

Lenovo System x3750 M4
Types 8752 and 8718



Installation and Service Guide

Lenovo System x3750 M4
Types 8752 and 8718



Installation and Service Guide

Note

Before using this information and the product it supports, read the general information in “Notices” on page 871 and the *Safety Information*, and *Environmental Notices and User’s Guide* on the *Documentation CD*, and the *Warranty* document that comes with the server.

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Contents

Safety vii

Guidelines for trained service technicians	xiii
Inspecting for unsafe conditions	xiii
Guidelines for servicing electrical equipment	xiv

Chapter 1. The Lenovo System x3750 M4 Types 8752 and 8718 server 1

The Lenovo Documentation CD	3
Hardware and software requirements	3
Using the Documentation Browser	4
Related documentation	5
Notices and statements in this document	6
Server features and specifications	6
What your server offers	12
Reliability, availability, and serviceability	17
Systems Director program	18
Server controls, LEDs, and power	19
Front view.	19
Operator information panel	20
Light path diagnostics	21
Rear view	23
Server power features	24
Turning on the server	25
Turning off the server	25

Chapter 2. Installing optional devices 27

Instructions for Business Partners	28
How to send DSA data	28
Server components	29
System-board internal connectors	30
System-board external connectors	30
System-board switches, jumpers, and buttons	32
System-board LEDs.	34
System-board optional-device connectors	35
Optional microprocessor and memory expansion tray	36
PCIe riser-card	37
ML2 (Ethernet) adapters	38
Installation guidelines	41
System reliability guidelines.	43
Handling static-sensitive devices	43
Removing the server top cover	44
Removing the microprocessor and memory expansion tray assembly	45
Removing the DIMM air baffle	46
Removing the microprocessor air baffle	47
Removing the fan cage assembly	48
Installing a memory module.	49
Non-mirroring (independent mode)	52
Memory mirroring	52
Memory sparing.	54
DIMM installation instructions	57
Installing drives	60
Drive IDs	61

Supported SAS/SATA drive backplane configurations	62
Backplane configuration for 4 drives	64
Backplane configurations for 8 drives.	65
Backplane configurations for 12 drives	65
Backplane configurations for 16 drives	66
Backplane configurations for 20 drives	68
Backplane configurations for 24 drives	69
Backplane configuration for 28 drives	70
Backplane configuration for 32 drives	70
Connecting the SAS cables	70
Installing 2.5-inch and 1.8-inch hot-swap drives	71
Installing an optional CD/DVD drive	73
Installing a PCIe riser-card assembly	75
Installing an adapter	76
Supported adapters.	78
Supported RAID cache cards	81
Supported features on demand software.	83
Adapter installation instructions	84
Installing the optional ServeRAID M5210 SAS/SATA Controller	86
Installing the optional ServeRAID M5120 SAS/SATA Controller	89
Installing the optional ServeRAID N2125 SAS/SATA Host Bus Adapter	91
Installing the optional ServeRAID N2215 Host Bus Adapter	92
Installing a RAID cache card	95
Installing a RAID adapter flash power module	98
Installing an additional microprocessor and heat sink	100
Thermal grease.	108
Installing power supplies	109
Installing a 1400-watt or 900-watt hot-swap power supply	109
Installing a 750-watt -48 volt to -60 volt dc power supply	112
Installing the power interposer for redundant power supply card assembly	116
Installing a USB embedded hypervisor flash device	117
Installing the 8x1.8-inch hot-swap drive backplane assembly	118
Installing the 8x2.5-inch hot-swap drive backplane	122
Installing the 8x2.5-inch hot-swap drive backplane with controller expander	126
Installing the 4x2.5-inch hot-swap drive backplane	130
Completing the installation.	134
Replacing the DIMM air baffle	134
Replacing the microprocessor air baffle.	135
Replacing the microprocessor and memory expansion tray assembly.	136
Replacing the fan cage assembly	137
Replacing the server top cover	138
Connecting the cables	139
Updating the server configuration	140

Chapter 3. Configuration information and instructions 141

Updating the firmware	141
Configuring the server	142
Using the ServerGuide Setup and Installation CD	143
ServerGuide features	144
Setup and configuration overview	144
Typical operating-system installation	145
Installing your operating system without using ServerGuide.	145
Using the Setup utility	145
Starting the Setup utility	146
Setup utility menu choices	146
Passwords	153
Using the Boot Manager.	155
Starting the backup server firmware.	155
The UpdateXpress System Pack Installer	156
Using the integrated management module II	156
Using the remote presence and blue-screen capture features	157
Obtaining the IMM2 host name	158
Obtaining the IP address for the IMM2.	159
Logging on to the IMM2 web interface.	159
Logging on to the IMM2 CLI interface using Telnet	160
Logging on to the IMM2 CLI interface using SSH	160
Configuring the LAN over USB interface manually.	161
Installing the LAN over USB Windows device driver	161
Installing the LAN over USB Linux device driver	162
Using the embedded hypervisor	163
Enabling Features on Demand Ethernet software	164
Enabling Features on Demand RAID software	164
Configuring RAID arrays	164
Advanced Settings Utility program	165
Updating Systems Director	165
Updating the Universal Unique Identifier and DMI/SMBIOS data	166
Locally: Keyboard Controller Style (KCS)	167
Locally: LAN over USB	167
Remotely over a LAN	169

Chapter 4. Troubleshooting 171

Start here.	171
Diagnosing a problem	171
Undocumented problems	173
Service bulletins	174
Checkout procedure	174
About the checkout procedure.	174
Performing the checkout procedure	175
Diagnostic tools	176
Light path diagnostics	178
Light path diagnostics LEDs	181
Power-supply LEDs	186
Fan LEDs.	187
PCIe riser-card LEDs	187

Event logs	188
Viewing event logs through the Setup utility	189
Viewing event logs without restarting the server	190
Clearing the error logs	192
POST	192
Dynamic System Analysis	192
DSA editions	193
Running the DSA Preboot diagnostic programs.	194
Diagnostic text messages	195
Viewing the test log results and transferring the DSA collection.	195
Automated service request (call home)	195
IBM Electronic Service Agent	196
IMM2 first failure data capture (FFDC) feature	196
Capturing the FFDC log using the IMM2 Web Interface	196
Capturing the FFDC log using IMM2 CLI commands	196
Capturing the FFDC log using IPMI commands	197
Error messages	197
Troubleshooting by symptom	197
CD/DVD drive problems	198
Fan problems	199
Hypervisor problems.	199
General problems	200
Hard disk drive problems	200
Intermittent problems	203
Keyboard, mouse, or pointing-device problems	203
Memory problems.	205
Microprocessor problems	206
Monitor and video problems	206
Observable problems	208
Optional-device problems	210
Power problems	211
Serial-device problems	212
ServerGuide problems	213
Software problems.	214
Universal Serial Bus (USB) port problems	215
Video problems.	215
Solving power problems.	215
Solving Ethernet controller problems	216
Solving undetermined problems	217
Problem determination tips.	218
Recovering from a UEFI update failure or UEFI image corruption	219
Automated boot recovery (ABR)	221
Nx boot failure	221

Chapter 5. Parts listing, Lenovo System x3750 M4 Types 8752 and 8718 223

Replaceable server components	223
Consumable parts	229
Structural parts.	230
Power cords.	231

Chapter 6. Removing and replacing components 235

Returning a device or component	235
Removing and replacing server components	235
Removing and replacing consumable parts	236
Removing and replacing structural parts	236
Removing the server top cover	236
Replacing the server top cover	237
Removing the bezel	238
Replacing the bezel	239
Removing and replacing Tier 1 CRUs	240
Removing the microprocessor air baffle.	240
Replacing the microprocessor air baffle.	241
Removing the DIMM air baffle	242
Replacing the DIMM air baffle	243
Removing an adapter.	244
Replacing an adapter.	245
Removing 2.5-inch and 1.8-inch hot-swap drives	246
Replacing 2.5-inch and 1.8-inch hot-swap drives	248
Removing a CD/DVD drive	250
Replacing a CD/DVD drive	251
Removing the CD/DVD cable.	253
Replacing the CD/DVD cable	254
Removing a memory module	256
Replacing a memory module	257
Removing the ServeRAID M5210 SAS/SATA Controller for System x	259
Replacing the ServeRAID M5210 SAS/SATA Controller for System x	260
Removing the ServeRAID M5120 SAS/SATA Controller for System x	262
Replacing the ServeRAID M5120 SAS/SATA Controller for System x	263
Removing the ServeRAID N2125 SAS/SATA Host Bus Adapter	264
Replacing the ServeRAID N2125 SAS/SATA Host Bus Adapter	265
Removing the ServeRAID N2215 SAS/SATA Host Bus Adapter	266
Replacing the ServeRAID N2215 SAS/SATA Host Bus Adapter	266
Removing a USB embedded hypervisor flash device.	268
Replacing a USB embedded hypervisor flash device.	269
Removing a 1400-watt or 900-watt hot-swap power supply	270
Replacing a 1400-watt or 900-watt hot-swap power supply	272
Removing a hot-swap fan assembly	275
Replacing a hot-swap fan assembly	276
Removing the fan cage assembly	277
Replacing the fan cage assembly	278
Removing the Intel I350-T4 ML2 Quad-Port GbE Adapter for IBM System x	279
Replacing the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x	280

Removing the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x	281
Replacing the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x	282
Removing a RAID adapter flash power module	285
Replacing a RAID adapter flash power module	286
Removing a RAID cache card	287
Replacing a RAID cache card	289
Removing the system battery	291
Replacing the system battery	293
Removing a PCI riser-card assembly.	295
Replacing a PCI riser-card assembly.	296
Removing the operator information panel assembly	297
Replacing the operator information panel assembly	298
Removing and replacing Tier 2 CRUs	299
Removing the USB/video tray assembly	300
Replacing the USB/video tray assembly	301
Removing the power interposer for redundant power supply card assembly	302
Replacing a power interposer redundant power supply card assembly	303
Removing the 4x2.5-inch hot-swap drive backplanes	304
Replacing the 4x2.5-inch hot-swap drive backplanes	304
Removing the 8x1.8-inch hot-swap drive backplane assembly	306
Replacing the 8x1.8-inch hot-swap drive backplane assembly	307
Removing the 8x2.5-inch drive backplane with controller expander	309
Replacing the 8x2.5-inch drive backplane with controller expander	310
Removing and replacing FRUs	312
Removing a microprocessor and heat sink	312
Replacing a microprocessor and heat sink	316
Removing the microprocessor and memory expansion tray assembly.	323
Replacing the microprocessor and memory expansion tray assembly.	324
Removing a 750-watt -48 volt to -60 volt dc power supply	326
Replacing a 750-watt -48 volt to -60 volt dc power supply	328
Removing the system board	331
Replacing the system board	334
Internal cable routing.	336

Appendix A. Boot code display error codes. 349

Appendix B. DSA diagnostic test results 353

DSA Broadcom network test results 353

DSA Brocade test results	362
DSA checkpoint panel test results	370
DSA CPU stress test results	371
DSA Emulex adapter test results	374
DSA EXA port ping test results	377
DSA hard drive test results	379
DSA Intel network test results	381
DSA LSI hard drive test results	386
DSA Mellanox adapter test results	387
DSA memory isolation test results	390
DSA memory stress test results	460
DSA Nvidia GPU test results	463
DSA optical drive test results	469
DSA system management test results	473
DSA tape drive test results	486

Appendix C. UEFI/POST error codes 491

Appendix D. Integrated management module II (IMM2) error messages 517

IMM Events that automatically notify Support	518
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Appendix E. Getting help and technical assistance 867

Before you call	867
Using the documentation	868
Getting help and information from the World Wide Web	868
How to send DSA data	869
Creating a personalized support web page	869
Software service and support	869

Hardware service and support	869
Taiwan product service	870

Notices 871

Trademarks	872
Important notes	872
Recycling information	873
Particulate contamination	873
Telecommunication regulatory statement	874
Electronic emission notices	874
Federal Communications Commission (FCC) statement.	874
Industry Canada Class A emission compliance statement.	875
Avis de conformité à la réglementation d'Industrie Canada	875
Australia and New Zealand Class A statement	875
European Union EMC Directive conformance statement.	875
Germany Class A statement	875
Japan VCCI Class A statement.	876
Korea Communications Commission (KCC) statement.	877
Russia Electromagnetic Interference (EMI) Class A statement	877
People's Republic of China Class A electronic emission statement	877
Taiwan Class A compliance statement	877

Index 879

Safety

These statements provide the caution and danger information that is used in this documentation.

Before installing this product, read the Safety Information.

قبل تركيب هذا المنتج، يجب قراءة الملاحظات الأمنية.

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information** (安全信息)。

安裝本產品之前，請先閱讀「安全資訊」。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינן מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

ཐོན་ཁུངས་འདི་བདེ་སྟོན་མ་གཅིག་གི་སྐོར་གྱི་ཡིད་གཟབ་
བྱ་འདྲ་མིན་ཡོད་པའི་འོད་སྟེར་བལྟ་དགོས།

ཐོན་ཁུངས་འདི་བདེ་སྟོན་མ་གཅིག་གི་སྐོར་གྱི་ཡིད་གཟབ་
བྱ་འདྲ་མིན་ཡོད་པའི་འོད་སྟེར་བལྟ་དགོས།

مەزكۇر مەھسۇلاتنى ئورنىتىشتىن بۇرۇن بىخەتەرلىك ئۇچۇرلىرىنى ئوقۇپ چىقىڭ.

Youq mwngz yungh canjbinj neix gaxgonq, itdingh aeu doeg aen
canjbinj soengq cungj vahgangj ancien siusik.

Bu ürünü kurmadan önce güvenlik bilgilerini okuyun.

Antes de instalar este producto, lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

Important:

Each caution and danger statement in this documentation is labeled with a number. This number is used to cross reference an English language caution or danger statement with translated versions of the caution or danger statement in the *Safety Information* document.

For example, if a caution statement is labeled Statement 1, translations for that caution statement are in the *Safety Information* document under Statement 1.

Be sure to read all caution and danger statements in this document before you perform the procedures. Read any additional safety information that comes with the server or optional device before you install the device.

Statement 1



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.

To Connect:

1. Turn everything OFF.
2. First, attach all cables to devices.
3. Attach signal cables to connectors.
4. Attach power cords to outlet.
5. Turn device ON.

To Disconnect:

1. Turn everything OFF.
2. First, remove power cords from outlet.
3. Remove signal cables from connectors.
4. Remove all cables from devices.

Statement 2



CAUTION:

When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.

Statement 3**CAUTION:**

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

**DANGER**

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.



Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

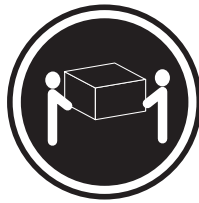
Statement 4



CAUTION:

Use safe practices when lifting.

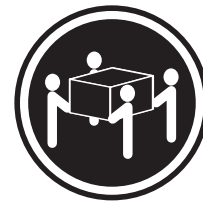
Three graphic illustrations for safety practices when lifting.



≥ 18 kg (39.7 lb.)



≥ 32 kg (70.5 lb.)



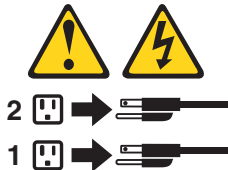
≥ 55 kg (121.2 lb.)

Statement 5



CAUTION:

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 6



CAUTION:

Do not place any objects on top of a rack-mounted device unless that rack-mounted device is intended for use as a shelf.

Statement 8



CAUTION:

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 12



CAUTION:

The following label indicates a hot surface nearby.



Statement 26



CAUTION:

Do not place any object on top of rack-mounted devices.



Statement 35:



CAUTION:

Hazardous energy present. Voltages with hazardous energy might cause heating when shorted with metal, which might result in splattered metal, burns, or both.

This server is suitable for use on an IT power-distribution system whose maximum phase-to-phase voltage is 240 V under any distribution fault condition.

Important: Maschinenlärminformations-Verordnung - 3. GPSGV, der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger.

Guidelines for trained service technicians

This section contains information for trained service technicians.

Inspecting for unsafe conditions

Use the information in this section to help you identify potential unsafe conditions in a Lenovo product that you are working on.

Each Lenovo product, as it was designed and manufactured, has required safety items to protect users and service technicians from injury. The information in this section addresses only those items. Use good judgment to identify potential unsafe conditions that might be caused by non-Lenovo alterations or attachment of non-Lenovo features or options that are not addressed in this section. If you identify an unsafe condition, you must determine how serious the hazard is and whether you must correct the problem before you work on the product.

Consider the following conditions and the safety hazards that they present:

- Electrical hazards, especially primary power. Primary voltage on the frame can cause serious or fatal electrical shock.
- Explosive hazards, such as a damaged CRT face or a bulging capacitor.
- Mechanical hazards, such as loose or missing hardware.

To inspect the product for potential unsafe conditions, complete the following steps:

1. Make sure that the power is off and the power cord is disconnected.
2. Make sure that the exterior cover is not damaged, loose, or broken, and observe any sharp edges.

3. Check the power cord:
 - Make sure that the third-wire ground connector is in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
 - Make sure that the power cord is the correct type, as specified in “Power cords” on page 231.
 - Make sure that the insulation is not frayed or worn.
4. Remove the top cover.
5. Check for any obvious non-Lenovo alterations. Use good judgment as to the safety of any non-Lenovo alterations.
6. Check inside the server for any obvious unsafe conditions, such as metal filings, contamination, water or other liquid, or signs of fire or smoke damage.
7. Check for worn, frayed, or pinched cables.
8. Make sure that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Guidelines for servicing electrical equipment

This section contains guidelines to follow when you service electrical equipment.

Observe the following guidelines when you service electrical equipment:

- Check the area for electrical hazards such as moist floors, nongrounded power extension cords, power surges, and missing safety grounds.
- Use only approved tools and test equipment. Some hand tools have handles that are covered with a soft material that does not provide insulation from live electrical currents.
- Regularly inspect and maintain your electrical hand tools for safe operational condition. Do not use worn or broken tools or testers.
- Do not touch the reflective surface of a dental mirror to a live electrical circuit. The surface is conductive and can cause personal injury or equipment damage if it touches a live electrical circuit.
- Some rubber floor mats contain small conductive fibers to decrease electrostatic discharge. Do not use this type of mat to protect yourself from electrical shock.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Locate the emergency power-off (EPO) switch, disconnecting switch, or electrical outlet so that you can turn off the power quickly in the event of an electrical accident.
- Disconnect all power before you perform a mechanical inspection, work near power supplies, or remove or install main units.
- Before you work on the equipment, disconnect the power cord. If you cannot disconnect the power cord, have the customer power-off the wall box that supplies power to the equipment and lock the wall box in the off position.
- Never assume that power has been disconnected from a circuit. Check it to make sure that it has been disconnected.
- If you have to work on equipment that has exposed electrical circuits, observe the following precautions:
 - Make sure that another person who is familiar with the power-off controls is near you and is available to turn off the power if necessary.

- When you are working with powered-on electrical equipment, use only one hand. Keep the other hand in your pocket or behind your back to avoid creating a complete circuit that could cause an electrical shock.
- When you use a tester, set the controls correctly and use the approved probe leads and accessories for that tester.
- Stand on a suitable rubber mat to insulate you from grounds such as metal floor strips and equipment frames.
- Use extreme care when you measure high voltages.
- To ensure proper grounding of components such as power supplies, pumps, blowers, fans, and motor generators, do not service these components outside of their normal operating locations.
- If an electrical accident occurs, use caution, turn off the power, and send another person to get medical aid.

Chapter 1. The Lenovo System x3750 M4 Types 8752 and 8718 server

The Lenovo® System x3750 M4 Types 8752 and 8718 server is a 2U-high rack model, four-socket server for virtualization, database, and computational intensive computing. It is the next generation enterprise server based on the Intel Xeon™ EP 4S E5-4600 V2 technology. This high-performance server is ideally suited for enterprise environments that require superior input/output (I/O) flexibility and high manageability.

This *Installation and Service Guide* contains information and instructions for setting up your Lenovo System x3750 M4 Types 8752 and 8718 server, instructions for installing some optional devices, cabling and configuring the server, removing and replacing devices, and diagnostics and troubleshooting information.

Note: This documentation includes references to IBM® web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

In addition to the instructions in Chapter 2, "Installing optional devices," on page 27 for installing optional hardware devices, updating firmware and device drivers, and completing the installation, Business Partners must also complete the steps in "Instructions for Business Partners" on page 28.

Performance, ease of use, reliability, and expansion capabilities were key considerations in the design of the server. These design features make it possible for you to customize the system hardware to meet your needs today and provide flexible expansion capabilities for the future.

The server comes with a limited warranty. For information about the terms of the warranty and getting service and assistance, see the *Lenovo Warranty* document that comes with the server.

The server contains next generation technologies, which help increase performance and reliability. For more information, see "What your server offers" on page 12 and "Reliability, availability, and serviceability" on page 17.

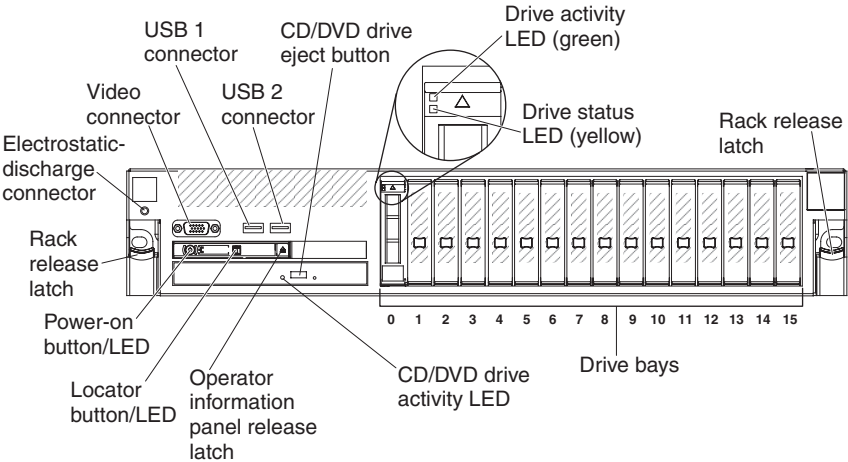
You can obtain up-to-date information about the server and other Lenovo server products at <http://www.ibm.com/systems/x/>. At <http://www.ibm.com/support/mysupport/>, you can create a personalized support page by identifying Lenovo products that are of interest to you. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

If you participate in the client reference program, you can share information about your use of technology, best practices, and innovative solutions; build a professional network; and gain visibility for your business. For more information about the client reference program, see <http://www.ibm.com/ibm/clientreference/>.

The server supports up to sixteen 2.5-inch hot-swap drives or thirty-two 1.8-inch hot-swap drives, or a combination of both 2.5-inch and 1.8-inch drives, using the

supported drive backplane configurations. It supports 2.5-inch hot-swap Serial Attached SCSI (SAS) or SATA hard disk drives, 2.5-inch hot-swap SATA solid state drives, or 1.8-inch hot-swap SATA solid state drives. See “Supported SAS/SATA drive backplane configurations” on page 62 for a complete list of the supported configurations. The illustrations in this document might differ slightly from your hardware.

The following illustration shows the front of the server.



If firmware and documentation updates are available, you can download them from the World Wide Web. The server might have features that are not described in the documentation that comes with the server, and the documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. To check for firmware updates, go to <http://www.ibm.com/supportportal/> and for documentation updates <http://publib.boulder.ibm.com/infocenter/systemx/documentation/index.jsp>.

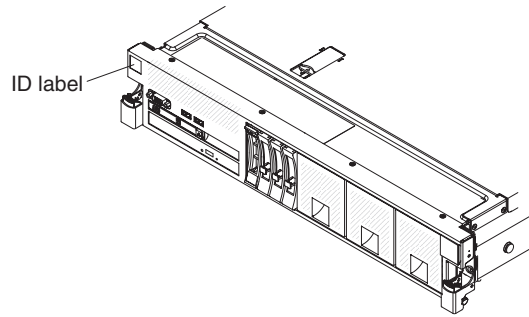
Record information about the server in the following table.

Table 1. Record of the system information

Product name	Machine type	Model number	Serial number
Lenovo System x3750 M4	Types 8752 and 8718	(record the model here)	(record the serial number here)

The model number and serial number are on the ID label on the front of the server, as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.



You can download a *Lenovo ServerGuide Setup and Installation* CD to help you configure the hardware, install device drivers, and install the operating system.

For a list of supported optional devices for the server, go to <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.

See the *Rack Installation Instructions* document on the *Documentation* CD for complete rack installation and removal instructions.

The Lenovo Documentation CD

The *Lenovo Documentation* CD contains documentation for the server.

The *Lenovo Documentation* CD contains documentation for the server in Portable Document Format (PDF) and includes the *Lenovo Documentation Browser* to help you find information quickly.

Hardware and software requirements

Use this information to determine the minimum hardware and software requirements.

The *Lenovo Documentation* CD requires the following minimum hardware and software:

- Microsoft Windows or Red Hat Linux
- 100 MHz microprocessor
- 32 MB of RAM
- Adobe Acrobat Reader 3.0 (or later) or xpdf, which comes with Linux operating systems

Using the Documentation Browser

Use this information to start the Documentation Browser.

Use the Documentation Browser to browse the contents of the CD, read brief descriptions of the documents, and view documents, using Adobe Acrobat Reader or xpdf. The Documentation Browser automatically detects the regional settings in use in your server and displays the documents in the language for that region (if available). If a document is not available in the language for that region, the English-language version is displayed.

Use one of the following procedures to start the Documentation Browser:

- If Autostart is enabled, insert the CD into the CD or DVD drive. The Documentation Browser starts automatically.
- If Autostart is disabled or is not enabled for all users, use one of the following procedures:
 - If you are using a Windows operating system, insert the CD into the CD or DVD drive and click **Start -> Run**. In the **Open** field, type
`e:\win32.bat`

where *e* is the drive letter of the CD or DVD drive, and click **OK**.

- If you are using Red Hat Linux, insert the CD into the CD or DVD drive; then, run the following command from the `/mnt/cdrom` directory:
`sh runlinux.sh`

Select the server from the **Product** menu. The **Available Topics** list displays all the documents for the server. Some documents might be in folders. A plus sign (+) indicates each folder or document that has additional documents under it. Click the plus sign to display the additional documents.

When you select a document, a description of the document is displayed under **Topic Description**. To select more than one document, press and hold the Ctrl key while you select the documents. Click **View Book** to view the selected document or documents in Acrobat Reader or xpdf. If you selected more than one document, all the selected documents are opened in Acrobat Reader or xpdf.

To search all the documents, type a word or word string in the **Search** field and click **Search**. The documents in which the word or word string appears are listed in order of the most occurrences. Click a document to view it, and press Ctrl+F to use the Acrobat search function, or press Alt+F to use the xpdf search function within the document.

Click **Help** for detailed information about using the Documentation Browser.

Related documentation

Use this information to identify and locate related server documentation.

This *Installation and Service Guide* contains general information about the server including how to set up and cable the server, how to install supported optional devices, how to configure the server, and information to help you solve problems yourself and information for service technicians. The following documentation also comes with the server:

- *Warranty Information*

This document is in printed format and comes with the server. It contains warranty terms and a pointer to the Lenovo Statement of Limited Warranty.

- *Important Notices*

This document is in printed format and comes with the server. It contains information about the safety, environmental, and electronic emission notices for your Lenovo product.

- *Environmental Notices and User Guide*

This document is in PDF format on the *Lenovo Documentation CD*. It contains translated environmental notices.

- *Lenovo License Agreement for Machine Code*

This document is in PDF on the *Lenovo Documentation CD*. It provides translated versions of the *Lenovo License Agreement for Machine Code* for your product.

- *Licenses and Attributions Document*

This document is in PDF on the *Lenovo Documentation CD*. It provides the open source notices.

- *Safety Information*

This document is in PDF on the *Lenovo Documentation CD*. It contains translated caution and danger statements. Each caution and danger statement that appears in the documentation has a number that you can use to locate the corresponding statement in your language in the *Safety Information* document.

- *Rack Installation Instructions*

This printed document contains instructions for installing the server in a rack.

Depending on the server model, additional documentation might be included on the *Lenovo Documentation CD*.

The ToolsCenter for Lenovo x86 servers is an online information center that contains information about tools for updating, managing, and deploying firmware, device drivers, and operating systems. The ToolsCenter for Lenovo x86 servers is at <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-CENTER>.

The server might have features that are not described in the documentation that you received with the server. The documentation might be updated occasionally to include information about those features, or technical updates might be available to provide additional information that is not included in the server documentation. To check for updates, go to <http://www.ibm.com/supportportal/>.

Notices and statements in this document

Use this information to understand the most common documentation notices and statements and how they are used.

The caution and danger statements in this document are also in the multilingual *Safety Information* document, which is on the *Lenovo Documentation* CD. Each statement is numbered for reference to the corresponding statement in your language in the *Safety Information* document.

The following notices and statements are used in this document:

- **Note:** These notices provide important tips, guidance, or advice.
- **Important:** These notices provide information or advice that might help you avoid inconvenient or problem situations.
- **Attention:** These notices indicate potential damage to programs, devices, or data. An attention notice is placed just before the instruction or situation in which damage might occur.
- **Caution:** These statements indicate situations that can be potentially hazardous to you. A caution statement is placed just before the description of a potentially hazardous procedure step or situation.
- **Danger:** These statements indicate situations that can be potentially lethal or extremely hazardous to you. A danger statement is placed just before the description of a potentially lethal or extremely hazardous procedure step or situation.

Server features and specifications

Use this information to view specific information about the server, such as server hardware features and the dimensions of the server.

The following information is a summary of the features and specifications of the server. Depending on the model, some features might not be available, or some specifications might not apply.

Microprocessor (depending on the model):

- Supports up to four of the following Intel Xeon EP 4S E5-4600 V2 versions of the microprocessors.

Note: The third and fourth microprocessor sockets are on the optional Microprocessor and Memory Expansion tray that you must purchase to install up to four microprocessors.

- Four-core with 10 MB shared among cores
- Six-core with 15 MB, shared among cores
- Eight-core Turbo with 16 MB shared among cores (depending on your model)
- Ten-core Turbo with 25 MB shared among cores (depending on your model)
- Twelve-core Turbo with 30 MB shared among cores (depending on your model)
- Up to 30 MB Level-3 cache

- Two QuickPath Interconnect (QPI) links speed up to 8 gigatransfers (GT) per second, with two QPI links per microprocessor (Depending on the microprocessor, link speed can range from 6.4 GT/s, 7.2 GT/s, or 8 GT/s.)
- Four memory channels per microprocessor that supports three DIMMs per channel
- Intel EP 4S microprocessor + C600 series chipset (PCH)
- HyperThreading (3.3 GHz, 16MB, 130W, 8C, processor does not support HyperThreading)
- Up to 40 PCIe Gen3 lanes per processor on the base system board

Note:

- Use the Setup utility to determine the type and speed of the microprocessors in the server.

Memory (depending on the model):

- Connectors: 48 dual inline memory module connectors (24 on the base system board and 24 on the optional microprocessor and memory expansion tray)
- Minimum: 4 GB
- Maximum: up to 1.5 TBs (768 GB on the base system board and 768 GB on the optional microprocessor and memory expansion tray)
- Type: PC3L-12800R 1600 MHz, PC3-14900R 1866 MHz, PC3L-12800L 1600 MHz (Load Reduced), PC3-14900L 1866 MHz (Load Reduced), single-rank, double-rank, or quad-rank, ECC, 240 pin, DDR3 registered SDRAM DIMMs only
- Supports 4 GB, 8 GB, 16 GB standard RDIMMs and 32 GB LR-DIMMs
- Supports 1.35-volt and 1.5-volt registered DIMMs (see “Installing a memory module” on page 49 for more information)

Drive expansion bays (depending on the model):

- Supports up to 16 2.5 inch drives, up to 32 1.8-inch drives, or a combination of both 2.5-inch and 1.8-inch hot-swap drives, when you use the supported SAS/SATA backplane configurations and/or required RAID Option Adapter additions. The following drives are supported:
 - 2.5-inch hot-swap SAS or hot-swap SATA hard disk drive
 - 1.8-inch hot-swap SATA solid state drive
 - 2.5-inch hot-swap SATA solid state drive

Optional SATA optical drives:

- Optional DVD-ROM Blu-Ray (cable comes mounted to the optical drive bracket in the server)

Hot-swap fans:

The server comes standard with six dual-motor, counter-rotating, speed-controlled hot-swap fans for N+N redundancy

PCI expansion slots (depending on your model):

- Five x8 low-profile, PCIe Gen3 adapter slots and one x8 Mezzanine LOM (ML) adapter slot on the system board
- Three x8 (x16 mechanical) PCIe Gen3 full-height, half-length adapter slots on the optional PCI riser-card used in the server
- One x8 (x16 mechanical) and one x16 PCIe Gen3 full-height, half-length adapter slots on the optional PCI riser-card used in the server

Notes:

- The second microprocessor must be installed on the system board for the server to support PCIe slots 4 and 5 on the system board and the optional PCIe riser-card
- PCIe slots 6, 7, and 8 are connected to the first microprocessor
- The ML adapter slot is connected to the first microprocessor

Integrated functions:

- Integrated management module II (IMM2), which provides service processor control and monitoring functions, video controller, and remote keyboard, video, mouse, and remote hard disk drive capabilities
- Onboard LSI 3108-e SAS RAID controller with support for RAID levels 0, 1, and 10 and an optional cache card socket. In addition, the optional RAID cache cards and Features on Demand (FoD) software RAID can provide additional RAID levels support
- Light path diagnostics
- Six Universal Serial Bus (USB) 2.0 ports:
 - Two on the front of the server
 - Two on the rear of the server
 - Two internal connectors on the system board
- One systems-management RJ-45 connector on the rear to connect to a systems-management network. This connector is dedicated to the IMM v2 functions and runs at 1 Gb speed
- One serial port

Power supply:

- The server comes with one 750-watt dc power supply, one 900-watt ac power supply or one 1400-watt ac power supply (depending on the model)
- Maximum of two 750-watt dc (110 or 220 V dc auto-sensing), two 900-watt ac (110 or 220 V ac auto-sensing) or two 1400-watt ac (110 or 220 V ac auto-sensing) hot-swap power supplies
- Two 1400-watt ac hot-swap power supplies fed from a 220 V input source provide N+N redundancy support for a full configuration
- Two 750-watt dc, two 900-watt ac or two 1400-watt ac hot-swap power supplies fed from a 110 V input source provides N+N redundancy support for limited configurations

Notes:

- The optional Power Interposer for Redundant Power option or the optional Microprocessor and Memory Expansion Tray must be installed to support two power supplies.
- The 750-watt dc and 900-watt ac power supplies require the installation of a power supply bay filler.
- You cannot use ac and dc power supplies in the same server.

Video controller (integrated into the IMM2):

- Matrox G200eR core (two analog ports: one front and one rear that can be connected at the same time)

Note: The maximum video resolution is 1600 x 1200 at 75 Hz (UXGA), with support for 1680 x 1050 (WSXGA+) wide screen resolution.

- DDR3 528 MHz SDRAM video memory controller
- Avocent Digital Video Compression
- Video memory is not expandable

RAID controllers:

The following RAID options are available for the server:

- ServeRAID M5210 SAS/SATA Controller for IBM System x
- ServeRAID M5120 SAS/SATA Controller for IBM System x
- ServeRAID N2125 SAS/SATA Host Bus Adapter for IBM System x
- IBM 12Gb Host Bus Adapter for IBM System x

Size:

- Height: 86.5 mm (3.4 inches, 2U)
- Depth: 734.1 mm (28.90 inches)
- Width: 445.6 mm (17.54 inches)
- Maximum weight: 31.07 kg (68.5 lb) when fully configured

Acoustical noise emissions:

- Sound power, idling: 6.5 bels maximum
- Sound power, operating: 6.6 bels maximum

Notes:

- With microprocessor loading, levels might fluctuate ± 0.3 bels, depending on the application.
- Maximum configuration of n=4; 130 W processors might run at 0.3 bels higher with microprocessor loading.

Environment:

- Air temperature:
 - Server on: 5° to 40°C (41° to 104°F); altitude: 0 to 3050 m (10,006 ft) derate maximum dry bulb temperature 1°C (33°F) per 175 m (574 ft) above 950 m (3,117 ft). Maximum rate of change 20°C (68°F) per hour
 - Server off: 5° to 45°C (41° to 113°F)
 - Shipment: -40°C to +60°C (-40°F to 140°F)

Note: The server is designed to the ASHRAE Class A3 guidelines

- Humidity range (noncondensing):
 - Server on: Minimum = higher (more moisture) of -12°C (10°F) dew point and 8% to 85% relative humidity; maximum dew point: 24°C (75°F)
 - Server off: 8% to 85% relative humidity; maximum dew point: 27°C (80°F)
 - Shipment: 5% to 100%
- Particulate contamination

Attention: Airborne particulates and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the server. For information about the limits for particulates and gases, see “Particulate contamination” on page 873.

Airflow:

- Typical airflow: 55 CFM
- Maximum airflow: 100 CFM

Heat output:

Approximate heat output:

- Minimum configuration: 513 Btu per hour (150 watts)
- Maximum configuration: 4446 Btu per hour (1300 watts)

Electrical input:

- Sine-wave input (50 or 60 Hz) required
- Input voltage low range:
 - Minimum: 100 V ac
 - Maximum: 127 V ac
- Input voltage high range:
 - Minimum: 200 V ac
 - Maximum: 240 V ac
- Input kilovolt-amperes (kVA), approximately:
 - Minimum: 0.030 kVA (system off)
 - Maximum: 1.856 kVA

Notes:

1. Power consumption and heat output vary depending on the number and type of optional features installed and the power-management optional features in use.
2. The sound levels were measured in controlled acoustical environments according to the procedures specified by the American National Standards Institute (ANSI) S12.10 and ISO 7779 and are reported in accordance with ISO 9296. Actual sound-pressure levels in a given location might exceed the average values stated because of room reflections and other nearby noise sources. The noise emission level stated in the declared (upper limit) sound-power level, in bels, for a random sample of system.

Note: Optional ML2 adapters that can be installed in this server are as follows:

- Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x
- Intel X540 ML2 Dual Port 10GbE SFP+ Adapter for IBM System x
- Emulex VFA5 ML2 Dual Port 10GbE SFP+ Adapter for IBM System x
- Broadcom NetXtreme II ML2 Dual Port 10GbE SFP+ Adapter for IBM System x
- Broadcom NetXtreme II ML2 Dual Port 10GbE SFP+ for IBM System x

Advanced options and technology such as iSCSI, vNIC, TCP/IP Offload Engine (TOE), Fiber Channel over Ethernet (FCoE) and Wake on LAN are only available on ML2 cards that support those features or technology.

EU Regulation 617/2013 Technical Documentation:

International Business Machines Corporation
New Orchard Road
Armonk, New York 10504
<http://www.ibm.com/customersupport/>

For more information on the energy efficiency program, go to
<http://www.ibm.com/systems/x/hardware/energy-star/index.html>.

Product Type:

Rack server

Year first manufactured:

2014

Internal/external power supply efficiency:

- http://www.plugloadsolutions.com/psu_reports/IBM_7001606-XXXX_900W_SO-273_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_7001616-XXX_1400W_SO-375_Report.pdf
- http://www.plugloadsolutions.com/psu_reports/IBM_DPS-1400BB%20A_1400W_SO-384_Report.pdf

Maximum power (watts):

See Power supply.

Idle state power (watts):

145

Sleep mode power (watts):

Not applicable for servers.

Off mode power (watts):

28

Noise levels (the declared A-weighted sound power level of the server)

See Acoustical noise emissions.

Test voltage and frequency:

230V / 50 Hz or 60 Hz

Total harmonic distortion of the electricity supply system:

The maximum harmonic content of the input voltage waveform will be equal or less than 2%. The qualification is compliant with EN 61000-3-2.

Information and documentation on the instrumentation setup and circuits used for electrical testing:

ENERGY STAR Test Method for servers; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

Measurement methodology used to determine information in this document:

ENERGY STAR Servers Version 2.0 Program Requirements; ECOVA Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies.

What your server offers

Your server offers features and technology such as the integrated management module II (IMM2), hard disk drive support, Features on Demand software Ethernet and RAID support, systems-management support, microprocessor technology, memory mirroring and sparing, remote presence and blue-screen capture features and ServeRAID support.

The server uses and supports the following features and technologies:

- **Active Energy Manager**

This Lenovo server provides IBM Active Energy Manager program support. The IBM Active Energy Manager solution is an IBM Systems Director extension that measures and reports server power consumption as it occurs. This enables you to monitor power consumption in correlation to specific software application programs and hardware configurations. You can obtain the measurement values through the systems-management interface and view them, using Systems Director. For more information, including the required levels of IBM Systems Director and Active Energy Manager, see the IBM Systems Director documentation on the *IBM Systems Director* DVD, or see <http://www.ibm.com/systems/management>

- **Dynamic System Analysis (DSA)**

The server comes with the Lenovo Dynamic System Analysis (DSA) Preboot diagnostic program stored in the integrated USB memory on the server. DSA collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA creates a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the IMM2 event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to IBM Support or view the information as a text file or HTML file.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the Lenovo System x products.

Two editions of Dynamic System Analysis are available: DSA Portable and DSA Preboot. For more information about both editions, see "DSA editions" on page 193.

- **Features on Demand software Ethernet support**

The server provides Features on Demand software Ethernet support. You can purchase a Features on Demand software upgrade activation key for Fiber Channel over Ethernet and iSCSI storage protocols that is provided through the Intel Ethernet controller. For more information, see "Enabling Features on Demand Ethernet software" on page 164.

- **Features on Demand software RAID support**

The server provides Features on Demand software RAID support for RAID levels 5, 6, 50, and 60 upgrade. Features on Demand software RAID upgrade is integrated into the IMM2. For more information, see "Enabling Features on Demand RAID software" on page 164.

- **Integrated management module II**

The IMM2 combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM2 provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM2 lights LEDs to help you diagnose the problem, records the error in the

IMM2 event log, and alerts you to the problem. Optionally, the IMM2 also provides a virtual presence capability for remote server management capabilities. The IMM2 provides remote server management through the following industry-standard interfaces:

- Intelligent Platform Management Interface (IPMI) version 2.0
- Simple Network Management Protocol (SNMP) version 3.0
- Common Information Model (CIM)
- Web browser

For additional information, see “Using the integrated management module II” on page 156 and the *Integrated Management Module II User’s Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnocid=MIGR-5086346>.

- **Integrated Trusted Platform Module**

This integrated security chip performs cryptographic functions and stores private and public secure keys. It provides the hardware support for the Trusted Computing Group (TCG) specification. You can download the software to support the TCG specification, when the software is available. See http://www.ibm.com/servers/eserver/xseries/scalable_family.html for details about the Trusted Platform Module (TPM) implementation. You can enable TPM support through the Setup utility under the **System Security** menu choice (see “Using the Setup utility” on page 145).

- **Large data-storage capacity and hot-swap capability**

The server can support a maximum of 16 2.5-inch drives, 32 1.8-inch drives, or a combination of both 2.5-inch and 1.8-inch drives when you use the supported SAS/SATA backplane configurations and/or required RAID Option Adapter additions. The server supports 2.5-inch hot-swap Serial Attached SCSI (SAS) hard disk drives or hot-swap Serial ATA (SATA) hard disk drives, 2.5-inch hot-swap solid state drives, or 1.8-inch hot-swap solid state drives.

With the hot-swap feature, you can add, remove, or replace hard disk drives without turning off the server.

- **Large system-memory capacity**

The server can support up to 1.5 TB of system memory. The server base system board provides 24 dual inline memory module (DIMM) connectors for up to 768 GB of memory. For additional memory capacity, an optional microprocessor and memory expansion tray is available for purchase that provides 24 DIMMs for up to 768 GB of additional memory (depending on the DIMM size) and two additional microprocessor sockets.

The server memory controller supports error correcting code (ECC) for up to 48 industry-standard PC3L-12800R 1600 MHz, PC3-14900R 1866 MHz, PC3L-12800L 1600 MHz (Load Reduced), or PC3-14900L 1866 MHz (Load Reduced) single-rank, dual-rank, or quad-rank, third-generation double-data-rate (DDR3), registered, synchronous dynamic random access memory (SDRAM) DIMMs.

- **Light path diagnostics**

Light path diagnostics provides LEDs to help you diagnose problems. For more information about light path diagnostics and the LEDs, see “Light path diagnostics” on page 21 and “Light path diagnostics LEDs” on page 181.

- **Memory mirroring**

Memory mirroring provides a redundant copy of all code and data that are addressable in the configured memory map. Through the microprocessor memory controller chip set, memory mirroring replicates and stores data across DIMMs on two or four memory channels simultaneously. If a failure occurs, the memory controller switches from the DIMMs on the primary channel to the

DIMMs on the backup channel. To enable memory mirroring through the Setup utility, select **System Settings > Memory > Memory Mode > Mirroring**. For information about installing DIMMs for memory mirroring, see “Memory mirroring” on page 52 and “Installing a memory module” on page 49 for more information.

- **Memory sparing**

The server supports memory sparing. Memory sparing reserves memory capacity for failover in the event of a DIMM failure, and the reserved capacity is subtracted from the total available memory. Memory sparing provides less redundancy than memory mirroring does. If a predetermined threshold of correctable errors is reached, the contents of the failing DIMM are copied to the spare memory, and the failing DIMM or rank is disabled. To enable memory sparing through the Setup utility, select **System Settings > Memory > Memory Mode > Sparing**. For information about installing DIMMs for memory sparing, see “Memory sparing” on page 54.

- **Multi-core processors**

The server supports up to four Intel Xeon EP 4S E5-4600 V2 series, four-core, six-core, eight-core, ten-core and 12 core microprocessors (depending on your model). The server comes with a minimum of one microprocessor.

Note: To install the third and fourth microprocessors, you must purchase and install an optional microprocessor and memory expansion tray. Both of the microprocessors must be installed as a pair on the microprocessor and memory expansion tray.

- **Network support**

The server comes with a proprietary ML adapter slot that supports an optional quad-port GbE, dual port 10 Gbase-T, or dual-port 10 GbE SFP+ ML2 adapter. The ML2 adapters can support a connection to a 10 Mbps, 100 Mbps, 1 Gbps, or 10 Gbps network, depending on the adapter. Advanced options or technology such as iSCSI, vNIC, TOE, FCoE and Wake on LAN are only available on ML2 adapters that support those options or technology and might require a Features on Demand (FOD) key to enable.

Functionality is available using the Network Controller Sideband Interface (NCSI) protocol to access System Management functions in one of the network ports on the ML2 adapter. This functionality is called Systems Management Shared Port since the port can be used for normal network traffic and systems management traffic. ML2 adapters use this shared port through the Reduced Media Independent Interface (RMII) to the IMM2 for system management.

Note: When the IMM2 is placed in Shared Mode (Shared Mode is enabled), the dedicated port is no longer used. The default port (port 1) on the ML2 adapter now performs as the shared port.

- **Next generation technology**

next generation technology systems combine proven, innovative, designs to make your x86-processor-based server powerful and reliable.

- **PCI Express Gen3 adapter capabilities**

The server provides up to eight PCIe Gen3 adapter slots. The system board provides five low-profile PCIe Gen3 adapter slots. An optional PCIe riser-card provides an additional two or three PCIe adapter slots:

- Three x8 (x16 mechanical) PCIe Gen3 adapter slots.
- Two PCIe Gen3 adapter slots one x8 (x16 mechanical) and one x16 (x16 mechanical).

Available PCIe riser-card adapter slots are dependent on the PCI riser-card used in the server. See “Installing an adapter” on page 76 for detailed information.

Note: The second microprocessor must be installed on the system board for the server to support more than three PCIe slots on the system board or the optional PCI riser-card.

- **Redundant connection**

The dual-port and quad-port Ethernet controller provides failover capability to a redundant Ethernet connection with the applicable application installed. If a problem occurs with the primary Ethernet connection and another Ethernet adapter is installed in the server, all Ethernet traffic that is associated with the primary connection is automatically switched to a secondary Ethernet connection. If the applicable device drivers are installed, this switching occurs without data loss and without user intervention.

- **Redundant cooling and optional power capabilities**

The server comes with six dual-motor, counter-rotating, speed-controlled hot-swap fans, which provide redundancy and hot-swap capability for a full configuration. The redundant cooling by the fans in the server enables continued operation if one of the fan motors fails.

The server comes with one of the following:

- One 750-watt dc hot-swap power supply
- One 900-watt hot-swap power supply
- One 1400-watt hot-swap power supply

The server supports a maximum of two 750-watt dc, two 900-watt or two 1400-watt hot-swap power supplies. For redundancy support, two power supplies must be installed in the server. Two power supplies enable continued operation if one of the power supplies fails. You can order the optional Power Interposer for Redundant Power Option Kit or the optional Microprocessor and Memory Expansion Tray to install a second power supply.

- **Remote presence and blue-screen capture features**

The remote presence and blue-screen capture features are integrated functions of the IMM2. The remote presence feature provides the following functions:

- Remotely view video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state
- Remotely access the server, using the keyboard and mouse from a remote client
- Map the CD, or DVD drive, diskette drive, and USB flash drive on a remote client, and map ISO and diskette image files as virtual drives that are available for use by the server
- Upload a diskette image to the IMM2 memory and map it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM2 restarts the server when the IMM2 detects an operating-system hang condition. A system administrator can use the blue-screen capture feature to assist in determining the cause of the hang condition.

See “Using the remote presence and blue-screen capture features” on page 157 for additional information.

- **ServerGuide Setup and Installation CD**

The Lenovo *ServerGuide Setup and Installation CD*, which you can download from the web, provides programs to help you set up the server and install a Windows operating system. The ServerGuide program detects installed optional hardware

devices and provides the correct configuration programs and device drivers. For more information about the *ServerGuide Setup and Installation* CD, see “Using the ServerGuide Setup and Installation CD” on page 143.

- **ServeRAID support**

A ServeRAID adapter provides hardware redundant array of independent disks (RAID) support to create configurations. The server comes with an integrated RAID controller, which provides RAID levels 0, 1 and 10. Additional optional RAID adapters, RAID cache cards, and Features on Demand software RAID are available to upgrade to RAID levels 5, 6, 50, and 60.

- **Systems Director DVD**

This Lenovo server provides IBM Systems Director program support. IBM Systems Director is a platform-management foundation that streamlines the way you manage physical and virtual systems in a heterogeneous environment. By using industry standards, IBM Systems Director supports multiple operating systems and virtualization technologies for Lenovo and non-Lenovo x86 platforms. For more information about IBM Systems Director, see “Systems Director program” on page 18.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the Lenovo System x products.

- **Systems-management capabilities**

The server comes with an IMM2 service processor. When the IMM2 is used with the systems-management software that comes with the server, you can manage the functions of the server locally and remotely. The IMM2 also provides system monitoring, event recording, and network alert capability. The systems-management connector on the rear of the server is dedicated to the IMM2. The dedicated systems-management connector provides additional security by physically separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems-management network or a shared network.

- **TCP/IP offload engine support**

Some of the Ethernet controllers that can be installed in the server support TCP/IP Offload Engine (TOE). TOE is a *technology* that offloads the TCP/IP flow from the microprocessor and I/O subsystem to increase the speed of the TCP/IP flow. When Ethernet controllers are installed that support TCP/IP technology, TCP/IP processing is moved to and managed by the Ethernet controller allowing the microprocessor to be used for more important tasks. When an operating system that supports TOE is running on the server and TOE is enabled, the server supports TOE operation. See the operating-system documentation for information about enabling TOE.

Note: As of the date of this document, the Linux operating system does not support TOE.

- **UEFI-compliant server firmware**

The UEFI firmware offers several features, including Unified Extensible Firmware Interface (UEFI) version 2.1 compliance, Active Energy Management (AEM) technology, enhanced reliability, availability, and serviceability (RAS) capabilities, and basic input/output system (BIOS) compatibility support. UEFI replaces the BIOS and defines a standard interface between the operating system, platform firmware, and external devices. The server is capable of booting UEFI-compliant operating systems, BIOS-based operating systems, and BIOS-based adapters as well as UEFI-compliant adapters. For more information

about UEFI-compliant firmware, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=MIGR-5083207>.

Note: The server does not support DOS.

- **VMware ESXi embedded hypervisor**

An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. Install the USB flash device in the USB embedded hypervisor flash device connectors on the system board (see “System-board internal connectors” on page 30). See “Using the embedded hypervisor” on page 163 for additional information.

Reliability, availability, and serviceability

Three important computer design features are reliability, availability, and serviceability (RAS). The RAS features help to ensure the integrity of the data that is stored in the server, the availability of the server when you need it, and the ease with which you can diagnose and correct problems.

Your server has the following RAS features:

- 3-year parts and 3-year labor limited warranty
- 24-hour support center
- Automatic error retry and recovery
- Automatic restart on nonmaskable interrupt (NMI)
- Automatic restart after a power failure
- Backup Unified Extensible Firmware Interface (UEFI) switching under the control of the integrated management module II
- Built-in monitoring for fan, power, temperature, voltage, and power-supply redundancy
- Cable-presence detection on most connectors
- Chipkill memory protection
- Single-device data correction (SDDC) for x4 DRAM technology DIMMs. Ensures that data is available on a single x4 DRAM DIMM after a hard failure of up to two DRAM DIMMs. One x4 DRAM DIMM in each rank is reserved as a spare device.
- Diagnostic support for ServeRAID and Ethernet adapters
- Error codes and messages
- Error correcting code (ECC) L3 cache and system memory
- Full Array Memory Mirroring (FAMM) redundancy
- Hot-swap cooling fans with speed-sensing capability
- Hot-swap hard disk drives
- Hot-swap power supplies
- Information and light path diagnostics LED panels
- Integrated management module II
- Light path diagnostics LEDs for DIMMs, microprocessors, hard disk drives, solid state drives, power supplies, and fans
- Memory mirroring and memory sparing support
- Memory error correcting code and parity test
- Memory downsizing (non-mirrored memory). After a restart of the server after the memory controller detects a non-mirrored uncorrectable error and the memory controller cannot recover operationally, the IMM logs the uncorrectable error and informs the power-on self-test. The power-on self-test logically maps out the memory with the uncorrectable error, and the server restarts with the remaining installed memory.

- Menu-driven setup, system configuration, and redundant array of independent disks (RAID) configuration programs
- Microprocessor built-in self-test (BIST), internal error signal monitoring, internal thermal trip signal monitoring, configuration checking, and microprocessor and voltage regulator module failure identification through light path diagnostics
- NMI button
- Parity checking on the PCIe buses
- Power management: compliance with Advanced Configuration and Power Interface (ACPI)
- Power-on self-test
- Predictive Failure Analysis (PFA) alerts on memory, SAS/SATA hard disk drives or solid state drives
- Redundant hot-swap power supplies and redundant hot-swap fans
- Remind button to temporarily turn off the system-error LED
- Remote system problem-determination support
- ROM-based diagnostics
- ROM checksums
- Serial Presence Detection (SPD) on memory, vital product data (VPD) on system board, power supply, and hard disk drive or solid state drive backplanes, microprocessor and memory expansion tray, and Ethernet adapters
- Single-DIMM isolation of excessive correctable error or multi-bit error by the UEFI
- Solid-state drives
- Standby voltage for systems-management features and monitoring
- Startup (boot) from LAN through remote initial program load (RIPL) or dynamic host configuration protocol/boot protocol (DHCP/BOOTP)
- System auto-configuring from the configuration menu
- System-error logging (POST and IMM)
- Systems-management monitoring through the Inter-Integrated Circuit (I2C) protocol bus
- Uncorrectable error (UE) detection
- Upgradeable UEFI, DSA, and IMM firmware, locally or over the LAN
- Wake on LAN capability

Systems Director program

You can use the IBM Systems Director program to manage your Lenovo server. IBM Systems Director program is a platform-management foundation that streamlines the way you manage physical and virtual systems in a heterogeneous environment. By using industry standards, IBM Systems Director supports multiple operating systems and virtualization technologies in Lenovo and non-Lenovo x86 platforms.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the Lenovo System x products.

Through a single user interface, IBM Systems Director provides consistent views for viewing managed systems, determining how these systems relate to one other, and identifying their statuses, helping to correlate technical resources with business needs. A set of common tasks that are included with IBM Systems Director provides many of the core capabilities that are required for basic management, which means instant out-of-the-box business value. The common tasks include discovery, inventory, configuration, system health, monitoring, updates, event notification, automation for managed systems, hardware log, power, and light path.

The IBM Systems Director web and command-line interfaces provide a consistent interface that is focused on driving these common tasks and capabilities:

- Discovering, navigating, and visualizing systems on the network with the detailed inventory and relationships to the other network resources
- Notifying users of problems that occur on systems and the ability to isolate the source of the problem
- Notifying users when systems need updates and distributing and installing updates on a schedule
- Analyzing real-time data for systems and setting critical thresholds that notify the administrator of emerging problems
- Configuring settings of a single system and creating a configuration plan that can apply those settings to multiple systems
- Updating installed plug-ins to add new features and functions to the base capabilities
- Managing the life cycles of virtual resources

For more information about IBM Systems Director, see http://pic.dhe.ibm.com/infocenter/director/pubs/index.jsp?topic=%2Fcom.ibm.director.main.helps.doc%2Ffqm0_main.html and <http://www.ibm.com/systems/management> which presents an overview of IBM Systems Management and IBM Systems Director.

Server controls, LEDs, and power

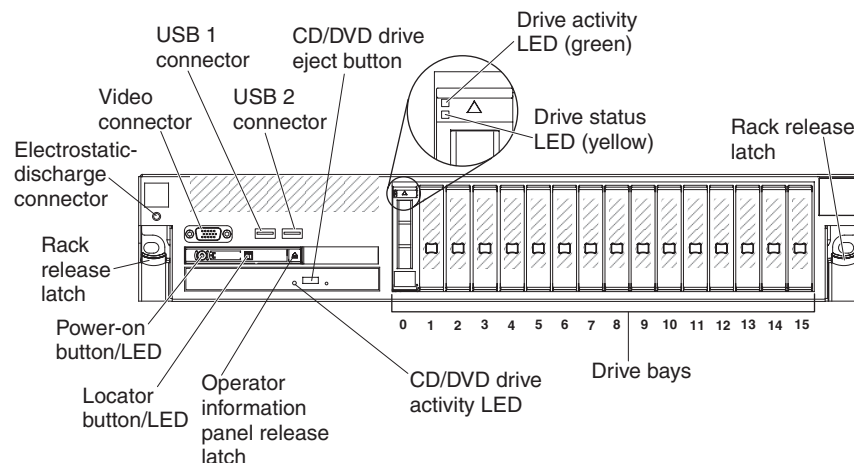
Use this information to view power features, turn on and turn off the server, and view the functions of the controls and indicators.

This section describes the controls and light-emitting diodes (LEDs) and how to turn the server on and off. For the locations of other LEDs on the system board, see “System-board LEDs” on page 34.

Front view

This section contains information about the controls, LEDs, and connectors on the front of the server.

The following illustration shows the controls, LEDs, and connectors on the front of the server.



- **Rack release latches:** Press the latch on each front side of the server to slide the server out of the rack.
- **Electrostatic-discharge connector:** Connect an electrostatic-discharge wrist strap to this connector when you work with static-sensitive devices.
- **Drive status LEDs:** These LEDs are on SAS or SATA hard disk drives and solid state drives. When one of these LEDs is lit, it indicates that the drive has failed. When this LED is flashing slowly (one flash per second), it indicates that the drive is being rebuilt. When the LED is flashing rapidly (three flashes per second), it indicates that the controller is identifying the drive.
- **Drive activity LEDs:** These LEDs are on SAS or SATA hard disk drives and solid state drives. Each hot-swap drive has an activity LED, and when this LED is flashing, it indicates that the drive is in use.
- **CD/DVD eject button:** Press this button to release a DVD or CD from the CD/DVD drive.
- **CD/DVD drive activity LED:** When this LED is lit, it indicates that the CD-RW/DVD drive is in use.
- **Operator information panel:** This panel contains controls and LEDs that provide information about the status of the server. For information about the controls and LEDs on the operator information panel, see “Operator information panel.”
- **Operator information panel release button:** Press the blue release button and pull out the light path diagnostics panel to view the light path diagnostics LEDs and buttons. See “Light path diagnostics” on page 21, “Light path diagnostics” on page 178, and “Light path diagnostics LEDs” on page 181 for more information about light path diagnostics.
- **Video connector:** Connect a monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.

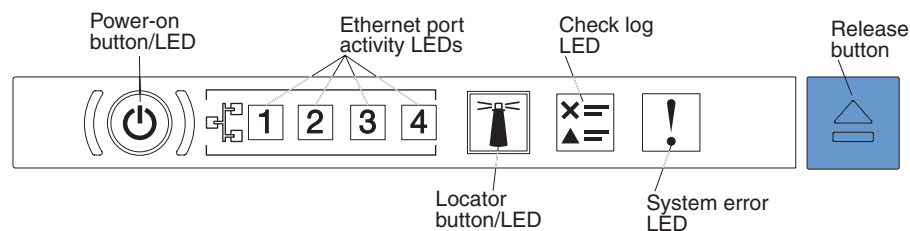
Note: The maximum video resolution is 1600 x 1200 at 75 Hz.

- **USB connectors:** Connect a USB device, such as a USB mouse, keyboard, or other device, to any of these connectors.

Operator information panel

The operator information panel consists of several LEDs: the Power-on button, Ethernet port activity, Locator button, check log and System error.

The following illustration shows the controls and LEDs on the operator information panel.



- **Power-on button/LED:** Press this button to turn the server on and off manually or to wake the server from a reduced-power state. The states of the power-on LED are as follows:
 - Off:** Input power is not present, or the power supply or the LED itself has failed.

Flashing rapidly (3 times per second): The server is turned off and is not ready to be turned on. The power-on button is disabled. This lasts approximately 10 seconds after input power has been applied or restored.

Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-on button to turn on the server.

Lit: The server is turned on.

- **Ethernet port activity LEDs:** When any of these LEDs is flashing or flickering, it indicates that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port that corresponds to that LED.
- **Locator button/LED:** Use this blue LED to visually locate the server among other servers. This LED is also used as a presence detection button. You can use IBM Systems Director to light this LED remotely. This LED is controlled by the IMM. When you press the locator button, the LED will be lit and it will continue to be lit until you press it again to turn it off. Press the locator button to visually locate the server among other servers. It is also used as the physical presence for the Trusted Platform Module (TPM).
- **Check log LED:** When this yellow LED is lit, it indicates that there are errors that require further diagnosis. Check the IMM2 event log for additional information. See “Event logs” on page 188 for more information about event logs.
- **System-error LED:** When this yellow LED is lit, it indicates that a system error has occurred. A system-error LED is also on the rear of the server. An LED on the light path diagnostics panel on the operator information panel is also lit to help isolate the error. This LED is controlled by the IMM.

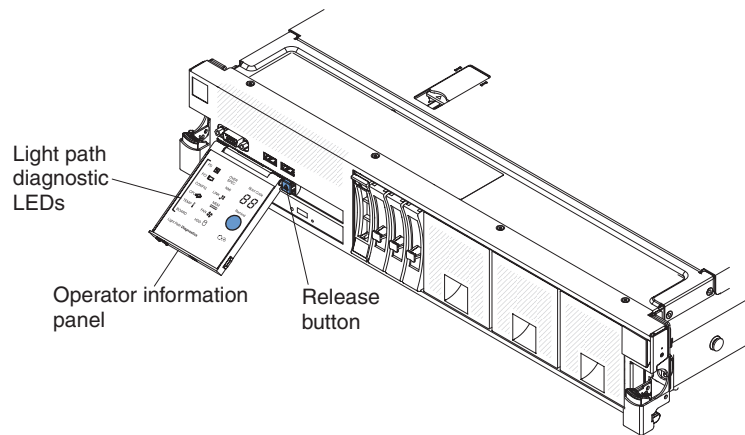
Light path diagnostics

Light path diagnostics is a system of LEDs on various external and internal components of the server.

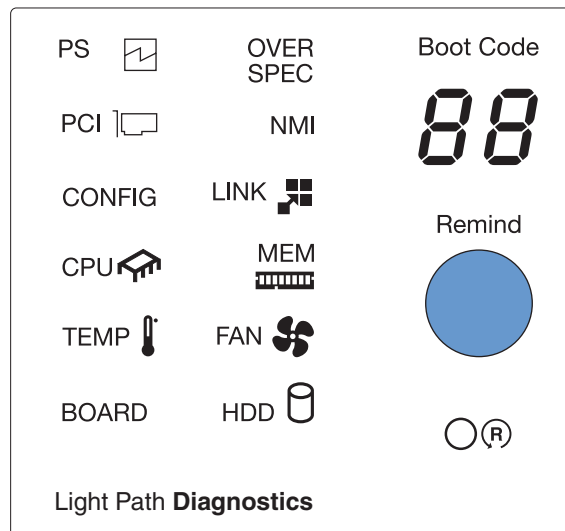
The light path diagnostics LEDs are on the top of the operator information panel. For additional information about light path diagnostics and LEDs, see “Light path diagnostics” on page 178 and “Light path diagnostics LEDs” on page 181.

Note: The system service label on the underside of the cover also provides information about the location of the light path diagnostics LEDs.

To access the light path diagnostics LEDs, press the blue release button on the operator information panel and pull forward on the unit until the hinge of the operator panel is free of the server chassis; then, pull down on the unit so that you can view the light path diagnostics LEDs.



The following illustration shows the LEDs and controls on the light path diagnostics panel.

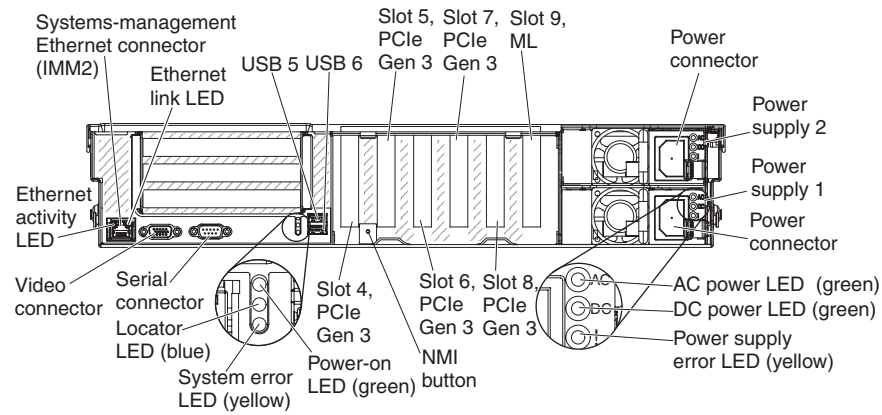


- **Boot code display:** This display provides boot error codes that indicate the point at which the system stopped during the boot block and the power-on self-test (POST). A boot code is a byte value that is produced by UEFI. In addition to UEFI codes, this display provides error codes in the event of a microprocessor error or a power fault. Along with the IMM2 event log, the error codes can provide suggested components to be replaced.
- **Remind button:** This button places the system-error LED on the operator information panel into the Remind mode. In Remind mode, the system-error LED flashes once every 2 seconds until the problem is corrected, the server is restarted, or a new problem occurs.
By placing the system-error LED indicator in the Remind mode, you acknowledge that you are aware of the last failure but will not take immediate action to correct the problem.
- **Reset button:** Press this button to reset the server and run the POST. You might have to use a pen or the end of a straightened paper clip to press the button. The Reset button is in the lower-right corner of the light path diagnostics panel.

Rear view

This section contains information about the LEDs and connectors on the rear of the server.

The following illustrations show the connectors and LEDs on the rear of the server.



- **Systems-management Ethernet connector:** Use this connector to manage the server, by using a dedicated management network. If you use this connector, the Integrated management module II (IMM2) cannot be accessed directly from the production network. A dedicated management network provides additional security by physically separating the management network traffic from the production network. You can use the Setup utility to configure the server to use a dedicated systems-management network or a shared network.
- **Video connector:** Connect a monitor to this connector. The video connectors on the front and rear of the server can be used simultaneously.

Note: The maximum video resolution is 1600 x 1200 at 75 Hz.

- **Serial connector:** Connect a 9-pin serial device to this connector. The serial port is shared with the IMM2. The IMM2 can take control of the shared serial port to redirect serial traffic, using Serial over LAN (SOL).
- **Ethernet activity LEDs:** When these LEDs are lit, they indicate that the server is transmitting to or receiving signals from the Ethernet LAN that is connected to the Ethernet port.
- **Ethernet link LEDs:** When these LEDs are lit, they indicate that there is an active link connection on the 100BASE-TX, 1000BASE-TX, or 10GBASE-TX interface for the Ethernet port.
- **Locator LED:** Use this LED to visually locate the server among other servers. You can use IBM Systems Director to light this LED remotely. The IMM2 can also be used to turn this LED on and off. This LED is functionally equivalent to the locator LED on the front of the server.
- **System-error LED:** When this LED is lit, it indicates that a system error has occurred. An LED on the light path diagnostics panel is also lit to help isolate the error. This LED is functionally equivalent to the system-error LED on the front of the server.
- **Power-on LED:** When this LED is lit and not flashing, it indicates that the server is turned on. This LED is functionally equivalent to the power-on LED on the front of the server. The states of the power-on LED are as follows:

Off: Input power is not present, or the power supply or the LED itself has failed.

Flashing rapidly (3 times per second): The server is turned off and is not ready to be turned on. The power-on button is disabled. This lasts approximately 10 seconds after input power has been applied or restored.

Flashing slowly (once per second): The server is turned off and is ready to be turned on. You can press the power-on button to turn on the server.

Lit: The server is turned on.

- **USB connectors:** Connect a USB device, such as a USB mouse, keyboard, or other device, to any of these connectors.
- **NMI button:** Press this button to force a nonmaskable interrupt to the microprocessor. You might have to use a pen or the end of a straightened paper clip to press the button. You can also use it to force a blue-screen memory dump. Use this button only when you are directed to do so by IBM Support.
- **ML adapter slot:** Insert a quad-port GbE, dual-port 10 Gbase-T, or dual-port 10 GbE SFP+ ML2 adapter into this slot. (see “System-board internal connectors” on page 30 for the location of the ML adapter slot on the system board. and “Installing an adapter” on page 76 for information about the installation of the ML2 adapters.
- **PCIe adapter slots:** Insert the PCIe adapters into these slots (see “System-board internal connectors” on page 30 for the locations of the PCIe adapter slots on the system board). See Table 15 on page 76 and “Installing an adapter” on page 76 for information about adapters.
- **Power-supply connector:** Connect the power cord to this connector.
- **AC power LED:** Each hot-swap power supply has an ac power LED and a dc power LED. When the ac power LED is lit, it indicates that sufficient power is being supplied to the power supply through the power cord. During normal operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see “Power-supply LEDs” on page 186.
- **DC power LED:** Each hot-swap power supply has a dc power LED and an ac power LED. When the dc power LED is lit, it indicates that the power supply is supplying adequate dc power to the system. During normal operation, both the ac and dc power LEDs are lit. For any other combination of LEDs, see “Power-supply LEDs” on page 186.
- **Power-supply error LED:** When the power-supply error LED is lit, it indicates that the power supply has failed, see “Power-supply LEDs” on page 186.

Server power features

Use this information to view power features and turn on and turn off the server.

When the server is connected to a suitable input power source but is not turned on, the operating system does not run, and all core logic except for the service processor (the IMM) is shut down. The server can respond to requests to the service processor, such as a remote request to turn on the server. The power-on LED flashes and indicates that the server is connected to input power but is not turned on.

Turning on the server

Use this information for details about turning on the server.

Approximately 5 seconds after the server is connected to input power, one or more fans might start running and the power-on LED flashes quickly. Approximately 10 seconds after the server is connected to input power, the power-on button becomes active. After the power-on button becomes active, the power-on LED flashes slowly. You can turn on the server by pressing the power-on button.

If a power failure occurs while the server is turned on, the server will restart automatically when power is restored.

Note: To disable this feature in the Setup utility (see “Using the Setup utility” on page 145), select **System Settings** → **Integrated Management Module** → **Power Restore Policy**.

Turning off the server

Use this information for details about turning off the server.

When you turn off the server and leave it connected to input power, the server can respond to requests to the service processor (the IMM), such as a remote request to turn on the server. While the server remains connected to input power, one or more fans might continue to run. To remove all power from the server, you must disconnect it from the power source.

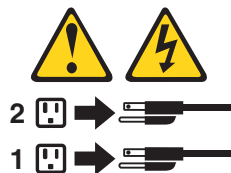
Some operating systems require an orderly shutdown before you turn off the server. See your operating-system documentation for information about shutting down the operating system.

Statement 5



CAUTION:

The power control button on the device do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



The server can be turned off in any of the following ways:

- You can turn off the server from the operating system, if your operating system supports this feature. After an orderly shutdown of the operating system, the server will turn off automatically.

- You can press the power-on button to start an orderly shutdown of the operating system and turn off the server, if your operating system supports this feature.
- If the operating system stops functioning, you can press and hold the power-on button for more than 4 seconds to turn off the server.
- The IMM can turn off the server as an automatic response to a critical system failure.
- You can turn off the server remotely by issuing a power-off command through the IMM2.

Chapter 2. Installing optional devices

The information in this section provides detailed instructions for installing optional hardware devices in the server.

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

In addition to the instructions in this document for installing optional hardware devices, updating the firmware and device drivers, and completing the installation, Business Partners must also complete the steps in "Instructions for Business Partners" on page 28.

Important: To help ensure that the devices that you install work correctly and do not introduce problems, observe the following precautions:

1. Make sure that the server and the installed firmware levels support the devices that you are installing. If necessary, update the UEFI and IMM firmware and any other firmware that is stored on the system board. For information about where firmware is stored in the server, see "Updating the firmware" on page 141. For a list of supported optional devices for the server, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.
Attention: Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.
2. Use the best practices to apply current firmware and device-driver updates for the server and optional devices. Additional hints and tips are available from the following sites:
 - IBM support: <http://www.ibm.com/supportportal/>
 - System x configuration tools: <http://www.ibm.com/systems/x/hardware/configtools.html>
3. Before you install optional hardware devices, make sure that the server is working correctly. Start the server and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see "Running the DSA Preboot diagnostic programs" on page 194 for information about how to run diagnostics.
4. Follow the installation procedures in this chapter and use the correct tools. Incorrectly installed devices can cause system failure because of damaged pins in sockets or connectors, loose cabling, or loose components.

Instructions for Business Partners

This section provides instructions for installing optional hardware devices, updating firmware and device drivers, and completing the installation.

Lenovo Business Partners must complete the following steps:

1. After you have confirmed that the server starts correctly and recognizes the newly installed devices and that no error LEDs are lit, run the Dynamic System Analysis (DSA) stress test. For information about using DSA, see "Dynamic System Analysis" on page 192.
2. Shut down and restart the server multiple times to ensure that the server is correctly configured and functions correctly with the newly installed devices.
3. Save the DSA log as a file and send it to IBM. For information about transferring data and logs, see "How to send DSA data."
4. To ship the server, repack it in the original undamaged packing material and observe the procedures for shipping.

Support information for Lenovo Business Partners is available at http://www.ibm.com/partnerworld/pwhome.nsf/weblook/index_us.html.

How to send DSA data

Before you send diagnostic data to IBM support, read the terms of use at http://www.ibm.com/de/support/ecurep/send_http.html.

About this task

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

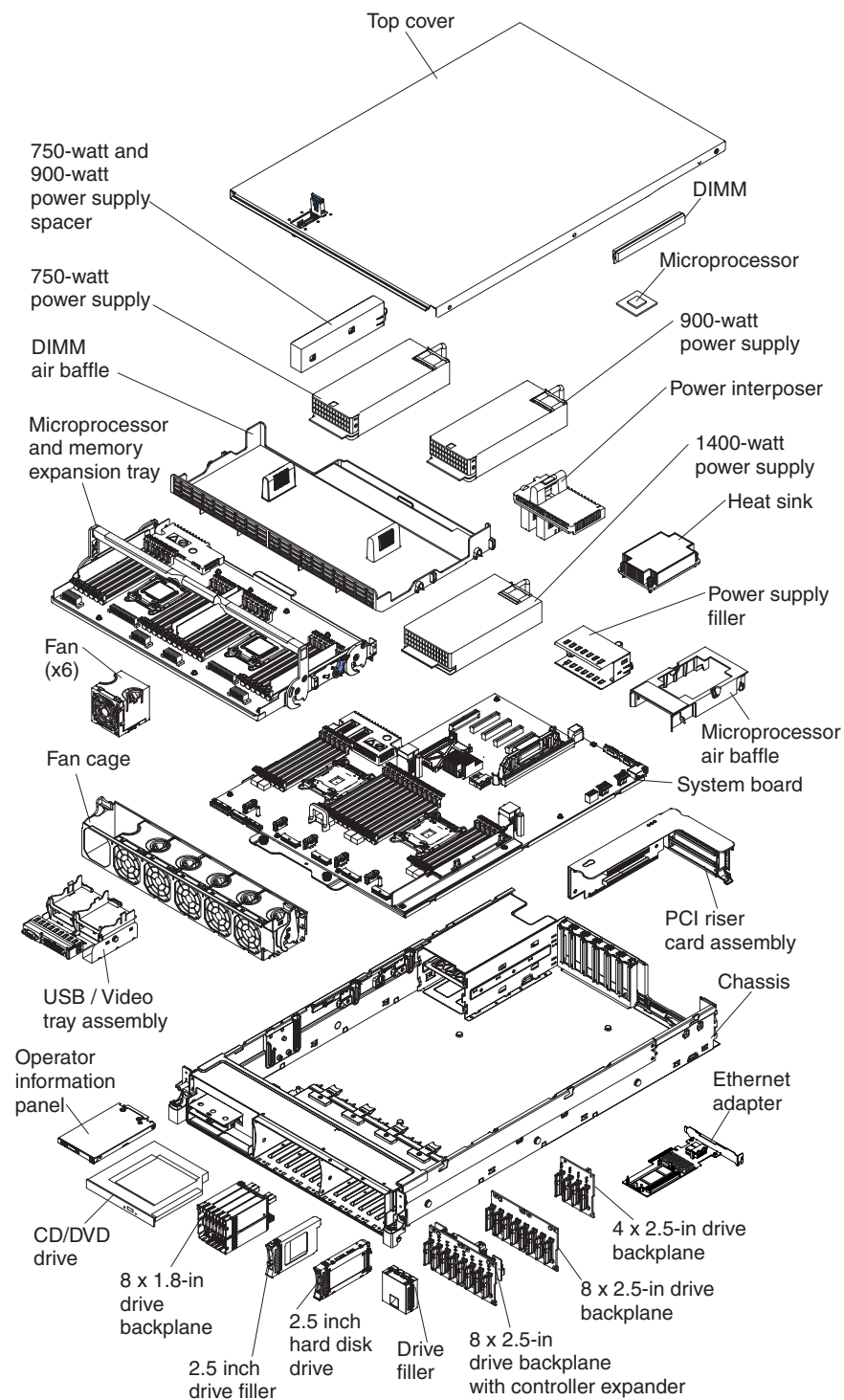
You can use any of the following methods to send diagnostic data to IBM:

- **Standard upload:** http://www.ibm.com/de/support/ecurep/send_http.html
- **Standard upload with the system serial number:** http://www.ecurep.ibm.com/app/upload_hw
- **Secure upload:** http://www.ibm.com/de/support/ecurep/send_http.html#secure
- **Secure upload with the system serial number:** https://www.ecurep.ibm.com/app/upload_hw

Server components

Use this information to locate the connectors, LEDs, jumpers, and switches on the system board.

The following illustration shows the major components in the server. The illustrations in this document might differ slightly from your hardware.



Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.

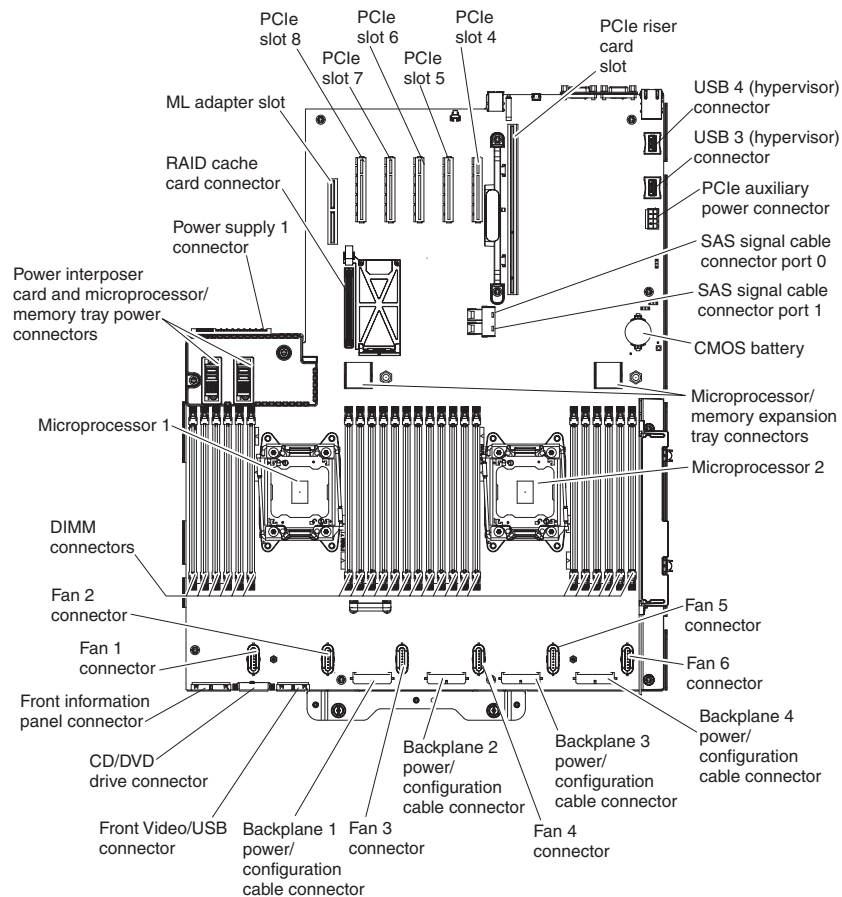
Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. Orange on a component, can also indicate touch points on hot-swap components. See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.

The illustrations in the following sections show the connectors, LEDs, and jumpers on the system board. In addition, illustrations of the connectors and LEDs on the optional microprocessor and memory expansion tray, the PCIe riser-cards and ML2 adapters are included.

System-board internal connectors

Use this information to locate the system-board internal connectors.

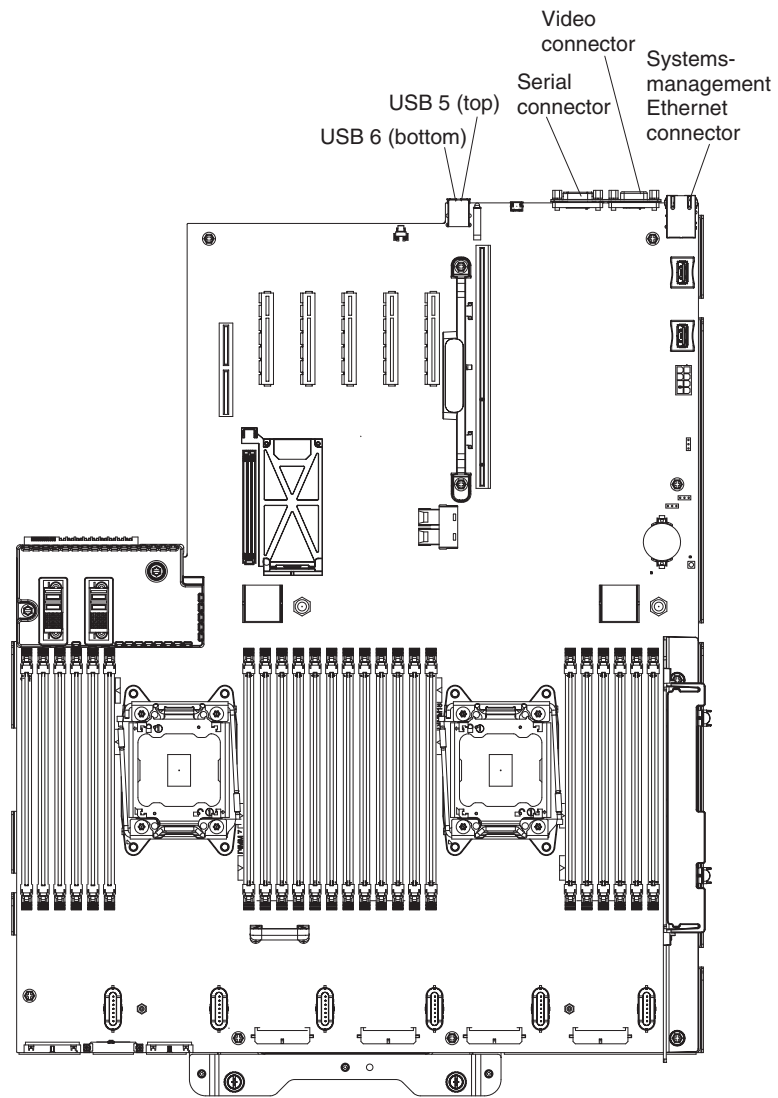
The following illustration shows the internal connectors on the system board.



System-board external connectors

Use this information to locate the system-board external connectors.

The following illustration shows the external input/output connectors on the system board.

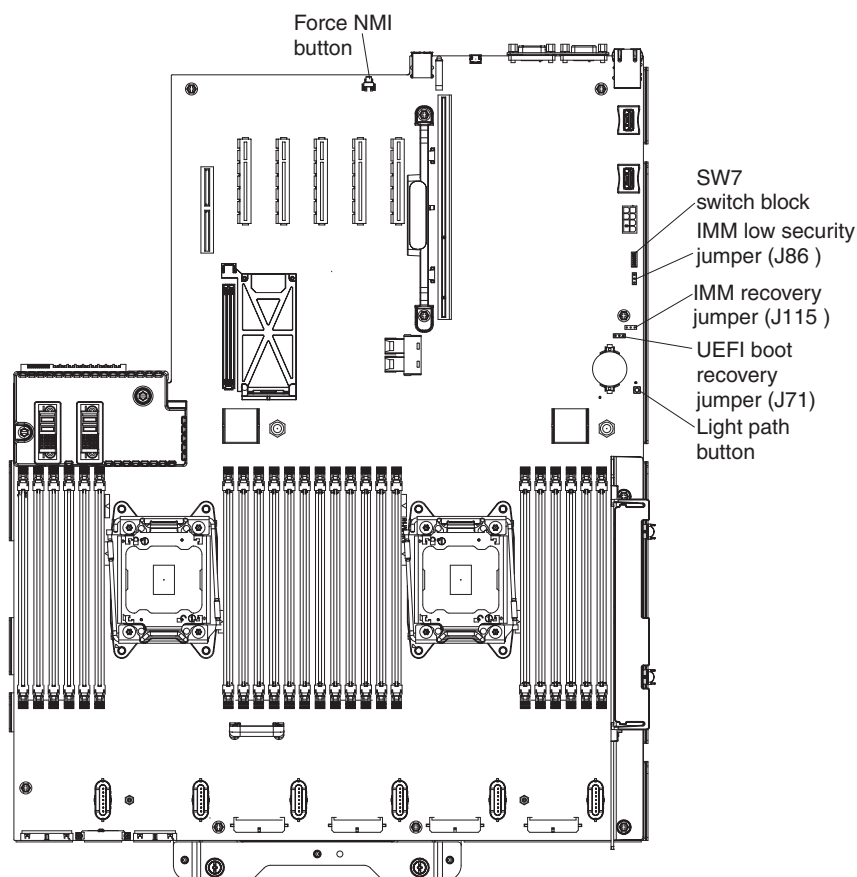


System-board switches, jumpers, and buttons

Use this information to locate the switches, jumpers, and buttons on the server.

The following illustration shows the location of the switches, jumpers, and buttons on the server.

Note: If there is a clear protective sticker on the top of the switch block, you must remove and discard it to access the switch.



The following table describes the jumpers on the system board.

Table 2. System-board jumpers

Jumper number	Jumper name	Jumper setting
J71	UEFI boot recovery jumper	<ul style="list-style-type: none"> Pins 1 and 2: (default) Loads the primary UEFI firmware ROM page. Pins 2 and 3: Loads the secondary (backup) UEFI firmware ROM page.
J86	IMM low security jumper	<ul style="list-style-type: none"> Pins 1 and 2: Removes the security check, allowing unsigned IMM2 firmware. Pins 2 and 3: (default) Allows only signed IMM2 firmware to be flashed.

Table 2. System-board jumpers (continued)

Jumper number	Jumper name	Jumper setting
J115	IMM recovery jumper	<ul style="list-style-type: none"> • Pins 1 and 2: (default) Loads the primary IMM firmware ROM page. • Pins 2 and 3: Loads the secondary (backup) IMM firmware ROM page.
Note: <ol style="list-style-type: none"> 1. If no jumper is present, the server responds as if the pins are set to the default. 2. Changing the position of the UEFI boot recovery jumper from pins 1 and 2 to pins 2 and 3 before the server is turned on alters which flash ROM page is loaded. Do not change the jumper pin position after the server is turned on. This can cause an unpredictable problem. 		

The following table describes the functions of the SW7 switch block on the system board.

Table 3. System-board SW7 switch block descriptions

Switch number	Default position	Description
1	Off	Reserved
2	Off	Clear CMOS memory. When this switch is toggled to On, it clears the data in CMOS memory, which clears the power-on password.
3	Off	Reserved
4	Off	Reserved
5	Off	Reserved
6	Off	<p>Power-on password override. Changing the position of this switch bypasses the power-on password check the next time the server is turned on and starts the Setup utility so that you can change or delete the power-on password.</p> <p>Notes:</p> <ul style="list-style-type: none"> • You do not have to move the switch back to the default position after the power-on password is overridden. • Changing the position of this switch does not affect the administrator password check if an administrator password is set. <p>See “Passwords” on page 153 for additional information about passwords.</p>
7	Off	Reserved
8	Off	Reserved

Important:

1. Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. Review the information in “Safety” on page vii, “Installation guidelines” on page 41, “Handling static-sensitive devices” on page 43, and “Turning off the server” on page 25.
2. Any system-board switch or jumper blocks that are not shown in the illustrations in this document are reserved.

The following table describes the functions of the buttons on the system board:

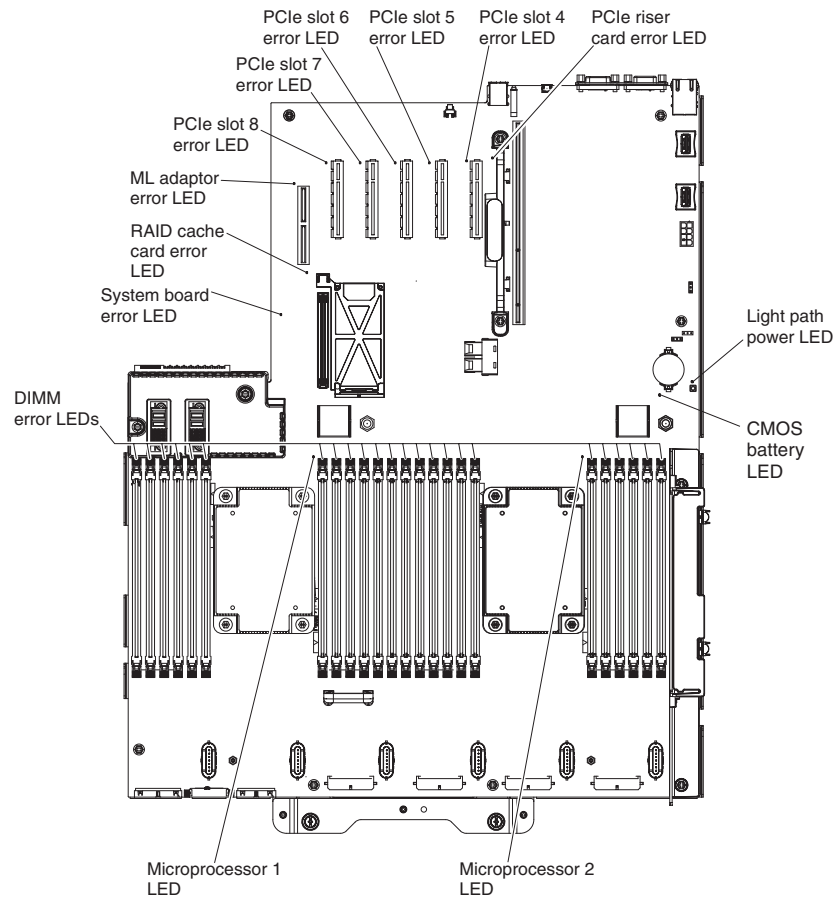
Table 4. Buttons on the server

Button name	Function
Light path button	Press this button to light the LEDs on the system board when the power source has been removed from the server.
Force NMI button	<p>This button is on the rear of the server. Press this button to force a nonmaskable interrupt to the microprocessor. You can also use this button to force a blue-screen memory dump (use this button only when you are directed to do so by IBM Support).</p> <p>Note:</p> <ul style="list-style-type: none">• You might have to use a pen or the end of a straightened paper clip to press the button.

System-board LEDs

Use this information to locate the system-board LEDs.

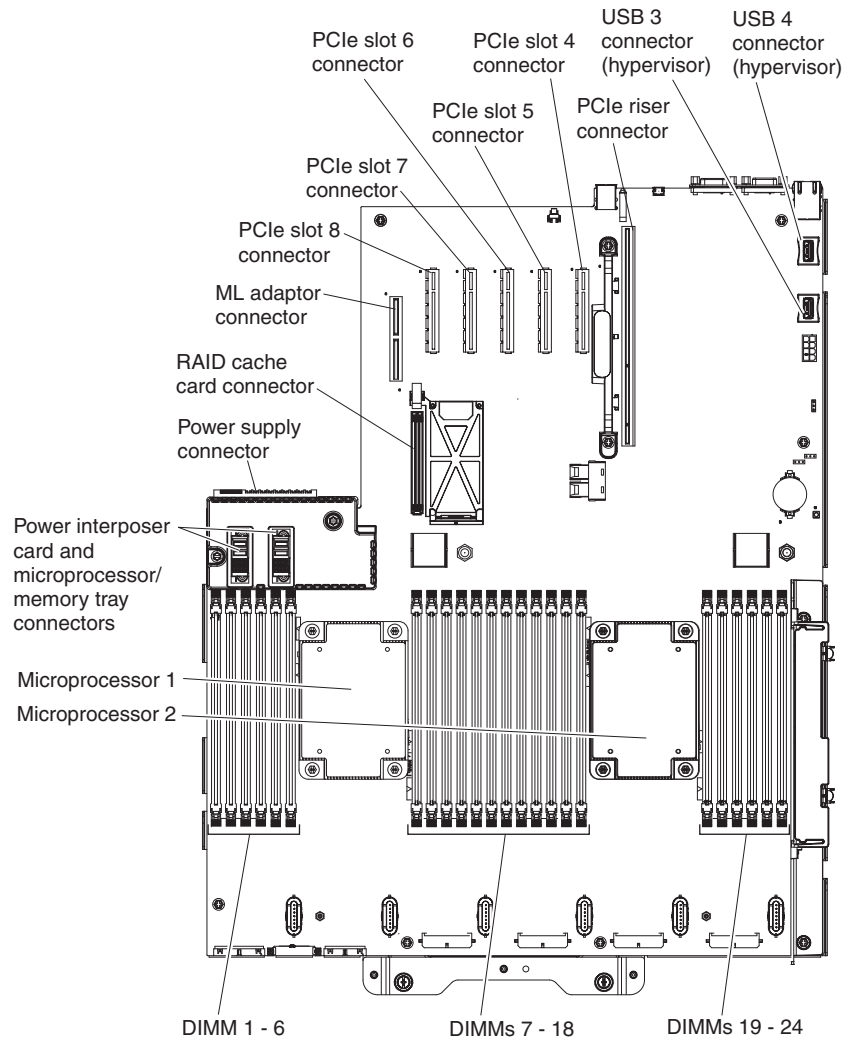
The following illustration shows the light-emitting diodes (LEDs) on the system board.



System-board optional-device connectors

Use this information to locate the system-board optional device connectors.

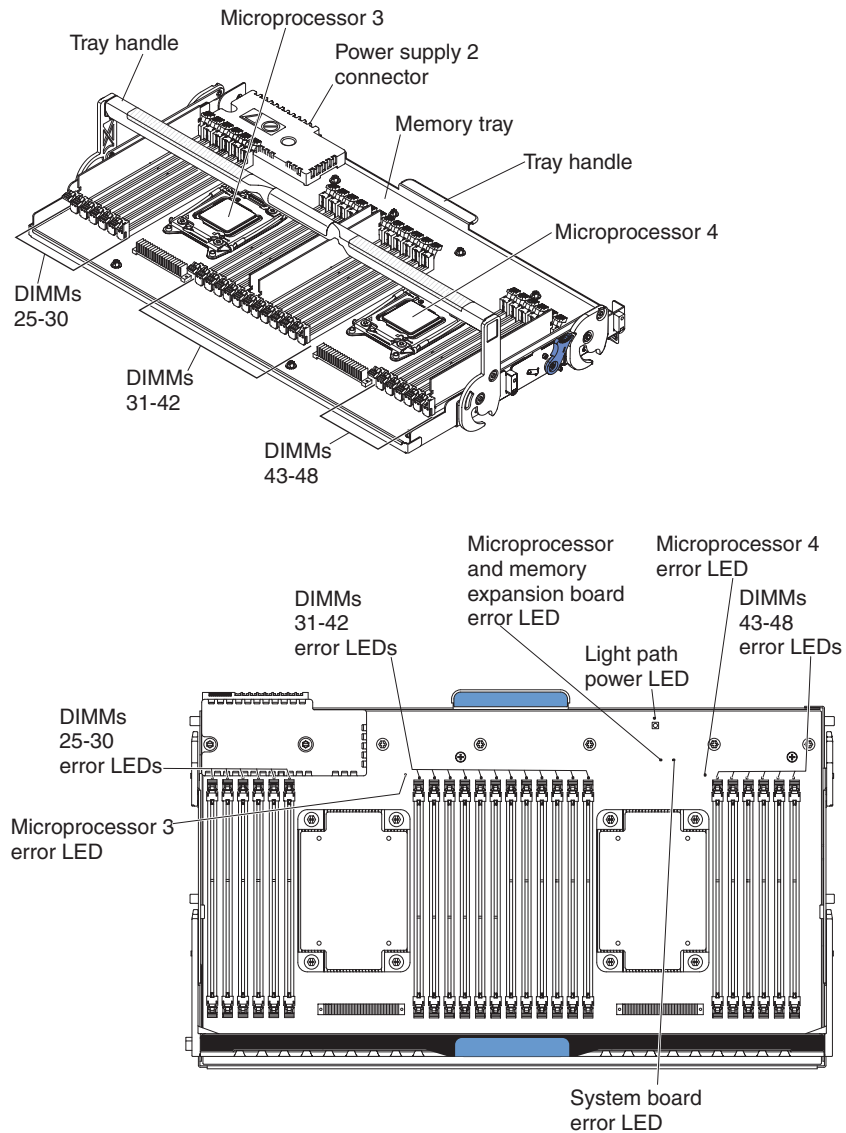
The following illustration shows the connectors on the system board for the optional devices.



Optional microprocessor and memory expansion tray

Use this information to locate the connectors and LEDS on the optional microprocessor and memory expansion tray.

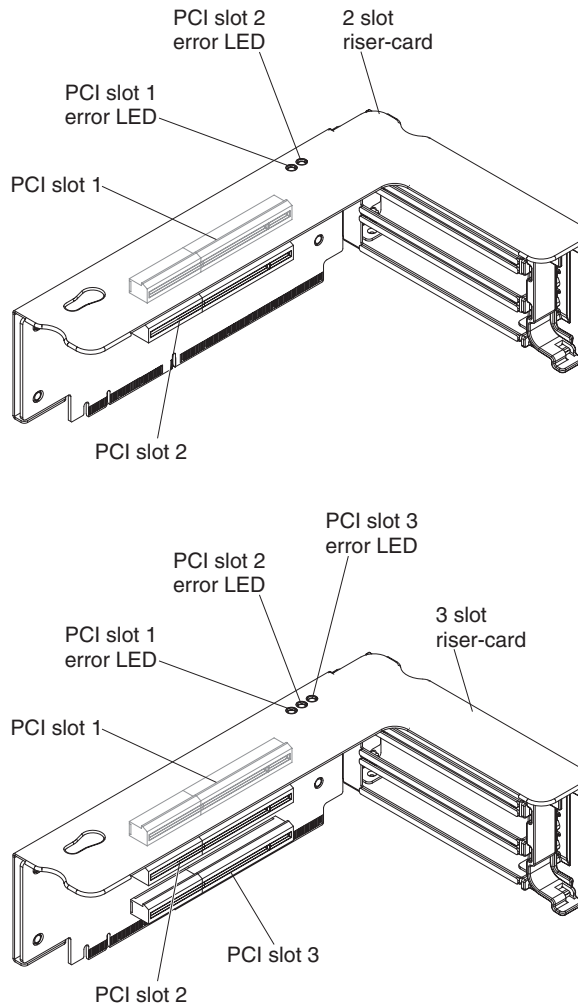
The following illustrations show the connectors and LEDS on the optional microprocessor and memory expansion tray.



PCIe riser-card

Use this information to locate the connectors and LEDs on the optional PCIe riser-card.

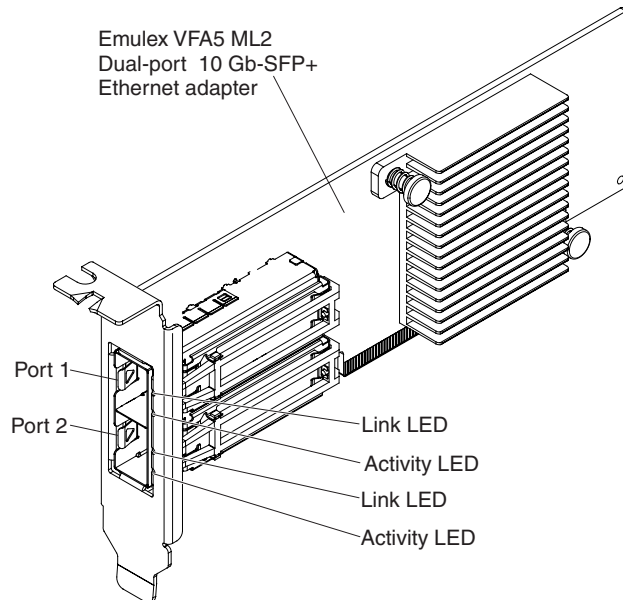
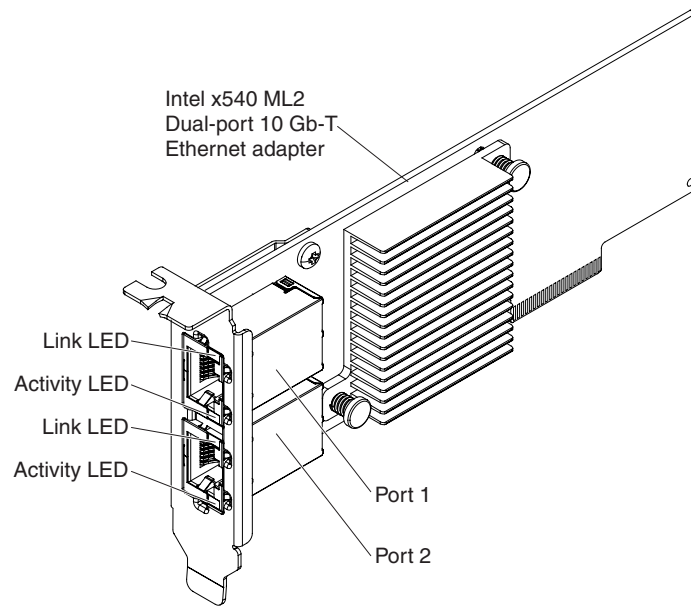
The following illustrations display the connectors and LEDs on the optional PCIe riser-cards:

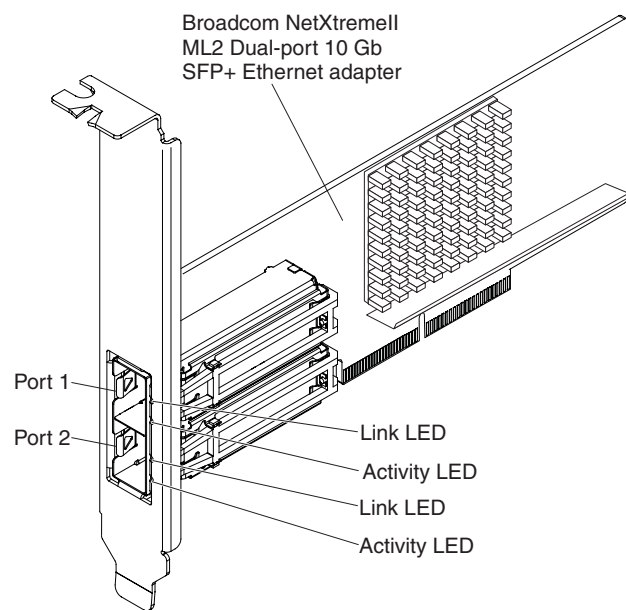
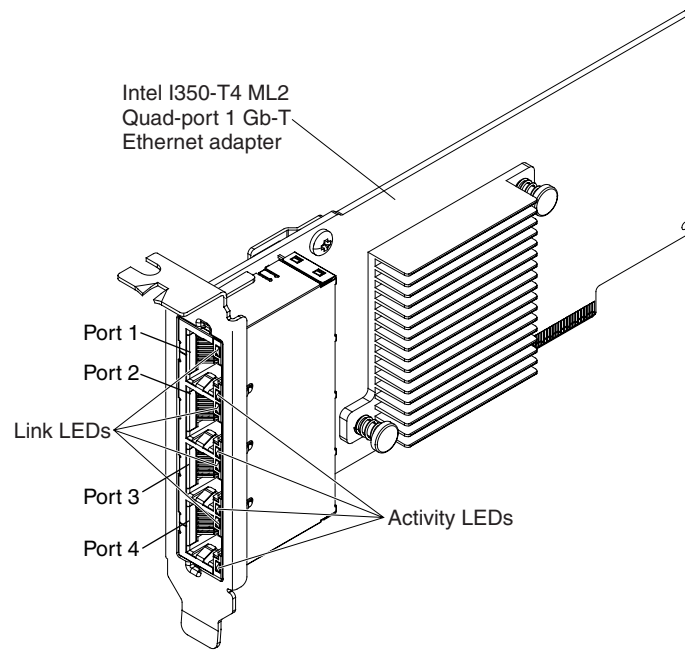


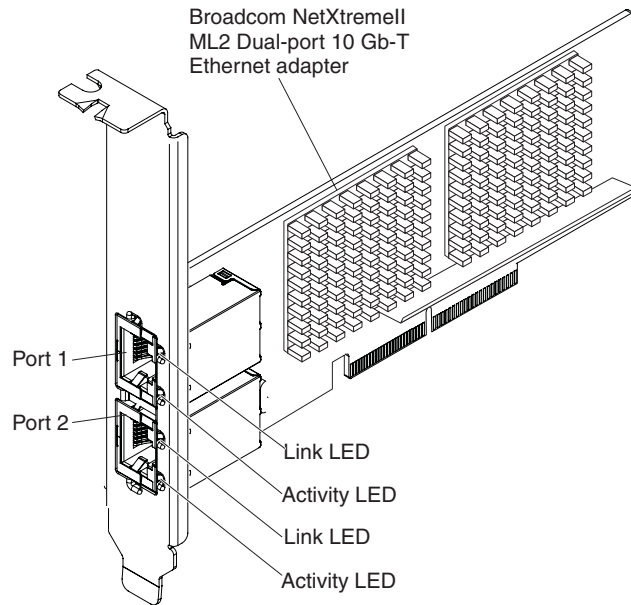
ML2 (Ethernet) adapters

Use this information to locate the LEDs on the optional ML2 adapters.

The following illustrations display the LEDs on the optional ML2 adapters:







Installation guidelines

Before you remove or replace a CRU or install an optional device, read the following information.

Attention: Static electricity that is released to internal server components when the server is powered on might cause the system to halt, which might result in the loss of data. To avoid this potential problem, use an electrostatic-discharge wrist strap and plug it into the Electrostatic-discharge connector on the front of the server (near the video connector) or other grounding system when you remove or install a hot-swap device.

Before you install optional devices, read the following information:

- Read the safety information, see “Safety” on page vii and the guidelines in “Handling static-sensitive devices” on page 43. This information will help you work safely.
- Make sure that the devices that you are installing are supported. For a list of supported optional devices for the server see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.
- When you install your new server, take the opportunity to download and apply the most recent firmware updates. This step will help to ensure that any known issues are addressed and that your server is ready to function at maximum levels of performance. To download firmware updates for your server, go to <http://www.ibm.com/support/fixcentral/>.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

For additional information about tools for updating, managing, and deploying firmware, see the ToolsCenter for Lenovo x86 servers at <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-CENTER>.

- Before you install optional hardware, make sure that the server is working correctly. Start the server, and make sure that the operating system starts, if an operating system is installed, or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise

working correctly. If the server is not working correctly, see “Running the DSA Preboot diagnostic programs” on page 194 for information about how to run diagnostics.

- Observe good housekeeping in the area where you are working. Place removed covers and other parts in a safe place.
- Do not attempt to lift an object that you think is too heavy for you. If you have to lift a heavy object, observe the following precautions:
 - Make sure that you can stand safely without slipping.
 - Distribute the weight of the object equally between your feet.
 - Use a slow lifting force. Never move suddenly or twist when you lift a heavy object.
 - To avoid straining the muscles in your back, lift by standing or by pushing up with your leg muscles.
- Make sure that you have an adequate number of properly grounded electrical outlets for the server, monitor, and other devices.
- Back up all important data before you make changes to disk drives.
- Have a small flat-blade screwdriver available.
- To view the error LEDs on the system board and internal components, leave the server connected to power.
- You do not have to turn off the server to install or replace hot-swap power supplies, hot-swap fans, or hot-plug Universal Serial Bus (USB) devices. However, you must turn off the server before you perform any steps that involve removing or installing adapter cables and you must disconnect the power source from the server before you perform any steps that involve removing or installing a riser-card.
- Blue on a component indicates touch points, where you can grip the component to remove it from or install it in the server, open or close a latch, and so on.
- Orange on a component or an orange label on or near a component indicates that the component can be hot-swapped, which means that if the server and operating system support hot-swap capability, you can remove or install the component while the server is running. (Orange can also indicate touch points on hot-swap components.) See the instructions for removing or installing a specific hot-swap component for any additional procedures that you might have to perform before you remove or install the component.
- When you are finished working on the server, reinstall all safety shields, guards, labels, and ground wires.

System reliability guidelines

Use these guidelines to ensure that the server meets the cooling and system reliability requirements:

To help ensure proper system cooling and system reliability, make sure that the following requirements are met:

- Each of the drive bays has a drive or a filler panel and electromagnetic compatibility (EMC) shield installed in it.
- Each of the power-supply bays has a power supply or a filler installed in it.
- There is adequate space around the server to allow the server cooling system to work properly. Leave approximately 50 mm (2.0 in.) of open space around the front and rear of the server. Do not place objects in front of the fans. For proper cooling and airflow, replace the server cover before you turn on the server.
- You have followed the cabling instructions that come with optional adapters.
- You have replaced a failed fan within 48 hours.
- You have replaced a hot-swap fan within 30 seconds of removal.
- You have replaced a hot-swap drive within 2 minutes of removal.
- You have replaced a failed hot-swap power supply within 2 minutes of removal.
- You do not operate the server without the air baffles installed. Operating the server without the air baffles might cause the device to overheat.

Handling static-sensitive devices

This section contains precautionary information about handling static-sensitive devices.

Attention: Static electricity can damage the server and other electronic devices. To avoid damage, keep static-sensitive devices in their static-protective packages until you are ready to install them.

To reduce the possibility of damage from electrostatic discharge, observe the following precautions:

- Limit your movement. Movement can cause static electricity to build up around you.
- Handle the device carefully, holding it by its edges or its frame.
- Do not touch solder joints, pins, or exposed circuitry.
- Do not leave the device where others can handle and damage it.
- While the device is still in its static-protective package, touch it to an unpainted metal surface on the outside of the server for at least 2 seconds. This drains static electricity from the package and from your body.
- Remove the device from its package and install it directly into the server without setting down the device. If it is necessary to set down the device, put it back into its static-protective package. Do not place the device on the server cover or on a metal surface.
- Take additional care when you handle devices during cold weather. Heating reduces indoor humidity and increases static electricity.

Removing the server top cover

Use this information to remove the server cover.

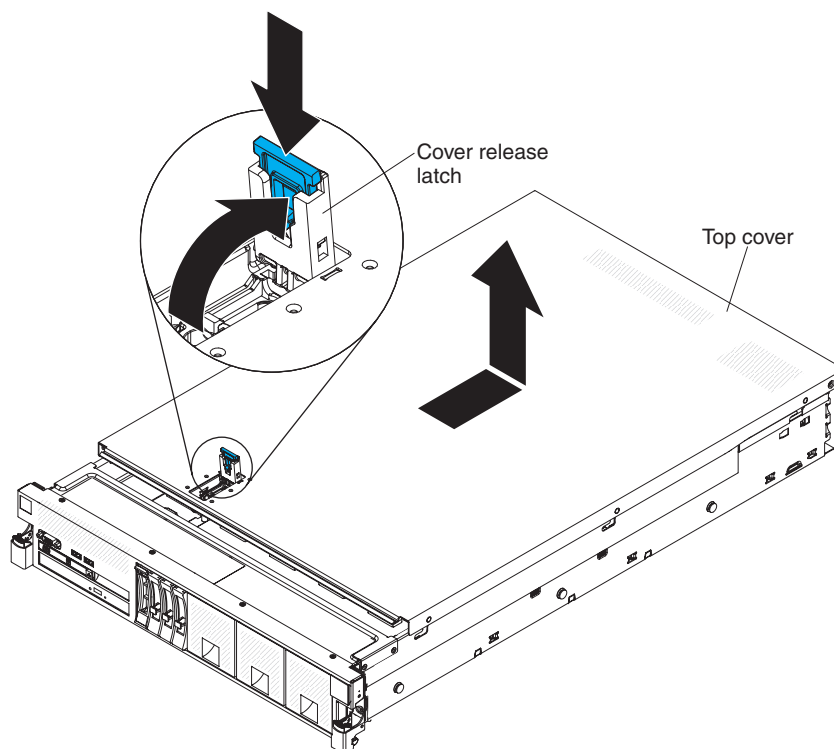
About this task

Before you install optional hardware devices, make sure that the server is working correctly. Start the server and make sure that the operating system starts (if an operating system is installed) or that a 19990305 error code is displayed, indicating that an operating system was not found but the server is otherwise working correctly. If the server is not working correctly, see Chapter 4, “Troubleshooting,” on page 171.

To remove the server top cover, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. If the server has been installed in a rack, slide the server out from the rack enclosure.
4. Press in on the blue tab on the cover-release latch and lift the cover-release latch up (the cover slides to the rear). Lift the cover off the server and set it aside.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Removing the microprocessor and memory expansion tray assembly

Use this information to remove the microprocessor and memory expansion tray.

About this task

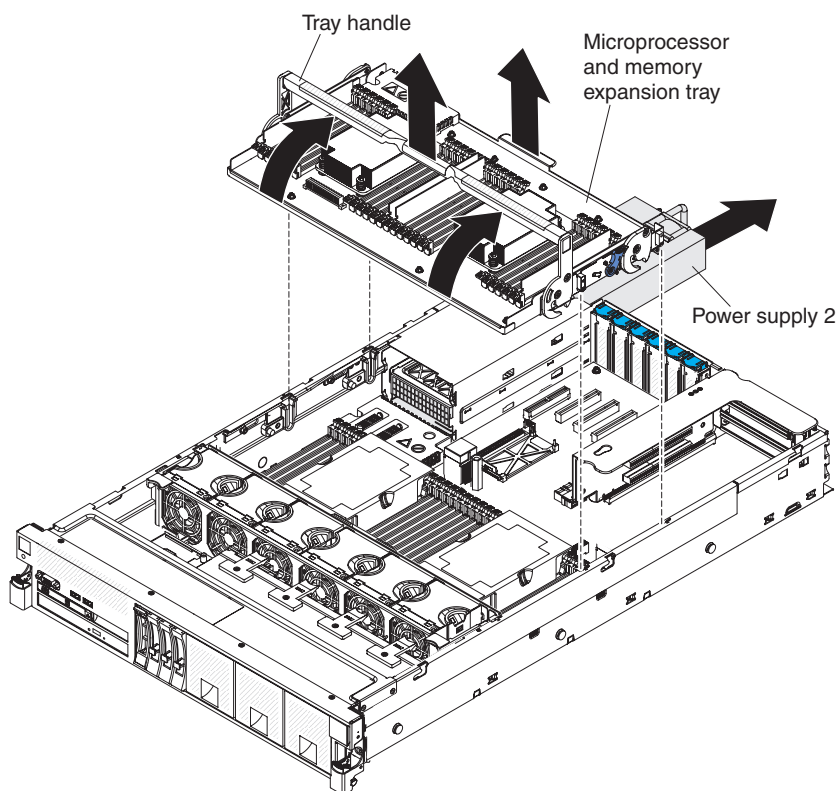
To remove the microprocessor and memory expansion tray, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. If the server has been installed in a rack, slide the server out from the rack enclosure.
4. Remove the top cover (see “Removing the server top cover” on page 44).
5. If power supply 2 is installed, slide it out of the power-supply bay slightly by pressing to the left the orange release tab.

Note: When the Power Supply is pulled out of the power supply bay, the Power Supply Interlock bracket is disengaged and the three Lock icons are no longer visible through the openings on the Interlock bracket.

6. Grasp the front handle tray by the blue touch points and rotate the handle all the way up to disengage the tray from the connectors on the system board.



7. Grasp the tray by both handles, lift it from the server, and set it on a flat surface to avoid damaging the connector pins on the bottom of the tray.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Removing the DIMM air baffle

Use this information to remove the DIMM air baffle.

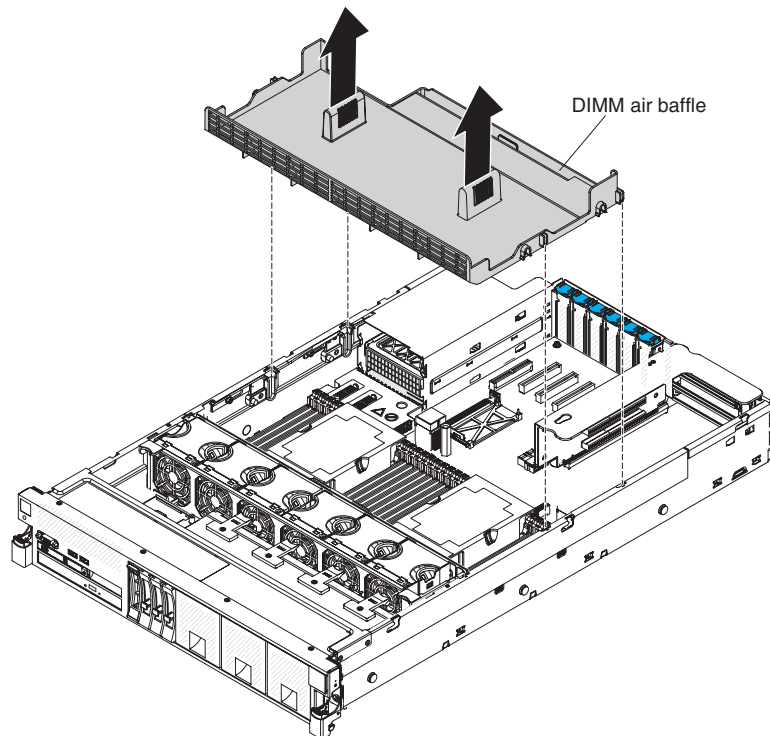
About this task

To remove the DIMM air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Lift the DIMM air baffle from the server and set it aside.

Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Removing the microprocessor air baffle

Use this information to remove the microprocessor air baffle.

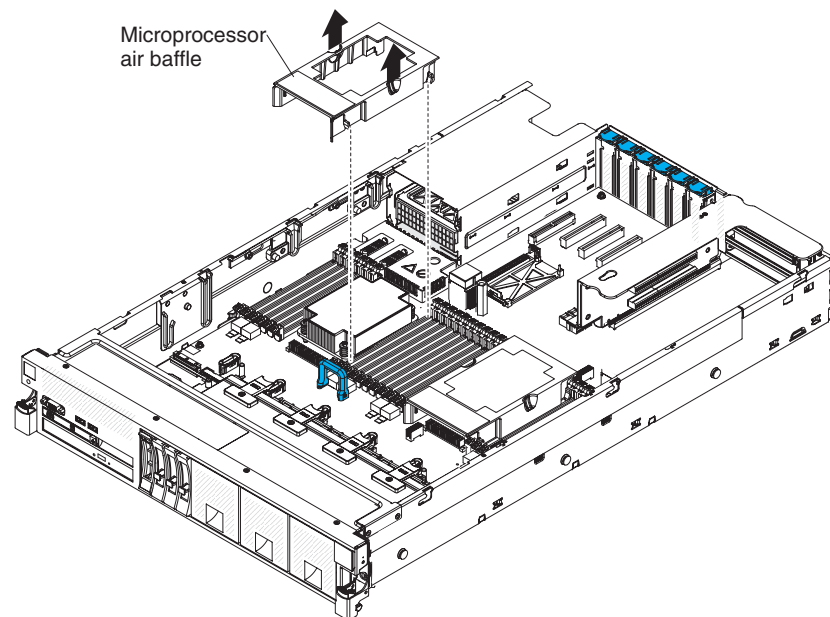
About this task

To remove the microprocessor air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Grasp the baffle by the grip points, lift it all the way up out of the slots, and set the baffle aside.

Note: A microprocessor air baffle must be installed whenever the two DIMM connectors closest to the microprocessor (on the left and the right) are empty. For example, when DIMM connectors 6 and 7 on the system board are empty, the microprocessor air baffle must be installed on microprocessor 1. This is applicable for all microprocessors.



Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Removing the fan cage assembly

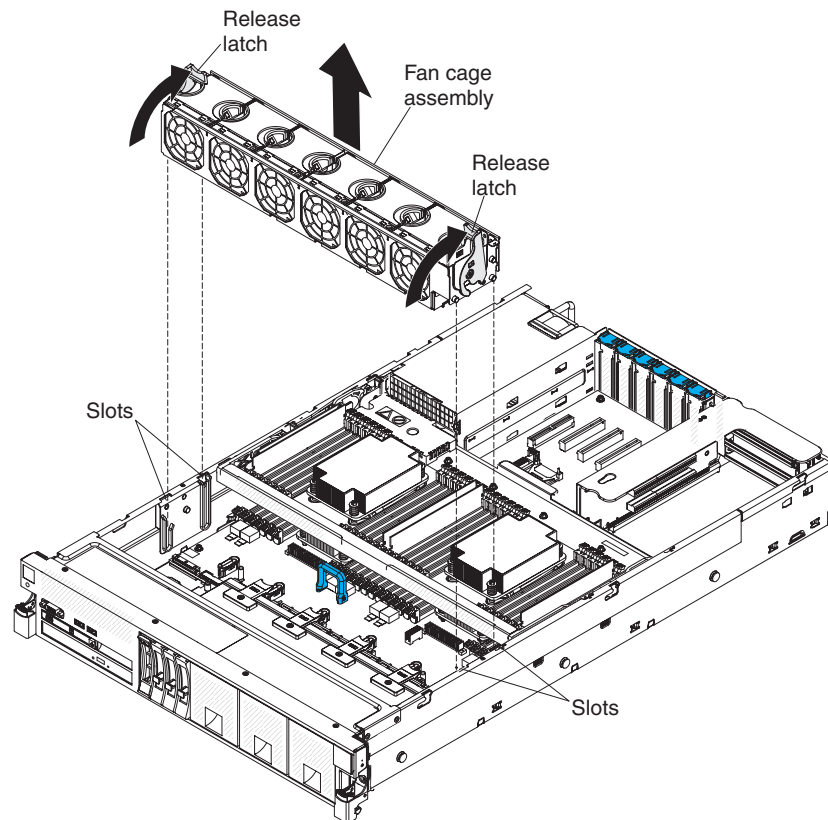
Use this information to remove the fan cage assembly.

About this task

To remove the fan cage assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. If the server is in a rack, slide the server out of the rack.
4. Remove the top cover (see “Removing the server top cover” on page 44).
5. Lift the fan cage assembly release latches and rotate the release latches up until the assembly disengages from the chassis; then, lift the fan cage assembly out of the server.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing a memory module

The type of dual inline memory modules (DIMMs) that the server supports are described in this section.

About this task

The following notes describe the type of DIMMs that the server supports and other information that you must consider when you install DIMMs, (see “System-board optional-device connectors” on page 35 for the location of the DIMM connectors):

- Confirm that the server supports the DIMM that you are installing (see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>).
- When you install or remove DIMMs, the server configuration information changes. When you restart the server, the system displays a message that indicates that the memory configuration has changed. You can use the Setup utility to view the server configuration information, see “Using the Setup utility” on page 145 for more information.
- The server supports only industry-standard double-data-rate 3 (DDR3), single-rank and dual-rank registered, and quad-rank load reduced, synchronous dynamic random-access memory (SDRAM) DIMMs with error correcting code (ECC). The server supports the following DIMMs:

- PC3L-12800R 1600 MHz
- PC3-14900R 1866 MHz
- PC3L-12800L 1600 MHz (Load Reduced)
- PC3-14900L 1866 MHz (Load Reduced)
- The specifications of a DDR3 DIMM are on a label on the DIMM, in the following format.

gGB eRxf-PC3-wwwwwm-a-b-c-d

where:

- *gGB* is the total capacity of the DIMM (for example, 1GB, 2GB, or 4GB)
- *eR* is the number of ranks
 - 1R = single-rank
 - 2R = dual-rank
 - 4R = quad-rank
- *xf* is the device organization or bit width (for example, x4, x8, or x16)
 - 4 = x4 organization (4 DQ lines per SDRAM)
 - 8 = x8 organization
 - 16 = x16 organization
- *wwwww* is the DIMM bandwidth, in MBps
 - 6400 = 6.40 GBps (PC3-800 SDRAMs, 8-byte primary data bus)
 - 8500 = 8.53 GBps (PC3-1066 SDRAMs, 8-byte primary data bus)
 - 10600 = 10.66 GBps (PC3-1333 SDRAMs, 8-byte primary data bus)
 - 12800 = 12.80 GBps (PC3-1600 SDRAMs, 8-byte primary data bus)
 - 14900 = 14.90 GBps (PC3-1866 SDRAMs 8-byte primary data bus)
- *m* is the DIMM type
 - E = Unbuffered DIMM (UDIMM) with ECC (x72-bit module data bus)
 - R = Registered DIMM (RDIMM)
 - U = Unbuffered DIMM with no ECC (x64-bit primary data bus)

- a is the CAS latency, in clocks at maximum operating frequency
- b is the JEDEC SPD Revision Encoding and Additions level
- c is the reference design file for the design of the DIMM
- d is the revision number of the reference design of the DIMM
- The server supports 1.35-volt (low-voltage) registered DIMMs and 1.5-volt (standard voltage) registered DIMMs as follows:
 - Supported DIMMs with speeds of 1600 MHz or less support both 1.35 V and 1.5 V operation, depending on the configuration settings in the Setup utility.
 - Supported DIMMs with speeds of 1866 MHz do not support 1.35 V operation. Only 1.5 V operation is supported.
- Single-device data correction (SDDC) support is available only when 16 GB or 32 GB, x4 DRAM technology DIMMs are installed in the server.
- The following table provides information about the maximum amount of memory that the server can support when you fully populate the server and the optional microprocessor and memory expansion tray by using the supported DIMMs.

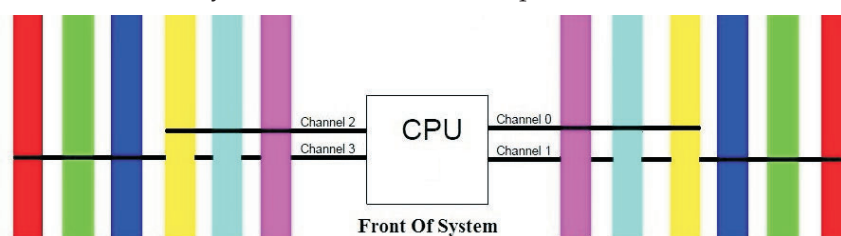
Table 5. Maximum supported memory

Number of DIMM connectors	Maximum memory
24 DIMMs on system board	Up to 768 GB
24 DIMMs on the optional microprocessor and memory expansion tray	Up to 768 GB
	Total = 1.5 TB of memory
Note: The server can support a maximum 1.5 TB of system memory when the server is fully populated with 32 GB DIMMs and the optional microprocessor and memory expansion tray is installed and fully populated with 32 GB DIMMs.	

- The DIMM options that are available for the server are 4 GB, 8 GB, 16 GB, and 32 GB.
- The server system board supports a minimum of 4 GB and a maximum of 768 GB of system memory. However, the server can support an additional 768 GB of memory when an optional microprocessor and memory expansion tray is installed in the server, for a total of 1.5 TB of system memory, depending on the model.

Note: The amount of usable memory is reduced, depending on the system configuration. A certain amount of memory must be reserved for system resources. To view the total amount of installed memory and the amount of configured memory, run the Setup utility. For additional information, see “Configuring the server” on page 142.

- The server system board provides four memory channels for each microprocessor, and each memory channel supports up to three DIMMs. The optional microprocessor and memory expansion tray also provides four memory channels that support up to three DIMMs per channel. The following illustration shows the memory channels for each microprocessor.



The following table lists the DIMM connectors on each memory channel for the microprocessors on the system board and the optional expansion tray.

Table 6. Memory channel DIMM connectors

Memory channel	DIMM connectors associated with MP 1 on the system board	DIMM connectors associated with MP 2 on the system board	DIMM connectors associated with MP 3 on the microprocessor and memory expansion tray	DIMM connectors associated with MP 4 on the microprocessor and memory expansion tray
Channel 0	7, 8, 9	19, 20, 21	31, 32, 33	43, 44, 45
Channel 1	10, 11, 12	22, 23, 24	34, 35, 36	46, 47, 48
Channel 2	4, 5, 6	16, 17, 18	28, 29, 30	40, 41, 42
Channel 3	1, 2, 3	13, 14, 15	25, 26, 27	37, 38, 39

- The following table shows the DIMM connectors on the system board and the microprocessor and memory expansion tray that are associated with each microprocessor.

Table 7. DIMM connectors associated with each microprocessor

Microprocessor	Location	DIMM connectors associated with the microprocessor
Microprocessor 1	System board	1 through 12
Microprocessor 2	System board	13 through 24
Microprocessor 3	Microprocessor and memory expansion tray	25 through 36
Microprocessor 4	Microprocessor and memory expansion tray	37 through 48

- When you replace a DIMM, the server provides automatic DIMM enablement capability without requiring you to use the Setup utility to enable the new DIMM manually.
- The maximum operating speed of the server is determined by the slowest DIMM in the server.
- DIMMs do not have to be installed in pairs, except in memory-mirroring mode.
- A minimum of one DIMM must be installed for each microprocessor. For example, you must install a minimum of two DIMMs if the server has two microprocessors (one for each microprocessor). If you install four microprocessors in the server, you must install a minimum of four DIMMs (one DIMM for each microprocessor). For more information about the DIMM population sequence, see Table 8 on page 52, Table 9 on page 53, and Table 10 on page 54.

Notes:

- When one DIMM per microprocessor is installed, system performance can be slow.
- To run VMware, one DIMM per microprocessor must be installed. If a DIMM is not installed for each microprocessor, the server will not be able to boot VMware.
- For best performance, install DIMMs evenly across all four memory channels for each microprocessor.

- The server supports non-mirroring mode, memory mirroring mode, and memory sparing mode. For more information and the DIMM population for non-mirroring mode, see “Non-mirroring (independent mode).” For more information and the DIMM population sequence for memory mirroring, see “Memory mirroring.” For more information and the DIMM population sequence for memory sparing, see “Memory sparing” on page 54.

Non-mirroring (independent mode)

This section contains information pertaining to the non-mirrored-channel mode of operation.

Note: When you install an optional microprocessor and memory expansion tray in the server, microprocessors 3 and 4 must be installed as a pair. The server does not support a configuration of three microprocessors.

The following table shows the DIMM population sequence for the non-mirrored channel mode of operation.

Table 8. DIMM population sequence for non-mirroring mode (independent mode)

Number of installed microprocessors	DIMM connector population sequence on the system board	DIMM connector population sequence on the microprocessor and memory expansion tray
1	1, 12, 4, 9, 2, 11, 5, 8, 3, 10, 6, 7	
2	1, 13, 12, 24, 4, 16, 9, 21, 2, 14, 11, 23, 5, 17, 8, 20, 3, 15, 10, 22, 6, 18, 7, 19	
4	1, 13, 12, 24, 4, 16, 9, 21, 2, 14, 11, 23, 5, 17, 8, 20, 3, 15, 10, 22, 6, 18, 7, 19	25, 37, 36, 48, 28, 40, 33, 45, 26, 38, 35, 47, 29, 41, 32, 44, 27, 39, 34, 46, 30, 42, 31, 43

Memory mirroring

This section contains information pertaining to the mirrored-channel mode of operation.

In the mirrored-channel mode, the channels are paired, and both channels in a pair store the same data. Memory-mirroring replicates and stores data on DIMMs across two or four channels simultaneously. If a failure occurs, the memory controller switches from the DIMMs on the primary channel to the DIMMs on the backup channel. To enable memory mirroring through the Setup utility, select **System Settings → Memory → Memory Mode**.

For more information, see “Using the Setup utility” on page 145.

When you use the memory mirroring mode, consider the following information:

- The server supports single-socket memory mirroring. Memory channel 0 mirrors channel 1, and memory channel 2 mirrors channel 3. This mirroring provides redundancy in memory but reduces the total memory capacity in half.
- DIMMs must be installed in pairs for each microprocessor when using the memory mirroring feature.
- The DIMM population must be identical for memory channel 0 and memory channel 1, and identical for memory channel 2 and memory channel 3.
- Memory mirroring reduces the maximum available memory by half of the installed memory. For example, if the server has 64 GB of installed memory, only 32 GB of addressable memory is available when memory mirroring is enabled.

The following table lists the DIMM installation sequence for the memory-mirroring mode.

Table 9. DIMM population sequence for memory mirroring mode

DIMMs	Number of microprocessors	DIMM connector population sequence on the system board	DIMM connector population sequence on the optional microprocessor and memory expansion tray
<i>One microprocessor</i>			
1st pair	1	1, 4	
2nd pair	1	9, 12	
3rd pair	1	2, 5	
4th pair	1	8, 11	
5th pair	1	3, 6	
6th pair	1	7, 10	
<i>Two microprocessors</i>			
1st set	2	1, 4, 13, 16	
2nd set	2	9, 12, 21, 24	
3rd set	2	2, 5, 14, 17	
4th set	2	8, 11, 20, 23	
5th set	2	3, 6, 15, 18	
6th set	2	7, 10, 19, 22	
<i>Four microprocessors</i>			
1st set	4	1, 4, 13, 16	25, 28, 37, 40
2nd set	4	9, 12, 21, 24	33, 36, 45, 48
3rd set	4	2, 5, 14, 17	26, 29, 38, 41
4th set	4	8, 11, 20, 23	32, 35, 44, 47
5th set	4	3, 6, 15, 18	27, 30, 39, 42
6th set	4	7, 10, 19, 22	31, 34, 43, 46
Note: The server does not support a configuration of three microprocessors. The server supports one, two, or four microprocessors only.			

Memory sparing

This section contains information pertaining to the memory-sparing mode of operation.

In the memory-sparing mode, one rank is held in reserve as a spare of the other ranks in the same channel. The server supports memory sparing. Memory sparing reserves memory capacity for failover in the event of a DIMM failure, and the reserved capacity is subtracted from the total available memory. Memory sparing provides less redundancy than memory mirroring does. If a predetermined threshold of correctable errors is reached, the contents of the failing DIMM are copied to the spare memory, and the failing DIMM or rank is disabled. To enable memory sparing through the Setup utility, select **System Settings** → **Memory** → **Memory Mode**.

When you use the memory sparing mode, consider the following information:

- When single-rank or dual-rank DIMMs are used, at least three DIMMs must be installed to support memory sparing.
- Each memory channel supports three DIMMs. The third DIMM in each channel is the sparing DIMM for all of the DIMMs in the channel.
- When quad-rank DIMMs are used, one of the ranks in the DIMM itself is used for sparing.
- The server does not support the mixing of single and dual-rank registered DIMMs (RDIMM) with quad-rank load-reduced DIMMs (LR-DIMM).

The following table shows the DIMM population sequence for the memory-sparing mode.

Note: The server does not support a configuration of three microprocessors. The server supports one, two, or four microprocessors only.

Table 10. DIMM population sequence for memory sparing mode

DIMMs	Number of microprocessors	DIMM connector population sequence on the system board	DIMM connector population sequence on the optional microprocessor and memory expansion tray
<i>One microprocessor</i>			
1st set	1	1, 2, 3	
2nd set	1	10, 11, 12	
3rd set	1	4, 5, 6	
4th set	1	7, 8, 9	
<i>Two microprocessors</i>			
1st set	2	1, 2, 3, 13, 14, 15	
2nd set	2	10, 11, 12, 22, 23, 24	
3rd set	2	4, 5, 6, 16, 17, 18	
4th set	2	7, 8, 9, 19, 20, 21	
<i>Four microprocessors</i>			
1st set	4	1, 2, 3, 13, 14, 15	25, 26, 27, 37, 38, 39
2nd set	4	10, 11, 12, 22, 23, 24	34, 35, 36, 46, 47, 48

Table 10. DIMM population sequence for memory sparing mode (continued)

DIMMs	Number of microprocessors	DIMM connector population sequence on the system board	DIMM connector population sequence on the optional microprocessor and memory expansion tray
3rd set	4	4, 5, 6, 16, 17, 18	28, 29, 30, 40, 41, 42
4th set	4	7, 8, 9, 19, 20, 21	31, 32, 33, 43, 44, 45

- The server supports a maximum of 24 DIMMs (single-rank, dual-rank, or quad-rank) on the base system board. If you mix single-rank, dual-rank or quad-rank DIMMs in the server, quad-rank DIMMs must be installed first.

Note: To determine the type of DIMM, see the label on the DIMM. The information on the label is in the format xxxxx nRxxx PC3-xxxxx-xx-xx-xxx. The numeral in the sixth numerical position indicates whether the DIMM is single-rank (n=1) or dual-rank (n=2).

- The following tables list the supported combinations of single-rank and dual-rank standard RDIMMs and quad-rank LR-DIMMs that you can install in the server.

Note: In the following table, the location of the DIMMs in the memory channels are defined as follows:

Near DIMM: The DIMM in the memory channel that is the closest to the microprocessor.

Middle DIMM: The middle DIMM in the memory channel.

Far DIMM: The DIMM in the memory channel that is the farthest from the microprocessor.

The following table lists the supported combinations of ranked registered DIMMs (RDIMMs) that you can install in the server.

Note: The server does not support the mixing of single and dual-rank RDIMMs with quad-rank LR-DIMMs.

Table 11. Supported combinations of ranked RDIMMs per memory channel

Configuration	DIMM 1 (far DIMM)	DIMM 2 (middle DIMM)	DIMM 3 (near DIMM)
1	Single-rank	Empty	Empty
2	Dual-rank	Empty	Empty
3	Single-rank	Single-rank	Empty
4	Dual-rank	Single-rank	Empty
5	Dual-rank	Dual-rank	Empty
6	Single-rank	Single-rank	Single-rank
7	Dual-rank	Single-rank	Single-rank
8	Dual-rank	Dual-rank	Single-rank
9	Dual-rank	Dual-rank	Dual-rank

The following table lists the supported combinations of ranked LR-DIMMs that you can install in the server.

Note: The server does not support the mixing of single and dual-rank RDIMMs with quad-rank LR-DIMMs in the same server.

Table 12. Supported combinations of ranked LR-DIMMs per memory channel

Configuration	DIMM 1 (far DIMM)	DIMM 2 (middle DIMM)	DIMM 3 (near DIMM)
1	Quad-rank	Empty	Empty
2	Quad-rank	Quad-rank	Empty
3	Quad-rank	Quad-rank	Quad-rank

- The following table lists the memory speed based on the type of ranked DIMM and the voltage at which the DIMM runs.

Table 13. Memory speeds and configurations based on ranked DIMM type and voltage

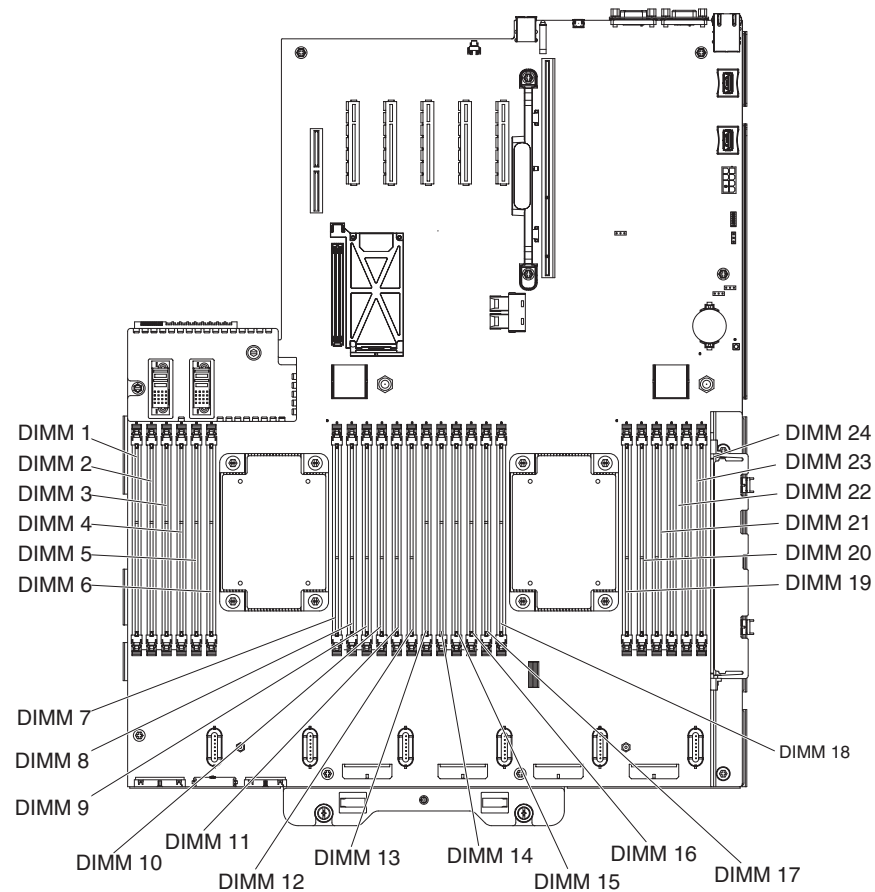
DIMM rank, type, and technology	DIMM capacity	1 DIMM per channel		2 DIMMs per channel		3 DIMMs per channel	
		1.35 V	1.50 V	1.35 V	1.50 V	1.35 V	1.50 V
Single-rank x4 RDIMM - 2 Gb (1600 MHz)	4 GB	1600	1600	1600	1600	1066	1333
Single-rank x4 RDIMM - 2 Gb (1866 MHz)	4 GB		1866		1866		1333
Single-rank x4 RDIMM - 4 Gb (1600 MHz)	8GB	1600	1600	1600	1600	1066	1333
Single-rank x4 RDIMM - 4 Gb (1866 MHz)	8GB		1866		1866		1333
Dual-rank x4 RDIMM - 4 Gb (1600 MHz)	16GB	1600	1600	1600	1600	1066	1333
Dual-rank x4 RDIMM - 4 Gb (1866 MHz)	16GB		1866		1866		1333
Quad-rank x4 LRDIMM - 4Gb (1600 MHz)	32 GB	1600	1600	1600	1600	1333	1333
Quad-rank x4 LRDIMM - 4Gb (1866 MHz)	32GB		1866		1866		1333

DIMM installation instructions

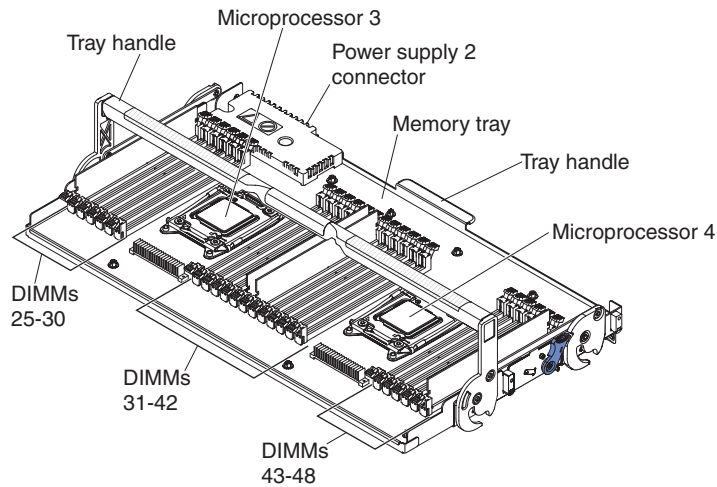
DIMM installation instructions for the base system board or the microprocessor expansion tray are included in this section.

Attention: Static electricity that is released to internal server components when the server is powered on might cause the server to stop, which might result in the loss of data. To avoid this potential problem, always use an electrostatic-discharge wrist strap and plug it into the electrostatic-discharge connector on the front of the server (see “Front view” on page 19 for the location of this connector) or other grounding system when you work inside the server with the power on.

The following illustration show the locations of the DIMM connectors on the system board.



The following illustration show the locations of the DIMM connectors on the optional microprocessor and memory expansion tray.



To install a DIMM, complete the following steps.

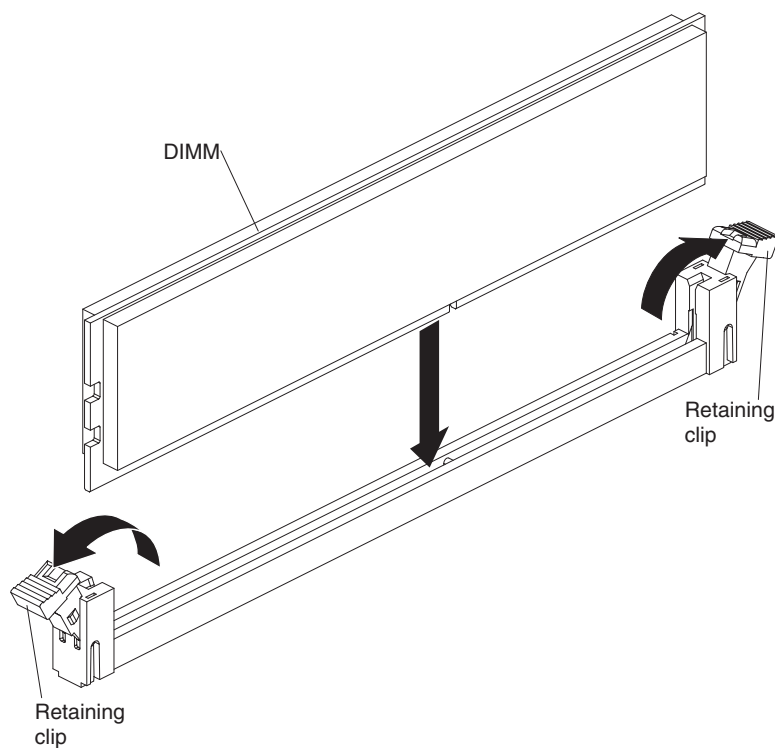
Note: These instructions apply to installing DIMMs on the base system board or the microprocessor and memory expansion tray.

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. If you are installing DIMMs on the system board, remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.

Note: When installing DIMMs closest to the microprocessor, remove the microprocessor air baffle (see “Removing the microprocessor air baffle” on page 47).

5. Open the retaining clip on each end of the DIMM connector.

Note: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.



6. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server. Then, remove the DIMM from the package.
7. Turn the DIMM so that the DIMM keys align correctly with the connector.
8. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see “System-board optional-device connectors” on page 35 for the locations of the DIMM connectors).
9. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing drives

The types of drives that the server supports are described in this section.

The following notes describe the type of drives that the server supports and other information that you must consider when you install a drive. For a list of supported drives, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- The server supports one optional ultra-slim SATA CD-RW/DVD-ROM optical drive.
- The server can support up to 16 2.5-inch drives, up to 32 1.8-inch drives, or a combination of both 2.5-inch and 1.8-inch hot-swap drives, when you use the supported SAS/SATA backplane configurations and/or required RAID Option Adapter additions. The server supports 2.5-inch hot-swap SAS or hot-swap SATA hard disk drives, 2.5-inch hot-swap SATA solid state drives, and 1.8-inch hot-swap SATA solid state drives (see “Supported SAS/SATA drive backplane configurations” on page 62 for more information).
- You can mix 2.5-inch hot-swap SAS and SATA hard disk drives, 2.5-inch hot-swap SATA solid-state drives, and 1.8-inch hot-swap SATA solid-state drives in the same server as long as you use the same type of drives within the same array.
- When you are upgrading drive backplane configurations, you must install all 1.8-inch solid state drive backplanes to the right of all 2.5-inch hard disk drive or 2.5-inch solid state drive backplanes. All 2.5-inch backplanes must be installed to the left of all 1.8-inch backplanes. See “Drive IDs” on page 61 for drive ID assignment information and “Supported SAS/SATA drive backplane configurations” on page 62 for information about the combination of supported drive backplane configurations.
- The 8x2.5-inch hot-swap drive backplane with controller expander must be installed in backplane bays 3 and 4. See “Connecting the SAS cables” on page 70 for more information about cabling the SAS cables.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCIe slots covered or occupied. When you install a drive, save the EMC shield and filler panel from the bay in the event that you later remove the device.

Drive IDs

Hot-swap-drive ID locations are described in this section.

The hot-swap-drive ID that is assigned to each drive is printed on the front of the server. The following illustrations show the locations of the IDs of the drives. The ID numbers and the drive bay numbers are the same.

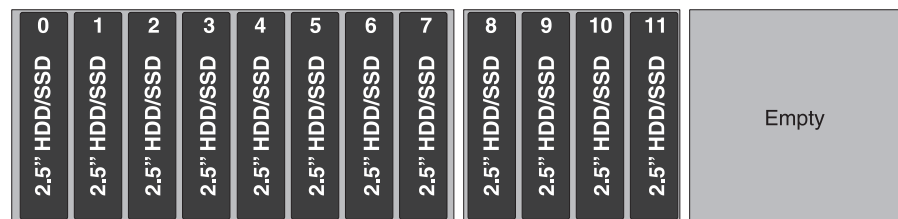
Notes:

- The drive bay IDs can vary, depending on the combination of the SAS/SATA backplanes installed in the server.
- When upgrading drive backplane configurations, you must install all 1.8-inch solid-state drive backplanes to the right of all 2.5-inch hard disk drive or 2.5-inch solid-state drive backplanes. All 2.5-inch drive backplanes must be installed to the left of all 1.8-inch drive backplanes.
- If you install a 8x1.8-inch drive backplane assembly, the drive IDs that are indicated on the server front bezel will no longer be valid. Use the drive ID labels that come with the backplane to renumber the drive IDs on the bezel.
- When you install a combination of 2.5-inch and 1.8-inch drive backplanes in the same server, the drive bay ID numbering is reset by skipping bay ID numbers based on the number of 2.5-inch drive backplanes that are installed to the left of the 1.8-inch drives backplanes.

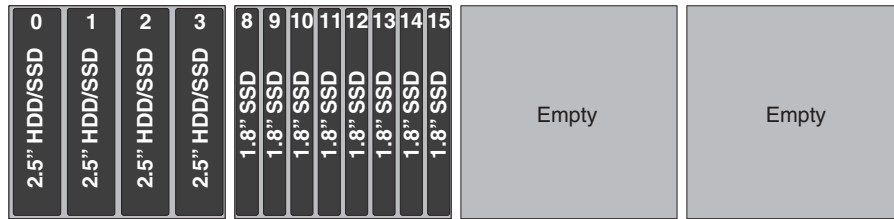
For example, if the server has a 4x2.5-inch drive backplane and a 8x1.8-inch backplane configuration, the drive bay IDs of the four drives in the 4x2.5-inch drive backplane are 0 through 3. The drive bay IDs of the eight drives in the 8x1.8-inch drive backplane start with an ID of 8 through 15. Since the drive bay IDs of the drives in the 4x2.5-inch backplane are 0 through 3, the IDs reset and skip four ID numbers (because the first backplane supports four drives). The drive IDs in the 8x1.8-inch drive backplane start with an ID of 8 through 15.

If a 8x2.5-inch drive backplane had been installed, instead of the 4x2.5-inch drive backplane, the IDs are reset and skip eight ID numbers. The drive IDs of the drives in the 8x1.8-inch drive backplane would start at 16 through 23. See the following example illustrations and the illustrations in “Supported SAS/SATA drive backplane configurations” on page 62 for more information.

In the following illustration, the drive bay IDs are in sequential order because all of the drive backplanes are 2.5-inch drive backplanes.



In the following illustration, you have a combination of drive backplanes. This example shows a 2.5-inch drive backplane and a 1.8-inch drive backplane installed in the server. In this instance, the drive bay IDs will require a gap in the bay ID numbering between the drive IDs in the 2.5-inch and 1.8-inch drive backplanes.



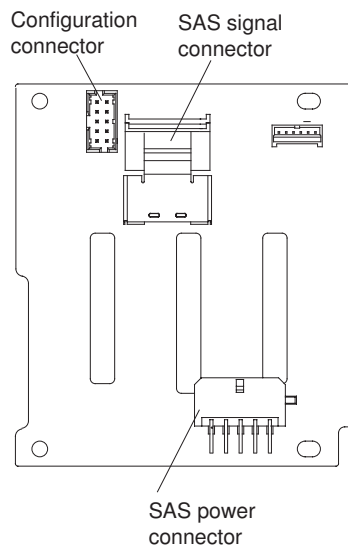
Supported SAS/SATA drive backplane configurations

This section provides information pertaining to SAS/SATA drive backplane configurations.

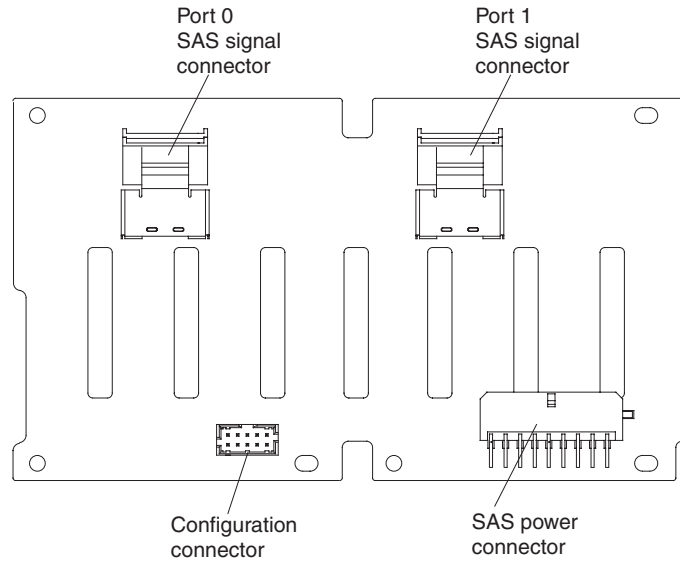
About this task

The following illustrations show the hot-swap drive backplanes that the server supports

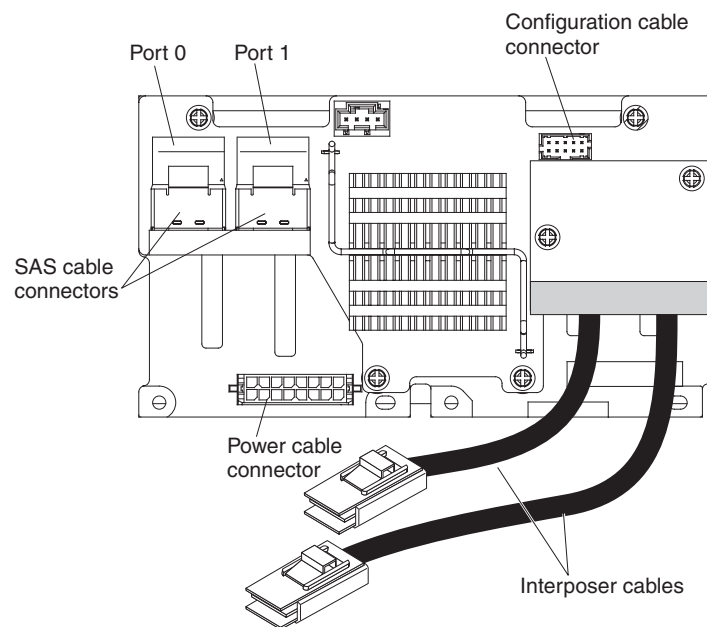
4x2.5-inch drive backplane rear view:



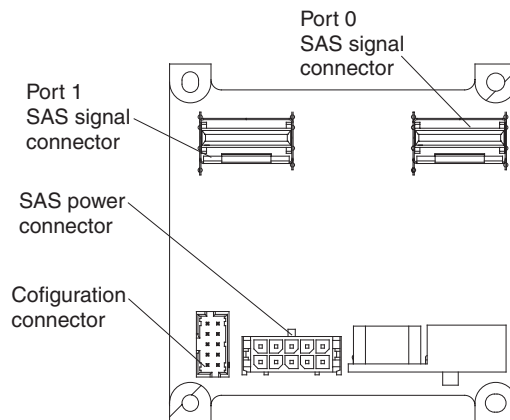
8x2.5-inch drive backplane rear view:



8x2.5-inch drive backplane with controller expander rear view:



8x1.8-inch drive backplane rear view:



You can install a combination of 2.5-inch and 1.8-inch SAS/SATA drive backplanes in the server for the maximum drive capacity. However, any SAS/SATA adapter that you install in the server must be capable of supporting two internal, 4-lane SAS/SATA signal connectors. The following sections list the supported SAS/SATA drive backplane configurations, the number of drives that each configuration supports, and information on connecting the SAS cables.

Notes:

- When you upgrade drive backplane configurations, you must install all 1.8-inch solid state drive backplanes to the right of all 2.5-inch drive backplanes. All 2.5-inch backplanes must be installed to the left of all 1.8-inch backplanes.
- The drive bay IDs can vary, depending on the combination of the SAS/SATA drive backplanes installed in the server (see “Drive IDs” on page 61 for more information).
- The 8x2.5-inch hot-swap drive backplane with controller expander must always be installed in backplane slots 3 and 4, see “Connecting the SAS cables” on page 70 for more information on cabling.

Backplane configuration for 4 drives

This section contains backplane configuration information to support four drives.

About this task

The following illustration shows the supported backplane configuration to support four drives.

This configuration consists of one 4x2.5-inch drive backplane and requires one SAS signal cable.



Backplane configurations for 8 drives

This section contains backplane configuration information to support eight drives.

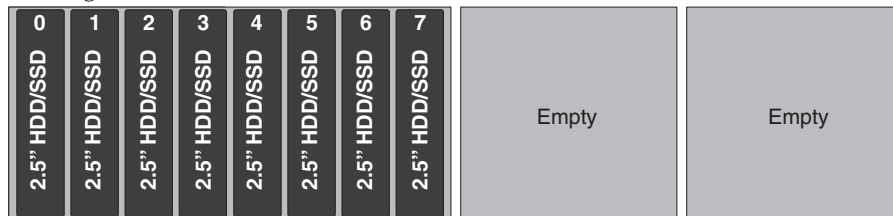
About this task

The following illustration shows the supported backplane configurations to support eight drives.

This configuration consists of two 4x2.5-inch drive backplanes and requires two SAS signal cables.



This configuration consists of one 8x2.5-inch drive backplane and requires two SAS signal cables.



This configuration consists of one 8x1.8-inch drive backplane and requires two SAS signal cables.



Backplane configurations for 12 drives

This section contains backplane configuration information to support 12 drives.

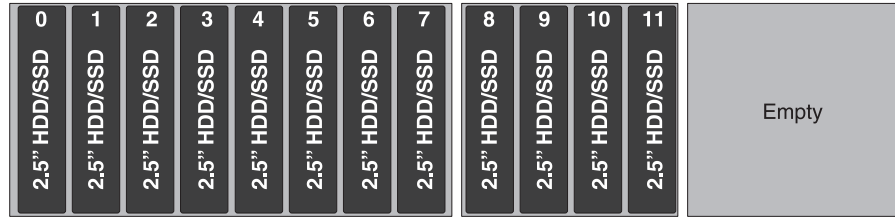
About this task

The following illustrations show the supported backplane configurations to support 12 drives

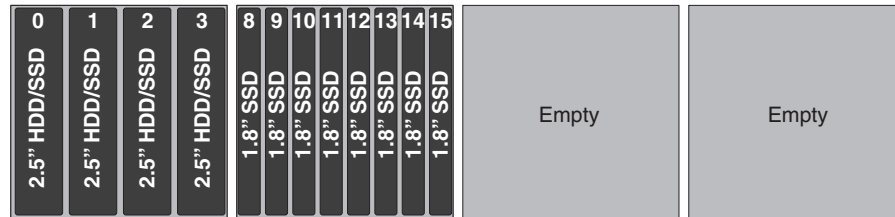
This configuration consists of three 4x2.5-inch drive backplanes and requires three SAS signal cables.



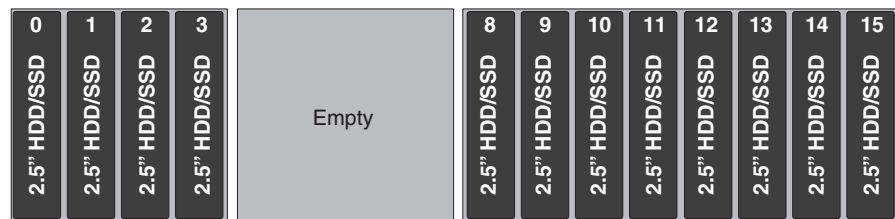
This configuration consists of one 8x2.5-inch drive backplane and one 4x2.5-inch drive backplane and requires three SAS signal cables.



This configuration consists of one 4x2.5-inch drive backplane and one 8x1.8-inch drive backplane and requires three SAS signal cables.



This configuration consists of one 4x2.5-inch drive backplane and one 8x2.5-inch drive backplane with controller expander and requires two SAS signal cables.



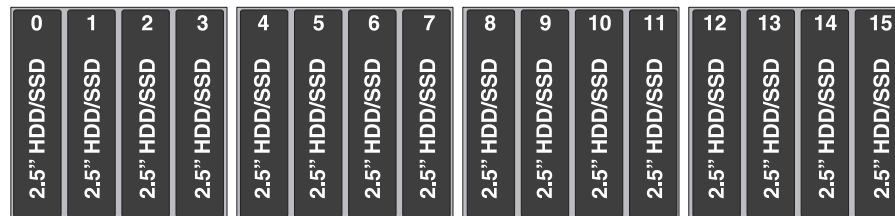
Backplane configurations for 16 drives

This section contains backplane configuration information to support 16 drives.

About this task

The following illustrations show the supported backplane configurations to support 16 drives

This configuration consists of four 4x2.5-inch drive backplanes and requires four SAS signal cables.



This configuration consists of one 8x2.5-inch drive backplane and two 4x2.5-inch drive backplanes and requires four SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	2.5" HDD/SSD	8	2.5" HDD/SSD	9	2.5" HDD/SSD	10	2.5" HDD/SSD	11	2.5" HDD/SSD	12	2.5" HDD/SSD	13	2.5" HDD/SSD	14	2.5" HDD/SSD	15
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This configuration consists of two 8x2.5-inch drive backplanes and requires four SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	2.5" HDD/SSD	8	2.5" HDD/SSD	9	2.5" HDD/SSD	10	2.5" HDD/SSD	11	2.5" HDD/SSD	12	2.5" HDD/SSD	13	2.5" HDD/SSD	14	2.5" HDD/SSD	15
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This configuration consists of one 8x2.5-inch drive backplane and one 8x2.5-inch backplane with controller expander and requires two SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	2.5" HDD/SSD	8	2.5" HDD/SSD	9	2.5" HDD/SSD	10	2.5" HDD/SSD	11	2.5" HDD/SSD	12	2.5" HDD/SSD	13	2.5" HDD/SSD	14	2.5" HDD/SSD	15
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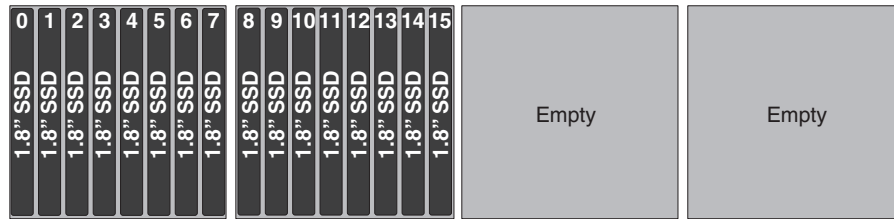
This configuration consists of two 4x2.5-inch drive backplanes and one 8x1.8-inch drive backplane and requires four SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	1.8" SSD	16	1.8" SSD	17	1.8" SSD	18	1.8" SSD	19	1.8" SSD	20	1.8" SSD	21	1.8" SSD	22	1.8" SSD	23	Empty	
2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	1.8" SSD	16	1.8" SSD	17	1.8" SSD	18	1.8" SSD	19	1.8" SSD	20	1.8" SSD	21	1.8" SSD	22	1.8" SSD	23		

This configuration consists of one 8x2.5-inch drive backplane and one 8x1.8-inch drive backplane and requires four SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	1.8" SSD	16	1.8" SSD	17	1.8" SSD	18	1.8" SSD	19	1.8" SSD	20	1.8" SSD	21	1.8" SSD	22	1.8" SSD	23	Empty	
2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	2.5" HDD/SSD	4	2.5" HDD/SSD	5	2.5" HDD/SSD	6	2.5" HDD/SSD	7	1.8" SSD	16	1.8" SSD	17	1.8" SSD	18	1.8" SSD	19	1.8" SSD	20	1.8" SSD	21	1.8" SSD	22	1.8" SSD	23		

This configuration consists of two 8x1.8-inch drive backplanes and requires four SAS signal cables.



This configuration consists of two 4x2.5-inch drive backplanes and one 8x2.5-inch drive backplane with controller expander and requires two SAS signal cables.



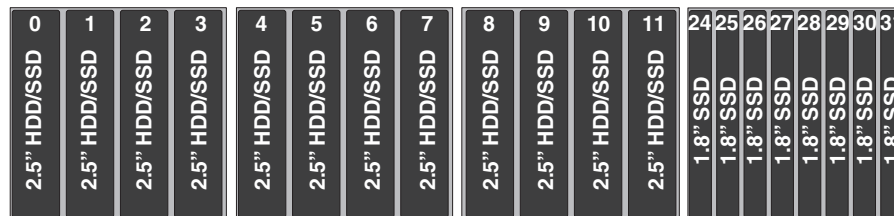
Backplane configurations for 20 drives

This section contains backplane configuration information to support 20 drives.

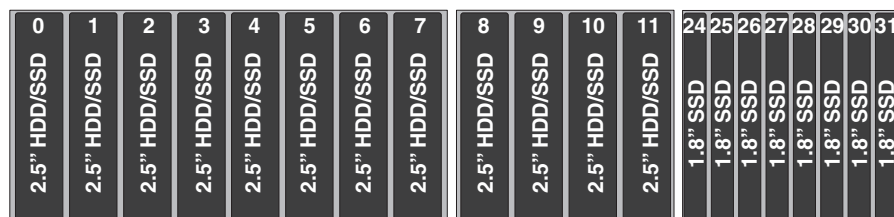
About this task

The following illustrations show the supported drive backplane configurations to support 20 drives.

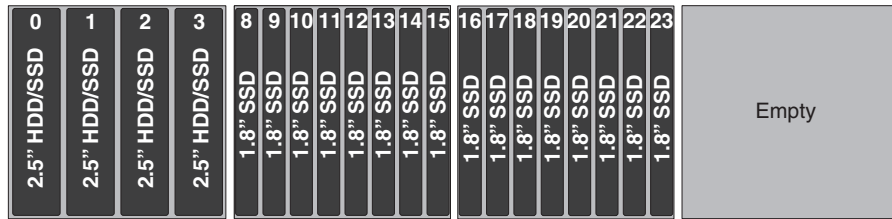
This configuration consists of three 4x2.5-inch drive backplanes and one 8x1.8-inch drive backplane and requires five SAS signal cables.



This configuration consists of one 8x2.5-inch drive backplane, one 4x2.5-inch drive backplane, and one 8x1.8-inch drive backplane and requires five SAS signal cables.



This configuration consists of one 4x2.5-inch drive backplane and two 8x1.8-inch drive backplanes and requires five SAS signal cables.



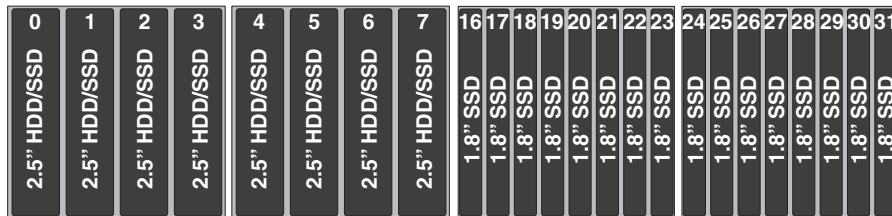
Backplane configurations for 24 drives

This section contains backplane configuration information to support 24 drives.

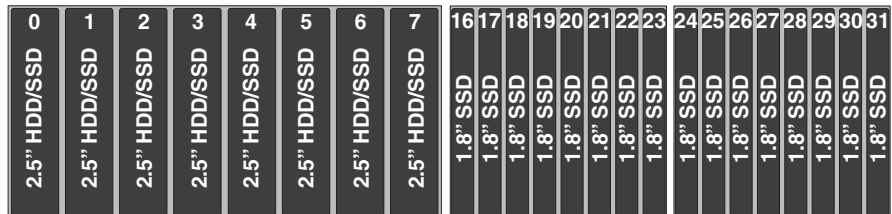
About this task

The following illustrations show the supported backplane configurations to support 24 drives.

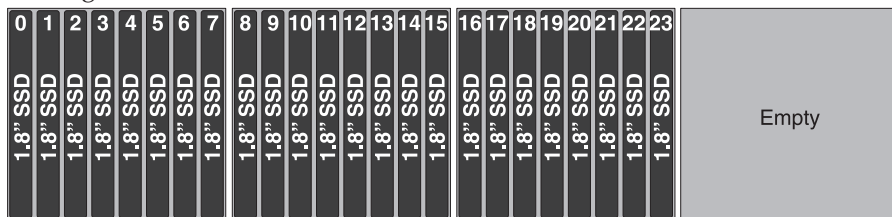
This configuration consists of two 4x2.5-inch drive backplanes and two 8x1.8-inch drive backplanes and requires six SAS signal cables.



This configuration consists of one 8x2.5-inch drive backplane and two 8x1.8-inch drive backplanes and requires six SAS signal cables.



This configuration consists of three 8x1.8-inch drive backplanes and requires six SAS signal cables.



Backplane configuration for 28 drives

This section contains backplane configuration information to support 28 drives.

About this task

The following illustration shows the supported backplane configuration to support 28 drives.

This configuration consists of one 4x2.5-inch drive backplane and three 8x1.8-inch drive backplanes and requires seven SAS signal cables.

2.5" HDD/SSD	0	2.5" HDD/SSD	1	2.5" HDD/SSD	2	2.5" HDD/SSD	3	1.8" SSD	8	1.8" SSD	9	1.8" SSD	10	1.8" SSD	11	1.8" SSD	12	1.8" SSD	13	1.8" SSD	14	1.8" SSD	15	1.8" SSD	16	1.8" SSD	17	1.8" SSD	18	1.8" SSD	19	1.8" SSD	20	1.8" SSD	21	1.8" SSD	22	1.8" SSD	23	1.8" SSD	24	1.8" SSD	25	1.8" SSD	26	1.8" SSD	27	1.8" SSD	28	1.8" SSD	29	1.8" SSD	30	1.8" SSD	31	1.8" SSD
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Backplane configuration for 32 drives

This section contains backplane configuration information to support 32 drives.

About this task

The following illustration shows the supported backplane configuration to support 32 drives.

This configuration consists of four 8x1.8-inch drive backplanes and requires eight SAS signal cables.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	1.8" SSD	

Connecting the SAS cables

Use this information to connect the SAS cables to the drive backplanes (BP).

About this task

The following table provides information for connecting the SAS cables to the drive BP based on the backplane slot and supported drive backplane configurations:

Table 14. Connecting the SAS cables to the drive BP based on the configurations

Drive backplane	BP 1	BP 2	BP 3	BP 4
4x2.5-inch drive backplane	<ul style="list-style-type: none">Connect the SAS cable from BP 1 to the SAS signal connector port 0 on the system board.	<ul style="list-style-type: none">Connect the SAS cable from BP 2 to the SAS signal connector port 1 on the system board.	<ul style="list-style-type: none">Connect the SAS cable from BP 3 to port 0 on the PCIe adapter.	<ul style="list-style-type: none">Connect the SAS cable from BP 4 to port 1 on the PCIe adapter.

Table 14. Connecting the SAS cables to the drive BP based on the configurations (continued)

Drive backplane	BP 1	BP 2	BP 3	BP 4
8x2.5-inch drive backplane	<ul style="list-style-type: none"> Connect one SAS cable from BP 1 to the SAS signal connector port 0 on the system board. Connect one SAS cable from BP 2 to the SAS signal connector port 1 on the system board. 		<ul style="list-style-type: none"> Connect one SAS cable from BP 3 to port 0 on the PCIe adapter. Connect one SAS cable from BP 4 to port 1 on the PCIe adapter. 	
8x2.5-inch drive backplane with controller expander			<ul style="list-style-type: none"> Connect one SAS cable from BP 3 to the SAS signal connector port 0 on the system board Connect one SAS cable from BP 4 to the SAS signal connector port 1 on the system board 	
8x1.8-inch drive backplane	<ul style="list-style-type: none"> Connect two SAS cables from BP 1 to the two SAS signal connectors on the system board. 	<ul style="list-style-type: none"> Connect two SAS cables from BP 2 to the connectors on the PCIe adapter. 	<ul style="list-style-type: none"> Connect two SAS cables from BP 3 to the connectors on the PCIe adapter. 	<ul style="list-style-type: none"> Connect two SAS cables from BP 4 to the connectors on the PCIe adapter.
<p>Note: Follow this general rule for connecting the SAS signal cables to the drive backplanes and adapters:</p> <ul style="list-style-type: none"> Port 0 on the drive backplane to Port 0 on the adapter Port 1 on the drive backplane to Port 1 on the adapter 				

Installing 2.5-inch and 1.8-inch hot-swap drives

Use this information to install a 2.5-inch or 1.8-inch hot-swap hard disk drive.

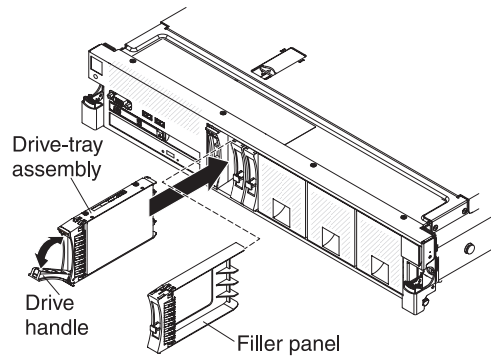
About this task

To install a hot-swap SAS or SATA drive, complete the following steps. For information about installing drives, see “Installing drives” on page 60.

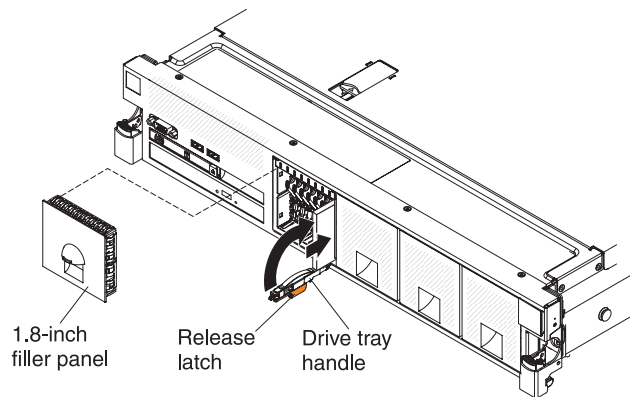
Note: If you install only one drive, you must install it in drive bay 0.

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.
3. To install a 2.5-inch drive, complete the following steps:
 - a. Remove the filler panel from the empty drive bay.
 - b. Make sure that the drive-tray handle is in the open (unlocked) position.
 - c. Align the drive assembly with the guide rails in the bay.



- d. Gently push the drive assembly into the drive bay until the drive stops.
 - e. Rotate the drive-tray handle to the closed (locked) position.
 - f. Skip to step 5.
4. To install a 1.8-inch drive, complete the following steps:
 - a. Remove the filler panel (EMC filler panel).
 - b. Grasp the orange release latch on the drive tray handle of the drive tray in which you want to install the drive and slide the release latch down to unlock the drive tray handle; then, rotate the drive tray handle down.



- c. Insert the drive into the drive tray with the label side of the drive facing the right side of the server and push the drive tray toward the server to slide the drive into the drive bay until it clicks into place and is seated firmly.
 - d. Rotate the drive tray handle to the closed position and slide the release latch up to secure the drive tray handle in place.
 - e. Replace the filler panel (EMC filler panel).
5. Check the drive status LED to verify that the drive is operating correctly. If the yellow drive status LED for a drive is lit continuously, that drive is faulty and must be replaced. If the green drive activity LED is flashing, the drive is being accessed.

Note: If the server is configured for RAID operation through a ServeRAID adapter, you might have to reconfigure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

6. If you are installing additional hot-swap drives, do so now.
7. Complete the additional steps in "Instructions for Business Partners" on page 28.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing an optional CD/DVD drive

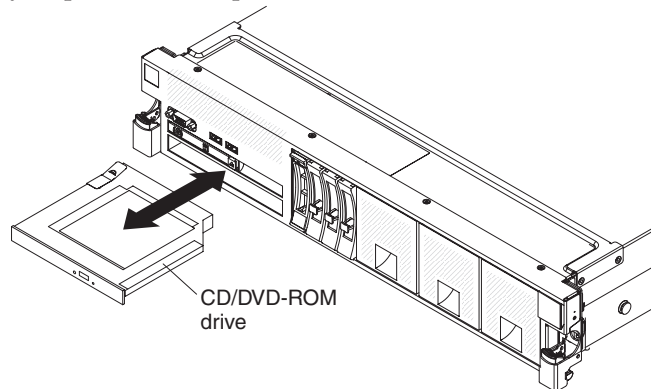
Use this information to install a CD/DVD drive.

About this task

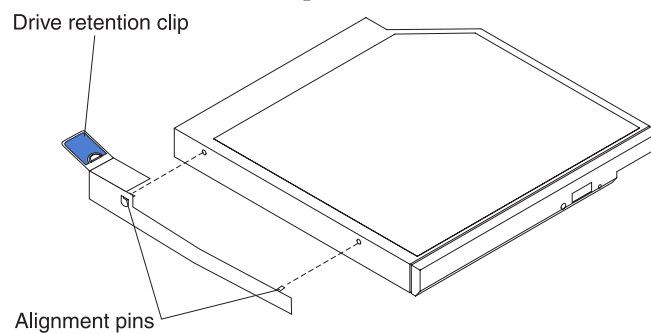
To install an optional CD/DVD drive, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Locate the blue release tab on the rear of the CD/DVD drive bay; then, while you press the tab, push the CD/DVD filler toward the front of the server.



5. Pull the CD/DVD drive filler out of the front of the server.
6. Touch the static-protective package that contains the new optical drive to any unpainted metal surface on the server; then, remove the optical drive from the package and place it on a static-protective surface.
7. Remove the retention clip from the side of the drive filler.



Note: If you are installing a drive that contains a laser, observe the following safety precaution.

Statement 3



CAUTION:

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



DANGER

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.



Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

8. Attach the drive retention clip that you removed from the previous drive to the side of the new drive.

Note: Be sure to align the bend on the drive retention clip tab with the rear edge of the CD/DVD drive. Your drive might have more mounting holes than what is shown in the illustration. Adjust the retention clip alignment based on your drive.

9. Align the drive in the drive bay and slide the drive into the CD/DVD drive bay until the drive clicks into place.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing a PCIe riser-card assembly

Use this information to install a PCIe riser-card assembly.

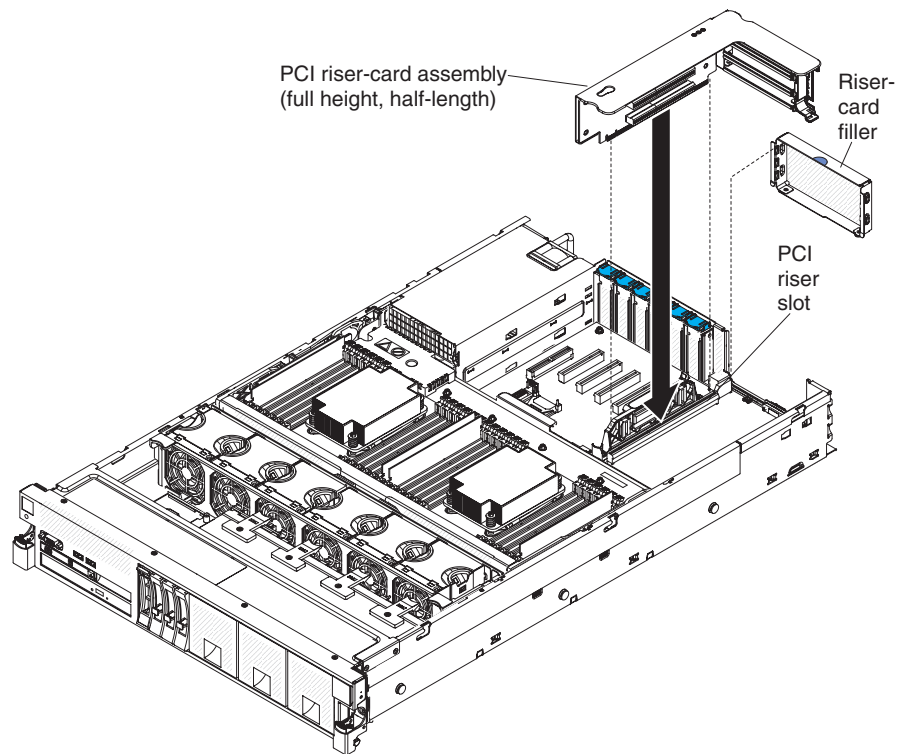
About this task

For the location of the PCIe riser-card slot on the system board, see “System-board internal connectors” on page 30.

To install a PCIe riser-card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and the “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the riser-card filler.
5. If you are installing adapters into the PCIe riser-card assembly (see “Installing an adapter” on page 76).
6. Align the PCIe riser-card assembly with the PCIe riser-card connector on the system board and align it with the slot on the chassis; then, lower it into the server and press down firmly until the riser-card assembly is seated correctly in the connector on the system board.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing an adapter

Use this information to understand the types of adapters that the server supports.

About this task

The following notes describe the types of adapters that the server supports and other information that you must consider when you install an adapter:

- To confirm that the server supports the adapter that you are installing, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.
- Locate the documentation that comes with the adapter and follow those instructions in addition to the instructions in this section.
- The server supports an add-on video adapter in slot 1 of the two slot riser-card.
- The server does not support stereo connectors on any add-on video adapter.
- The server does not support PCI-X adapters or legacy 5 V PCI adapters.
- Disconnect the power cords from the power source before you remove or install any adapter or riser-card.
- The server supports five optional Ethernet adapters that you can purchase: the Intel x540 ML2 Dual-port 10 Gb-T Ethernet adapter, the Intel I350-T4 ML2 Quad-port 1 Gb-T Ethernet adapter, the Emulex VFA5 ML2 Dual-port 10 Gb-SFP+ Ethernet adapter, the Broadcom NetXtremeII ML2 Dual-port 10 Gb-SFP+ Ethernet adapter and the Broadcom NetXtremeII ML2 Dual-port 10 Gb-T Ethernet adapter. For more information, see Table 16 on page 78.
- The server supports an internal mini-SAS HD RAID controller that is plugged into PCIe slots 1, 2 or 3. RAID controllers supporting internal drive connections are limited to slots 1 - 3 by cable routing constraints.
- The server provides one PCIe riser-card slot on the system board. The riser-card provides two or three PCI Express Gen3 adapter slots dependent on the optional riser-card used in the server. See "PCIe riser-card" on page 37 for the location of the PCIe slots on the optional riser-card. The system board provides five additional PCI Express Gen3 adapter slots (see "System-board optional-device connectors" on page 35 for the location of the PCIe slots on the system board). Some models come with the PCIe riser-card assembly with brackets installed. The following table lists the PCIe slots on the riser-card and the system board, the microprocessor to which each slot is connected, and the supported adapters that you can install in each slot.

Table 15. PCIe slots, the microprocessor which supports the PCIe slot, and the size of the PCIe adapters supported.

PCIe slots	Slot on PCI riser-card	Slot on the system board	Microprocessor to which the slot is connected	Adapters supported in the slot
Slot 1	Yes		Microprocessor 2	PCIe Gen3 x16 (x16, x8, x4, x1) full-height, half-length adapter
Slot 2	Yes		Microprocessor 2	PCIe Gen3 x16 (x8, x4, x1) full-height, half-length adapter

Table 15. PCIe slots, the microprocessor which supports the PCIe slot, and the size of the PCIe adapters supported. (continued)

PCIe slots	Slot on PCI riser-card	Slot on the system board	Microprocessor to which the slot is connected	Adapters supported in the slot
Slot 3	Yes		Microprocessor 2	PCIe Gen3 x16 (x8, x4, x1) full-height, half-length adapter
Slot 4		Yes	Microprocessor 2	PCIe Gen3 x8 low-profile adapter
Slot 5		Yes	Microprocessor 2	PCIe Gen3 x8 low-profile adapter
Slot 6		Yes	Microprocessor 1	PCIe Gen3 x8 low-profile adapter
Slot 7		Yes	Microprocessor 1	PCIe Gen3 x8 low-profile adapter
Slot 8		Yes	Microprocessor 1	PCIe Gen3 x8 low-profile adapter
Notes: <ul style="list-style-type: none"> • The x16 (x8) designation for a PCIe slot identifies a x16 slot that is wired for x8. If you install a x16 adapter in this slot that can downshift to the x8 bandwidth, it will run at the x8 bandwidth. The x16 connector can be used for x8, x4, x1, and x16 adapters. Check the information that comes with your adapter for compatibility information. • The server also supports PCIe Gen1 and Gen2 adapters. 				

- The server comes with an onboard RAID controller that provides basic RAID levels 0, 1, and 10 functionality. The server supports optional RAID controllers, RAID cache cards, and Feature On Demand software RAID that you can purchase for additional RAID levels 5, 6, 50, and 60 support. For configuration information, see the documentation that comes with the adapter or the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

For more information about the supported adapters, see Table 16 on page 78. For more information about the supported RAID cache cards, see Table 17 on page 81. For more information about the supported Features on Demand (FoD) software, see Table 18 on page 83. For instructions on how to install an adapter, see “Adapter installation instructions” on page 84.

Supported adapters

This section contains descriptive information of the adapters supported by this server along with the suggested slot installation sequence.

About this task

The following table lists the adapters that the server supports.

Table 16. Supported adapters, slot in which to install the adapters, and information about the adapters.

Name of adapter	Suggested slot installation sequence	Notes
ServeRAID M5210 SAS/SATA Controller for System x	PCIe slots 1, 2, and 3	<ul style="list-style-type: none">Provides base RAID levels 0, 1, and 10:<ul style="list-style-type: none">With the ServeRAID M5200 Series Zero Cache/RAID 5 Upgrade for IBM System x (Features On Demand software RAID) enabled on this adapter, you also get RAID level 5 and 50 support.With the ServeRAID M5200 Series RAID 6 Upgrade for IBM System x (Features On Demand software RAID) enabled on this adapter, you also get RAID level 6 and 60 support.ServeRAID M5200 Series Solid State Drive Caching Enabler for System x enables CacheCade 1 (read only) or CacheCade 2 (write caching). This software allows a solid state drive to be configured as a secondary tier of cache. Cachecade is a usage model where a hard disk drive RAID array is given a solid state drive cache, resulting in more effective performance acceleration. Note: A RAID cache card must be installed on this adapter to run the MegaRAID firmware.ServeRAID M5200 Series Solid State Drive Performance Accelerator for System x accelerates the performance of solid state drive RAID devices by bypassing front end processing. Note: A RAID cache card must be installed on this adapter to run the MegaRAID firmware.Supports the following RAID cache cards:<ul style="list-style-type: none">ServeRAID M5200 Series 1 GB Cache/RAID 5 Upgrade for System xServeRAID M5200 Series 1 GB Flash/RAID 5 Upgrade for System xServeRAID M5200 Series 2 GB Flash/RAID 5 Upgrade for System xServeRAID M5200 Series 4 GB Flash/RAID 5 Upgrade for System xNote: When any of the cache cards are installed on this adapter, you can enable the ServeRAID M5200 Series RAID 6 Upgrade for System x (Features on Demand software RAID) to get RAID levels 6 and 60 support.This adapter supports internal drive connections.

Table 16. Supported adapters, slot in which to install the adapters, and information about the adapters. (continued)

Name of adapter	Suggested slot installation sequence	Notes
ServeRAID M5120 SAS/SATA Controller for System x	PCIe slots 1, 2, 3, 4, 5, 6, 7, and 8	<ul style="list-style-type: none"> Provides base RAID levels 0, 1, 5, 10, and 50 (This adapter comes with a cache card installed): <ul style="list-style-type: none"> With the ServeRAID M5100 Series RAID 6 Upgrade for System x (Features On Demand software RAID) enabled on this adapter, you also get RAID level 6 and 60 support. You can also install the following RAID cache cards on this adapter for RAID levels 5 and 50 support: <ul style="list-style-type: none"> ServeRAID M5100 Series 512 MB Cache/RAID 5 Upgrade for System x ServeRAID M5100 Series 512 MB Flash/RAID 5 Upgrade for System x ServeRAID M5100 Series 1 GB Flash/RAID 5 Upgrade for System x <p>Note: When any of the three cache cards is installed on this adapter, you can enable the ServeRAID M5100 Series RAID 6 Upgrade for System x (Features On Demand software RAID) to get RAID levels 6 and 60 support. Optionally, the ServeRAID M5100 Series Solid State Drive Caching Enabler for System x (Features On Demand software RAID) can be enabled on this adapter to accelerate solid-state drive RAID devices and reduce processing overhead that is associated with caching.</p> A RAID cache card must be installed on this adapter to run the MegaRAID firmware. The adapter supports external cabling. The battery must always be mounted remotely in the server.
ServeRAID N2125 SAS/SATA Host Bus Adapter	PCIe slots 1, 2, 3, 4, 5, 6, 7, and 8	<ul style="list-style-type: none"> This adapter provides no RAID support. It helps provide optimized performance for applications that do not need RAID support. This 6 Gb adapter supports external drive connections.
ServeRAID N2215 SAS/SATA Host Bus Adapter	PCIe slots 1, 2, and 3	<ul style="list-style-type: none"> This solid-state drive controller provides no RAID support. It helps provide optimized performance for applications that do not need RAID support. This 12 Gb adapter supports internal drive connections.
Intel X540 ML2 Dual Port 10GbaseT Adapter for System x	Install in the ML adapter slot on the system board.	<ul style="list-style-type: none"> Port 1 on the adapter is the default port for IMM Shared mode when enabled through UEFI. This adapter provides the following features: <ul style="list-style-type: none"> Single chip, dual port 10 Gb Base-T controller with integrated MAC and PHY 12.5 watts maximum power Unified networking delivering LAN, iSCSI, and FCoE over 10 Gb Base-T Two independent 10 Gb Base-T interfaces with SR-IOV support PCI Express v2.1 with 5.0 GT/s and 2.5 GT/s support for x1, x2, x4, and x8 links widths 10BASE-T, 1000BASE-T, and 100BASE-TX link modes

Table 16. Supported adapters, slot in which to install the adapters, and information about the adapters. (continued)

Name of adapter	Suggested slot installation sequence	Notes
Intel I350-T4 ML2 Quad Port GbE Adapter for System x	Install in the ML adapter slot on the system board.	<ul style="list-style-type: none"> Port 1 on the adapter is the default port for IMM Shared mode when enabled through UEFI. This adapter provides the following features: <ul style="list-style-type: none"> Single chip, quad-port 1 Gb Base-T controller with integrated MAC and PHY PCI Express v2.1 with 5.0 GT/s and 2.5 GT/s support for x1, x2, and x4 links widths Pass-Through (PT) functionality via a sideband interface DMTF Network Controller Sideband Interface (NC-SI) 1000BASE-T, 100BASE-TX, and 10Base-T link modes Flexible port partitioning (32 virtual functions on quad-port or 16 virtual functions on dual-port)
Emulex VFA5 ML2 Dual Port 10GbE SFP+ Adapter for System x	Install in the ML adapter slot on the system board.	<ul style="list-style-type: none"> Port 1 on the adapter is the default port for IMM Shared mode when enabled through UEFI. This adapter supports FoD and requires a license or key (Emulex VFA5 ML2 FCoE/iSCSI License for IBM System x (FoD)) if you want access to FCoE and iSCSI advanced features. For this adapter, you will need supported SFP transceivers or DAC cables to connect to your Fibre connections. This adapter provides the following features: <ul style="list-style-type: none"> Four SFI 10 Gb Base-R Ethernet interfaces PCIe Gen3 x8 interface Single Root I/O Virtualization (SR-IOV) Ethernet network interface (Layer 2 NIC) and TCP/IP Fibre Channel over Ethernet (FCoE) Remote Direct Memory Access (RDMA)
Broadcom NetXtreme II ML2 Dual Port 10GbE SFP+ Adapter for System x	Install in the ML adapter slot on the system board.	<ul style="list-style-type: none"> Port 1 on the adapter is the default port for IMM Shared mode when enabled through UEFI. This adapter provides the following features: <ul style="list-style-type: none"> PCIe Gen2 x8 dual-port 10 Gb SFP+ controller in 50 mm wide ML2 form factor TCP/IP Offload (TOE), Wake on LAN (WoL), UCM and CIM capable Supports standard pNIC or vNIC2 modes Unified networking delivering LAN and iSCSI over 10 Gb SFP+ Two independent 10 Gbp SFP+ interfaces with SR-IOV capability PCI Express v2.1 with support for x8 link width, accepts both FTP+ SR optical and SFP+ DAC cables DMTV Network Controller Sideband interface (NC-SI) capable for IMM2 Shared port access

Table 16. Supported adapters, slot in which to install the adapters, and information about the adapters. (continued)

Name of adapter	Suggested slot installation sequence	Notes
Broadcom NetXtreme II ML2 Dual Port 10GbaseT Adapter for System x	Install in the ML adapter slot on the system board.	<ul style="list-style-type: none"> Port 1 on the adapter is the default port for IMM Shared mode when enabled through UEFI. This adapter provides the following features: <ul style="list-style-type: none"> PCIe Gen2 x8 dual-port 10 Gb Base-T controller in 50 mm wide ML2 form factor TCP/IP Offload (TOE), Wake on LAN (WOL), UCM and CIM capable Supports standard pNIC or vNIC2 modes Unified networking delivering LAN and iSCSI over 10 Gb Base-T Two independent 10 Gbp Base-T interfaces with SR-IOV capability PCI Express v2.1 with support for x8 link width 10 Gb Base-T and 1000Base-T link modes DMTV Network Controller Sideband interface (NC-SI) capable for IMM2 shared port access

Supported RAID cache cards

This section contains descriptive information for the RAID cache cards supported by this server.

About this task

The following table lists the supported RAID cache cards.

Table 17. Supported RAID cache cards and where you can install the cache cards.

RAID cache card	Where to install the card	Notes
ServeRAID M5100 Series 512 MB Flash/RAID 5 Upgrade for System x (RAID cache card)	You can connect this cache card to the optional ServeRAID M5120 SAS/SATA Controller.	<ul style="list-style-type: none"> This cache card comes with a flash power module (Supercap pack) that you can attach to this card. It powers the integrated RAID subsystem long enough to store the cache contents to flash in the event of a power loss. The flash power module must be installed remotely in the server (see “Installing a RAID adapter flash power module” on page 98) for information about where to install the flash power module in the server). Provides RAID levels 5 and 50 upgrade support. Enables the ServeRAID controller to run MegaRAID firmware. Has 72-bit memory.

Table 17. Supported RAID cache cards and where you can install the cache cards. (continued)

RAID cache card	Where to install the card	Notes
ServeRAID M5100 Series 1 GB Flash/RAID 5 Upgrade for System x (RAID cache card)	You can connect this cache card to the optional ServeRAID M5120 SAS/SATA Controller.	<ul style="list-style-type: none"> • This cache card comes with a flash power module (Supercap pack) that you can attach to this card. It powers the integrated RAID subsystem long enough to store the cache contents to flash in the event of a power loss. The flash power module must be installed remotely in the server, (see "Installing a RAID adapter flash power module" on page 98) for information about where to install the flash power module in the server). • Provides RAID levels 5 and 50 upgrade support. • Enables the ServeRAID controller to run MegaRAID firmware. • Has 72-bit memory.
ServeRAID M5200 Series 1 GB Cache/RAID 5 Upgrade for System x (RAID cache card)	You can install this cache card in the RAID cache card connector on the system board or the ServeRAID M5210 SAS/SATA Controller.	<ul style="list-style-type: none"> • Enables the ServeRAID controller to run MegaRAID firmware. • Provides RAID levels 5 and 50 upgrade support. • Has 40-bit memory.
ServeRAID M5200 Series 1 GB Flash/RAID 5 Upgrade for System x (RAID cache card)	You can install this cache card in the RAID cache card connector on the system board or the ServeRAID M5210 SAS/SATA Controller.	<ul style="list-style-type: none"> • This cache card comes with a flash power module (Supercap pack) that you can attach to this card. It powers the integrated RAID subsystem long enough to store the cache contents to flash in the event of a power loss. The flash power module must be installed remotely in the server, (see "Installing a RAID adapter flash power module" on page 98) for information about where to install the flash power module in the server). • Enables the ServeRAID controller to run MegaRAID firmware. • Provides RAID levels 5 and 50 upgrade support. • Has 72-bit memory.
ServeRAID M5200 Series 2 GB Flash/RAID 5 Upgrade for System x (RAID cache card)	You can install this cache card in the RAID cache card connector on the system board or the ServeRAID M5210 SAS/SATA Controller.	<ul style="list-style-type: none"> • This cache card comes with a flash power module (Supercap pack) that you can attach to this card. It powers the integrated RAID subsystem long enough to store the cache contents to flash in the event of a power loss. The flash power module must be installed remotely in the server, (see "Installing a RAID adapter flash power module" on page 98) for information about where to install the flash power module in the server). • Enables the ServeRAID controller to run MegaRAID firmware. • Provides RAID levels 5 and 50 upgrade support. • Has 72-bit memory.

Table 17. Supported RAID cache cards and where you can install the cache cards. (continued)

RAID cache card	Where to install the card	Notes
ServeRAID M5200 Series 4 GB Flash/RAID 5 Upgrade for System x (RAID cache card)	You can install this cache card in the RAID cache card connector on the system board or the ServeRAID M5210 SAS/SATA Controller.	<ul style="list-style-type: none"> This cache card comes with a flash power module (Supercap pack) that you can attach to this card. It powers the integrated RAID subsystem long enough to store the cache contents to flash in the event of a power loss. The flash power module must be installed remotely in the server, (see “Installing a RAID adapter flash power module” on page 98) for information about where to install the flash power module in the server). Enables the ServeRAID controller to run MegaRAID firmware. Provides RAID levels 5 and 50 upgrade support. Has 72-bit memory.

Supported features on demand software

This section contains descriptive information of the Features on Demand (FoD) software that is supported by this server.

About this task

The following table lists the supported FoD software.

Table 18. Supported Features on Demand software

Features On Demand software	Notes
ServeRAID M5100 Series Performance Accelerator for System x (FoD FastPath)	<ul style="list-style-type: none"> Accelerates solid-state drive RAID devices by reducing the processing overhead that is associated with caching. One of the RAID cache cards must be installed in the RAID cache card connector on the system board to enable this capability.
ServeRAID M5100 Series RAID 6 Upgrade for System x	<ul style="list-style-type: none"> Provides RAID levels 6 and 60 support.
ServeRAID M5100 Series Solid State Drive Caching Enabler for System x (FoD Cachecade 1 or 2)	<ul style="list-style-type: none"> Enables a hard disk drive RAID array to have its own solid-state drive cache. The solid-state drive cache is much larger than the DRAM cache on the controller and can provide better performance acceleration. Cachecade 1 is read cache only, and Cachecade 2 adds write caching.
ServeRAID M5200 Series Zero Cache/RAID 5 Upgrade for System x	<ul style="list-style-type: none"> Provides RAID levels 5 and 50 support.
ServeRAID M5200 Series RAID 6 Upgrade for System x	<ul style="list-style-type: none"> Provides RAID levels 6 and 60 support.
ServeRAID M5200 Series Performance Accelerator for System x (FoD FastPath)	<ul style="list-style-type: none"> Accelerates solid-state drive RAID devices by reducing the processing overhead that is associated with caching. One of the RAID cache cards must be installed in the RAID cache card connector on the system board to enable this capability.

Table 18. Supported Features on Demand software (continued)

Features On Demand software	Notes
ServeRAID M5200 Series Solid State Drive Caching Enabler for System x	<ul style="list-style-type: none"> Enables a hard disk drive RAID array to have its own solid-state drive cache. The solid-state drive cache is much larger than the DRAM cache on the controller and can provide better performance acceleration. Cachecade 1 is read cache only, and Cachecade 2 adds write caching. One of the RAID cache cards must be installed in the RAID cache card connector on the system board to enable this capability.

Adapter installation instructions

Use this information to install an adapter.

About this task

Notes:

- The instructions in this section apply to any supported adapter (for example, network adapters).
- The server does not support any high-definition video-out connector.
- The server supports an add-on video adapter in slot 1 of the two slot riser-card.

To install an adapter, complete the following steps:

Procedure

- Read the safety information and installation guidelines, see “Safety” on page vii and the “Installation guidelines” on page 41.
- Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
- Remove the top cover (see “Removing the server top cover” on page 44).
- Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
- Follow the cabling instructions, if any come with the adapter. Route the adapter cables before you install the adapter.

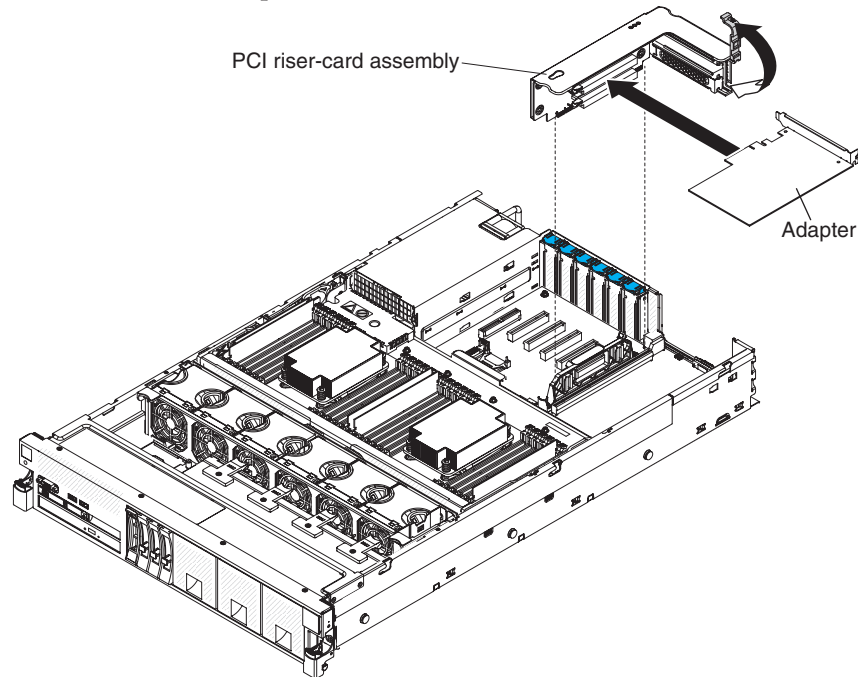
Note: The cables should be routed through the SAS cable guide.

- To install an adapter on the system board, complete the following steps:
 - Open the PCIe retention latch and remove the PCIe filler bracket from the connector in which you want to install the adapter.
 - Insert the adapter into the PCIe slot, aligning the edge connector on the adapter with the connector on the system board. Press the edge of the connector on the adapter *firmly* into the connector on the system board. Make sure that the adapter snaps into the PCIe connector securely.

Attention: Make sure that the adapter is correctly seated. An incorrectly seated adapter might cause damage to the system board or the adapter.
 - Close the PCIe retention latch.

- d. Skip to step 8.
- 7. To install an adapter on the PCIe riser-card assembly, complete the following steps:
 - a. Grasp the riser-card assembly by the blue touch points and pull it up until it disengages from the connector on the system board.
 - b. Open the PCIe retention latch.
 - c. Remove the PCIe filler bracket from the slot in which you want to install the adapter.
 - d. Make sure that the PCIe retention latch is in the open position.
 - e. Insert the adapter into the connector on the riser-card assembly, aligning the edge connector on the adapter with the connector on the riser-card assembly. Press the edge of the connector on the adapter *firmly* into the riser-card assembly connector. Make sure that the adapter snaps into the connector on the riser-card assembly securely.

Attention: Make sure that the adapter is correctly seated into the riser-card assembly connector and that the riser-card assembly is correctly seated into the connector on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board, the riser-card, or the adapter.



- f. Close the PCIe retention latch.
 - g. Install the riser-card assembly in the server (see “Installing a PCIe riser-card assembly” on page 75).
- 8. Perform any configuration tasks that are required for the adapter.

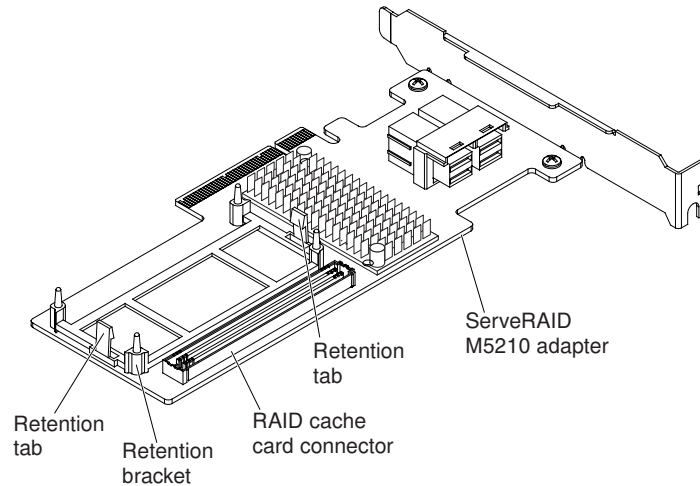
Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the optional ServeRAID M5210 SAS/SATA Controller

Use this information to install the optional ServeRAID M5210 SAS/SATA Controller.

About this task



You can purchase an optional ServeRAID M5210 SAS/SATA Controller. This adapter can be installed only in the PCIe slots listed in “Supported adapters” on page 78. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

Notes:

- For additional information and notes about installing adapters see “Installing an adapter” on page 76.
- Follow the general rule for connecting the SAS signal cables to the adapter and drive backplane: port 0 on the adapter to port 0 on the drive backplane and port 1 on the adapter to port 1 on the drive backplane (depending on the type of drive backplane you install in the server).

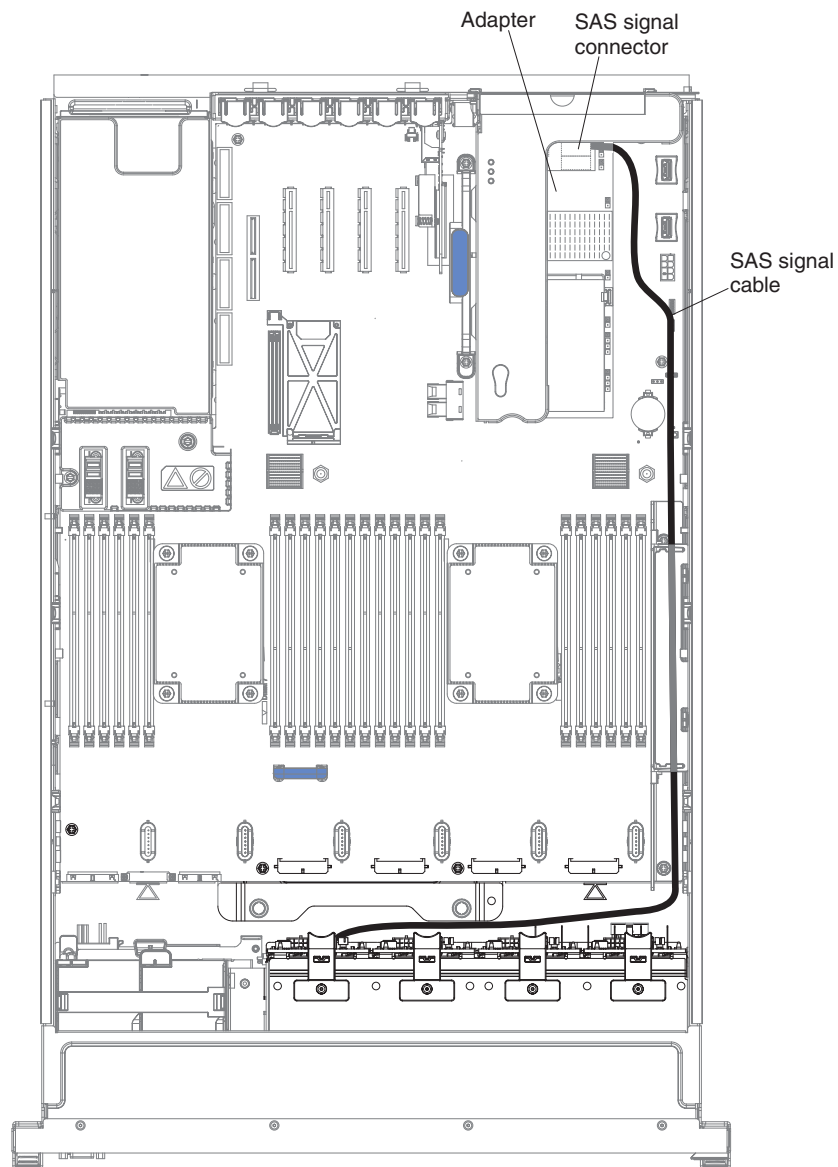
To install the ServeRAID M5210 SAS/SATA adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).

5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Carefully grasp the riser-card assembly by the blue touch points and pull it until the riser-card assembly disengages from the connector on the system board; then, set it aside.
7. Touch the static-protective package that contains the adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
8. Align the ServeRAID M5210 SAS/SATA adapter so that the keys align correctly with the connector on the riser-card assembly.
9. Insert the ServeRAID M5210 SAS/SATA adapter into the connector on the riser-card until it is firmly seated.
Attention: Incomplete insertion might cause damage to the server or the adapter.
10. Connect the SAS cables to the adapter.
11. Reinstall the riser-card assembly onto the system board.
12. Route the signal cables through the SAS cable guide and connect the signal cable to the drive backplane.

Note: Follow the general rule for connecting the SAS signal cables to the adapter and drive backplane: port 0 on the adapter to port 0 on the drive backplane and port 1 on the adapter to port 1 on the drive backplane (depending on the type of drive backplanes you installed in the server).



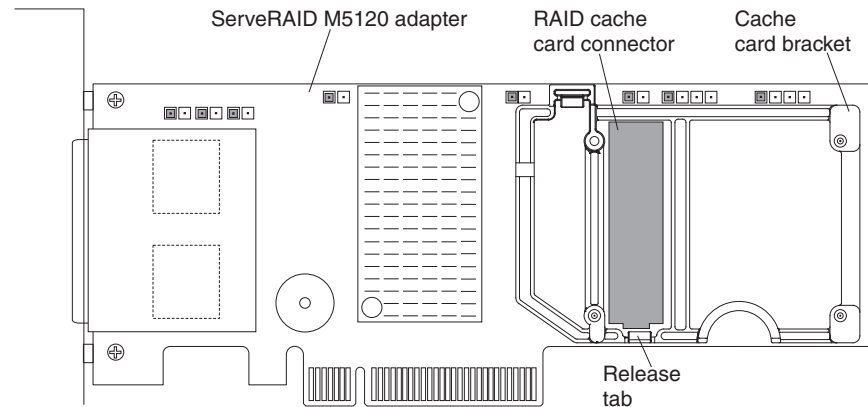
Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the optional ServeRAID M5120 SAS/SATA Controller

Use this information to install the optional ServeRAID M5120 SAS/SATA Controller.

About this task



You can purchase an optional ServeRAID M5120 SAS/SATA Controller. This adapter can be installed only in the PCIe slots listed in “Supported adapters” on page 78. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

Notes:

- For additional information and notes about installing adapters “Installing an adapter” on page 76.
- Follow the general rule for connecting the SAS signal cables to the adapter and drive backplane: port 0 on the adapter to port 0 on the drive backplane and port 1 on the adapter to port 1 on the drive backplane (depending on the type of drive backplane you install in the server).
- This adapter comes with a RAID cache card. The cache card comes with a battery or flash power module that must be installed remotely in the server (see “Installing a RAID adapter flash power module” on page 98 for more information).
- This adapter is for external RAID and can be used when external storage expansion units are attached to the server.

To install the ServeRAID M5120 SAS/SATA adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).

5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Touch the static-protective package that contains the adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
7. If the RAID cache card is not already attached to the adapter, see “Installing a RAID cache card” on page 95 and “Installing a RAID adapter flash power module” on page 98 for instructions on installing and cabling the cache card.
8. Use one of the following procedures:
 - a. To install the adapter on the system board, complete the following steps:
 - 1) Open the PCIe retention latch.
 - 2) Remove the PCIe filler bracket from the slot in which you want to install the adapter.
 - 3) Align the adapter so that the keys align correctly with the connector on the system board.
 - 4) Insert the adapter into the connector on the system board until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board or the adapter.
 - 5) Close the PCIe retention latch.
 - 6) Connect the external cables to the adapter.
 - b. To install the adapter on the PCIe riser-card assembly, complete the following steps:
 - 1) Carefully grasp the riser-card assembly by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board.
 - 2) Open the PCIe retention latch.
 - 3) Remove the PCI filler bracket from the slot in which you want to install the adapter.
 - 4) Align the adapter so that the keys align correctly with the connector on the riser-card assembly.
 - 5) Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.
 - 6) Close the PCI retention latch.
 - 7) Reinstall the riser-card assembly onto the system board.
 - 8) Connect the external cables to the adapter.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the optional ServeRAID N2125 SAS/SATA Host Bus Adapter

Use this information to install a ServeRAID N2125 SAS/SATA Host Bus Adapter.

About this task

You can purchase an optional ServeRAID N2125 Host Bus Adapter. This adapter provides no RAID support; however, it helps to provide optimized performance for applications that do not need a RAID support. This adapter can be installed in the PCIe slots listed in “Supported adapters” on page 78. For configuration information, see the documentation that comes with the adapter.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

For additional information and notes about installing the adapters see “Installing an adapter” on page 76.

To install the adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Touch the static-protective package that contains the adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
7. Use one of the following procedures:
 - a. To install the adapter on the system board, complete the following steps:
 - 1) Open the PCIe retention latch.
 - 2) Remove the PCIe filler bracket from the slot in which you want to install the adapter.
 - 3) Align the adapter so that the keys align correctly with the connector on the system board.
 - 4) Insert the adapter into the connector on the system board until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board or the adapter.
 - 5) Close the PCIe retention latch.
 - 6) Connect the external cables to the adapter.

- b. To install the adapter on the PCIe riser-card assembly, complete the following steps:
 - 1) Carefully grasp the riser-card assembly by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board.
 - 2) Open the PCIe retention latch.
 - 3) Remove the PCIe filler bracket from the slot in which you want to install the adapter.
 - 4) Align the adapter so that the keys align correctly with the connector on the riser-card assembly.
 - 5) Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.
 - 6) Close the PCIe retention latch.
 - 7) Reinstall the riser-card assembly onto the system board.
 - 8) Connect the external cables to the adapter.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the optional ServeRAID N2215 Host Bus Adapter

Use this information to install the ServeRAID N2215 Host Bus Adapter.

About this task

You can purchase an optional ServeRAID N2215 Host Bus Adapter. This adapter provides no RAID support; however, it helps to provide optimized performance for applications that do not need a RAID support. This adapter can be installed in the PCIe slots listed in “Supported adapters” on page 78. For configuration information, see the documentation that comes with the adapter.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

For additional information and notes about installing the adapters see “Installing an adapter” on page 76.

To install the adapter, complete the following steps:

Procedure

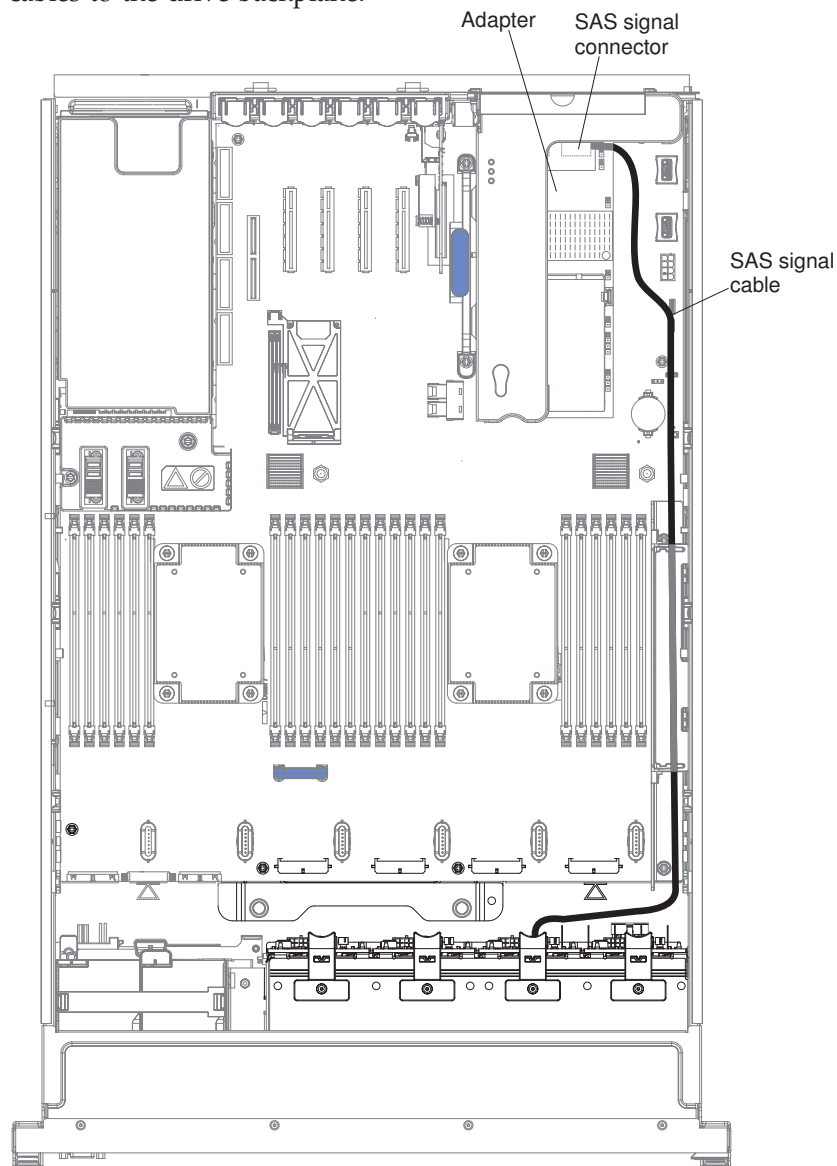
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).

4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Touch the static-protective package that contains the adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
7. To install the adapter on the PCIe riser-card assembly, complete the following steps:
 - a. Carefully grasp the riser-card assembly by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board.
 - b. Open the PCIe retention latch.
 - c. Remove the PCIe filler bracket from the slot in which you want to install the adapter.
 - d. Align the adapter so that the keys align correctly with the connector on the riser-card assembly.
 - e. Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.

 - f. Close the PCIe retention latch.
 - g. Reinstall the riser-card assembly onto the system board.
 - h. Connect the internal cables to the adapter.

8. Route the signal cables through the SAS cable guide and connect the signal cables to the drive backplane.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing a RAID cache card

Use this information to install a RAID cache card.

About this task

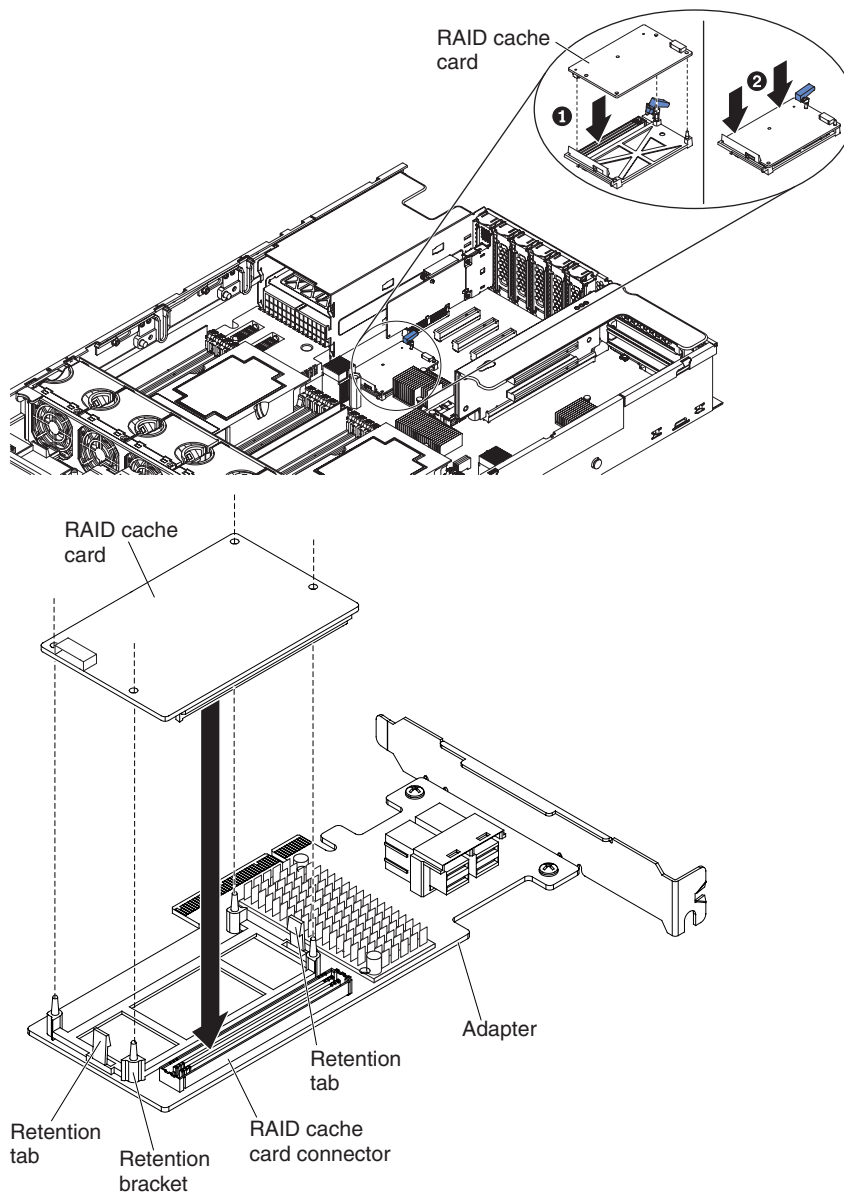
The server supports optional RAID cache cards that you can install on the RAID cache card connector on the system board or on the RAID adapters to upgrade to RAID levels 5 and 50 support. See “Supported RAID cache cards” on page 81 for more information about the cache cards and which cache card is supported on the RAID adapters.

To install a RAID cache card, complete the following steps:

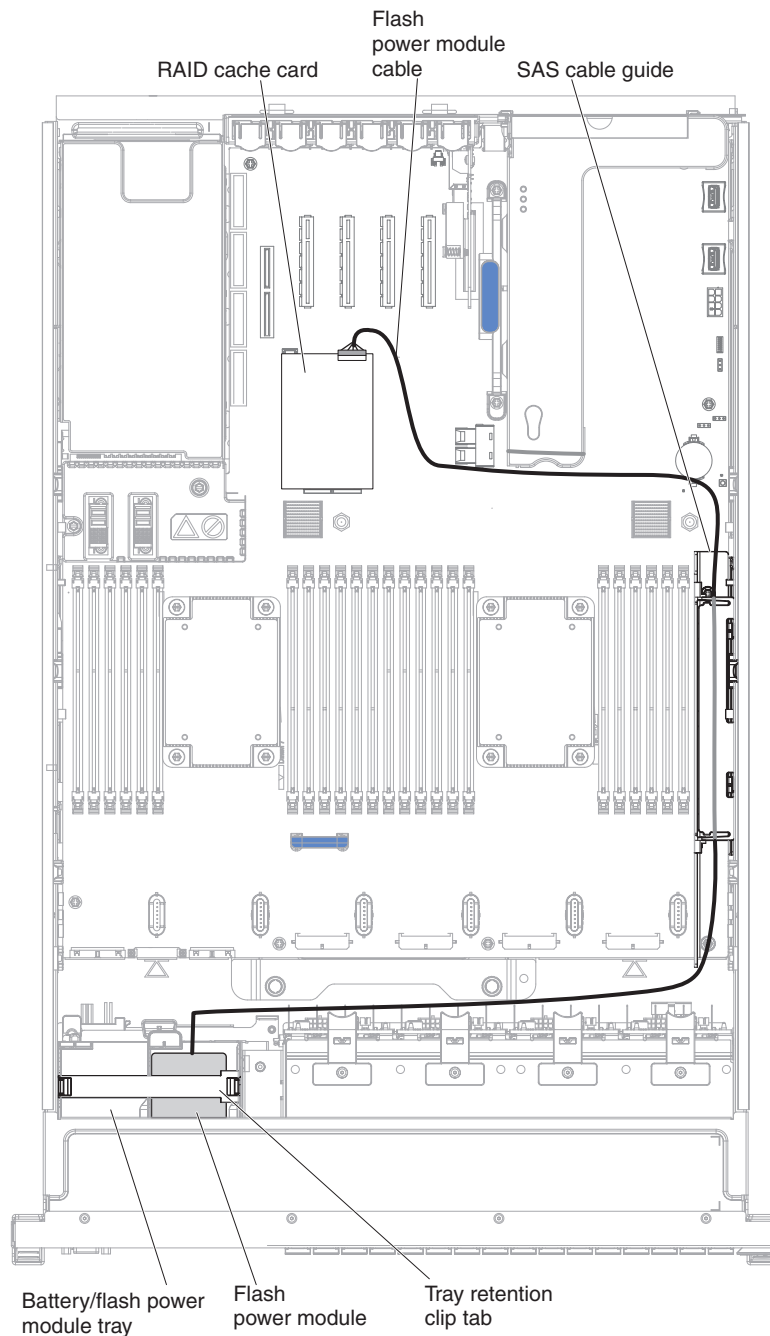
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Pull the tabs on the SAS cable guide back toward the chassis wall and open the cable guide cover.
7. Make sure the release tab on the RAID cache card slot is in the open position.
8. Touch the static-protective package that contains the cache card to any unpainted surface on the outside of the server; then, grasp the cache card by the edges and remove it from the package.
9. Connect one end of the flash power module cable to the cache card.
10. Align the cache card with the RAID cache card slot on the system board or adapter and insert it onto the connector.

Note: To assist in aligning the cache card if installing the RAID cache card on the RAID cache card connector on the system board, you can align the cache card holes with the two RAID cache card connector Guide Pins; then, lower the cache card onto the connector.



11. Gently press down on the touch points of the cache card until it clicks into place on the connector and is firmly seated.
12. Route the flash power module cable along the side of the chassis and through the SAS cable guide.



13. Press the tray retention clip tab outward to release the retention clip that secures flash power modules in the battery/flash power module trays (on the top of the USB/video assembly near the front of the server).

Note: If the RAID cache card is installed in the connector on the system board, place the flash power module in the battery/flash power module tray slot closest to drive bay 0.

14. Place the flash power module into the battery/flash power module tray (install the flash power modules in the trays starting from top to bottom).
15. Connect the other end of the flash power module cable to the flash power module.
16. Reinstall the retention clip to secure the flash power module in place.
17. Close the SAS cable guide cover.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing a RAID adapter flash power module

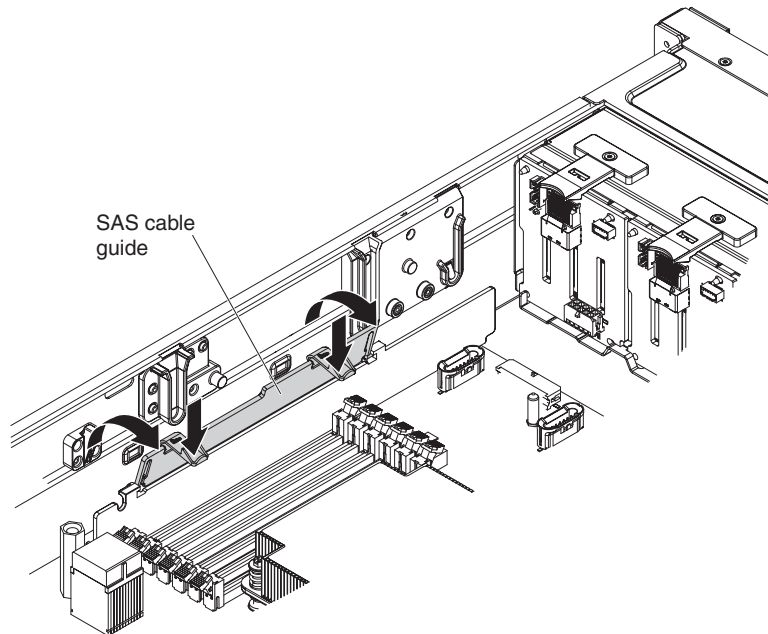
Use this information to install a RAID adapter flash power module.

About this task

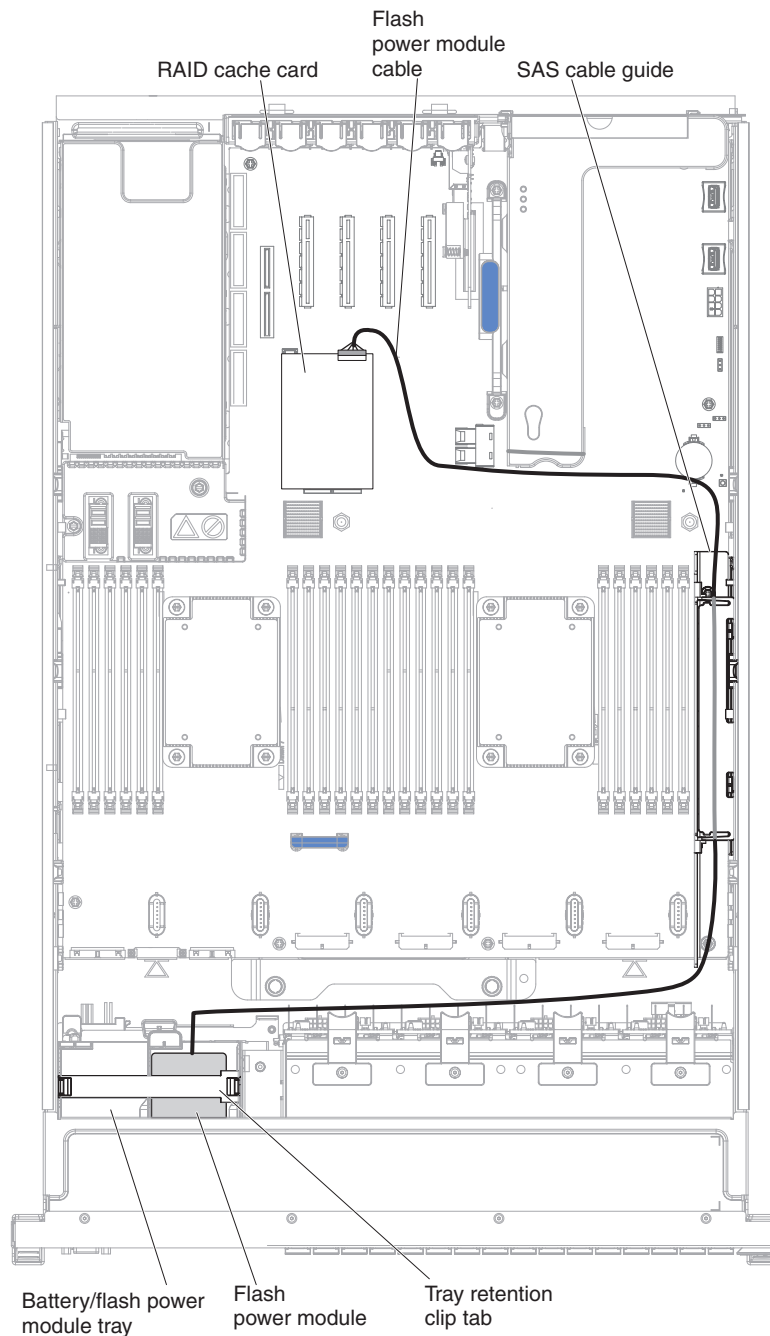
When you install multiple RAID adapters that come with flash power modules, the flash power modules must be installed remotely to prevent them from overheating. The flash power modules must be installed in the battery/flash power module trays that are located on top of the USB/video assembly (in the front of the server). To install a flash power module remotely in the server, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server and peripheral devices and disconnect all power cords and external devices; then, remove the top cover (see “Removing the server top cover” on page 44).
3. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
4. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
5. Connect one end of the flash power module cable to the cache card.
6. Open the SAS cable guide cover.



7. Route the flash power module cable along the side of the chassis and through the SAS cable guide.



8. Close the SAS cable guide cover.
9. Press the tray retention clip tab outward to release the retention clip that secure the flash power modules in the battery/flash power module trays (on the top of the USB/video assembly near the front of the server).
10. Place the RAID flash power module into the battery/flash power module tray (install the flash power modules in the trays starting from top to bottom).

Note: If the RAID cache card is installed in the connector on the system board, place the flash power module in the battery/flash power module tray slot closest to drive bay 0.

11. Connect the other end of the flash power module cable to the flash power module.
12. Reinstall the retention clip to secure the flash power module in place.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing an additional microprocessor and heat sink

Use this information to install an additional microprocessor and heat sink.

About this task

The following notes describe the type of microprocessor that the server supports and other information that you must consider when you install a microprocessor and heat sink:

- Be extremely careful when handling the microprocessor, the microprocessor socket contacts are very fragile.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything. Contact with any surface can compromise the thermal grease and the microprocessor socket.
- If the thermal-grease protective cover (for example, a plastic cap or tape liner) is removed from the heat sink, do not touch the thermal grease on the bottom of the heat sink or set down the heat sink. For more information, see “Thermal grease” on page 108.

Note: Removing the heat sink from the microprocessor destroys the even distribution of the thermal grease and requires replacing the thermal grease.

- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- When installing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.
- When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 43.
- The server base system board supports two microprocessors. The optional microprocessor and memory expansion tray provides two additional microprocessor slots plus 24 additional DIMM connectors. The server supports up to four Intel Xeon four-core, six-core, eight-core, ten core, or twelve-core microprocessors (depending on your model) with the microprocessor and memory expansion tray installed. To confirm that the server supports the microprocessor, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/> for a list of supported microprocessors.
- A microprocessor air baffle must be installed whenever the two DIMM connectors closest to the microprocessor (on the left and the right) are empty. For example, when DIMM connectors 6 and 7 on the system board are empty, a microprocessor air baffle must be installed on microprocessor 1. This is applicable for all microprocessors.

- Microprocessors 3 and 4 must be installed as a pair on the optional microprocessor and memory expansion tray.

Note: The server does not support a configuration of three microprocessors. You must install one, two, or four microprocessors in the server.

- Do not mix four-core, six-core, eight-core, ten core or twelve-core microprocessors in the same server.
- The microprocessor options that IBM supports are limited by the capacity and capability of the server. Any additional microprocessor that you install must have the same specifications as the microprocessors that came with the server.
- You must always have a microprocessor in socket 1 on the system board.
- When one microprocessor is installed, the microprocessor air baffle, the DIMM air baffle, or the microprocessor and memory expansion tray must be installed to provide proper system cooling.
- When you install an additional microprocessor, you must also install additional memory. See “Non-mirroring (independent mode)” on page 52, “Memory mirroring” on page 52, and “Memory sparing” on page 54 for details about DIMM installation sequence.
- To ensure proper server operation when you install an additional microprocessor, use microprocessors that have the same QuickPath Interconnect (QPI) link speed, integrated memory controller frequency, core frequency, power segment, internal cache size, and type.
- Installing microprocessors of different stepping levels within the same server is supported.
- When you install microprocessors with different stepping levels within the same server, you do not have to install the microprocessor with the lowest stepping level and features in microprocessor socket 1.
- The components in the server dictate the number of microprocessors that you must install to support the components. Failure to adhere to the following information will affect the system performance and functionality:

Table 19. The components supported by each microprocessor

Number of microprocessors	Components the server can support with the number of microprocessor(s) installed
Microprocessor 1	Onboard LSI SAS controller ML2 adapter PCIe slots 6, 7, and 8
Microprocessor 2	PCIe slots 1, 2, 3, 4, and 5
Microprocessor 3 and 4 (these must be installed as a pair)	A fully-populated server

- The server supports microprocessor failover support. For example, if two microprocessors are installed and microprocessor 1 fails, the server will switch to microprocessor 2 until the server is serviced. To ensure that the microprocessor failover support works correctly, do the following:
 - Make sure that microprocessor 1 and microprocessor 2 have valid boot devices and paths. That is, an Ethernet controller or a SAS controller must be installed in slots 1, 2, 3, 4, or 5 to boot from microprocessor 2.
 - Make sure that the boot order in the Setup utility is set up so that microprocessor 1 and microprocessor 2 boot devices are in the boot order.
- The microprocessor voltage regulator modules are integrated on the system board and the microprocessor and memory expansion tray.

- If you have to replace a microprocessor, you must call for service.
- Read the documentation that comes with the microprocessor, so that you can determine whether you have to update the server firmware. To download the latest level of the server firmware and other code updates for your server, go to <http://www.ibm.com/supportportal/>.
- To order an additional optional microprocessor, contact your Lenovo sales representative or Lenovo reseller.
- When you order a microprocessor option kit, it comes with a microprocessor installation tool that you must use to install the microprocessor. The microprocessor installation tool comes with the microprocessor and a protective cover on the bottom of the microprocessor tool.
- The following table shows the DIMM connectors on the system board and the microprocessor and memory expansion tray that are associated with each microprocessor.

Table 20. DIMM connectors associated with each microprocessor

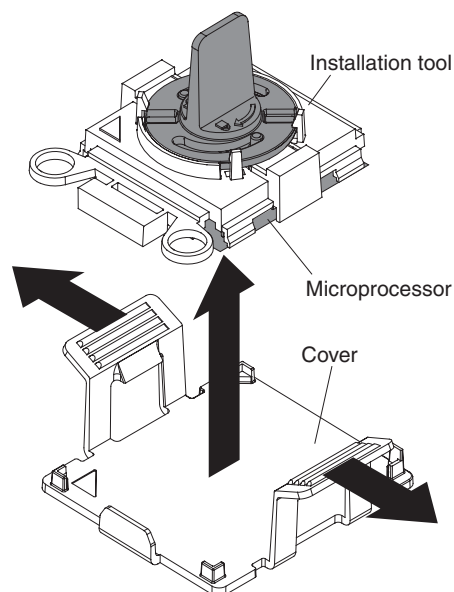
Microprocessor	Location	DIMM connectors associated with the microprocessor
Microprocessor 1	System board	1 through 12
Microprocessor 2	System board	13 through 24
Microprocessor 3	Microprocessor and memory expansion tray	25 through 36
Microprocessor 4	Microprocessor and memory expansion tray	37 through 48

Note: DIMMs 1 through 12 are solely associated with microprocessor 1. Microprocessor 2 has access to DIMMs 1 through 12, but access is through microprocessor 1. This is important if load balancing is a necessity for your operating system or software load.

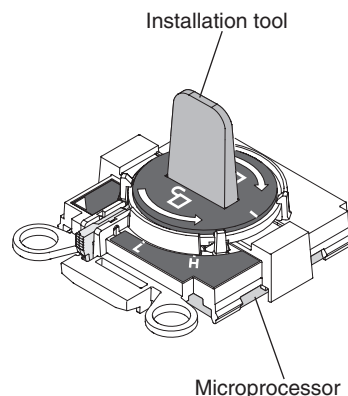
There are two types of microprocessor installation tools. The tools are similar in function and design; but, have a major difference:

- Installation Tool A has one setting for installing one size of microprocessor that supports E5-26xx and E5-46xx microprocessors.
- Installation Tool B supports E5-26xx, E5-46xx, E5-26xx v2, and E5-46xx v2 microprocessors. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings on Tool B are:
 - “L” for smaller low core microprocessors
 - “H” for larger high core microprocessors

Microprocessor Installation Tools A and B are shown in the next illustration.



Microprocessor Installation Tool A



Microprocessor Installation Tool B

To install an additional microprocessor and heat sink, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 43.

3. Remove the server top cover (see “Removing the server top cover” on page 44).
4. If a power supply is installed in bay 2, slide power supply 2 out of the bay slightly.

Note: When the Power Supply is pulled out of the power supply bay, the Power Supply Interlock bracket is disengaged and the three Lock icons are no longer visible through the openings on the Interlock bracket.

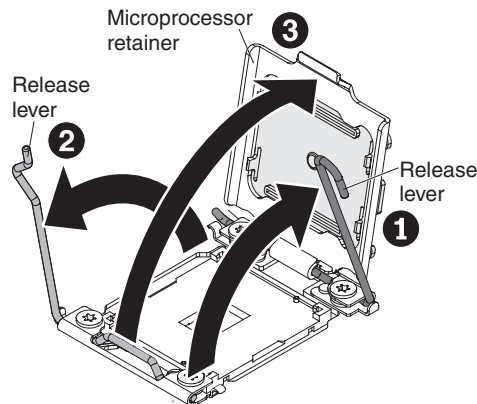
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.

Note: You only need to remove the DIMM air baffle or microprocessor and memory expansion tray if you are installing a microprocessor in socket 2.

6. Locate microprocessor socket 2 on the system board.
7. Remove the microprocessor air baffle (see “Removing the microprocessor air baffle” on page 47).
8. Open the microprocessor socket release levers and retainer:
 - a. Locate the two release levers on microprocessor socket 2.

- b. Press the first release lever (on the right) down and inward toward the socket and lift it up to the fully open position; then, press the second release lever on the (left) down and inward toward the socket and lift it up to the fully open position.
- c. Open the microprocessor retainer by lifting up on the microprocessor retainer tab.

Open the microprocessor socket release levers and retainer in the order that is shown.



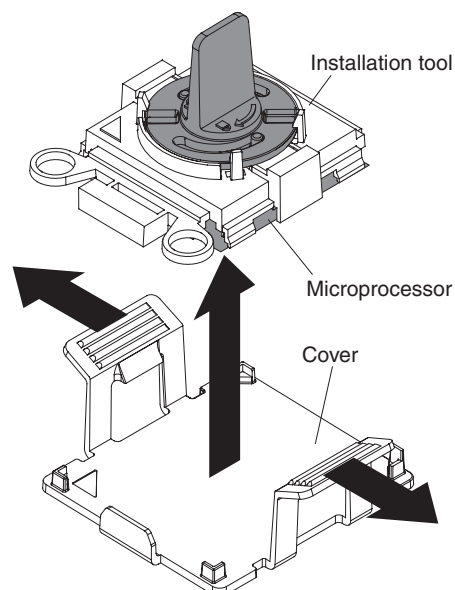
9. Install the microprocessor in the microprocessor socket:

- a. Open the packaging that contains the new microprocessor installation tool assembly and carefully remove the installation tool assembly from the package.

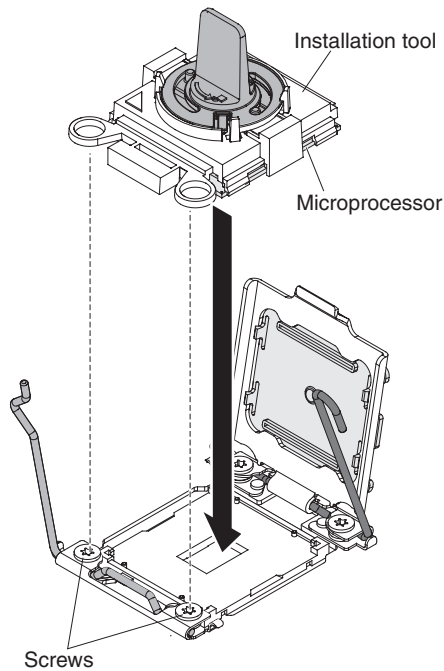
Attention: Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.

- b. Release the sides of the microprocessor protective cover on the bottom of the microprocessor and carefully remove the cover from the installation tool.

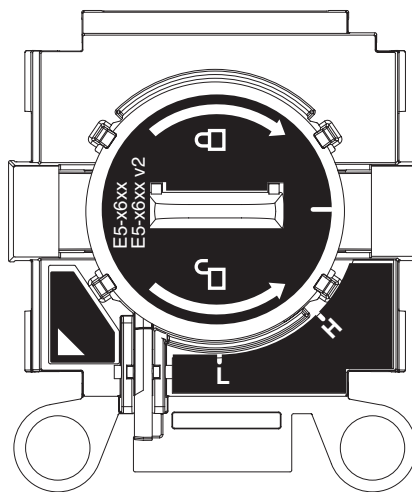
Note: The microprocessor is preinstalled on the installation tool.



- c. Carefully align the microprocessor installation tool with the microprocessor socket. The installation tool rests flush on the socket only if it is properly aligned.



- d. Install the microprocessor using the appropriate instructions for your installation tool:
- If using Installation Tool A, twist the handle on the microprocessor tool assembly counterclockwise to the open position to insert the microprocessor into the socket; then, lift the installation tool out of the socket.
 - If using Installation Tool B, twist the handle of the installation tool assembly counterclockwise until the microprocessor is inserted into the socket; then, lift the installation tool out of the socket.
- The next illustration shows Installation Tool B with the tool handle in the open position.

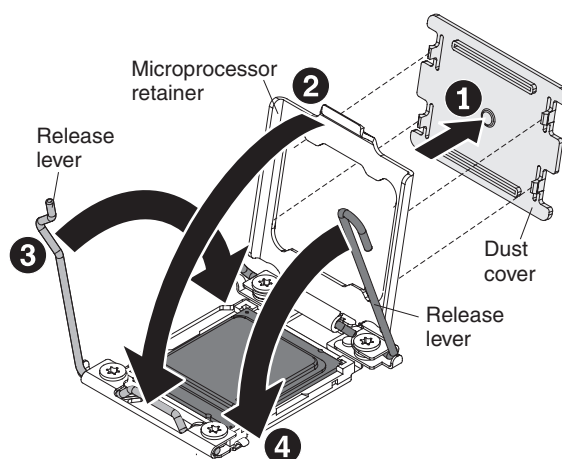


Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is aligned correctly in the socket before you try to close the microprocessor retainer.
- Do not touch the thermal grease on the bottom of the heat sink or on top of the microprocessor. Touching the thermal grease will contaminate it.

10. Close the microprocessor retainer and release levers:

- a. If a microprocessor dust cover is installed over the microprocessor retainer, remove the dust cover and store it in a safe place.
- b. Close the microprocessor retainer on the microprocessor socket.
- c. Carefully close the microprocessor release levers to the closed position to secure the microprocessor in the socket. Make sure that you close the release lever on the left first; then, close the release lever on the right. Close the microprocessor retainer and release levers in the order shown.

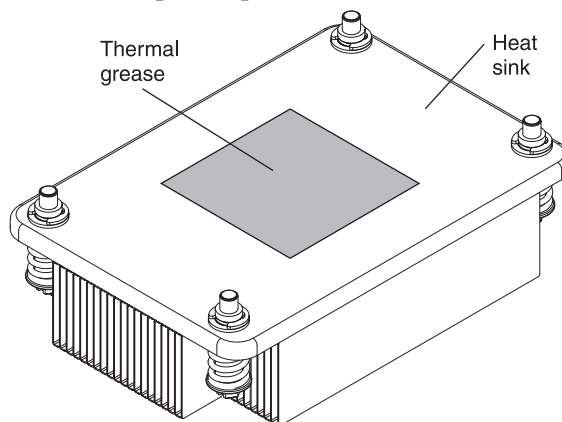


Attention:

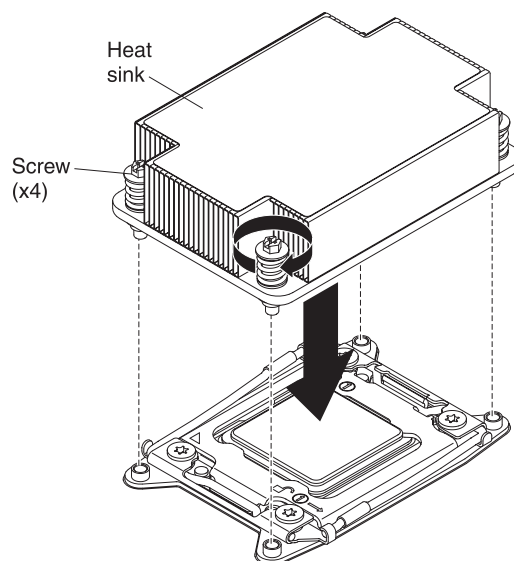
- If you are installing a new heat sink, do not set down the heat sink after you remove the plastic cover.
- Do not touch the thermal grease on the bottom of the heat sink after you remove the plastic cover. Touching the thermal grease will contaminate it. See "Thermal grease" on page 108 for more information.

11. Install the heat sink that came with the microprocessor:

- a. Remove the plastic protective cover from the bottom of the heat sink.



- b. Align the heat sink on the top of the microprocessor with the thermal grease side down.
- c. Align the captive screws on the heat sink with the holes on the heat-sink retention module.



- d. Press down on the center of the heat sink, and then press firmly on the captive screws and tighten them, alternating between the screws in a figure-8 pattern as illustrated on the heat sink label until they are tightened. You can cause damage to the microprocessor if you tighten the screws on one side first, rather than rotating. Rotate each screw one full rotation at a time. Repeat this process until the screws are tightened.
12. Reinstall the microprocessor air baffle (see "Replacing the microprocessor air baffle" on page 135).

Note: A microprocessor air baffle must be installed whenever the DIMM connectors closest to the microprocessor (on the left and the right) are empty. For example, when DIMM connectors 6 and 7 on the system board are empty, a microprocessor air baffle must be installed on microprocessor 1. This is applicable for all microprocessors.

13. Reinstall the DIMM air baffle (see "Replacing the DIMM air baffle" on page 134).
14. Reconnect any cables that you disconnected.

Results

If you have other devices to install, do so now. Otherwise, go to "Completing the installation" on page 134.

Thermal grease

Use this information to determine the guidelines for using thermal grease on a heat sink and microprocessor.

About this task

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease. For information on the part number to order the thermal grease, see “Replaceable server components” on page 223.

When you are installing the heat sink on the same microprocessor that it was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Note:

- Read the Safety information “Safety” on page vii.
- Read the “Installation guidelines” on page 41.
- Read “Handling static-sensitive devices” on page 43.

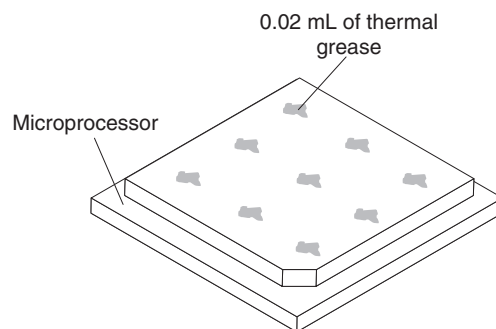
To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

Procedure

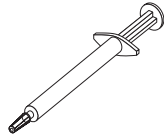
1. Place the heat sink on a clean work surface.
2. Remove the cleaning pad from its package and unfold it completely.
3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

Note: Make sure that all of the thermal grease is removed.

4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.



5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in step 11 on page 106.

Installing power supplies

This topic provides information about the installation of the 750-watt dc, 900-watt, and 1400-watt hot-swap power supply.

This server comes with one 750-watt dc power supply, one 900-watt power supply or one 1400-watt power supply (depending on the model). This server supports up to two redundant power supplies. For the server to support two power supplies, you must install the optional Power Interposer for Redundant Power option or the optional Microprocessor and Memory Expansion Tray.

Note: You cannot use ac and dc power supplies in the same server.

Installing a 1400-watt or 900-watt hot-swap power supply

Use this information to install a 1400-watt or 900-watt hot-swap power supply.

About this task

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a hot-swap power supply:

- To confirm that the server supports the power supply that you are installing, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.
- The server comes standard with one 900-watt (input voltage 110 or 220 V ac auto-sensing) hot-swap power supply or one 1400-watt hot-swap power supply (input voltage 110 or 220 V ac auto-sensing) depending on your model.

Note: Do not mix 110 V ac and 220 V ac input voltage power supplies in the server. It is not supported.

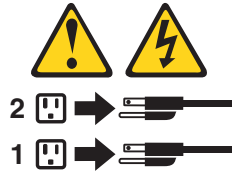
- Do not mix 900-watt and 1400-watt power supplies in the server. It is not supported.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.
- Full N+N redundancy support is provided by two 1400-watt power supplies fed from a 220 V input source.
- Limited N+N redundancy support is provided by two 900-watt power supplies fed from either a 110 V or 220 V input source, or by two 1400-watt power supplies fed from a 110 V source.
- For the server to support two power supplies, you must install the optional Power Interposer for Redundant Power option or the optional Microprocessor and Memory Expansion Tray, if one is not installed in your model.

Statement 5



CAUTION:

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8



CAUTION:

Never remove the cover on a power supply or any part that has the following label attached.



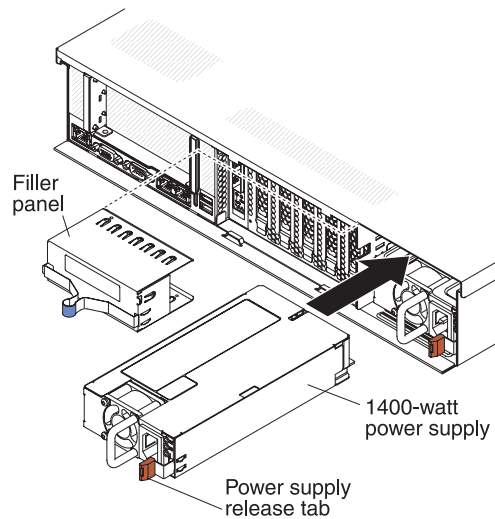
Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To install a hot-swap power supply, complete the following steps:

Procedure

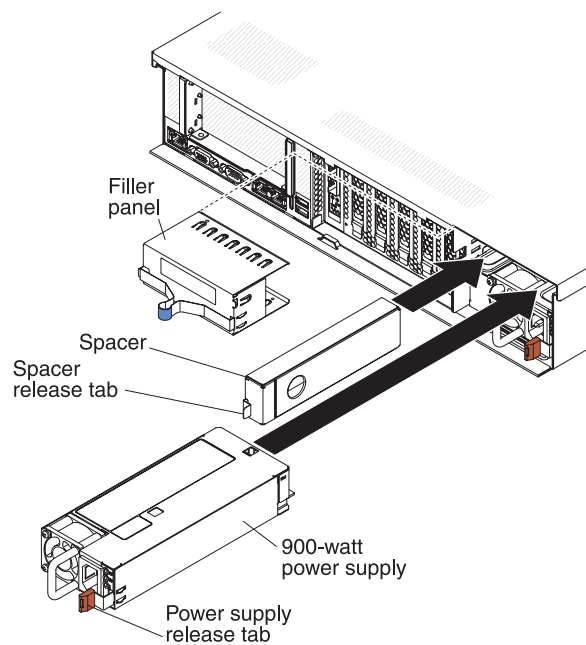
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
3. If you are installing the power supply into an empty bay, remove the power-supply filler panel from the power-supply bay.
4. Use one of the following procedures to install the power supply.
 - a. **To install a 1400-watt power supply**, complete the following step:

- 1) Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.



b. **To install a 900-watt power supply**, complete the following steps:

- 1) Insert the power-supply spacer into the left side (against the bay wall) of the power-supply bay and slide it in until it snaps into place on the tabs on the side of the bay.



- 2) Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay (next to the spacer) until it clicks. Make sure that the power supply connects firmly into the power-supply connector
5. Route the power cord through the cable hook-and-loop on the rear of the server so that it does not accidentally become unplugged.
6. Connect the power cord for the new power supply to the power-cord connector on the power supply.
7. Connect the other end of the power cord to a properly grounded electrical outlet.

8. Make sure that the ac power LED on the power supply is lit, indicating that sufficient power is being supplied to the power supply through the power cord. During normal operation, both the ac and the dc power LEDs are lit. For any other combination of LEDs, see “Power-supply LEDs” on page 186. Make sure that no error LEDs are lit.
9. Restart the server. Confirm that it starts correctly and recognizes the newly installed device, and make sure that no error LEDs are lit.

Installing a 750-watt -48 volt to -60 volt dc power supply

Use this information to install a 750-watt -48 volt to -60 volt dc power supply.

About this task

The following notes provides information that you must consider when you install a 750-watt -48 V to -60 V dc power supply. To confirm that the server supports the power supply that you are installing, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.

Attention:

- Only trained service technicians, other than IBM service technicians, are authorized to install and remove the 750-watt -48 V to -60 V dc power supply, and make connections to or disconnections from the 750-watt -48 V to -60 V dc power source.
- IBM service technicians are not certified or authorized to install or remove the 750-watt -48 V to -60 V dc power cable. You are responsible for ensuring that only a trained service technician install or remove the 750-watt -48 V to -60 V dc power cable.
- You can install up to two dc power supplies or two ac power supplies in the server, but you cannot mix dc and ac power supplies in the same server.
- To reduce the risk of electric shock or energy hazards when installing the 750-watt -48 V to -60 V dc power supplies, take the following steps:
 - Use a circuit breaker that is rated 40 amps.
 - Use 4 mm² (10 AWG) at 60° C copper wire.
 - Cut the power cable wires to the correct length, but do not cut the wires shorter than 150 mm (6 inches).
 - Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).
- For the server to support two power supplies, you must install the optional Power Interposer for Redundant Power option or the optional Microprocessor and Memory Expansion Tray, if one is not installed in your model.

Statement 8



CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

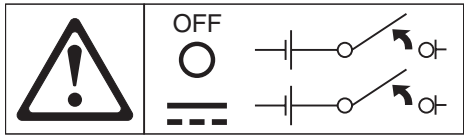


Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 19:



CAUTION:
The power-control button on the device does not turn off the electrical current supplied to the device. The device also might have more than one connection to dc power. To remove all electrical current from the device, ensure that all connections to dc power are disconnected at the dc power input terminals.



Statement 31:



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded power source.
- Connect to properly wired power sources any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.

To Connect:	To Disconnect:
<ol style="list-style-type: none">1. Turn OFF all power sources and equipment that is to be attached to this product.2. Attach signal cables to the product.3. Attach power cords to the product.<ul style="list-style-type: none">• For ac systems, use appliance inlets.• For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.4. Attach signal cables to other devices.5. Connect power cords to their sources.6. Turn ON all the power sources.	<ol style="list-style-type: none">1. Turn OFF all power sources and equipment that is to be attached to this product.<ul style="list-style-type: none">• For ac systems, remove all power cords from the chassis power receptacles for interrupt power at the ac power distribution unit.• For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.2. Remove the signal cables from the connectors.3. Remove all cables from the devices.

Statement 34:



CAUTION:

To reduce the risk of electric shock or energy hazards:

- This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.
- Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).
- Incorporate a readily available approved and rated disconnect device in the field wiring.
- See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.
- Use copper wire conductors only. See the specifications in the product documentation for the required wire size.
- See the specifications in the product documentation for the required torque values for the wiring-terminal screws.

To install a 750-watt -48 V to -60 V dc power supply, complete the following steps:

Note: Only trained service technicians, other than Lenovo service technicians, are authorized to install and remove the 750-watt -48 V to -60 V dc power supply, and make connections to or disconnections from the 750-watt -48 V to -60 V dc power source. Lenovo service technicians are not certified or authorized to install or remove the 750-watt -48 V to -60 V dc power cable. You are responsible for ensuring that only a trained service technician install or remove the 750-watt -48 V to -60 V dc power cable.

Procedure

1. Read the notes at the beginning of this section and read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all external cables from the server.
Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 43.
3. Turn off the circuit breaker(s) for the dc power supplies.

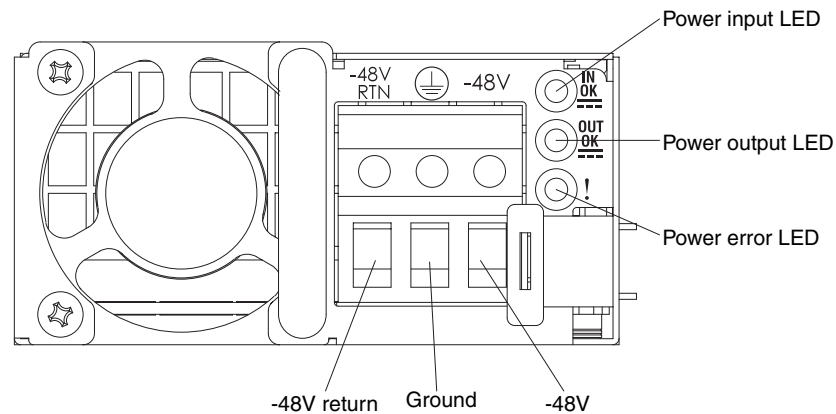
Note: Make sure that you use a circuit breaker that is rated 40 amps.

4. Remove the power-supply filler panel from the power-supply bay where you are installing the power supply. Save the filler for later use.
5. Touch the static-protective package that contains the power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.

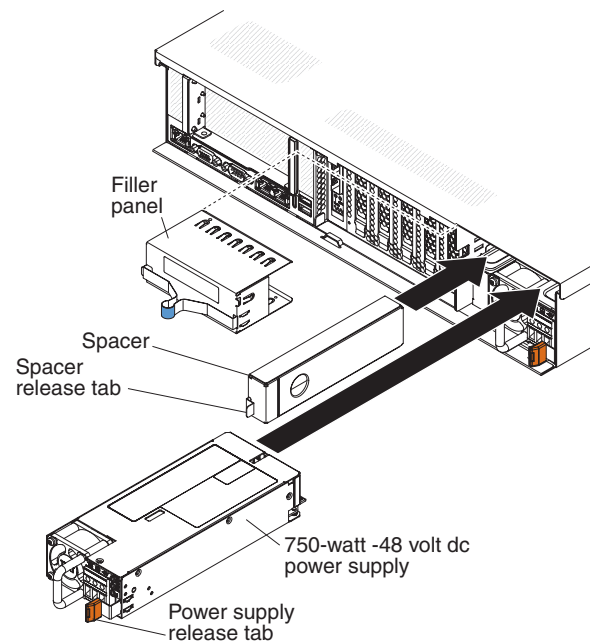
6. Attach the dc power cable to the new power supply. Make sure that the power cable wires are connected securely to the -48 V, ground, and to the -48 V return terminals (as shown in the following illustration).

Make sure that you:

- a. Use 4 mm² (10 AWG) at 60° C copper wire.
- b. Cut the power cable wires to the correct length, but do not cut the wires shorter than 150 mm (6 inches).
- c. Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).

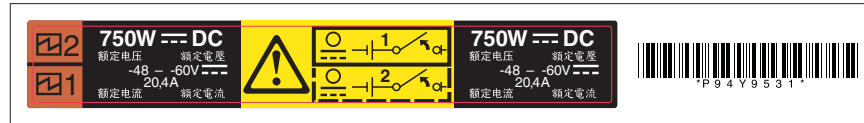


7. Insert the power-supply spacer into the left side of the power-supply bay (against the bay wall) and slide it in until it snaps into place on the tabs on the side of the power supply bay.



8. Grasp the handle on the rear of the power supply and slide the power supply into the bay until it clicks into place and is seated firmly into the connector.
9. Connect the other ends of the dc power cable to the dc power source.

Note: When you install the second power supply, place the following power rating label that comes with the power supply option on the rear of the server.

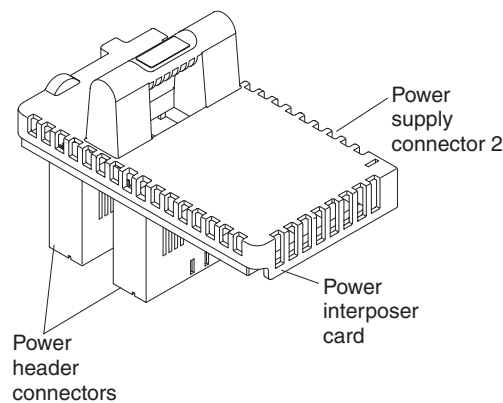


10. Turn on the circuit breaker(s) for the dc power supplies.
11. Route the power cable through the cable hook-and-loop on the rear of the server so that it does not accidentally become unplugged.
12. Reconnect all of the cables to the peripheral devices.
13. Restart the server. Make sure that it starts correctly and recognizes the newly installed device, and make sure that no error LEDs are lit.

Installing the power interposer for redundant power supply card assembly

Use this information to install the power interposer.

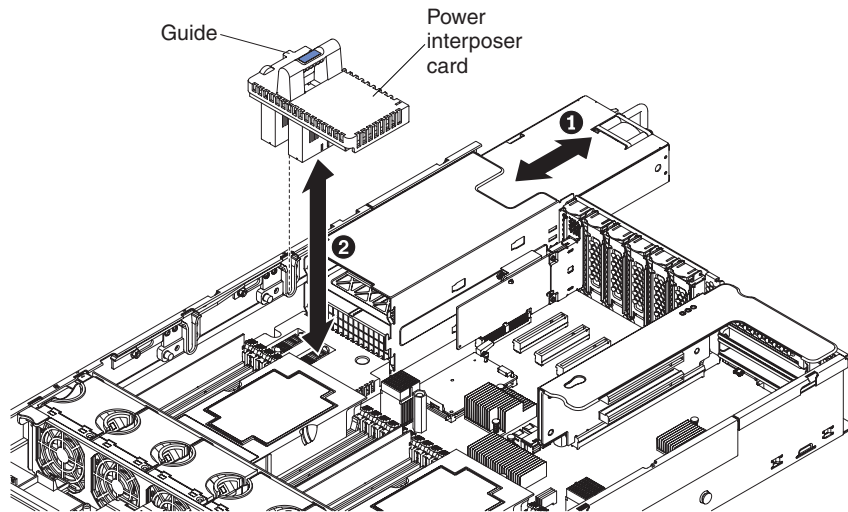
About this task



The Power Interposer for Redundant Power Supply option enables redundant power support when no microprocessor and memory expansion tray is installed. To install the optional power interposer card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Align the power connectors on the power interposer card so that they are aligned with the power interposer card connectors on the system board; then, press down on the power interposer card until it is firmly seated in the connectors on the system board.



5. Install the power supply that comes with the power interposer card, (see “Installing a 1400-watt or 900-watt hot-swap power supply” on page 109) or (“Installing a 750-watt -48 volt to -60 volt dc power supply” on page 112).

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing a USB embedded hypervisor flash device

Use this information to install a USB embedded hypervisor flash device.

About this task

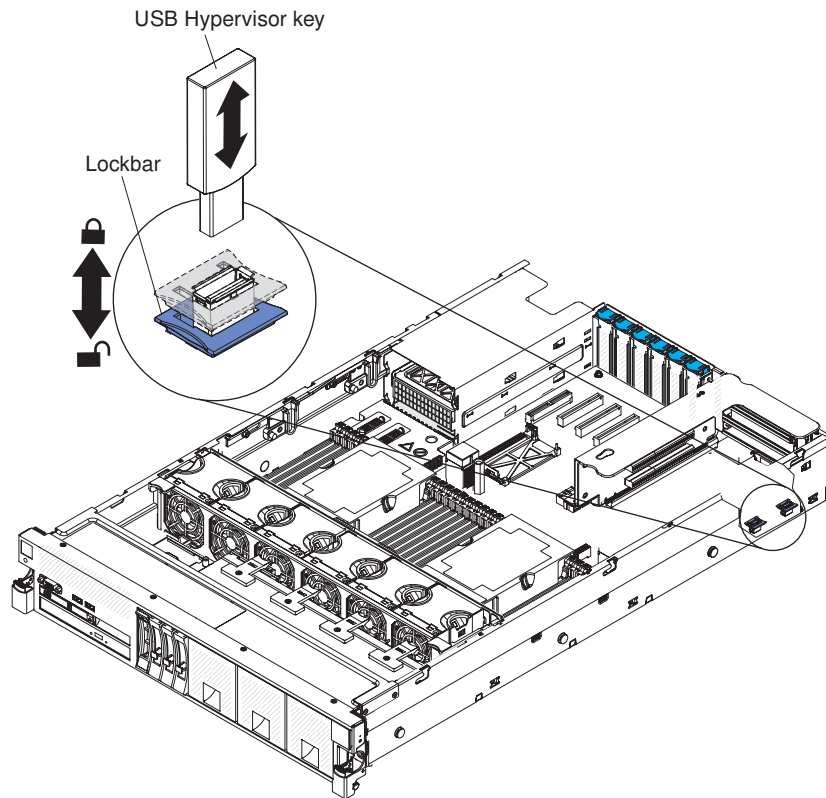
To install a hypervisor flash device, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).

Note: You might have to remove the PCIe riser-card assembly to access the USB (hypervisor) connectors.

4. Locate the USB (hypervisor) connector on the system board in which you want to install the flash device (see “System-board internal connectors” on page 30 for the location of the connectors for the embedded hypervisor USB flash device).
5. Make sure that the lockbar on the USB (hypervisor) connector is in the unlock position (down).
6. Align the USB flash device with the connector on the system board and push it into the connector until it is firmly seated.
7. Slide the lockbar up to the locked position until the lockbar is seated firmly.



Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the 8x1.8-inch hot-swap drive backplane assembly

Use this information to install the 8x1.8-inch hot-swap drive backplane assembly.

About this task

Notes:

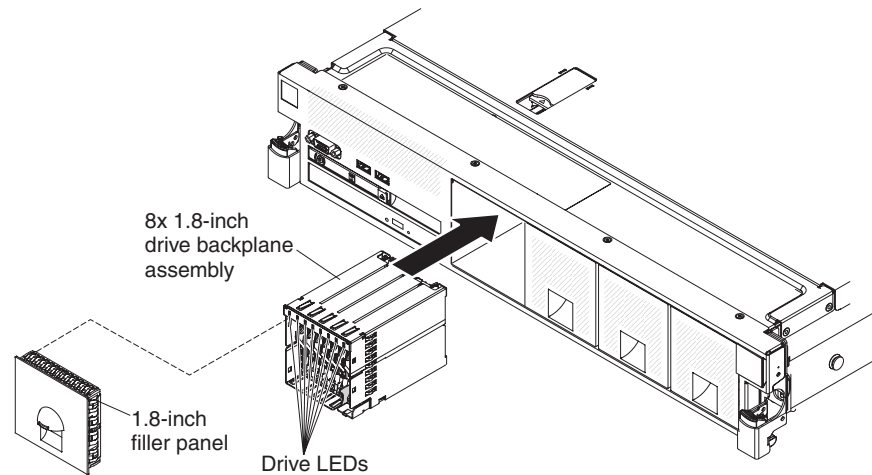
- For more information about connecting the SAS signal cables to the drive backplane, see “Connecting the SAS cables” on page 70.
- When you install a 8x1.8-inch drive backplane assembly, the drive IDs that are indicated on the server front bezel will no longer be valid. Use the drive labels that come with the backplane to renumber the drive IDs on the bezel.
- For more information about drive IDs, see “Drive IDs” on page 61. For more information about the supported drive backplane configurations, see “Supported SAS/SATA drive backplane configurations” on page 62.

To install the 8x1.8-inch hot-swap drive backplane assembly, complete the following steps:

Procedure

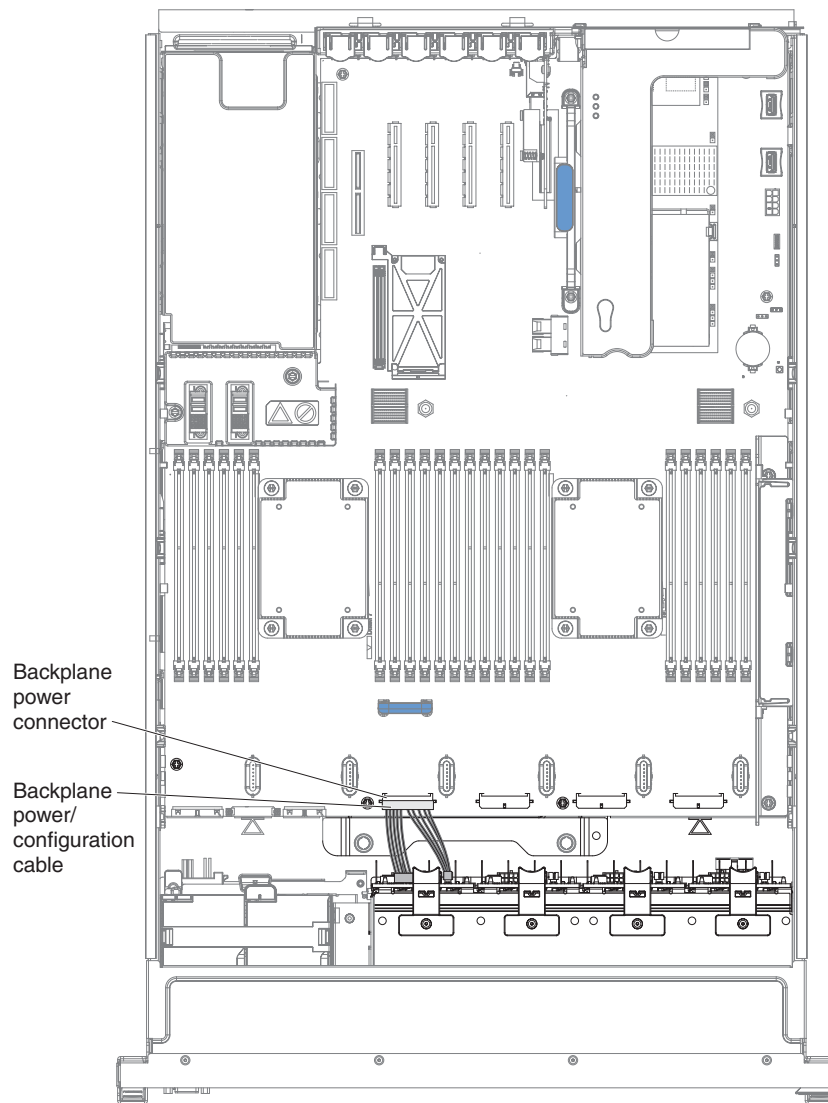
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.

2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Open the SAS cable guide cover.
7. Remove the drive bay fillers from the front of the server for the bays that are associated with the backplane bay in which you are installing the backplane.
8. If a backplane filler panel is installed in the backplane bays in which you are installing the backplane assembly, remove the backplane filler panel.
9. Align the backplane assembly with the backplane bay in which you are installing the assembly.

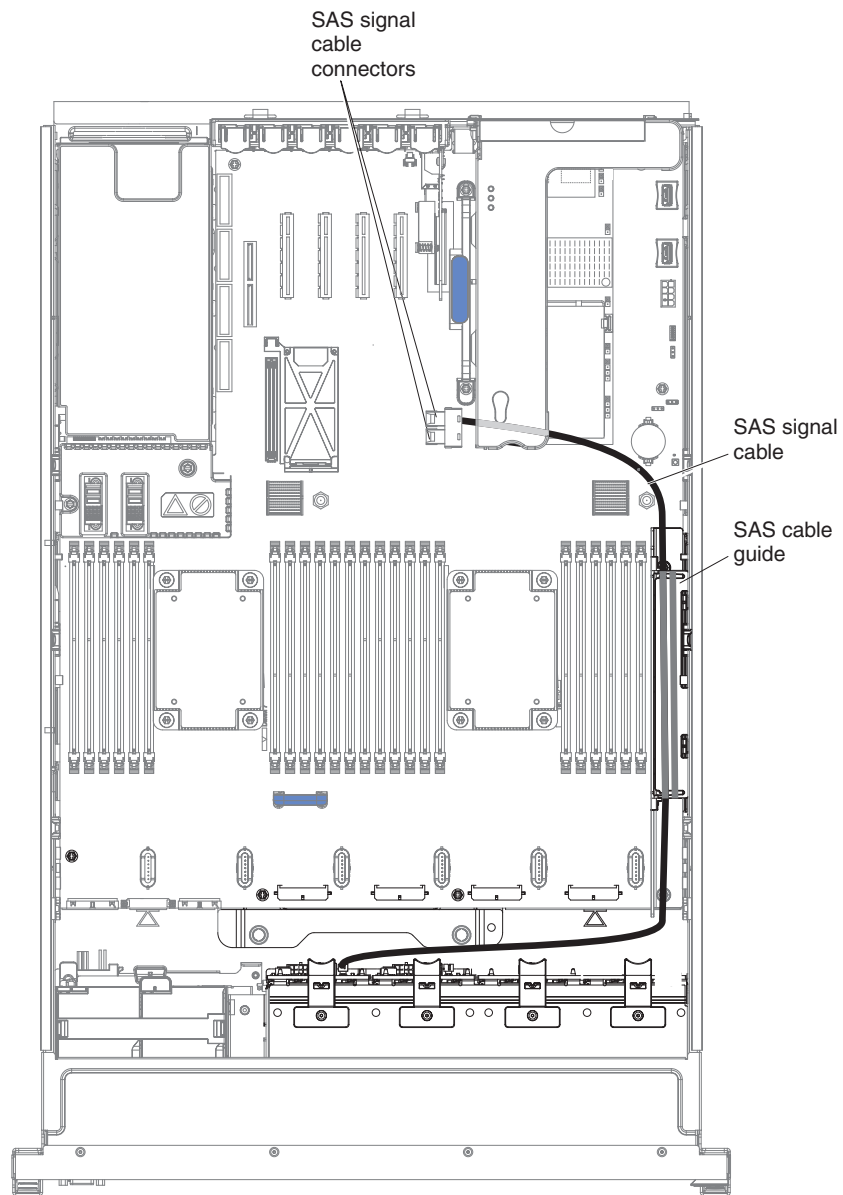


10. Slide the backplane assembly into the backplane bay until it clicks into place.
11. Connect the combination power/configuration cable end to the power and configuration connectors on the backplane assembly; then, connect the power connector on the other end of the cable to the backplane power connector on the system board. See the following cabling illustration.

Note: You can connect the cables to the backplane before you install the backplane onto the cage or you can connect the cables after you install the backplane, if that is easier for you.



12. Route the signal cables through the SAS cable guide and connect the signal cables to the backplane assembly and to the adapter or the system board.



13. Close the SAS cable guide cover.

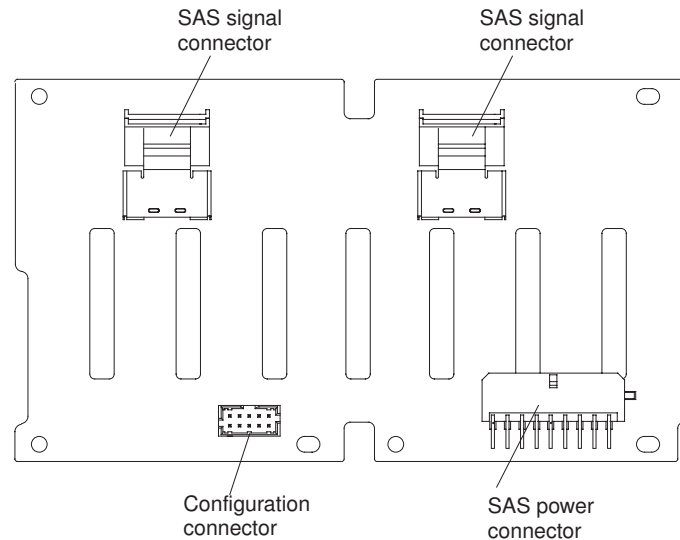
Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the 8x2.5-inch hot-swap drive backplane

Use this information to install the 8x2.5-inch hot-swap drive backplane.

About this task



Notes:

- For more information about connecting the SAS signal cables to the drive backplane, see “Connecting the SAS cables” on page 70).
- You can install this drive backplane in backplane bays 1 and 2 or 3 and 4. It cannot be installed in drive backplane bays 2 and 3. It is not supported.

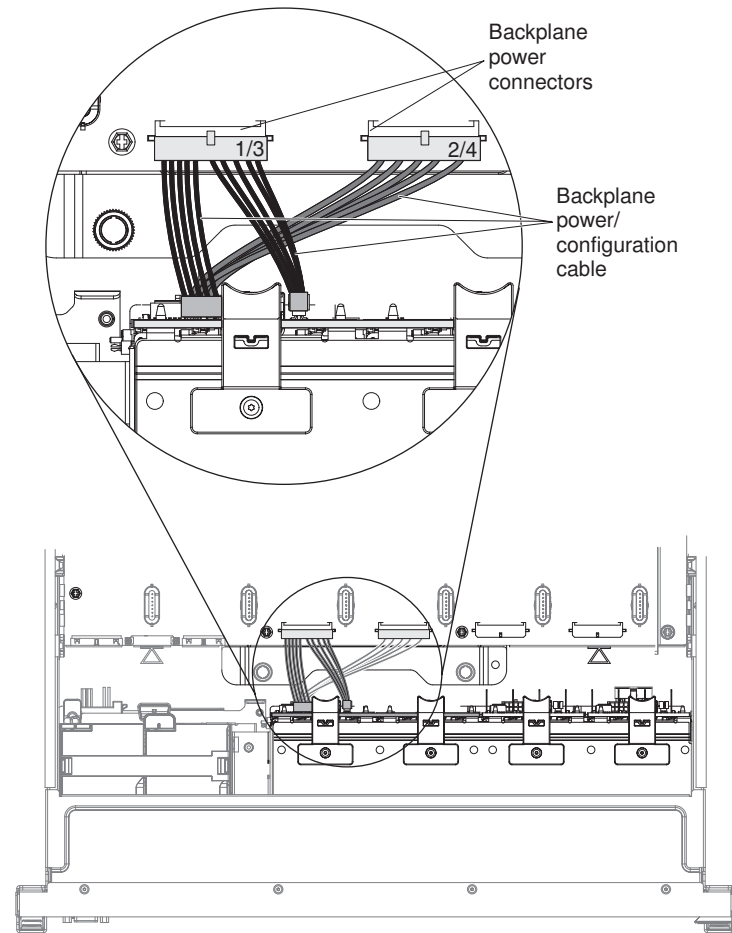
To install the 8x2.5-inch hot-swap drive backplane, complete the following steps:

Procedure

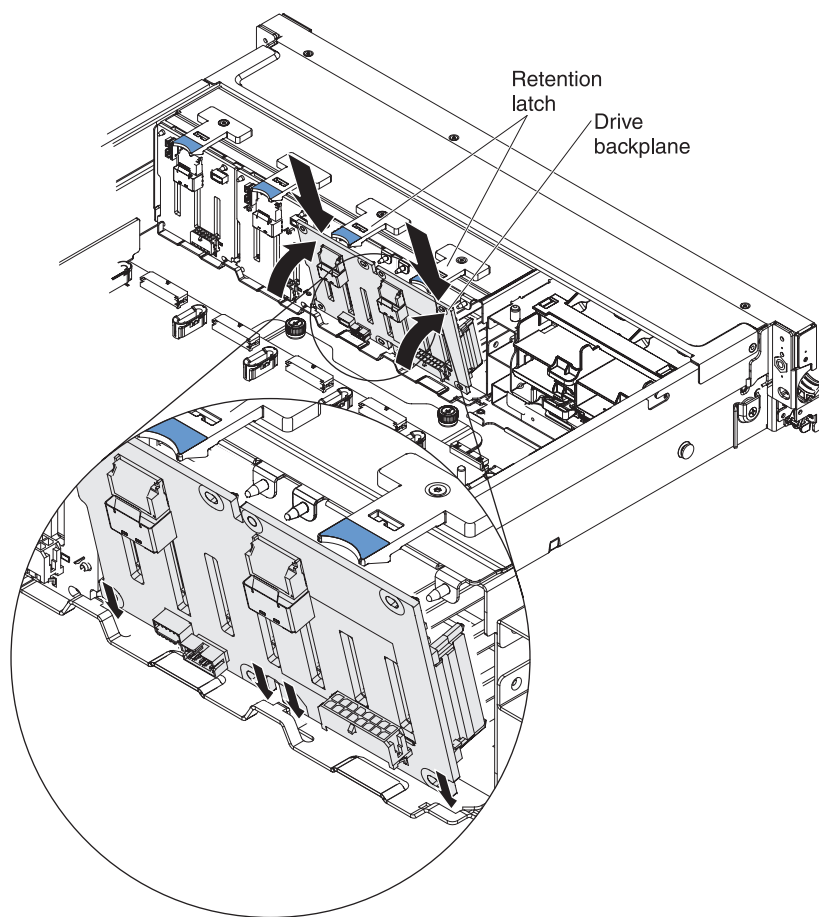
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Open the SAS cable guide cover.
7. If a backplane filler panel is installed in the backplane bay in which you are installing the backplane, remove the backplane filler panel.
8. Connect the two 10x2-pin power connectors on the combination power/configuration cable to the backplane power connectors on the system board. The power connector on the end of the black cable (which might be labelled 1/3) connects to backplane connector 1 or 3 on the system board. The power connector on the end of the gray cable (which might be labelled 2/4)

connects to backplane connector 2 or 4 on the system board. Connect the configuration connector on the combination power/configuration cable to the configuration connector on the drive backplane. Connect the other power connector on the combination power/configuration cable to the power connector on the backplane.

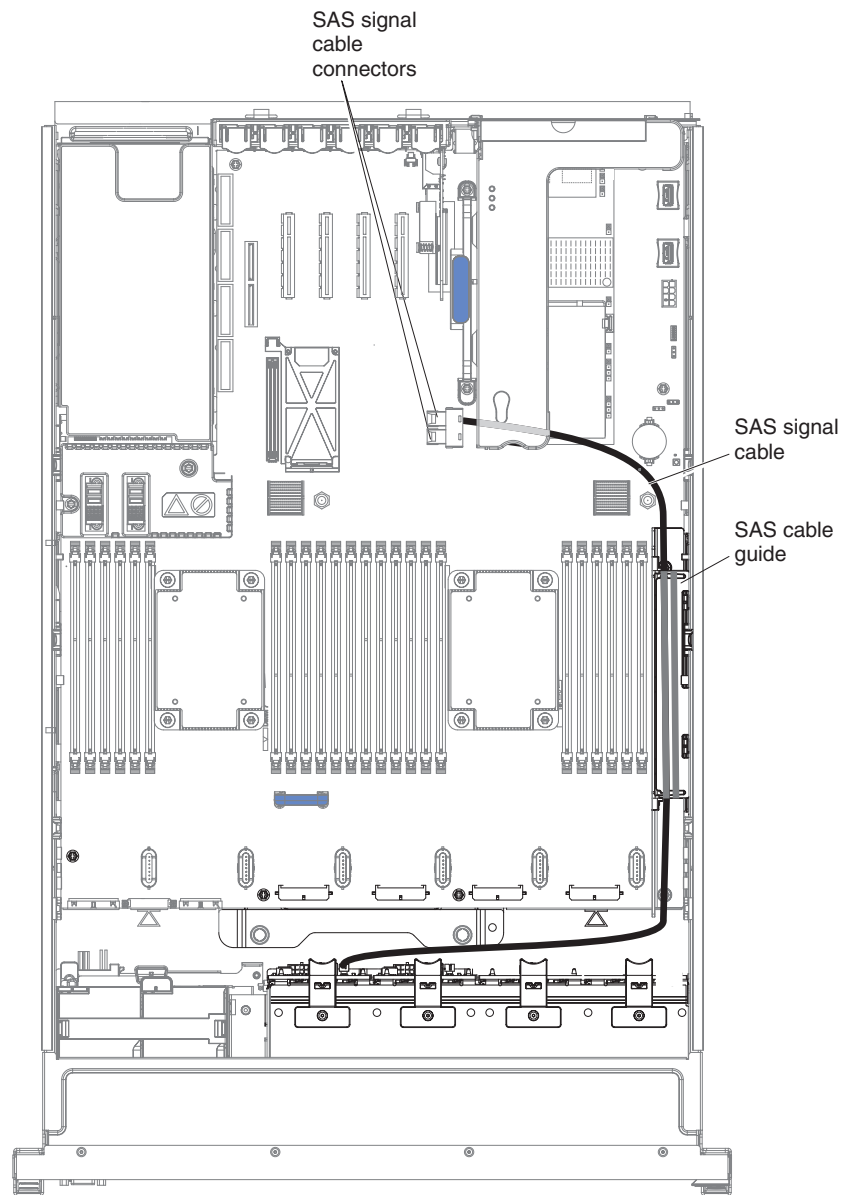
Note: You can connect the cables to the backplane before you install the backplane onto the cage, or you can connect the cables after you install the backplane, if that is easier for you.



9. Insert the backplane tabs into the slots on the bottom of the backplane cage and rotate the backplane assembly forward until the backplane locks in place.



10. Connect the signal cables to the backplane assembly and route the cables through the SAS cable guide; then, connect the other end of the cables to the adapter or the system board.



11. Close the SAS cable guide cover.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

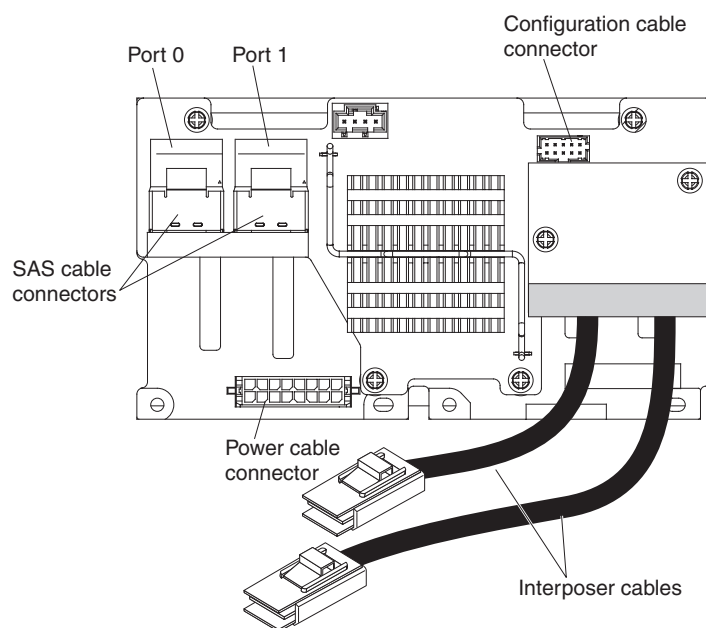
Installing the 8x2.5-inch hot-swap drive backplane with controller expander

Use this information to install the 8x2.5-inch hot-swap drive backplane with controller expander.

About this task

Notes:

- For more information about the connecting the SAS cables to the drive backplane, (see “Connecting the SAS cables” on page 70).
- When you install this backplane, it attaches to the drive backplane that is next to it in the configuration, using the two interposer cables that come with this backplane. See “Supported SAS/SATA drive backplane configurations” on page 62 for the supported configurations that use this drive backplane.
- Install this backplane in backplane bays 3 and 4 only. It cannot be installed in drive backplane bays 1 and 2. It is not supported.



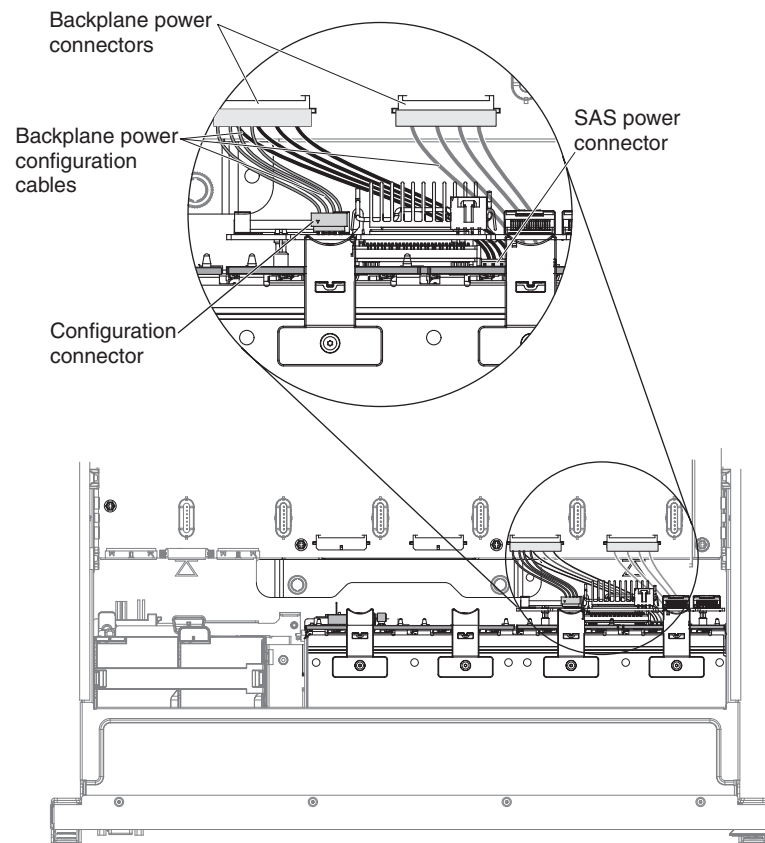
To install the 8x2.5-inch hot-swap drive backplane with controller expander, complete the following steps:

Procedure

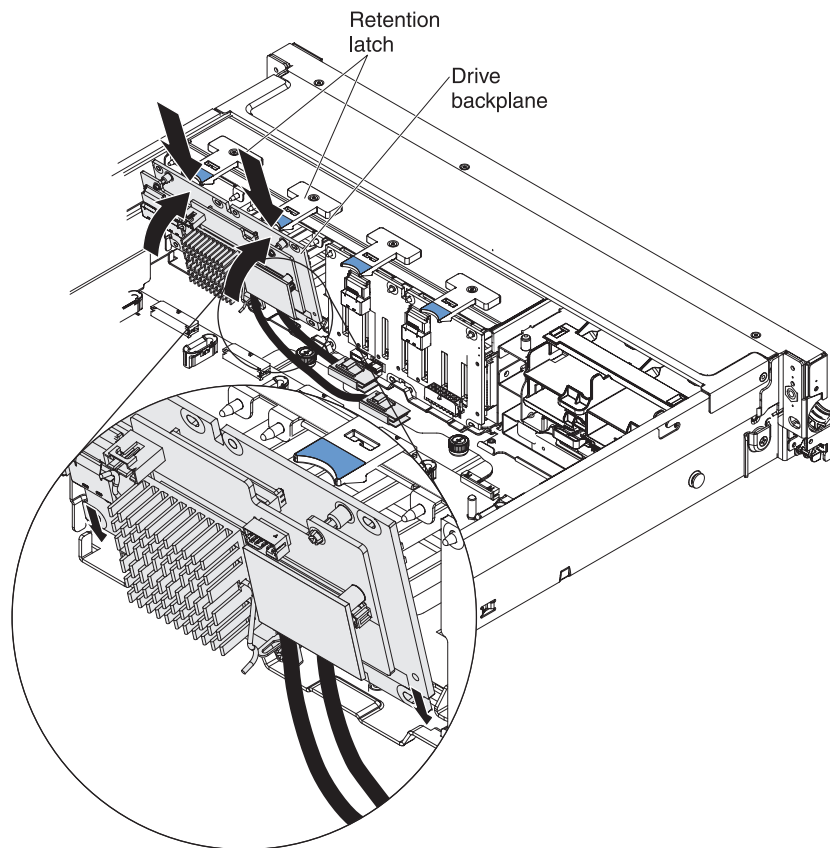
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).

5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Open the SAS cable guide cover.
7. If backplane filler panels are installed in the backplane bays in which you are installing the backplane, remove the backplane filler panels.
8. Connect the two 10x2-pin power connectors on the combination power/configuration cable to the backplane power connectors on the system board. The power connector on the end of the black cable (which might be labelled 1/3) connects to backplane connectors 3 on the system board. The power connector on the end of the gray cable (which might be labelled 2/4) connects to backplane connectors 4 on the system board. Connect the configuration connector on the combination power/configuration cable to the configuration connector on the backplane. Connect the other power connector on the combination power/configuration cable to the power connector on the backplane.

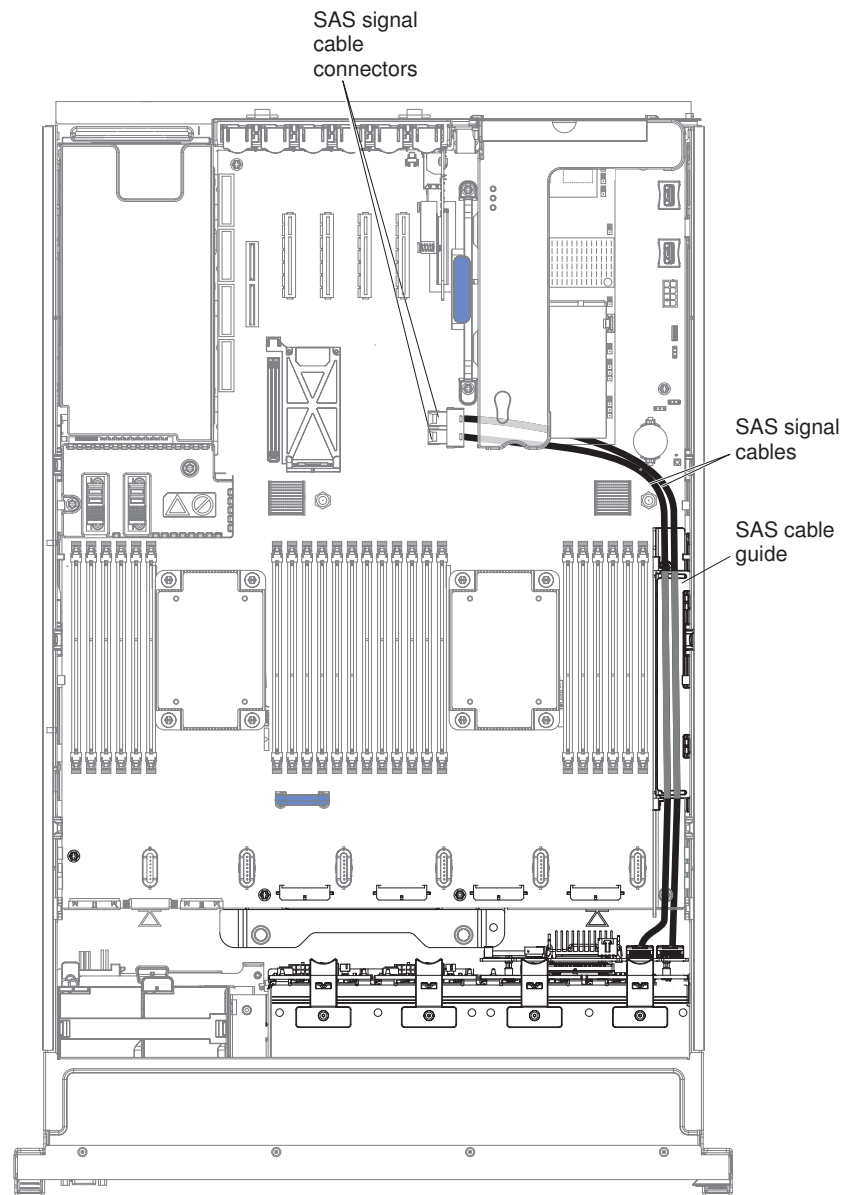
Note: You can connect the cables to the backplane before you install the backplane onto the cage, or you can connect the cables after you install the backplane, if that is easier for you.



9. Insert the drive backplane tabs into the slots on the bottom of the backplane cage and rotate the backplane assembly forward until the backplane locks into place.



10. Connect the two interposer cables (that are attached to this backplane) to the signal connectors on the other backplane in this configuration. The shortest cable connects to the closest SAS signal connector on the other backplane. The longest cable connects to the farthest SAS signal connector on the other backplane.
11. Connect the SAS signal cables to the two SAS signal connectors on the system board and route the cables through the SAS cable guide; then, connect the other end of the signal cables to the backplane assembly.



12. Close the SAS cable guide cover.

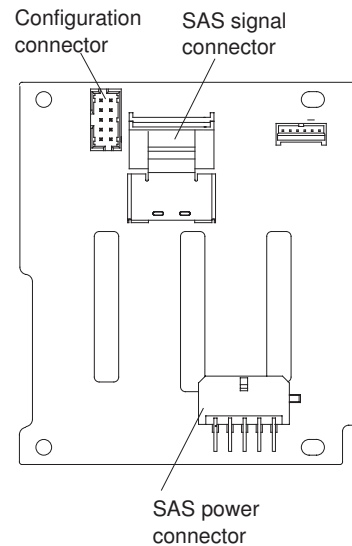
Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Installing the 4x2.5-inch hot-swap drive backplane

Use this information to install the 4x2.5-inch hot-swap drive backplane.

About this task



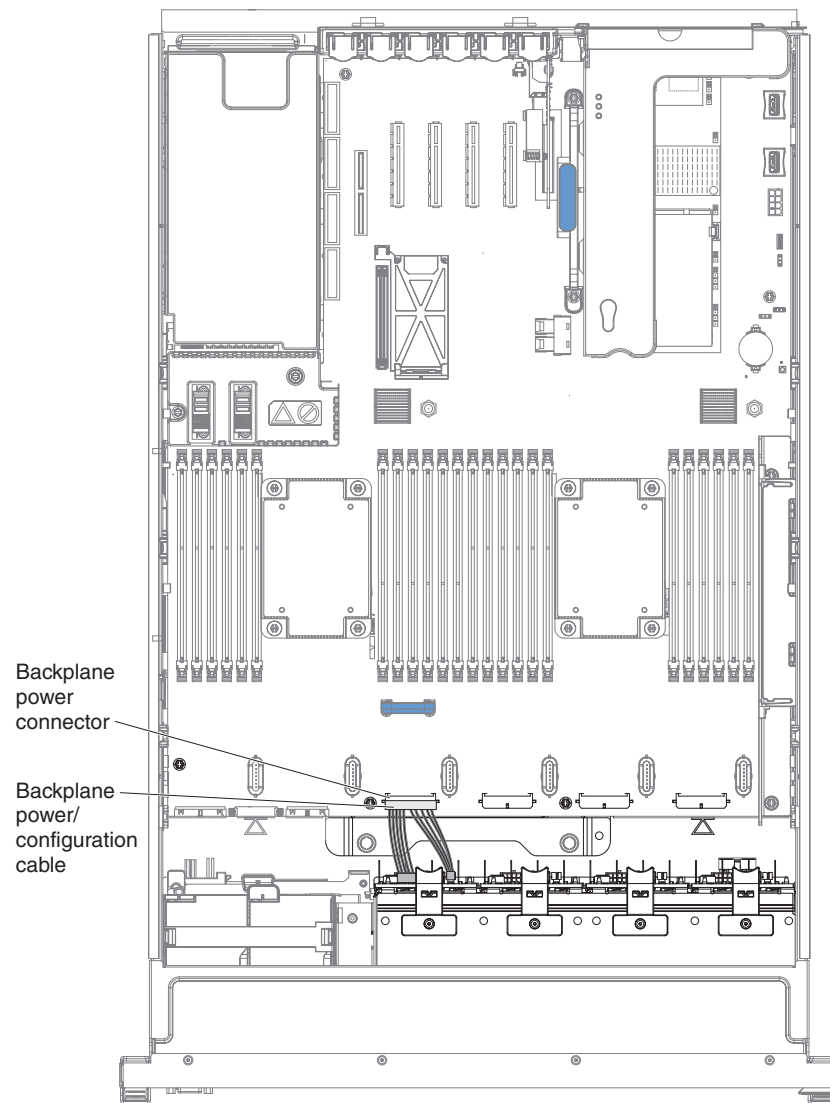
Note: For more information about connecting the SAS signal cables to the drive backplane, (see “Connecting the SAS cables” on page 70).

To install the 4x2.5-inch hot-swap drive backplane, complete the following steps:

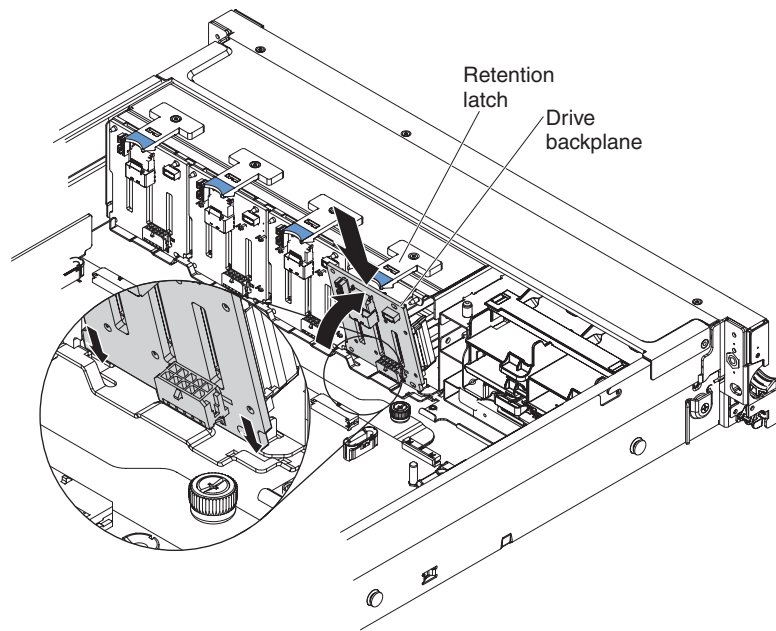
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables from the server.
3. Remove the top cover (see “Removing the server top cover” on page 44).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 48).
5. Remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323) or DIMM air baffle (see “Removing the DIMM air baffle” on page 242), whichever one is installed.
6. Open the SAS cable guide cover.
7. If backplane filler panels are installed in the backplane bay in which you are installing the backplane, remove the backplane filler panels.
8. Connect the combination power/configuration cable end to the power and configuration connectors on the drive backplane; then, connect the power connector on the other end of the cable to the backplane power connector on the system board. See the following cabling illustration.

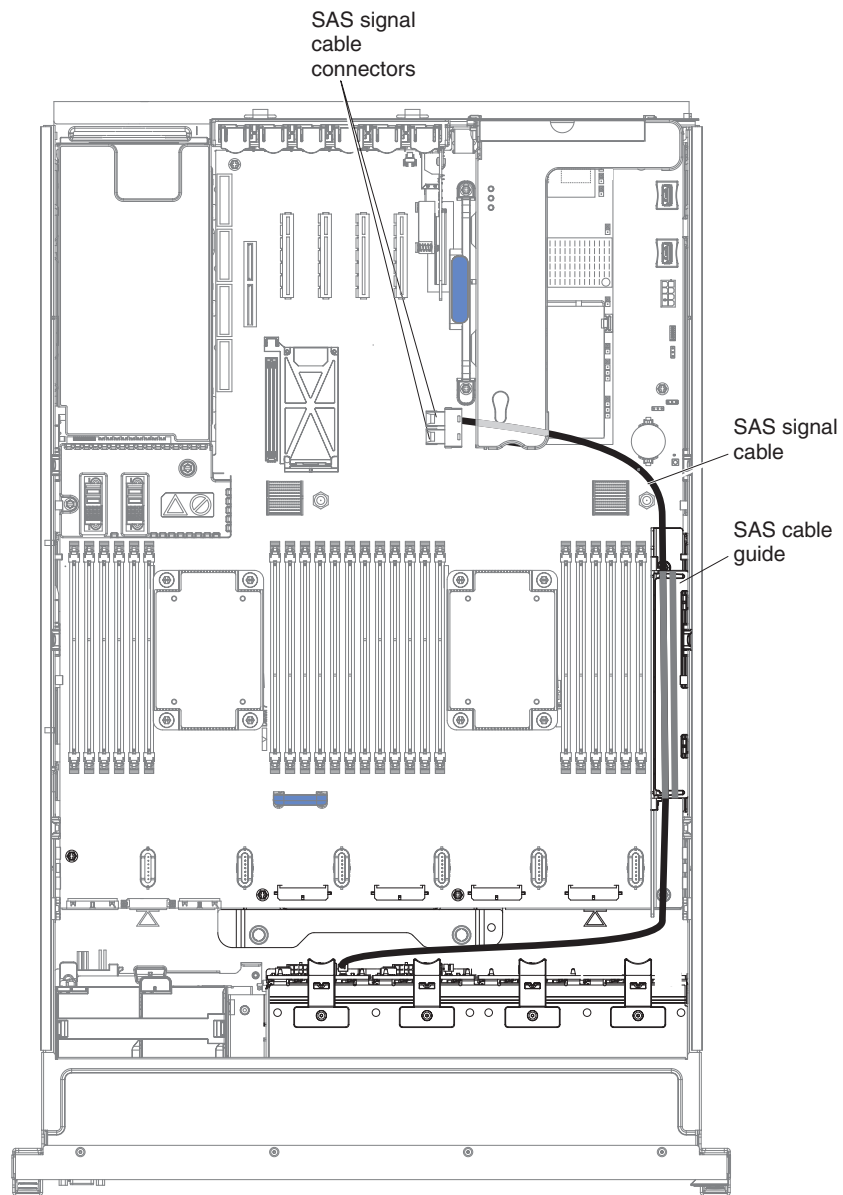
Note: You can connect the cables to the drive backplane before you install the backplane onto the cage, or you can connect the cables after you install the backplane, if that is easier for you.



9. Insert the backplane tabs into the slots on the bottom of the backplane cage and rotate the drive backplane assembly forward until the backplane locks in place.



10. Route the signal cables through the SAS cable guide and connect signal cables to the drive backplane assembly and to the adapter or the system board.



11. Close the SAS cable guide cover.

Results

If you have other devices to install or remove, do so now. Otherwise, go to “Completing the installation” on page 134.

Completing the installation

Use this information to complete the installation.

About this task

To complete the installation, complete the following steps:

Procedure

1. Make sure that the SAS cable guide is closed.
2. If you removed any air baffles or the microprocessor and memory expansion tray, reinstall them (see “Replacing the DIMM air baffle,” “Replacing the microprocessor and memory expansion tray assembly” on page 136, and “Replacing the microprocessor air baffle” on page 135).
3. Replace the fan cage assembly, if you removed it (see “Replacing the fan cage assembly” on page 137).
4. Reconnect the cables (see “Connecting the cables” on page 139).
5. If you removed the server cover, replace it (see “Replacing the server top cover” on page 138).
6. Reconnect the power cords.
7. Start the server. Confirm that it starts correctly and recognizes the newly installed devices, and make sure that no error LEDs are lit.
8. Update the server configuration (see “Updating the server configuration” on page 140).
9. (Business Partners only) Complete the additional steps in “Instructions for Business Partners” on page 28.
10. Install the server in the rack (see the *Rack Installation Instructions* that come with the server for instructions).

Replacing the DIMM air baffle

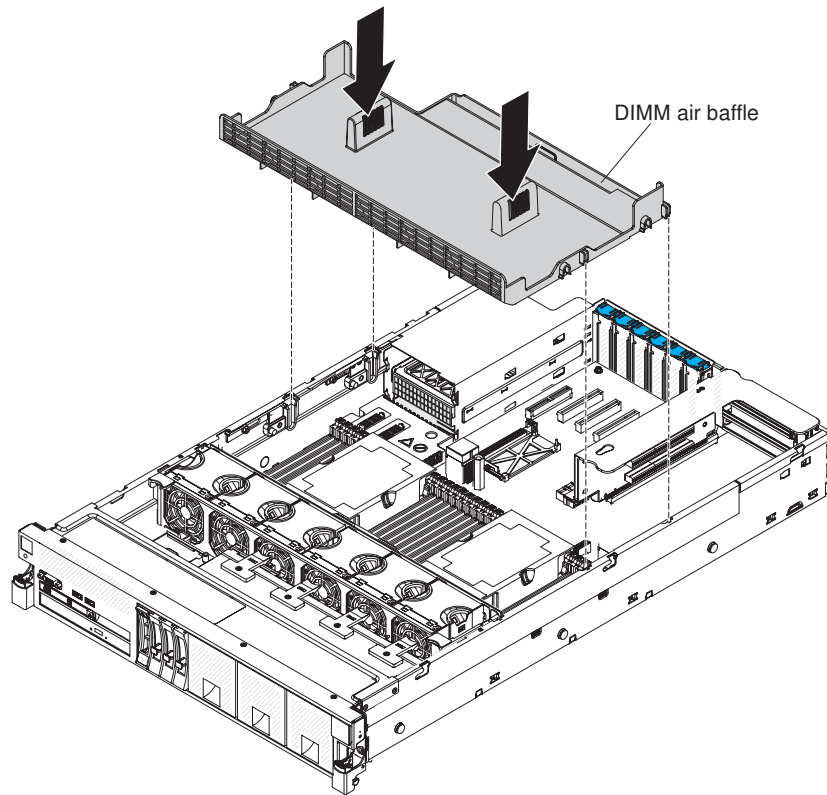
Use this information to replace the DIMM air baffle.

About this task

To install the DIMM air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the tabs on the sides of the DIMM air baffle with the slots on the sides of the chassis wall and lower the DIMM air baffle into the server.



Replacing the microprocessor air baffle

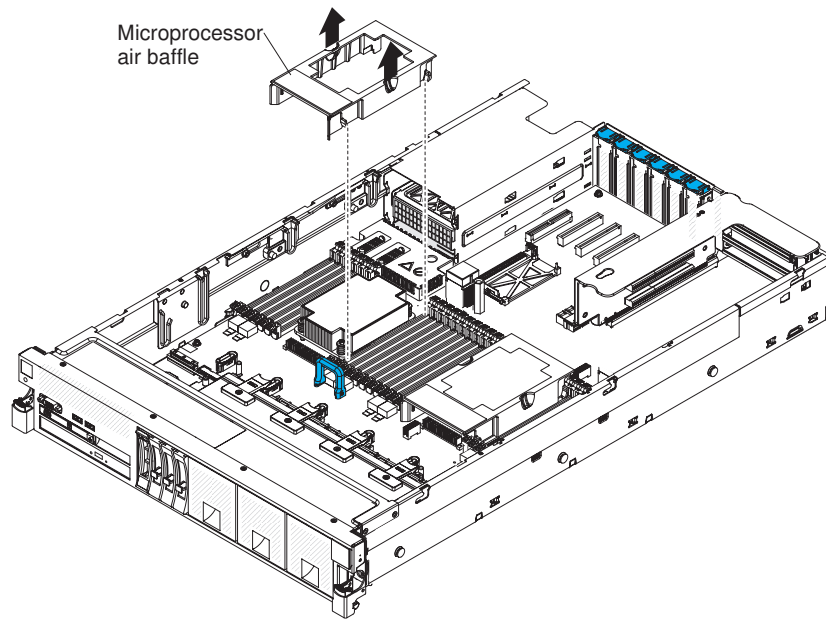
Use this information to replace the microprocessor air baffle.

About this task

To install the microprocessor air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the tabs on the air baffle behind the latches (front and rear latches) of the two DIMMs closest to the microprocessor (the DIMM on the left of the microprocessor and the DIMM on the right of the microprocessor); then, lower the air baffle down until it is seated firmly.



Replacing the microprocessor and memory expansion tray assembly

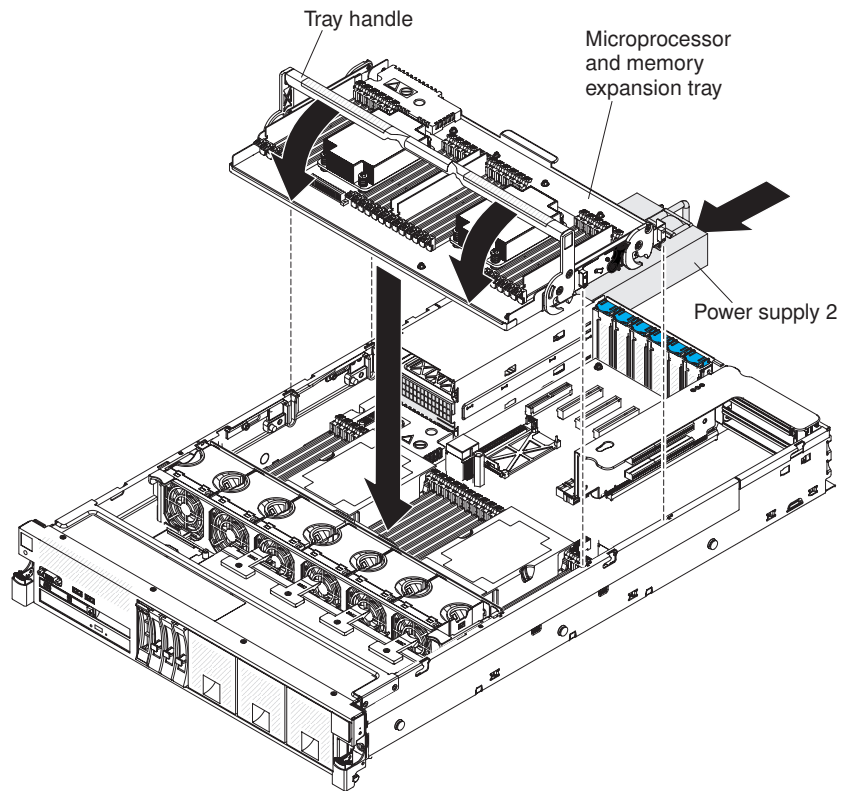
Use this information to replace the microprocessor and memory expansion tray assembly.

About this task

To replace the microprocessor and memory expansion tray, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Grasp the tray by the handles, and align the tabs on the sides of the microprocessor and memory expansion tray with the slots on the chassis wall, and lower the tray into the server.



3. Rotate the tray handle down until the tray is seated firmly and the handle is locked in place.
4. Slide power supply 2 back into the server.

Replacing the fan cage assembly

Use this information to replace the fan cage assembly.

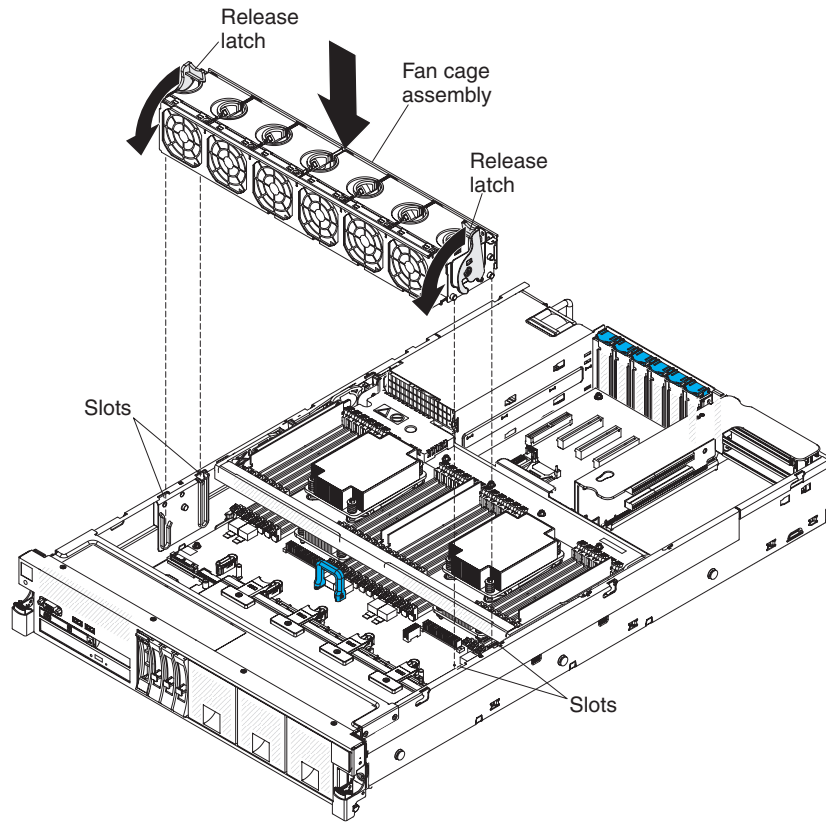
About this task

To replace the fan cage assembly, complete the following steps:

Procedure

1. Make sure that no backplane cables or other cables are in the way before you install the fan cage assembly.

2. Align the tabs on the fan cage assembly with the slots on both sides of the chassis and lower it into the server.



3. Rotate the fan cage assembly release latches down until the release latches are in the locked position.

Replacing the server top cover

Use this information to replace the server top cover.

About this task

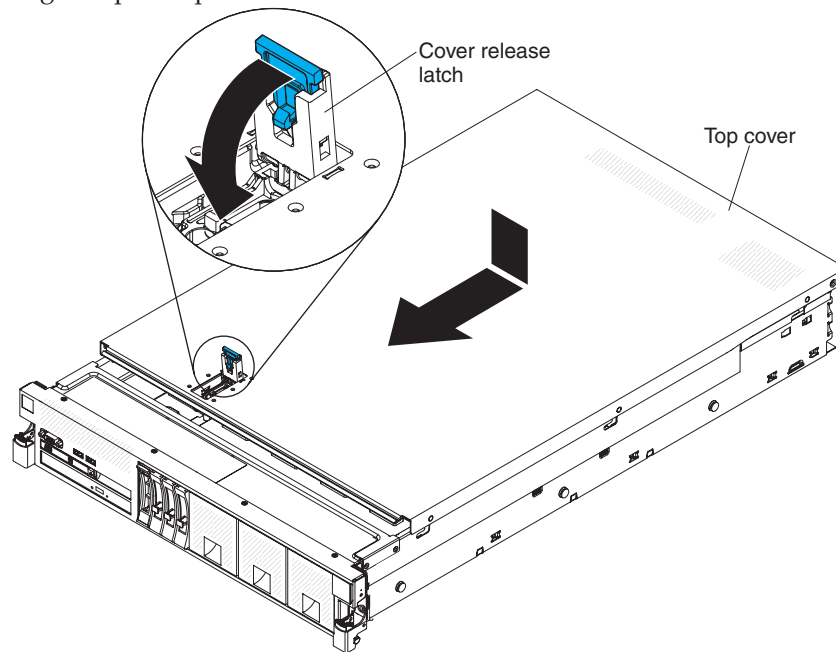
To replace the server cover, complete the following steps:

Procedure

1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.

Note: Make sure you have closed the SAS cable guide cover before placing the cover over the server.

- Align the cover over the server (toward the rear of the server) until the cover edges slip into position over the chassis.



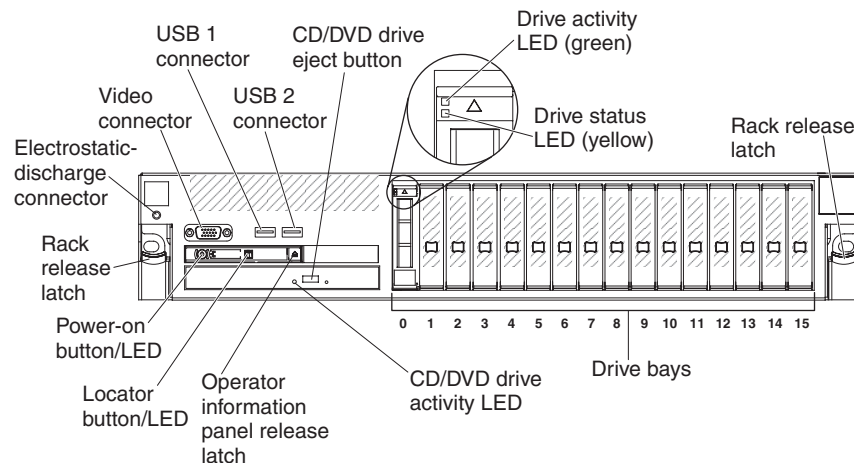
- Slide the cover toward the front of the server until the cover starts to engage on the server; then, press down on the cover release latch until it clicks into place.

Connecting the cables

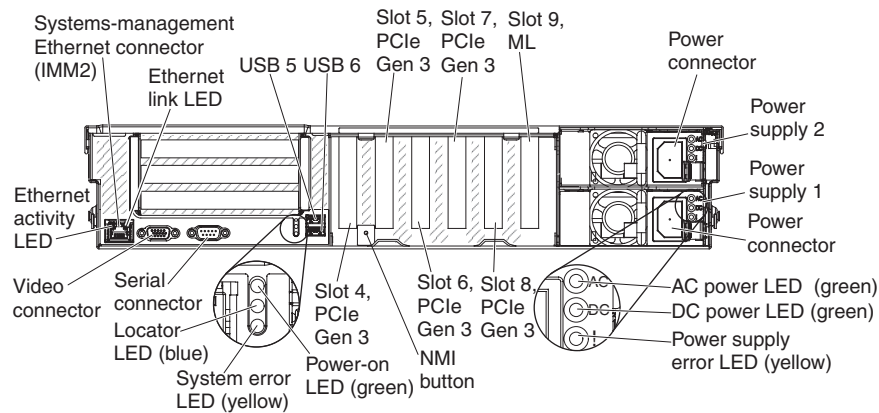
Use this information to connect the input and output cables.

About this task

The following illustration shows the locations of the input and output connectors on the front of the server.



The following illustration shows the locations of the input and output connectors on the rear of the server.



You must turn off the server before you connect or disconnect cables.

See the documentation that comes with any external devices for additional cabling instructions. It might be easier for you to route cables before you connect the devices to the server.

Updating the server configuration

Use this information to update the server configuration.

When you start the server for the first time after you add or remove a device, you might receive a message that the configuration has changed. The Setup utility starts automatically so that you can save the new configuration settings.

Some optional devices have device drivers that you must install. For information about installing device drivers, see the documentation that comes with each device.

If the server has an optional RAID adapter and you have installed or removed a hard disk drive, see the documentation that comes with the RAID adapter for information about reconfiguring the disk arrays.

The server comes with at least one microprocessor. If more than one microprocessor is installed, the server can operate as a symmetric multiprocessing (SMP) server. You might have to upgrade the operating system to support SMP. For more information, see “Typical operating-system installation” on page 145 and the operating-system documentation.

Chapter 3. Configuration information and instructions

This chapter provides information about updating the firmware and using the configuration utilities.

Updating the firmware

Use this information to update the firmware in your server.

Note:

- Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.
- Before you update the firmware, be sure to back up any data that is stored in the Trusted Platform Module (TPM), in case any of the TPM characteristics are changed by the new firmware. For instructions, see your encryption software documentation.

To check for the latest level of firmware, such as the UEFI firmware, vital product data (VPD), device drivers, and integrated management module (IMM) firmware, go to <http://www.ibm.com/support/fixcentral/>.

Attention: Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. Use UpdateXpress System Pack Installer to acquire and apply UpdateXpress System Packs and individual firmware and device-driver updates. For additional information and to download the UpdateXpress System Pack Installer, go to the ToolsCenter for Lenovo x86 servers at <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-CENTER> and click **UpdateXpress System Pack Installer**.

When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image.

The firmware for the server is periodically updated. Download the latest firmware for the server; then, install the firmware, using the instructions that are included with the downloaded files.

When you replace a device in the server, you might have to update the firmware that is stored in memory on the device or restore the pre-existing firmware from a CD or DVD image.

The following list indicates where the firmware is stored:

- UEFI firmware is stored in ROM on the system board.
- IMM2 firmware is stored in ROM on the system board.
- ML2 firmware is stored in ROM on the ML2 adapter (if one is installed).
- ServeRAID firmware is stored in ROM on the system board and the RAID adapter (if one is installed).

Configuring the server

Use this information to configure the server.

The following configuration programs come with the server:

- **Setup utility**

The Setup utility is part of the UEFI firmware. Use it to perform configuration tasks such as changing interrupt request (IRQ) settings, changing the startup-device sequence, setting the date and time, and setting passwords. For information about using this program, see “Using the Setup utility” on page 145.

- **Boot Manager**

The Boot Manager is part of the UEFI firmware. Use it to override the startup sequence that is set in the Setup utility and temporarily assign a device to be first in the startup sequence. For more information about using this program, see “Using the Boot Manager” on page 155.

- **IBM ServerGuide Setup and Installation CD**

The ServerGuide program provides software-setup tools and installation tools that are designed for the server. Use this CD during the installation of the server to configure basic hardware features, such as an integrated SAS/SATA controller with RAID capabilities, and to simplify the installation of your operating system. For information about using this CD, see “Using the ServerGuide Setup and Installation CD” on page 143.

- **Integrated management module II**

Use the IMM2 for configuration to update the firmware and sensor data record/field replaceable unit (SDR/FRU) data, and to remotely manage a network. For information about using the IMM2, see “Using the integrated management module II” on page 156 and the *Integrated Management Module II User's Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?indocid=MIGR-5086346>.

- **VMware ESXi embedded hypervisor**

An optional USB flash device with VMware ESXi embedded hypervisor software is available for purchase. Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB embedded hypervisor flash device can be installed in USB connectors 3 and 4 on the system board. For more information about using the embedded hypervisor, see “Using the embedded hypervisor” on page 163.

- **Remote presence and blue-screen capture features**

The remote presence and blue-screen capture features are integrated functions of the IMM2. The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state

- Remotely accessing the server, using the keyboard and mouse from a remote client
- Mapping the CD or DVD drive, diskette drive, and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server
- Uploading a diskette image to the IMM2 memory and mapping it to the server as a virtual drive

The blue-screen capture feature captures the video display contents before the IMM2 restarts the server when the IMM2 detects an operating-system hang condition. A system administrator can use the blue-screen capture feature to assist in determining the cause of the hang condition.

- **Features on Demand Ethernet software**

The server provides Features on Demand software Ethernet support. You can purchase a Features on Demand software upgrade key for Fibre Channel over Ethernet (FCoE) and iSCSI storage protocols for a ML2 adapter. For more information, see “Enabling Features on Demand Ethernet software” on page 164.

- **Features on Demand RAID software**

The server comes with Features on Demand software RAID support for RAID levels 5, 6, 50, and 60 upgrade. Software RAID upgrade is enabled through the IMM2. For more information, see “Enabling Features on Demand RAID software” on page 164.

- **Configuring RAID arrays**

For information about configuring RAID arrays, see “Configuring RAID arrays” on page 164.

- **IBM Advanced Settings Utility (ASU) program**

Use this program as an alternative to the Setup utility for modifying UEFI settings and IMM2 settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the server to run the Setup utility. For more information about using this program, see “Advanced Settings Utility program” on page 165.

Using the ServerGuide Setup and Installation CD

This section describes the content and the use of the ServerGuide Setup and Installation CD.

The *ServerGuide Setup and Installation* CD provides software setup tools and installation tools that are designed for your server. The ServerGuide program detects the server model and optional hardware devices that are installed and uses that information during setup to configure the hardware. The ServerGuide simplifies the operating-system installations by providing updated device drivers and, in some cases, installing them automatically.

You can download a free image of the *ServerGuide Setup and Installation* CD from the <http://www.ibm.com/support/entry/portal/docdisplay?lnidocid=SERV-GUIDE>.

Note: Changes are made periodically to Lenovo pages on the World Wide Web. The actual procedure might vary slightly from what is described in this document.

The ServerGuide program requires a supported Lenovo server with an enabled startable (bootable) CD drive. In addition to the *ServerGuide Setup and Installation* CD, you must have your operating-system CD to install the operating system.

To start the *ServerGuide Setup and Installation* CD, complete the following steps:

1. Insert the CD, and restart the server. If the CD does not start, see “ServerGuide problems” on page 213.
2. Follow the instructions on the screen to complete the following steps:
 - a. Select your language.
 - b. Select your keyboard layout and country.
 - c. View the overview to learn about ServerGuide features.
 - d. View the readme file to review installation tips for your operating system and adapter.
 - e. Start the operating-system installation. You will need your operating-system CD.

ServerGuide features

Use this information to understand the tasks performed by the ServerGuide program.

Features and functions can vary slightly with different versions of the ServerGuide program. To learn more about the version that you have, start the *ServerGuide Setup and Installation* CD and view the online overview. Not all features are supported on all server models.

The ServerGuide program performs the following tasks:

- Sets system date and time
- Detects the RAID adapter or controller and runs the SAS/SATA RAID configuration program
- Checks the microcode (firmware) levels of a ServeRAID adapter and determines whether a later level is available from the CD
- Detects installed hardware options and provides updated device drivers for most adapters and devices
- Provides diskette-free installation for supported Windows operating systems
- Includes an online readme file with links to tips for your hardware and operating-system installation

Setup and configuration overview

Use the *ServerGuide Setup and Installation* CD to configure your server.

When you use the *ServerGuide Setup and Installation* CD, you do not need setup diskettes. You can use the CD to configure any supported IBM server model. The setup program provides a list of tasks that are required to set up your server model. On a server with a ServeRAID adapter or SAS/SATA controller with RAID capabilities, you can run the SAS/SATA RAID configuration program to create logical drives.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

Typical operating-system installation

Use this information to understand the ServerGuide operating-system installation.

The ServerGuide program can reduce the time it takes to install an operating system. It provides the device drivers that are required for your hardware and for the operating system that you are installing. This section describes a typical ServerGuide operating-system installation.

Note: Features and functions can vary slightly with different versions of the ServerGuide program.

1. After you have completed the setup process, the operating-system installation program starts. (You will need your operating-system CD to complete the installation.)
2. The ServerGuide program stores information about the server model, service processor, hard disk drive controllers, and network adapters. The program checks the CD for newer device drivers. This information is stored and then passed to the operating-system installation program.
3. The ServerGuide program presents operating-system partition options that are based on your operating-system selection and the installed hard disk drives.
4. The ServerGuide program prompts you to insert your operating-system CD and restart the server. At this point, the installation program for the operating system takes control to complete the installation.

Installing your operating system without using ServerGuide

Use this information to install the operating system on your server without using ServerGuide.

About this task

If you have already configured the server hardware and you are not using the ServerGuide program to install your operating system, download the operating-system installation instructions for the server from <http://www.ibm.com/supportportal/>.

Using the Setup utility

Use this information to understand the tasks that can be performed when using the Unified Extensible Firmware Interface (UEFI) Setup utility.

Use the UEFI Setup utility to perform the following tasks:

- View configuration information
- View and change settings for devices and I/O ports
- Set the date and time
- Set and change passwords
- Set the startup characteristics of the server and the order of startup devices
- Set and change settings for advanced hardware features
- View, set, and change settings for power-management features
- View and clear error logs
- Change interrupt request (IRQ) settings
- Resolve configuration conflicts

Starting the Setup utility

This section explains how to use the Setup utility.

About this task

To start the Setup utility, complete the following steps:

Procedure

1. Turn on the server.

Note: Approximately 10 seconds after the server is connected to input power, the power-on button becomes active.

2. When the prompt <F1> Setup is displayed, press F1. This prompt is displayed on the screen for only a few seconds. You must press F1 quickly. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.
3. Select **Settings** to view or change.

Setup utility menu choices

The UEFI Setup utility main menu contains several menu items to view or change information in the server.

The following choices are on the UEFI Setup utility main menu. Depending on the version of the UEFI firmware, some menu choices might differ slightly from these descriptions. For more information on UEFI-compliant firmware, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=MIGR-5083207>.

- **System Information**

Select this choice to view basic information about the server. When you make changes through other choices in the Setup utility, some of those changes are reflected in the system information; you cannot change settings directly in the system information.

- **System Summary**

Select this choice to view configuration information, including the ID, speed, and cache size of the microprocessors, machine type and model of the server, the serial number, the system UUID, and the amount of installed memory. When you make configuration changes through other choices in the Setup utility, the changes are reflected in the system summary; you cannot change settings directly in the system summary.

- **Product Data**

Select this choice to view the system-board identifier, the revision level or issue date of the firmware, the IMM2 and diagnostics code, and the version and date.

- **System Settings**

Select this choice to view or change the server component settings. This choice is only on the full Setup utility menu.

- **Adapters and UEFI Drivers**

Select this choice if you want to use the configuration capabilities of the device drivers to configure the device.

- **Processors**

Select this choice to view or change the processor settings.

- **Memory**

Select this choice to view or change the memory settings. To configure memory mirroring, select **System Settings > Memory > Memory Mode > Mirroring**.

– **Devices and I/O Ports**

Select this choice to view or change settings for devices and input/output (I/O) ports. You can configure the serial ports and remote console redirection; enable or disable the ML2 adapter, SATA optical drive channels, and PCI slots. If you disable a device, it cannot be configured, and the operating system will not be able to detect it (this is equivalent to disconnecting the device).

– **Power**

Select this choice to view or change power capping to control consumption, processors, and performance states.

– **Active Energy Manager**

Select this choice to enable or disable Active Energy Manager Power Capping. If you enable Power Capping, the Active Energy Manager program will limit the maximum power that is consumed by the server.

– **Workload Configuration**

Select this choice to determine how to balance between I/O bandwidth and balanced workload. Choosing **I/O sensitive** will get higher I/O bandwidth when expansion cards are used. Choosing **Balanced** will allow enough frequency for the workload while the microprocessor cores are idle.

– **Operating Modes**

Select this choice to view or change the operating profile (performance and power utilization). This choice specifies a preset operating mode to configure the server for maximum power savings, maximum efficiency, and maximum performance.

– **Choose Operating Mode**

Select the operating mode based on your preference. Power savings and performance are dependent on hardware configuration and software running on the system. When a present mode is selected, the low-level settings are not changeable and will be grayed out.

• **Minimal Power mode**

Select this choice to minimize the absolute power consumption of the system during operation. Server performance in this mode might be reduced depending on the application that is running.

• **Efficiency-Favor Power mode**

Select this choice to configure the server to draw the minimum amount of power and generate the least noise. Server performance might be degraded, depending on the application that you are running. This mode provides the best features for reducing power and increasing performance in applications where the maximum bus speeds are not critical.

• **Efficiency-Favor Performance mode**

Select this choice to maintain the optimal balance between performance and power consumption. The server generally produces the best performance per watt while it is in this mode. No bus speeds are derated in this mode. This is the **default** mode.

• **Maximum Performance mode**

Select this choice to achieve the maximum performance for most server applications. The power consumption in this mode is often higher than in the Efficiency-Favor Power or Efficiency-Favor Performance mode.

- **Balanced mode** Select this choice to achieve a balance between performance and power.

- **Custom mode**

Select this choice only if you understand the functions of the low-level IMM2 settings. This is the only choice that enables you to change the low-level IMM2 settings that affect the performance and power consumption of the server.

- **Legacy Support**

Select this choice to view or set legacy support.

- **Force Legacy Video on Boot**

Select this choice to force legacy video support, if the operating system does not support UEFI video output standards. The default is **Enable**.

- **Rehook INT 19H**

Select this choice to enable or disable devices from taking control of the boot process. The default is **Disable**.

- **Legacy Thunk Support**

Select this choice to enable or disable UEFI to interact with PCI mass storage devices that are non-UEFI compliant. The default is **Enable**.

- **Infinite Boot Retry**

Select this choice to enable or disable the continuous retry of the Legacy Boot. The default is **Disable**.

- **BBS Boot**

Select this choice to enable or disable the legacy boot in accordance with the BIOS Boot Specification (BBS) manner. The default is **Enable**.

- **System Security**

Select this choice to view or configure Trusted Platform Module (TPM) support.

- **TPM Physical Presence**

Select this choice to display the current state of the TPM physical presence. The TPM Physical Presence must be in the asserted state for TPM commands to succeed.

- **TPM Device State**

Select this choice to display the current state of the TPM device.

- **TPM TXT Status**

Select this choice to display the current state of Trusted Execution Technology (TXT).

- **MOR Status**

Select this choice to display the current state of the Memory Overwrite Request (MOR).

- **Refresh TPM Status**

Select this choice to get the current status of the TPM chip.

- **TPM Device**

Select this choice to enable or disable the TPM device. This command requires the TPM physical presence to be in the asserted state. A reboot of the server is required to successfully enable or disable the TPM device.

- **TPM State**
Select this choice to activate or deactivate the TPM device. This command requires the TPM physical presence to be in the asserted state. A reboot of the server is required to successfully activate or deactivate the TPM device.
- **TXT State**
Make sure the TPM is enabled and activated prior to enabling the TXT feature. A reboot of the server is required to successfully perform this command.
- **MOR State**
Select this choice to enable or disable the MOR feature.
- **TPM Force Clear**
Select this choice to erase the contents of the TPM. This command requires the TPM physical presence to be in the asserted state. A reboot of the server is required to successfully perform this command.
- **Integrated Management Module**
Select this choice to view or change the settings for the integrated management module II (IMM2).
 - **Power Restore Policy**
Select this choice to determine the mode of operation to which the server will be restored after a power outage occurs. To restore the server to the state it was set to at the time of the power outage, select one of the following choices:
 - **Always Off**
After the power is restored the server remains in the off mode of operation.
 - **Restore**
After the power is restored, the server returns to the mode of operation prior to the power failure.
 - **Always On**
After the power is restored, the server returns to the on mode of operation. Allow a few minutes for any changes to take effect.
 - **Commands on USB Interface Preference**
Select this choice to enable or disable the Ethernet over USB interface on the IMM2. Allow a few minutes for any changes to take effect.
 - **Network Configuration**
Select this choice to perform the following activities:
 - View the systems-management network interface port
 - View the IMM2 MAC address
 - View the current IMM2 IP address
 - View the system Ethernet MAC addresses
 - View the host name
 - Define the static IMM2 IP address
 - Define the subnet mask and gateway address
 - Specify to use the static IP address or have DHCP assign the IMM2 IP address
 - Enable or disable IP6 support
 - Enable or disable Virtual Local Area Network (VLAN) support
 - Advanced IMM2 Ethernet setup

- Save the network changes
- **Reset IMM to Defaults**
Select this choice to reset the IMM2 to the default settings. All IMM2 settings are reset to the factory default settings. This includes the IMM2 settings displayed in the setup screen. After the IMM2 configuration is cleared the IMM2 is restarted.
- **Reset IMM**
Select this choice to restart the IMM2 settings.
- **Recovery**
Select this choice to view or set the number of POST attempts and configure start recovery attempts.
 - **POST attempts**
Select this choice to view or set the number of attempts to POST before the recovery mechanisms are started.
 - **System Recovery**
Select this choice to view or set the time to start the system recovery attempt.
 - **POST Watchdog Timer**
Select this choice to view or enable the POST watchdog timer. The default is **Disable**.
 - **POST Watchdog Timer Value**
Select this choice to view or set the POST loader watchdog timer value. The default is 5.
 - **Reboot System on NMI**
Select this choice to enable or disable restarting the server whenever a nonmaskable interrupt (NMI) occurs. The default is **Enabled**.
 - **Halt On Server Error**
Select this choice to prevent the server from booting the operating system and displaying the POST event viewer when a severe error is detected during POST. The default is **Disable**.
- **Backup Bank Management**
Select this choice to configure backup bank management settings.
 - **Backup Bank Management Method**
Select this choice to choose the Backup Bank Management Method. If **Auto Promotion** is selected the IMM2 automatically updates the backup bank after the specified number of weeks and successful consecutive boots have passed. If **User Managed** is selected the IMM2 will not automatically update the backup bank.
 - **Disk GPT Recovery**
Select this choice to choose the Disk GPT Recovery method. If **Automatic** is selected the UEFI attempts to repair the corrupted GUID Partition Table (GPT) by copying over the corrupted version with a non-corrupt version.
- **Storage**
Select this choice to view and manage RAID controller configurations.
 - **Configuration Management**
Select this choice to display configuration options. Some options only appear if the controller supports that option.
 - **Controller Management**

Select this choice to display the controller status and basic properties of the controller. For example product name, serial number, and firmware version.

- **Virtual Drive Management**

Select this choice to manage and view basic virtual drive properties.

- **Drive Management**

Select this choice to display basic drive properties and perform operational tasks. For example assign and unassign a hot spare drive, locate drives, and place a drive online or offline.

- **Hardware Components**

Select this choice to display the status of the battery, temperature sensors, fans, and power supplies.

- **Network**

Select this choice to view or configure the network device options, such as iSCSI, PXE, and network devices. There might be additional configuration choices for optional network devices that are compliant with UEFI 2.1 and later.

- **Network Boot Configuration**

Select this choice to configure the network boot parameters.

- **iSCSI Configuration**

Select this choice to configure the iSCSI parameters.

- **Driver Health**

Select this choice to view the health of the controllers in the server as reported by their device drivers.

- **Date and Time**

Select this choice to set the date and time in the server, in 24-hour format (*hour:minute:second*).

This choice is on the full Setup utility menu only.

- **Start Options**

Select this choice to view the startup sequence or select an option to try and boot from immediately.

Note: Any option that is selected, will happen immediately.

- **Boot Manager**

Select this choice to view, add, delete, or change the device boot order, boot from a file, boot from a device, or boot the UEFI shell. This choice is on the full Setup utility menu only.

- **System Event Logs**

Select this choice to enter the System Event Manager, where you can view the POST event log and the system-event log. You can use the arrow keys to move between pages in the error log. This choice is only on the full Setup utility menu.

The POST event log contains the most recent error codes and messages that were generated during POST.

The system-event log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the IMM2.

Note: If the system-error LED on the front of the server is lit, review the system-event log to determine what the fault is or look at the IMM2 interface to determine if there are any active events. Once the fault is resolved, the system-error LED will turn off.

The following list contains the activities you can perform in the System Event Logs main menu item:

- **POST Event Viewer**

Select this choice to enter the POST event viewer to view the error messages in the POST event log.

- **System Event Log**

Select this choice to view the system-event log.

- **Clear System Event Log**

Select this choice to clear the system-event log.

- **User Security**

Select this choice to set, change, or clear passwords. The full Setup utility menu, enables all of the options in the User Security option. See “Passwords” on page 153 for more information.

This choice is on the full and limited Setup utility menu.

- **Set Power-on Password**

Select this choice to set or change a power-on password. See “Power-on password” on page 153 for more information.

- **Clear Power-on Password**

Select this choice to clear the power-on password.

- **Set Administrator Password**

Select this choice to set or change an administrator password. An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If an administrator password is set, the full Setup utility menu is available only if you type the administrator password at the password prompt. For more information, see “Administrator password” on page 155.

- **Clear Admin Password**

Select this choice to clear the Administrator Password.

- **Save Settings**

Select this choice to save the changes that you have made in the settings. This choice is on the full Setup utility menu only.

- **Restore Settings**

Select this choice to cancel the changes that you have made in the settings and restore the previous settings. This choice is on the full Setup utility menu only.

- **Load Default Settings**

Select this choice to cancel the changes that you have made in the settings and restore the factory settings. This choice is on the full Setup utility menu only.

- **Exit Setup**

Select this choice to exit from the Setup utility. If you have not saved the changes that you have made in the settings, you are asked whether you want to save the changes or exit without saving them.

Passwords

Use the information in this section to understand the purpose and use of passwords.

From the **User Security** menu choice, you can set, change, and delete a power-on password and an administrator password. The **User Security** choice is on the full Setup utility menu only.

If you set only a power-on password, you must type the power-on password to complete the system startup and to have access to the full Setup utility menu.

An administrator password is intended to be used by a system administrator; it limits access to the full Setup utility menu. If you set only an administrator password, you do not have to type a password to complete the system startup, but you must type the administrator password to access the Setup utility menu.

If you set a power-on password for a user and an administrator password for a system administrator, you can type either password to complete the system startup. A system administrator who types the administrator password has access to the full Setup utility menu; the system administrator can give the user authority to set, change, and delete the power-on password. A user who types the power-on password has access to only the limited Setup utility menu; the user can set, change, and delete the power-on password, if the system administrator has given the user that authority.

Power-on password:

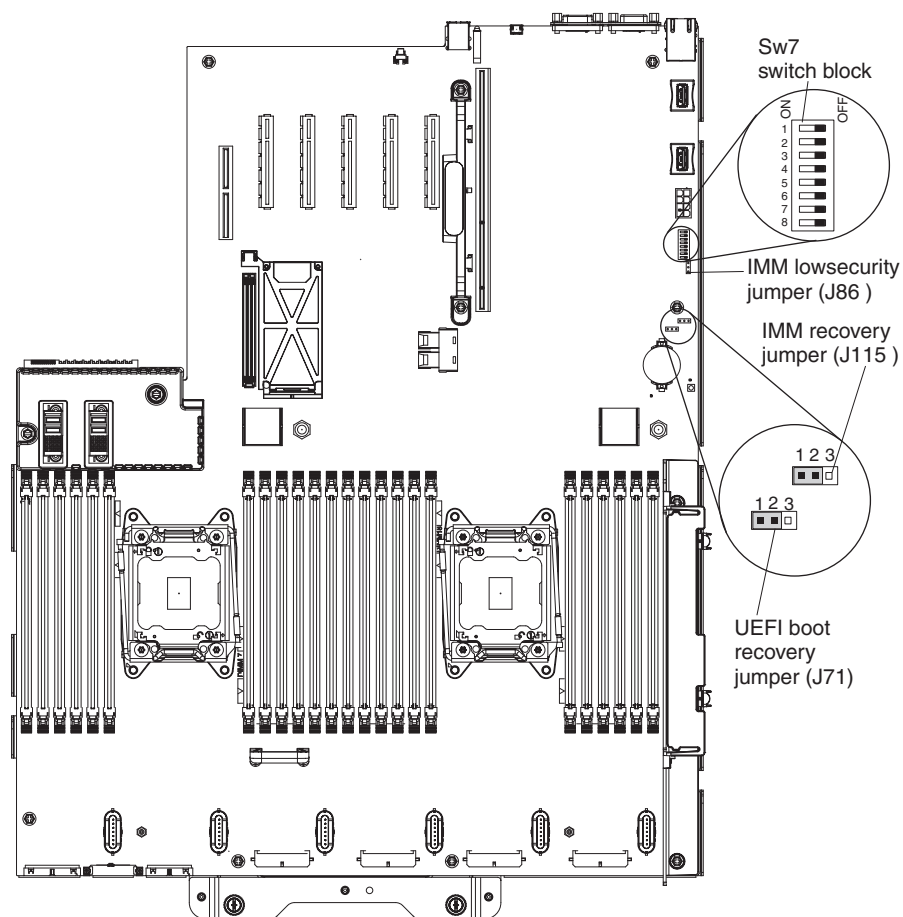
This section describes the power-on password.

If a power-on password is set, when you turn on the server, the system startup will not be completed until you type the power-on password. You can use any combination of 6 to 20 printable ASCII characters for the password.

When a power-on password is set, you can enable the Unattended Start mode, in which the keyboard and mouse remain locked but the operating system can start. You can unlock the keyboard and mouse by typing the power-on password.

If you forget the power-on password, you can regain access to the server in any of the following ways:

- If an administrator password is set, type the administrator password at the password prompt. Start the Setup utility and reset the power-on password.
- Remove the battery from the server, wait 30 seconds, and then reinstall it.
- Change the position of the power-on password switch (switch 6) on the system board switch block (SW7) to bypass the power-on password check (see Table 3 on page 33 for more information).



Attention: Before you change any switch settings or move any jumpers, turn off the server; then, disconnect all power cords and external cables. Read “Safety” on page vii, this information will help you work safely. Do not change settings or move jumpers on any system-board switch or jumper blocks that are not shown in this document.

The default for all of the switches on switch block SW7 is Off.

While the server is turned off, move switch 6 on switch block SW7 to the On position to enable the power-on password override. You can then start the Setup utility and reset the power-on password. You do not have to return the switch to the previous position.

The power-on password override switch does not affect the administrator password.

Administrator password:

This section explains the administrator password.

If an administrator password is set, you must type the administrator password for access to the full Setup utility menu. You can use any combination of 6 to 20 printable ASCII characters for the password.

Attention: If you set an administrator password and then forget it, there is no way to change, override, or remove it. You must replace the system board.

Using the Boot Manager

This section explains how to use the Boot Manager.

About this task

The Boot Manager is a built-in, menu-driven configuration utility program that you can use to temporarily redefine the first startup device without changing settings in the Setup utility.

To use the Boot Manager, complete the following steps:

Procedure

1. Turn off the server.
2. Restart the server.
3. When the prompt <F12> Select Boot Device is displayed, press F12.
4. Use the Up arrow and Down arrow keys to select an item from the menu and press Enter.

Results

The next time the server starts, it returns to the startup sequence that is set in the Setup utility.

Starting the backup server firmware

This section contains information about using the backup server firmware.

About this task

The system board contains a backup copy area for the server firmware. This is a secondary copy of the server firmware that you update only during the process of updating the server firmware. If the primary copy of the server firmware becomes damaged, use this backup copy.

To force the server to start from the backup copy, turn off the server; then, place the J71 jumper (UEFI boot recovery jumper) in the backup position (pins 2 and 3). See “System-board switches, jumpers, and buttons” on page 32 for the location of the UEFI boot recovery jumper (J71).

Use the backup copy of the server firmware until the primary copy is restored. After the primary copy is restored, turn off the server; then, move the J71 jumper back to the primary position (pins 1 and 2).

The UpdateXpress System Pack Installer

This section explains the function of the UpdateXpress System Pack Installer.

The UpdateXpress System Pack Installer detects supported and installed device drivers and firmware in the server and installs available updates.

For additional information and to download the UpdateXpress System Pack Installer, go to the ToolsCenter for Lenovo x86 servers at <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-CENTER> and click **UpdateXpress System Pack Installer**.

Using the integrated management module II

This section contains information about the integrated management module II (IMM2).

The IMM2 is a second generation of the functions that were formerly provided by the baseboard management controller hardware. It combines service processor functions, video controller, and remote presence function in a single chip.

For more information about IMM2, see the *Integrated Management Module II User's Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5086346>.

The IMM2 supports the following basic systems-management features:

- Active Energy Manager.
- Alerts (in-band and out-of-band alerting, PET traps - IPMI style, SNMP, email).
- Auto Boot Failure Recovery (ABR).
- Automatic microprocessor disable on failure and restart in a multi-microprocessor configuration when one microprocessor signals an internal error. When one of the microprocessors fail, the server will disable the failing microprocessor and restart with the other microprocessors.

Note: When one microprocessor fails in a four-microprocessor configuration, two microprocessors will be disabled.

- Automatic Server Restart (ASR) when POST is not complete or the operating system hangs and the operating system watchdog timer times out. The IMM2 might be configured to watch for the operating system watchdog timer and reboot the system after a timeout, if the ASR feature is enabled. Otherwise, the IMM2 allows the administrator to generate a nonmaskable interrupt (NMI) by pressing an NMI button on the rear of the server for an operating-system memory dump. ASR is supported by Intelligent Platform Management Interface (IPMI).
- Remote presence support (remote video, remote keyboard/mouse, and remote storage).
- Boot sequence manipulation.
- Command-line interface.
- Configuration save and restore.
- DIMM error assistance. The Unified Extensible Firmware Interface (UEFI) disables a failing DIMM that is detected during POST, and the IMM2 lights the associated system error LED and the failing DIMM error LED.
- Environmental monitor with fan speed, temperature, voltages, fan failure, power supply failure, and power backplane failure.

- First Failure Data Capture (FFDC) support.
- IPMI Specification V2.0 and Intelligent Platform Management Bus (IPMB) support.
- Invalid system configuration (CONFIG) LED support.
- Light path diagnostics LEDs indicators to report errors that occur with fans, power supplies, microprocessor, hard disk drives, and system errors.
- Local firmware code flash update
- NMI detection, generation, and reporting.
- Operating-system failure blue screen capture.
- PCI configuration data.
- PECI 3 support.
- Power/reset control (power-on, hard and soft shutdown, hard and soft reset, schedule power control).
- Query power-supply input power.
- ROM-based IMM2 firmware flash updates.
- Serial over LAN (SOL).
- Serial port redirection over telnet or Secure Shell (SSH).
- SMI handling
- System-event log (SEL) - user readable event log.

The IMM2 also provides the following remote server management capabilities through the OSA SMBridge management utility program:

- **Command-line interface (IPMI Shell)**

The command-line interface provides direct access to server management functions through the IPMI 2.0 protocol. Use the command-line interface to issue commands to control the server power, view system information, and identify the server. You can also save one or more commands as a text file and run the file as a script.

- **Serial over LAN**

Establish a Serial over LAN (SOL) connection to manage servers from a remote location. You can remotely view and change the UEFI settings, restart the server, identify the server, and perform other management functions. Any standard Telnet client application can access the SOL connection.

Using the remote presence and blue-screen capture features

This section contains information about the remote presence and blue screen capture features.

About this task

The remote presence and blue-screen capture features are integrated functions of the IMM2. The remote presence feature provides the following functions:

- Remotely viewing video with graphics resolutions up to 1600 x 1200 at 75 Hz, regardless of the system state.
- Remotely accessing the server, using the keyboard and mouse from a remote client.
- Mapping the CD or DVD drive and USB flash drive on a remote client, and mapping ISO and diskette image files as virtual drives that are available for use by the server.

- Uploading a diskette image to the IMM2 memory and mapping it to the server as a virtual drive.

The blue-screen capture feature captures the video display contents before the IMM2 restarts the server when the IMM2 detects an operating-system hang condition. A system administrator can use the blue-screen capture to assist in determining the cause of the hang condition.

For more information about IMM2, see the *Integrated Management Module II User's Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnodocid=MIGR-5086346>.

Obtaining the IMM2 host name

Use this information to obtain the IMM2 host name.

About this task

If you are logging on to the IMM2 for the first time after installation, the IMM2 defaults to DHCP. If a DHCP server is not available, the IMM2 uses a static IP address of 192.168.70.125. The default IPv4 host name is "IMM2-" (plus the last 12 characters on the IMM MAC address). The default host name is also on the IMM network access tag that is attached to the power supply on the rear of the server. The IMM network access tag provides the default host name of the IMM2 and does not require you to start the server.

The IPv6 link-local address (LLA) is derived from the IMM2 default host name. The IMM2 LLA is on the IMM network access tag on the power supply on the rear of the server. To derive the link-local address, complete the following steps:

1. Take the last 12 characters on the IMM MAC address (for example, 5CF3FC5EAAD0).
2. Separate the number into pairs of hexadecimal characters (for example, 5C:F3:FC:5E:AA:D0).
3. Separate the first six and last six hexadecimal characters.
4. Add "FF" and "FE" in the middle of the 12 characters (for example, 5C F3 FC FF FE 5E AA D0).
5. Convert the first pair of hexadecimal characters to binary (for example, 5=0101, C=1100, which results in 01011100 F3 FC FF FE 5E AA D0).
6. Flip the 7th binary character from left (0 to 1 or 1 to 0), which results in 01011110 F3 FF FE 5E AA D0.
7. Convert the binary back to hexadecimal (for example, 5E F3FCFFFE5EAAD0).

Obtaining the IP address for the IMM2

This section contains information about obtaining the IP address for the IMM2.

About this task

To access the web interface to use the remote presence feature, you need the IP address or host name of the IMM2. You can obtain the IMM2 IP address through the Setup utility and you can obtain the IMM2 host name from the IMM network access tag. The server comes with a default IP address for the IMM2 of 192.168.70.125. To obtain the IP address, complete the following steps:

Procedure

1. Turn on the server.

Note: Approximately 10 seconds after the server is connected to ac power, the power-on button becomes active.

2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to access the full Setup utility menu.

Note: This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.

3. From the Setup utility main menu, select **System Settings**.
4. On the next screen, select **Integrated Management Module**.
5. On the next screen, select **Network Configuration**.
6. Find the IP address and write it down.
7. Exit from the Setup utility.

Logging on to the IMM2 web interface

Use this information to log on to the IMM2 web interface.

About this task

To log on to the IMM2 web interface, complete the following steps:

Procedure

1. On a system that is connected to the server, open a web browser. In the **Address** or **URL** field, type the IP address or host name of the IMM2 to which you want to connect.

Note: If you are logging on to the IMM2 for the first time after installation, the IMM2 defaults to DHCP. If a DHCP host is not available, the IMM2 assigns a static IP address of 192.168.70.125. The IMM network access tag provides the default host name of the IMM2 and does not require you to start the server.

2. On the Login page, type the user name and password. If you are using the IMM2 for the first time, you can obtain the user name and password from your system administrator. All login attempts are documented in the system-event log.

Note: The IMM2 is set initially with a user name of USERID and password of PASSWORD (with a zero in the word password, not the letter O). You have read/write access. You must change the default password the first time you log on.

3. Click **Log in** to start the session. The System Status and Health page provides a quick view of the system status.

What to do next

Note: If you boot to the operating system while in the IMM2 GUI and the message “Booting OS or in unsupported OS” is displayed under **System Status → System State**, disable Windows 2008 firewall or type the following command in the Windows 2008 console. This might also affect blue-screen capture features.

```
netsh firewall set icmpsetting type=8 mode=ENABLE
```

By default, the icmp packet is blocked by Windows firewall. The IMM2 GUI will then change to “OS booted” status after you change the setting as indicated above in both the Web and CLI interfaces.

Logging on to the IMM2 CLI interface using Telnet

Use this information to log on to the IMM2 web interface using a Telnet protocol.

About this task

To log on to the IMM2 CLI interface using Telnet, complete the following steps:

Procedure

1. From the command prompt, type **telnet**; then, the **IP address** for the IMM2 to which you want to log on to and press **Enter**.
2. Type the **USERID** and **PASSWORD** for the IMM2 and press **Enter**.
3. At the system prompt, type your command.

Note: You can type **help** in the command prompt if you want to see a list of commands that you can use.

4. When you are finished, type **Exit**, to exit the session.

Logging on to the IMM2 CLI interface using SSH

Use this information to log on to the IMM2 CLI using a Secure Shell (SSH) protocol.

About this task

To log on to the IMM2 CLI interface using SSH, complete the following steps:

Procedure

1. Generate an SSH Server private key, see the *Integrated Management Module II User's Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnocid=MIGR-5086346> for information on how to generate an SSH Server private key.
2. Make sure that the SSH Server is enabled.
3. From the command prompt, type **ssh**, then press **Enter**.
4. Type **USERID@IPADDRESS** in the command prompt (where the **USERID** and **IP ADDRESS** is the user ID and IP address for the IMM2 to which you want to log on to), then press **Enter**.
5. Type the **PASSWORD** for the IMM2 and press **Enter**.
6. At the system prompt, type your command.

Note: You can type **help** in the command prompt if you want to see a list of commands that you can use.

7. When you are finished, type **Exit**, to exit the session.

Configuring the LAN over USB interface manually

An IMM2 must be configured to use the LAN over USB interface. The firmware update package or Advanced Settings Utility attempts to perform the setup automatically, if needed. If the automatic setup fails or if you prefer to set up the LAN over USB manually, use one of the following processes.

For more information about LAN over USB configuration on different operating systems, see <http://www.ibm.com/support/entry/portal/docdisplay?lnodocid=MIGR-5083207>.

Installing the LAN over USB Windows device driver

When you install a Windows operating system, there might be an unknown RNDIS device in the Device Manager. Lenovo provides a Windows INF file that identifies this device. The signed version of the INF file is included in all of the Windows versions of the IMM2, UEFI, and DSA update packages. Complete the following steps to install `ibm_rndis_server_os.inf`.

Procedure

To install the LAN over USB device driver for Windows, complete the following steps.

Note: You only have to perform these steps if the compute node is running a Windows operating system and the `ibm_rndis_server_os.inf` file has not been previously installed. The file only has to be installed once. It is required by Windows operating systems to detect and use the LAN over USB functionality.

1. Obtain a Windows version of the server UEFI code package (see “Updating the firmware” on page 141 for more information).
2. Extract the `ibm_rndis_server_os.inf` and `device.cat` files from the firmware update package and copy them to the `\WINDOWS\inf` subdirectory.

Note: You can use the `-x path` command-line interface option to extract the files. For more information about this option, see the readme file that comes with the update package.

3. (Windows 2003) Install the `ibm_rndis_server_os.inf` file by right-clicking the file and clicking **Install**. This generates a PNF file of the same name in `\WINDOWS\inf`.

(Windows 2008) Click **Computer Management > Device Manager** and find the RNDIS Device. Click **Properties > Driver > Reinstall driver**. Point the server to the `\Windows\inf` directory where it can find the `ibm_rndis_server_os.inf` file and install the device.

4. Click **Computer Management > Device Manager**. Right-click **Network adapters** and select **Scan for hardware changes**. A small pop-up confirms that the Ethernet device is found and installed. The New Hardware Wizard starts automatically.
5. When you are prompted Can Windows connect to Windows Update to search for software?, select **No, not this time**. Click **Next** to continue.
6. When you are prompted What do you want the wizard to do?, select **Install from a list or specific location (Advanced)**. Click **Next** to continue.

7. When you are prompted Please choose your search and installation options, select **Don't search. I will choose the driver to install**. Click **Next** to continue.
8. When you are prompted Select a hardware type, and then click Next, select **Network adapters**. Click **Next** to continue.
9. When you are prompted with the statement Completing the Found New Hardware Wizard, click **Finish**. A new local area connection appears. If the message This connection has limited or no connectivity is displayed, ignore this message.
10. Return to the Device Manager. **IBM USB Remote NDIS Network Device** or **Lenovo USB Remote NDIS Network Device** appears under **Network Adapters**.
11. Use the Setup utility to view or set the IP address.
 - a. Connect a keyboard, monitor, and mouse to the server.
 - b. Turn on the server. (see "Turning on the server" on page 25).
 - c. When the prompt Press <F1> Setup is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.
 - d. Select **System Settings** → **Integrated Management Module** → **Network Configuration**.
 - e. Locate the IP address.
 - f. Exit from the Setup utility.

Installing the LAN over USB Linux device driver

Versions of Linux since RHEL5 Update 3 and SLES10 Service Pack 2 support the LAN over USB interface by default. This interface is detected and displayed during the installation of these operating systems.

Note: Older Linux distributions might not detect the LAN over USB interface, and might require manual configuration. For information about configuring LAN over USB on specific Linux distributions, see <http://www.ibm.com/support/entry/portal/docdisplay?lnodocid=MIGR-5083207>.

The IMM2 LAN over USB interface requires that the `usbnet` and `cdc_ether` device drivers be loaded. If the drivers have not been installed, use **modprobe** to install them. When these drivers are installed, the IMM2 USB network interface is shown as a network device in the operating system. To discover the name that the operating system has assigned to the IMM2 USB network interface, type:

```
dmesg | grep -i cdc ether
```

Using the embedded hypervisor

This section provides information about the VMware ESXi embedded hypervisor software.

About this task

The VMware ESXi embedded hypervisor software is available on the optional IBM USB flash device with embedded hypervisor. The USB flash device can be installed in USB connectors 3 and 4 on the system board (see “System-board internal connectors” on page 30 for the location of the connectors). Hypervisor is virtualization software that enables multiple operating systems to run on a host system at the same time. The USB flash device is required to activate the hypervisor functions.

To start using the embedded hypervisor functions, you must add the USB flash device to the startup sequence in the Setup utility.

To add the USB flash device to the startup sequence, complete the following steps:

Procedure

1. Turn on the server.

Note: Approximately 10 seconds after the server is connected to ac power, the power-on button becomes active.

2. When the prompt <F1> Setup is displayed, press F1.

Note: This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.

3. From the Setup utility main menu, select **Boot Manager**.
4. Select **Add Boot Option**; then, select **Generic Boot Option** and **Embedded Hypervisor**. Press Enter, and then press Esc.
5. Select **Change Boot Order** and then select **Change the order**. Use the Up arrow and Down Arrow keys to select **Embedded Hypervisor** and use the plus (+) and minus (-) keys to move Embedded Hypervisor in the boot order. When **Embedded Hypervisor** is in the correct location in the boot order, press Enter. Select **Commit Changes** and press Enter.
6. Select **Save Settings** and then select **Exit Setup**.

Results

If the embedded hypervisor flash device image becomes corrupted, you can download the image from <http://www.ibm.com/systems/x/os/vmware/esxi/>.

For additional information and instructions, see the *VMware vSphere Installation and Setup Guide* at <http://pubs.vmware.com/vsphere-50/topic/com.vmware.ICbase/PDF/vsphere-esxi-vcenter-server-50-installation-setup-guide.pdf>.

Enabling Features on Demand Ethernet software

This topic provides information about Features on Demand Ethernet software.

You can activate the Features on Demand (FoD) software upgrade key for Fibre Channel over Ethernet (FCoE) and iSCSI storage protocols that is integrated in the IMM2. For more information and instructions for activating the Features on Demand Ethernet software key, see the *Features on Demand User's Guide*. To download the document, go to <http://www.ibm.com/systems/x/fod/>, log in, and click **Help**.

Enabling Features on Demand RAID software

This topic provides information about Features on Demand RAID software.

Integrated into the IMM2 is a Features on Demand RAID software upgrade key that you can activate to get support for RAID levels 5 and 50 or 6 and 60 (depending on the Features on Demand key). For more information and instructions for activating the Feature On Demand RAID software key, see the *Features on Demand User's Guide*. To download the document, go to <http://www.ibm.com/systems/x/fod/>, log in, and click **Help**.

Configuring RAID arrays

Use this information to configure a RAID array.

Through the Setup utility, you can access utilities to configure RAID arrays. The specific procedure for configuring arrays depend on the RAID controller that you are using. For details, see the documentation for your RAID controller. To access the utility for your RAID controller, complete the following steps:

1. Turn on the server.

Note: Approximately 10 seconds after the server is connected to ac power, the power-on button becomes active.

2. When prompted, <F1> Setup is displayed, press F1. If you have set an administrator password, you must type the administrator password to access the full Setup utility menu. If you do not type the administrator password, a limited Setup utility menu is available.

Note: This prompt is displayed on the screen for only a few seconds. You must press F1 quickly.

3. Select **System Settings → Storage**.
4. Press Enter to refresh the list of device drivers.
5. Select the device driver for your RAID controller and press Enter.
6. Follow the instructions in the documentation for your RAID controller.

Advanced Settings Utility program

The IBM Advanced Settings Utility (ASU) program is an alternative to the Setup utility for modifying UEFI settings. Use the ASU program online or out of band to modify UEFI settings from the command line without the need to restart the system to access the Setup utility.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

You can use the IBM Advanced Settings Utility (ASU) program to configure the optional remote presence features or other IMM2 settings. The remote presence features provide enhanced systems-management capabilities.

In addition, the ASU program provides limited settings for configuring the IPMI function in the IMM2 through the command-line interface.

Use the command-line interface to issue setup commands. You can save any of the settings as a file and run the file as a script. The ASU program supports scripting environments through a batch-processing mode.

For more information and to download the ASU program, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-ASU>.

Updating Systems Director

If you plan to use IBM Systems Director to manage the server, you must check for the latest applicable IBM Systems Director updates and interim fixes.

About this task

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

Changes are made periodically to the support site. The actual procedure might vary slightly from what is described in this document.

To locate and install a newer version of IBM Systems Director, complete the following steps:

Procedure

1. Check for the latest version of IBM Systems Director:
 - a. Go to http://pic.dhe.ibm.com/infocenter/director/pubs/index.jsp?topic=%2Fcom.ibm.director.main.helps.doc%2Fqm0_main.html.
 - b. If a newer version of IBM Systems Director than what comes with the server is shown in the drop-down list, follow the instructions on the web page to download the latest version.
2. Install the IBM Systems Director program.

Results

If your management server is connected to the Internet, to locate and install updates and interim fixes, complete the following steps:

1. Make sure that you have run the Discovery and Inventory collection tasks.

2. On the Welcome page of the IBM Systems Director Web interface, click **View updates**.
3. Click **Check for updates**. The available updates are displayed in a table.
4. Select the updates that you want to install, and click **Install** to start the installation wizard.

If your management server is not connected to the Internet, to locate and install updates and interim fixes, complete the following steps:

1. Make sure that you have run the Discovery and Inventory collection tasks.
2. On a system that is connected to the Internet, go to <http://www.ibm.com/support/fixcentral/>.
3. From the **Product family** list, select **IBM Systems Director**.
4. From the **Product** list, select **IBM Systems Director**.
5. From the **Installed version** list, select the latest version, and click **Continue**.
6. Download the available updates.
7. Copy the downloaded files to the management server.
8. On the management server, on the Welcome page of the IBM Systems Director Web interface, click the **Manage** tab, and click **Update Manager**.
9. Click **Import updates** and specify the location of the downloaded files that you copied to the management server.
10. Return to the Welcome page of the Web interface, and click **View updates**.
11. Select the updates that you want to install, and click **Install** to start the installation wizard.

Updating the Universal Unique Identifier and DMI/SMBIOS data

After the system board is replaced, you must update the Universal Unique Identifier (UUID) and DMI/SMBIOS data in the IMM on the new system board.

You can use the Advanced Setting Utility (ASU) and any of the following access methods to update the UUID and DMI/SMBIOS data:

- Locally (in-band)
 - Through the Keyboard Controller Style (KCS) interface
 - Through the LAN over USB interface
- Remotely over a LAN

You can use the ASU under any supported operating system, or you can use the Bootable Media Creator or a Windows- or Linux-based toolkit to create bootable media that contains the ASU. For information about the ASU, see the *Advanced Settings Utility User's Guide* and instructions for downloading and unpacking the ASU code at <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-ASU>.

The following sections provide instructions for updating the UUID and DMI/SMBIOS data, using the different methods for accessing the IMM2. The following conventions apply to the command syntax:

- Variables are shown in *italics*.
- Optional parameters are enclosed in brackets ([]). Do not type the brackets in the commands. If you omit an optional parameter, the default is used.
- Although the command syntax is shown in mixed case, the commands are not case sensitive.

Locally: Keyboard Controller Style (KCS)

This section describes the keyboard controller style interface.

Procedure

This access method uses the IPMI/KCS interface. The IPMI driver must be installed; with some operating systems, the IPMI driver is installed by default. The ASU provides the corresponding mapping layer.

To update the UUID, in the ASU command-line interface, enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoUUID uuid
```

where *uuid* is the user-assigned hexadecimal value, up to 16 bytes, that identifies the server.

To update the DMI/SMBIOS data, complete the following steps:

1. In the ASU command-line interface, enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName xxxxyyy
```

where:

xxxx is the 4-digit machine type of the server.

yyy is the 3-digit model number of the server.

2. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoSerialNum zzzzzzz
```

where *zzzzzzz* is the 7-character serial number of the server.

3. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag  
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

where *aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa* is the 33-character asset tag number of the server.

Locally: LAN over USB

If you omit any optional parameter, the default value is used. If one or more default values are used and the ASU cannot access the IMM2 by using the LAN over USB access method, the ASU automatically uses the KCS access method.

About this task

Procedure

To update the UUID, in the ASU command-line interface, enter the following command:

Note: If you omit any optional parameter, the default value is used. If one or more default values are used and the ASU cannot access the IMM by using the LAN over USB access method, the ASU automatically uses the KCS access method.

```
asu set SYSTEM_PROD_DATA.SysInfoUUID uuid [--host ipaddress]  
      [--user userid] [--password password]
```

where:

uuid is the user-assigned hexadecimal value, up to 16 bytes, that identifies the server.

ipaddress is the internal LAN/USB IP address of the IMM. The default is 169.254.95.118.

userid is the IMM account name (1 of 12 accounts). The default is USERID.

password is the IMM account password (1 of 12 accounts). The default is PASSWORD (with a zero, not the letter O).

To update the DMI/SMBIOS data, complete the following steps:

1. In the ASU command-line interface, enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName xxxxyyy [--host ipaddress]  
      [--user userid] [--password password]
```

where:

xxxx is the 4-digit machine type of the server.

yyy is the 3-digit model number of the server.

ipaddress is the internal LAN/USB IP address of the IMM. The default is 169.254.95.118.

userid is the IMM account name (1 of 12 accounts). The default is USERID.

password is the IMM account password (1 of 12 accounts). The default is PASSWORD (with a zero, not the letter O).

2. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoSerialNum zzzzzzz [--host ipaddress]  
      [--user userid] [--password password]
```

where zzzzzzz is the 7-character serial number of the server.

3. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag  
      aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa [--host ipaddress]  
      [--user userid] [--password password]
```

where aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa is the 33-character asset tag number of the server.

Remotely over a LAN

If you omit any optional parameter, the default value is used.

Procedure

Note: If you omit any optional parameter, the default value is used.
To update the UUID in the ASU command-line interface, enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoUUID uuid --host ipaddress
      [--user userid] [--password password]
```

where:

uuid is the user-assigned hexadecimal value, up to 16 bytes, that identifies the server.

ipaddress is the external LAN IP address of the IMM.

userid is the IMM account name (1 of 12 accounts). The default is USERID.

password is the IMM account password (1 of 12 accounts). The default is PASSWORD (with a zero, not the letter O).

To update the DMI/SMBIOS data, complete the following steps:

1. In the ASU command-line interface, enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoProdName xxxxyyy --host ipaddress
      [--user userid] [--password password]
```

where:

xxxx is the 4-digit machine type of the server.

yyy is the 3-digit model number of the server.

ipaddress is the external LAN IP address of the IMM.

userid is the IMM account name (1 of 12 accounts). The default is USERID.

password is the IMM account password (1 or 12 accounts). The default is PASSWORD (with a zero, not the letter O).

2. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysInfoSerialNum zzzzzzz --host ipaddress
      [--user userid] [--password password]
```

where *zzzzzzz* is the 7-character serial number of the server.

3. Enter the following command:

```
asu set SYSTEM_PROD_DATA.SysEncloseAssetTag
      aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa --host ipaddress
      [--user userid] [--password password]
```

where *aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa* is the 33-character asset tag number of the server.

Chapter 4. Troubleshooting

Use this information to diagnose and correct problems that might occur in your server.

This chapter describes the diagnostic tools and troubleshooting information that are available to help you solve problems that might occur in the server.

If you cannot diagnose and correct a problem by using the information in this chapter, see Appendix E, “Getting help and technical assistance,” on page 867 for more information.

Start here

You can solve many problems without outside assistance by following the troubleshooting procedures in this documentation and on the World Wide Web.

This document describes the diagnostic tests that you can perform, troubleshooting procedures, and explanations of error messages and error codes. The documentation that comes with your operating system and software also contains troubleshooting information.

Diagnosing a problem

Before you call an approved warranty service provider, follow these procedures in the order in which they are presented to diagnose a problem with your server.

Procedure

1. **Return the server to the condition it was in before the problem occurred.** If any hardware, software, or firmware was changed before the problem occurred, if possible, reverse those changes. This might include any of the following items:
 - Hardware components
 - Device drivers and firmware
 - System software
 - UEFI firmware
 - System input power or network connections
2. **View the light path diagnostics LEDs and event logs.** The server is designed for ease of diagnosis of hardware and software problems.
 - **Light path diagnostics LEDs:** See “Light path diagnostics” on page 178 for information about using light path diagnostics LEDs.
 - **Event logs:** See “Event logs” on page 188 for information about notification events and diagnosis.
 - **Software or operating-system error codes:** See the documentation for the software or operating system for information about a specific error code. See the manufacturer's website for documentation.
3. **Run Dynamic System Analysis (DSA) and collect system data.** Run Dynamic System Analysis (DSA) to collect information about the hardware, firmware, software, and operating system. Have this information available when you

contact your approved warranty service provider. For instructions for running DSA, see the *Dynamic System Analysis Installation and User's Guide*.

To download the latest version of DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=SERV-DSA>.

4. **Check for and apply code updates.** Fixes or workarounds for many problems might be available in updated UEFI firmware, device firmware, or device drivers. To display a list of available updates for the server, go to <http://www.ibm.com/support/fixcentral>.

Attention: Installing the wrong firmware or device-driver update might cause the server to malfunction. Before you install a firmware or device-driver update, read any readme and change history files that are provided with the downloaded update. These files contain important information about the update and the procedure for installing the update, including any special procedure for updating from an early firmware or device-driver version to the latest version.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

- a. **Install UpdateXpress system updates.** You can install code updates that are packaged as an UpdateXpress System Pack or UpdateXpress CD image. An UpdateXpress System Pack contains an integration-tested bundle of online firmware and device-driver updates for your server. In addition, you can use the ToolsCenter Bootable Media Creator to create bootable media that is suitable for applying firmware updates and running preboot diagnostics. For more information about UpdateXpress System Packs, see <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=SERV-XPRESS> and “Updating the firmware” on page 141. For more information about the Bootable Media Creator, see <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=LNVO-BOMC>.

Be sure to separately install any listed critical updates that have release dates that are later than the release date of the UpdateXpress System Pack or UpdateXpress image (see step 4b).

- b. **Install manual system updates.**

- 1) **Determine the existing code levels.**

In DSA, click **Firmware/VPD** to view system firmware levels, or click **Software** to view operating-system levels.

- 2) **Download and install updates of code that is not at the latest level.**

To display a list of available updates for the server, go to <http://www.ibm.com/support/fixcentral>.

When you click an update, an information page is displayed, including a list of the problems that the update fixes. Review this list for your specific problem; however, even if your problem is not listed, installing the update might solve the problem.

5. **Check for and correct an incorrect configuration.** If the server is incorrectly configured, a system function can fail to work when you enable it; if you make an incorrect change to the server configuration, a system function that has been enabled can stop working.
 - a. **Make sure that all installed hardware and software are supported.** See <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us> to verify that the server supports the installed operating system, optional

devices, and software levels. If any hardware or software component is not supported, uninstall it to determine whether it is causing the problem. You must remove nonsupported hardware before you contact an approved warranty service provider for support.

- b. **Make sure that the server, operating system, and software are installed and configured correctly.** Many configuration problems are caused by loose power or signal cables or incorrectly seated adapters. You might be able to solve the problem by turning off the server, reconnecting cables, reseating adapters, and turning the server back on. For information about performing the checkout procedure, see “About the checkout procedure” on page 174. For information about configuring the server, see “Configuring the server” on page 142.
6. **See controller and management software documentation.** If the problem is associated with a specific function (for example, if a RAID hard disk drive is marked offline in the RAID array), see the documentation for the associated controller and management or controlling software to verify that the controller is correctly configured.

Problem determination information is available for many devices such as RAID and network adapters.

For problems with operating systems, software, or devices, go to <http://www.ibm.com/supportportal>.
7. **Check for troubleshooting procedures and RETAIN tips.** Troubleshooting procedures and RETAIN tips document known problems and suggested solutions. To search for troubleshooting procedures and RETAIN tips, go to <http://www.ibm.com/supportportal>.
8. **Use the troubleshooting tables.** See “Troubleshooting by symptom” on page 197 to find a solution to a problem that has identifiable symptoms.

A single problem might cause multiple symptoms. Follow the troubleshooting procedure for the most obvious symptom. If that procedure does not diagnose the problem, use the procedure for another symptom, if possible.

If the problem remains, contact an approved warranty service provider for assistance with additional problem determination and possible hardware replacement. To open an online service request, go to http://www.ibm.com/support/entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data.

Undocumented problems

If you have completed the diagnostic procedure and the problem remains, the problem might not have been previously identified. After you have verified that all code is at the latest level, all hardware and software configurations are valid, and no light path diagnostics LEDs or log entries indicate a hardware component failure, contact an approved warranty service provider for assistance.

To open an online service request, go to http://www.ibm.com/support/entry/portal/Open_service_request. Be prepared to provide information about any error codes and collected data and the problem determination procedures that you have used.

Service bulletins

This section describes how to locate service bulletins for this server.

The support website is continually updated with the latest tips and techniques that you can use to solve problem that you might have with the Lenovo System x3750 M4 server. To find service bulletins that are available for the server, go to <http://www.ibm.com/supportportal/> and search for 8752 and retain.

Checkout procedure

The checkout procedure is the sequence of tasks that you should follow to diagnose a problem in the server.

About the checkout procedure

Before you perform the checkout procedure for diagnosing hardware problems, review the information in this section.

- Read the safety information, see “Safety” on page vii.
- The Dynamic System Analysis (DSA) program provides the primary methods of testing the major components of the server, such as the system board, Ethernet controller, keyboard, mouse (pointing device), serial ports, and hard disk drives. You can also use them to test some external devices. If you are not sure whether a problem is caused by the hardware or by the software, you can use the diagnostic programs to confirm that the hardware is working correctly.
- When you run DSA, a single problem might cause more than one error message. When this happens, correct the cause of the first error message. The other error messages usually will not occur the next time you run DSA.

Exception: If multiple error codes or light path diagnostics LEDs indicate a microprocessor error, the error might be in the microprocessor or in the microprocessor socket. See “Microprocessor problems” on page 206 for information about diagnosing microprocessor problems.

- Before you run diagnostic programs, you must determine whether the failing server is part of a shared hard disk drive cluster (two or more servers sharing external storage devices). If it is part of a cluster, you can run all diagnostic programs except the ones that test the storage unit (that is, a hard disk drive in the storage unit) or the storage adapter that is attached to the storage unit. The failing server might be part of a cluster if any of the following conditions is true:
 - You have identified the failing server as part of a cluster (two or more servers sharing external storage devices).
 - One or more external storage units are attached to the failing server and at least one of the attached storage units is also attached to another server or unidentifiable device.
 - One or more servers are located near the failing server.

Important: If the server is part of a shared hard disk drive cluster, run one test at a time. Do not run any suite of tests, such as “quick” or “normal” tests, because this might enable the hard disk drive diagnostic tests.

- If the server is halted and a POST error code is displayed, see Appendix C, “UEFI/POST error codes,” on page 491. If the server is halted and no error message is displayed, see “Troubleshooting by symptom” on page 197 and “Solving undetermined problems” on page 217.

- For information about power-supply problems, see “Solving power problems” on page 215 and “Power-supply LEDs” on page 186.
- For intermittent problems, check the event log; see “Event logs” on page 188 and Appendix B, “DSA diagnostic test results,” on page 353.

Performing the checkout procedure

This section contains the steps to perform the checkout procedure.

About this task

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

To perform the checkout procedure, complete the following steps:

Procedure

1. Is the server part of a cluster?
 - **No:** Go to step 2.
 - **Yes:** Shut down all failing servers that are related to the cluster. Go to step 2.
2. Complete the following steps:
 - a. Check the power supply LEDs (see “Power-supply LEDs” on page 186).
 - b. Turn off the server and all external devices.
 - c. Check all internal and external devices for compatibility at <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.
 - d. Check all cables and power cords.
 - e. Set all display controls to the middle positions.
 - f. Turn on all external devices.
 - g. Turn on the server. If the server does not start, see “Troubleshooting by symptom” on page 197.
 - h. Check the system-error LED on the operator information panel. If it is lit, check the light path diagnostics LEDs (see “Light path diagnostics” on page 178).
 - i. Check for the following results:
 - Successful completion of POST (see “POST” on page 192 for more information)
 - Successful completion of startup, which is indicated by a readable display of the operating-system desktop
3. Is there a readable image on the monitor screen?
 - **No:** Find the failure symptom in “Troubleshooting by symptom” on page 197; if necessary, see “Solving undetermined problems” on page 217.
 - **Yes:** Run DSA (see “Running the DSA Preboot diagnostic programs” on page 194).
 - If DSA reports an error, follow the instructions in Appendix B, “DSA diagnostic test results,” on page 353.
 - If DSA does not report an error but you still suspect a problem, see “Solving undetermined problems” on page 217.

Diagnostic tools

This section describes the available tools to assist you when diagnosing system errors.

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

The following tools are available to help you diagnose and solve hardware-related problems:

- **Light path diagnostics**

Use light path diagnostics to diagnose system errors quickly. See “Light path diagnostics” on page 178 for more information.

- **Event logs**

The event logs list the error codes and messages that are generated when an error is detected for the subsystems IMM2, POST, DSA, and the server baseboard management controller. See “Event logs” on page 188 for more information.

- **Integrated management module II**

The integrated management module II (IMM2) combines service processor functions, video controller, and remote presence and blue-screen capture features in a single chip. The IMM2 provides advanced service-processor control, monitoring, and alerting function. If an environmental condition exceeds a threshold or if a system component fails, the IMM2 lights LEDs to help you diagnose the problem, records the error in the IMM2 event log, and alerts you to the problem. Optionally, the IMM2 also provides a virtual presence capability for remote server management capabilities. The IMM2 provides remote server management through the following industry-standard interfaces:

- Intelligent Platform Management Protocol (IPMI) version 2.0
- Simple Network Management Protocol (SNMP) version 3
- Common Information Model (CIM)
- Web browser

For more information about the IMM2, see “Using the integrated management module II” on page 156, Appendix D, “Integrated management module II (IMM2) error messages,” on page 517, and the *Integrated Management Module II User's Guide* at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnocid=MIGR-5086346>.

- **Lenovo Dynamic System Analysis**

Two editions of Dynamic System Analysis (DSA) are available for diagnosing problems, DSA Portable and DSA Preboot:

- **DSA Portable**

DSA Portable collects and analyzes system information to aid in diagnosing server problems. DSA Portable runs on the server operating system and collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Installed hardware, including PCI and USB information
- Installed applications and hot fixes
- Kernel modules
- Light path diagnostics status

- Microprocessor, input/output hub, and UEFI error logs
- Network interfaces and settings
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Portable creates a DSA log, which is a chronologically ordered merge of the system-event log (as the IPMI event log), the integrated management module II (IMM2) event log (as the ASM event log), and the operating-system event logs. You can send the DSA log as a file to IBM Support (when requested by IBM Support) or view the information as a text file or HTML file.

Note: Use the latest available version of DSA to make sure you are using the most recent configuration data. For documentation and download information for DSA, see <http://www.ibm.com/systems/management/>.

For additional information, see “Dynamic System Analysis” on page 192 and Appendix B, “DSA diagnostic test results,” on page 353.

– DSA Preboot

DSA Preboot diagnostic program is stored in the integrated USB memory on the server. DSA Preboot collects and analyzes system information to aid in diagnosing server problems, as well as offering a rich set of diagnostic tests of the major components of the server. DSA Preboot collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Installed hardware, including PCI and USB information
- Light path diagnostics status
- Microprocessor, input/output hub, and UEFI error logs
- Network interfaces and settings
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration
- Vital product data, firmware, and UEFI configuration

DSA Preboot also provides diagnostics for the following system components (when they are installed):

1. ML2 network adapter
2. IMM2 I2C bus
3. Light path diagnostics panel
4. Memory modules
5. Microprocessors
6. Optical devices (CD or DVD)
7. SAS or SATA drives

See “Running the DSA Preboot diagnostic programs” on page 194 for more information on running the DSA Preboot program on the server.

• Troubleshooting by symptom

These tables list problem symptoms and actions to correct the problems. See “Troubleshooting by symptom” on page 197 for more information.

Light path diagnostics

Use this information as an overview of light path diagnostics.

Light path diagnostics is a system of LEDs on various external and internal components of the server that leads you to the failed component. When an error occurs, LEDs are lit along the path of the front panel, the light path diagnostics panel, then on the failed component. By viewing the LEDs in a particular order, you can often identify the source of the error.

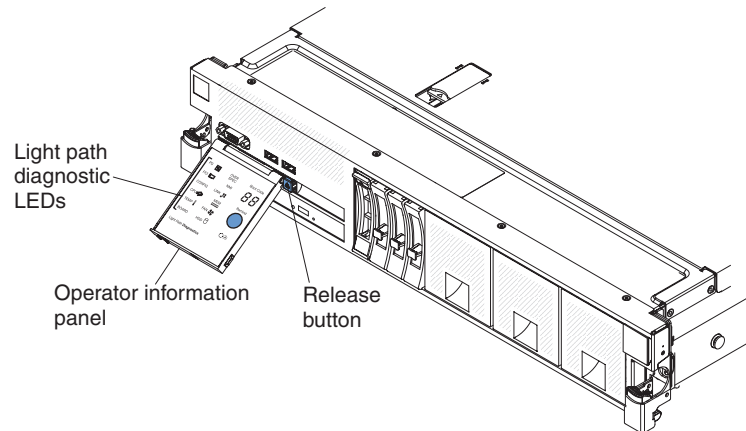
When LEDs are lit to indicate an error, they remain lit when the server is turned off, provided that the server is still connected to power and the power supply is operating correctly.

Before you work inside the server to view light path diagnostics LEDs, read “Safety” on page vii and “Handling static-sensitive devices” on page 43.

If an error occurs, view the light path diagnostics LEDs in the following order:

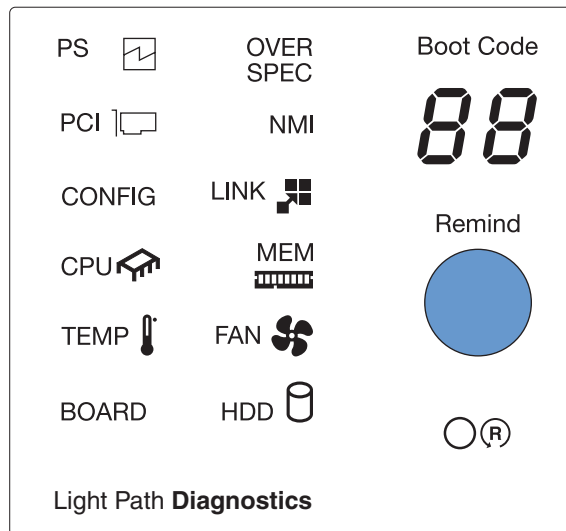
1. Look at the operator information panel on the front of the server:
 - If the check log LED is lit, it indicates that information about an un-isolated fault condition in the server is available in the IMM2 event log or in the system-event log.
 - If the system-error LED is lit, it indicates that an error has occurred; go to step 2.

The following illustration shows the operator information panel.



2. To view the light path diagnostics panel, press in on the blue release button on the operator information panel and pull forward on the panel until the hinge of the operator information panel is free of the server chassis. Then, pull down on the panel so that you can view the light path diagnostics panel information. This reveals the light path diagnostics panel. Lit LEDs on this panel indicate the type of error that has occurred.

The following illustration shows the light path diagnostics panel.



Note any LEDs that are lit, and then slide the light path diagnostics panel back into the server.

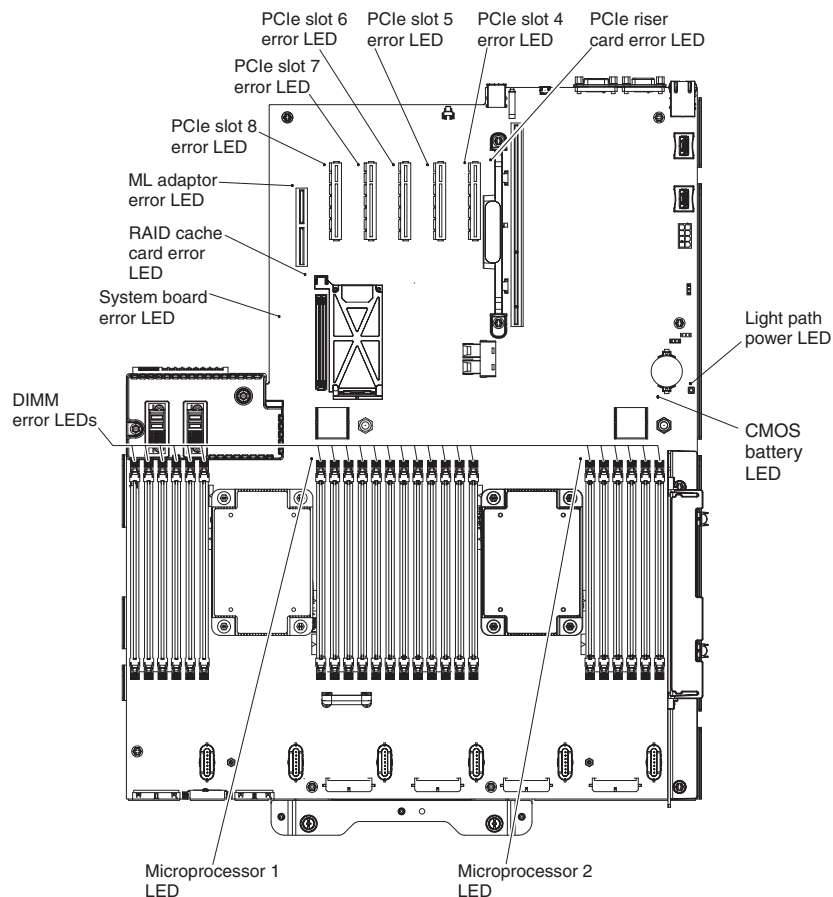
- **Boot code display:** This display provides an error code that indicates the point at which the system stopped during the boot block and POST. A boot code is either a byte or a word value that is produced by UEFI. This display will provide error codes in the event of a microprocessor error or a power fault. In addition to the IMM log, the codes can provide suggested components to be replaced. For more information about the error codes displayed in the boot code display area on the light path diagnostics panel and the actions to take, see Appendix A, “Boot code display error codes,” on page 349.
- **Remind button:** Press this button to place the system-error LED on the front information panel into Remind mode. By placing the system-error LED indicator in Remind mode, you acknowledge that you are aware of the last failure but will not take immediate action to correct the problem. In Remind mode, the system-error LED flashes every 2 seconds until one of the following conditions occurs:
 - All known errors are corrected.
 - The server is restarted.
 - A new error occurs, causing the system-error LED to be lit again.
- **Reset button:** Press this button to reset the server and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button. The Reset button is in the lower-right corner of the light path diagnostics panel.

The system service label inside the server cover provides an overview of internal components that correspond to the LEDs on the light path diagnostics panel. This information and the information in “Light path diagnostics LEDs” on page 181 can often provide enough information to diagnose the error.

3. Remove the server cover and look inside the server for lit LEDs. Certain components inside the server have LEDs that are lit to indicate the location of a problem.

Note: You do not have to remove the server cover to view the LEDs on hard disk drives and power supplies.

The following illustration shows the LEDs and connectors on the system board.



The following illustration shows the LEDs on the optional microprocessor and memory expansion tray.

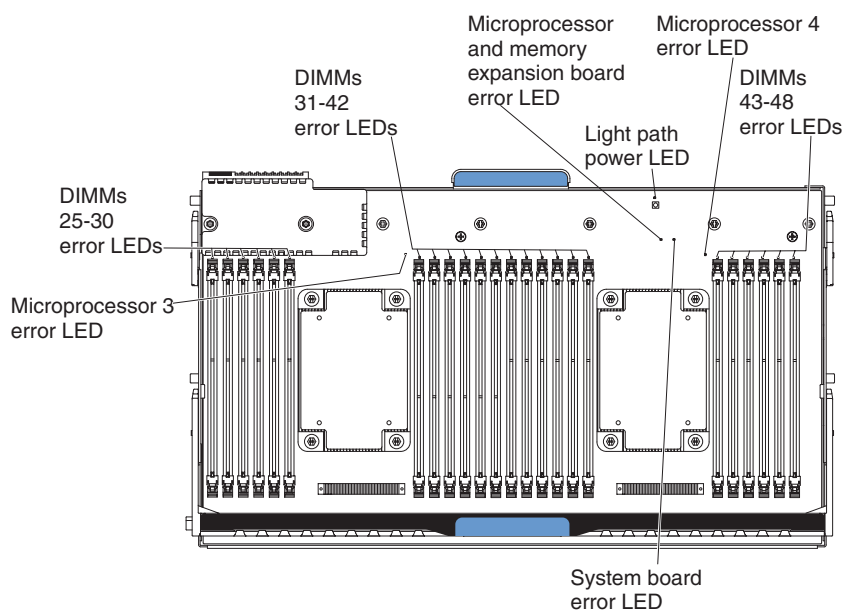


Table 21. Microprocessor and memory expansion tray LEDs

LEDs	Description
Light path power LED	When this LED is lit, it indicates that the capacitor on the microprocessor and memory expansion tray has sufficient power to light the error LEDs.
Microprocessor and memory expansion tray board error LED	When this LED is lit, it indicates that the microprocessor and memory expansion tray board has failed.
System board error LED	When this LED is lit, it indicates that an error has occurred on the base system board.

Light path diagnostics LEDs

Use this information to diagnose possible errors that are indicated by the light path diagnostics LEDs.

The following table describes the LEDs on the light path diagnostics panel and suggested actions to correct the detected problems. For additional information, see “Server controls, LEDs, and power” on page 19 and the “System-board LEDs” on page 34 for the location of the system board LEDs.

Note: Check the IMM2 event log or the system-event log for additional information before you replace a FRU.

Table 22. Light path diagnostics panel LEDs

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If a action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a trained service technician. 		
LED	Description	Action
None, but the system error LED is lit.	An error has occurred and cannot be isolated. The error is not represented by a path.	Use the Setup utility to check the system event log for information about the error (see “Using the Setup utility” on page 145).
PS	A power supply has failed.	<ol style="list-style-type: none"> 1. Check the power-supply in the server that has an lit yellow LED (see “Power-supply LEDs” on page 186). 2. Make sure that the power supplies are seated correctly. 3. Remove one of the power supplies to isolate the failed power supply. 4. Replace the failed power supply.
OVER SPEC	The server is using more power than the power supplies can output.	<ol style="list-style-type: none"> 1. Install an additional power supply or change the input power source from 110 V to 220 V. 2. Remove any recently installed options. 3. Restart the server to see whether the problem remains.

Table 22. Light path diagnostics panel LEDs (continued)

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If a action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a trained service technician. 		
LED	Description	Action
PCI	An error has occurred on a PCI bus on the system board or on the PCI riser-card. An additional LED might be lit on one of the PCI slots on the system board or the riser-card.	<ol style="list-style-type: none"> Check the IMM2 event log for information about the error. Check the LEDs on the system board or PCI riser-card to identify the component that caused the error. If you cannot isolate the failing adapter by using the LEDs and the information in the IMM2 event log, remove one adapter at a time from the failing PCI bus; and restart the server after each adapter is removed. Replace the following components, in the order shown, restarting the server each time: <ul style="list-style-type: none"> PCI riser-card <i>(Trained service technician only)</i> Replace the system board.
NMI	A nonmaskable interrupt has occurred.	Check the IMM2 event log for information about the error.
CONFIG	A hardware configuration error has occurred.	<ol style="list-style-type: none"> If the CONFIG LED and the CPU LED are lit, complete the following steps to correct the problem: <ol style="list-style-type: none"> Check the microprocessors that were just installed to make sure that they are compatible with each other (see “Installing an additional microprocessor and heat sink” on page 100 for additional information about microprocessor requirements) and use the Setup utility and select System Information > System Summary > Processor to verify the microprocessors information. <i>(Trained service technician only)</i> Replace the incompatible microprocessor. Check the IMM2 event logs for information about the error. Replace any components that are identified in the error log. If the CONFIG LED and the MEM LED are both lit, complete the following steps: <ol style="list-style-type: none"> Make sure that the DIMM configuration is supported (see “Installing a memory module” on page 49 for DIMM requirements and installation sequence information). Replace the DIMMs with a supported configuration.
LINK	Reserved.	

Table 22. Light path diagnostics panel LEDs (continued)

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If a action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a trained service technician. 		
LED	Description	Action
CPU	An invalid microprocessor configuration or a microprocessor has failed (both the CPU LED and the CONFIG LED might be lit).	<ol style="list-style-type: none"> 1. If the CONFIG LED is lit, the system issues an invalid microprocessor configuration error. See the CONFIG LED action plan for more information. 2. If the CPU LED is lit and the CONFIG LED is not lit, complete the following steps: <ol style="list-style-type: none"> a. (Trained service technician only) Make sure that the failing microprocessor, which is indicated by a lit LED on the system board or microprocessor and memory expansion tray, is installed correctly. See “Replacing a microprocessor and heat sink” on page 316 for more information. b. If there is no microprocessor and memory expansion tray installed, remove the DIMM air baffle and check the LEDs on the system board to see which microprocessor LED is lit, then do the following: <ol style="list-style-type: none"> 1) Check the IMM2 event logs for information about the error. Replace any components that are identified in the error log. 2) (Trained service technician only) Replace the microprocessor. c. If the microprocessor and memory expansion tray is installed, do the following: <ol style="list-style-type: none"> 1) Check the LEDs on the microprocessor and memory expansion tray. If one of the microprocessor LEDs is lit, do the following: <ol style="list-style-type: none"> a) (Trained service technician only) Replace the microprocessor. 2) If the System board error LED is lit on the microprocessor and memory expansion tray, do the following: <ol style="list-style-type: none"> a) Turn off the server. Remove the top cover and the microprocessor and memory expansion tray; then, press the light path button on the system board to light the LEDs associated with the failed microprocessor (See “System-board LEDs” on page 34 for the location of the light path button). b) (Trained service technician only) Replace the failing microprocessor, which is indicated by the lit LED on the system board.

Table 22. Light path diagnostics panel LEDs (continued)

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If a action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a trained service technician. 		
LED	Description	Action
MEM	An invalid memory configuration (both the MEM LED and CONFIG LED might be lit) or a memory error has occurred.	<ol style="list-style-type: none"> If the MEM LED and the CONFIG LED are lit, the system issues an invalid memory configuration error. See the CONFIG LED action plan for more information. If the CONFIG LED is not lit, the system has detected a memory error. Complete the following steps to correct the problem: <ol style="list-style-type: none"> Turn off the server. Remove the top cover and press the light path button on the system board to light the LEDs (See “System-board LEDs” on page 34 for the location of the light path button). Check the LEDs on the server and the microprocessor and memory expansion tray. If there is no microprocessor and memory expansion tray installed, remove the DIMM air baffle and check the LEDs on the system board to see which DIMM LED is lit, then do the following: <ol style="list-style-type: none"> Make sure that DIMM is seated correctly. Replace the DIMM. If the microprocessor and memory expansion tray is installed, do the following: <ol style="list-style-type: none"> Check the LEDs on the microprocessor and memory expansion tray. If one of the DIMM LEDs is lit, do the following: <ol style="list-style-type: none"> Make sure that DIMM is seated correctly. Replace the DIMM. If the System board error LED is lit on the microprocessor and memory expansion tray, do the following: <ol style="list-style-type: none"> Turn off the server and disconnect it from the power source. Remove the top cover and the microprocessor and memory expansion tray; then, press the light path button on the system board to light the LEDs associated with the failed DIMM (See “System-board LEDs” on page 34 for the location of the light path button). Make sure that all DIMMs are seated correctly. Replace the failing DIMM, which is indicated by the lit DIMM latch on the system board (the DIMM LED is underneath the DIMM latch).

Table 22. Light path diagnostics panel LEDs (continued)

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If a action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a trained service technician. 		
LED	Description	Action
TEMP	The system temperature has exceeded a threshold level. A failing fan can cause the TEMP LED to be lit.	<ol style="list-style-type: none"> Make sure that the air vents are not blocked. Make sure that all fans are seated correctly. Determine whether a fan has failed (indicated by a lit LED on the fan). If it has, replace the fan. Make sure that the heat sink is seated correctly. Make sure that the room temperature is not too high. See “Server features and specifications” on page 6 and “Installation guidelines” on page 41 for the server temperature information.
FAN	A fan has failed, is operating too slowly, or has been removed. The TEMP LED might also be lit.	<ol style="list-style-type: none"> Check the LEDs on the hot-swap fan. Reseat the failing fan, which is indicated by a lit LED on the fan. Replace the failing fan.
BOARD	An error has occurred on the system board.	<ol style="list-style-type: none"> Check the LEDs on the server. Check the LEDs on the system board to identify the component that caused the error. The BOARD LED can be lit due to many reasons, for example: <ul style="list-style-type: none"> RAID cache card Battery Failed system board Check the IMM2 event log for information about the error. Replace any failed or missing replacement components, such as the battery. (Trained service technician only) replace the server system board.
HDD	A hard disk drive has failed or is missing.	<ol style="list-style-type: none"> Check the LEDs on the hard disk drives for the drive with a lit status LED and reseat the hard disk drive. Make sure that the cables are correctly connected to the hard disk drive backplane. For more information, see “Hard disk drive problems” on page 200. If the error remains, replace the following components in the order listed, restarting the server after each: <ol style="list-style-type: none"> Replace the hard disk drive. Replace the hard disk drive backplane.

Power-supply LEDs

This section provides information about the power supply LEDs.

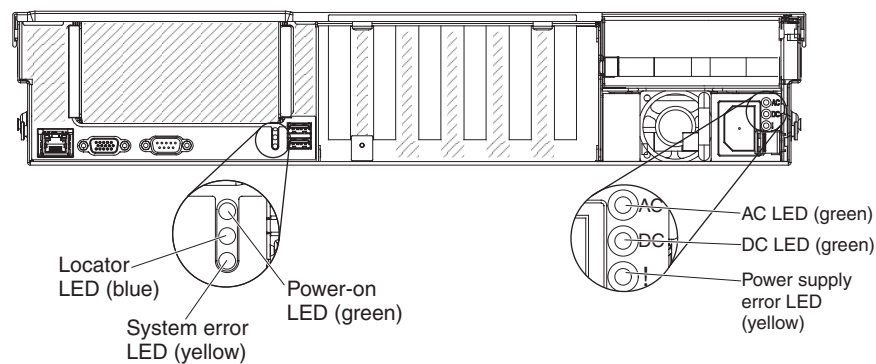
The following minimum configuration is required for the AC LED on the power supply to be lit:

- Power supply
- Power cord
- Appropriate input power from the power source

The following minimum configuration is required for the server to start:

- One microprocessor in microprocessor socket 1
- One 4 GB DIMM in a DIMM connector that is associated with microprocessor socket 1 on the system board
- One power supply
- Power cord
- Six cooling fans

The following illustration shows the locations of the power-supply LEDs.



The following table describes the problems that are indicated by various combinations of the power-supply LEDs and the power-on LED on the operator information panel and suggested actions to correct the detected problems.

Table 23. Power-supply LEDs

Power-supply LEDs			Description	Action	Notes
AC	DC	Error			
On	On	Off	Normal operation		The server is functioning correctly.
Off	Off	Off	No ac power to the server or a problem with the ac power source.	<ol style="list-style-type: none"> 1. Check the ac power to the server. 2. Make sure that the power cord is connected to a functioning power source. 3. Restart the server. If the error remains, check the power-supply LEDs. 4. Replace the power supply. 	This is a normal condition when no ac power is present.

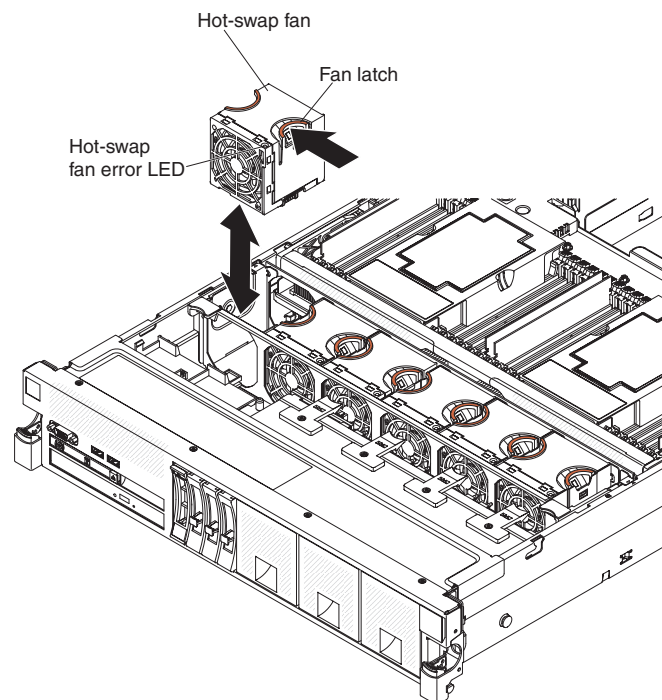
Table 23. Power-supply LEDs (continued)

Power-supply LEDs			Description	Action	Notes
AC	DC	Error			
Off	Off	On	No input power to the power supply or the power supply has detected an internal problem.	<ul style="list-style-type: none"> Make sure that the power cord is connected to a functioning power source. Replace the power supply. 	This happens only when a second power supply is providing power to the server.
Off	On	Off	Faulty power supply	Replace the power supply.	
Off	On	On	Faulty power supply	Replace the power supply.	
On	Off	Off	The system is off: The system is connected to ac power.		The server is functioning correctly.
			The system is on: Power supply not fully seated, faulty system board, or faulty power supply.	<ol style="list-style-type: none"> Reseat the power supply. Replace the power supply. (Trained service technician only) replace the system board. 	Typically indicates a power supply is not fully seated.
On	Off	On	Faulty power supply	Replace the power supply.	
On	On	On	Faulty power supply	Replace the power supply.	

Fan LEDs

The illustration in this section shows the hot-swap fan error LED location.

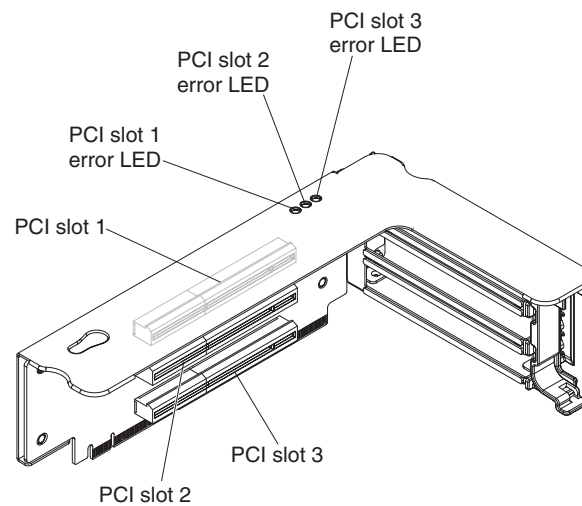
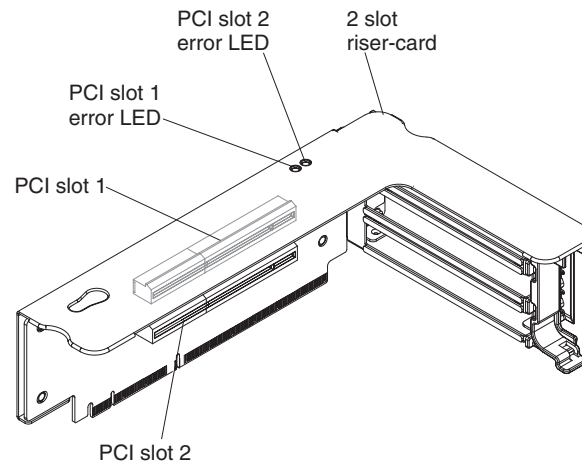
The following illustration shows the location of the fan LEDs.



PCIe riser-card LEDs

The illustrations in this section display the PCIe riser-card LED locations.

The following illustrations display the location of the LEDs on the two-slot and three-slot PCIe riser-cards.



Event logs

Use this information as an overview of the event logs.

Error codes and messages are displayed in the following types of event logs:

- **POST event log:** This log contains the most recent error codes and messages that were generated during POST. You can view the contents of the POST event log from the Setup utility (see "Starting the Setup utility" on page 146). For more information about UEFI/POST error codes, see Appendix C, "UEFI/POST error codes," on page 491.
- **System-event log:** This log contains POST and system management interrupt (SMI) events and all events that are generated by the baseboard management controller that is embedded in the integrated management module II (IMM2). You can view the contents of the system-event log through the Setup utility and through the Dynamic System Analysis (DSA) program (as IPMI event log).

The system-event log is limited in size. When it is full, new entries will not overwrite existing entries; therefore, you must periodically clear the system-event log through the Setup utility. When you are troubleshooting an error, you might have to save and then clear the system-event log to make the

most recent events available for analysis. For more information about the system-event log, see Appendix D, “Integrated management module II (IMM2) error messages,” on page 517.

Messages are listed on the left side of the screen, and details about the selected message are displayed on the right side of the screen. To move from one entry to the next, use the Up Arrow (↑) and Down Arrow (↓) keys.

Some IMM sensors cause assertion events to be logged when their setpoints are reached. When a setpoint condition no longer exists, a corresponding deassertion event is logged. However, not all events are assertion-type events.

- **Integrated management module event log:** This log contains a filtered subset of all IMM2, POST, and system management interrupt (SMI) events. You can view the IMM2 event log through the IMM2 web interface. For more information, see “Logging on to the IMM2 web interface” on page 159. You can also view the IMM2 event log through the Dynamic System Analysis (DSA) program (as the ASM event log). For more information about IMM2 error messages, see Appendix D, “Integrated management module II (IMM2) error messages,” on page 517.
- **DSA event log:** This log is generated by the Dynamic System Analysis (DSA) program, and it is a chronologically ordered merge of the system-event log (as the IPMI event log), the IMM chassis-event log (as the ASM event log), and the operating-system event logs. You can view the DSA event log through the DSA program (see “Viewing event logs without restarting the server” on page 190). For more information about DSA and DSA messages, see “Dynamic System Analysis” on page 192 and Appendix B, “DSA diagnostic test results,” on page 353.

For more information about viewing the logs or clearing the logs, see “Viewing event logs through the Setup utility,” “Viewing event logs without restarting the server” on page 190, and “Clearing the error logs” on page 192.

Viewing event logs through the Setup utility

Use this information to view the POST event and system-event logs through the Setup utility.

About this task

To view the POST event log or system-event log, complete the following steps:

Procedure

1. Turn on the server.
2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
3. Select **System Event Logs** and use one of the following procedures:
 - To view the POST event log, select **POST Event Viewer**.
 - To view the system-event log, select **System Event Log**.

Viewing event logs without restarting the server

If the server is not hung and the IMM2 is connected to a network, methods are available for you to view one or more event logs without having to restart the server.

About this task

If you have installed Dynamic System Analysis (DSA) Portable, you can use it to view the system-event log (as the IPMI event log), or the IMM2 event log (as the ASM event log), the operating-system event logs, or the merged DSA log. You can also use DSA Preboot to view these logs, although you must restart the server to use DSA Preboot. The server comes with DSA Preboot stored in integrated USB memory. To install DSA Portable or check for and download a later version of DSA Preboot CD image, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnodocid=SERV-DSA>.

Results

If IPMITool is installed in the server, you can use it to view the system-event log. Most recent versions of the Linux operating system come with a current version of IPMITool. For an overview of IPMI, go to <http://www.ibm.com/developerworks/linux/blueprints/> and click **Using Intelligent Platform Management Interface (IPMI) on IBM Linux platforms**.

You can view the IMM2 event log through the **Event Log** link in the IMM2 web interface. For more information, see “Logging on to the IMM2 web interface” on page 159.

The following table describes the methods that you can use to view the event logs, depending on the condition of the server. The first three conditions generally do not require that you restart the server.

Table 24. Methods for viewing event logs

Condition	Action
The server is not hung and is connected to a network (using an operating system controlled network ports).	<p>Use any of the following methods:</p> <ul style="list-style-type: none">• Run DSA Portable to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to IBM service and support (using ftp or local copy).• Use IPMITool to view the system-event log (requires IPMI driver).• Use the web browser interface to the IMM2 to view the system-event log locally (requires RNDIS USB LAN driver).

Table 24. Methods for viewing event logs (continued)

Condition	Action
The server is not hung and is not connected to a network (using an operating system controlled network ports).	<p>Use any of the following methods:</p> <ul style="list-style-type: none"> • Run Portable DSA to view the diagnostic event log (requires IPMI driver) or create an output file that you can send to IBM service and support (using a local copy). • Use IPMITool to view the system-event log (requires IPMI driver). • Use the web browser interface to the IMM2 to view the system-event log locally (requires RNDIS USB LAN driver). For more information, see “Obtaining the IP address for the IMM2” on page 159 and “Logging on to the IMM2 web interface” on page 159.
The IMM2 is connected to a network, and ac power is applied. The server state might be hung, not hung, or powered off.	<p>Use any of the following methods:</p> <ul style="list-style-type: none"> • Use IPMITool over the network to the IMM2 external IP address to view the system-event log. • Use the web browser interface to the IMM2 to view the system-event log. In the Web browser, type the IP address for the IMM2 and go to the Event Log page. For more information, see “Obtaining the IP address for the IMM2” on page 159 and “Logging on to the IMM2 web interface” on page 159.
The server is hung, and no communication can be made with the IMM2.	<p>Restart the server and press F2 to start DSA Preboot and view the diagnostic event log (see “Running the DSA Preboot diagnostic programs” on page 194 for more information).</p> <p>Alternatively, you can restart the server and press F1 to start the Setup utility and view the POST event log or system-event log. For more information, see “Viewing event logs through the Setup utility” on page 189.</p>

Clearing the error logs

Use this information to clear the event logs.

About this task

To clear the event logs, complete the following steps.

Note: The POST event log is automatically cleared each time the server is restarted.

Procedure

1. Turn on the server.
2. When the prompt <F1> Setup is displayed, press F1. If you have set both a power-on password and an administrator password, you must type the administrator password to view the event logs.
3. Use one of the following procedures:
 - To clear the IMM system-event log, select **System Event Logs --> Clear System Event Log**.

POST

When you turn on the server, it performs a series of tests to check the operation of the server components and some optional devices in the server. This series of tests is called the power-on self-test, or POST.

Note: This server does not use beep codes for server status.

If a power-on password is set, you must type the password and press Enter (when you are prompted), for POST to run.

If POST detects a problem an error message is displayed. See Appendix C, "UEFI/POST error codes," on page 491 for more information.

If POST detects a problem, an error message is sent to the POST event log, see "Event logs" on page 188 for more information.

Dynamic System Analysis

Lenovo Dynamic System Analysis (DSA) collects and analyzes system information to aid in diagnosing server problems.

DSA collects the following information about the server:

- Drive health information
- Event logs for ServeRAID controllers and service processors
- Hardware inventory, including PCI and USB information
- Installed applications and hot fixes (available in DSA Portable only)
- Kernel modules (available in DSA Portable only)
- Light path diagnostics status
- Network interfaces and settings
- Performance data and details about processes that are running
- RAID controller configuration
- Service processor (integrated management module) status and configuration
- System configuration

- Vital product data and firmware information

For system-specific information about the action that you should take as a result of a message that DSA generates, see Appendix B, “DSA diagnostic test results,” on page 353.

If you cannot find a problem by using DSA, see “Solving undetermined problems” on page 217 for information about testing the server.

Note: DSA Preboot might appear to be unresponsive when you start the program. This is normal operation while the program loads.

Make sure that the server has the latest version of the DSA code. To obtain DSA code and the *Dynamic System Analysis Installation and User's Guide*, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=SERV-DSA>.

DSA editions

This section describes DSA editions.

Two editions of Dynamic System Analysis are available:

- **DSA Portable**

DSA Portable Edition runs within the operating system; you do not have to restart the server to run it. It is packaged as a self-extracting file that you download from the web. When you run the file, it self-extracts to a temporary folder and performs a comprehensive collection of hardware and operating-system information. After it runs, it automatically deletes the temporary files and folder and leaves the results of the data collection and diagnostics on the server.

If you are able to start the server, use DSA Portable.

- **DSA Preboot**

DSA Preboot runs outside of the operating system; you must restart the server to run it. It is provided in the flash memory on the server, or you can create a bootable media such as a CD, DVD, ISO, USB, or PXE using the Lenovo ToolsCenter Bootable Media Creator (BoMC). For more details, see the *BoMC User Guide* at <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-BOMC>. In addition to the capabilities of the other editions of DSA, DSA Preboot includes diagnostic routines that would be disruptive to run within the operating-system environment (such as resetting devices and causing loss of network connectivity). It has a graphical user interface that you can use to specify which diagnostics to run and to view the diagnostic and data collection results.

DSA Preboot provides diagnostics for the following system components, if they are installed:

- ML2 adapter
- Optical devices (CD or DVD)
- Tape drives (SCSI, SAS, or SATA)
- Memory
- Microprocessor
- Checkpoint panel
- I2C bus
- SAS and SATA drives

If you are unable to restart the server or if you need comprehensive diagnostics, use DSA Preboot.

The Lenovo System x3750 M4 Types 8752 and 8718 server comes with DSA Preboot diagnostics code on the integrated USB flash memory. Utilities are available to reset and update the diagnostics code on the integrated USB flash device, if the diagnostic partition becomes damaged and does not start the DSA Preboot diagnostic programs. For more information and to download the utilities, go to <http://www.ibm.com/support/entry/portal/docdisplay?lnocid=SERV-DSA>.

Running the DSA Preboot diagnostic programs

Use this information to run DSA Preboot programs.

About this task

Note: The DSA memory test might take up to 30 minutes to run. If the problem is not a memory problem, skip the memory test.

To run the DSA Preboot diagnostic programs that is stored in integrated flash memory on the server, complete the following steps:

Procedure

1. If the server is running, turn off the server and all attached devices.
2. Turn on all attached devices; then, turn on the server.
3. When the prompt `<F2> Diagnostics` is displayed, press F2.

Note: The DSA Preboot diagnostic program might appear to be unresponsive for an unusual length of time when you start the program. This is normal operation while the program loads.

4. Optionally, select **Quit to DSA** to exit from the stand-alone memory diagnostic program.

Note: After you exit from the stand-alone memory diagnostic environment, you must restart the server to access the stand-alone memory diagnostic environment again.

5. Select **gui** to display the graphical user interface, or select **cmd** to display the DSA interactive menu.
6. Follow the instructions on the screen to select the diagnostic test to run.

Results

If the server stops during testing and you cannot continue, restart the server and try running the DSA Preboot diagnostic programs again. If the problem remains, replace the component that was being tested when the server stopped.

Diagnostic text messages

Use this information to understand the diagnostic text messages that are displayed while the tests are running.

Diagnostic text messages are displayed while the tests are running. A diagnostic text message contains one of the following results:

Passed: The test was completed without any errors.

Failed: The test detected an error.

Aborted: The test could not proceed because of the server configuration

Additional information concerning test failures is available in the extended diagnostic results for each test.

Viewing the test log results and transferring the DSA collection

Use this information to view the test log results and transfer DSA Preboot collection information.

To view the test log for the results when the tests are completed, click the **Success** link in the Status column, if you are running the DSA graphical user interface, or type :x to exit the Execute Tests menu, if you are running the DSA interactive menu, or select **Diagnostic Event Log** in the graphical user interface. To transfer DSA Preboot collections to an external USB device, type the copy command in the DSA interactive menu.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

- If you are running the DSA graphical user interface, click the **Success** link in the Status column.
- If you are running the DSA interactive menu (CLI), type :x to exit the Execute Tests menu; then, select **completed tests** to view the results.

You can also send the DSA error log to IBM support to aid in diagnosing the server problems.

Automated service request (call home)

The following sections provide information about the call home tools.

Note: This documentation includes references to IBM web sites, products, and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

IBM provides tools that can automatically collect and send data or call IBM Support when an error is detected. These tools can help IBM Support speed up the process of diagnosing problems.

IBM Electronic Service Agent

IBM Electronic Service Agent monitors, tracks, and captures system hardware errors and hardware and software inventory information, and reports serviceable problems directly to IBM Support.

You can also choose to collect data manually. It uses minimal system resources, and can be downloaded from the IBM website. For more information and to download IBM Electronic Service Agent, go to <http://www-01.ibm.com/support/esa/index.htm>.

IMM2 first failure data capture (FFDC) feature

The integrated management module II (IMM2) provides a first failure data capture (FFDC) feature that you can use to collect the log data for system hardware errors into a file, which you can send to IBM Support for problem determination assistance.

The following sections provide information about how to use this IMM2 feature to generate and download the FFDC log data file. For more information on the FFDC data download commands, see the Integrated Management Module II User's Guide at <http://www-947.ibm.com/support/entry/portal/docdisplay?lnodocid=MIGR-5086346>.

Capturing the FFDC log using the IMM2 Web Interface

This section provides the steps to generate and download the first failure data capture (FFDC) log data using the IMM2 Web interface.

To generate and download the first failure data capture (FFDC) log data using the IMM2 Web interface, complete the following steps:

1. Log in to the IMM2.
2. From the **Server and Support** tab, click the **Download Server Data** option.
3. Next, click on the **Download Now** button. A progress window displays indicating that the file is being generated. It prompts you to save the file and to provide the location in which you want the file saved to.

Capturing the FFDC log using IMM2 CLI commands

This section provides the steps to generate and download the first failure data capture (FFDC) log data using IMM2 CLI commands.

Note: You must have an tftp or sftp server setup prior to using this procedure. To generate and download the first failure data capture (FFDC) log data using IMM2 CLI commands, complete the following steps:

1. First, set up a tftp or sftp server.
2. Log in to the IMM2 using Telnet or SSH Server.
3. At the command prompt, type **ffdc generate**.

Note: You can also use the status command to check the progress of the file generation. You can use the copy command to obtain a copy of the existing log data file and the delete command to delete the existing log data file.

4. Next, type **ffdc status** to check the status.
5. You can wait until the file is generated, or you can type **ffdc copy -IP host address** (where *host address* is the IP address for the tftp or sftp server). The file will be copied to your tftp server or sftp server.
6. Type **exit** to exit the session when you are done.

Capturing the FFDC log using IPMI commands

This section provides the steps to generate and download the first failure data capture (FFDC) log data using IPMI commands.

Note: For this procedure, you will need to use a tool such as IPMITool to communicate with IMM2.

To generate and download the first failure data capture (FFDC) log data using IPMI commands, complete the following steps:

1. From a host system, type the command: `ipmitool -I lanplus -H 169.254.95.118 -U USERID -P PASSWORD raw 0x3a 0x49 0x1` (where 169.254.95.118 is the IMM2 IP address). Make sure that you replace this IP address with your IP address.
2. Wait 2 to 3 minutes, then type: `ipmitool -I lanplus -H 169.254.95.118 -U USERID -P PASSWORD raw 0x3a 0x4d 0x01`. If you receive a response of 01, the ffdc log data is ready to download. If you do not get a response of 01, wait longer and send this command again.
3. Next, type the command: `wget ftp://192.168.5.199:121/download/ffdc/*.tgz -user immftp -password imm4tw`. This command downloads the ffdc file to your local environment.

Error messages

Use this information to view UEFI/POST, IMM2, boot code display, and DSA error codes and messages.

For the list of error codes and messages for UEFI/POST, IMM2, boot code display error codes, and DSA that are generated when a problem is detected, see Appendix C, “UEFI/POST error codes,” on page 491, Appendix A, “Boot code display error codes,” on page 349, Appendix B, “DSA diagnostic test results,” on page 353, and Appendix D, “Integrated management module II (IMM2) error messages,” on page 517.

Troubleshooting by symptom

Use the troubleshooting tables to find solutions to problems that have identifiable symptoms. The information in the tables cover events that might occur that do not produce a log event entry or turn on an LED.

If you cannot find a solution to the problem in these tables, see Appendix B, “DSA diagnostic test results,” on page 353 for information about testing the server and “Running the DSA Preboot diagnostic programs” on page 194 for additional information about running the DSA Preboot program that is stored in integrated USB memory on the server. For additional information to help you solve problems, see “Start here” on page 171.

If you have just added new software or a new optional device and the server is not working, complete the following steps before you use the troubleshooting tables:

1. Check the system-error LED on the operator information panel; if it is lit, check the light path diagnostics LEDs (see “Light path diagnostics” on page 178).
2. Remove the software or device that you just added.
3. Run Dynamic System Analysis (DSA) to determine whether the server is running correctly (for information about using DSA, see Appendix B, “DSA diagnostic test results,” on page 353).

4. Reinstall the new software or new device.

CD/DVD drive problems

Use this information to solve CD/DVD drive problems.

Table 25. CD/DVD drive problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The CD-ROM/DVD-ROM drive is not recognized.	<ol style="list-style-type: none"> Check the IMM2 event log for events associated with CD-ROM/DVD-ROM drive. Make sure that: <ul style="list-style-type: none"> The CD or DVD is recognized and enabled in the Setup utility (see “Starting the Setup utility” on page 146 for more information). If the CD or DVD is not recognized: <ul style="list-style-type: none"> Check the CD or DVD cables and jumpers for damage and to make sure that they are connected correctly The correct device driver is installed for the CD or DVD drive. The CD or DVD is enabled in the operating system. Run the CD or DVD drive diagnostic programs (See “Running the DSA Preboot diagnostic programs” on page 194). Replace the CD or DVD drive. (Trained service technician only) Replace the system board.
A CD or DVD is not working correctly.	<ol style="list-style-type: none"> Clean the CD or DVD. Replace the CD or DVD with new CD or DVD media. Run the CD or DVD drive diagnostic programs (see “Running the DSA Preboot diagnostic programs” on page 194). Reseat the CD or DVD drive (see “Removing a CD/DVD drive” on page 250 and “Replacing a CD/DVD drive” on page 251). Make sure that the cable is connected to the system board correctly and connected to the correct SATA port. Replace the CD or DVD drive.
The CD or DVD drive tray is not working but the drive is recognized.	<ol style="list-style-type: none"> Make sure that the server is turned on and the CD or DVD drive is enabled in the Setup utility (see “Starting the Setup utility” on page 146). Note: The CD or DVD eject button might be disabled if you are starting the server from a CD or DVD. Insert the end of a straightened paper clip into the manual tray-release opening. Reseat the CD or DVD drive (see “Removing a CD/DVD drive” on page 250 and “Replacing a CD/DVD drive” on page 251). Replace the CD or DVD drive.

Fan problems

Use this information to solve problems associated with the fans running at a high RPM.

Table 26. Fan problems

<ul style="list-style-type: none">• Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.• See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).• If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
The fans are running at an abnormally high revolutions per minute (RPM). The TEMP LED may or may not be lit.	<ol style="list-style-type: none">1. Check to see if the system inlet perforation or heatsinks are clogged.2. Make sure that all baffles are installed correctly in the server.3. Check the thermal grease on the microprocessor. Make sure the thermal grease is not contaminated.

Hypervisor problems

Use this information to solve hypervisor problems.

Table 27. Hypervisor problems

<ul style="list-style-type: none">• Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.• See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).• If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
If an optional embedded hypervisor flash device is not listed in the expected boot order, does not appear in the list of boot devices, or a similar problem has occurred.	<ol style="list-style-type: none">1. Make sure that the optional embedded hypervisor flash device is selected on the boot manager (<F12> Select Boot Device) at startup.2. Make sure that the embedded hypervisor flash device is seated in the connector correctly (see “Removing a USB embedded hypervisor flash device” on page 268 and “Replacing a USB embedded hypervisor flash device” on page 269).3. See the documentation that comes with the optional embedded hypervisor flash device for setup and configuration information.4. Make sure that other software works on the server.

General problems

Use this information to solve general problems.

Table 28. General problems

<ul style="list-style-type: none">Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
A cover latch is broken, an LED is not working, or a similar problem has occurred.	If the part is a CRU, replace it. If the part is a FRU, the part must be replaced by a trained service technician (see Chapter 6, “Removing and replacing components,” on page 235 to determine whether the part is a CRU or a FRU).

Hard disk drive problems

Use this information to solve hard disk drive problems.

Table 29. Hard disk drive problems

<ul style="list-style-type: none">Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
Not all drives are recognized by the DSA hard disk drive diagnostic test.	<ol style="list-style-type: none">Set up the RAID configuration before you run the DSA diagnostic tests.Remove the drive that is indicated by DSA (see “Removing 2.5-inch and 1.8-inch hot-swap drives” on page 246); then, run the hard disk drive diagnostic test again (see “Running the DSA Preboot diagnostic programs” on page 194).If the remaining drives are recognized, replace the drive that you removed with a new one.
The server stops responding during the hard disk drive diagnostic test.	<ol style="list-style-type: none">Set up the RAID configuration before you run the DSA diagnostic tests.Remove the hard disk drive that was being tested when the server stopped responding (see “Removing 2.5-inch and 1.8-inch hot-swap drives” on page 246), and run the diagnostic test again (see “Running the DSA Preboot diagnostic programs” on page 194).If the hard disk drive diagnostic test runs successfully, replace the drive that you removed with a new one (see “Replacing 2.5-inch and 1.8-inch hot-swap drives” on page 248).
A hard disk drive has failed, and the associated yellow hard disk drive status LED is lit.	Check the IMM2 event log for hard disk drive events and resolve the problem.

Table 29. Hard disk drive problems (continued)

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
A newly installed hard disk drive is not recognized.	<ol style="list-style-type: none"> Set up the RAID configuration. Check the IMM event log for hard disk drive events and resolve the problem. If the LED is lit, remove the drive from the drive bay, wait 45 seconds, and reinsert the drive, making sure that the drive assembly connects to the hard disk drive backplane. Observe the associated green hard disk drive activity LED and the yellow status LED: <ul style="list-style-type: none"> If the green activity LED is flashing and the yellow status LED is not lit, the drive is recognized by the controller and is working correctly. Run the DSA hard disk drive test to determine whether the drive is detected (see “Running the DSA Preboot diagnostic programs” on page 194). If the green activity LED is flashing and the yellow status LED is flashing slowly, the drive is recognized by the controller and is rebuilding. If neither LED is lit or flashing, check the hard disk drive backplane (go to step 5). If the green activity LED is flashing and the yellow status LED is lit, replace the drive. If the activity of the LEDs remain the same, go to step 5. If the activity of the LEDs changes, return to step 1. Make sure that a hard disk drive backplane is present to install the drive into. Make sure that the hard disk drive backplane is correctly seated. When it is correctly seated, the drive assemblies correctly connect to the backplane without bowing or causing movement of the backplane. Reseat the backplane power cable and repeat steps 1 through 3. Reseat the backplane signal cable and repeat steps 1 through 3. Suspect the backplane signal cable or the backplane: <ol style="list-style-type: none"> Replace the affected backplane signal cable. Replace the affected backplane. Run the DSA tests for the SAS/SATA adapter and hard disk drives (see “Running the DSA Preboot diagnostic programs” on page 194). <ul style="list-style-type: none"> If the adapter passes the test but the drives are not recognized, replace the backplane signal cable and run the tests again. Replace the backplane. If the adapter fails the test, disconnect the backplane signal cable from the adapter and run the tests again. If the adapter fails the test, replace the adapter. See “Problem determination tips” on page 218 for more information. <i>(Trained service technician only)</i> replace the system board.

Table 29. Hard disk drive problems (continued)

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
Multiple hard disk drives fail or are offline.	<ol style="list-style-type: none"> If the server was recently installed, moved, or serviced, make sure that the drives are seated correctly, the backplane cables are securely connected to the backplane and the system board, and the RAID adapter is configured correctly. Check the IMM2 event log for any hard disk drive events and resolve the problem. Install the drives on a different backplane to see if they are recognized. If they are, replace the backplane; otherwise, replace the drive. Replace the RAID adapter. Replace the system board.
Hard disk drive(s) installed in the server, but not detected by the SAS controller.	<p>Complete the following steps:</p> <ol style="list-style-type: none"> Verify that the drives are supported for this server. See the ServerProven web site at http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/ for a list of supported hard drives. Check the IMM event log for any RAID hard disk drive events and resolve the problem. Make sure that the drives are seated correctly, the SAS signal cables are securely connected, the backplane cables are securely connected to the backplanes, and the RAID adapter is configured correctly. If the problem remains: <ol style="list-style-type: none"> Reseat the backplane(s), SAS signal cable(s), and backplane power cable(s). Restart the server.
A replacement hard disk drive does not rebuild.	<ol style="list-style-type: none"> Make sure that the hard disk drive is recognized by the adapter (the green hard disk drive activity LED is flashing). If it is not recognized, see A newly installed hard disk drive is not recognized. Review the SAS/SATA RAID adapter documentation to determine the correct configuration parameters and settings.
An yellow hard disk drive status LED does not accurately represent the actual state of the associated drive.	<ol style="list-style-type: none"> If the yellow hard disk drive LED and the RAID adapter software do not indicate the same status for the drive, complete the following steps: <ol style="list-style-type: none"> Turn off the server. Reseat the SAS/SATA adapter. Reseat the backplane signal cable and backplane power cable. Reseat the hard disk drive. Turn on the server and observe the activity of the hard disk drive LEDs. See “Problem determination tips” on page 218 for more information.

Intermittent problems

Use this information to solve intermittent problems.

Table 30. Intermittent problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The server resets (restarts) occasionally.	<ol style="list-style-type: none"> Check the IMM2 event log for messages associated with the restart event. If the reset occurs during POST and the POST watchdog timer is enabled (click System Settings --> Recovery --> System Recovery --> POST Watchdog Timer in the Setup utility (see "Starting the Setup utility" on page 146) to see the POST watchdog setting), make sure that sufficient time is allowed in the watchdog timeout value (POST Watchdog Timer). If the server continues to reset during POST, see Appendix C, "UEFI/POST error codes," on page 491 and Appendix B, "DSA diagnostic test results," on page 353. If the reset occurs after the operating system starts, disable any automatic server restart (ASR) utilities, such as the IBM Automatic Server Restart IPMI Application for Windows, or any ASR devices that are be installed. Note: ASR utilities operate as operating-system utilities and are related to the IPMI device driver. If the reset continues to occur after the operating system starts, the operating system might have a problem; see "Software problems" on page 214.

Keyboard, mouse, or pointing-device problems

Use this information to solve keyboard, mouse, or pointing-device problems.

Table 31. Keyboard, mouse, or pointing device problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
All or some keys on the keyboard do not work.	<ol style="list-style-type: none"> Make sure that the following conditions are met: <ul style="list-style-type: none"> The keyboard cable is securely connected. The server and the monitor are turned on. See http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/ for information about keyboard compatibility. If you are using a USB keyboard and it is connected to a USB hub, disconnect the keyboard from the hub and connect it directly to the server. If you are using a USB keyboard and it is connected to a USB hub, disconnect the keyboard from the hub and connect it directly to the server. If the keyboard is connected directly to the server, try another port. If the keyboard works, replace the USB hub. Replace the keyboard.

Table 31. Keyboard, mouse, or pointing device problems (continued)

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The mouse or pointing device does not work.	<ol style="list-style-type: none"> 1. See http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/ for information about mouse compatibility. 2. Make sure that the following conditions are met: <ul style="list-style-type: none"> • The mouse or pointing-device cable is securely connected to the server. • If you are using a pointing device, the keyboard and mouse or pointing-device cables are not reversed. • The mouse or pointing-device device drivers are installed correctly. • The server and the monitor are turned on. • The mouse option is enabled in the Setup utility (see “Starting the Setup utility” on page 146). 3. If you are using a USB mouse and it is connected to a USB hub, disconnect the mouse from the hub and connect it directly to the server. If it is connected to the server, try another port. If the mouse works, replace the USB hub. 4. Replace the mouse or pointing device.

Memory problems

Use this information to solve memory problems.

Table 32. Memory problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The amount of system memory that is displayed is less than the amount of installed physical memory.	<p>Note: If you change memory, you must update the memory configuration in the Setup utility (see “Using the Setup utility” on page 145 for more information). For more information about installing DIMMs, see “Installing a memory module” on page 49, “Non-mirroring (independent mode)” on page 52, “Memory mirroring” on page 52, and “Memory sparing” on page 54.</p> <ol style="list-style-type: none"> If the server was recently installed, moved, or serviced, make sure that all DIMMs are seated correctly. If a new DIMM has been installed recently, verify that you have not received any configuration events in the event log. Otherwise, check the IMM2 event log. If any DIMM configuration events are listed, resolve the event problems first. Make sure that the following conditions are met: <ul style="list-style-type: none"> No error LEDs are lit on the operator information panel or on the microprocessor and memory expansion tray. Memory mirroring does not account for the discrepancy (see “Memory mirroring” on page 52). The memory modules are seated correctly (see “Removing a memory module” on page 256 and “Replacing a memory module” on page 257). You have installed the correct type of memory (see “Installing a memory module” on page 49). If you changed the memory, you updated the memory configuration in the Setup utility. All banks of memory are enabled. The server might have automatically disabled a memory bank when it detected a problem, or a memory bank might have been manually disabled. Check the POST event log: <ul style="list-style-type: none"> If a DIMM was disabled by a systems-management interrupt (SMI), replace the DIMM. If a DIMM was disabled by the user or by POST, run the Setup utility and enable the DIMM. Run memory diagnostics (see “Dynamic System Analysis” on page 192). If an error is detected, follow the steps to correct the error. For the system board and the microprocessor and memory expansion tray, add DIMMs one at a time (see “Replacing a memory module” on page 257). Reseat the DIMM. Restart the server.
Multiple rows of DIMMs in a branch are identified as failing.	<ol style="list-style-type: none"> Check the system-event log for any events associated with a failing DIMM. Resolve the DIMM errors that are listed in the system-event log, starting with the first error that has occurred. Resolve any DIMM configuration mismatches that are listed in the IMM event log.

Microprocessor problems

Use this information to solve microprocessor problems.

Table 33. Microprocessor problems

<ul style="list-style-type: none">Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
The server goes directly to the POST event viewer when it is turned on.	1. Check the IMM2 event log and resolve any errors that have occurred.

Monitor and video problems

Use this information to solve monitor and video problems.

Some monitors have their own self-tests. If you suspect a problem with your monitor, see the documentation that comes with the monitor for instructions for testing and adjusting the monitor. If you cannot diagnose the problem, call for service.

Table 34. Monitor and video problems

<ul style="list-style-type: none">Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
Testing the monitor or video.	<ol style="list-style-type: none">Make sure that the monitor cables are firmly connected.If the server is attached to a KVM switch, bypass the KVM switch to eliminate it as a possible cause of the problem; connect the monitor cable to the correct connector on the rear of the server. If the video now works, replace the KVM switch.Try using the monitor on a different server. If it still does not work, replace the cable, and then replace the monitor.Make sure that the video device driver is at the latest level.(Trained service technician only) Replace the system board.
The monitor works when you turn on the server, but the screen goes blank when you start some application programs.	<ol style="list-style-type: none">Make sure that the following conditions are met:<ul style="list-style-type: none">The application program is not setting a display mode that is higher than the capability of the monitor.You installed the necessary device drivers for the application.Run video diagnostics (see "Running the DSA Preboot diagnostic programs" on page 194).<ul style="list-style-type: none">If the server passes the video diagnostics, the video is good; see "Solving undetermined problems" on page 217.(Trained service technician only) If the server fails the video diagnostics, replace the system board.

Table 34. Monitor and video problems (continued)

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The monitor has screen jitter, or the screen image is wavy, unreadable, rolling, or distorted.	<ol style="list-style-type: none"> 1. If the monitor self-tests show that the monitor is working correctly, consider the location of the monitor. Magnetic fields around other devices (such as transformers, appliances, fluorescents, and other monitors) can cause screen jitter or wavy, unreadable, rolling, or distorted screen images. If this happens, turn off the monitor. Attention: Moving a color monitor while it is turned on might cause screen discoloration. Move the device and the monitor at least 305 mm (12 in.) apart, and turn on the monitor. Notes: <ol style="list-style-type: none"> a. To prevent diskette drive read/write errors, make sure that the distance between the monitor and any external diskette drive is at least 76 mm (3 in.). b. Non-Lenovo monitor cables might cause unpredictable problems. 2. If the server is attached to a KVM switch, bypass the KVM switch to eliminate it as a possible cause of the problem; connect the monitor cable to the correct connector on the rear of the server. If the image clears, replace the KVM switch. 3. Reseat the monitor cable. 4. Try the monitor on a different server. If it still does not work, replace the cable, then the monitor. 5. Replace the adapter, if installed. 6. (Trained service technician only) Replace the system board.
Wrong characters appear on the screen.	<ol style="list-style-type: none"> 1. Verify that the language and locality settings are correct for the keyboard and operating system. 2. If the wrong language is displayed, update the server firmware to the latest level (see “Updating the firmware” on page 141) with the correct language.

Observable problems

Use this information to solve observable server problems.

Table 35. Symptoms and user actions for observable problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
Power supply - squealing, scratching, or grinding noise.	<ol style="list-style-type: none"> If the server is running redundant power, pull and replace each power supply, one at a time, to determine which power supply is causing the noise. If a single power supply is identified as causing the problem, complete the following steps: <ol style="list-style-type: none"> Make sure that the power supply causing the noise does not have an obstruction (cable, cable label, etc). Replace the power supply. If the noise can not be associated with a single power supply, it might be coming from the cooling fans.
Power supply - Jet or fast-moving air noise.	Check the IMM event log for events associated with thermals, cooling, and fans.
Power supply - Clicking or rattling noise.	<ol style="list-style-type: none"> If the server is running redundant power, pull and replace each power supply, one at a time, to determine which power supply is causing the noise. If a single power supply is identified as causing the problem, complete the following steps: <ol style="list-style-type: none"> Make sure that the power supply causing the noise does not have an obstruction (cable, cable label, etc). Replace the power supply. If the noise can not be associated with a single power supply, it may be coming from the cooling fans.
Fans - Squealing, scratching, or grinding noise.	<ol style="list-style-type: none"> This server has redundant hot-swap cooling. Remove and replace each fan assembly, one at a time, to determine which assembly is causing the noise. If a single fan assembly is identified as causing the problem, complete the following steps: <ol style="list-style-type: none"> Make sure that the fan assembly causing the noise does not have an obstruction (cable, cable label, etc) touching the fan blades during operation. Replace the fan assembly. If the noise can not be associated with a single fan assembly, it might be coming from the cooling fans in a power supply.
Fans - Jet or fast moving air noise.	Check the IMM event log for events associated with thermals, cooling, and fans.
Fans - Clicking, or rattling noise.	<ol style="list-style-type: none"> This server has redundant hot-swap cooling. Remove and replace each fan assembly, one at a time, to determine which assembly is causing the noise. <ol style="list-style-type: none"> Make sure that the fan assembly causing the noise does not have an obstruction (cable, cable label, etc) touching the fan blades during operation. Replace the fan assembly. If the noise can not be associated with a single fan assembly, it might be coming from the cooling fans in a power supply.

Table 35. Symptoms and user actions for observable problems (continued)

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
Visible physical damage; Broken, damaged, or malfunctioning door, bezel, cover, or chassis part.	Contact Lenovo Support.
Server is unresponsive (POST is complete and operating system is running)	<p>If you are in the same location as the server, complete the following steps:</p> <ol style="list-style-type: none"> 1. If you are using a KVM connection, make sure that the connection is operating correctly. Otherwise, make sure that the keyboard and mouse are operating correctly. 2. If possible, log in to the server and verify that all applications are running (no applications are hung). 3. Restart the server. 4. If the problem remains, make sure that any new software has been installed and configured correctly. 5. Contact your place of purchase of the software or your software provider. <p>If you are accessing the server from a remote location, complete the following steps:</p> <ol style="list-style-type: none"> 1. Make sure that all applications are running (no applications are hung). 2. Attempt to log out of the system and log back in. 3. Validate the network access by pinging or running a trace route to the server from a command line. <ol style="list-style-type: none"> a. If you are unable to get a response during a ping test, attempt to ping another server in the chassis to determine whether it is a connection problem or server problem. b. Run a trace route to determine where the connection breaks down. Attempt to resolve a connection issue with either the VPN or the point at which the connection breaks down. 4. Restart the server remotely through the management interface. 5. If the problem remains, verify that any new software has been installed and configured correctly. 6. Contact your place of purchase of the software or your software provider.
Unusual smell	<p>Complete the following steps until the problem is solved.</p> <ol style="list-style-type: none"> 1. An unusual smell might be coming from newly installed equipment. 2. If the problem remains, contact Lenovo Support.
Server seems to be running hot	Make sure that the room temperature is within the specified range (see “Server features and specifications” on page 6).

Optional-device problems

Use this information to solve optional-device problems.

Table 36. Optional-device problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
An optional device that was just installed does not work.	<ol style="list-style-type: none"> Check the IMM2 event log for any events associated with the device. Make sure that the following conditions are met: <ul style="list-style-type: none"> The device is installed in the correct port. The device is designed for the server (see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/). You followed the installation instructions that came with the device, and the device is installed correctly. You have not loosened any other installed devices or cables. You updated the configuration information in the Setup utility. Whenever memory or any other device is changed, you must update the configuration. Reseat the device that you just installed. Replace the device that you just installed.
An optional device that worked previously does not work now.	<ol style="list-style-type: none"> Check the IMM2 event log for any events associated with the device. Make sure that all of the cable connections for the device are secure. Reseat the failing device. If the device comes with test instructions, use those instructions to test the device. If the failing device is a SCSI device, make sure that the following conditions are met: <ul style="list-style-type: none"> The cables for all external SCSI devices are connected correctly. The last device in each SCSI chain, or the end of the SCSI cable, is terminated correctly. Any external SCSI device is turned on. You must turn on an external SCSI device before you turn on the server. Replace the failing device.
PCIe adapters not recognized or are not functioning	<ol style="list-style-type: none"> Check the IMM2 event log and resolve any errors related to the device. Make sure that the adapter is on the ServerProven list for the Machine Type (see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/). Make sure that the adapter is installed in the correct slot. Make sure that the correct device drivers for the device are installed on your operating system. Resolve any resource conflicts if the server is running in legacy mode (UEFI). Check for service bulletins for help with this problem. Make sure that any adapter external connections are correct and not physically damaged.

Power problems

Use this information to solve power problems.

Table 37. Power problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
<p>The power-on button does not work, and the reset button does not work (the server does not start).</p> <p>Note: The power-on button will not function until approximately 10 seconds after the server has been connected to ac power.</p>	<ol style="list-style-type: none"> Check the ac power LED and the dc power LED on the power supply see “Power-supply LEDs” on page 186. Check the IMM2 event log and resolve any errors related to the device. Install an additional power supply or change the input power source from 110 V to 220 V. If you just installed an optional device, remove it and restart the server. If the server now starts, you might have installed more devices than the power supply can support. Make sure that the power interposer card is connected to the power supply connector and the system board correctly. Replace the operator information panel and operator information panel cable.
The server does not turn off	<ol style="list-style-type: none"> Determine whether you are using an Advanced Configuration and Power Interface (ACPI) or a non-ACPI operating system. If you are using a non-ACPI operating system, complete the following steps: <ol style="list-style-type: none"> Press Ctrl+Alt+Delete. Turn off the server by pressing the power-on button and holding it down for 5 seconds. Restart the server. If the server fails POST and the power-on button does not work, disconnect the ac power cord for 20 seconds; then, reconnect the ac power cord and restart the server. If the problem remains or if you are using an ACPI-aware operating system, suspect the system board.
The server unexpectedly shuts down, and the LEDs on the operator information panel are not lit.	<ol style="list-style-type: none"> Check the IMM2 event log for errors and resolve any errors associated with the device. Check the LCD display panel for other error information. If the problem remains, see “Solving undetermined problems” on page 217.
The server goes directly to the POST Event Viewer when it is turned on.	Check the IMM2 event log and resolve any errors that has occurred.

Serial-device problems

Use this information to solve serial-device problems.

Table 38. Serial-device problems

<ul style="list-style-type: none"> Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The number of serial ports that are identified by the operating system is less than the number of installed serial ports.	<ol style="list-style-type: none"> Make sure that the following conditions are met: <ul style="list-style-type: none"> Each port is assigned a unique address in both the Setup utility and the operating system, and none of the serial ports are disabled. The serial-port adapter (if one is present) is seated correctly. Reseat the serial port adapter. Replace the serial port adapter.
A serial device does not work.	<ol style="list-style-type: none"> Make sure that the following conditions are met: <ul style="list-style-type: none"> The device is compatible with the server. The serial port is enabled and is assigned a unique address in both the Setup utility and the operating system. The device is connected to the correct connector (see "System-board internal connectors" on page 30 and "System-board external connectors" on page 30). Reseat the following components: <ol style="list-style-type: none"> Failing serial device Serial cable Replace the components listed in step 2 one at a time, in the order shown, restarting the server each time. Replace the serial adapter (if one is installed). (Trained service technician only) Replace the system board.

ServerGuide problems

Use this information to solve ServerGuide problems.

Table 39. ServerGuide problems

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The <i>ServerGuide Setup and Installation</i> CD will not start.	<ol style="list-style-type: none"> 1. Make sure that the server supports the ServerGuide program and has a startable (bootable) CD or DVD drive. See the readme file that is part of the ISO image at http://www.ibm.com/support/entry/portal/docdisplay?lnocid=LNVO-CENTER. 2. Make sure that you burned the CD or DVD from an image (do not burn the CD or DVD ISO file as a data disk) 3. Make sure that you burned the CD or DVD as <i>disk at once</i> (not track at once). 4. If the startup (boot) sequence settings have been changed, make sure that the CD or DVD drive is first in the startup sequence. 5. If more than one CD or DVD drive is installed, make sure that only one drive is set as the primary drive.
The MegaRAID Storage Manager program cannot view all installed drives, or the operating system cannot be installed.	<ol style="list-style-type: none"> 1. Make sure that the hard disk drive is connected correctly. 2. Make sure that the SAS/SATA hard disk drive cables are securely connected. Note: You may need to update the hard disk drive firmware level. Back-level firmware can be the reason a hard disk drive is not recognized. 3. Follow the steps for A newly installed hard disk drive is not recognized.
The operating-system installation program continuously loops.	Make more space available on the hard disk.
The ServerGuide program will not start the operating-system CD.	Make sure that the operating-system CD is supported by the ServerGuide program. For a list of supported operating-system versions, go to http://www.ibm.com/systems/management/serverguide/sub.html , click IBM Service and Support Site , click the link for your ServerGuide version, and scroll down to the list of supported Microsoft Windows operating systems.

Table 39. ServerGuide problems (continued)

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
The operating system cannot be installed; the option is not available.	Make sure that the server supports the operating system. If it does, either no logical drive is defined (SCSI RAID servers), or the ServerGuide System Partition is not present. Run the ServerGuide program and make sure that setup is complete.

Software problems

Use this information to solve software problems.

Table 40. Software problems

<ul style="list-style-type: none"> • Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved. • See Chapter 5, "Parts listing, Lenovo System x3750 M4 Types 8752 and 8718," on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU). • If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician. 	
Symptom	Action
You suspect a software problem.	<ol style="list-style-type: none"> 1. Make sure that the following conditions are met: <ul style="list-style-type: none"> • The server has the minimum amount of memory that is needed to run the software. For memory requirements, see the information that is provided with the software. • The operating system is on the ServerProven list (see http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/) and supported by your hardware. • If you have just installed an adapter, make sure that the correct device driver for that adapter is installed on the server. • The software is designed to run on the server and the operating system that is installed on the server. • Other software that is installed on the server runs correctly. • The software can be installed on another server (running the same level of operating system) and works correctly. 2. If you receive any error messages when you use the software, see the information that comes with the software for a description of the messages and suggested solutions to the problem. 3. Check the operating system logs for any events related to your software and attempt to resolve them. 4. Contact your software provider for additional problem resolution.

Universal Serial Bus (USB) port problems

Use this information to solve USB port problems.

Table 41. USB port problems

<ul style="list-style-type: none">• Follow the suggested actions in the order in which they are listed in the Action column until the problem is solved.• See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine which components are customer replaceable units (CRU) and which components are field replaceable units (FRU).• If an action step is preceded by <i>(Trained service technician only)</i>, that step must be performed only by a Trained service technician.	
Symptom	Action
A USB device does not work.	<ol style="list-style-type: none">1. Make sure that the correct device drivers are installed on the server. See the production documentation for the USB device or the manufacturer’s website for information about the device drivers.2. Use the Setup utility to make sure that the device is configured correctly (see “Using the Setup utility” on page 145).3. If the USB device is connected into the hub or the console breakout cable, disconnect the device and connect it to a USB port on the server.4. Run the DSA USB diagnostic test (see “Running the DSA Preboot diagnostic programs” on page 194).

Video problems

Use this information to solve video problems.

See “Monitor and video problems” on page 206.

Solving power problems

Use this information to solve power problems.

About this task

Power problems can be difficult to solve. For example, a short circuit can exist anywhere on any of the power distribution buses. Usually, a short circuit will cause the power subsystem to shut down because of an overcurrent condition. To diagnose a power problem, use the following general procedure:

Procedure

1. Check the IMM2 event log and resolve any errors related to the power (see “Power problems” on page 211).
2. Check for short circuits, for example, if a loose screw is causing a short circuit on a circuit board.
3. Remove the adapters and disconnect the cables and power cords to all internal and external devices until the server is at the minimum configuration that is required for the server to start (see “Solving undetermined problems” on page 217 for the minimum configuration).
4. Reconnect all ac power cords and turn on the server. If the server starts successfully, reseal the adapters and devices one at a time until the problem is isolated.

Results

If the server does not start from the minimum configuration, see “Power-supply LEDs” on page 186 to replace the components in the minimum configuration one at a time until the problem is isolated.

Solving Ethernet controller problems

Use this information to solve Ethernet controller problems.

About this task

The method that you use to test the Ethernet controller depends on which operating system you are using. See the operating-system documentation for information about Ethernet controllers, and see the Ethernet controller device-driver readme file.

Try the following procedures:

- Make sure that the correct device drivers, which come with the server are installed and that they are at the latest level.
- Make sure that the Ethernet cable is installed correctly.
 - The cable must be securely attached at all connections. If the cable is attached but the problem remains, try a different cable.
 - If you set the Ethernet controller to operate at 100 Mbps or 1000 Mbps, you must use Category 5 cabling.
- Determine whether the hub supports auto-negotiation. If it does not, try configuring the integrated Ethernet controller manually to match the speed and duplex mode of the hub.
- Check the Ethernet controller LEDs on the rear panel of the server. These LEDs indicate whether there is a problem with the connector, cable, or hub.
 - The Ethernet link status LED is lit when the Ethernet controller receives a link pulse from the hub. If the LED is off, there might be a defective connector or cable or a problem with the hub.
 - The Ethernet transmit/receive activity LED is lit when the Ethernet controller sends or receives data over the Ethernet network. If the Ethernet transmit/receive activity LED is off, make sure that the hub and network are operating and that the correct device drivers are installed.
- Check the LAN activity LED on the rear of the server. The LAN activity LED is lit when data is active on the Ethernet network. If the LAN activity LED is off, make sure that the hub and network are operating and that the correct device drivers are installed.
- Check for operating-system-specific causes of the problem, and also make sure that the operating system drivers are installed correctly.
- Make sure that the device drivers on the client and server are using the same protocol.

If the Ethernet controller still cannot connect to the network but the hardware appears to be working, the network administrator must investigate other possible causes of the error.

Solving undetermined problems

Use this information to solve undetermined problems.

About this task

If Dynamic System Analysis (DSA) did not diagnose the failure or if the server is inoperative, use the information in this section.

If you suspect that a software problem is causing failures (continuous or intermittent), see “Software problems” on page 214.

Corrupted data in CMOS memory or corrupted UEFI firmware can cause undetermined problems. To reset the CMOS data, use switch 2 on the SW7 switch block to clear the CMOS memory and override the power-on password; see Table 3 on page 33. If you suspect that the UEFI firmware is corrupted, see “Recovering from a UEFI update failure or UEFI image corruption” on page 219.

If the power supplies are working correctly, complete the following steps:

Procedure

1. Turn off the server.
2. Make sure that the server is cabled correctly.
3. Remove or disconnect the following devices, one at a time, until you find the failure. Turn on the server and reconfigure it each time.
 - Any external devices.
 - Surge-suppressor device (on the server).
 - Printer, mouse, and non-Lenovo devices.
 - Each adapter.
 - Hard disk drives.
 - Memory modules. The minimum configuration requirement is one 4 GB DIMM in slot 1.
4. Turn on the server.

Results

If the problem is solved when you remove an adapter from the server but the problem recurs when you reinstall the same adapter, suspect the adapter; if the problem recurs when you replace the adapter with a different one, try a different PCIe slot.

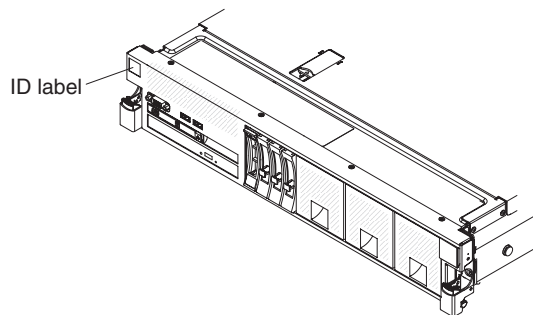
If you suspect a networking problem and the server passes all the system tests, suspect a network cabling problem that is external to the server.

Problem determination tips

Because of the variety of hardware and software combinations that you can encounter, use the information in this section to assist you in problem determination.

The model number and serial number are located on the ID label on the front of the server as shown in the following illustration.

Note: The illustrations in this document might differ slightly from your hardware.



- Machine type and model
- Microprocessor or hard disk drive upgrades
- Failure symptom
 - Does the server fail the Dynamic System Analysis diagnostic tests?
 - What occurs? When? Where?
 - Does the failure occur on a single server or on multiple servers?
 - Is the failure repeatable?
 - Has this configuration ever worked?
 - What changes, if any, were made before the configuration failed?
 - Is this the original reported failure?
- Diagnostic program type and version level
- Hardware configuration (print screen of the system summary)
- UEFI firmware level
- IMM2 firmware level
- Operating-system software

You can solve some problems by comparing the configuration and software setups between working and nonworking servers. When you compare servers to each other for diagnostic purposes, consider them identical only if all the following factors are exactly the same in all the servers:

- Machine type and model
- UEFI firmware level
- IMM2 firmware level
- Adapters and attachments, in the same locations
- Address jumpers, terminators, and cabling
- Software versions and levels
- Diagnostic program type and version level
- Setup utility settings

- Operating-system control-file setup

See Appendix E, “Getting help and technical assistance,” on page 867 for information about calling for service.

Recovering from a UEFI update failure or UEFI image corruption

This topic provides information about recovering from a UEFI update failure or UEFI image corruption.

About this task

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

If the server firmware has become corrupted, such as from a power failure during an update, you can recover the server firmware in either of two ways:

- **In-band method:** Recover the server firmware, using either the UEFI boot recovery jumper (Automated Boot Recovery) and a server Firmware Update Package Service Pack.
- **Out-of-band method:** Use the IMM2 web interface to update the firmware, using the latest server firmware update package.

Note: You can obtain a server update package from one of the following sources:

- Download the server firmware update from the World Wide Web.
- Contact your service representative.

To download the server firmware update package from the World Wide Web, go to <http://www.ibm.com/supportportal/>.

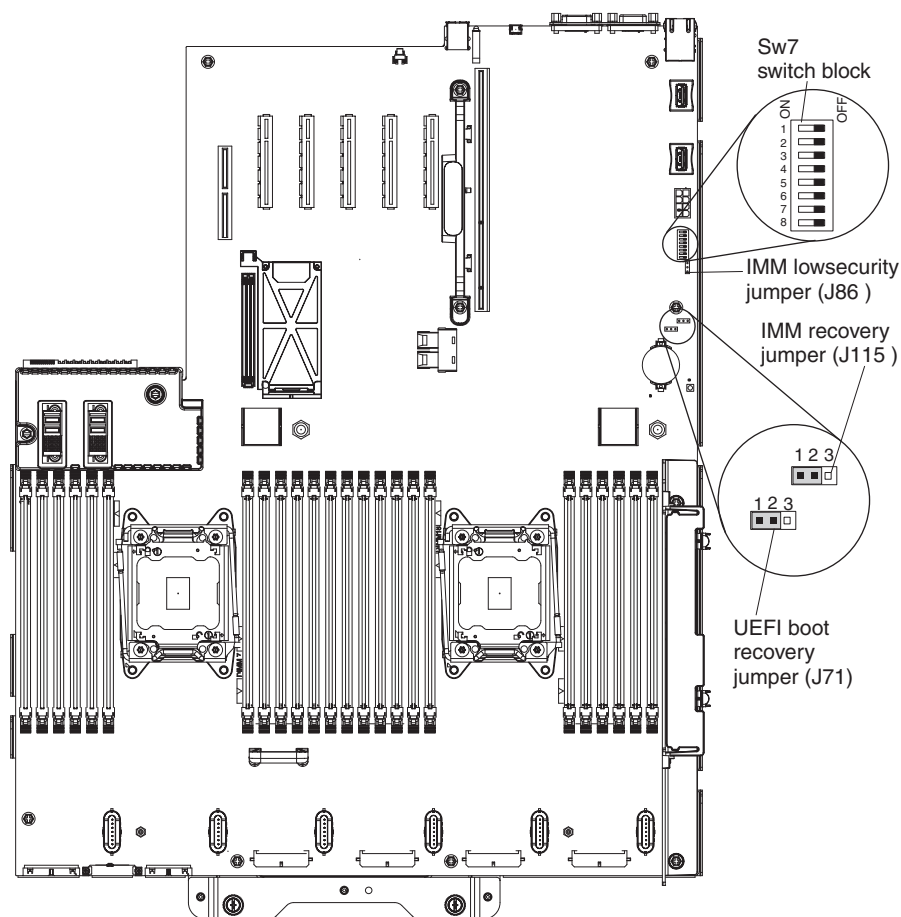
The flash memory of the server consists of a primary bank and a backup bank. You must maintain a bootable UEFI firmware image in the backup bank. If the server firmware in the primary bank becomes corrupted, you can either manually boot the backup bank with the UEFI boot recovery jumper (J71), or in the case of image corruption, this will occur automatically with the Automated Boot Recovery function.

In-band manual recovery method

To recover the server firmware and restore the server operation to the primary bank, complete the following steps:

Procedure

1. Turn off the server, and disconnect all power cords and external cables.
2. Remove the server cover. See “Removing the server top cover” on page 236 for more information.
3. Locate the UEFI boot recovery jumper (J71) on the system board.



4. Move the jumper from pins 1 and 2 to pins 2 and 3 to enable the UEFI recovery mode.
5. Reinstall the server cover; then, reconnect all power cords.
6. Restart the server. The power-on self-test (POST) starts.
7. Boot the server to an operating system that is supported by the Flash UEFI Update package that you downloaded.
8. Perform the firmware update by following the instructions that are in the firmware update package readme file.
9. Copy the downloaded firmware update package into a directory.
10. From a command line, type *filename-s*, where *filename* is the name of the executable file that you downloaded with the firmware update package.
11. Turn off the server and disconnect all power cords and external cables, and then remove the server cover.
12. Move the UEFI boot recovery jumper (J71) back to the primary position (pins 1 and 2).
13. Reinstall the server cover, and then reconnect all the power cables.
14. Restart the server.

Results

In-band automated boot recovery method

Note: Use this method if the BOARD LED on the light path diagnostics panel is lit and there is a log entry or Booting Backup Image is displayed on the firmware splash screen; otherwise, use the in-band manual recovery method.

1. Boot the server to an operating system that is supported by the firmware update package that you downloaded.
2. Perform the firmware update by following the instructions that are in the firmware update package readme file.
3. Restart the server.
4. At the firmware splash screen, press F3 when prompted to restore to the primary bank. The server boots from the primary bank.

Out-of-band method: See the IMM2 documentation (*Integrated Management Module II User's Guide*) at <http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5086346>.

For more information about UEFI-compliant firmware, go to <http://www.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5083207>.

Automated boot recovery (ABR)

This topic provides information about recovering the server to the firmware primary bank.

About this task

If the server is booting up and the IMM2 detects problems with the server firmware in the primary bank, it will automatically switch to the backup firmware bank and give you the opportunity to recover the primary bank. To recover to the server firmware primary bank, complete the following steps.

Procedure

1. Restart the server.
2. When the prompt press F3 to restore to primary is displayed, press F3 to recover the primary bank. Pressing F3 will restart the server.

Nx boot failure

This topic provides information about a failure to POST and the Nx boot failure feature.

About this task

Configuration changes, such as added devices or adapter firmware updates, and firmware or application code problems can cause the server to fail the power-on self-test (POST). If the server fails to POST, the server responds in either of the following ways:

- The server restarts automatically and attempts POST again.
- The server hangs, and you must manually restart the server for the server to attempt POST again.

After a specified number of consecutive attempts (automatic or manual), the Nx boot failure feature causes the server to revert to the default UEFI configuration and start the Setup utility so that you can make the necessary corrections to the

configuration and restart the server. If the server is unable to successfully complete POST with the default configuration, there might be a problem with the system board.

To specify the number of consecutive restart attempts in the Setup utility that will trigger the Nx boot failure feature, complete the following steps. The available values are 3, 6, 9, and Disable (disable Nx boot failure).

Procedure

1. From the Setup utility main menu, click **System Settings**.
2. Click **Recovery**.
3. Click **POST Attempts**; then, click **POST Attempts Limit**.
4. Modify the configuration settings and click **Save Settings**; then, exit Setup.

Chapter 5. Parts listing, Lenovo System x3750 M4 Types 8752 and 8718

Use this information to locate and identify replaceable components that are available for the Lenovo System x3750 M4 Types 8752 and 8718.

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

The following replaceable components are available for the Lenovo System x3750 M4 Types 8752 and 8718 server, except as specified otherwise in "Replaceable server components." For an updated parts listing, go to <http://www.ibm.com/supportportal/>.

Replaceable server components

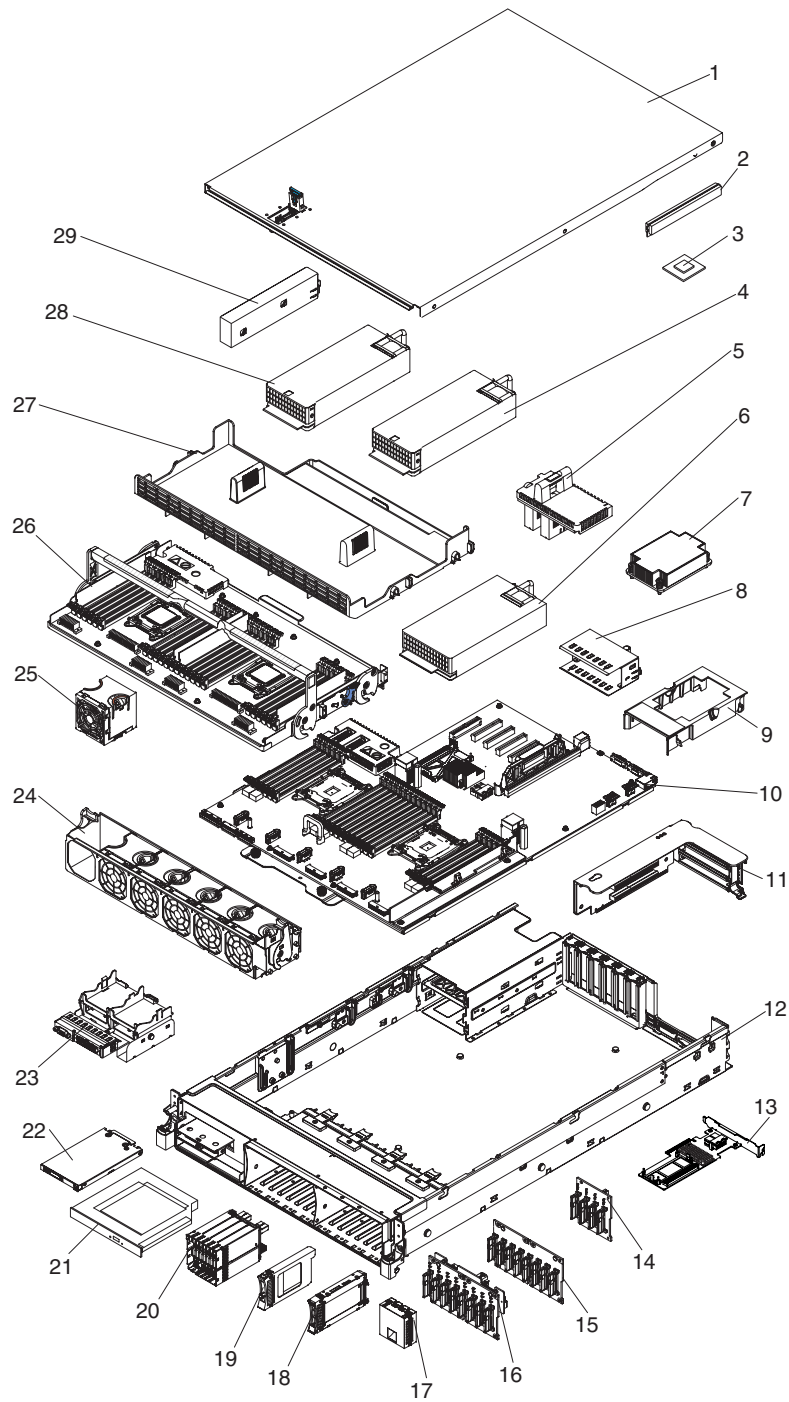
The following replaceable components are available for the Lenovo System x3750 M4 Types 8752 and 8718.

Replaceable components consist of consumable parts, structural parts, and field replaceable units (FRUs).

- **Consumables:** Purchase and replacement of consumables (components, such as batteries and printer cartridges, that have depleting life) is your responsibility. If IBM acquires or installs a consumable component at your request, you will be charged for the service. See "Consumable parts" on page 229 for the list of consumable parts.
- **Structural parts:** Purchase and replacement of structural parts (components, such as chassis assembly, top cover, and bezel) is your responsibility. If IBM acquires or installs a structural component at your request, you will be charged for the service. See "Structural parts" on page 230 for the list of structural parts.
- **Field replaceable unit (FRU):** FRUs must be installed only by trained service technicians, unless they are classified as customer replaceable units (CRUs):
 - **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.
 - **Tier 2 customer replaceable unit (CRU):** You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designated for your server.

For information about the terms of the warranty and getting service and assistance, see the *Warranty Information* document that comes with the server. For more information about getting service and assistance, see Appendix E, "Getting help and technical assistance," on page 867.

The following illustration shows the major components in the server. The illustrations in this document might differ slightly from your hardware. For a list of consumable parts, see "Consumable parts" on page 229 and for a list of structural parts, see "Structural parts" on page 230.



The following table lists the part numbers for the server replaceable components.

Table 42. Parts listing, Types 8752 and 8718

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
2	Memory, 4 GB (1.5 V), PC3-14900 DDR3 ECC 1866 MHz RDIMM	00D5022		
2	Memory, 4 GB (1.35 V), PC3-12800 DDR3 ECC 1600 MHz RDIMM	00D5026		
2	Memory, 8 GB (1.5 V), PC3-14900 DDR3 ECC 1866 MHz RDIMM	00D5034		
2	Memory, 8 GB (1.35 V), PC3-12800 DDR3 ECC 1600 MHz RDIMM	00D5038		
2	Memory, 16 GB (1.5 V), PC3-14900 DDR3 ECC 1866 MHz RDIMM	46W0670		
2	Memory, 16 GB (1.35 V), PC3-12800 DDR3 ECC 1600 MHz RDIMM	46W0674		
2	Memory, 32 GB (1.5 V), PC3-14900 DDR3 ECC 1866 MHz LR-DIMM	46W0763		
2	Memory, 32 GB (1.35 V), PC3-12800 DDR3 ECC 1600 MHz LR-DIMM	46W0678		
3	Microprocessor, 1.9 GHz, 25MB, 70W, 10C, E5-4628Lv2			00D0575
3	Microprocessor, 2.2 GHz, 10MB, 95W, 4C, E5-4603v2			00D1949
3	Microprocessor, 2.2 GHz, 20MB, 95W, 10C, E5-4640v2			00D1969
3	Microprocessor, 2.3 GHz, 16MB, 95W, 8C, E5-4610v2			00D1959
3	Microprocessor, 2.4 GHz, 25MB, 95W, 10C, E5-4650v2			00D1974
3	Microprocessor, 2.4 GHz, 30MB, 115W, 12C, E5-4657Lv2			00D1989
3	Microprocessor, 2.6 GHz, 15MB, 95W, 6C, E5-4607v2			00D1954
3	Microprocessor, 2.6 GHz, 20MB, 95W, 8C, E5-4620v2			00D1964
3	Microprocessor, 3.3 GHz, 16MB, 130W, 8C, E5-4627v2			00D1979
4	Power supply, 900-Watt-Emerson	94Y8118		
5	Power interposer for redundant power supply card		81Y3704	
6	Power supply, 1400 Watt-Emerson	69Y5954		
6	Power supply, 1400 Watt-Delta	69Y5956		
7	Heat sink assembly, microprocessor (all models)			46C9740
10	System board (all models)			47C9552
11	IBM x3750 M4 PCIe 3 x8 riser, full-height, half-length	46C9742		
11	IBM x3750 M4 PCIe 1x16 and 1x8 riser, full-height, half-length	00AN060		
13	Ethernet adapter, Intel X540 ML2 Dual Port 10 GbaseT Adapter for IBM System x (all models)	47C8152		
13	Ethernet adapter, Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x (all models)	47C8210		
13	Ethernet adapter, Emulex VFA5 ML2 Dual Port 10 GbE SFP+ Adapter for IBM System x (all models)	47C8153		

Table 42. Parts listing, Types 8752 and 8718 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
13	Ethernet adapter, Broadcom NetXtreme II ML2 Dual Port 10 GbE SFP+ for IBM System x (all models)	94Y5231		
13	Ethernet adapter, Broadcom NetXtreme II ML2 Dual Port 10 GbaseT for IBM System x (all models)	94Y5233		
14	IBM 4x 2.5" HS SAS/SATA/SSD HDD Backplane		43V7070	
15	IBM 8x 2.5" HS SAS/SATA/SSD HDD Backplane		46W9187	
16	IBM 8x 2.5" HS SAS/SATA/SSD HDD Backplane with controller expansion		46W8418	
18	Self encrypting drive, 2.5-inch, SAS hot-swap, 146 GB, 15K, 6 Gbps	90Y8945		
18	Self encrypting drive, 2.5-inch, SAS hot swap, 300 GB, 10K, 6 Gbps	90Y8914		
18	Self encrypting drive, 2,5-inch, SAS hot-swap, 600 GB, 10K, 6 Gbps	90Y8909		
18	Self encrypting drive, 2,5-inch, SAS hot-swap, 900 GB, 10K, 6 Gbps	81Y9663		
18	Slim form factor self encrypting drive, 2.5-inch, SAS hot-swap, 1.2 TB, 10K, 6 Gbps	00AD086		
18	Solid state drive, 1.8-inch, MLC, 200 GB	41Y8367		
18	Solid state drive, 1.8-inch, MLC, 400 GB	41Y8372		
18	Solid state drive, 2.5-inch, hot swap MLC, 200 GB	41Y8332		
18	Solid state drive, 2.5-inch, hot-swap MLC, 400 GB	41Y8337		
18	Solid state drive, 2.5-inch, hot-swap MLC, 800 GB	41Y8342		
18	S3500 solid state drive, 2.5-inch, SATA hot-swap MLC, 120 GB	00AJ001		
18	S3500 solid state drive, 2.5-inch, SATA hot-swap MLC, 240 GB	00AJ006		
18	S3500 solid state drive, 2.5-inch, SATA hot-swap MLC, 480 GB	00AJ011		
18	S3500 solid state drive, 2.5-inch, SATA hot-swap MLC, 800 GB	00AJ016		
18	S3500 solid state drive, 1.8-inch, SATA MLC, 80 GB	00AJ041		
18	S3500 solid state drive, 1.8-inch, SATA MLC, 240 GB	00AJ046		
18	S3500 solid state drive, 1.8-inch, SATA MLC, 400 GB	00AJ051		
18	S3500 solid state drive, 1.8-inch, SATA MLC, 800 GB	00AJ456		
18	Solid state drive, 2.5-inch, 200 GB, 6 Gbps	49Y6130		
18	Solid state drive, 1.8-inch, 200 GB, 6 Gbps	49Y6120		
18	Solid state drive, 2.5-inch, 400 GB, 6 Gbps	49Y6135		
18	Solid state drive, 2.5-inch, 800 GB, 6 Gbps	49Y6140		
18	Solid state drive, 1.8-inch, SATA hot swap, 128 GB, 6 Gbps	00W1223		
18	Solid state drive, 1.8-inch, SATA hot swap, 256 GB, 6 Gbps	00W1228		
18	Solid state drive, 2.5-inch, 1.6 TB, 6 Gbps	49Y6196		

Table 42. Parts listing, Types 8752 and 8718 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
18	G2 Hybrid, 2.5-inch, SAS hot-swap, 600 GB, 10K, 6 Gbps	00AD103		
18	Hard disk drive, 2.5-inch, NL SATA hot-swap, 250 GB, 7.2K, 6 Gbps	81Y9723		
18	Hard disk drive, 2.5-inch, NL SATA hot-swap, 1 TB, 7.2K, 6 Gbps	81Y9731		
18	Hard disk drive, 2.5-inch, SAS Gen2 hot-swap, 146 GB 15K, 6 Gbps	90Y8927		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 300 GB, 10K, 6 Gbps	90Y8878		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 300 GB, 15K, 6 Gbps	81Y9671		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 1.2 TB, 10K, 6 Gbps	00AD076		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 500 GB, 72K, 6 Gbps	90Y8954		
18	Hard disk drive, 2.5-inch, NL SAS Gen2 hot-swap, 500 GB, 7.2K, 6 Gbps	81Y9727		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 600 GB, 10K, 6 Gbps	90Y8873		
18	Hard disk drive, 2.5-inch, SAS Gen2 512E hot-swap, 600 GB, 15K, 6 Gbps	00AJ301		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 900 GB, 10K, 6 Gbps	81Y9651		
18	Hard disk drive, 2.5-inch, SAS hot-swap, 1 TB, 72K, 6 Gbps	81Y9691		
20	IBM eXFlash 8x 1.8 inch HS SAS SSD Backplane	59Y6222		
21	DVD drive	44W3256		
22	Operator information panel	90Y5822		
23	USB/video bracket/tray/cable assembly (all models)		46C9735	
25	Fan, hot-swap 60 mm	46C9727		
26	Microprocessor and memory expansion tray assembly			00D1493
28	Power supply, 750-Watt dc			69Y5742
	ServeRAID M5100 Series 2 GB Flash/RAID 5 Adapter	47C8671		
	ServeRAID M5120 SAS/SATA Controller	00AE811		
	ServeRAID M5210 SAS/SATA Controller	46C9111		
	ServeRAID M5200 Series 1 GB Flash/RAID 5 Adapter	47C8661		
	ServeRAID M5200 Series 2 GB Flash/RAID 5 Adapter	47C8665		
	ServeRAID M5200 Series 4 GB Flash/RAID 5 Adapter	47C8669		
	ServeRAID M5200 Series 1GB Cache/RAID 5 Adapter	47C8657		
	ServeRAID N2125 SAS/SATA Host Bus Adapter	46C9011		
	ServeRAID N2215 SAS/SATA Host Bus Adapter	47C8676		
	QLogic 10 Gb Converged Network Adapter	00Y3274		
	Solarflare SFN5162F MR Dual Port 10 GbE SFP+ Adapter	47C9955		

Table 42. Parts listing, Types 8752 and 8718 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
	Solarflare SFN6122F LL Dual Port 10 GbE SFP+ Adapter	47C9963		
	Broadcom NetXtreme II Dual Port 10 GBaseT Adapter for IBM System x	49Y7912		
	Intel x520 Dual Port 10 GbE SFP+ Adapter for IBM System x	49Y7962		
	IBM High IOPS MLC Mono Adapter, 365 GB	46C9079		
	IBM High IOPS MLC Mono Adapter, 365 GB	00AE814		
	IBM High IOPS MLC Duo Adapter, 785 GB	46C9082		
	IBM High IOPS MLC Mono Adapter, 785 GB	00AE815		
	IBM High IOPS MLC Mono Adapter, 1.2 TB	90Y4378		
	IBM High IOPS MLC Mono Adapter, 1.2 TB	00AE812		
	IBM High IOPS MLC Duo Adapter, 2.4 TB	90Y4398		
	IBM High IOPS MLC Duo Adapter, 2.4 TB	00AE813		
	Broadcom NetXtreme I Quad Port GbE Adapter for IBM System x	90Y9355		
	Broadcom NetXtreme I Dual Port GbE Adapter for IBM System x	90Y9373		
	Ethernet Adapter, Intel Dual Port I340-T2	94Y5166		
	Ethernet Adapter, Intel Quad Port I340-T4	94Y5167		
	Emulex 16 GB FC Single-Port Host Bus Adapter	81Y1658		
	Emulex 16 GB FC Dual Port Host Bus Adapter	81Y1665		
	Brocade 16 GB FC Single Port Host Bus Adapter for IBM System x	81Y1671		
	Brocade 16 GB FC Dual Port Host Bus Adapter for IBM System x	81Y1678		
	Brocade 8 GB FC Single Port Host Bus Adapter for IBM System x	46M6061		
	Brocade 8 GB FC Dual Port Host Bus Adapter for IBM System x	46M6062		
	QLogic 16 GB FC Single-Port Host Bus Adapter for IBM System x	00Y3340		
	QLogic 16 GB FC Dual-Port Host Bus Adapter for IBM System x	00Y3344		
	Emulex 8 GB FC Single-Port Host Bus Adapter	42D0491		
	Emulex 8 GB FC Dual Port Host Bus Adapter	42D0500		
	Brocade 10 Gb FCoCEE Dual Port Host Bus Adapter for IBM System x	42C1822		
	Mellanox 10 GbE Adapter for IBM System x	00D9692		
	USB key, memory flash 2 GB (USB flash device with embedded hypervisor software)	42D0545		
	Cable, operator information panel (all models)	46C9729		

Table 42. Parts listing, Types 8752 and 8718 (continued)

Index	Description	CRU part number (Tier 1)	CRU part number (Tier 2)	FRU part number
	Cable, power/configuration (for 4x2.5-inch drive backplane)	69Y2278		
	Cable, power/configuration (for 8x2.5-inch drive backplane)	69Y2279		
	Cable, power/configuration (for 8x2.5-inch drive backplane with controller expander)	46C9733		
	Cable, power (solid state drives)	69Y2289		
	Cable, DVD SATA signal and power (all models)	00AN065		
	Cable, ServeRAID M5100 Series Flash Power Module	90Y7310		
	Cable, ServeRAID M5200 Series Flash Power Module	46C9793		
	Cable, SAS signal, 130/155mm (for backplane-to-backplane)	90Y4661		
	Cable, SAS for non-expander backplanes	00AN059		
	Labels, system service	00AN058		
	Battery, 3.0 volt	33F8354		
	Thermal grease kit (all models)			41Y9292
	Alcohol wipes			59P4739
	Microprocessor installation tool			94Y9960

Consumable parts

The following consumable parts are available for the Lenovo System x3750 M4 Types 8752 and 8718.

Consumable parts are not covered by the IBM Statement of Limited Warranty. The following consumable parts are available for purchase from the retail store.

Table 43. Consumable parts, Types 8752 and 8718

Index	Description	Part number
	ServeRAID M5100 Series Flash Power Module Kit	81Y4579 and 46C9067
	ServeRAID M5200 Series Flash Power Module Kit	47C8696

To order a consumable part, complete the following steps:

Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

1. Go to <http://www.ibm.com>.
2. From the **Products** menu, select **Upgrades, accessories & parts**.
3. Click **Obtain maintenance parts**; then, follow the instructions to order the part from the retail store.

If you need help with your order, call the toll-free number that is listed on the retail parts page, or contact your local IBM representative for assistance.

Structural parts

The following structural parts are available for the Lenovo System x3750 M4 Types 8752 and 8718.

Structural parts are not covered by the IBM Statement of Limited Warranty. The following structural parts are available for purchase from the retail store.

Table 44. Structural parts, Type 8752 and 8718

Index	Description	Part number
1	Top cover (all models)	46C9728
12	Chassis assembly (without front bezel) (all models)	46C9725
17	Filler, 4x2.5-inch hot-swap hard disk drive	49Y5359
19	Filler, single 2.5-inch hot-swap hard disk drive bay	44T2248
24	Fan cage assembly (all models)	46C9726
	Bezel	46C9738
	Cable management arm, Gen-III 1U (System x)	94Y6626
	Cable management arm, Gen-III 2U (System x)	94Y6627
	Filler, 4x2.5-inch drive backplane	69Y2286
	Filler, group PCIe riser slot	69Y2294
	Rack latch kit, 2U	69Y2295
	Rail kit, Gen3 Ball Bearing Slide	94Y6625
	x3750 M4 Shipping Bracket	46C9737
	Miscellaneous parts kit includes: SAS cable guide Microprocessor air baffle DIMM air baffle Backplane retention Riser-card guide Interlock spring RAID battery retention bracket RAID battery and flash power module tray PCIe riser-card slot filler 1U Power supply bay blank filler PCI retention cover 750-watt dc and 900-watt power supply spacer RAID cache card retention bracket System board handle M2x0.4 screw M2x10 screw M3x0.5 screw DVD drive bay blank filler DVD retention bracket DVD spacer RJ-45 filler	00AN057

To order a structural part, complete the following steps:

Note: Changes are made periodically to the IBM website. The actual procedure might vary slightly from what is described in this document.

1. Go to <http://www.ibm.com>.
2. From the **Products** menu, select **Upgrades, accessories & parts**.
3. Click **Obtain maintenance parts**; then, follow the instructions to order the part from the retail store.

If you need help with your order, call the toll-free number that is listed on the retail parts page, or contact your local IBM representative for assistance.

Power cords

Use this information to review safety information about power cord usage.

For your safety, a power cord with a grounded attachment plug is provided to use with this product. To avoid electrical shock, always use the power cord and plug with a properly grounded outlet.

Power cords for this product that are used in the United States and Canada are listed by Underwriter's Laboratories (UL) and certified by the Canadian Standards Association (CSA).

For units intended to be operated at 115 volts: Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a parallel blade, grounding-type attachment plug rated 15 amperes, 125 volts.

For units intended to be operated at 230 volts (U.S. use): Use a UL-listed and CSA-certified cord set consisting of a minimum 18 AWG, Type SVT or SJT, three-conductor cord, a maximum of 15 feet in length and a tandem blade, grounding-type attachment plug rated 15 amperes, 250 volts.

For units intended to be operated at 230 volts (outside the U.S.): Use a cord set with a grounding-type attachment plug. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed.

Power cords for a specific country or region are usually available only in that country or region.

Power cord part number	Used in these countries and regions
39M5206	China
39M5102	Australia, Fiji, Kiribati, Nauru, New Zealand, Papua New Guinea

Power cord part number	Used in these countries and regions
39M5123	Afghanistan, Albania, Algeria, Andorra, Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Benin, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo (Democratic Republic of), Congo (Republic of), Cote D'Ivoire (Ivory Coast), Croatia (Republic of), Czech Republic, Dahomey, Djibouti, Egypt, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Finland, France, French Guyana, French Polynesia, Germany, Greece, Guadeloupe, Guinea, Guinea Bissau, Hungary, Iceland, Indonesia, Iran, Kazakhstan, Kyrgyzstan, Laos (People's Democratic Republic of), Latvia, Lebanon, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Madagascar, Mali, Martinique, Mauritania, Mauritius, Mayotte, Moldova (Republic of), Monaco, Mongolia, Morocco, Mozambique, Netherlands, New Caledonia, Niger, Norway, Poland, Portugal, Reunion, Romania, Russian Federation, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Slovakia, Slovenia (Republic of), Somalia, Spain, Suriname, Sweden, Syrian Arab Republic, Tajikistan, Tahiti, Togo, Tunisia, Turkey, Turkmenistan, Ukraine, Upper Volta, Uzbekistan, Vanuatu, Vietnam, Wallis and Futuna, Yugoslavia (Federal Republic of), Zaire
39M5130	Denmark
39M5144	Bangladesh, Lesotho, Macao, Maldives, Namibia, Nepal, Pakistan, Samoa, South Africa, Sri Lanka, Swaziland, Uganda
39M5151	Abu Dhabi, Bahrain, Botswana, Brunei Darussalam, Channel Islands, China (Hong Kong S.A.R.), Cyprus, Dominica, Gambia, Ghana, Grenada, Iraq, Ireland, Jordan, Kenya, Kuwait, Liberia, Malawi, Malaysia, Malta, Myanmar (Burma), Nigeria, Oman, Polynesia, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Sudan, Tanzania (United Republic of), Trinidad and Tobago, United Arab Emirates (Dubai), United Kingdom, Yemen, Zambia, Zimbabwe
39M5158	Liechtenstein, Switzerland
39M5165	Chile, Italy, Libyan Arab Jamahiriya
39M5172	Israel
39M5095	220 - 240 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela

Power cord part number	Used in these countries and regions
39M5076	110 - 120 V Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Caicos Islands, Canada, Cayman Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guam, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia (Federal States of), Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Thailand, Taiwan, United States of America, Venezuela
39M5219	Korea (Democratic People's Republic of), Korea (Republic of)
39M5199	Japan
39M5226	India
39M5240	Brazil

Chapter 6. Removing and replacing components

Use this information to remove and replace components of the Lenovo System x3750 M4 Types 8752 and 8718.

Replaceable components are of three types:

- **Tier 1 customer replaceable unit (CRU):** Replacement of Tier 1 CRUs is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation.
- **Tier 2 customer replaceable unit (CRU):** You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service that is designated for your server.
- **Field replaceable unit (FRU):** FRUs must be installed only by Trained service technicians.

See Chapter 5, “Parts listing, Lenovo System x3750 M4 Types 8752 and 8718,” on page 223 to determine whether a component is a Tier 1 CRU, Tier 2 CRU, or FRU that must be replaced only by a trained service technician.

For information about the terms of the warranty, see the *Warranty Information* document that comes with the server.

For more information about getting service and assistance, see Appendix E, “Getting help and technical assistance,” on page 867.

Returning a device or component

Use this information if you are instructed to return a device or component.

If you are instructed to return a device or component, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Removing and replacing server components

Use this information for removing or replacing a CRU, FRU, or installing an optional device.

This section provides information for removing and replacing components in the server.

Removing and replacing consumable parts

Use this information to remove and replace consumable parts.

Replacement of consumable parts is your responsibility. If a Lenovo approved warranty service provider installs a consumable part at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

Removing and replacing structural parts

Use this information to remove and replace structural parts.

Replacement of structural parts is your responsibility. If a Lenovo approved warranty service provider installs a structural part at your request, you will be charged for the installation.

The illustrations in this document might differ slightly from your hardware.

Removing the server top cover

Use this information to remove the server cover.

About this task

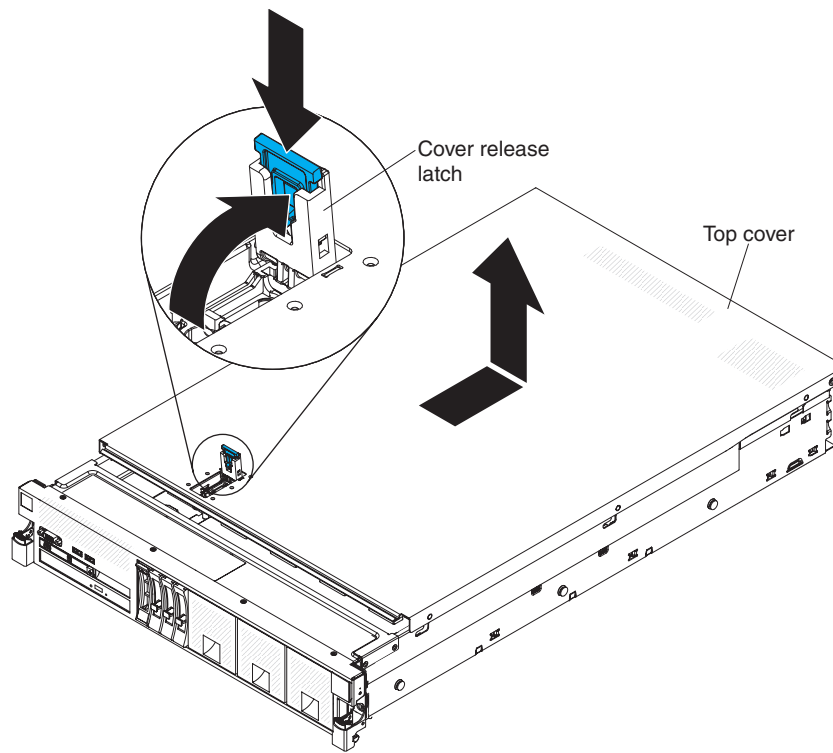
To remove the server top cover, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.

Note: If you need to view any LEDs on the system board after you disconnect power, press the **Light path button** to light the LEDs.

3. If the server has been installed in a rack, slide the server out from the rack enclosure.
4. Press in on the blue tab on the cover-release latch and lift the cover release latch up (the cover slides to the rear). Lift the cover off the server and set it aside.



Replacing the server top cover

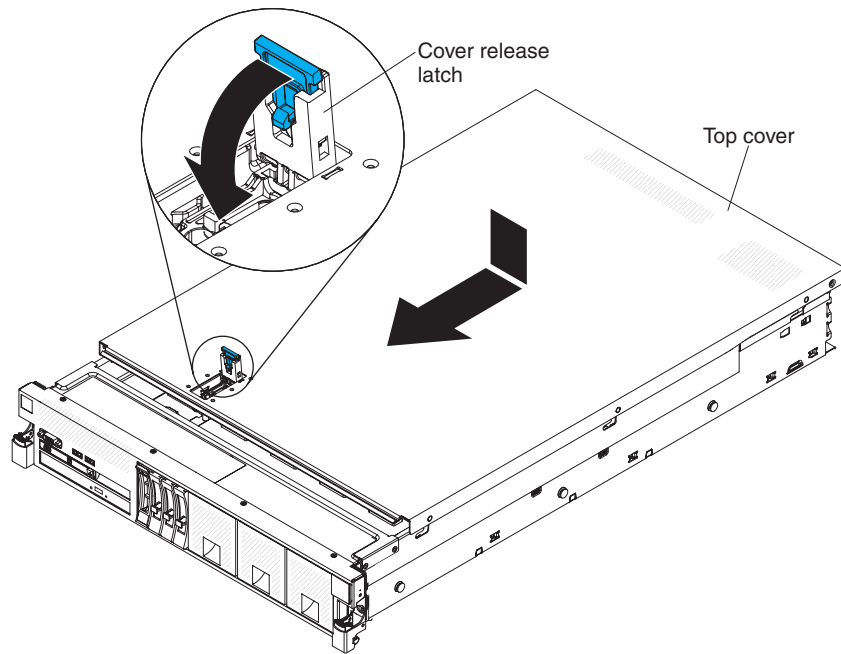
Use this information to install the server cover.

About this task

To install the server top cover, complete the following steps:

Procedure

1. Make sure that all cables, adapters, and other components are installed and seated correctly and that you have not left loose tools or parts inside the server. Also, make sure that all internal cables are correctly routed.
2. Align the cover over the server (toward the rear of the server) until the cover edges slip into position over the chassis.



3. Slide the cover toward the front of the server; then, press down on the cover release latch until it clicks into place.
4. Slide the server back into the rack cabinet until it latches.
5. Reconnect the external cables and power cords.

Removing the bezel

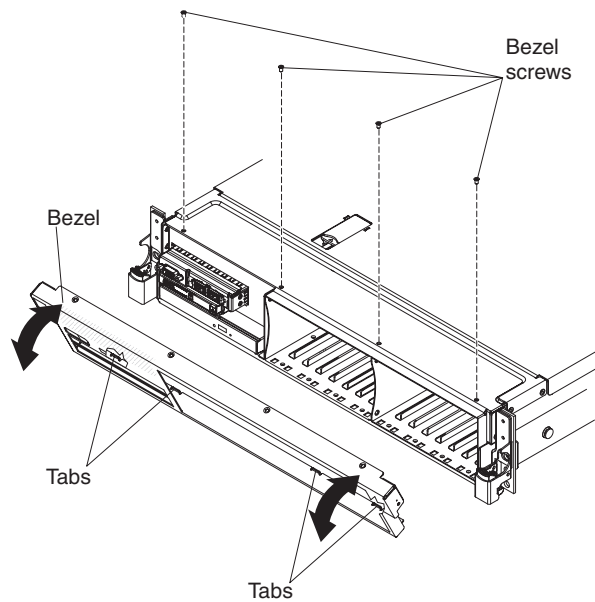
Use this information to remove the bezel.

About this task

To remove the bezel, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack.
4. Remove the screws from the bezel with a Torx screwdriver.



5. Pull the top of the bezel out slightly; then, rotate it downward until the tabs on the bottom of the bezel disengages from the chassis and set it aside.

Replacing the bezel

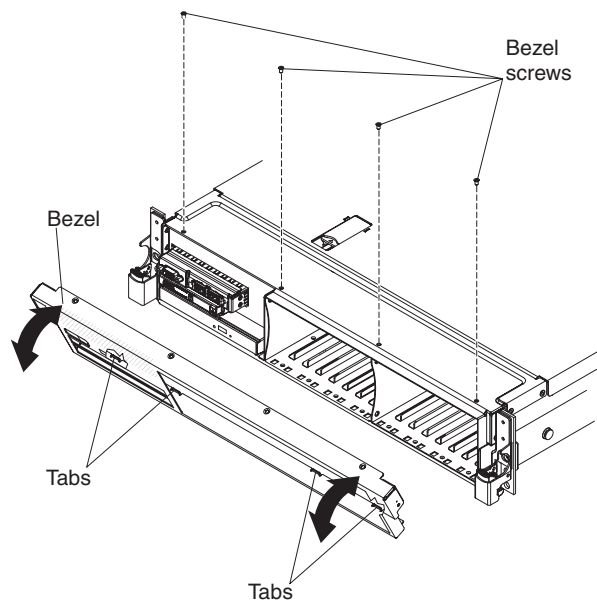
Use this information to install the bezel.

About this task

To install the bezel, complete the following steps:

Procedure

1. Insert the tabs on the bottom of the bezel into the holes on the chassis.
2. Rotate the bezel upward to the server and reinstall the bezel screws.



3. Reconnect the power cords and any cables that you removed.
4. Slide the server into the rack.
5. Turn on the peripheral devices and the server.

Removing and replacing Tier 1 CRUs

Use this information for removing and replacing Tier 1 CRUs.

Replacement of Tier 1 CRUs is your responsibility. If a Lenovo approved warranty service provider installs a Tier 1 CRU at your request, you will be charged for the installation. The illustrations in this document might differ slightly from your hardware.

Removing the microprocessor air baffle

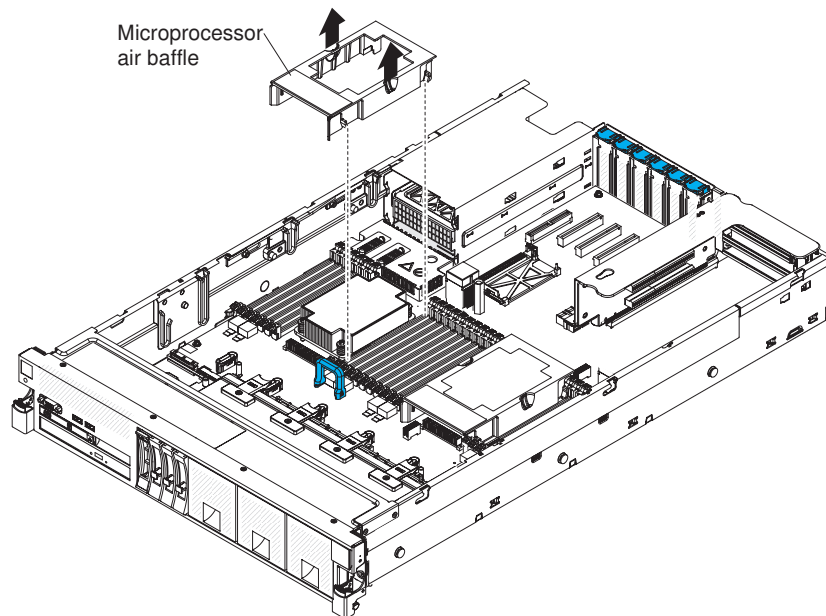
Use this information to remove the microprocessor air baffle.

About this task

To remove the microprocessor air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the server cover (see “Removing the server top cover” on page 236).
4. Grasp the baffle by the grip points and lift it all the way up out of the slots on the chassis wall and set it aside.



Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with the air baffle removed might damage server components.

Replacing the microprocessor air baffle

Use this information to replace the microprocessor air baffle.

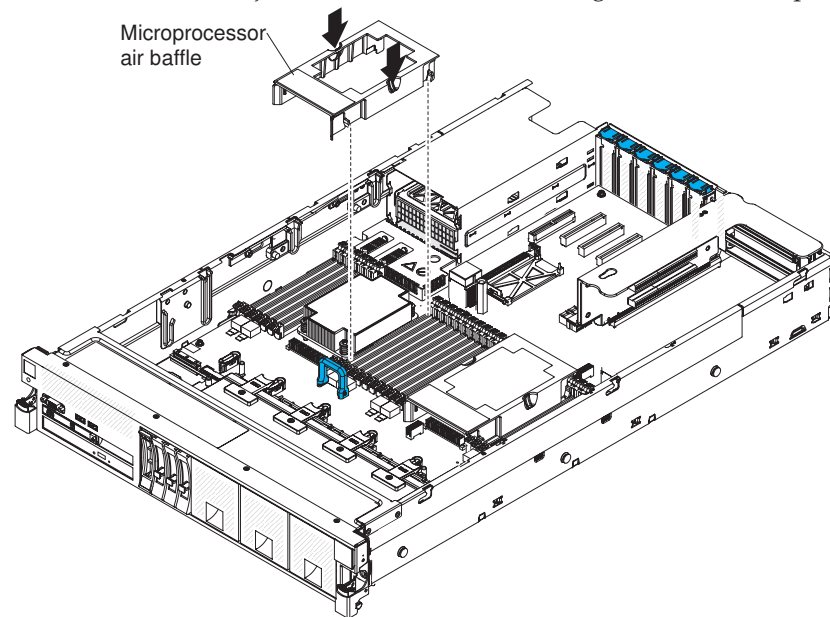
About this task

To install the microprocessor air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the tabs on the air baffle behind the latches (front and rear latches) of the two DIMMs closest to the microprocessor (DIMM on the left and DIMM on the right of the microprocessor); then, lower the air baffle down until it is seated firmly.

Note: The microprocessor air baffle is only required when there are no DIMMs in the connectors adjacent (on the left and the right) to the microprocessor.



3. Reinstall the cover (see “Replacing the server top cover” on page 237).
4. Slide the server into the rack.
5. Reconnect the power cords and any cables that you removed.
6. Turn on the peripheral devices and the server.

Removing the DIMM air baffle

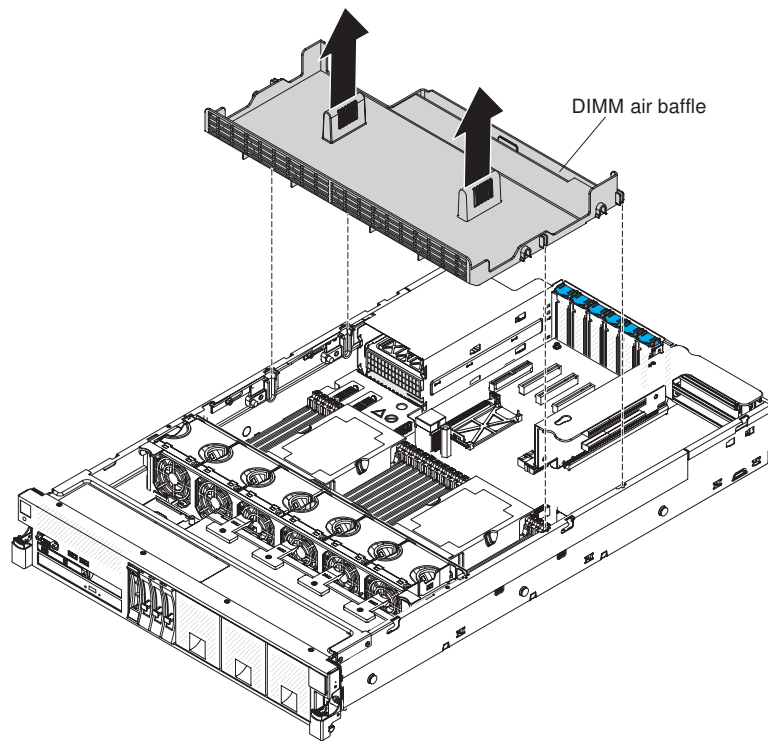
Use this information to remove the DIMM air baffle.

About this task

To remove the DIMM air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Lift the DIMM air baffle from the server.



Attention: For proper cooling and airflow, replace the air baffle before you turn on the server. Operating the server with an air baffle removed might damage server components.

Replacing the DIMM air baffle

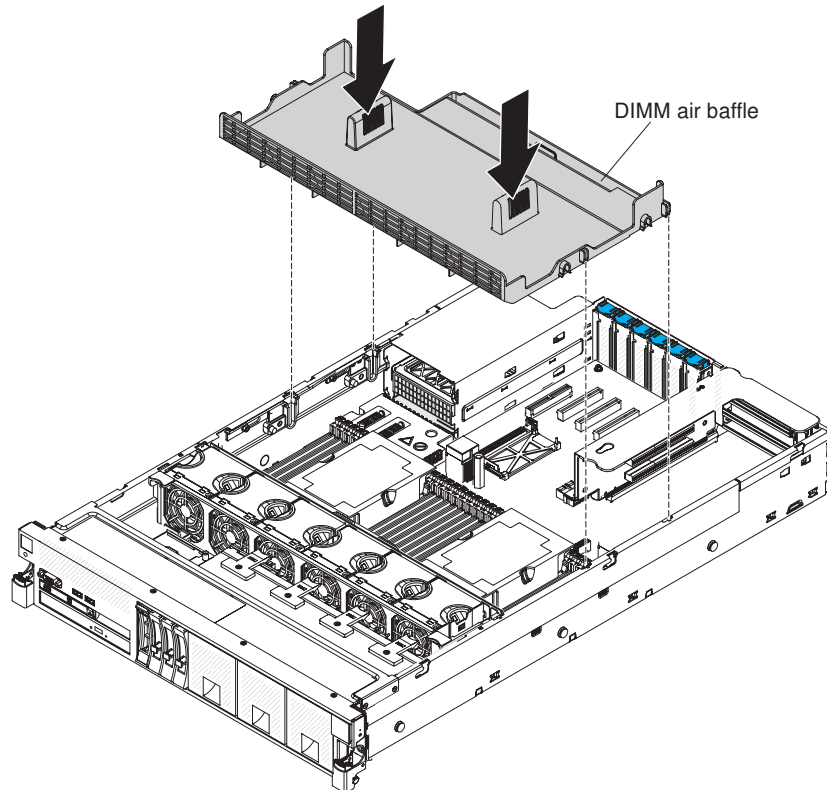
Use this information to install the DIMM air baffle.

About this task

To install the DIMM air baffle, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the tabs on the sides of the DIMM air baffle with the slots on the sides of the chassis wall and lower the DIMM air baffle into the server.



3. Reinstall the cover (see “Replacing the server top cover” on page 237).
4. Slide the server into the rack.
5. Reconnect the power cord and any cables that you removed.
6. Turn on the peripheral devices and the server.

Attention: For proper cooling and airflow, replace the air baffle before turning on the server. Operating the server with an air baffle removed might damage server components.

Removing an adapter

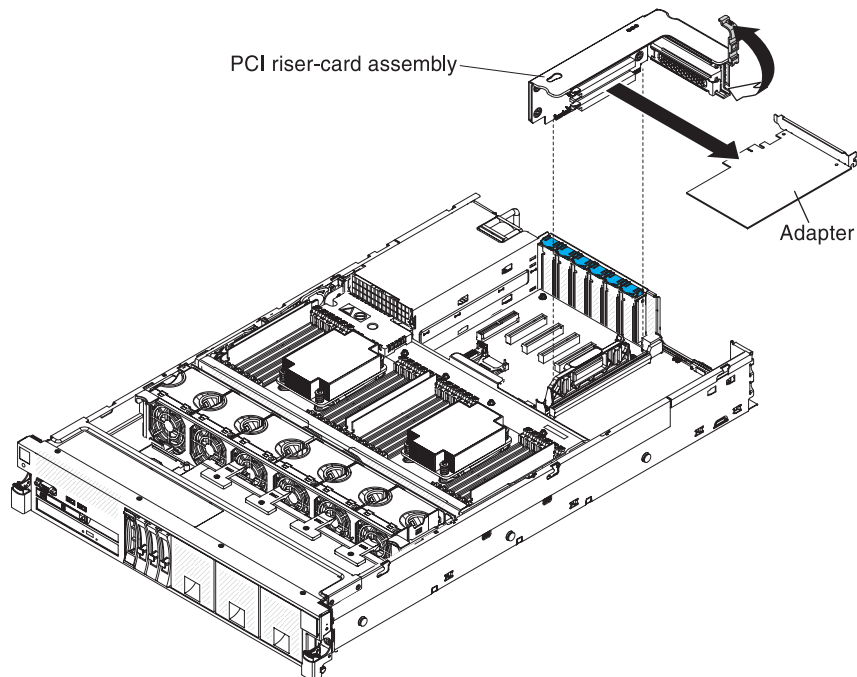
Use this information to remove an adapter.

About this task

To remove an adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the server cover (see “Removing the server top cover” on page 236).
4. **Remove the adapter from a PCIe slot on the system board.**
 - a. Disconnect any cables (including external cables) from the adapter.
 - b. Lift up the adapter retention latch that secures the adapter
 - c. Carefully grasp the adapter by its top edge or upper corners, and pull the adapter from the connector on the system board and set it aside. Go to step 6.
5. **Remove the adapter from the PCIe riser-card assembly.**
 - a. Grasp the riser-card assembly by the blue touch points and pull it out of the PCIe riser-card connector on the system board.
 - b. Disconnect any cables (including external cables) from the adapter.
 - c. Lift up the adapter retention latch that secures the adapter.
 - d. Carefully grasp the adapter by its top edge or upper corners, and pull the adapter from the riser-card assembly.



- e. Place the riser-card assembly on a flat, static-protective surface.
6. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing an adapter

Use this information to replace an adapter.

About this task

Note:

- The instructions in this section apply to any supported adapter (for example, network adapters).
- See “Installing an adapter” on page 76 for additional notes and information that you must consider when you install an adapter in the server.
- Any high-definition video-out connector or stereo connector on any add-on video adapter is not supported.

To install an adapter, complete the following steps:

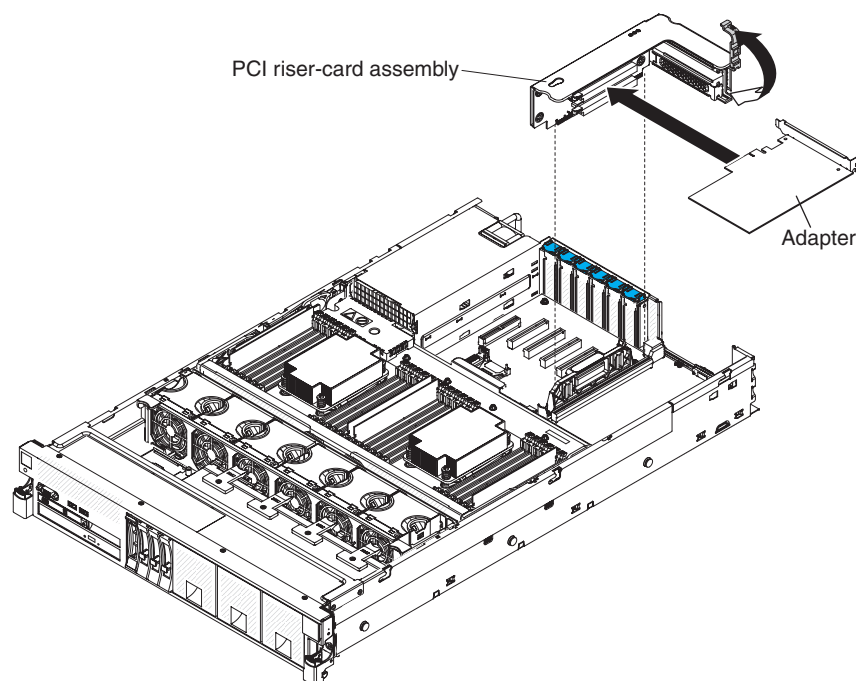
Procedure

1. Read the safety information, see “Safety” on page vii and the “Installation guidelines” on page 41.
2. Follow the cabling instructions, if any come with the adapter. Route the internal adapter cables before you install the adapter.
3. **Install the new adapter in a PCIe slot on the system board,**
 - a. Make sure that the retention latch is in the open position.
 - b. Connect any internal cables to the adapter.
 - c. Insert the adapter into the connector, aligning the edge connector on the adapter with the connector on the system board.
 - d. Press the edge of the connector on the adapter *firmly* into the connector on the system board. Make sure that the adapter snaps into connector securely.

Attention: When you install an adapter, make sure that the adapter is correctly seated on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board or the adapter.

- e. Close the adapter retention clip to secure the adapter in place.
 - f. Go to step 5 on page 246.
4. **Install the new adapter on the PCIe riser-card assembly,**
 - a. Make sure that the PCIe retention latch is in the open position.
 - b. Connect any internal cables to the adapter.
 - c. Insert the adapter into the riser-card assembly, aligning the edge connector on the adapter with the connector on the riser-card assembly.
 - d. Press the edge of the connector *firmly* into the riser-card assembly. Make sure that the adapter snaps into the riser-card assembly securely.

Attention: When you install an adapter, make sure that the adapter is correctly seated in the riser-card assembly and that the riser-card assembly is securely seated in the riser-card connector on the system board before you turn on the server. An incorrectly seated adapter might cause damage to the system board, the riser-card assembly, or the adapter.



- e. Close the adapter retention latch to secure the adapter in place.
- f. Install the riser-card assembly in the server (see “Replacing a PCI riser-card assembly” on page 296).
5. Connect any external cables to the adapter, if necessary.
6. Perform any configuration tasks that are required for the adapter.
7. Install the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cord and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing 2.5-inch and 1.8-inch hot-swap drives

Use this information to remove a 2.5-inch or 1.8-inch drive.

About this task

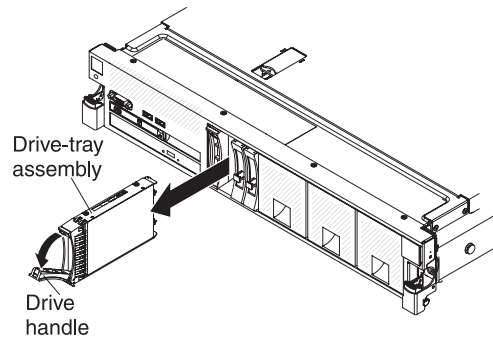
To remove a hot-swap drive, complete the following steps.

Attention:

- To avoid damage to the drive connectors, make sure that the server cover is in place and fully closed whenever you install or remove a drive.
- To make sure that there is adequate system cooling, do not operate the server for more than 2 minutes without either a drive or a filler panel installed in each bay.

Procedure

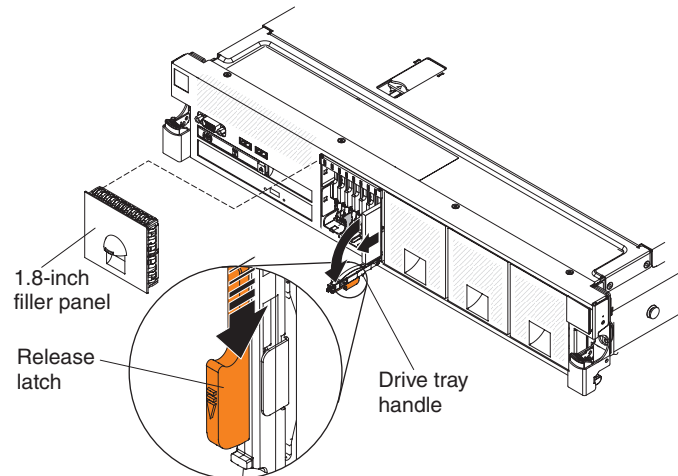
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. **Removing a 2.5-inch hot-swap drive:**
 - a. Slide the release latch (orange) up gently to unlock the drive handle



- b. Grasp the handle and pull the drive out of the drive bay.
- c. Skip to step 4.

3. Removing a 1.8-inch hot-swap drive:

- a. Remove the filler panel.
- b. Grasp the orange release latch on the drive tray handle of the drive tray for the drive that you want to remove and slide the release latch down to unlock the drive-tray handle. Rotate the drive tray handle down and pull the handle toward you to slide the drive out of the bay. Lift the drive out of the drive tray.



- 4. If you are instructed to return the drive assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing 2.5-inch and 1.8-inch hot-swap drives

Use this information to replace a 2.5-inch or 1.8-inch drive.

About this task

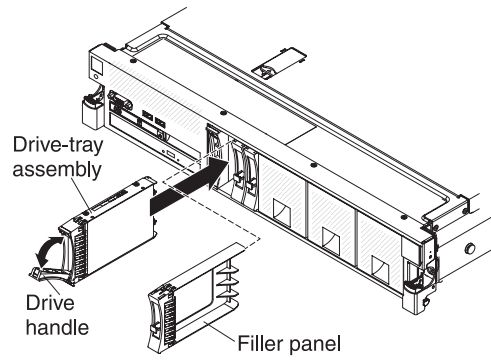
The following notes describe the type of drives that the server supports and other information that you must consider when you install a drive. For a list of supported drives, see <http://www.ibm.com/servers/eserver/serverproven/compat/us/>.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- The server can support up to 16 2.5-inch drives, up to 32 1.8-inch drives, or a combination of both 2.5-inch and 1.8-inch hot-swap drives, using the supported SAS\SATA backplane configurations. The server supports 2.5-inch hot-swap SAS or hot-swap SATA hard disk drives, 2.5-inch hot-swap solid state drives, or 1.8-inch hot-swap solid state drives (see “Supported SAS/SATA drive backplane configurations” on page 62 for more information).
- You can mix 2.5-inch hot-swap SAS and SATA hard disk drives, 2.5-inch hot-swap solid state drives, and 1.8-inch hot-swap solid state drives in the same server as long as they are not on the same array.
- When upgrading drive backplane configurations, all 1.8-inch solid state drive backplanes must be installed to the right of all 2.5-inch HDD or 2.5-inch solid state drive backplanes. All 2.5-inch backplanes installs to the left of all 1.8-inch backplanes. See “Drive IDs” on page 61 for drive ID assignment information and “Supported SAS/SATA drive backplane configurations” on page 62 for information about the combination of supported drive backplane configurations.
- The electromagnetic interference (EMI) integrity and cooling of the server are protected by having all bays and PCI and PCI Express slots covered or occupied. When you install a drive, save the EMC shield and filler panel from the bay in the event that you later remove the device.
- For a complete list of supported optional devices for the server, see <http://www.ibm.com/servers/eserver/serverproven/compat/us/>.

To install a hot-swap drive, complete the following steps:

Procedure

1. Read the safety information, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.
3. **Install a 2.5-inch hot-swap drive:**
 - a. Make sure that the drive-tray handle is in the open (unlocked) position.
 - b. Align the drive assembly with the guide rails in the bay.

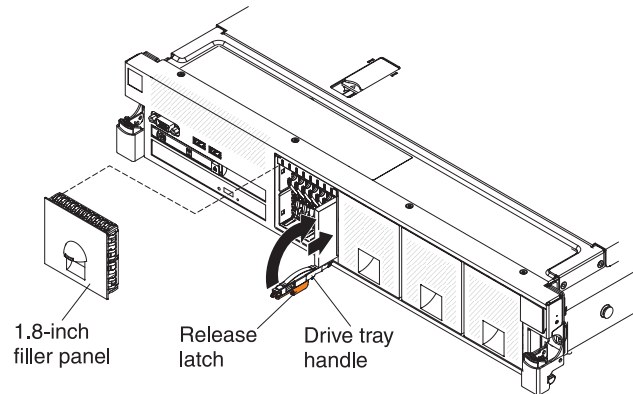


c. Gently push the drive-tray assembly into the bay until the drive stops.

d. Rotate the drive-tray handle to the closed (locked) position.

4. Installing a 1.8-inch hot-swap drive:

a. Insert the drive into the drive bay with the label side of the drive facing the right side of the server.



b. Push the drive tray into the drive bay and rotate the drive tray handle to the closed position and ensure that the latch is in the locked position.

5. Reinstall the drive filler panel.

6. Check the drive status LED to verify that the drive is operating correctly. If the yellow drive status LED for a drive is lit continuously, that drive is faulty and must be replaced. If the green drive activity LED is flashing, the drive is being accessed.

Note: If the server is configured for RAID operation using a ServeRAID adapter, you might have to reconfigure your disk arrays after you install drives. See the ServeRAID adapter documentation for additional information about RAID operation and complete instructions for using the ServeRAID adapter.

7. If you are installing additional hot-swap drives, do so now.

8. Turn on the peripheral devices and the server.

Removing a CD/DVD drive

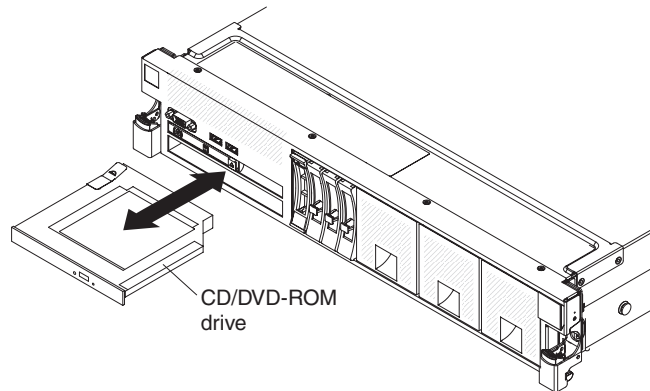
Use this information to remove a CD/DVD drive.

About this task

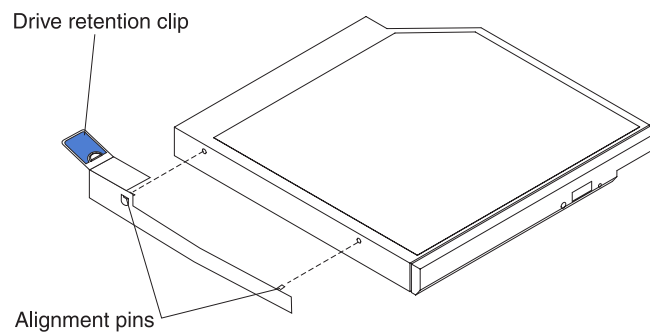
To remove a CD/DVD drive, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the server cover (see “Removing the server top cover” on page 236).
4. Press and hold the release tab down as you push the drive from the rear to slide it out of the bay.



5. Slide the drive-retention clip from the side of the drive. Save the clip to use when you install the replacement drive.



6. If you are instructed to return the CD/DVD drive, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a CD/DVD drive

Use this information to replace a CD/DVD drive.

About this task

The following notes describe the type of drives that the server supports and other information that you must consider when you install a CD/DVD drive. For a list of supported drives, see <http://www.ibm.com/servers/eserver/serverproven/compat/us/>.

- Locate the documentation that comes with the drive and follow those instructions in addition to the instructions in this chapter.
- Make sure that you have all the cables and other equipment that are specified in the documentation that comes with the drive.
- The server supports one optional ultra-slim SATA CD-RW/DVD-ROM optical drive.

If you need to replace a CD/DVD drive, complete the following steps:

Procedure

1. Read the safety information, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new optical drive to any unpainted metal surface on the server; then, remove the drive from the package and place it on a static-protective surface.

Note: If you are installing a drive that contains a laser, observe the following safety precaution.

Statement 3



CAUTION:

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



DANGER

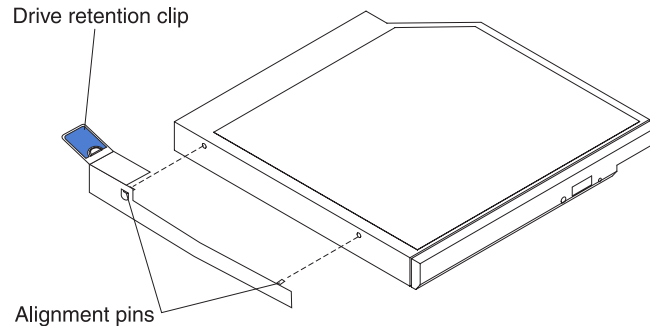
Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following.

Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.



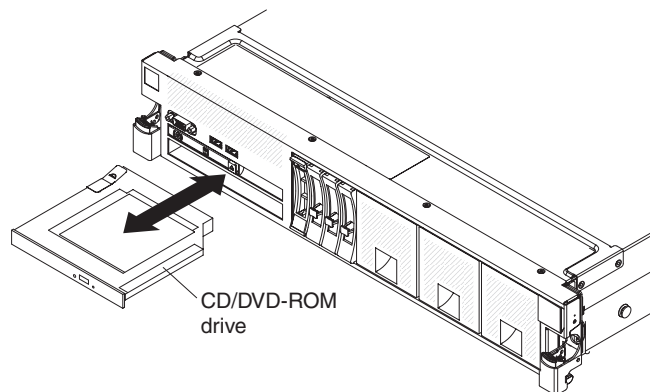
Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

3. Attach the drive retention clip that you removed from the previous drive to the side of the new drive.



4. Align the drive in the drive bay and slide the drive into the CD/DVD drive bay until the drive clicks into place.

Note: Be sure to align the bend on the drive retention clip tab with the rear edge of the CD/DVD drive. Your drive might have more mounting holes than what is shown in the illustration. Adjust the retention clip alignment based on your drive.



5. Reconnect the power cord and any cables that you removed.
6. Replace the server cover and slide the server back into the rack.
7. Turn on the peripheral devices and the server.

Removing the CD/DVD cable

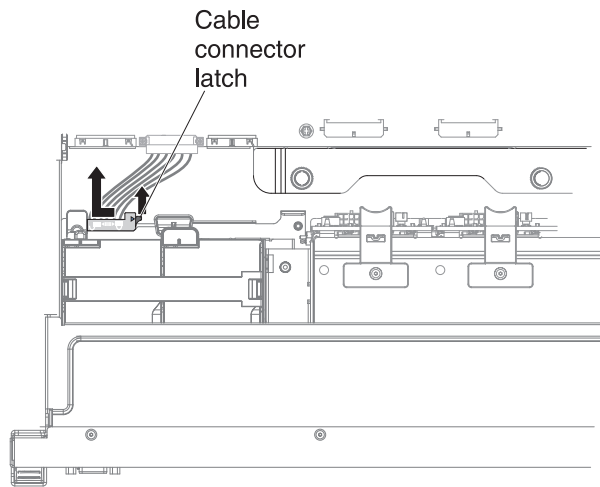
Use this information to remove the CD/DVD cable.

About this task

To remove the CD/DVD cable, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
5. Slide the CD/DVD out of the server (see “Removing a CD/DVD drive” on page 250).
6. Facing the front of the server, grasp the cable connector latch (right of the cable connector) and pull it up toward the rear of the server; then, slide the cable connector to the left to disconnect it from the optical drive connector on the rear of the optical drive cage.



7. Disconnect the other end of the cable from the optical drive connector on the system board.
8. If you are instructed to return the CD/DVD cable, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the CD/DVD cable

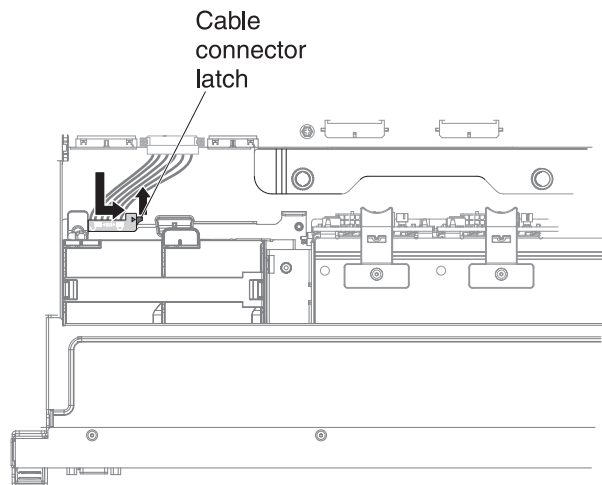
Use this information to replace the CD/DVD cable.

About this task

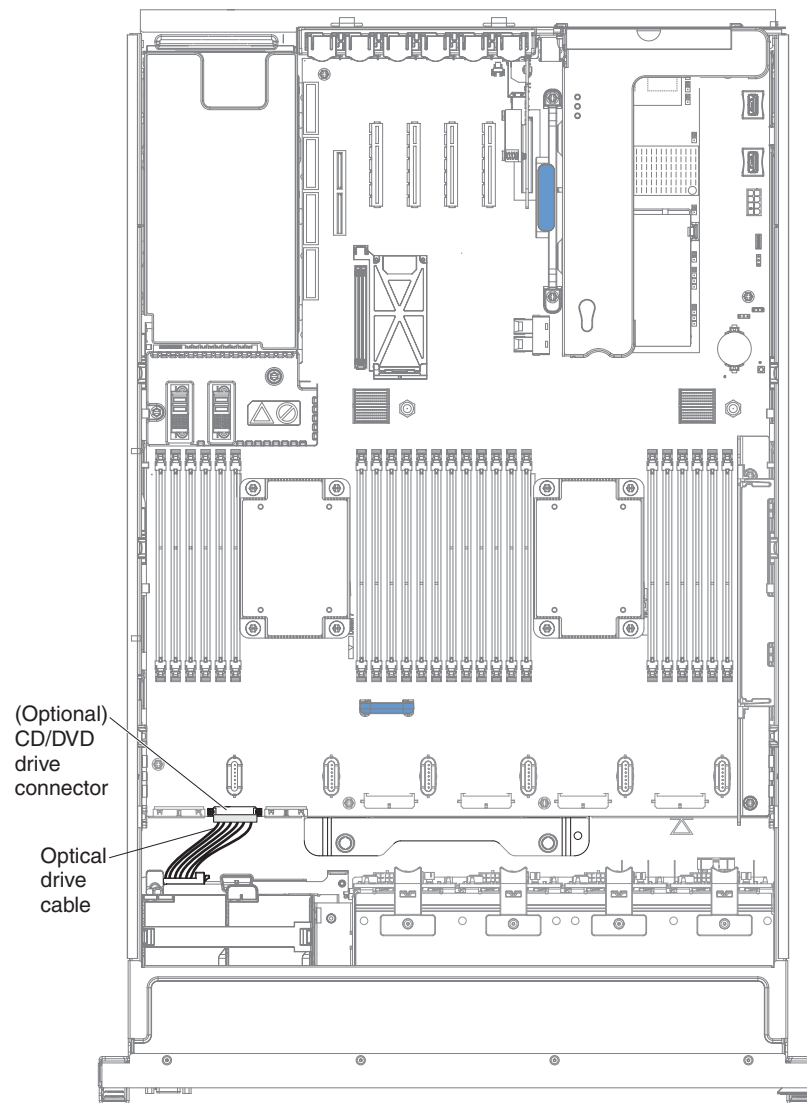
To install the CD/DVD cable, complete the following steps:

Procedure

1. Read the safety information, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the cable connector with the connector on the rear of the optical drive and push the cable connector into the optical drive connector until it is firmly seated.
3. Slide the cable connector to the right to lock the cable in place.



4. Connect the other end of the CD/DVD drive cable to the system board.



5. Slide the CD/DVD back into the server.
6. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
7. Replace the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cord and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing a memory module

Use this information to remove a memory module.

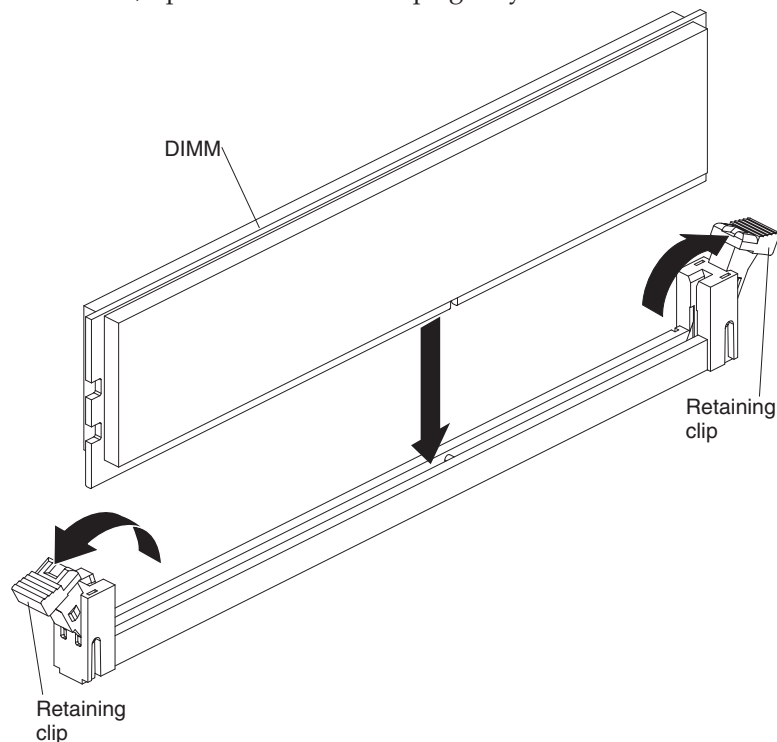
About this task

To remove a dual inline memory module (DIMM), complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. If the DIMM is on the system board, remove the DIMM air baffle (see “Removing the DIMM air baffle” on page 242). or microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323).
5. Carefully open the retaining clips on each end of the DIMM connector and remove the DIMM.

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.



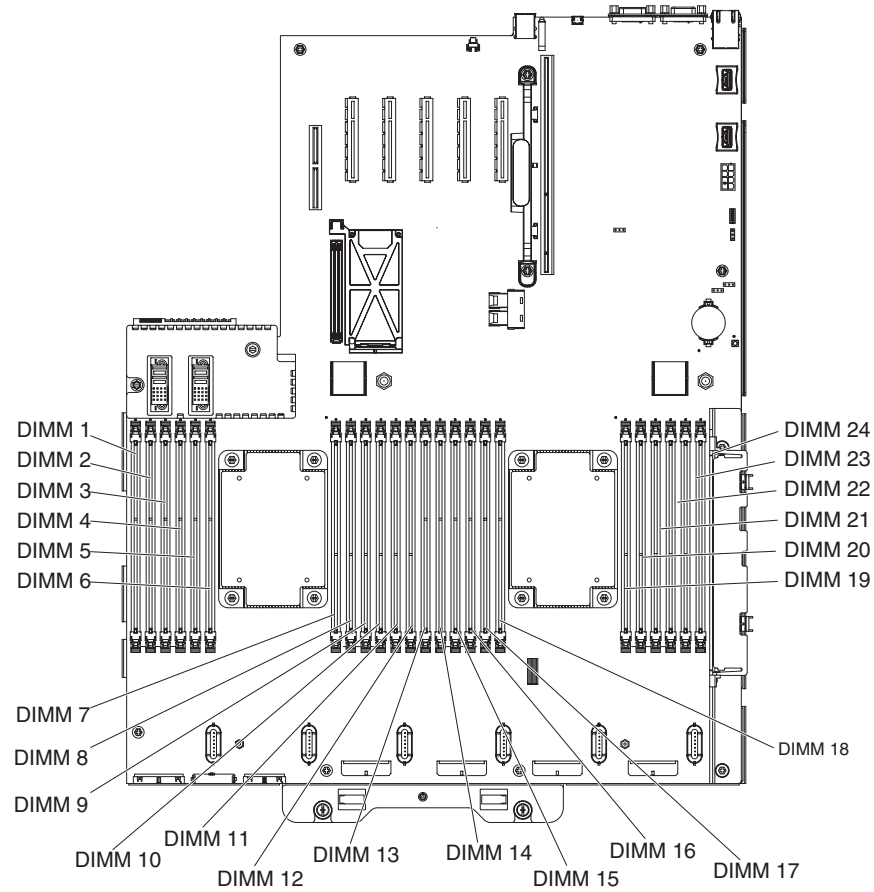
6. If you are instructed to return the DIMM, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a memory module

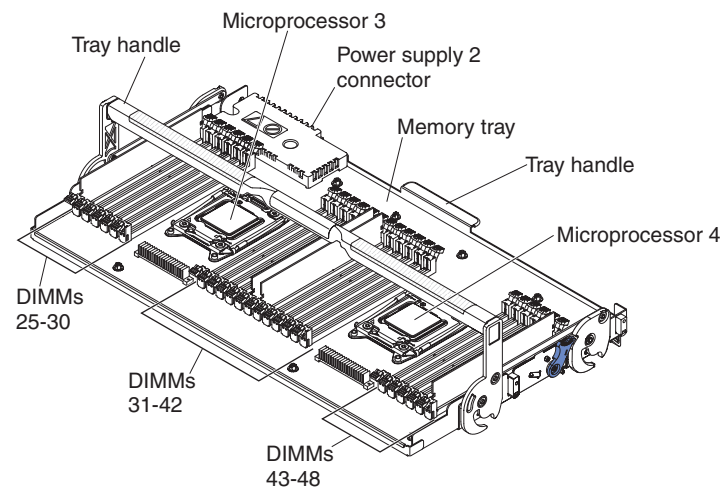
Use this information to replace a memory module.

About this task

The following illustration shows the location of the DIMM connectors on the system board.



The following illustration shows the location of the DIMMs on the optional microprocessor and memory expansion tray.



Note:

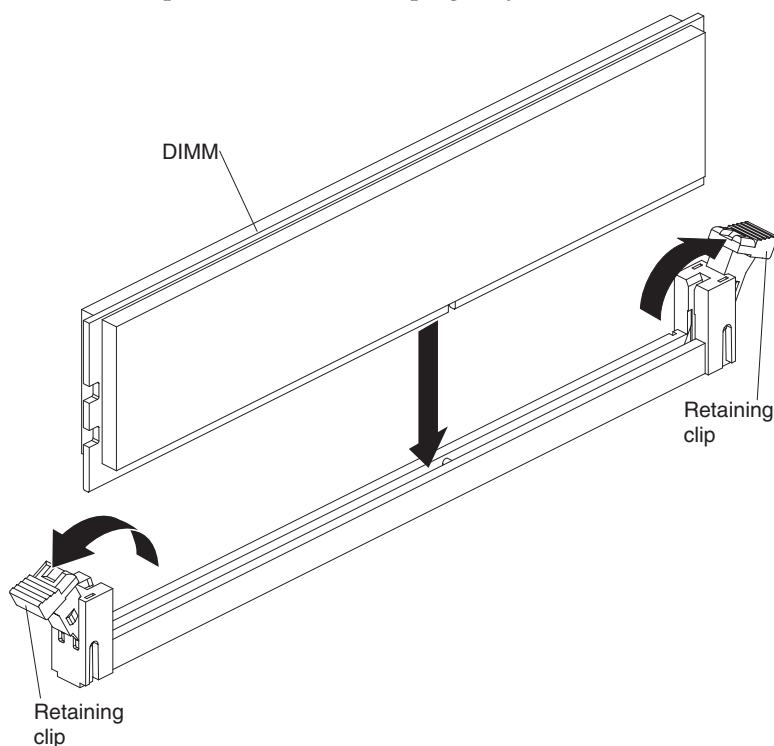
- See “Installing a memory module” on page 49 for notes and information that you must consider when you install DIMMs. For DIMM population information, see “Non-mirroring (independent mode)” on page 52, “Memory mirroring” on page 52, and “Memory sparing” on page 54.
- Confirm that the server supports the DIMM that you are installing, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.

To install a DIMM, complete the following steps:

Procedure

1. Read the safety information, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server and peripheral devices and disconnect the power cords and all external cables, if necessary.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Touch the static-protective package that contains the DIMM to any unpainted metal surface on the outside of the server; then, remove the DIMM from the package.
5. Open the retaining clip on each end of the DIMM connector.

Attention: To avoid breaking the retaining clips or damaging the DIMM connectors, open and close the clips gently.



6. Turn the DIMM so that the DIMM keys align correctly with the connector.
7. Insert the DIMM into the connector by aligning the edges of the DIMM with the slots at the ends of the DIMM connector (see “System-board optional-device connectors” on page 35 for the locations of the DIMM connectors).
8. Firmly press the DIMM straight down into the connector by applying pressure on both ends of the DIMM simultaneously. The retaining clips snap into the locked position when the DIMM is firmly seated in the connector.

Note: If there is a gap between the DIMM and the retaining clips, the DIMM has not been correctly inserted; open the retaining clips, remove the DIMM, and then reinsert it.

9. Replace the DIMM air baffle (see “Replacing the DIMM air baffle” on page 243) or the microprocessor and memory expansion tray (see “Replacing the microprocessor and memory expansion tray assembly” on page 136), if you removed it earlier.
10. Reconnect the power cord and any cables that you removed.
11. Replace the cover (see “Replacing the server top cover” on page 237).
12. Turn on the peripheral devices and the server.

Removing the ServeRAID M5210 SAS/SATA Controller for System X

Use this information to remove the ServeRAID M5210 SAS/SATA Controller.

About this task

To remove the ServeRAID M5210 SAS/SATA controller, complete the following steps:

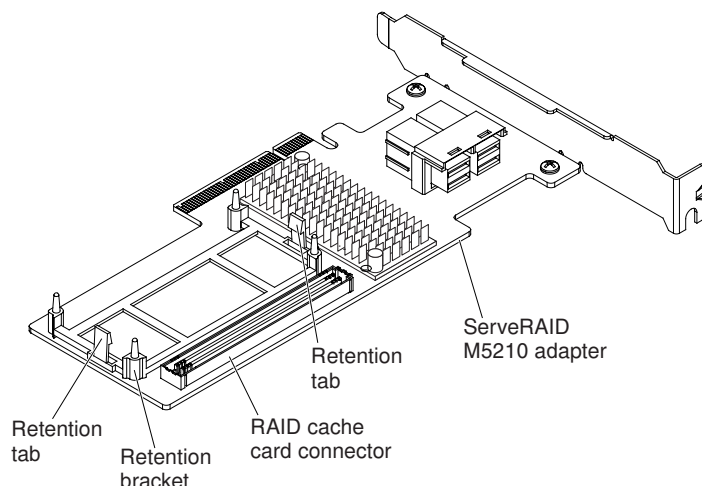
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Disconnect the signal cables from the adapter.
5. Disconnect the cable from the RAID cache card, if a RAID cache card is installed on the adapter.
6. Carefully grasp the riser-card by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board and set it aside.
7. Open the PCIe retention latch.
8. Remove the adapter from the riser-card assembly.
9. Remove the RAID cache card from the adapter, if a RAID cache card is installed (see “Removing a RAID cache card” on page 287).
10. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the ServeRAID M5210 SAS/SATA Controller for System x

Use this information to replace the ServeRAID M5210 SAS/SATA Controller.

About this task



Note: For additional information and notes about installing adapters, see “Installing an adapter” on page 76.

You can purchase the optional ServeRAID M5210 SAS/SATA Controller. The ServeRAID M5210 adapter provides base RAID levels 0, 1, and 10 support. See “Supported adapters” on page 78 and Table 15 on page 76 for more information. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

To install the ServeRAID M5210 SAS/SATA adapter, complete the following steps:

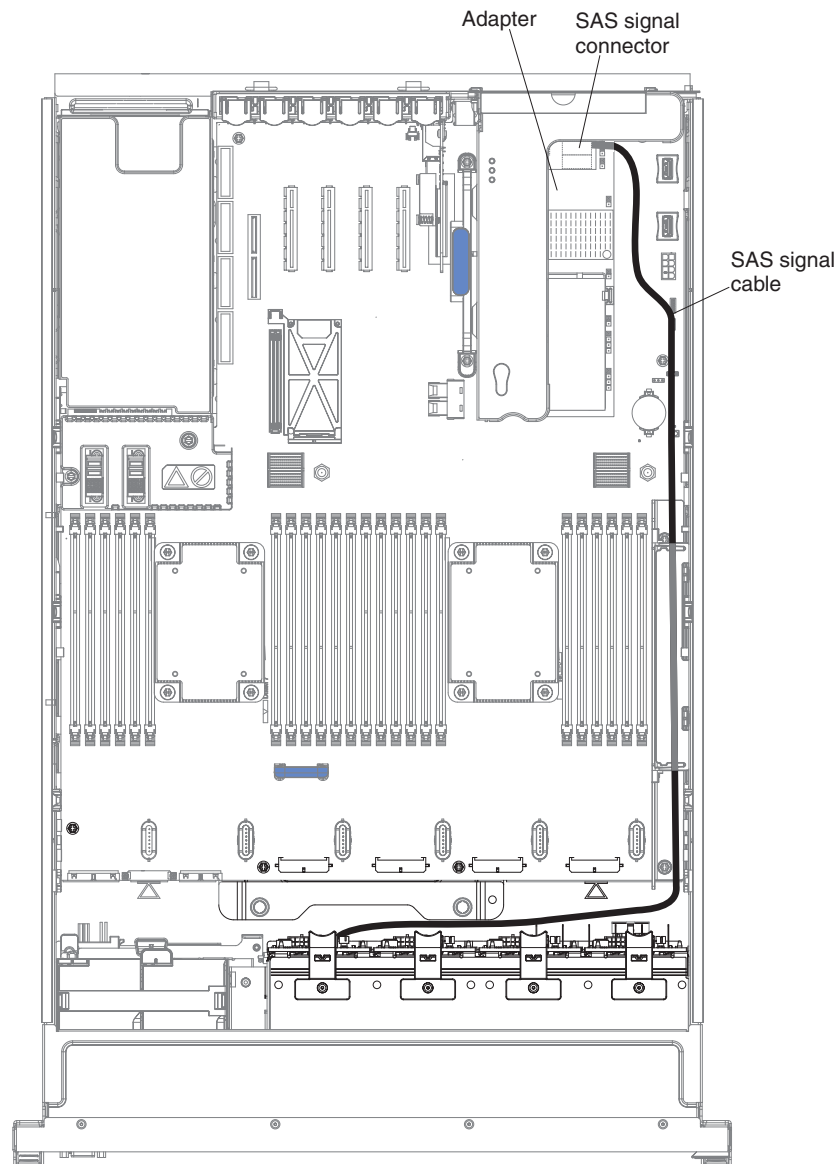
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new ServeRAID M5210 SAS/SATA adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
3. Reinstall the RAID cache card, if it was removed (see “Replacing a RAID cache card” on page 289).
4. Align the ServeRAID M5210 SAS/SATA adapter so that the keys align correctly with the connector on the riser-card assembly.
5. Insert the SAS/SATA adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.

6. Close the PCIe retention latch.

7. Reinstall the riser-card assembly onto the system board.
8. Reconnect the cables to the adapter and to the cache card.



9. Replace the cover (see “Replacing the server top cover” on page 237).
10. Slide the server in the rack.
11. Reconnect the power cord and any cables that you removed.
12. Turn on the peripheral devices and the server.

Removing the ServeRAID M5120 SAS/SATA Controller for System x

Use this information to remove the ServeRAID M5120 SAS/SATA Controller.

About this task

To remove a ServeRAID M5120 SAS/SATA controller, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. **Remove the adapter from the system board.**
 - a. Disconnect the cables from the existing adapter.
 - b. Disconnect the cable from the RAID cache card, if a cache card is installed on the adapter.
 - c. Carefully grasp the adapter by the edges and pull it out of the connector on the system board.
 - d. Remove the RAID cache card from the adapter (see “Removing a RAID cache card” on page 287).
 - e. Go to step 6.
5. **Remove the adapter from the PCIe riser-card assembly.**
 - a. Disconnect the cables from the existing adapter.
 - b. Disconnect the cable from the RAID cache card, if a cache card is installed on the adapter.
 - c. Carefully grasp the riser card by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board and set it aside.
 - d. Carefully grasp the adapter and pull it out of the riser-card assembly.
 - e. Remove the RAID cache card from the adapter (see “Removing a RAID cache card” on page 287).
6. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the ServeRAID M5120 SAS/SATA Controller for System X

Use this information to replace the ServeRAID M5120 SAS/SATA Controller.

About this task

Note: For additional information and notes about installing adapters, see “Installing an adapter” on page 76.

You can purchase the optional ServeRAID M5120 SAS/SATA Controller. The ServeRAID M5120 adapter provides base RAID levels 0, 1, 5, 10 and 50 support. See “Supported adapters” on page 78 and Table 15 on page 76 for more information. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

To install a ServeRAID M5120 SAS/SATA adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new ServeRAID M5120 SAS/SATA adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
3. **Install the adapter on system board.**
 - a. Reinstall the RAID cache card onto the adapter, if one was removed earlier (see “Replacing a RAID cache card” on page 289).
 - b. Align the ServeRAID M5120 adapter so that the keys align correctly with the connector on the system board.
 - c. Insert the adapter into the connector on the system board until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board or the adapter.
 - d. Reconnect the cables to the adapter and to the cache card.
 - e. Go to step 5.
4. **Install the adapter on the PCIe riser-card assembly.**
 - a. Reinstall the RAID cache card onto the adapter, if one was removed earlier (see “Replacing a RAID cache card” on page 289).
 - b. Align the ServeRAID M5120 adapter so that the keys align correctly with the connector on the riser-card assembly.
 - c. Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.
 - d. Reinstall the riser-card assembly onto the system board.
 - e. Reconnect the cables to the adapter and to the cache card.
5. Replace the cover (see “Replacing the server top cover” on page 237).

6. Slide the server in the rack.
7. Reconnect the power cord and any cables that you removed.
8. Turn on the peripheral devices and the server.

Removing the ServeRAID N2125 SAS/SATA Host Bus Adapter

Use this information to remove the ServeRAID N2125 SAS/SATA Host Bus Adapter.

About this task

To remove the ServeRAID N2125 SAS/SATA Host Bus Adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. **Remove the adapter from the system board.**
 - a. Open the PCIe retention latch.
 - b. Disconnect the signal cables from the existing adapter.
 - c. Carefully grasp the adapter by the edges and pull it out of the connector on the system board.
 - d. Go to step 6.
5. **Remove the adapter from the PCIe riser-card assembly.**
 - a. Disconnect the cables from the existing adapter.
 - b. Carefully grasp the riser-card assembly at the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board and set it aside.
 - c. Open the PCIe retention latch.
 - d. Carefully grasp the adapter by the edges and pull it out of the riser-card assembly.
6. If you are instructed to return the SAS/SATA adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the ServeRAID N2125 SAS/SATA Host Bus Adapter

Use this information to replace the ServeRAID N2125 SAS/SATA Host Bus Adapter.

About this task

Note: For additional information and notes about installing adapters, see “Installing an adapter” on page 76.

You can purchase the optional ServeRAID N2125 SAS/SATA Host Bus Adapter. This adapter provides no RAID support. It helps provide optimized performance for applications that do not need RAID support. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

To install the adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new ServeRAID N2125 SAS/SATA adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
3. **Install the adapter on system board.**
 - a. Align the ServeRAID N2125 adapter so that the keys align correctly with the connector on the system board.
 - b. Insert the adapter into the connector on the system board until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board or the adapter.
 - c. Close the PCIe retention latch.
 - d. Reconnect the cables to the adapter.
 - e. Go to step 5.
4. **Install the adapter on the PCIe riser-card assembly.**
 - a. Align the ServeRAID N2125 adapter so that the keys align correctly with the connector on the riser-card assembly.
 - b. Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.
 - c. Close the PCIe retention latch.
 - d. Reinstall the riser-card assembly onto the system board.
 - e. Reconnect the cables to the adapter.
5. Replace the cover (see “Replacing the server top cover” on page 237).
6. Slide the server in the rack.
7. Reconnect the power cord and any cables that you removed.

8. Turn on the peripheral devices and the server.

Removing the ServeRAID N2215 SAS/SATA Host Bus Adapter

Use this information to remove the ServeRAID N2215 SAS/SATA Host Bus Adapter.

About this task

To remove the ServeRAID N2215 SAS/SATA Host Bus Adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. **Remove the adapter from the PCIe riser-card assembly.**
 - a. Disconnect the cables from the existing adapter.
 - b. Carefully grasp the riser card by the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board and set it aside.
 - c. Open the PCIe retention latch.
 - d. Carefully grasp the adapter and pull it out of the riser-card assembly.
5. If you are instructed to return the SAS/SATA adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the ServeRAID N2215 SAS/SATA Host Bus Adapter

Use this information to replace the ServeRAID N2215 SAS/SATA Host Bus Adapter.

About this task

Note: For additional information and notes about installing adapters, see “Installing an adapter” on page 76.

You can purchase the optional ServeRAID N2215 SAS/SATA Host Bus Adapter. This adapter provides no RAID support; however, it helps to provide optimized performance for applications that do not need RAID support. See “Supported adapters” on page 78 and Table 15 on page 76 for more information. For configuration information, see the ServeRAID documentation at <http://www.ibm.com/supportportal/>.

Attention: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

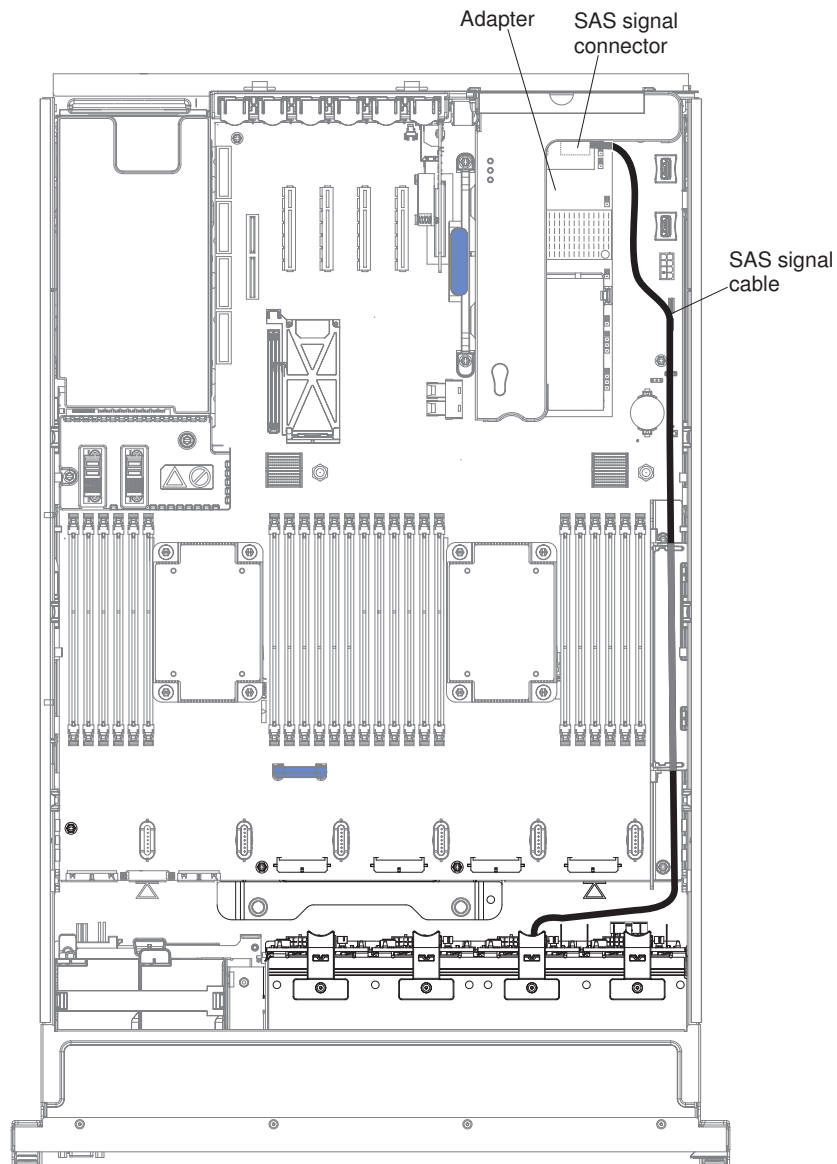
To install the adapter, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.

2. Touch the static-protective package that contains the new ServeRAID N2215 Host Bus Adapter to any unpainted surface on the outside of the server; then, grasp the adapter by the top edge or upper corners of the adapter and remove it from the package.
3. Install the adapter on the PCIe riser-card assembly.
 - a. Align the adapter so that the keys align correctly with the connector on the riser-card assembly.
 - b. Insert the adapter into the connector on the riser-card until it is firmly seated.

Attention: Make sure that the adapter is seated correctly. Incomplete insertion might cause damage to the system board, the adapter, and the PCIe riser-card assembly.
 - c. Close the PCIe retention latch.
 - d. Reinstall the riser-card assembly onto the system board.
 - e. Reconnect the cables to the adapter.



4. Replace the cover (see “Replacing the server top cover” on page 237).
5. Slide the server in the rack.

6. Reconnect the power cord and any cables that you removed.
7. Turn on the peripheral devices and the server.

Removing a USB embedded hypervisor flash device

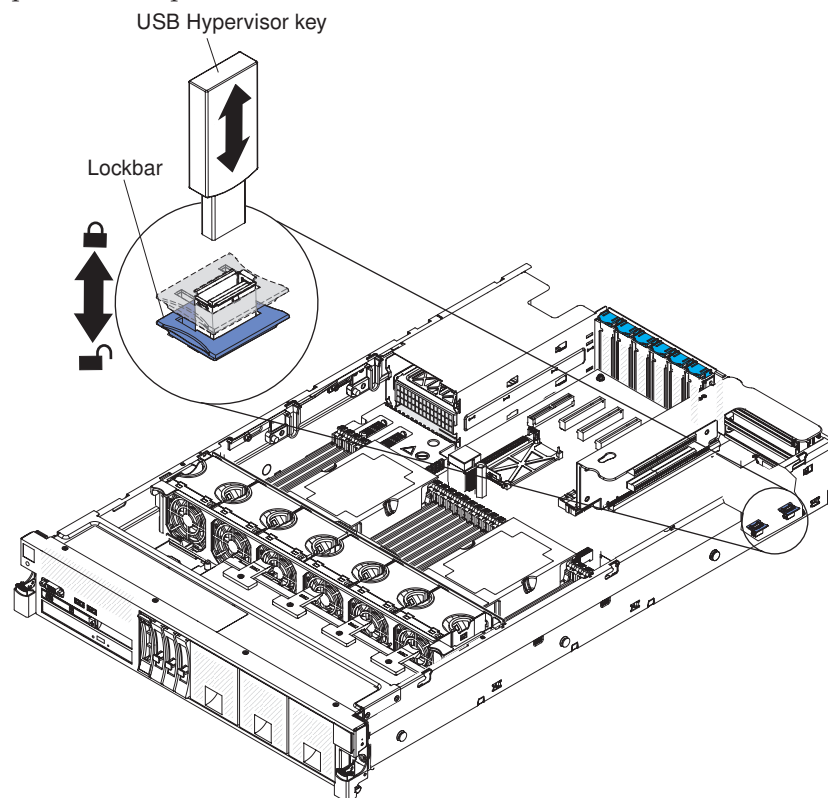
Use this information to remove a USB embedded hypervisor flash device.

About this task

To remove a USB embedded hypervisor flash device, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. If any adapters are installed in the PCI riser-card assembly, disconnect any cables that are connected to the adapters.
5. Remove the PCIe riser-card assembly (see “Removing a PCI riser-card assembly” on page 295).
6. Locate the USB embedded hypervisor flash device connector on the system board.
7. Slide the lockbar on the USB flash device connector down to the unlocked position and pull the USB flash device out of the connector.



8. If you are instructed to return the flash device, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a USB embedded hypervisor flash device

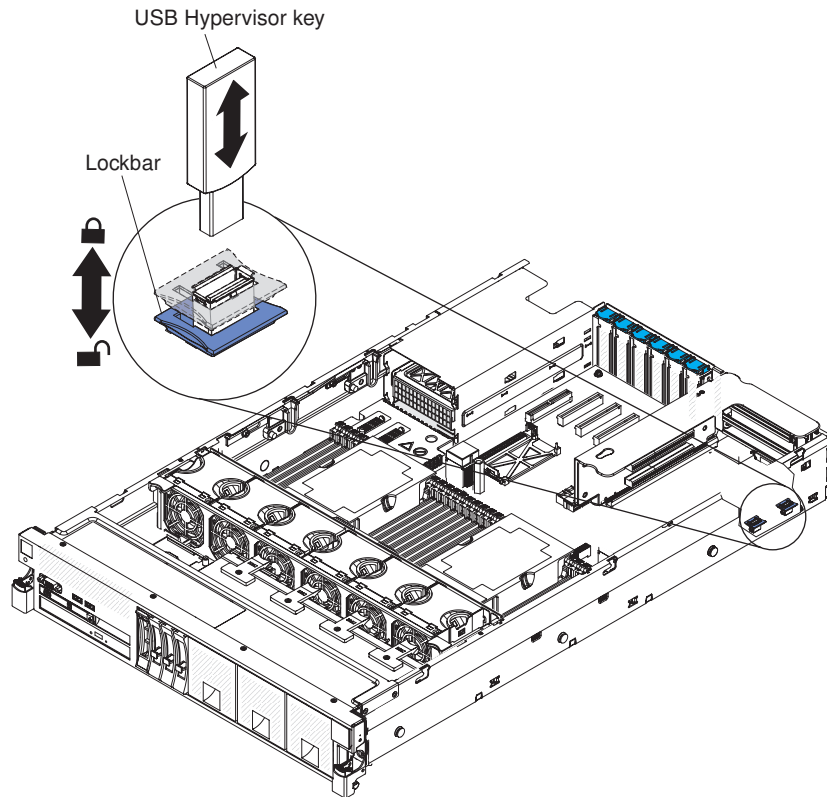
Use this information to replace a USB embedded hypervisor flash device.

About this task

To install a USB hypervisor flash device, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the USB flash device with the connector on the system board and push it into the connector until it is firmly seated.
3. Slide the lockbar up to the locked position until the lockbar is seated firmly.



4. Reinstall the PCIe riser-card assembly (see “Replacing a PCI riser-card assembly” on page 296).
5. Reconnect the cables to the adapters, if any were installed in the PCI riser-card.
6. Reconnect the power cord and any cables that you removed.
7. Install the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Turn on the peripheral devices and the server.

Removing a 1400-watt or 900-watt hot-swap power supply

Use this information to remove a 1400-watt or 900-watt hot-swap power supply.

About this task

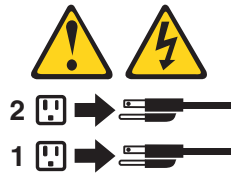
When you remove or install a hot-swap power supply, observe the following precautions.

Statement 5



CAUTION:

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8



CAUTION:

Never remove the cover on a power supply or any part that has the following label attached.



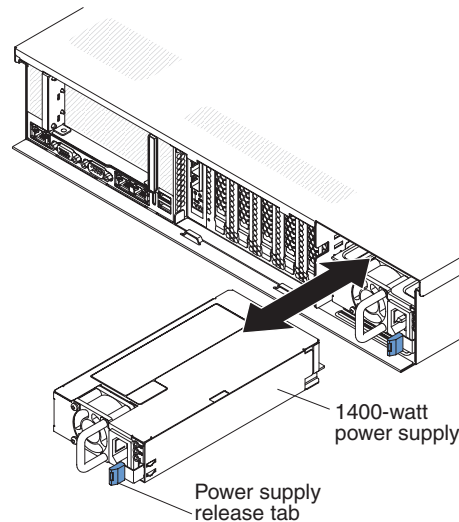
Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

To remove a hot-swap power supply, complete the following steps:

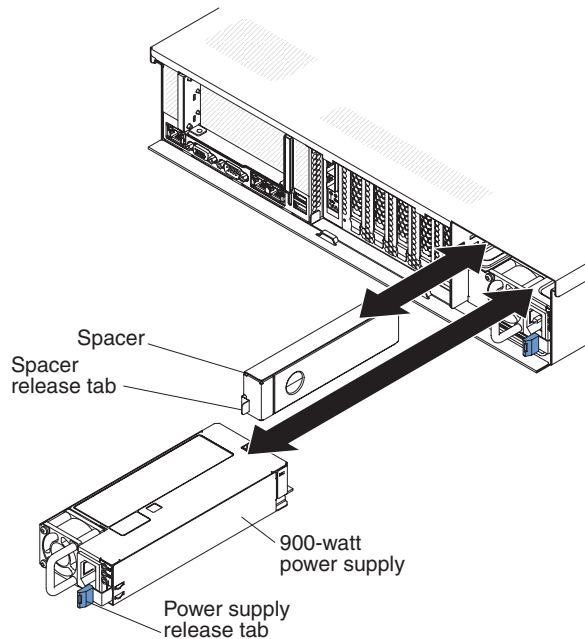
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.

2. If only one power supply is installed, turn off the server and peripheral devices and disconnect all power cords.
3. If the server is in a rack, at the back of the server, pull back the cable management arm to gain access to the rear of the server and the power supply.
4. **Removing a 1400-watt hot-swap power supply.**
 - a. Press and hold the orange release tab to the left. Grasp the handle and pull the power supply out of the server.



- b. Set the power supply aside.
 - c. Go to step 6 on page 272.
5. **Removing a 900-watt hot-swap power supply.**
 - a. Press and hold the orange release tab to the left. Grasp the power supply handle and pull the power supply out of the server.



- b. Facing the rear of the server, pull the spacer release tab on the power supply spacer to the right, use your finger to grasp the hole on the side of the spacer, and slide the power supply spacer out of the server.

- Note:** You only need to remove the spacer if you are removing all of the 900-watt power supplies and installing 1400-watt power supplies.
- c. Set the power supply spacer aside.
 6. If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a 1400-watt or 900-watt hot-swap power supply

Use this information to replace a 1400-watt or 900-watt hot-swap power supply.

The following notes describe the type of power supply that the server supports and other information that you must consider when you install a power supply:

- The server comes standard with one 1400-watt (input voltage 110 or 220 V ac auto-sensing) hot-swap power supply or an optional 900-watt (input voltage 110 or 220 V ac auto-sensing) hot-swap power supply depending on your model.

Note: You cannot mix 110 V ac and 220 V ac input voltage power supplies in the server, it is not supported.

- Do not mix 900 watt and 1400 watt power supplies in the server, it is not supported.
- These power supplies are designed for parallel operation. In the event of a power-supply failure, the redundant power supply continues to power the system. The server supports a maximum of two power supplies.

Note: When two 900 watt or 1400 watt power supplies are installed and connected to 110 V power source, redundancy is available only for a limited configuration.

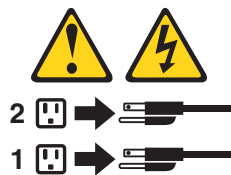
- The optional IBM Power Interposer for Redundant Power Option kit or the IBM Microprocessor and Memory Expansion Tray must be installed in the server to support two power supplies, if one is not installed in your model.

Statement 5



CAUTION:

The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.



Statement 8



CAUTION:

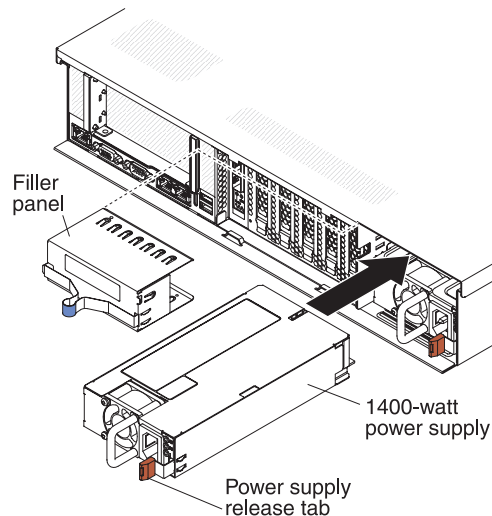
Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

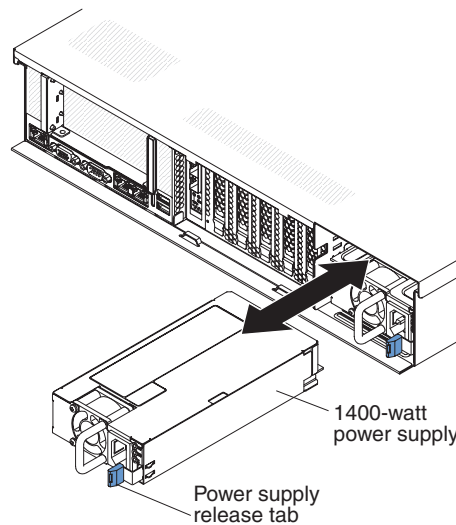
To install a hot-swap power supply, complete the following steps:

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the hot-swap power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
3. If you are installing a hot-swap power supply into an empty bay, remove the power-supply filler panel from the power-supply bay.



4. Replacing a 1400-watt hot-swap power supply.

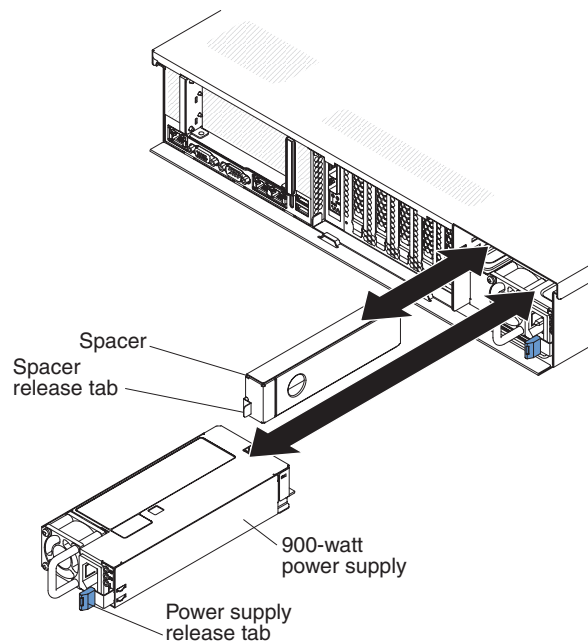
- a. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks into place



- b. Make sure that the power supply connects firmly into the power-supply connector.
- c. Go to step 6.

5. Replacing a 900-watt hot-swap power supply.

- a. Facing the rear of the server, insert the power supply spacer against the wall on the left side of the power supply bay, if you removed it.



- b. Slide the power supply spacer into the bay until it snaps into place on the tabs that are on the side of the bay.
 - c. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.
6. Route the power cord through the hook-and-loop strap so that it does not accidentally become disconnected.
 7. Connect the power cord for the new power supply to the power-cord connector on the power supply.
 8. Connect the other end of the power cord to a properly grounded electrical outlet.

9. Turn on the peripheral devices and the server.
10. Make sure that the ac power LED and the dc power LED on the power supply are lit, indicating that power is being supplied to the power supply through the power cord. During normal operation, both ac and dc power LEDs are lit. For other combinations of LEDs, see “Power-supply LEDs” on page 186.

Removing a hot-swap fan assembly

Use this information to remove a hot-swap fan assembly.

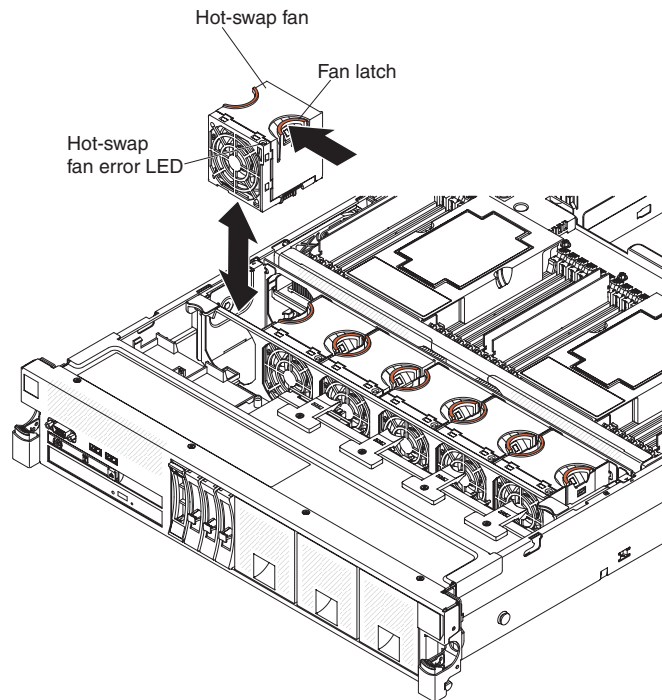
About this task

Attention: To ensure proper server operation, replace a failed hot-swap fan within 30 seconds.

To remove a hot-swap-fan, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. If the server is in a rack, slide the server out of the rack.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Pull the fan latch to the left to release the fan from the fan connector and pull the fan out of the fan cage assembly.



Attention: To ensure proper operation, replace a failed hot-swap fan within 30 seconds.

5. If you are instructed to return the fan, follow all of the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a hot-swap fan assembly

Use this information to replace a hot-swap fan assembly.

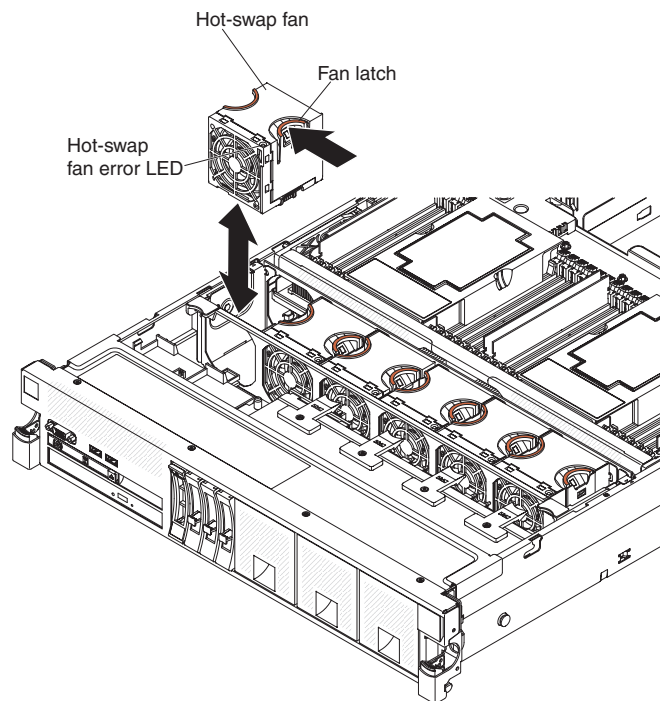
About this task

The server comes standard with six speed-controlled hot-swap cooling fans.

Attention: To ensure proper operation, replace a failed hot-swap fan within 30 seconds.

To install or replace a hot-swap fan, complete the following steps:

1. Touch the static-protective package that contains the new fan to any unpainted metal surface on the server; then, remove the new fan from the package.
2. Orient the fan over the fan slot in the fan cage assembly so that the fan connector aligns with the connector on the system board.



3. Insert the fan into the fan slot in the fan cage assembly and ensure that it is seated correctly and the fan release tab is in the slot (hole) on the fan cage assembly.
4. Install the cover (see "Replacing the server top cover" on page 237).
5. Slide the server into the rack.

Removing the fan cage assembly

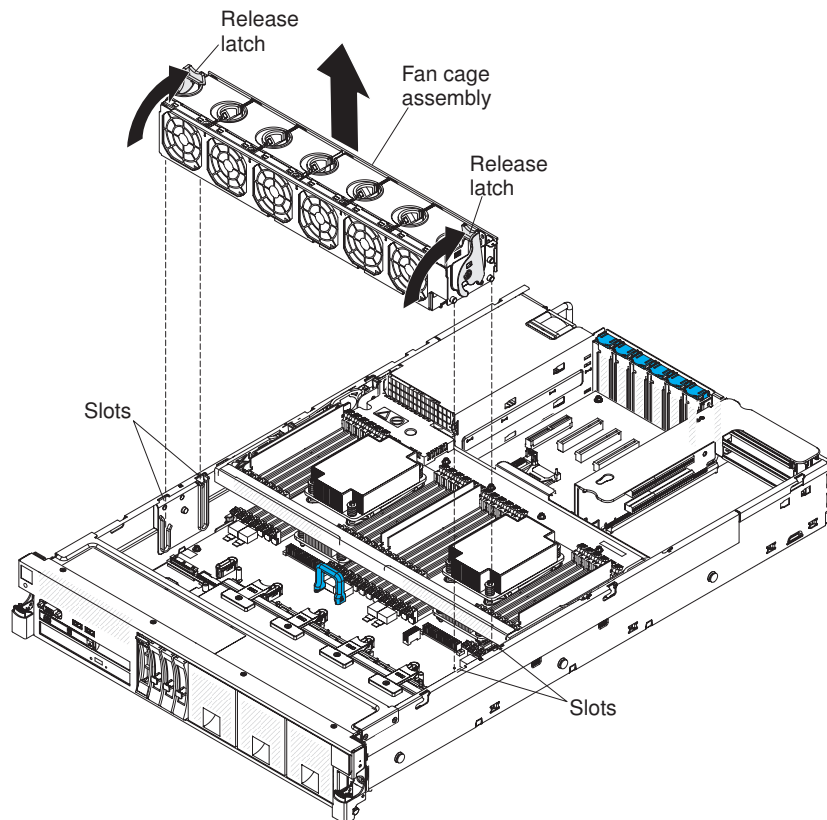
Use this information to remove the fan cage assembly.

About this task

To remove the fan cage assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. If the server is in a rack, slide the server out of the rack.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. If you are replacing the fan cage assembly, remove the fans (see “Removing a hot-swap fan assembly” on page 275).
6. Lift the fan cage assembly release latches and rotate the release latches up until the assembly disengages from the chassis; then, lift the fan cage assembly out of the server.



7. If you are instructed to return the fan cage assembly, follow all of the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the fan cage assembly

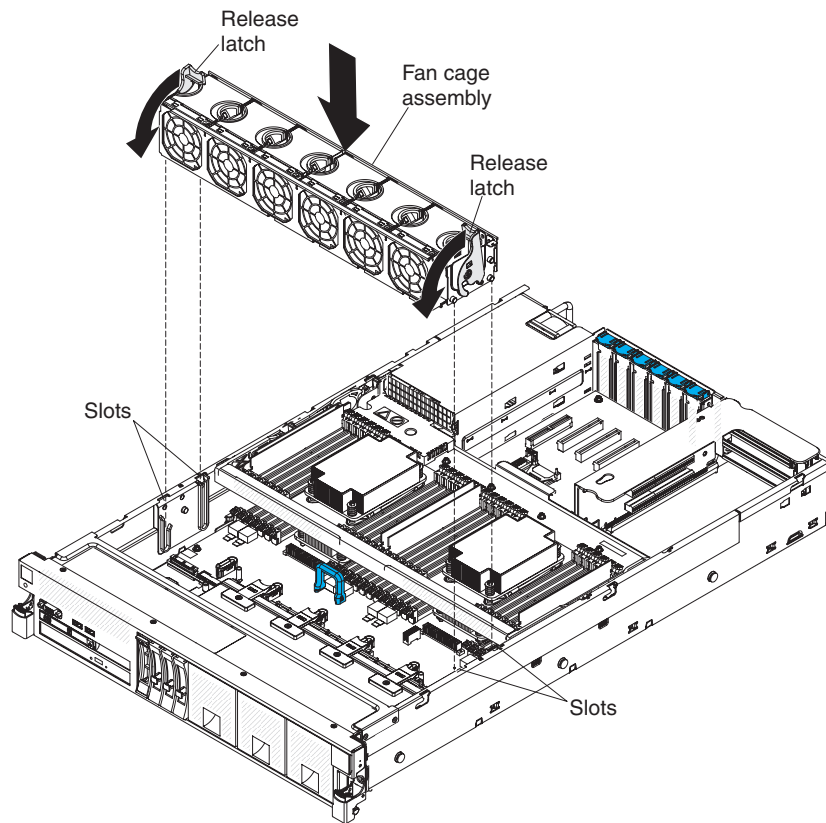
Use this information to replace the fan cage assembly.

About this task

To install the fan cage assembly, complete the following steps:

Procedure

1. Align the tabs on the fan cage assembly with the slots on both sides of the chassis and lower it into the server.



2. Rotate the fan cage assembly release latches down until the release latches are in the locked position.
3. Reinstall the cover (see "Replacing the server top cover" on page 237).
4. Slide the server into the rack.
5. Reconnect the power cord and any cables that you removed.
6. Turn on the peripheral devices and the server.

Removing the Intel I350-T4 ML2 Quad-Port GbE Adapter for IBM System x

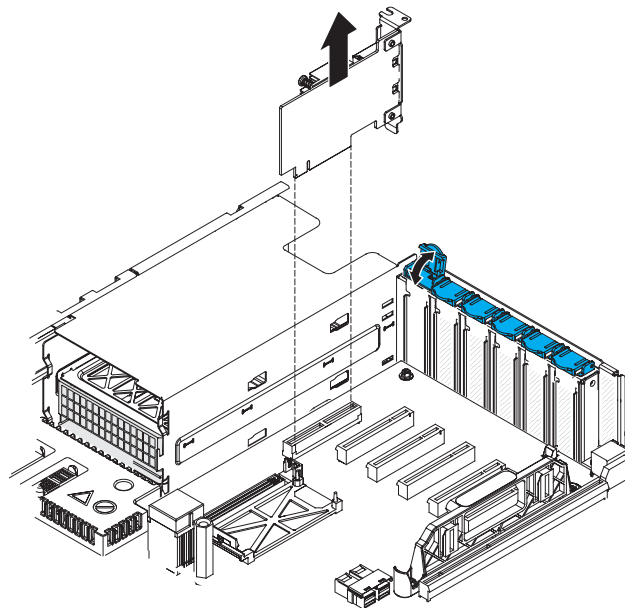
Use this information to remove the Intel I350-T4 ML2 Quad-Port GbE Adapter for IBM System x.

About this task

To remove the Intel I350-T4 ML2 Quad-Port GbE Adapter for IBM System x, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Open the adapter retention latch.
5. Carefully grasp the adapter and pull it out of the connector on the system board.



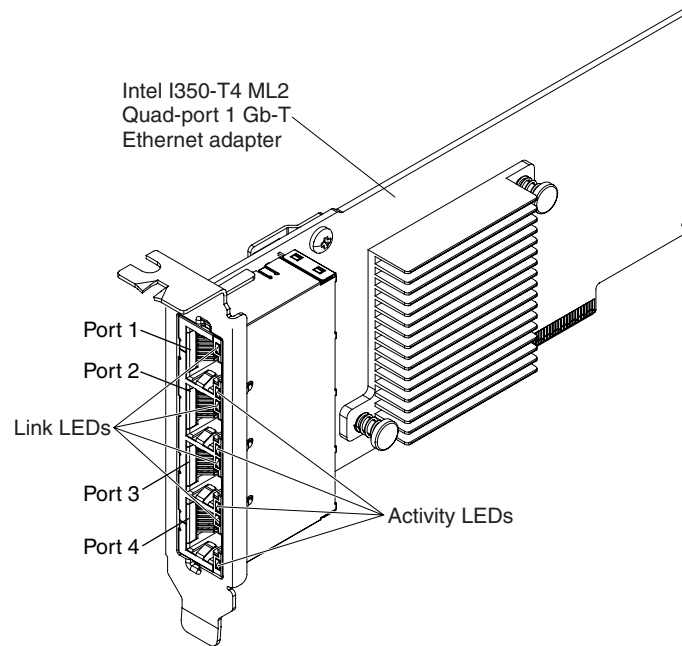
6. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x

Use this information to replace the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x.

About this task

The following illustration is the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x. See “Supported adapters” on page 78 and Table 15 on page 76 for more information.



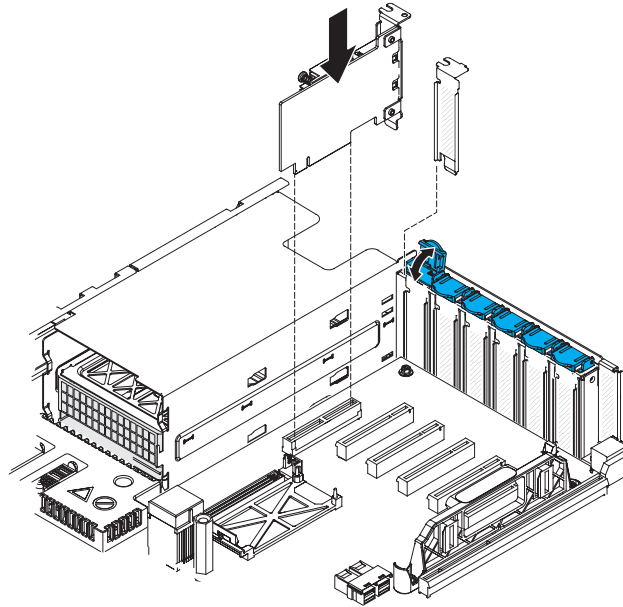
To install the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x, complete the following steps:

Note: The illustration in this document might differ slightly from your hardware.

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
3. Align the edge connector on the adapter with the connector on the system board. Press the edge of the connector *firmly* into the system board connector and make sure that the adapter snaps into the connector securely.

Attention: When you install an adapter, make sure that the adapter is correctly seated on the system board connector before you turn on the server. An incorrectly seated adapter might cause damage to the system board or the adapter.



4. Close the adapter retention latch.
5. Reconnect any cables that you disconnect earlier.
6. Perform any configuration tasks that are required for the adapter.
7. Replace the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cord and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x

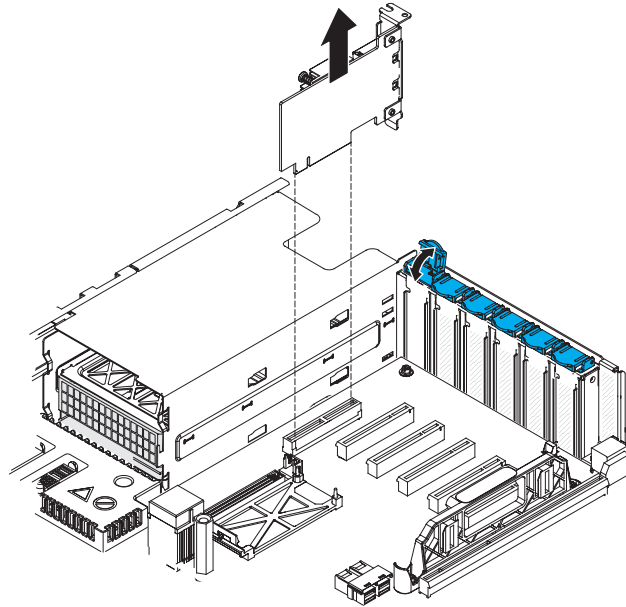
Use this information to remove the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x.

About this task

To remove the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x , complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Open the adapter retention latch.
5. Carefully grasp the adapter and pull it out of the connector on the system board.



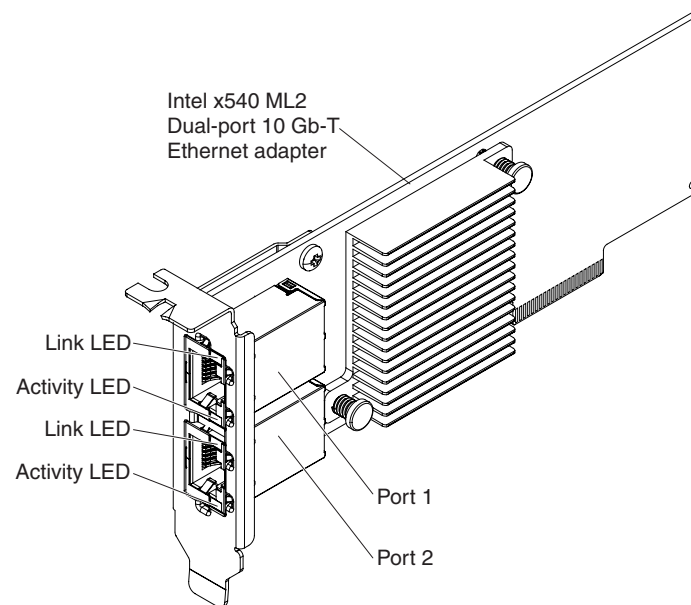
6. If you are instructed to return the adapter, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

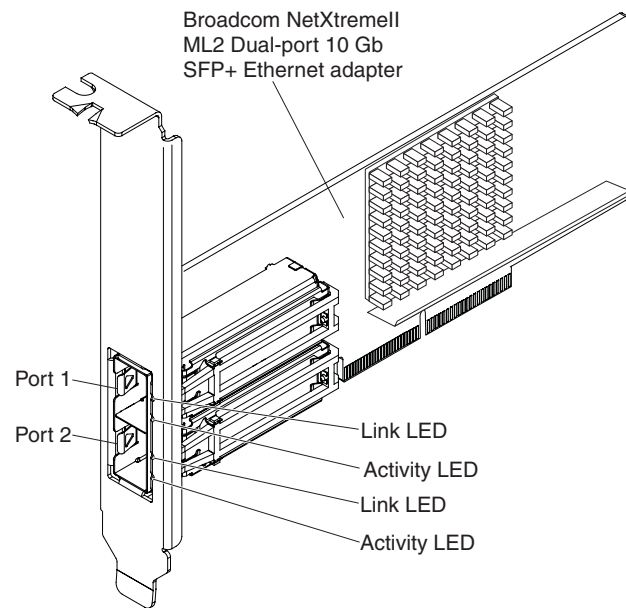
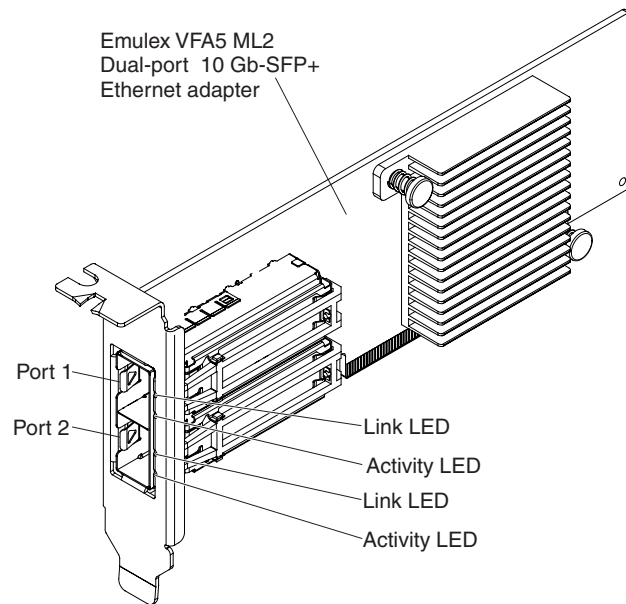
Replacing the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x

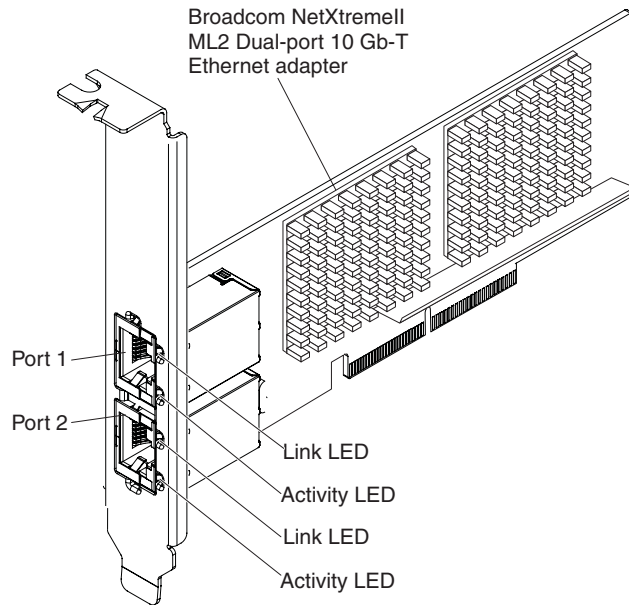
Use this information to replace the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x.

About this task

The following illustrations are the ML2 Dual-port 10Gbase-T Adapter for IBM System x and the ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x. See “Supported adapters” on page 78 and Table 15 on page 76 for more information.







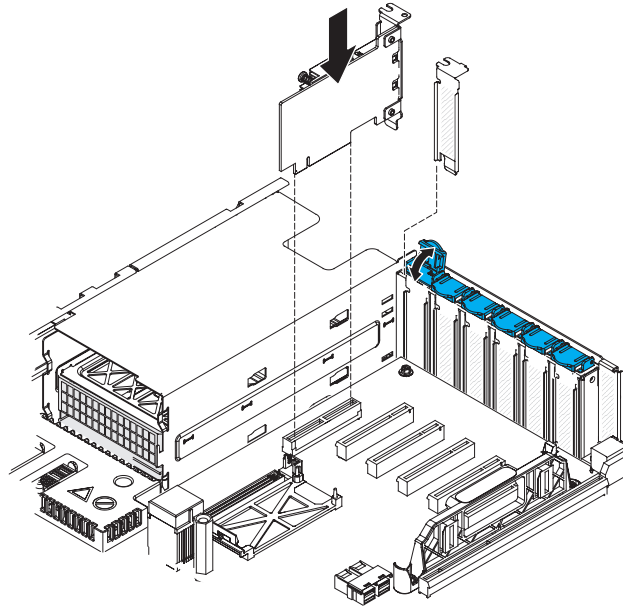
To install the ML2 Dual-port 10Gbase-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x, complete the following steps:

Note: The illustration in this document might differ slightly from your hardware.

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new adapter to any unpainted metal surface on the server; then, remove the adapter from the package.
3. Align the edge connector on the adapter with the connector on the system board. Press the edge of the connector *firmly* into the system board connector and make sure that the adapter snaps into the connector securely.

Attention: When you install an adapter, make sure that the adapter is correctly seated on the system board connector before you turn on the server. An incorrectly seated adapter might cause damage to the system board or the adapter.



4. Close the adapter retention latch.
5. Reconnect any cables that you disconnect earlier.
6. Perform any configuration tasks that are required for the adapter.
7. Replace the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cord and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing a RAID adapter flash power module

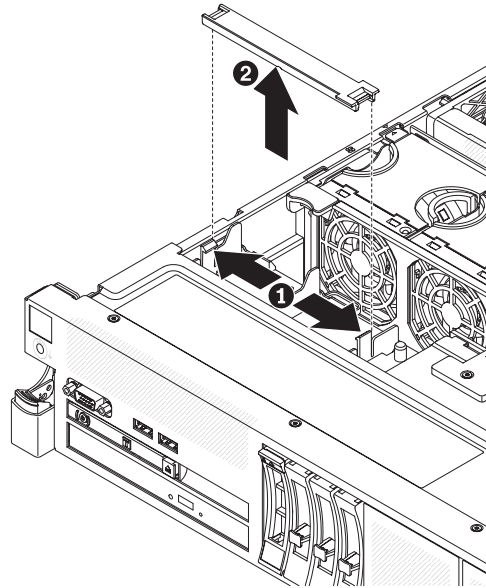
Use this information to remove a RAID adapter flash power module.

About this task

If a RAID adapter flash power module is installed remotely in the server and you need to replace the RAID adapter flash power module, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. Locate the battery/flash power module trays on top of the USB/video assembly (above the operator information panel).
5. Press the tray retention clip tab to the right or left and remove the retention clip. See
6. Disconnect the flash power module cable from the failed flash power module and remove it from the tray.



7. If you are instructed to return the flash power module, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a RAID adapter flash power module

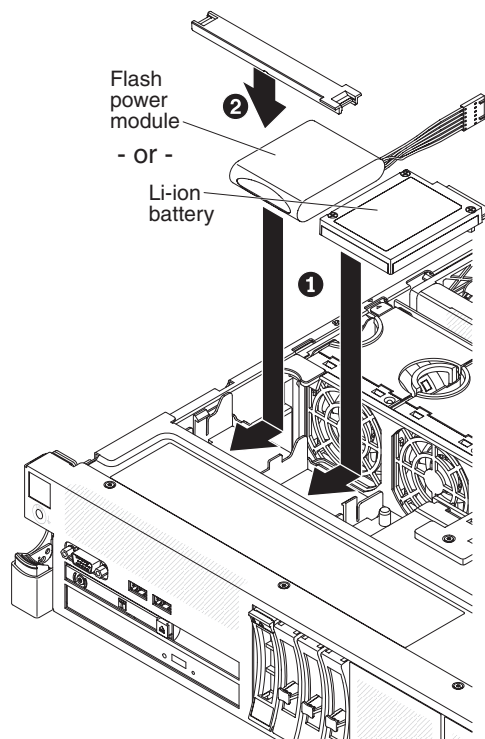
Use this information to replace a RAID adapter flash power module.

About this task

When you install any RAID adapter that comes with a flash power module, the flash power module must be installed remotely in the server to prevent it from overheating. The RAID adapter flash power module must be installed in the trays on top of the USB/video assembly (above the operator information panel). To install the RAID adapter flash power module remotely in the server, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Place the new flash power module into the battery/flash power module tray.
3. Connect the flash power module cable to the cable connector on the new flash power module. Replace the retention clip by pressing down on the retention clip until it snaps in place to hold the flash power module firmly in place.



4. Install the cover.
5. Slide the server into the rack.
6. Reconnect the power cords and all external cables, and turn on the server and peripheral devices.

Removing a RAID cache card

Use this information to remove a RAID cache card.

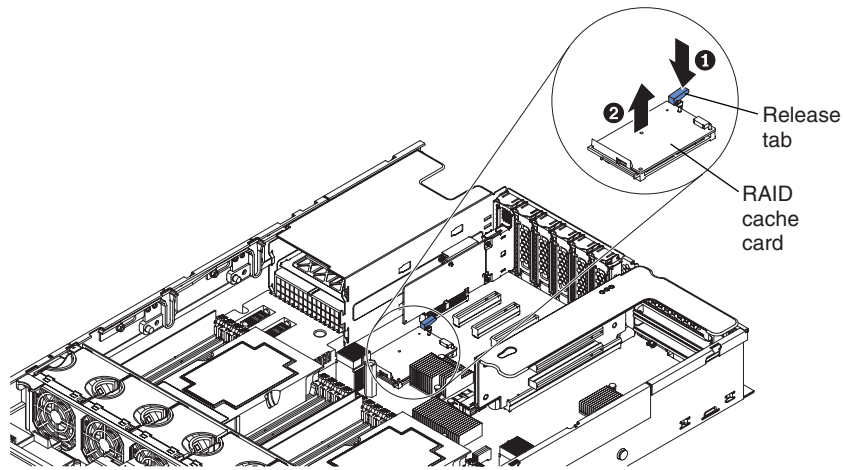
About this task

Note: For additional information and notes about the adapters, see “Installing an adapter” on page 76.

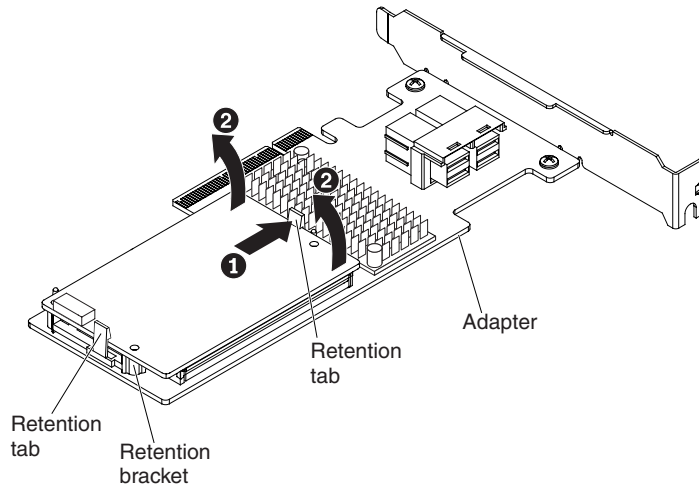
To remove a RAID cache card, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see “Removing the server top cover” on page 236).
4. **If the cache card is installed on the system board**, complete the following steps.
 - a. Disconnect the cable from the flash power module in the battery/flash power module tray located on top of the USB/video assembly near the front of the server.
 - b. Press the blue lever down to the open position. The cache card will disengage from the RAID cache card connector on the system board.



- c. Disconnect the flash power module cable from the cache card.
- d. Press the black retention clip toward the front of the server and lift the cache card out of the server and set it aside.
- e. Go to step 6.
5. **If the cache card is installed on a RAID adapter**, complete the following steps:
 - a. Disconnect the cable from the flash power module in the battery/flash power module tray located on top of the USB/video assembly.
 - b. Grasp the riser-card assembly at the blue touch points and pull it up until the riser-card assembly disengages from the connector on the system board.
 - c. Disconnect the cache card cable from the cache card on the RAID adapter.
 - d. Remove the adapter from the riser-card assembly (see "Removing an adapter" on page 244).
 - e. Press the black retention clip away from the cache card and lift the cache card off the adapter and set it aside.



6. If you are instructed to return the cache card, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a RAID cache card

Use this information to replace a RAID cache card.

About this task

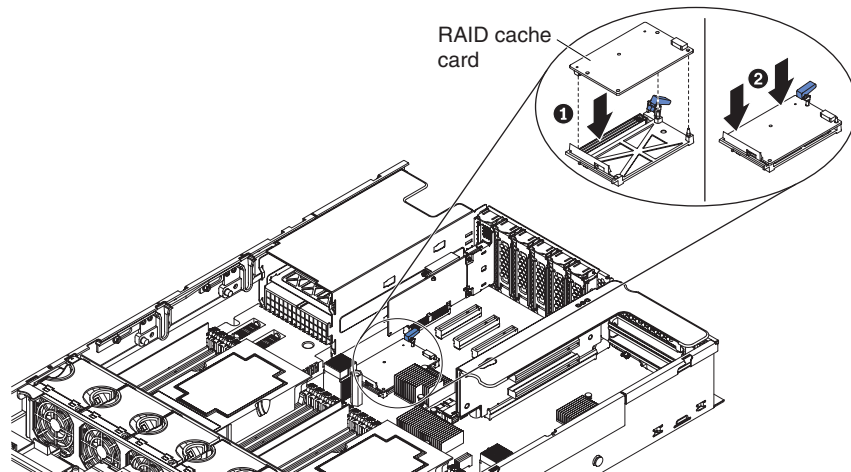
Note: For additional information and notes about installing adapters, see “Installing an adapter” on page 76.

To install a RAID cache card, complete the following steps:

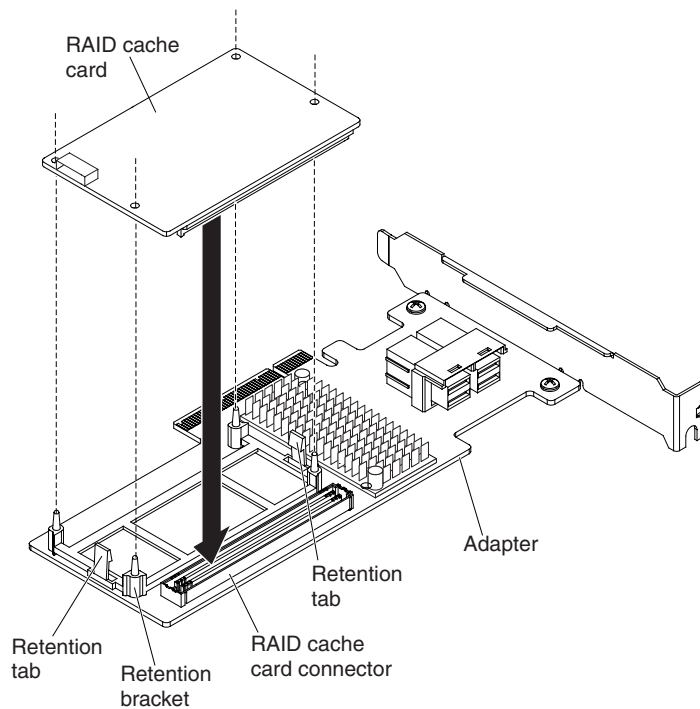
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the new RAID cache card to any unpainted surface on the outside of the server; then, grasp the card by the top edge or upper corners of the card and remove it from the package.
3. **If you are replacing a cache card that is installed on the system board,** complete the following steps.
 - a. Connect the flash power module cable to the cache card.
 - b. Align the cache card with the RAID cache card slot on the system board and lower it onto the connector.

Note: To assist in aligning the cache card, you can align the cache card holes with the two RAID cache card connector Guide Pins; then, lower the cache card onto the connector.



- c. Gently press down on the touch points of the cache card until it clicks into place on the connector and is firmly seated.
 - d. Reconnect the cache card cable to the flash power module in the battery/flash power module tray.
 - e. Continue to step 5 on page 290.
4. **If you are replacing a cache card on the RAID adapter,** complete the following steps:
 - a. Align the cache card with the RAID cache card slot on the RAID adapter and lower it onto the connector.



- b. Gently press down on the touch points of the cache card until it clicks into place on the connector and is firmly seated
 - c. Reconnect the flash power module cable to the cache card.
 - d. Align the PCI riser-card assembly with the PCI slot connector on the system board and align slots on the PCI riser-card assembly with the hinges on the chassis; then, press down firmly until the riser-card assembly is seated correctly in the connector on the system board.
 - e. Insert the adapter into the connector on the riser-card until it is firmly seated.
 - f. Reconnect the flash power module cable to the flash power module in the battery/flash power module tray located on top of the USB/video assembly near the front of the server.
 - g. Go to step 5.
5. Replace the cover (see "Replacing the server top cover" on page 237).
 6. Slide the server in the rack.
 7. Reconnect the power cord and any cables that you removed.
 8. Turn on the peripheral devices and the server.

Removing the system battery

Use this information to remove the system battery.

About this task

The following notes describe information that you must consider when replacing the battery:

- IBM has designed this product with your safety in mind. The lithium battery must be handled correctly to avoid possible danger. If you replace the battery, you must adhere to the following instructions.

Note: In the U. S., call 1-800-IBM-4333 for information about battery disposal.

- If you replace the original lithium battery with a heavy-metal battery or a battery with heavy-metal components, be aware of the following environmental consideration. Batteries and accumulators that contain heavy metals must not be disposed of with normal domestic waste. They will be taken back free of charge by the manufacturer, distributor, or representative, to be recycled or disposed of in a proper manner.
- To order replacement batteries, call 1-800-IBM-SERV within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your support center or business partner.

Note: After you replace the battery, you must reconfigure the server and reset the system date and time.

Statement 2



CAUTION:

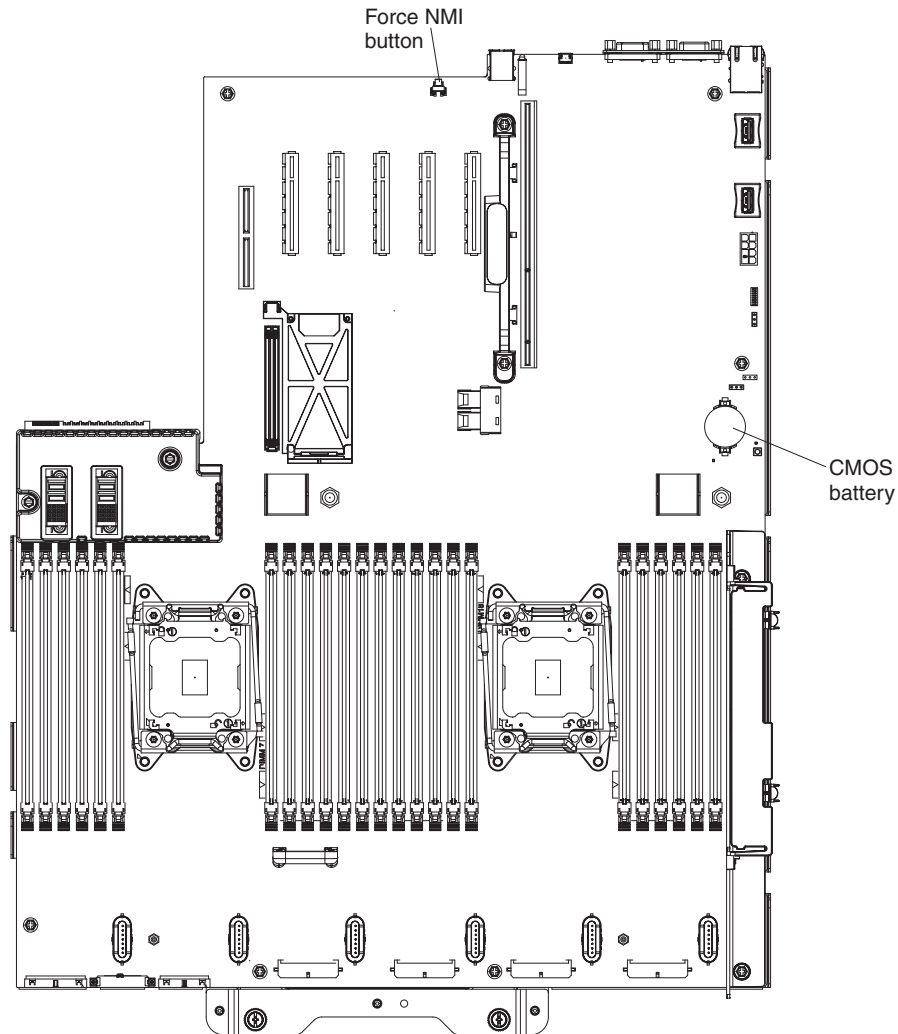
When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

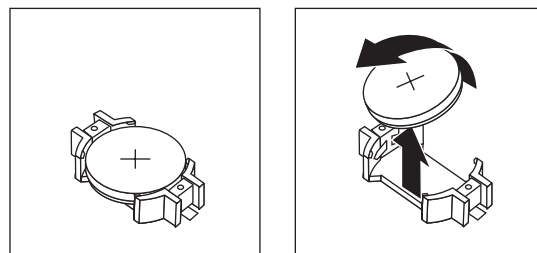
Dispose of the battery as required by local ordinances or regulations.

To remove the system-board battery, complete the following steps:



Procedure

1. Read the safety information and installation guidelines, see "Safety" on page vii and "Installation guidelines" on page 41.
2. Turn off the server (see "Turning off the server" on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the top cover (see "Removing the server top cover" on page 236).
4. Disconnect the cables from the adapters in the PCI riser-card assembly and remove the PCI riser assembly from the server. (see "Removing a PCI riser-card assembly" on page 295).
5. Remove the system-board battery:
 - a. Use one finger to push the battery horizontally out of its housing.



- b. Use your thumb and index finger to lift the battery from the socket.
6. Dispose of the battery as required by local ordinances or regulations. See the *IBM Environmental Notices and User's Guide* on the IBM Documentation CD for more information.

Replacing the system battery

Use this information to replace the system battery.

About this task

The following notes describe information that you must consider when replacing the system-board battery in the server.

- When replacing the system-board battery, you must replace it with a lithium battery of the same type from the same manufacturer.
- To order replacement batteries, call 1-800-426-7378 within the United States, and 1-800-465-7999 or 1-800-465-6666 within Canada. Outside the U.S. and Canada, call your IBM sales representative or IBM reseller.
- After you replace the system-board battery, you must reconfigure the server and reset the system date and time.
- To avoid possible danger, read and follow the following safety statement.

Statement 2



CAUTION:

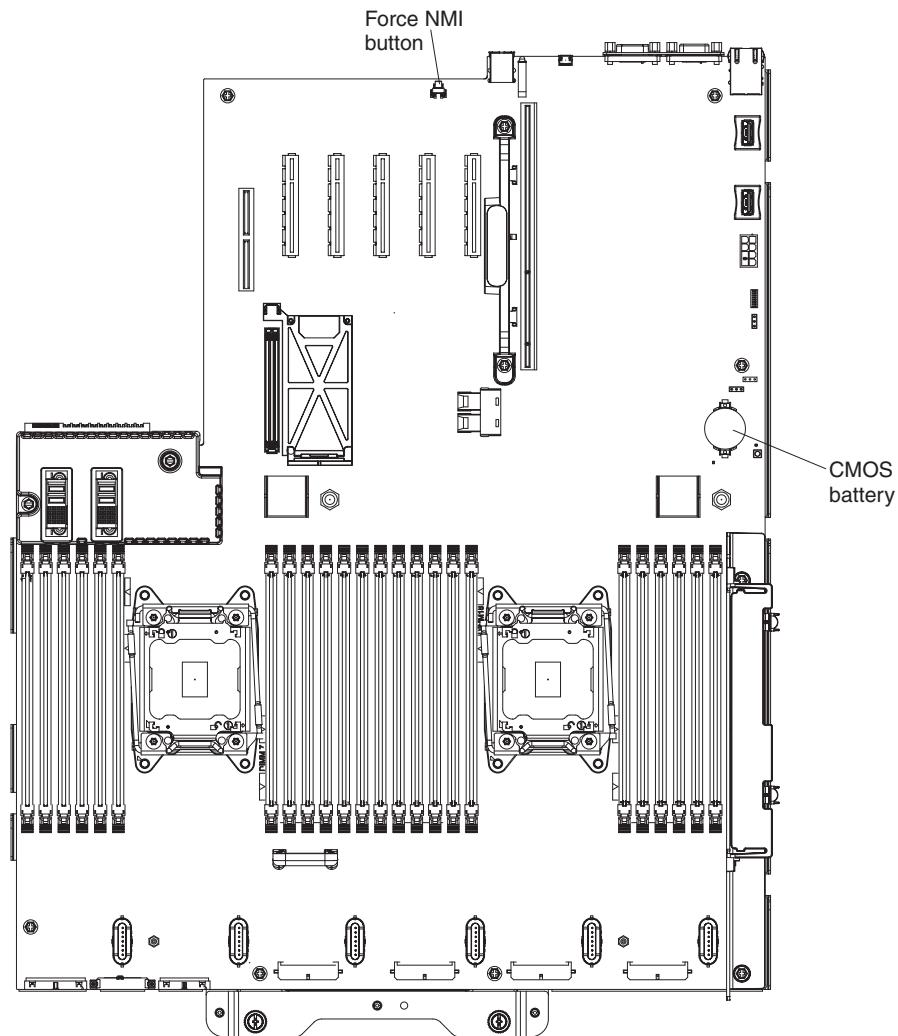
When replacing the lithium battery, use only IBM Part Number 33F8354 or an equivalent type battery recommended by the manufacturer. If your system has a module containing a lithium battery, replace it only with the same module type made by the same manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

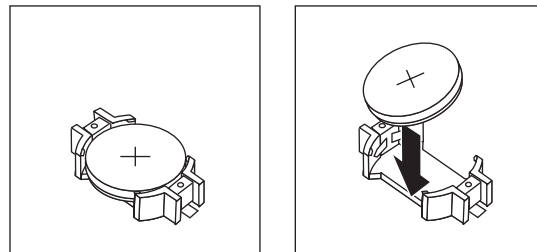
Dispose of the battery as required by local ordinances or regulations.

To install the replacement system-board battery, complete the following steps:



Procedure

1. Follow any special handling and installation instructions that come with the replacement battery.
2. Insert the new battery:
 - a. Position the battery so that the positive (+) symbol is facing you.



- b. Place the battery into its socket, and press the battery toward the housing until it clicks into place. Make sure that the battery clip holds the battery securely.
3. Reinstall the PCI riser-card (see "Installing a PCIe riser-card assembly" on page 75) and reconnect the cables to the adapters.
4. Install the cover (see "Replacing the server top cover" on page 237).

5. Slide the server into the rack.
6. Reconnect the external cables; then, reconnect the power cords and turn on the peripheral devices and the server.

Note: You must wait approximately 10 seconds after you connect the server to input power before the power-on button becomes active.

7. Start the Setup utility and reset the configuration.
 - Set the system date and time.
 - Set the power-on password.
 - Reconfigure the server.

See “Using the Setup utility” on page 145 for details.

Removing a PCI riser-card assembly

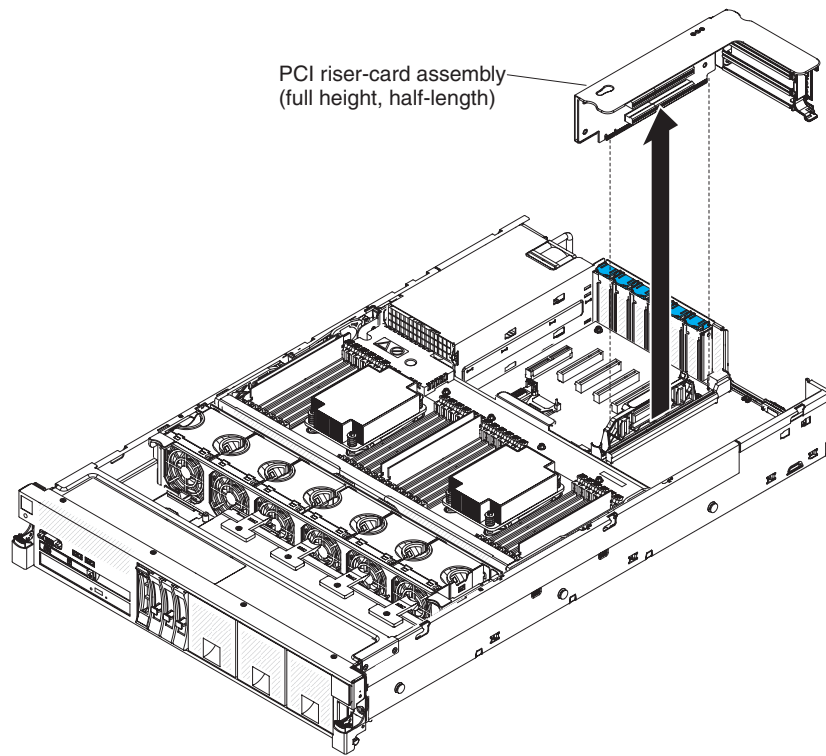
Use this information to remove a PCI riser-card assembly.

About this task

To remove a PCI riser-card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and the “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack, if installed in a rack.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. If an adapter is installed in the PCI riser-card assembly, disconnect any cables that are connected to the adapter.
6. Grasp the front and rear of the PCI riser-card assembly at the blue touch-points and lift it out of the PCI riser-card slot on the system board.



7. Remove the adapter, if necessary, from the PCI riser-card assembly.
8. Set the adapter and PCI riser-card assembly aside.

Replacing a PCI riser-card assembly

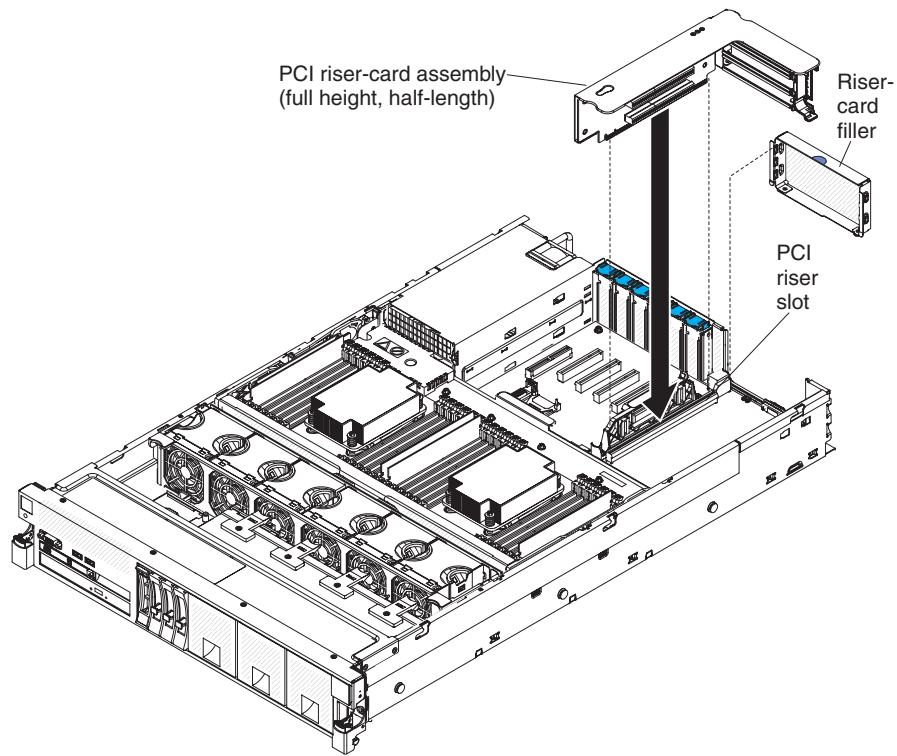
Use this information to replace a PCI riser-card assembly.

About this task

To install a PCI riser-card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Install the adapter in the new PCI riser-card assembly (see “Replacing an adapter” on page 245).
3. Align the PCI riser-card assembly with the PCI slot connector on the system board and align it with the slot on the chassis; then, lower it into the server and press down firmly until the PCI riser-card assembly is seated correctly in the connector on the system board.



4. Reconnect any cables that you disconnected earlier to the adapters.
5. Install the cover (see “Replacing the server top cover” on page 237).
6. Slide the server into the rack, if it was in a rack.
7. Reconnect the power cords and any cables that you removed.
8. Turn on the peripheral devices and the server.

Removing the operator information panel assembly

Use this information to remove the operator information panel assembly.

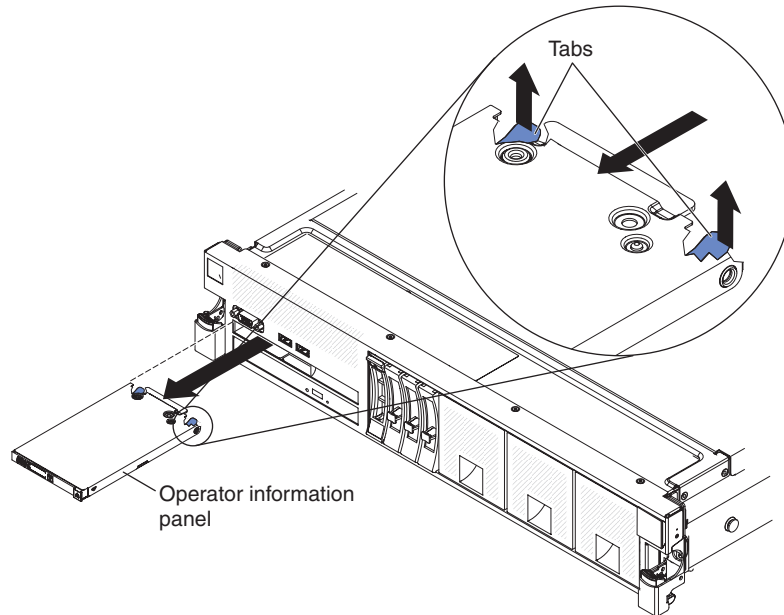
About this task

To remove the operator information panel, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack.
4. Remove the server cover (see “Removing the server top cover” on page 236).
5. Disconnect the cable from the rear of the operator information panel assembly.

6. Lift the two release tabs on the rear of the operator information panel and carefully slide the assembly out of the front of the server.



7. If you are instructed to return the operator information panel assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the operator information panel assembly

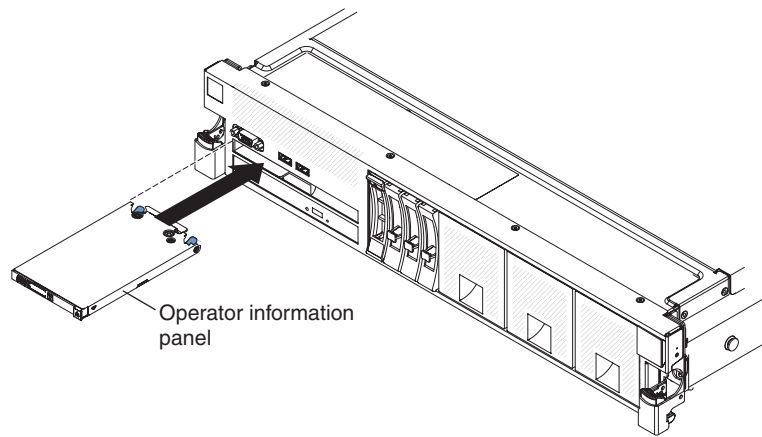
Use this information to replace the operator information panel assembly.

About this task

To install the operator information panel, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. From the front of the server, align the panel with the slot and slide the operator information panel into the server until it clicks into place.



3. Reconnect the cable to the rear of the operator information panel assembly.

Note: Make sure that cable is installed correctly by using the keys on the connector and the keys on the cable. Incorrect installation of the cable can damage the operator information panel.

4. Install the cover (see “Replacing the server top cover” on page 237).
5. Slide the server into the rack.
6. Reconnect the power cords and any cables that you removed.
7. Turn on the peripheral devices and the server.

Removing and replacing Tier 2 CRUs

Use this information to remove and replace Tier 2 CRUs.

You may install a Tier 2 CRU yourself or request a Lenovo approved warranty service provider to install it, at no additional charge, under the type of warranty service that is designated for your server.

The illustrations in this document might differ slightly from your hardware.

Removing the USB/video tray assembly

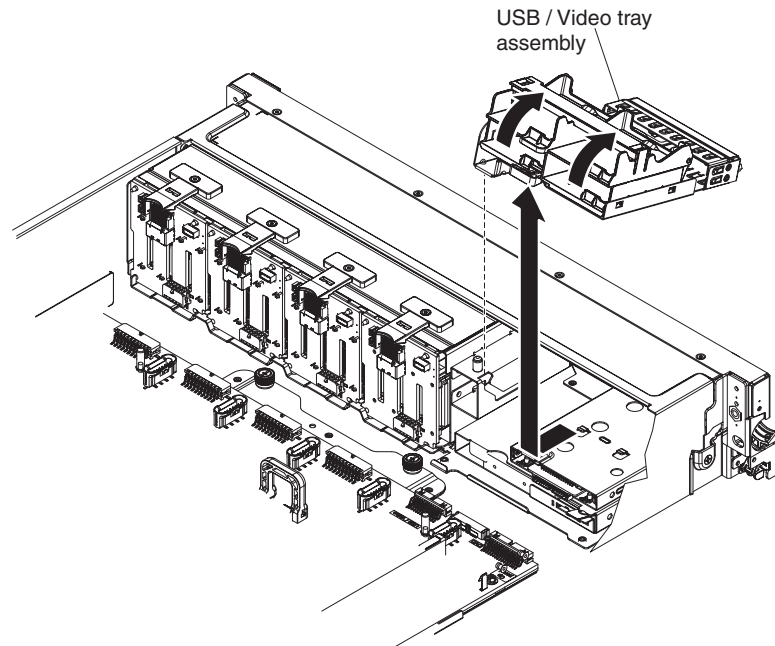
Use this information to remove the USB/video tray assembly.

About this task

To remove the USB/video tray assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack.
4. Remove the server top cover (see “Removing the server top cover” on page 236).
5. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
6. Remove all RAID flash power modules from the USB/video tray assembly, if any are installed (see “Removing a RAID adapter flash power module” on page 285).
7. Disconnect the USB/video tray assembly cable from the system board.
8. Lift the tab on the rear of the USB/video tray assembly and the assembly; then, slide the assembly out (toward the rear of the server) of the server.



9. If you are instructed to return the USB/video tray assembly, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the USB/video tray assembly

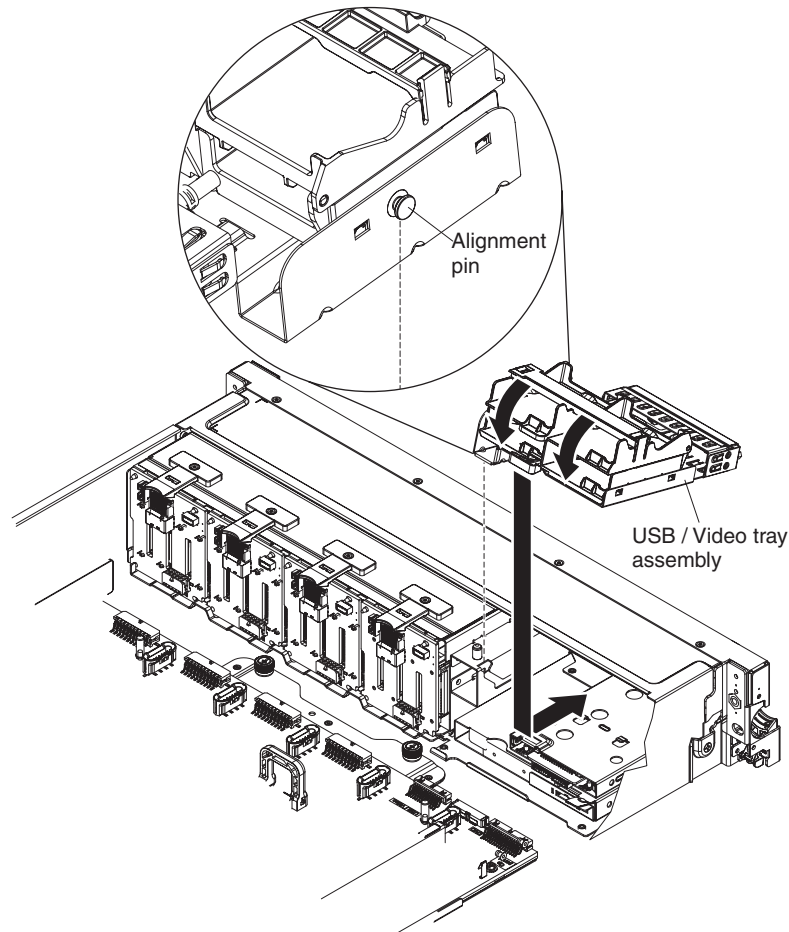
Use this information to replace the USB/video tray assembly.

About this task

To install the USB/video tray assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. From inside the server, align the USB/video tray assembly with the slot in the server and insert the pin on the side of the tray assembly into the pin hole on the side of the slot for the tray assembly; then, slide it into the slot until it snaps into place and is seated firmly.



3. Connect the USB/video cable to the system board.
4. Reinstall the RAID flash power modules, if you removed them earlier (see “Replacing a RAID adapter flash power module” on page 286).
5. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
6. Replace the cover (see “Replacing the server top cover” on page 237).

Removing the power interposer for redundant power supply card assembly

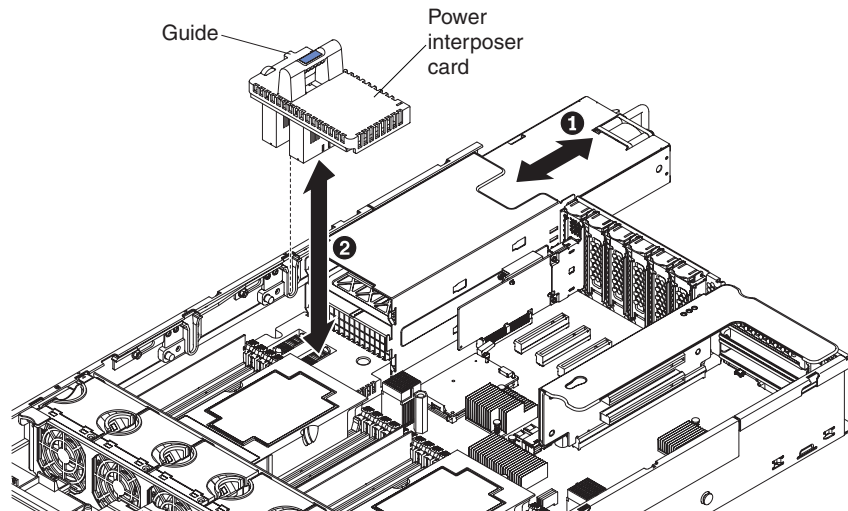
Use this information to remove the power interposer for redundant power supply card assembly.

About this task

To remove the power interposer for redundant power supply card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the server cover (see “Removing the server top cover” on page 236).
4. Disconnect the power supply that is connected to the power interposer card assembly.
5. Grasp the power interposer card assembly and lift it out of the connectors on the system board.



6. If you are instructed to return the power interposer card assembly, follow all of the packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a power interposer redundant power supply card assembly

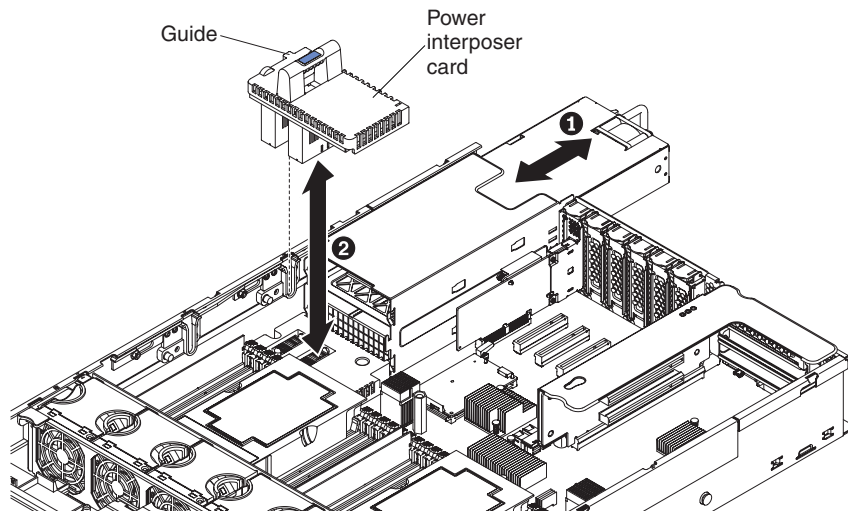
Use this information to replace a power interposer redundant power supply card assembly.

About this task

To install the power interposer for redundant power supply card assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the connectors on the power interposer card assembly with the power interposer card connectors on the system board; then, press down on the assembly until it is firmly seated in the connectors on the system board.



3. Reinstall the power supply that you removed earlier.
4. Reinstall the cover (see “Replacing the server top cover” on page 237).
5. Slide the server into the rack.
6. Reconnect the power cords and any cables that you removed.
7. Turn on the peripheral devices and the server.

Removing the 4x2.5-inch hot-swap drive backplanes

Use this information to remove the 4x2.5-inch hot-swap drive backplane.

About this task

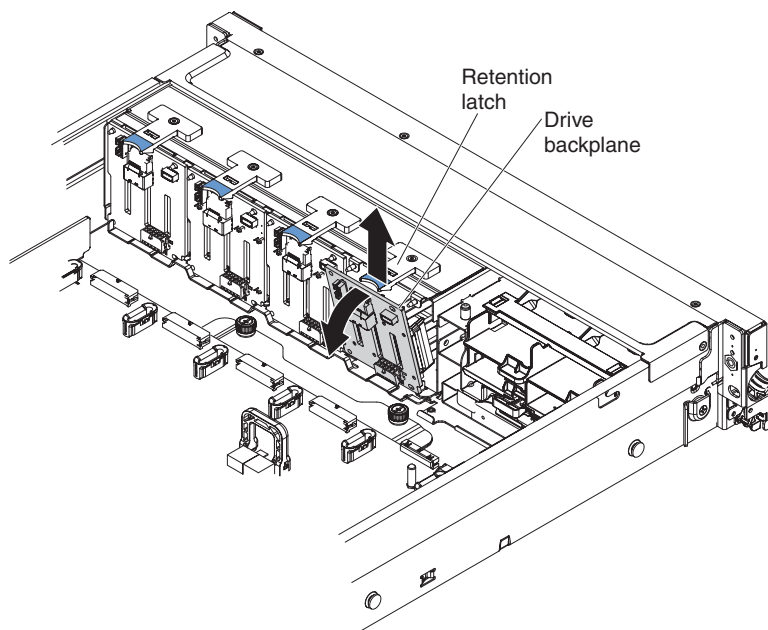
To remove the 4x2.5-inch hot-swap drive backplanes, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. Pull the drives and filler panels out of the server slightly to disengage them from the drive backplane.
6. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
7. Disconnect the combination power/configuration cable from the backplane. If a SAS signal cable is attached to the drive backplane, disconnect it.

Note: You can also choose to disconnect the cables after removing the backplane, if that is easier for you.

8. Lift the retention latch or latches on top of the backplane cage; then, rotate the backplane down and pull it out of the retention latch and remove it from the server.



9. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

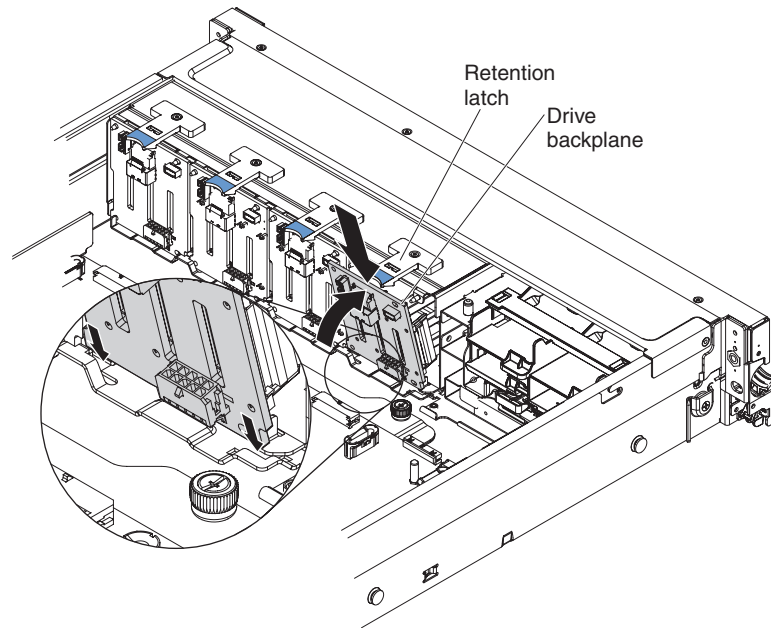
Replacing the 4x2.5-inch hot-swap drive backplanes

Use this information to replace the 4x2.5-inch hot-swap drive backplane.

To install the replacement hot-swap 4x2.5-inch drive backplanes, complete the following steps:

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the tabs on the bottom of the drive backplane with the slots on the bottom of the backplane cage.
3. Insert the drive backplane tabs into slots on the bottom of the backplane cage and push the drive backplane forward into the retention latch on top of the backplane cage until the backplane is locked in place.

Note: You can reconnect the cables to the drive backplane before installing the backplane onto the cage or you can connect the cables after you install the backplane, if that is easier for you.



4. Reconnect the cables to the drive backplane.
5. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
6. Reinstall the drives and filler panels.
7. Install the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cords and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing the 8x1.8-inch hot-swap drive backplane assembly

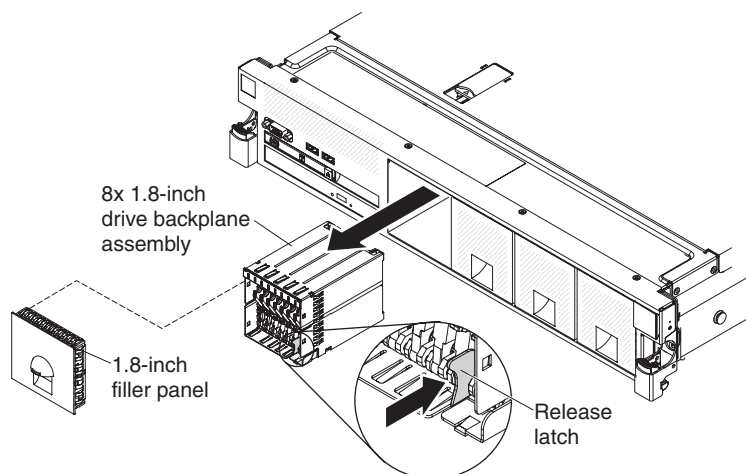
Use this information to remove the 8x1.8-inch hot-swap drive backplane assembly.

About this task

To remove the 8x1.8-inch hot-swap drive backplane assembly, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. If the server is installed in a rack, slide it out of the rack.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
6. Remove the drive filler panel.
7. Remove the drives from the drive backplane assembly (see “Removing 2.5-inch and 1.8-inch hot-swap drives” on page 246) and install them in the new backplane assembly.
8. Disconnect the combination power/configuration cable from the backplane assembly. If SAS signal cables are attached to the drive backplane, disconnect them.
9. Lift up the spring release latch slightly while pushing the assembly from the back and slide the backplane assembly out the front of the server.



10. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the 8x1.8-inch hot-swap drive backplane assembly

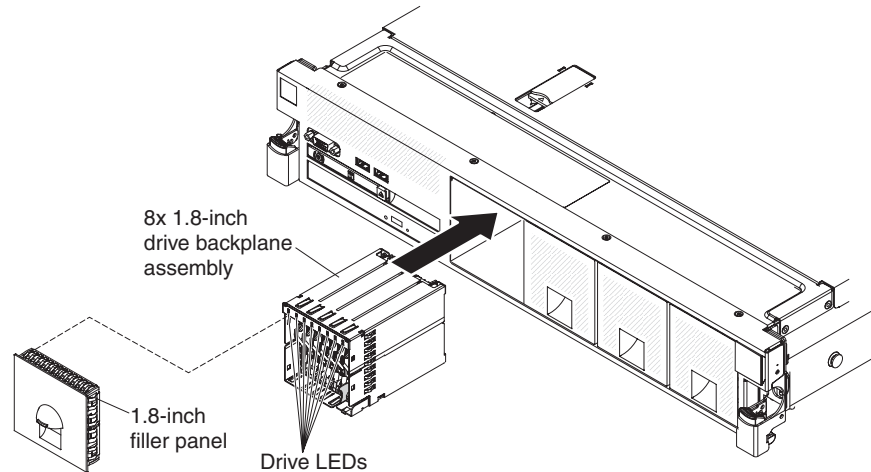
Use this information to replace the 8x1.8-inch hot-swap drive backplane assembly.

About this task

To install the 8x1.8-inch hot-swap drive backplane assembly, complete the following steps:

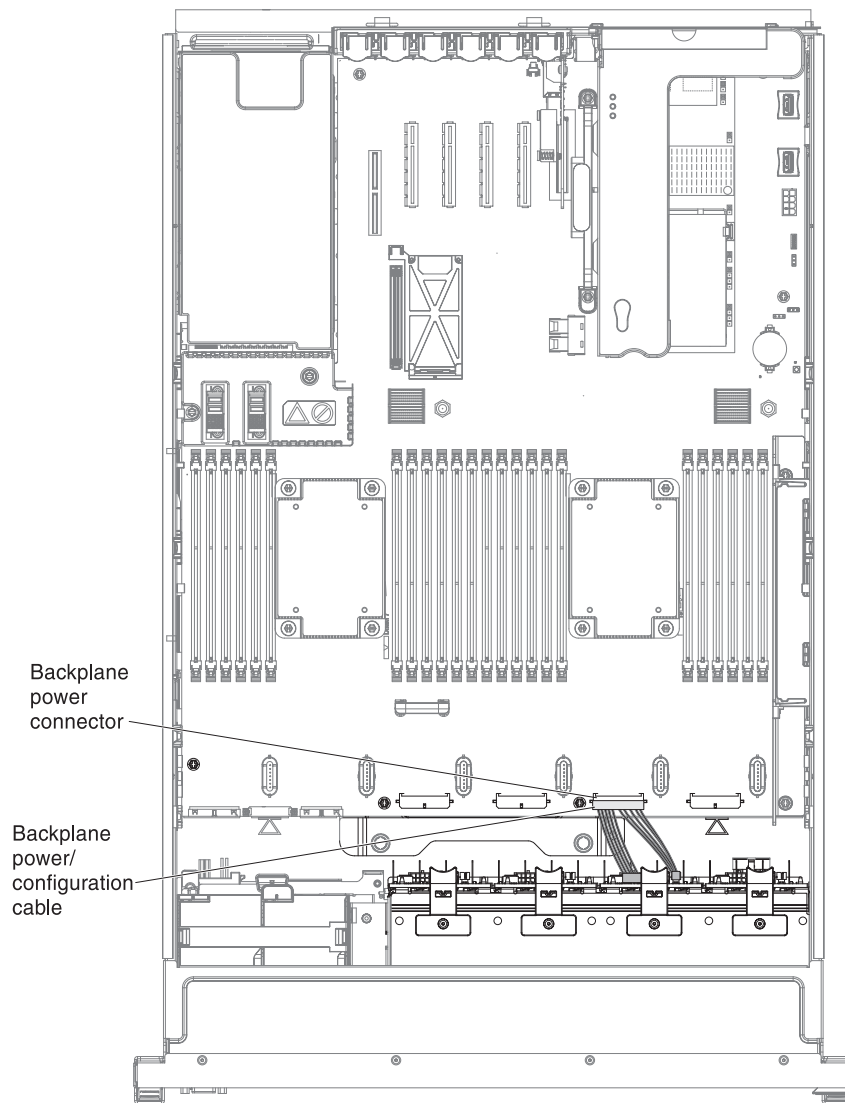
Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the drive backplane assembly with the drive-bay slots in which you want to install the assembly.



3. Slide the drive backplane assembly into the slot until it clicks into place.
4. Connect the combination power/configuration cable to the connectors on the backplane assembly; then connect the signal cables to the backplane assembly (as shown in the illustration).

Note: You can reconnect the cables to the drive backplane before installing the backplane onto the cage or you can connect the cables after you install the backplane, if that is easier for you.



5. Reinstall the drives that you removed from the old assembly into the new drive backplane assembly (see “Replacing 2.5-inch and 1.8-inch hot-swap drives” on page 248).
6. Install the drive filler panel.
7. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
8. Install the cover (see “Replacing the server top cover” on page 237).
9. Slide the server into the rack.
10. Reconnect the power cords and any cables that you removed.
11. Turn on the peripheral devices and the server.

Removing the 8x2.5-inch drive backplane with controller expander

Use this information to remove the 8x2.5-inch drive backplane with controller expander.

About this task

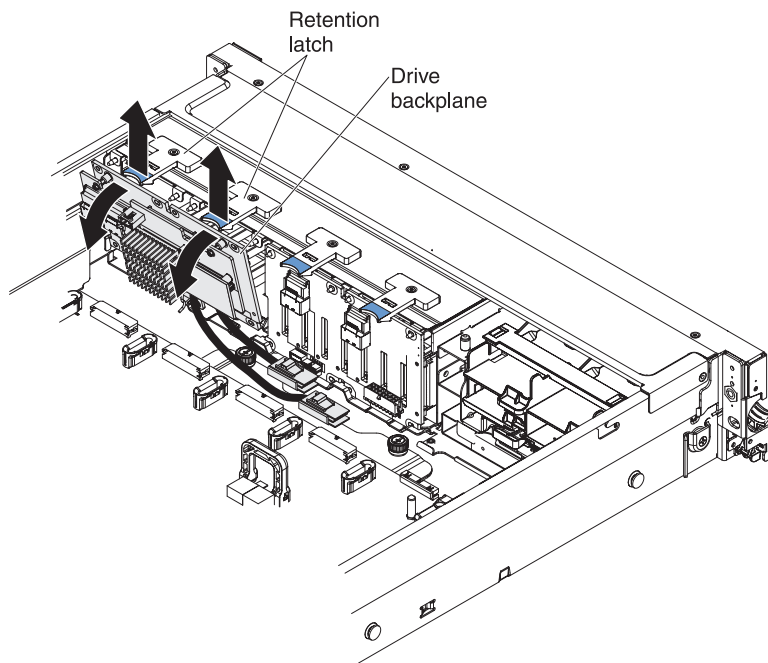
To remove 8x2.5-inch drive backplane with controller expander, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Slide the server out of the rack.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. Pull the drives and filler panels out of the server slightly to disengage them from the drive backplane.
6. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
7. Disconnect the combination power/configuration cable from the backplane. If a SAS signal cable is attached to the drive backplane, disconnect it.

Note: You can also choose to disconnect the cables after removing the backplane, if that is easier for you.

8. Disconnect the long SAS signal cables from the backplane.
9. Disconnect the short interposer cables from the backplane (which attaches this backplane to the other backplane in this configuration).
10. Lift the retention latch or latches on top of the backplane cage; then, rotate the backplane down and pull it out of the retention latch and remove it from the server.



11. Remove the two screws from the card with the short interposer cables attached to it from the old backplane and attached them to the new backplane using the two screws.
12. If you are instructed to return the drive backplane, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the 8x2.5-inch drive backplane with controller expander

Use this information to replace the 8x2.5-inch drive backplane with controller expander.

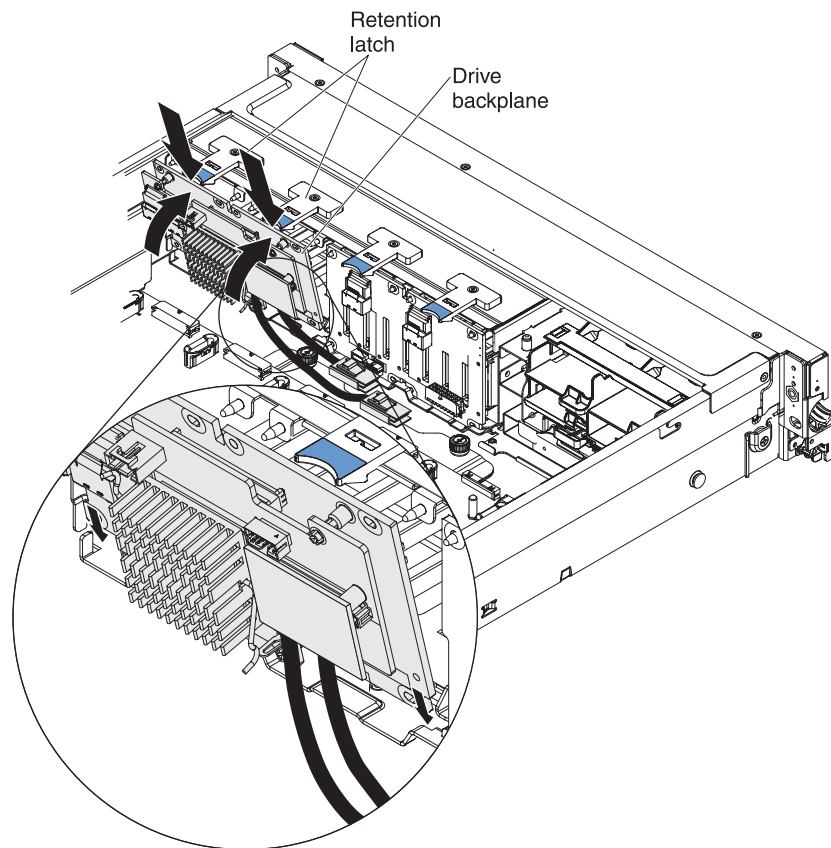
About this task

To install the 8x2.5-inch drive backplane with controller expander, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Touch the static-protective package that contains the drive backplane to any unpainted surface on the outside of the server; then, grasp the backplane and remove it from the package.
3. Make sure that you have attached the card with the short interposer cables from the old backplane to this replacement backplane.
4. Align the tabs on the bottom of the drive backplane with the slots on the bottom of the backplane cage.
5. Insert the drive backplane tabs into slots on the bottom of the backplane cage and push the drive backplane forward into the retention latch (on top of the backplane cage) until the backplane is locked in place.

Note: You can reconnect the cables to the drive backplane before installing the backplane onto the cage or you can connect the cables after you install the backplane, if that is easier for you.



6. Reconnect the interposer cables to the other backplane.
7. Reconnect the long SAS signal cables to the backplane and the system board that you disconnected them from earlier.
8. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
9. Reinstall the drives and filler panels.
10. Install the cover (see “Replacing the server top cover” on page 237).
11. Slide the server in the rack.
12. Reconnect the power cord and any cables that you removed.
13. Turn on the peripheral devices and the server.

Removing and replacing FRUs

Use this information to remove and replace FRUs.

FRUs must be replaced or installed only by trained service technicians.

The illustrations in this document might differ slightly from the hardware.

Removing a microprocessor and heat sink

Use this information to remove a microprocessor and heat sink.

About this task

Attention:

- Be extremely careful when handling the microprocessor, the microprocessor socket contacts are very fragile.
- Do not touch the microprocessor contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Do not allow the thermal grease on the microprocessor and heat sink to come in contact with anything. Contact with any surface can compromise the thermal grease and the microprocessor socket.
- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- When removing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.
- Be sure to use only the installation tools provided with the new microprocessor to remove or install the microprocessor. Do not use any other tool.
- The microprocessor installation tool has the microprocessor installed on the tool, and may have a protective cover over the microprocessor. Do not use the tool, or remove the cover until you are instructed to do so.

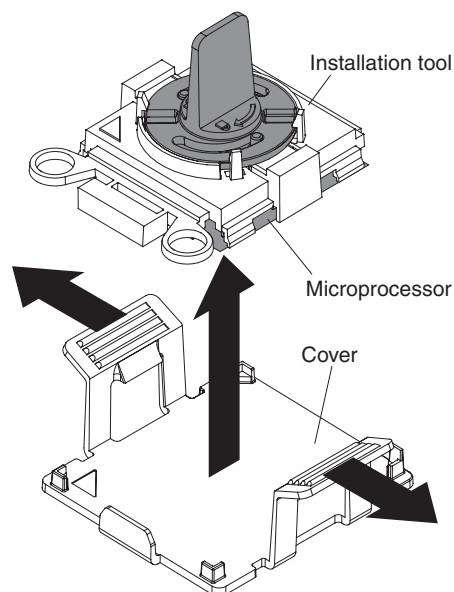
Note: This procedure for removing a microprocessor and heat sink also apply when removing a microprocessor and heat sink from the microprocessor and memory expansion tray.

There are two types of microprocessor installation tools. The tools are similar in function and design; but, have a major difference.

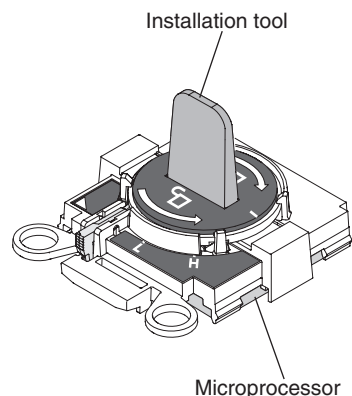
Important: Be sure to use the installation tool that comes with your microprocessor installation tool assembly.

- Installation Tool A has one setting for installing one size of microprocessor that supports E5-26xx and E5-46xx microprocessors.
- Installation Tool B supports E5-26xx, E5-46xx, E5-26xx v2, and E5-46xx v2 microprocessors. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings on Tool B are:
 - “L” for smaller low core microprocessors
 - “H” for larger high core microprocessors

Microprocessor Installation Tools A and B are shown in the next illustration.



Microprocessor Installation Tool A

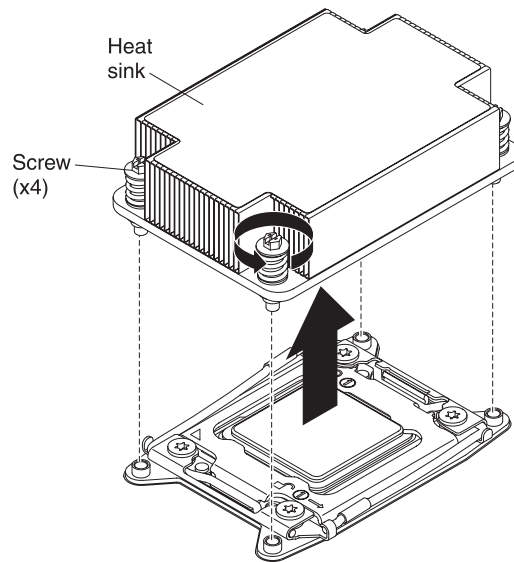


Microprocessor Installation Tool B

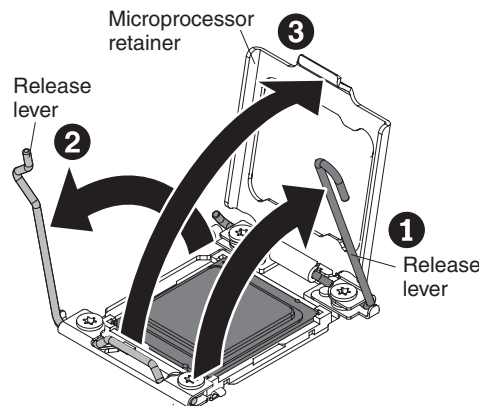
To remove a microprocessor and heat sink, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. Remove the server cover (see “Removing the server top cover” on page 236).
4. Disconnect any cables that impede access to the heat sink and microprocessor.
5. If you are replacing a microprocessor on the system board, remove the microprocessor and memory expansion tray (see “Removing the microprocessor and memory expansion tray assembly” on page 323).
6. Remove the DIMM air baffle, if one is installed (see “Removing the DIMM air baffle” on page 242).
7. Remove the microprocessor air baffle, if one is installed (see “Removing the microprocessor air baffle” on page 240).
8. Remove the heat sink.
 - a. Use a screwdriver to loosen the captive screw on one side of the heat sink to break the seal with the microprocessor.
 - b. Loosen all the captive screws on the heat sink, rotating each screw one full turn until each screw is loose.



- c. Gently lift the heat sink from the microprocessor.
9. After removal, place the heat sink on its side on a clean, flat surface.
Attention: Do not use any tools or sharp objects to lift the release levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
10. Open the microprocessor socket release levers and retainer.
 - a. Locate the two release levers on the microprocessor socket.
 - b. Press the first release lever (on the right) down and inward toward the socket and lift it up to the fully open position; then, press the second release lever on the (left) down and inward toward the socket and lift it up to the fully open position.
 - c. Open the microprocessor retainer by lifting up on the microprocessor retainer tab.
Attention: Do not touch the contacts on the microprocessor and the microprocessor socket.
 - d. Open the microprocessor socket release levers and retainer in the order that is shown.

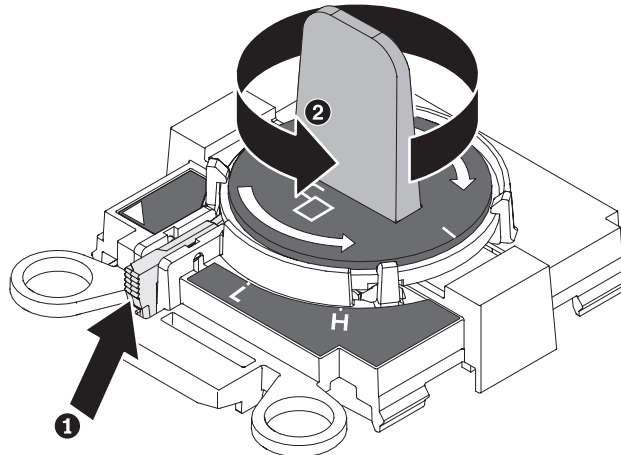


11. Locate the microprocessor installation tools that come with the new microprocessor kit.

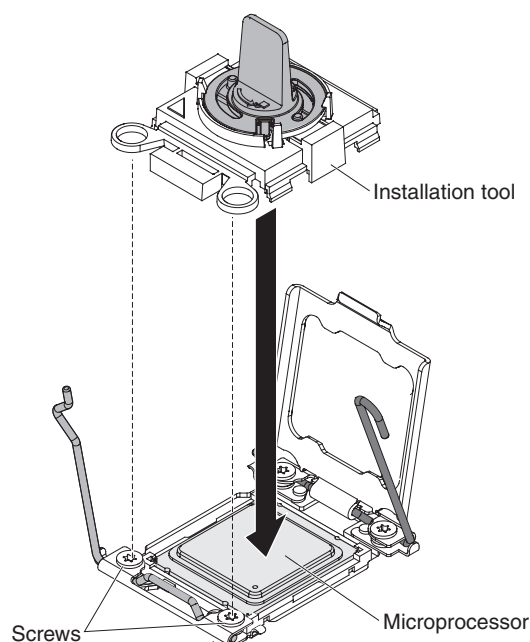
Note: The microprocessor FRU comes with two microprocessor installation tools: one tool is empty and one tool comes with a microprocessor and a cover on the bottom of the tool. Use the empty tool to remove the failed microprocessor.

12. Remove the microprocessor from the socket.
 - a. Select the empty installation tool and ensure that the handle is in the open position. If the installation tool handle is not in the open position, use the following instructions for your installation tool:
 - If using Installation Tool A, twist the microprocessor installation tool handle counterclockwise to the open position.
 - If using Installation Tool B:
 - 1) Lift the interlock latch and raise the latch up.
 - 2) While holding the interlock latch up, twist the microprocessor installation tool handle counterclockwise to the open position; then, release the interlock latch.

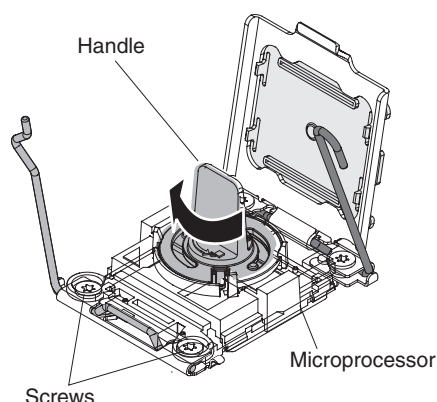
The following illustration of Installation Tool B shows the location of the interlock latch and counterclockwise rotation of the handle before loading the microprocessor.



- b. Align the holes on the installation tool with the screws on the microprocessor bracket, then lower the microprocessor installation tool down over the microprocessor. The installation tool rests flush on the socket only if it is aligned correctly.



- c. Place the microprocessor on a static-protective surface. Remove the microprocessor from the socket using the appropriate instructions for your installation tool.
- If using Installation Tool A, gently twist the handle clockwise to the closed position and lift the microprocessor out of the socket.
 - If using Installation Tool B, gently twist the handle of the installation tool clockwise until it locks in the “H” or “L” position, depending on the size of microprocessor; then, lift the microprocessor out of the socket.



13. If you are instructed to return the microprocessor, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you. Do not return the microprocessor installation tool.

Replacing a microprocessor and heat sink

Use this information to replace a microprocessor and heat sink.

Attention:

- When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 43.

- Be extremely careful when handling the microprocessor, the microprocessor socket contacts are very fragile.
- Do not use any tools or sharp objects to lift the locking levers on the microprocessor socket. Doing so might result in permanent damage to the system board.
- Each microprocessor socket must always contain either a socket cover or a microprocessor and heat sink.
- When replacing multiple microprocessors, open one microprocessor socket at a time to avoid damaging other microprocessor socket contacts.
- Be sure to use only the installation tools provided with the new microprocessor to remove or install the microprocessor. Do not use any other tool.
- The microprocessor installation tool has the microprocessor installed on the tool, and may have a protective cover over the microprocessor. Do not use the tool, or remove the cover until you are instructed to do so.

Notes:

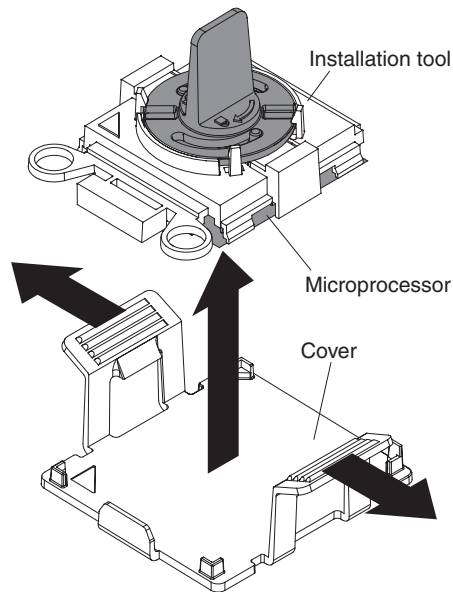
- See “Installing an additional microprocessor and heat sink” on page 100 for notes and other information that you must consider when you install a microprocessor.
- The server supports up to four Intel Xeon dual-core or quad-core microprocessors (two on the base system board and two on the optional microprocessor and memory expansion tray). See <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/> for a list of supported microprocessors.
- Be sure to only install microprocessors that have the same speed, number of cores, and frequency.
- This procedure for replacing a microprocessor and heat sink also apply when replacing a microprocessor and heat sink on the microprocessor and memory expansion tray.

There are two types of microprocessor installation tools. The tools are similar in function and design; but, have a major difference.

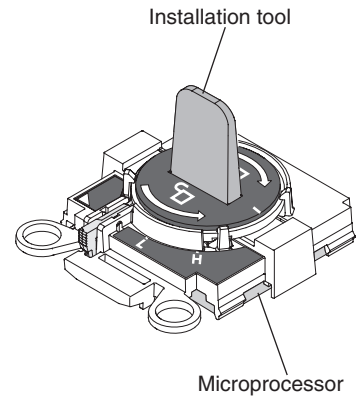
Important: Be sure to use the installation tool that comes with your microprocessor installation tool assembly.

- Installation Tool A has one setting for installing one size of microprocessor that supports E5-26xx and E5-46xx microprocessors.
- Installation Tool B supports E5-26xx, E5-46xx, E5-26xx v2, and E5-46xx v2 microprocessors. Installation Tool B has two settings for installing two different sizes of microprocessors. The settings on Tool B are:
 - “L” for smaller low core microprocessors
 - “H” for larger high core microprocessors

Microprocessor Installation Tools A and B are shown in the next illustration.



Microprocessor Installation Tool A



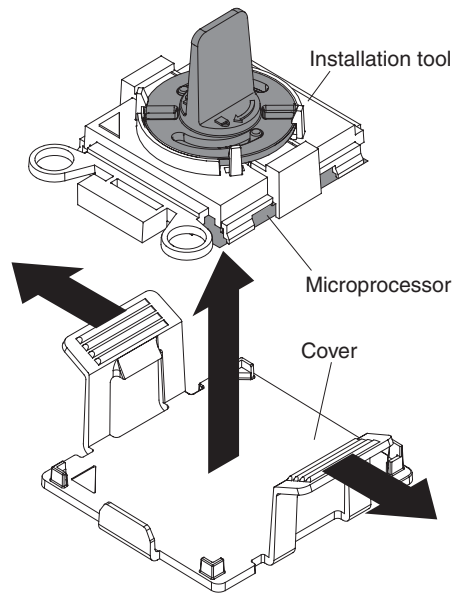
Microprocessor Installation Tool B

To install the microprocessor and heat sink, complete the following steps:

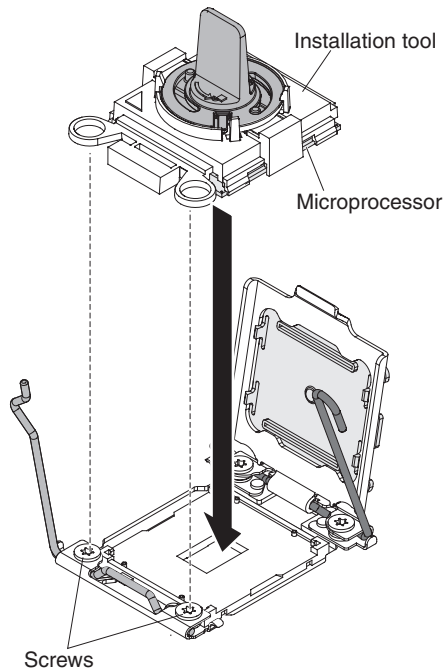
1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Install the microprocessor:
 - a. Open the packaging that contains the new microprocessor installation tool assembly and carefully remove the installation tool assembly from the package.

Attention:

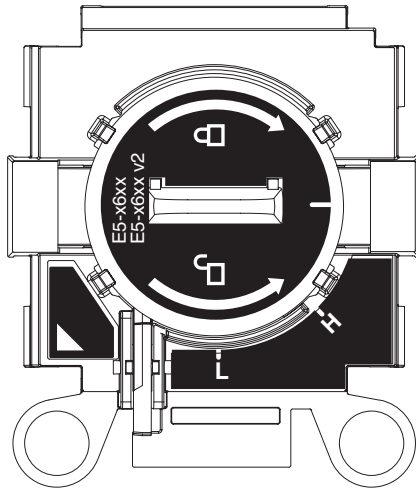
 - The microprocessor FRU comes with two microprocessor tools: one tool is empty and one tool comes with a microprocessor and a cover on the bottom of the tool.
 - Do not touch the microprocessor socket contacts. Contaminants on the microprocessor contacts, such as oil from your skin, can cause connection failures between the contacts and the socket.
 - Handle the microprocessor carefully. Dropping the microprocessor during installation or removal can damage the contacts.
 - Do not use excessive force when you press the microprocessor into the socket.
 - b. Release the sides of the microprocessor protective cover on the bottom of the microprocessor and carefully remove the cover from the installation tool.



- c. Carefully align the installation tool with the microprocessor socket. The installation tool rests flush on the socket only if it is properly aligned.



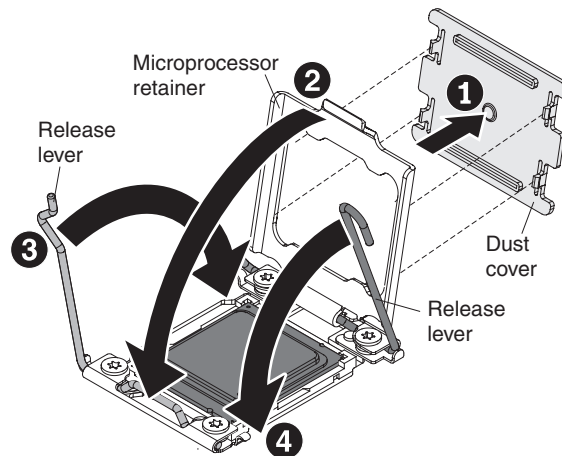
- d. Install the microprocessor using the appropriate instructions for your installation tool:
- If using Installation Tool A, twist the handle on the microprocessor tool assembly counterclockwise to the open position to insert the microprocessor into the socket; then, lift the installation tool out of the socket.
 - If using Installation Tool B, twist the handle of the installation tool assembly counterclockwise until the microprocessor is inserted into the socket; then, lift the installation tool out of the socket.
- The next illustration shows Installation Tool B with the tool handle in the open position.



Attention:

- Do not press the microprocessor into the socket.
- Make sure that the microprocessor is oriented and aligned correctly, in the socket before you try to close the release levers and microprocessor retainer.
- Do not touch the thermal grease on the bottom of the heat sink or on top of the microprocessor. Touching the thermal grease will contaminate it.

- e. Remove the microprocessor dust cover.
 - f. Close the microprocessor retainer on the microprocessor socket.
 - g. Carefully close the microprocessor release levers to the closed position to secure the microprocessor in the socket. Make sure that you close the release lever on the left first; then, close the release lever on the right.
- Close the microprocessor retainer and release levers in the order shown.

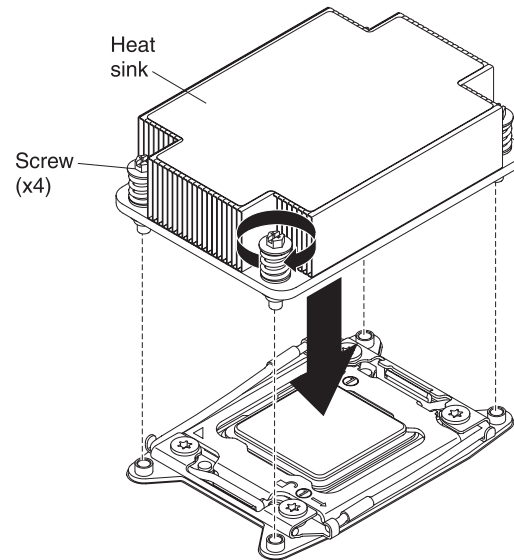


3. Reinstall the heat sink:
 - a. Use an alcohol wipe to remove the thermal grease from bottom of the heat sink (see “Replaceable server components” on page 223 for the alcohol wipes part number).

- b. Apply new thermal grease to the top of the microprocessor (see “Thermal grease” on page 322 for instructions on how to apply thermal grease to the top of the microprocessor).

Attention: Do not touch the thermal grease. Touching the thermal grease will contaminate it.

- c. Align the heat sink on the top of the microprocessor.
- d. Lower the heat sink and press down firmly on the heat sink.



- e. Align the captive screws on the heat sink with the holes on the heat-sink retention module.
 - f. Press down on the center of the heat sink; then, press firmly on the captive screws and tighten them, alternating between the screws in a figure-8 pattern as illustrated on the heat sink label until they are tightened. You can cause damage to the microprocessor if you tighten the screws on one side first, rather than rotating. Rotate each screw one full rotation at a time. Repeat this process until the screws are tightened.
4. If you removed the microprocessor air baffle, reinstall it (see “Replacing the microprocessor air baffle” on page 241).

Note: A microprocessor air baffle must be installed whenever the DIMM connectors closest to the microprocessor (on the left and the right) are empty. For example, when DIMM connectors 6 and 7 are empty on the system board, the microprocessor air baffle must be installed on microprocessor 1. This is applicable for all microprocessors.

5. Reinstall the microprocessor and memory expansion tray, if one was removed (see “Replacing the microprocessor and memory expansion tray assembly” on page 324).
6. Reinstall the DIMM air baffle, if one was removed (see “Replacing the DIMM air baffle” on page 243).
7. Reconnect any cables that you disconnected from the adapters or system board.
8. Reinstall the server cover (see “Replacing the server top cover” on page 237).
9. Slide the server into the rack.
10. Reconnect the power cords and any cables that you removed.
11. Turn on the peripheral devices and the server.

Thermal grease:

Use this information to determine the guidelines for using thermal grease on a heat sink and microprocessor.

The thermal grease must be replaced whenever the heat sink has been removed from the top of the microprocessor and is going to be reused or when debris is found in the grease.

When you are installing the heat sink on the same microprocessor that is was removed from, make sure that the following requirements are met:

- The thermal grease on the heat sink and microprocessor is not contaminated.
- Additional thermal grease is not added to the existing thermal grease on the heat sink and microprocessor.

Notes:

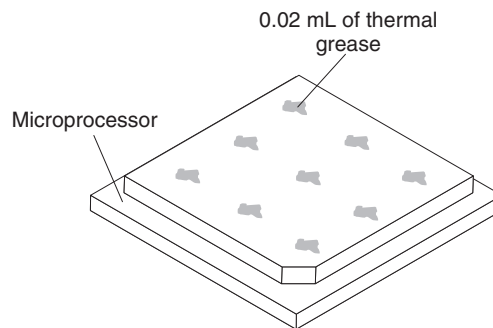
- Read the Safety information, see “Safety” on page vii.
- Read the “Installation guidelines” on page 41.
- Read “Handling static-sensitive devices” on page 43.

To replace damaged or contaminated thermal grease on the microprocessor and heat sink, complete the following steps:

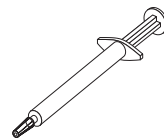
1. Place the heat sink on a clean work surface.
2. Remove the cleaning pad from its package and unfold it completely.
3. Use the cleaning pad to wipe the thermal grease from the bottom of the heat sink.

Note: Make sure that all of the thermal grease is removed.

4. Use a clean area of the cleaning pad to wipe the thermal grease from the microprocessor; then, dispose of the cleaning pad after all of the thermal grease is removed.



5. Use the thermal-grease syringe to place 9 uniformly spaced dots of 0.02 mL each on the top of the microprocessor. The outermost dots must be within approximately 5 mm of the edge of the microprocessor; this is to ensure uniform distribution of the grease.



Note: If the grease is properly applied, approximately half of the grease will remain in the syringe.

6. Install the heat sink onto the microprocessor as described in “Replacing a microprocessor and heat sink” on page 316.

Removing the microprocessor and memory expansion tray assembly

Use this information to remove the microprocessor and memory expansion tray assembly.

About this task

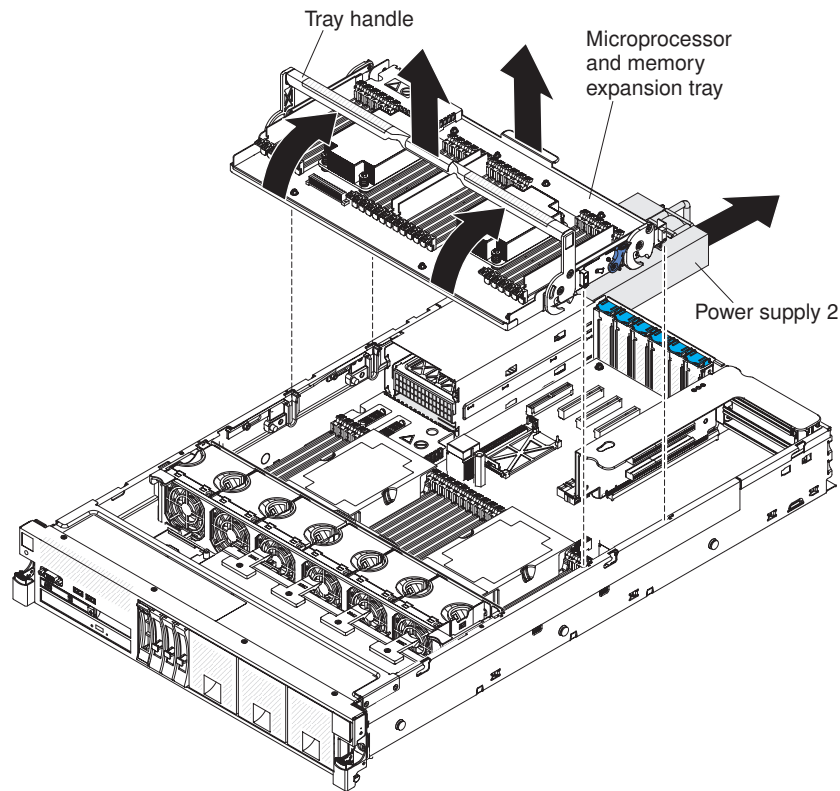
To remove the microprocessor and memory expansion tray, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. If the server has been installed in a rack, slide the server out from the rack enclosure.
4. Remove the top cover (see “Removing the server top cover” on page 236).
5. If power supply 2 is installed, slide it out of the power supply bay slightly.

Note: When the Power Supply is pulled out of the power supply bay, the Power Supply Interlock bracket is disengaged and the three Lock icons are no longer visible through the openings on the Interlock bracket.

6. Remove the DIMMs (see “Removing a memory module” on page 256).
7. Remove the microprocessor air baffles (“Removing the microprocessor air baffle” on page 240).
8. Remove the heat sinks (see “Removing a microprocessor and heat sink” on page 312 for information on how to remove the heat sinks).
9. Grasp the microprocessor and memory expansion tray front handle by the blue touch points and rotate it all the way up (this disengages the tray from the connectors on the system board).



10. Grasp both handles (front and rear) and lift the tray assembly from the server and set it on a flat surface to avoid damaging the connector pins on the bottom of the tray.
11. Remove the microprocessors (see “Removing a microprocessor and heat sink” on page 312 for instructions on how to remove a microprocessor).

Note: When you remove the microprocessors from the old tray, install the microprocessors directly from the old tray to the new tray with the microprocessor installation tool.

12. If you are instructed to return the microprocessor and memory expansion tray, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the microprocessor and memory expansion tray assembly

Use this information to replace the microprocessor and memory expansion tray assembly.

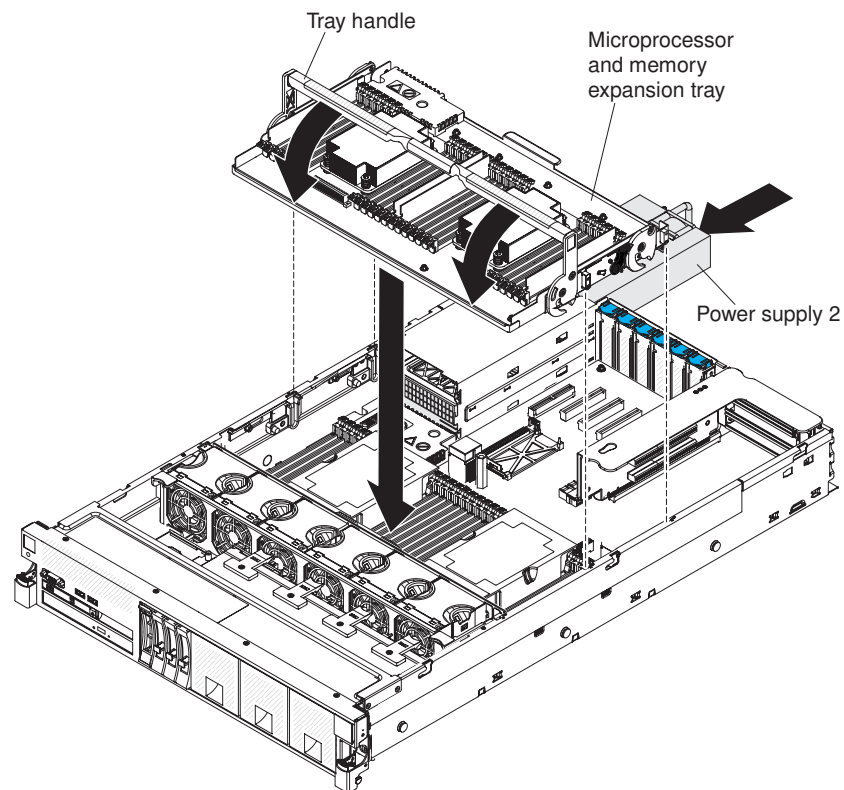
About this task

To install the microprocessor and memory expansion tray, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Grasp the tray by both handles, align the tabs on the sides of the microprocessor and memory expansion tray with the slots on the chassis wall, and lower the tray into the server.

Note: Before you install the new tray, make sure that there is no packaging material underneath tray.



3. Reinstall the DIMMs and heat sinks (see “Replacing a memory module” on page 257 and “Replacing a microprocessor and heat sink” on page 316).
4. Reinstall the microprocessor air baffles, if you removed them earlier.
5. Rotate the tray handle down until the tray is seated firmly and the handle is locked in place.
6. Slide power supply 2 back into the server.
7. Reinstall the cover (see “Replacing the server top cover” on page 237).
8. Slide the server into the rack.
9. Reconnect the power cords and any cables that you removed.
10. Turn on the peripheral devices and the server.

Removing a 750-watt -48 volt to -60 volt dc power supply

Use this information to remove a 750-watt -48 volt to -60 volt dc power supply.

About this task

When you remove a 750-watt -48 V to -60 V dc power supply, observe the following precautions.

Statement 8



CAUTION:

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 31:



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded power source.
- Connect to properly wired power sources any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.

To Connect:

1. Turn OFF all power sources and equipment that is to be attached to this product.
2. Attach signal cables to the product.
3. Attach power cords to the product.
 - For ac systems, use appliance inlets.
 - For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.
4. Attach signal cables to other devices.
5. Connect power cords to their sources.
6. Turn ON all the power sources.

To Disconnect:

1. Turn OFF all power sources and equipment that is to be attached to this product.
 - For ac systems, remove all power cords from the chassis power receptacles for interrupt power at the ac power distribution unit.
 - For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.
2. Remove the signal cables from the connectors.
3. Remove all cables from the devices.

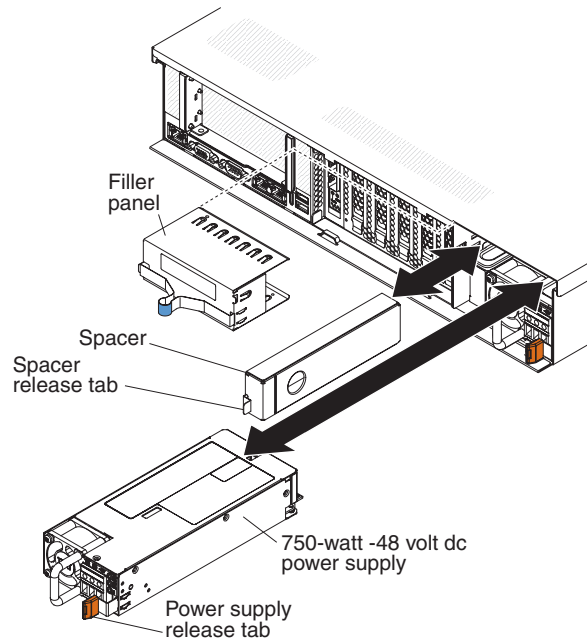
To remove a 750-watt -48 V to -60 V dc power supply, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Turn off the server (see “Turning off the server” on page 25) and remove the peripheral devices cables, excluding the power supply cable. Disconnect all external cables from the server.

Attention: When you handle static-sensitive devices, take precautions to avoid damage from static electricity. For details about handling these devices, see “Handling static-sensitive devices” on page 43.

3. Turn off the circuit breaker(s) for the power supplies.
4. If the server is in a rack, at the back of the server, pull back the cable management arm to gain access to the rear of the server and the power supply.
5. Press and hold the orange release tab to the left. Grasp the power supply handle and pull the power supply out of the server.



6. Detach the dc power cable from the power supply.
7. If you are not installing a new power supply, reinstall the power supply filler in the bay.
8. Facing the rear of the server, pull the spacer release tab on the power supply spacer to the right, use your finger to grasp the hole on the side of the spacer, and slide the power supply spacer out of the server.

Note: You only need to remove the spacer if you are removing all of the 750-watt -48 V to -60 V dc power supplies from the server and installing 1400-watt power supplies.

9. Set the power supply spacer aside.
10. If you are instructed to return the power supply, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing a 750-watt -48 volt to -60 volt dc power supply

Use this information to replace a 750-watt -48 volt to -60 volt dc power supply.

The following notes provide information that you must consider when you install a 750-watt -48 V to -60 V dc power supply. To confirm that the server supports the power supply that you are installing, see <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us/>.

Attention:

- Only trained service technicians, other than IBM service technicians, are authorized to install and remove the 750-watt -48 V to -60 V dc power supply, and make connections to or disconnections from the 750-watt -48 V to -60 V dc power source.
- IBM service technicians are not certified or authorized to install or remove the 750-watt -48 V to -60 V dc power cable. You are responsible for ensuring that only a trained service technician install or remove the -48 V to -60 V dc power cable.
- You can install up to two dc power supplies or two ac power supplies in the server, but you cannot mix dc and ac power supplies in the same server.
- To reduce the risk of electric shock or energy hazards when installing the 750-watt -48 V to -60 V dc power supplies, take the following steps:
 - Use a circuit breaker that is rated 40 amps.
 - Use 4 mm² (10 AWG) at 60° C copper wire.
 - Cut the power cable wires to the correct length, but do not cut the wires shorter than 150 mm (6 inches).
 - Torque the wiring-terminal screws to 0.50 ~ 0.60 newton-meters (4.43 ~ 5.31 inch-pounds).
- For the server to support two power supplies, you must install the optional IBM Power Interposer for Redundant Power option or the optional IBM Microprocessor and Memory Expansion Tray, if one is not installed in your model.

Statement 8



CAUTION:
Never remove the cover on a power supply or any part that has the following label attached.

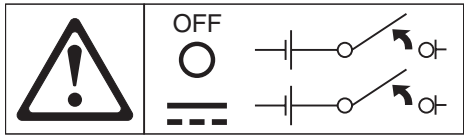


Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

Statement 19:



CAUTION:
The power-control button on the device does not turn off the electrical current supplied to the device. The device also might have more than one connection to dc power. To remove all electrical current from the device, ensure that all connections to dc power are disconnected at the dc power input terminals.



Statement 31:



DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded power source.
- Connect to properly wired power sources any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached ac power cords, dc power sources, network connections, telecommunications systems, and serial cables before you open the device covers, unless you are instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when you install, move, or open covers on this product or attached devices.

To Connect:	To Disconnect:
<ol style="list-style-type: none">1. Turn OFF all power sources and equipment that is to be attached to this product.2. Attach signal cables to the product.3. Attach power cords to the product.<ul style="list-style-type: none">• For ac systems, use appliance inlets.• For dc systems, ensure correct polarity of -48 V dc connections: RTN is + and -48 V dc is -. Earth ground should use a two-hole lug for safety.4. Attach signal cables to other devices.5. Connect power cords to their sources.6. Turn ON all the power sources.	<ol style="list-style-type: none">1. Turn OFF all power sources and equipment that is to be attached to this product.<ul style="list-style-type: none">• For ac systems, remove all power cords from the chassis power receptacles for interrupt power at the ac power distribution unit.• For dc systems, disconnect dc power sources at the breaker panel or by turning off the power source. Then, remove the dc cables.2. Remove the signal cables from the connectors.3. Remove all cables from the devices.

Statement 34:



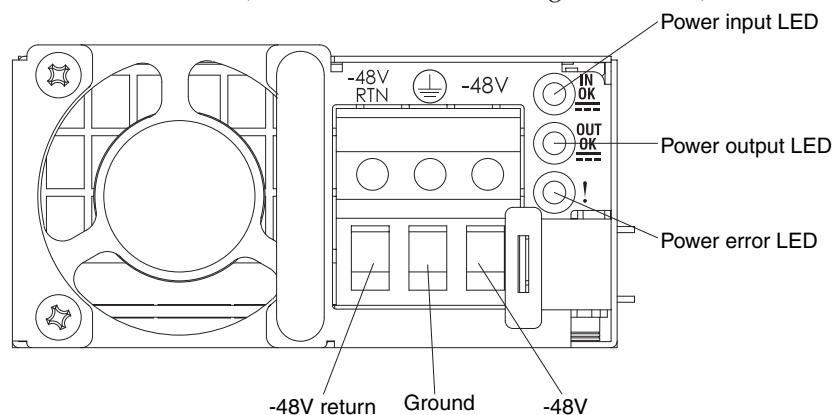
CAUTION:

To reduce the risk of electric shock or energy hazards:

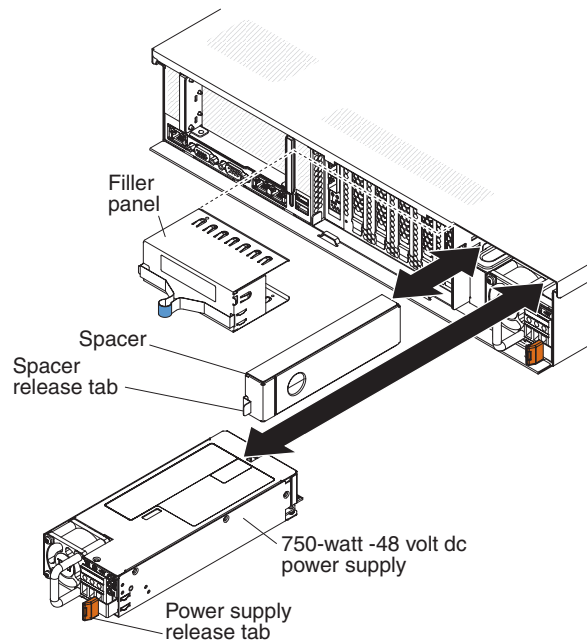
- This equipment must be installed by trained service personnel in a restricted-access location, as defined by the NEC and IEC 60950-1, First Edition, The Standard for Safety of Information Technology Equipment.
- Connect the equipment to a properly grounded safety extra low voltage (SELV) source. A SELV source is a secondary circuit that is designed so that normal and single fault conditions do not cause the voltages to exceed a safe level (60 V direct current).
- Incorporate a readily available approved and rated disconnect device in the field wiring.
- See the specifications in the product documentation for the required circuit-breaker rating for branch circuit overcurrent protection.
- Use copper wire conductors only. See the specifications in the product documentation for the required wire size.
- See the specifications in the product documentation for the required torque values for the wiring-terminal screws.

To install a 750-watt -48 V to -60 V dc power supply, complete the following steps:

1. Touch the static-protective package that contains the power supply to any unpainted metal surface on the server; then, remove the power supply from the package and place it on a static-protective surface.
2. Make sure that the circuit breaker for the dc power supply is off.
3. Attach the dc power cable to the new power supply. Make sure that the power cable wires are connected securely to the -48 V, ground, and to the -48 V return terminals (as shown in the following illustration).



4. Facing the rear of the server, insert the power supply spacer into the left side of the power-supply bay (against the bay wall) against the wall on the left side of the power supply bay, if you removed it.



5. Slide the power supply spacer into the bay until it snaps into place on the tabs that are on the side of the bay.
6. Grasp the handle on the rear of the power supply and slide the power supply forward into the power-supply bay until it clicks. Make sure that the power supply connects firmly into the power-supply connector.
7. Route the power cord through the hook-and-loop strap so that it does not accidentally become disconnected.
8. Turn on the circuit breaker(s) for the dc power supplies.
9. Reconnect any external cables that you disconnected.
10. Slide the server back into the rack, if it was in a rack.
11. Turn on the server and the peripheral devices.
12. Make sure that the server starts correctly and recognizes the newly installed device, and make sure that no error LEDs are lit.

Removing the system board

Use this information to remove the system board.

About this task

Before you remove the system board from the server, take the following steps to save data, firmware, and configuration data:

- Record all system configuration information, such as integrated management module II (IMM2) IP addresses, vital product data, and the machine type, model number, serial number, Universally Unique Identifier, and asset tag of the server.
- Using the Advanced Settings Utility (ASU), save the system configuration to external media.
- Save the system-event log to external media.

Note: When you replace the system board, you must update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a CD or DVD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed.

To remove the system board, complete the following steps:

Procedure

1. Read the safety information and installation guidelines, see “Safety” on page vii and “Installation guidelines” on page 41).
2. Turn off the server (see “Turning off the server” on page 25) and all attached peripheral devices. Disconnect all power cords; then, disconnect all external cables as necessary to replace the device.
3. If the server is in a rack, slide the server out of the rack.
4. Remove the server cover (see “Removing the server top cover” on page 236).
5. Remove the fan cage assembly (see “Removing the fan cage assembly” on page 277).
6. Remove the DIMM air baffle, if one is installed (see “Removing the DIMM air baffle” on page 242).
7. Slide the power supplies out of the bays slightly to disengage them from the connectors.
8. Remove the microprocessor and memory expansion tray, if one is installed (see “Removing the microprocessor and memory expansion tray assembly” on page 323).
9. Remove the microprocessor air baffle (see “Removing the microprocessor air baffle” on page 240).
10. Disconnect all cables from the system board. Make a list of each cable as you disconnect it; you can then use this as a checklist when you install the new system board.
11. Disconnect the remote RAID flash power module cable from the adapter and remove the flash power module from the trays located on top of the USB/video assembly, if any are installed (see “Removing a RAID adapter flash power module” on page 285).
12. Remove the DIMMs from the system board and set them aside on a static-protective surface for reinstallation (see “Removing a memory module” on page 256).

Note: Make a note of the location of each DIMM as you remove it, so that you can later reinstall it in the same connector.

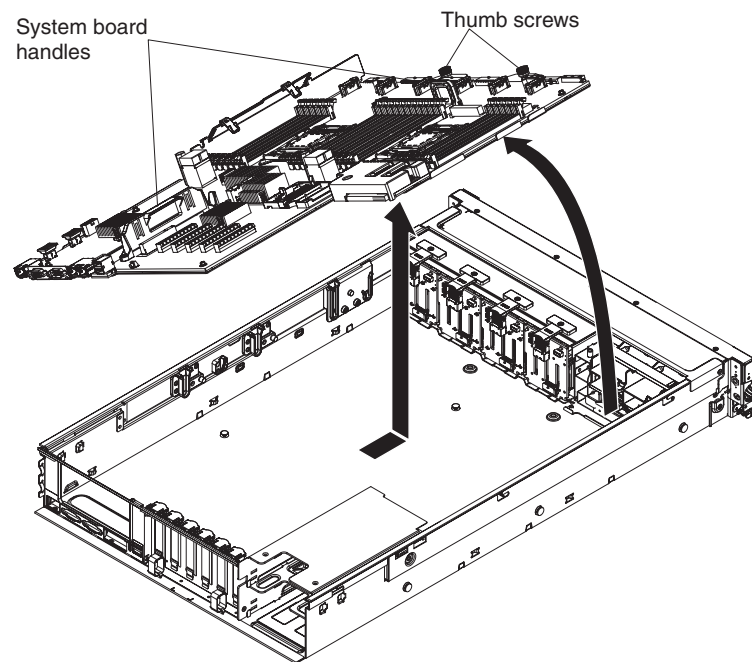
13. Remove the RAID cache cards from the system board, if any are installed (see “Removing a RAID cache card” on page 287).
14. Remove the power interposer card assembly, if one is installed (see “Removing the power interposer for redundant power supply card assembly” on page 302).
15. Remove the PCIe riser-card assembly, if it is installed (see “Removing a PCI riser-card assembly” on page 295).
16. Remove any adapters that are installed on the system board (see “Removing an adapter” on page 244).
17. Remove the Ethernet adapter, if one is installed (see “Removing the Intel I350-T4 ML2 Quad-Port GbE Adapter for IBM System x” on page 279 or “Removing the ML2 Dual-port 10GbE-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x” on page 281).
18. Remove the USB embedded hypervisor flash device (see “Removing a USB embedded hypervisor flash device” on page 268).

19. Remove all heat sinks and microprocessors, and set them aside on a static-protective surface for reinstallation (see "Removing a microprocessor and heat sink" on page 312).

Notes:

- a. Remove the socket covers from the microprocessor frame brackets on the new system board and place them on the microprocessor sockets of the old system board that you are removing.
 - b. Use an alcohol wipe to remove any thermal grease from the tabs on the microprocessor bracket frame on the old system board.
 - c. Use the microprocessor tool that comes in the system board FRU to remove and replace microprocessors.
 - d. Remove the microprocessors from the old system board and place them directly onto the new system board sockets. Keep the heat sink and microprocessor from each microprocessor socket of the old system board together so that you can install them on the new system board on the same socket together. For example, when you remove the heat sink and microprocessor from microprocessor socket 1 of the old system board, install them both on the same socket (socket 1) on the new system board.
20. Remove the backplanes and cables, if necessary to access and remove the system board.
 21. Loosen the thumbscrews (near the front of the server) that secure the system board to the server and slide the system board toward the front of the server.

Note: Remove the drive backplanes, if necessary.



22. Grasp both system-board handles and lift up the left side of the system board slightly and carefully remove it from the chassis, being careful not to damage any surrounding components.

Note: Use the system-board handles to lift the system board only. Do not attempt to lift the server using the system board handles.

23. If you are instructed to return the system board, follow all packaging instructions, and use any packaging materials for shipping that are supplied to you.

Replacing the system board

Use this information to replace the system board.

About this task

Notes:

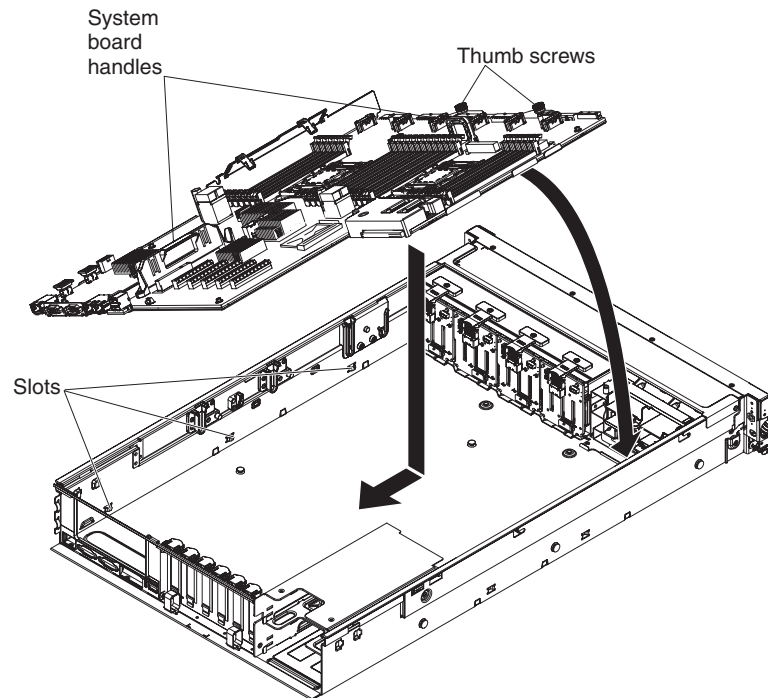
- When you reassemble the components in the server, be sure to route all cables carefully so that they are not exposed to excessive pressure and so that they do not get pinched when you reinstall the system board.
- When you replace the system board, you must either update the server with the latest firmware or restore the pre-existing firmware that the customer provides on a diskette or CD image. Make sure that you have the latest firmware or a copy of the pre-existing firmware before you proceed. See “Updating the firmware” on page 141 and “Updating the Universal Unique Identifier and DMI/SMBIOS data” on page 166 for more information.
- Reactivate any Features on Demand features. Instructions for automating the activation of features and installing activation keys is in the *IBM System x Features on Demand User's Guide*. To download the document, go to <http://www.ibm.com/systems/x/fod/>, log in, and click **Help**.

Important: Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

To install the system board, complete the following steps:

Procedure

1. Read the safety information, see “Safety” on page vii and “Installation guidelines” on page 41.
2. Align the system board with the slots on the side of the chassis and lower the right side into the chassis first; then, lower the other side of the system board into the chassis.



3. Slide the system-board toward the rear of the server to secure it in place.
4. Tighten the thumbscrews to secure the system board to the chassis.
5. Reinstall the DIMMs onto the system board (see “Replacing a memory module” on page 257).
6. Reinstall the heat sinks (see “Replacing a microprocessor and heat sink” on page 316).

Notes:

- Make sure that the socket covers from the microprocessor frame brackets on the new system board were placed on the microprocessor sockets on the old system board that you removed.
 - Use an alcohol wipe to remove any thermal grease from the tabs on the microprocessor bracket frame on the old system board.
 - Use the microprocessor tool that comes in the system board FRU to remove and replace microprocessors.
 - Remove and keep the heat sink and microprocessor from each microprocessor socket of the old system board together and install them on the new system board on the same socket together. For example, when you removed the heat sink and microprocessor from microprocessor socket 1 of the old system board , you installed them both on the same socket (socket 1) on the new system board.
7. Reinstall the microprocessor air baffle (see “Replacing the microprocessor air baffle” on page 241).
 8. Reinstall the USB embedded hypervisor flash device, if you removed it earlier (see “Replacing a USB embedded hypervisor flash device” on page 269).
 9. Reinstall the PCI riser-card assembly, if any were installed (see “Replacing a PCI riser-card assembly” on page 296).
 10. Reinstall any adapters that were removed from the system board, if you removed them earlier (see “Replacing an adapter” on page 245).
 11. Reinstall the RAID cache cards, if you removed them earlier (see “Replacing a RAID cache card” on page 289).

12. Reinstall the Ethernet adapter, if you removed it earlier (see “Replacing the Intel I350-T4 ML2 Quad Port GbE Adapter for IBM System x” on page 280 or “Replacing the ML2 Dual-port 10GbE-T Adapter for IBM System x or ML2 Dual-port 10 GbE SFP+ Adapter for IBM System x” on page 282).
13. Reinstall the power interposer card assembly, if you removed it earlier (see “Replacing a power interposer redundant power supply card assembly” on page 303).
14. Reconnect the cables that you disconnected earlier to the system board.
15. Reconnect the remote RAID flash power module cable to the adapter and install the RAID flash power module in the trays located on the top of the front USB/video assembly, if you removed it earlier.
16. Reinstall the DIMM air baffle, if one was installed (see “Replacing the DIMM air baffle” on page 243).
17. Reinstall the microprocessor and memory expansion tray, if one was installed (see “Replacing the microprocessor and memory expansion tray assembly” on page 324).
18. Slide the power supplies back into the bays until they click into place.
19. Reinstall the backplanes and cables, if you removed them.
20. Reinstall the fan cage assembly (see “Replacing the fan cage assembly” on page 278).
21. Reinstall the cover (see “Replacing the server top cover” on page 237).
22. Slide the server into the rack.
23. Reconnect the power cords and any cables that you removed.
24. Turn on the peripheral devices and the server.

Results

Important: Perform the following updates:

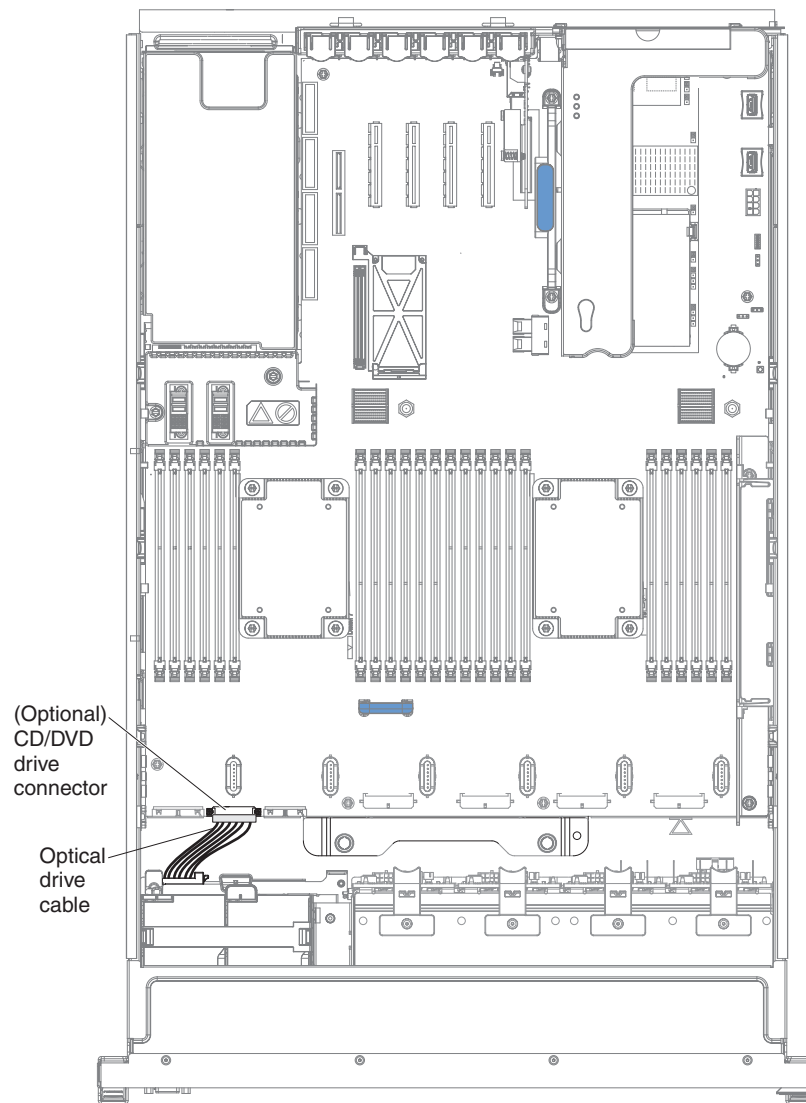
- Update the server with the latest RAID firmware or restore the pre-existing firmware from a CD or DVD image.
- Update the UUID and the DMI/SMBIOS (see “Updating the Universal Unique Identifier and DMI/SMBIOS data” on page 166).

Internal cable routing

This section provides information about routing the cables when you install some components in the server.

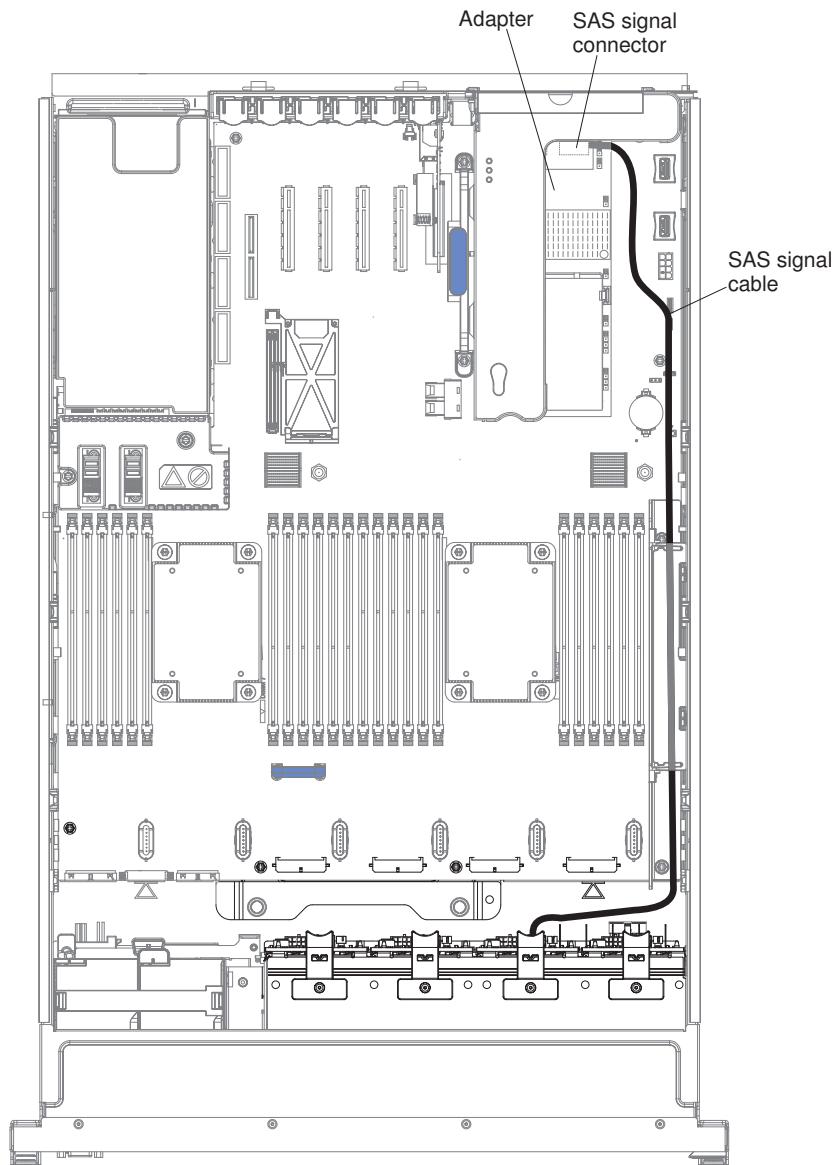
For more information about the requirements for cables and connecting devices, see the documentation that comes with these devices.

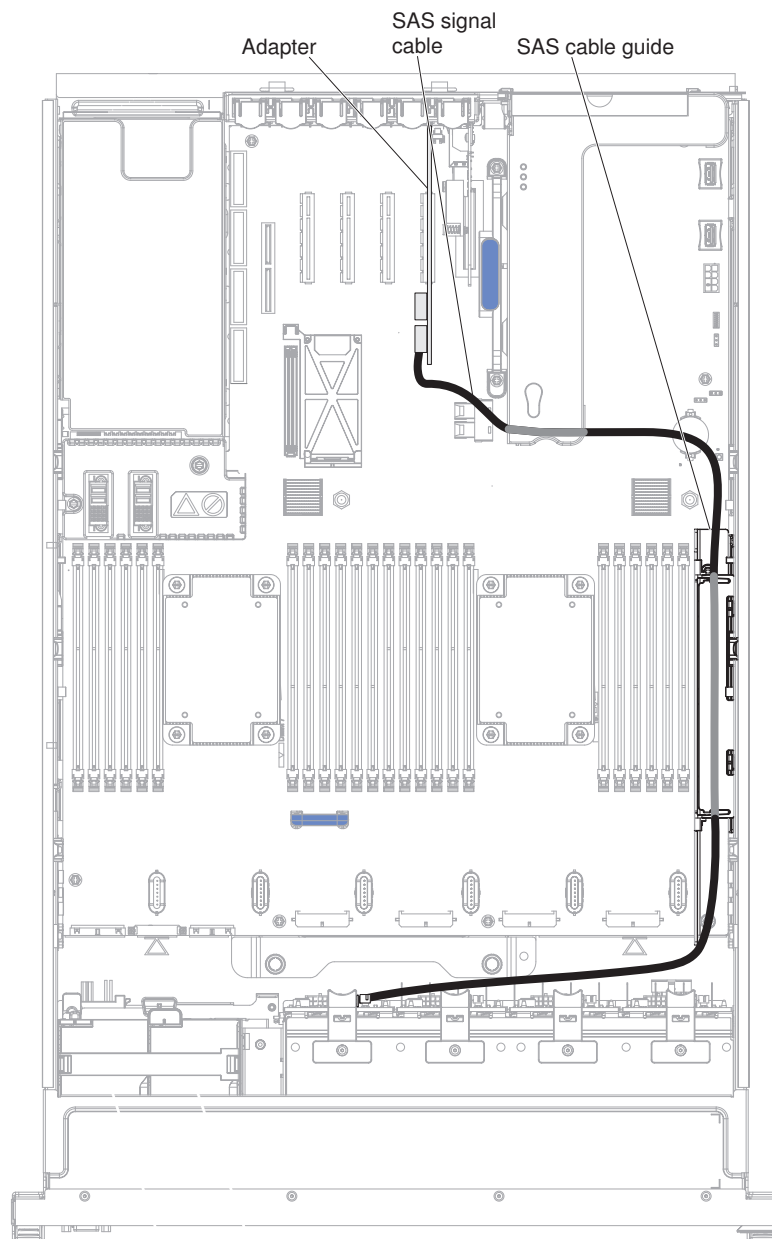
Cabling the CD/DVD drive:



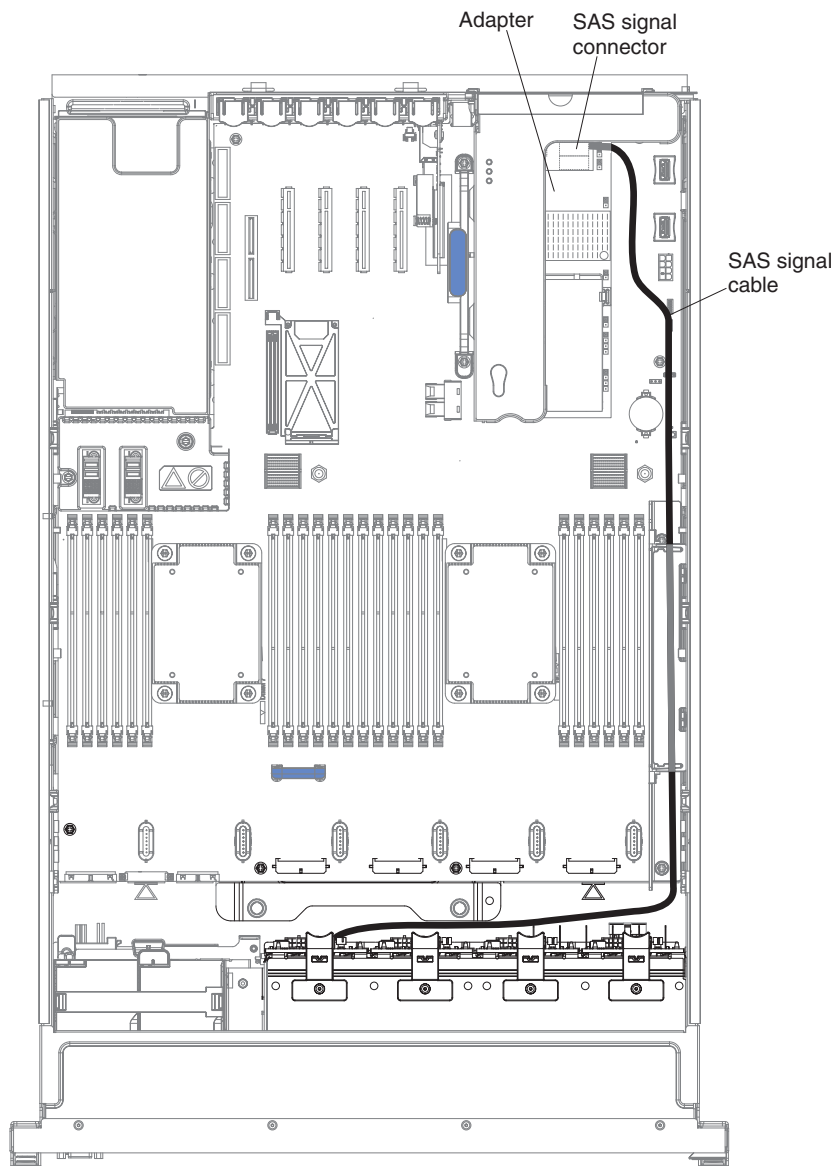
Cabling the SAS signal cables to the adapter and the backplane:

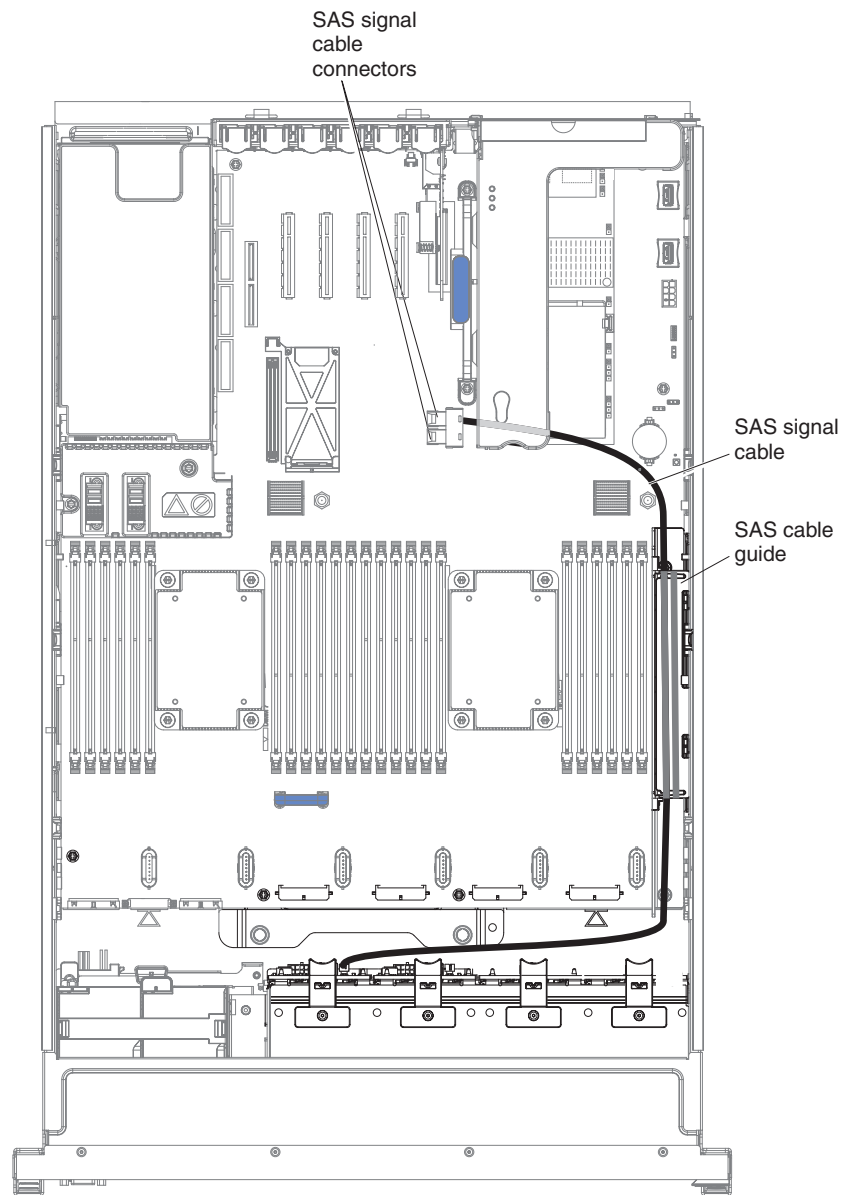
8x1.8 inch backplane and adapter:





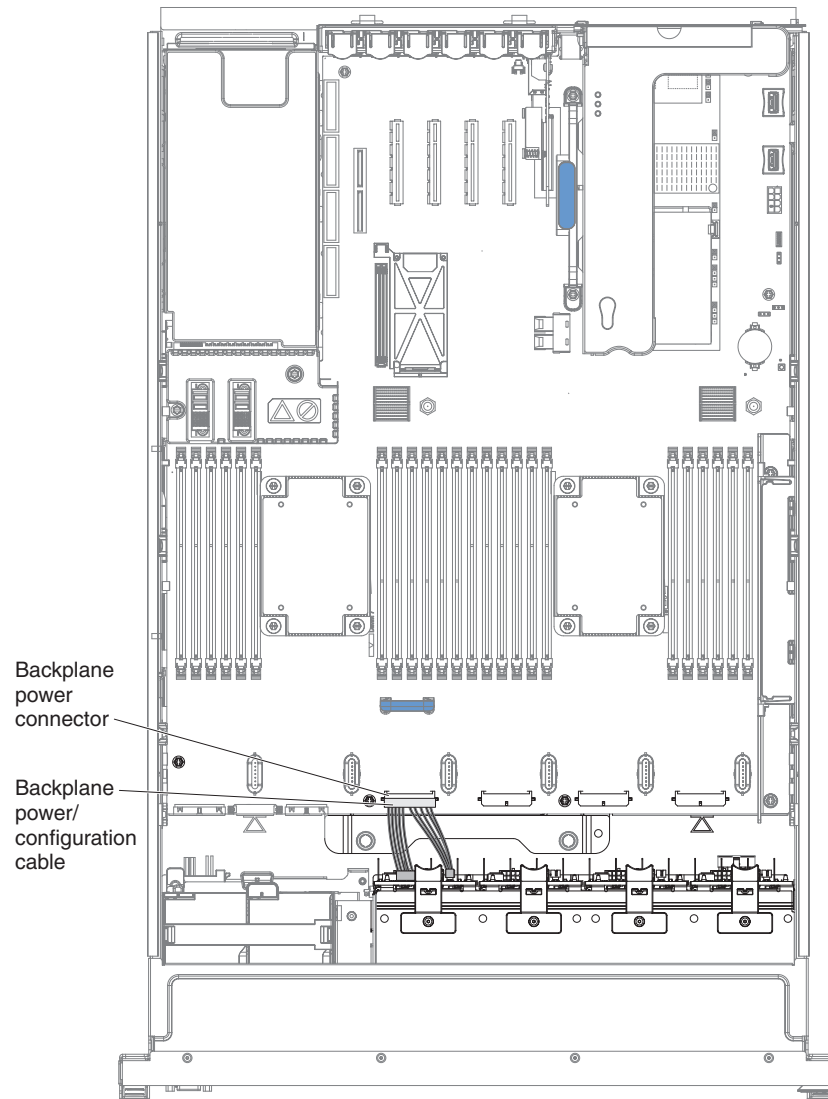
8x2.5 inch backplane and adapter:



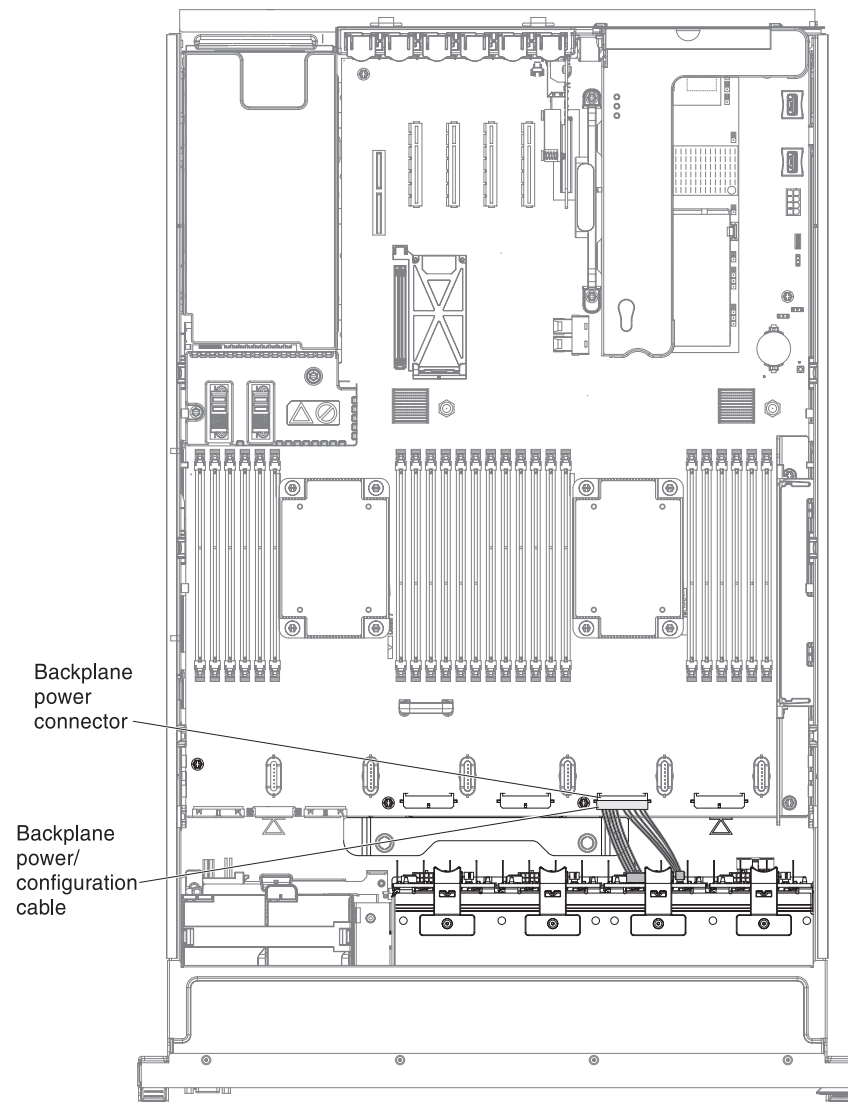


Cabling the combination power/configuration cable to the backplanes:

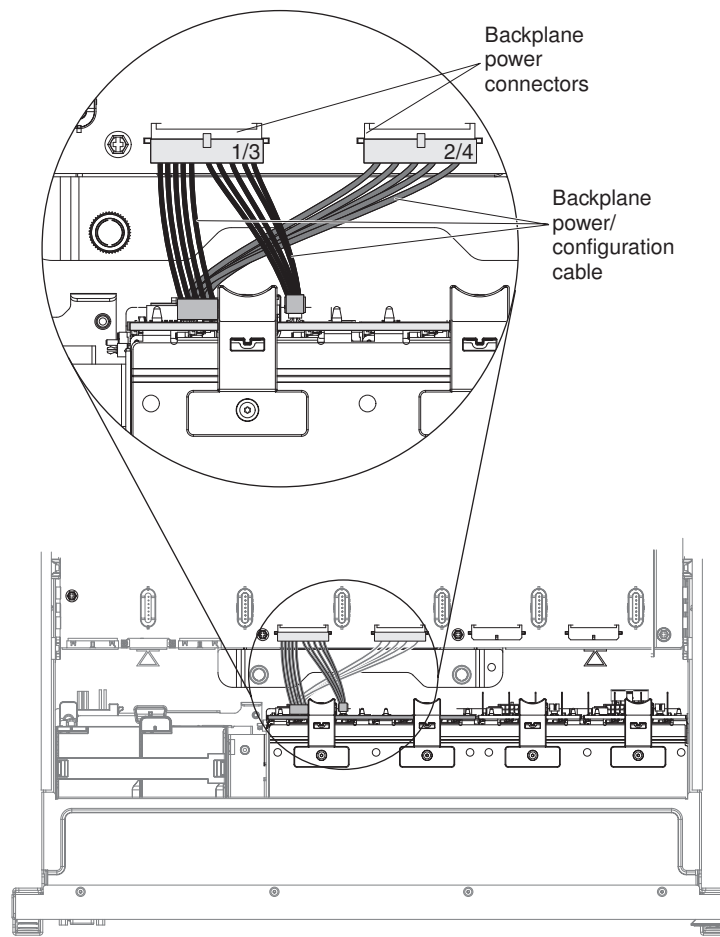
4x2.5-inch backplane:



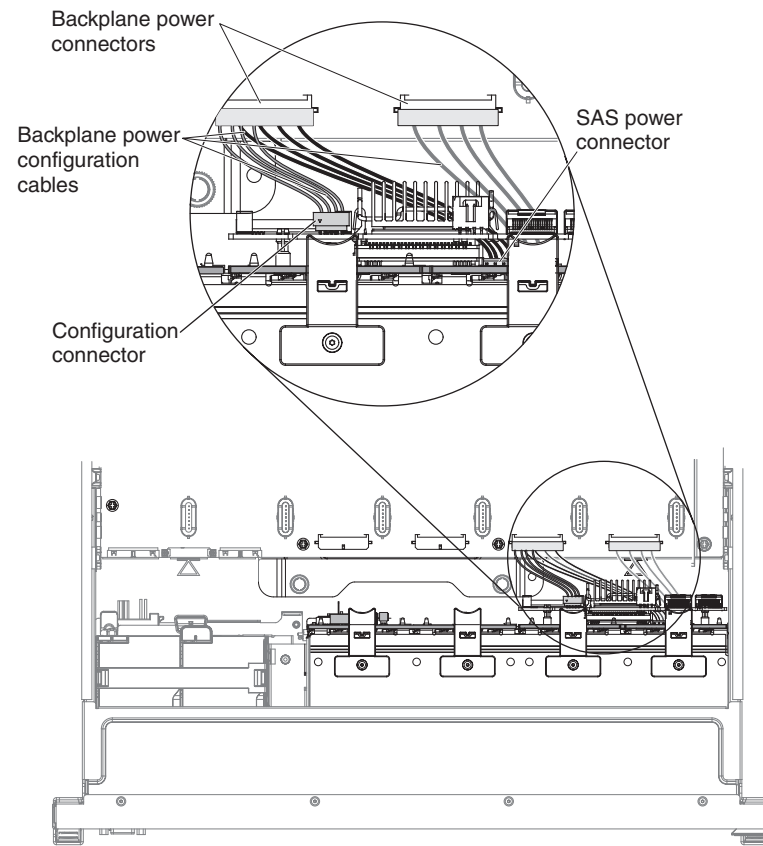
8x1.8 inch backplane:



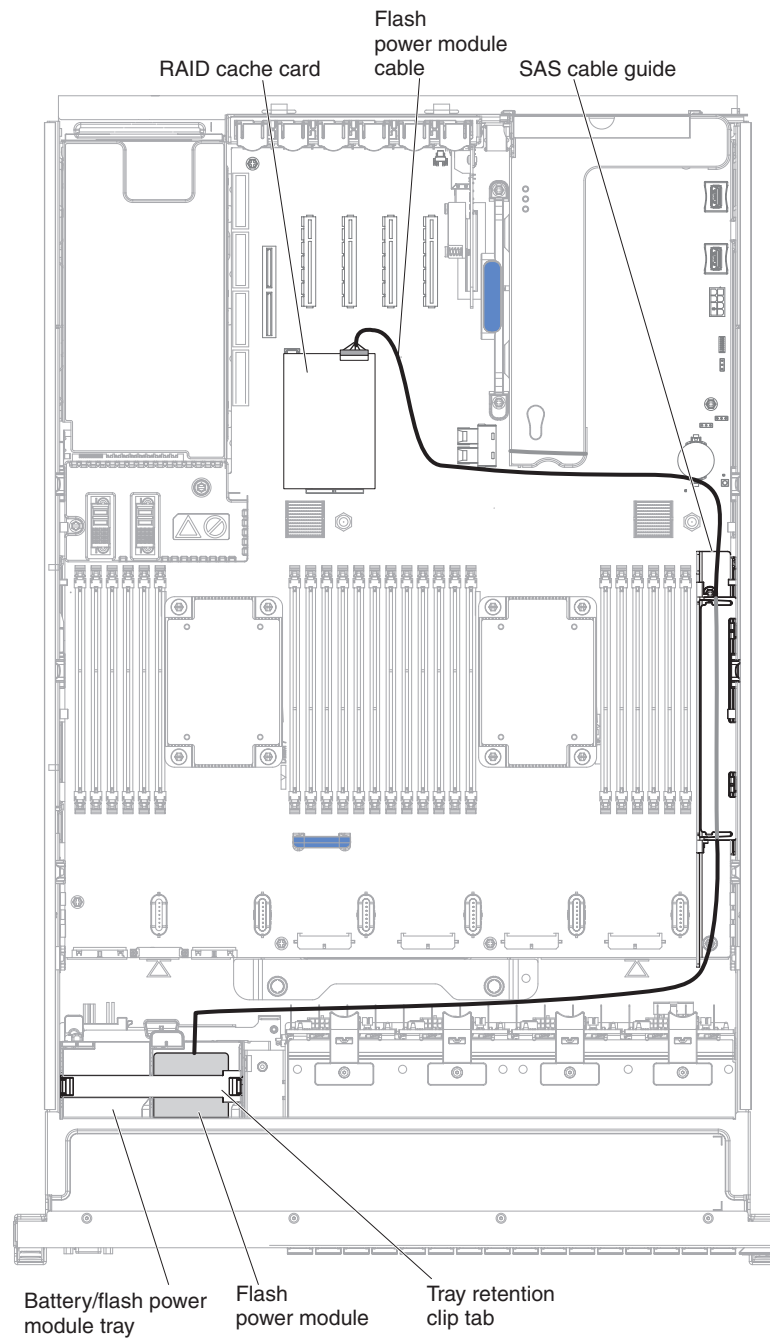
8x2.5 inch backplane:

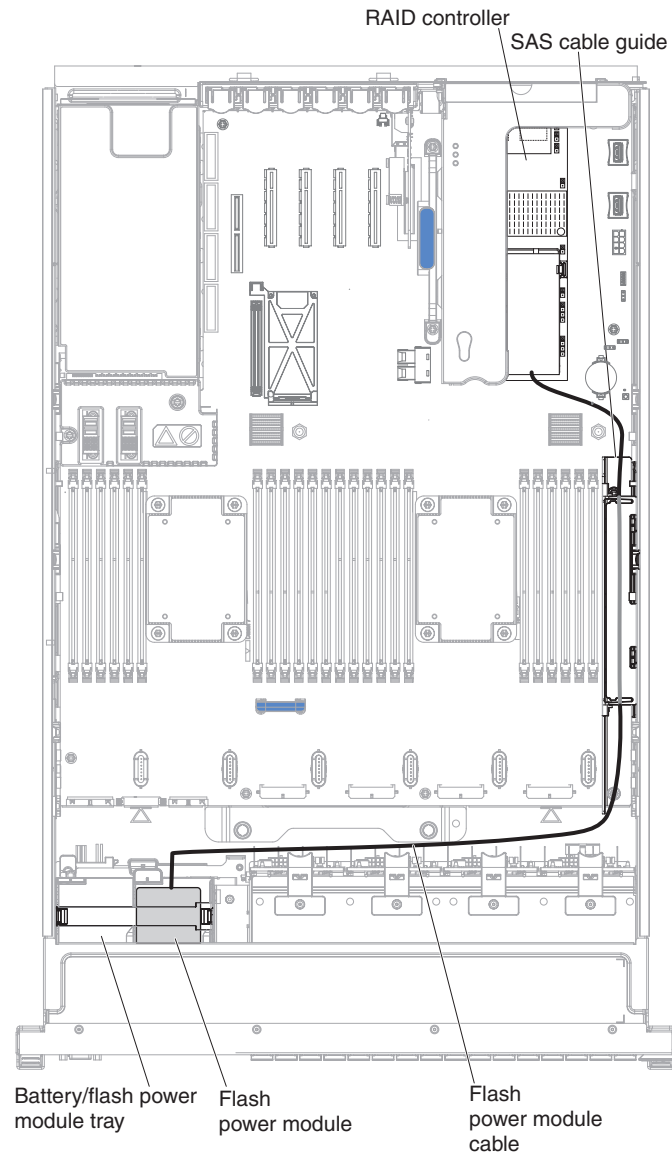


8x2.5 inch backplane with controller expander:



Cabling the RAID cache card and flash power module:



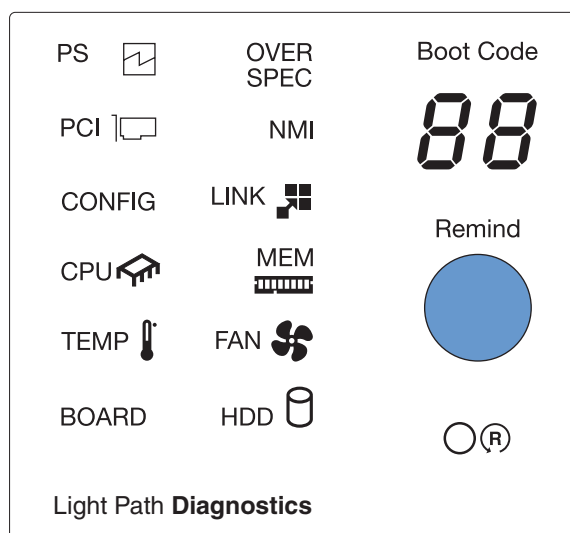


Appendix A. Boot code display error codes

Use this information to resolve boot code error messages.

The boot code display area of the light path diagnostics panel provides an error code that indicates the point at which the system stopped during the boot block and POST. A boot code is either a byte or a word value that is produced by UEFI. This display will provide error codes in the event of a microprocessor error or a power fault. In addition to the IMM log, the codes can provide suggested components to be replaced.

The following is an illustration show the boot code display area on the light path diagnostics panel:



The following table lists the error codes that might display in the boot code display area that is associated with the integrated voltage regulator power faults or microprocessor failure events. Follow the action plan listed for the corresponding IMM events listed in this table to solve the problem. See the Appendix D, "Integrated management module II (IMM2) error messages," on page 517 for the corresponding IMM event ID and action plan to follow and correct the problem.

Table 45. System power faults

Boot code	Message	Potential defective component	Corresponding IMM Event ID	Corresponding IMM log message
01	5V_PGOOD	System Board	80070603-0701ffff	Sensor System VRD has transitioned to non-recoverable.
02	0_8VAUX_PGOOD	10G-T Card	80070603-0B01ffff	Sensor 10Gb-T VRD has transitioned to non-recoverable.
03	ENET_1_0VAUX_PGOOD	System Board	80070603-0701ffff	Sensor 10Gb-T VRD has transitioned to non-recoverable.

Table 45. System power faults (continued)

Boot code	Message	Potential defective component	Corresponding IMM Event ID	Corresponding IMM log message
04	1_1V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
05	1_2VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
06	1_25VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
07	1_5VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
08	ENET_1_8VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd ENET VRD has transitioned to non-recoverable.
09	ENET_2_5VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd ENET VRD has transitioned to non-recoverable.
0A	3_3VAUX_PGOOD	System Board	80070603-0701ffff	Sensor System VRD has transitioned to non-recoverable.
0B	5VAUX_PGOOD	System Board	80070603-0701ffff	Sensor System VRD has transitioned to non-recoverable.
0C	2_5VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
0D	PS_12V_PGOOD	System Board	80070603-2584ffff	Sensor Power Supply has transitioned to non-recoverable.
0E	PCH_1_5V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
0F	SAS_0_75V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd SAS VRD has transitioned to non-recoverable.
10	SAS_1_0V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd SAS VRD has transitioned to non-recoverable.
11	SAS_AVSO_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd SAS VRD has transitioned to non-recoverable.
12	SAS_1_5V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd SAS VRD has transitioned to non-recoverable.
13	SAS_1_8V_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd SAS VRD has transitioned to non-recoverable.

Table 45. System power faults (continued)

Boot code	Message	Potential defective component	Corresponding IMM Event ID	Corresponding IMM log message
14	3_3V_PGOOD	System Board	80070603-0701ffff	Sensor System VRD has transitioned to non-recoverable.
16	ENET_1_5VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd ENET VRD has transitioned to non-recoverable.
17	DIMM_3_3VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.
18	MEM1A_VDDQ_PGOOD	System Board	80070603-0701ffff	Sensor DIMM 1-6 VRD has transitioned to non-recoverable.
19	MEM1B_VDDQ_PGOOD	System Board	80070603-0701ffff	Sensor DIMM 7-12 VRD has transitioned to non-recoverable.
1A	MEM2A_VDDQ_PGOOD	System Board	80070603-0701ffff	Sensor DIMM 13-18 VRD has transitioned to non-recoverable.
1B	MEM2B_VDDQ_PGOOD	System Board	80070603-0701ffff	Sensor DIMM 19-24 VRD has transitioned to non-recoverable.
1C	MEM3A_VDDQ_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor DIMM 25-30 VRD has transitioned to non-recoverable.
1D	MEM3B_VDDQ_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor DIMM 31-36 VRD has transitioned to non-recoverable.
1E	MEM4A_VDDQ_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor DIMM 37-42 VRD has transitioned to non-recoverable.
1F	MEM4B_VDDQ_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor DIMM 43-48 VRD has transitioned to non-recoverable.
20	OC_FAULT	System Board	80070603-0701ffff	Sensor System VRD has transitioned to non-recoverable.
28	CPU1_VCORE_PGOOD	System Board	80070603-0701ffff	Sensor CPU1 VRD has transitioned to non-recoverable.
29	CPU2_VCORE_PGOOD	System Board	80070603-0701ffff	Sensor CPU2 VRD has transitioned to non-recoverable.
2A	CPU3_VCORE_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU3 VRD has transitioned to non-recoverable.
2B	CPU4_VCORE_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU4 VRD has transitioned to non-recoverable.

Table 45. System power faults (continued)

Boot code	Message	Potential defective component	Corresponding IMM Event ID	Corresponding IMM log message
2C	CPU1_VPLL_PGOOD	System Board	80070603-0701ffff	Sensor CPU1 VRD has transitioned to non-recoverable.
2D	CPU2_VPLL_PGOOD	System Board	80070603-0701ffff	Sensor CPU2 VRD has transitioned to non-recoverable.
2E	CPU3_VPLL_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU3 VRD has transitioned to non-recoverable.
2F	CPU4_VPLL_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU4 VRD has transitioned to non-recoverable.
30	CPU1_VSA_PGOOD	System Board	80070603-0701ffff	Sensor CPU1 VRD has transitioned to non-recoverable.
31	CPU2_VSA_PGOOD	System Board	80070603-0701ffff	Sensor CPU2 VRD has transitioned to non-recoverable.
32	CPU3_VSA_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU3 VRD has transitioned to non-recoverable.
33	CPU4_VSA_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU4 VRD has transitioned to non-recoverable.
34	CPU1_VTT_PGOOD	System Board	80070603-0701ffff	Sensor CPU1 VRD has transitioned to non-recoverable.
35	CPU2_VTT_PGOOD	System Board	80070603-0701ffff	Sensor CPU2 VRD has transitioned to non-recoverable.
36	CPU3_VTT_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU3 VRD has transitioned to non-recoverable.
37	CPU4_VTT_PGOOD	CPU/Memory Tray	80070603-2B01ffff	Sensor CPU4 VRD has transitioned to non-recoverable.
3E	ENET_1_2VAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd ENET VRD has transitioned to non-recoverable.
3F	FPGA_CPU1_VTTAUX_PGOOD	System Board	80070603-0701ffff	Sensor MainBrd VRD has transitioned to non-recoverable.

Appendix B. DSA diagnostic test results

After running the DSA diagnostic tests, use this information to resolve any issues that were found.

DSA Broadcom network test results

The following messages are generated when you run the Broadcom network test.

405-000-000 BRCM:TestControlRegisters Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-001-000 BRCM:TestMIIRegisters Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-002-000 BRCM:TestEEPROM Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-003-000 BRCM:TestInternalMemory Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-004-000 BRCM:TestInterrupt Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-005-000 BRCM:TestLoopbackMAC Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-006-000 BRCM:TestLoopbackPhysical Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-007-000 BRCM:TestLEDs Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-800-000 BRCM:TestControlRegisters Test Aborted

Explanation: The control registers test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-801-000 BRCM:TestMIIRegisters Test Aborted

Explanation: The MII register test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-802-000 BRCM:TestEEPROM Test Aborted

Explanation: The EEPROM test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-803-000 BRCM:TestInternalMemory Test Aborted

Explanation: The internal memory test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-804-000 BRCM:TestInterrupt Test Aborted

Explanation: The interrupt test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-805-000 BRCM:TestLoopbackMAC Test Aborted

Explanation: Loopback testing at the MAC layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-806-000 BRCM:TestLoopbackPhysical Test Aborted

Explanation: Loopback testing at the physical layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-807-000 BRCM:TestLEDs Test Aborted

Explanation: Verification of status LEDs was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-900-000 BRCM:TestControlRegisters Test Failed

Explanation: A failure was detected while testing internal MAC registers

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-901-000 BRCM:TestMIRegisters Test Failed

Explanation: A failure was detected while testing internal PHY registers.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-902-000 BRCM:TestEEPROM Test Failed

Explanation: A failure was detected while testing non-volatile RAM.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-903-000 BRCM:TestInternalMemory Test Failed

Explanation: A failure was detected while testing internal memory.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

405-904-000 BRCM:TestInterrupt Test Failed

Explanation: A failure was detected while testing interrupts.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-905-000 BRCM:TestLoopbackMAC Test Failed

Explanation: BRCM:TestLoopbackMAC Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-906-000 BRCM:TestLoopbackPhysical Test Failed

Explanation: A failure was detected during the loopback test at the physical layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

405-907-000 BRCM:TestLEDs Test Failed

Explanation: A failure was detected while verifying operation of the status LEDs.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Brocade test results

The following messages are generated when you run the Brocade test.

218-000-000 Brocade:MemoryTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-001-000 Brocade:ExternalLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-002-000 Brocade:SerdesLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-003-000 Brocade:PCILoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-004-000 Brocade:ExternalEthLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-005-000 Brocade:SerdesEthLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-006-000 Brocade:InternalLoopbackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-800-000 Brocade:MemoryTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-801-000 Brocade:ExternalLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-802-000 Brocade:SerdesLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-803-000 Brocade:PCILoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-804-000 Brocade:ExternalEthLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-805-000 Brocade:SerdesEthLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-806-000 Brocade:InternalLoopbackTest Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-900-000 Brocade:MemoryTest Failed

Explanation: A failure was detected while testing the adapter memory.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-901-000 Brocade:ExternalLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify whether the firmware is at proper level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-902-000 Brocade:SerdesLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

218-903-000 Brocade:PCILoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-904-000 Brocade:ExternalEthLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check or replace SFP/cable.
2. Rerun the test.
3. Verify whether the firmware is at proper level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-905-000 Brocade:SerdesEthLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

218-906-000 Brocade:InternalLoopbackTest Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Rerun the test.
2. Verify whether the firmware is at proper level.
3. Rerun the test.
4. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA checkpoint panel test results

The following messages are generated when you run the checkpoint panel test.

180-000-000 Check-point Panel Test Passed

Explanation: Check-point Panel Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

180-801-000 Check-point Panel Test Aborted

Explanation: Check-point Panel Test Aborted. BMC is unable to verify that the operator information panel cable is connected.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Inspect and reseal operator information panel cable at both ends.
2. Verify that the Baseboard Management Controller (BMC) is working.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

180-901-000 Check-point Panel Test Failed

Explanation: Check-point Panel Test Failed. Operator reported incorrect display.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the operator information panel cabling for loose or broken connections at both ends or damage to the cable.
2. Replace the information panel cable if damage is present.
3. Run the test again.
4. Replace the operator information panel assembly.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA CPU stress test results

The following messages are generated when you run the CPU stress test.

089-000-000 CPU Stress Test Passed

Explanation: CPU Stress Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-801-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. Internal Program Error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component. The latest level firmware for this component can be found in reference to this system type at the IBM Support website.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-802-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. System resource unavailability error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-803-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. Memory size is insufficient to run the test. At least 1GB is required.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-804-000 CPU Stress Test Aborted

Explanation: CPU Stress Test Aborted. User pressed Ctrl-C.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

089-901-000 CPU Stress Test Failed

Explanation: CPU Stress Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. If the system has stopped responding, turn off and restart the system and then run the test again.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If the system has stopped responding, turn off and restart the system and then run the test again.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Emulex adapter test results

The following messages are generated when you run the Emulex adapter test.

516-000-000 ELXUCNA: NIC MAC LoopBackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-001-000 ELXUCNA: NIC PHY LoopBackTest Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-002-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-800-000 ELXUCNA: NIC MAC LoopBackTest Aborted

Explanation: Loopback testing at the MAC layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-801-000 ELXUCNA: NIC PHY LoopBackTest Aborted

Explanation: Loopback testing at the physical layer was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-802-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Aborted

Explanation: Verification of status LEDs was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-900-000 ELXUCNA: NIC MAC LoopBackTest Failed

Explanation: A failure was detected during the loopback test at the MAC layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

516-901-000 ELXUCNA: NIC PHY LoopBackTest Failed

Explanation: A failure was detected during the loopback test at the physical layer.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

516-902-000 ELXUCNA: ELXUCNA: NIC LED(Beacon)Test Failed

Explanation: A failure was detected while verifying operation of the status LEDs.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA EXA port ping test results

The following messages are generated when you run the EXA port ping test.

401-000-000 EXA Port Ping Test Passed

Explanation: EXA Port Ping Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

401-801-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Unable to get device base address.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Make sure that DSA and BIOS/uEFI are at the latest level.
4. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

401-802-000 EXA Port Ping Test Aborted

Explanation: EXA Port Ping Test Aborted. Port connections may not be correct.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Make sure that DSA and BIOS/uEFI are at the latest level.
4. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

401-901-001 EXA Port Ping Test Failed

Explanation: EXA Port Ping Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Remove power cables, wait for 45 seconds, reconnect and rerun the test.
2. Make sure that the scalability cable connections are as per specification.
3. Check scalability cables for loose connections.
4. Replace the scalability cable(s) for specified port(s).
5. If the problem remains, contact your technical-service representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA hard drive test results

The following messages are generated when you run the hard drive test.

217-000-000 HDD Test Passed

Explanation: HDD Stress Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

217-800-000 HDD Test Aborted

Explanation: HDD Test Aborted. The test was canceled.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify that Hard drive supports self test and self test logging.
4. If the problem remains, contact your technical-support representative.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

217-900-000 HDD Test Failed

Explanation: HDD Test Failed. The hard drive self-test detected a failure.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify the firmware is at the latest level.
4. Rerun the test.
5. If the problem remains, contact your technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Intel network test results

The following messages are generated when you run the Intel network test.

406-000-000 IANet:Registers Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

406-001-000 IANet:EEPROM Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

406-002-000 IANet:FIFO Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-003-000 IANet:Interrupts Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-004-000 IANet:Loopback Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-800-000 IANet:Registers Test Aborted

Explanation: Registers test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-801-000 IANet:EEPROM Test Aborted

Explanation: EEPROM test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-802-000 IANet:FIFO Test Aborted

Explanation: FIFO test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-803-000 IANet:Interrupts Test Aborted

Explanation: Interrupt test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-804-000 IANet:Loopback Test Aborted

Explanation: Loopback test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

406-900-000 IANet:Registers Test Failed

Explanation: A failure was detected during the Registers test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

406-901-000 IANet:EEPROM Test Failed

Explanation: A failure was detected during the EEPROM test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-902-000 IANet:FIFO Test Failed

Explanation: A failure was detected during the FIFO test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-903-000 IANet:Interrupts Test Failed

Explanation: A failure was detected during the Interrupt test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
2. Rerun the test.
3. Check interrupt assignments in the PCI Hardware section of the DSA Diagnostic Log. If the ethernet device is sharing interrupts, if possible modify the interrupt assignments using F1 Setup to assign a unique interrupt to the device.
4. Rerun the test.
5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

406-904-000 IANet:Loopback Test Failed

Explanation: A failure was detected during the Loopback test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the Ethernet cable for damage and ensure correct cable type and attachment.
2. Check component firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
3. Rerun the test.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

DSA LSI hard drive test results

The following messages are generated when you run the LSI hard drive test.

407-000-000 LSIESG:DiskDefaultDiagnostic Test Passed

Explanation: The test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

407-800-000 LSIESG:DiskDefaultDiagnostic Test Aborted

Explanation: The test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

407-900-000 LSIESG:DiskDefaultDiagnostic Test Failed

Explanation: The hard drive self-test detected a failure.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check cable connections.
2. Rerun the test.
3. Verify whether the firmware is at the latest level.
4. Rerun the test.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Mellanox adapter test results

The following messages are generated when you run the Mellanox adapter test.

408-000-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Passed

Explanation: Port Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-001-000 MLNX:MLNX_DiagnosticTestIBPort Test Passed

Explanation: Port Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-800-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Aborted

Explanation: Port Test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-801-000 MLNX:MLNX_DiagnosticTestIBPort Test Aborted

Explanation: Port Test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-900-000 MLNX:MLNX_DiagnosticTestEthernetPort Test Failed

Explanation: Port Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the physical link of the port under test is in the active state.
2. If these conditions were met but the test keeps failing, the port's adapter might be faulty.
3. Try replacing the adapter and repeating the test.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

408-901-000 MLNX:MLNX_DiagnosticTestIBPort Test Failed

Explanation: Port Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the physical link of the port under test is in the active state and a subnet manager is running on the fabric to which the port is attached.
2. If these conditions were met but the test keeps failing, the port's adapter might be faulty.
3. Try replacing the adapter and repeating the test.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA memory isolation test results

The following messages are generated when you run the memory isolation test.

201-000-000 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test All CPUs Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-001 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 1 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-002 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 2 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-003 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 3 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-000-004 Standalone Memory Test Passed

Explanation: Quick/Full Memory Test CPU 4 Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-000 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-001 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-811-002 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-811-003 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-000 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-001 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-812-002 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-812-003 Standalone Memory Test Aborted

Explanation: Memory test is not supported for this system.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-813-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-813-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not turn OFF ECC error reporting in CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-814-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-814-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Can not disable Scubbing feature for CPU.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-000 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-001 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-815-002 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-815-003 Standalone Memory Test Aborted

Explanation: Program Error with Quick Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-000 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-001 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-816-002 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-816-003 Standalone Memory Test Aborted

Explanation: Program Error with Full Memory Menu Option Selection.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-000 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-001 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-818-002 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-818-003 Standalone Memory Test Aborted

Explanation: Unable to Locate SMBIOS key "_SM_".

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-000 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-001 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-819-002 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-819-003 Standalone Memory Test Aborted

Explanation: The start-end address ranges in the restricted area of the memory.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-000 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-001 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-820-002 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-820-003 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-000 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-001 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-821-002 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-821-003 Standalone Memory Test Aborted

Explanation: Variable range MTRR registers are larger than fixed range MTRR registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-000 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-001 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-822-002 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-822-003 Standalone Memory Test Aborted

Explanation: Invalid MTRR service request.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-000 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-001 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-824-002 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-824-003 Standalone Memory Test Aborted

Explanation: Node Interleave feature must be OFF. Go to Setup and disable Node Interleave option and then re-run the test.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-000 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-001 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-826-002 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-826-003 Standalone Memory Test Aborted

Explanation: BIOS: Memory Controller has been disabled. Go to Setup and Enable Memory Controller.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-000 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-001 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-827-002 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-827-003 Standalone Memory Test Aborted

Explanation: BIOS: ECC function has been disabled by BIOS. Go to Setup and enable ECC generation.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-844-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-844-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem in masking MSR machine check control MASK registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-000 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-001 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-845-002 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-845-003 Standalone Memory Test Aborted

Explanation: Chipset Error: Problem clearing MSR machine check control registers.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-000 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-001 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-859-002 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-859-003 Standalone Memory Test Aborted

Explanation: INVALID XSECSRAT type.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-000 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-001 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-860-002 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-860-003 Standalone Memory Test Aborted

Explanation: No OEM0 type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-000 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-001 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-861-002 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-861-003 Standalone Memory Test Aborted

Explanation: No SRAT type 1 found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-000 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-001 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-862-002 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-862-003 Standalone Memory Test Aborted

Explanation: No OEM1 structure found.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-000 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-001 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-863-002 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-863-003 Standalone Memory Test Aborted

Explanation: No IBMERROR key in OEM1 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-000 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-001 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-864-002 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-864-003 Standalone Memory Test Aborted

Explanation: No GAS located in OEM1.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-000 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-001 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-865-002 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-865-003 Standalone Memory Test Aborted

Explanation: No XSECSRAT key in OEM0 structure.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-000 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-001 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-866-002 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-866-003 Standalone Memory Test Aborted

Explanation: EFI-SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-000 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-001 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-867-002 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-867-003 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer not allocated.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-000 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-001 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-868-002 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-868-003 Standalone Memory Test Aborted

Explanation: EFI/SAL: Buffer allocated in GetMemoryMap too small.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-000 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-001 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-869-002 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-869-003 Standalone Memory Test Aborted

Explanation: EFI/SAL Invalid parameter from GetMemoryMap function.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-000 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-001 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-870-002 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-870-003 Standalone Memory Test Aborted

Explanation: CPU Doamin in ACPI not valid.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-000 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-001 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-871-002 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-871-003 Standalone Memory Test Aborted

Explanation: Data Mis-compare encountered.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-000 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-001 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-877-002 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-877-003 Standalone Memory Test Aborted

Explanation: BIOS: Sparing in Extended PCI reg. must be OFF. Go to setup and disable sparing.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-000 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-001 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-878-002 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-878-003 Standalone Memory Test Aborted

Explanation: Sparing feature must be turned OFF. Go to setup and turn the sparing feature OFF.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-000 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-001 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-885-002 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-885-003 Standalone Memory Test Aborted

Explanation: Processor does not support MTRR register manipulation. Can not write to memory without cache.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-000 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-001 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-886-002 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-886-003 Standalone Memory Test Aborted

Explanation: Memory Upper limit is less than 16 Mbytes.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-000 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-001 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-899-002 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-899-003 Standalone Memory Test Aborted

Explanation: Memory Diagnostics Test Aborted by user.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

201-901-000 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-001 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-002 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

201-901-003 Standalone Memory Test Failed

Explanation: Memory Diagnostics Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Perform the actions mentioned one at a time and try the test after each action.
2. If the problem remains, contact your technical-service representative.
3. Turn off the system and disconnect it from power. Wait for 45 seconds. Reseat DIMM(s). Reconnect it to power.
4. Make sure that DSA and BIOS/uEFI are at the latest level.
5. Replace any DIMMS(s) mentioned in error, one by one.
6. Make sure that all DIMMs are enabled in the Configuration/Setup Utility program.
7. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA memory stress test results

The following messages are generated when you run the memory stress test.

202-000-000 MemStr Test Passed

Explanation: Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-801-000 MemStr Test Aborted

Explanation: Internal program error.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Turn off and restart the system.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Run the test again.
4. If the system has stopped responding, turn off and restart the system.
5. Check the system firmware level and upgrade if necessary.
6. Run the memory diagnostic to identify the specific failing DIMM.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-802-000 MemStr Test Aborted

Explanation: Memory size is insufficient to run the test. At least 1 GB is required.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-803-000 MemStr Test Aborted

Explanation: User pressed Ctrl-C.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

202-901-000 MemStr Test Failed

Explanation: Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Execute the standard DSA memory diagnostics to validate all memory.
2. Make sure that the DSA Diagnostic code is at the latest level.
3. Turn off the system and disconnect it from power.
4. Reseat the memory cards and DIMMs.
5. Reconnect the system to power and turn the system on.
6. Run the test again.
7. Execute the standard DSA memory diagnostics to validate all memory.
8. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

202-902-000 MemStr Test Failed

Explanation: Memory size is insufficient to run the test.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Ensure that all memory is enabled by checking the "Available System Memory" in the "Resource Utilization" section of the DSA Diagnostic Event log.
2. If necessary, access the Configuration/Setup Utility program by pressing F1 during system boot and enable all memory.
3. Make sure that the DSA Diagnostic code is at the latest level.
4. Run the test again.
5. Execute the standard DSA memory diagnostics to validate all memory.
6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA Nvidia GPU test results

The following messages are generated when you run the Nvidia GPU test.

409-000-000 NVIDIA User Diagnostic Test Passed

Explanation: NVIDIA User Diagnostic test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-003-000 Nvidia::DiagnosticServiceProvider::Bandwidth Test Passed

Explanation: Nvidia GPU Bandwidth test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-004-000 Nvidia::DiagnosticServiceProvider::Query Test Passed

Explanation: Nvidia GPU Query test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-005-000 Nvidia::DiagnosticServiceProvider::Matrix Test Passed

Explanation: Nvidia GPU Matrix test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-006-000 Nvidi::DiagnosticServiceProvider::Binomial Test Passed

Explanation: Nvidia GPU Binomial test passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-800-000 NVIDIA User Diagnostic Test Aborted

Explanation: NVIDIA User Diagnostic test was canceled.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-803-000 Nvidi::DiagnosticServiceProvider::Bandwidth Test Aborted

Explanation: Nvidia GPU Bandwidth test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-804-000 Nvidia::DiagnosticServiceProvider::Query Test Aborted

Explanation: Nvidia GPU Query test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-805-000 Nvidia::DiagnosticServiceProvider::Matrix Test Aborted

Explanation: Nvidia GPU Matrix test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-806-000 Nvidia::DiagnosticServiceProvider::Binomial Test Aborted

Explanation: Nvidia GPU Binomial test was canceled.

Severity: Warning

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-900-000 NVIDIA User Diagnostic Test Failed

Explanation: NVIDIA User Diagnostic Test Failed.

Severity: Event

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run `nvidia-smi -q` In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-903-000 Nvidia::DiagnosticServiceProvider::Bandwidth Test Failed

Explanation: Nvidia GPU Bandwidth Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run `nvidia-smi -q` In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-904-000 Nvidia::DiagnosticServiceProvider::Query Test Failed

Explanation: Nvidia GPU Query Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run `nvidia-smi -q` In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-905-000 Nvidia::DiagnosticServiceProvider::Matrix Test Failed

Explanation: Nvidia GPU Matrix Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run `nvidia-smi -q` In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

409-906-000 Nvidia::DiagnosticServiceProvider::Binomial Test Failed

Explanation: Nvidia GPU Binomial Test Failed.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Verify that the GPU is seated in the PCIe slot correctly by reseating the GPU. Then power cycle the system.
2. Verify that the power connectors to the GPU are connected firmly. Then power cycle the system.
3. Run `nvidia-smi -q` In some cases this will report a poorly connected power cable.
4. Rerun the diagnostics, using the same GPU, on system that is known to be working. A variety of system issues can cause diagnostic failure.
5. If the problem remains, contact your IBM technical-support representative.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA optical drive test results

The following messages are generated when you run the optical drive test.

215-000-000 Optical Drive Test Passed

Explanation: Optical Drive Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-801-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Unable to communicate with driver.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that the DSA Diagnostic code is at the latest level.
2. Run the test again.
3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
4. Run the test again.
5. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
6. Run the test again.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

215-802-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. A read error was encountered.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-803-000 Optical Drive Test Failed

Explanation: Optical Drive Test Failed. Disk may be in use by the operating system.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Wait for the system activity to cease
2. Run the test again
3. Turn off and restart the system.
4. Run the test again.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-804-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. The media tray is open.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Close the media tray and wait for 15 seconds for the media to be recognized. Run the test again.
2. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
3. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
4. Run the test again.
5. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-901-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Drive media is not detected.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

215-902-000 Optical Drive Test Failed

Explanation: Optical Drive Test Failed. Read miscompare.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

215-903-000 Optical Drive Test Aborted

Explanation: Optical Drive Test Aborted. Could not access the device.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Insert a new CD or DVD into the drive and wait for 15 seconds for the media to be recognized. Rerun the test.
2. Check the drive cabling for loose or broken connections at both ends or damage to the cable. Replace the cable if damage is present.
3. Run the test again.
4. Check system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
5. Run the test again.
6. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA system management test results

The following messages are generated when you run the system management test.

166-000-001 IMM I2C Test Passed

Explanation: IMM I2C Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-801-001 IMM I2C Test Aborted

Explanation: IMM returned incorrect response length.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-802-001 IMM I2C Test Aborted

Explanation: Test cannot be completed for unknown reason.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-803-001 IMM I2C Test Aborted

Explanation: Node Busy. Try later.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-804-001 IMM I2C Test Aborted

Explanation: Invalid Command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-805-001 IMM I2C Test Aborted

Explanation: Invalid Command for given LUN.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-806-001 IMM I2C Test Aborted

Explanation: Timeout while processing command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-807-001 IMM I2C Test Aborted

Explanation: Out of space.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-808-001 IMM I2C Test Aborted

Explanation: Reservation Canceled or Invalid Reservation ID.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-809-001 IMM I2C Test Aborted

Explanation: Request data truncated.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-810-001 IMM I2C Test Aborted

Explanation: Request data length invalid.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-811-001 IMM I2C Test Aborted

Explanation: Request data field length limit exceeded.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-812-001 IMM I2C Test Aborted

Explanation: Parameter out of range.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-813-001 IMM I2C Test Aborted

Explanation: Cannot return number of requested data bytes.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-814-001 IMM I2C Test Aborted

Explanation: Requested Sensor, data, or record not present.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-815-001 IMM I2C Test Aborted

Explanation: Invalid data field in Request.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-816-001 IMM I2C Test Aborted

Explanation: Command illegal for specified sensor or record type.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-817-001 IMM I2C Test Aborted

Explanation: Command response could not be provided.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-818-001 IMM I2C Test Aborted

Explanation: Cannot execute duplicated request.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-819-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. SDR Repository in?update mode.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-820-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. Device in firmware update mode.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-821-001 IMM I2C Test Aborted

Explanation: Command response could not be provided. BMC initialization in progress.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-822-001 IMM I2C Test Aborted

Explanation: Destination unavailable.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-823-001 IMM I2C Test Aborted

Explanation: Cannot execute command. Insufficient privilege level.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-824-001 IMM I2C Test Aborted

Explanation: Cannot execute command.

Severity: Warning

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-901-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in RTMM bus (BUS 0).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-902-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in TPM bus (BUS 1).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-903-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in Clock bus (BUS 2).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-904-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in LED bus (BUS 3).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-905-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in Power Supply bus (BUS 4).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-906-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in PCIe bus (BUS 5).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

166-907-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in Optional Mezz Card bus (BUS 6).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

166-908-001 IMM I2C Test Failed

Explanation: IMM Indicates failure in the DASD bus (BUS 7).

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Perform the actions mentioned one at a time and try the test after each action:

1. Turn off the system and disconnect it from power. Wait for 45 seconds. Reconnect it to power.
2. Make sure that DSA and BMC/IMM are at the latest level.
3. Run the test again.
4. If failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

DSA tape drive test results

The following messages are generated when you run the tape drive test.

264-000-000 Tape Test Passed

Explanation: Tape Test Passed.

Severity: Event

Serviceable: No

Recoverable: No

Automatically notify Support: No

Related Links:

- IBM Support Website
 - Latest level of DSA
 - Latest level of BMC/IMM
-

264-901-000 Tape Test Failed

Explanation: An error was found in the tape alert log.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Clear the error log.
4. Run the test again.
5. Make sure that the drive firmware is at the latest level.
6. Rerun the test after upgrading to the latest firmware level.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-902-000 Tape Test Failed

Explanation: Tape Test Failed. Media is not detected.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-903-000 Tape Test Failed

Explanation: Tape Test Failed. Media is not detected.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-904-000 Tape Test Failed

Explanation: Tape Test Failed. Drive hardware error.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Check the tape drive cabling for loose or broken connections or damage to the cable. Replace the cable if damage is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.
3. Run the test again.
4. Make sure that the drive firmware is at the latest level.
5. Rerun the test after upgrading to the latest firmware level.
6. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-905-000 Tape Test Failed

Explanation: Tape Test Failed. Software error: invalid request.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. If the system has stopped responding, turn off and restart the system.
2. Check the system firmware level and upgrade if necessary. The installed firmware level can be found in the DSA Diagnostic Event Log within the Firmware/VPD section for this component.
3. Run the test again.
4. If the system has stopped responding, turn off and restart the system.
5. Make sure that the drive firmware is at the latest level.
6. Run the test again.
7. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-906-000 Tape Test Failed

Explanation: Tape Test Failed. Unrecognized error.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.
2. Run the test again.
3. Make sure that the drive firmware is at the latest level.
4. Rerun the test after upgrading to the latest firmware level.
5. Make sure that the DSA Diagnostic code is at the latest level.
6. Run the test again.
7. Check the system firmware level and upgrade if necessary.
8. Run the test again.
9. If the failure remains, refer to "Troubleshooting by symptom" in the system "Installation and Service Guide" for the next corrective action.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-907-000 Tape Test Failed

Explanation: An error was found in the block address somewhere.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Clean the tape drive using the appropriate cleaning media and install new media.

Related Links:

- IBM Support Website
- Latest level of DSA
- Latest level of BMC/IMM

264-908-000 Tape Test Failed

Explanation: An error was found in getting tape capacity.

Severity: Error

Serviceable: Yes

Recoverable: No

Automatically notify Support: No

User response: Complete the following steps:

1. Make sure that medium is present.
2. Clean the tape drive using the appropriate cleaning media and install new media.

Related Links:

- [IBM Support Website](#)
- [Latest level of DSA](#)
- [Latest level of BMC/IMM](#)

Appendix C. UEFI/POST error codes

This topic contains information about the UEFI/POST diagnostic error codes.

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

UEFI/POST diagnostic error codes can be generated when the server starts or while the server is running. UEFI/POST codes are logged in the IMM event log in the server.

For each event code, the following fields are displayed:

Event identifier

An identifier that uniquely identifies an event.

Event description

The logged message string that appears for an event.

Explanation

Additional information to explain why the event occurred.

Severity

An indication of the level of concern for the condition. The severity is abbreviated in the event log to the first character. The following severities can be displayed.

Table 46. Event severity levels

Severity	Description
Informational	An informational message is something that was recorded for audit purposes, usually a user action or a change of states that is normal behavior.
Warning	A warning is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.
Error	An error typically indicates a failure or critical condition that impairs service or an expected function.

User response

The actions that you should take to resolve the event.

Perform the steps in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact IBM Support.

The following is the list of the UEFI/POST error codes and suggested actions to correct the detected problems.

I.11002 **[I.11002] A processor mismatch has been detected between one or more processors in the system.**

Explanation: One or More Mismatched Processors Detected

Severity: Info

User response: Complete the following steps:

1. This message could occur with messages about other processor configuration problems. Resolve those messages first.
2. If the problem persists, ensure that matching processors are installed (i.e., matching option part numbers, etc)
3. Verify that the processors are installed in the correct sockets. If not, correct that problem.
4. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
5. Replace mismatching processor. Inspect the processor socket and replace the system board first if the socket is damaged.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.18005 **[I.18005] A discrepancy has been detected in the number of cores reported by one or more processor packages within the system.**

Explanation: Processors have mismatched number of cores

Severity: Info

User response: Complete the following steps:

1. If this is a newly installed option, ensure that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin that applies to this processor error.
3. Replace the processor. Inspect the processor socket and replace the system board first if the socket is damaged.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.18006 **[I.18006] A mismatch between the maximum allowed QPI link speed has been detected for one or more processor packages.**

Explanation: Processors have mismatched QPI Speed

Severity: Info

User response: Complete the following steps:

1. If this is a newly installed option, ensure that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the processor. Inspect the processor socket and replace the system board first if the socket is damaged.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.18007 [I.18007] A power segment mismatch has been detected for one or more processor packages.

Explanation: Processors have mismatched Power Segments

Severity: Info

User response: Complete the following steps:

1. Ensure that all Processors have matching power requirements (such as 65, 95, or 130 Watts)
2. If power requirements match, check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the processor. Inspect the processor socket and replace the system board first if the socket is damaged

Related Links:

- “Removing a microprocessor and heat sink” on page 312
 - “Replacing a microprocessor and heat sink” on page 316
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

I.18008 [I.18008] Currently, there is no additional information for this event.

Explanation: Processors have mismatched Internal DDR3 Frequency

Severity: Info

User response: Complete the following steps:

1. Verify that matching DIMMs are installed in the correct population sequence. Correct any configuration issues found.
2. Replace the associated processor. Inspect the processor socket and replace the system board first if the socket is damaged

Related Links:

- “Installing a memory module” on page 49
 - “Removing a microprocessor and heat sink” on page 312
 - “Replacing a microprocessor and heat sink” on page 316
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

I.18009 [I.18009] A core speed mismatch has been detected for one or more processor packages.

Explanation: Processors have mismatched Core Speed

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets. Correct any mismatch issues found.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the processor. Inspect the processor socket and replace the system board first if the socket is damaged.

Related Links:

- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.1800A **[I.1800A] A mismatch has been detected between the speed at which a QPI link has trained between two or more processor packages.**

Explanation: Processors have mismatched Bus Speed

Severity: Info

User response: Complete the following steps:

1. Verify that the processor is a valid option that is listed as a Server Proven device for this system. If not, remove the Processor and install one listed on the Server Proven website.
2. Verify that matching processors are installed in the correct processor sockets. Correct any mismatch found.
3. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
4. Replace the processor. Inspect the processor socket and replace the system board first if the socket is damaged

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.1800B **[I.1800B] A cache size mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched size

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets. Correct any mismatch found.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.1800C **[I.1800C] A cache type mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched type

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.1800D **[I.1800D] A cache associativity mismatch has been detected for one or more processor packages.**

Explanation: Processors have one or more cache levels with mismatched associativity

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
 - “Replacing a microprocessor and heat sink” on page 316
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

I.1800E **[I.1800E] A processor model mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Model Number

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this Processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
 - “Replacing a microprocessor and heat sink” on page 316
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

I.1800F **[I.1800F] A processor family mismatch has been detected for one or more processor packages.**

Explanation: Processors have mismatched Family

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.18010 [I.18010] A processor stepping mismatch has been detected for one or more processor packages.

Explanation: Processors of the same model have mismatched Stepping ID

Severity: Info

User response: Complete the following steps:

1. Verify that matching processors are installed in the correct processor sockets.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.2018002 [I.2018002] The device found at Bus % Device % Function % could not be configured due to resource constraints. The Vendor ID for the device is % and the Device ID is %.

Explanation: OUT_OF_RESOURCES (PCI Option ROM)

Severity: Info

User response: Complete the following steps:

1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseal the adapter and any attached cables.
2. Check the IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error.

NOTE: It may be necessary to disable unused option ROMs from UEFI F1 setup or ASU or using adapter manufacturer utilities so that adapter firmware can be updated.
3. Move the adapter to a different slot. If a slot is not available or error recurs, replace the adapter.
4. If the adapter was moved to a different slot and the error did not recur, verify that this is not a system limitation. Then replace the system board. Also, if this is not the initial installation and the error persists after adapter replacement, replace the system board.

Related Links:

- “Removing an adapter” on page 244
- “Replacing an adapter” on page 245
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.2018003 [I.2018003] A bad option ROM checksum was detected for the device found at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.

Explanation: ROM CHECKSUM ERROR

Severity: Info

User response: Complete the following steps:

1. If this PCIe device and/or any attached cables were recently installed, moved, serviced or upgraded, reseal the adapter and any attached cables.
2. Move the adapter to a different system slot, if available.
3. Check the IBM support site for any applicable service bulletin or UEFI or adapter firmware update that applies to this error.

NOTE: It may be necessary to configure slot to Gen1 or to use special utility software so that adapter firmware can be upgraded. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.

4. Replace the adapter.

Related Links:

- “Removing an adapter” on page 244
- “Replacing an adapter” on page 245

I.3048005 [I.3048005] UEFI has booted from the backup flash bank.

Explanation: Booting Backup UEFI Image

Severity: Info

User response: Complete the following steps:

Return the system to primary bank.

Related Links:

- “Updating the firmware” on page 141

I.3808004 [I.3808004] The IMM System Event log (SEL) is full.

Explanation: IPMI System Event Log is Full

Severity: Info

User response: Complete the following steps:

1. Use the IMM Web Interface to clear the event log.
2. If IMM communication is unavailable, use the Setup Utility to access the System Event Logs Menu and choose Clear IMM System Event Log and Restart Server.

I.3818001 **[I.3818001] The firmware image capsule signature for the currently booted flash bank is invalid.**

Explanation: Current Bank CRTM Capsule Update Signature Invalid

Severity: Info

User response: Complete the following steps:

1. Reboot the system. Will come up on backup UEFI image. Update the primary UEFI image.
2. If error does not persist, no additional recovery action is required.
3. If error persists, or boot is unsuccessful, replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.3818002 **[I.3818002] The firmware image capsule signature for the non-booted flash bank is invalid.**

Explanation: Opposite Bank CRTM Capsule Update Signature Invalid

Severity: Info

User response: Complete the following steps:

1. Update the backup UEFI image.
2. If error does not persist, no additional recovery action is required.
3. If error persists, or boot is unsuccessful, replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.3818003 **[I.3818003] The CRTM flash driver could not lock the secure flash region.**

Explanation: CRTM Could not lock secure flash region

Severity: Info

User response: Complete the following steps:

1. If system failed to boot successfully, DC cycle the system.
2. If system boots to F1 setup, update the UEFI image and reset bank to primary (if required). If the system boots without error, recovery is complete and no additional action is required.
3. If system fails to boot, or if the firmware update attempt fails, replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

I.3868000 [I.3868000] BOFM: System reset performed to reset adapters.

Explanation: BOFM: System reset performed to reset adapters

Severity: Info

User response: Complete the following steps:

Information only; no action is required.

I.3868003 [I.3868003] BOFM: Configuration too large for compatibility mode.

Explanation: BOFM: Configuration too large for compatibility mode

Severity: Info

User response: Complete the following steps:

Information only; no action is required.

I.58015 [I.58015] Memory spare copy initiated.

Explanation: Spare Copy Started

Severity: Info

User response: Complete the following steps:

Information only; no action is required.

I.580A4 [I.580A4] Memory population change detected.

Explanation: DIMM Population Change Detected

Severity: Info

User response: Complete the following steps:

Check system event log for uncorrected DIMM failures and replace those DIMMs.

Related Links:

- “Removing a memory module” on page 256
 - “Replacing a memory module” on page 257
-

I.580A5 [I.580A5] Mirror Fail-over complete. DIMM number % has failed over to to the mirrored copy.

Explanation: DIMM Mirror Fail-over Detected

Severity: Info

User response: Complete the following steps:

Check the system-event log for uncorrected DIMM failures and replace those DIMMs.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257

I.580A6 **[I.580A6] Memory spare copy has completed successfully.**

Explanation: Spare Copy Complete

Severity: Info

User response: Complete the following steps:

Check system log for related DIMM failures and replace those DIMMs.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257

S.1100C **[S.1100C] An uncorrectable error has been detected on processor %.**

Explanation: Uncorrectable processor error detected

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Reboot the system. If problem persists, contact Support.

S.2011001 **[S.2011001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.**

Explanation: PCI SERR Detected

Severity: Error

User response: Complete the following steps:

1. If this system and/or any attached cables were recently installed, moved, serviced or upgraded,
 - a. Reseat the adapter and any attached cables.
 - b. Reload the device driver.
 - c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
2. Check the IBM support site for an applicable device driver, firmware update, or other information that applies to this error. Load the new device driver and install any required firmware updates.
3. If the problem persists, remove the adapter. If system reboots successfully without the adapter, replace that adapter.
4. Replace the processor associated with the PCIe slot in which the adapter is installed. See Table 1 in section: Installing optional devices -> Installing an adapter for information describing which processors support which PCIe slots.

Related Links:

- “Removing an adapter” on page 244
- “Replacing an adapter” on page 245
- “Updating the firmware” on page 141
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316

S.2018001 [S.2018001] An Uncorrected PCIe Error has Occurred at Bus % Device % Function %. The Vendor ID for the device is % and the Device ID is %.

Explanation: PCIe Uncorrected Error Detected

Severity: Error

User response: Complete the following steps:

1. If this system and/or any attached cables were recently installed, moved, serviced or upgraded:
 - a. Reseat the adapter and any attached cables.
 - b. Reload the device driver.
 - c. If device is not recognized, reconfiguring slot to Gen1 or Gen2 may be required. Gen1/Gen2 settings can be configured via F1 Setup -> System Settings -> Devices and I/O Ports -> PCIe Gen1/Gen2/Gen3 Speed Selection, or the ASU Utility.
2. Check the IBM support site for an applicable device driver, firmware update, or other information that applies to this error. Load the new device driver and install any required firmware updates.
3. If the problem persists, remove the adapter. If the system reboots successfully without the adapter, replace that adapter.
4. Replace the processor associated with the PCIe slot in which the adapter is installed. See Table 1 in section: Installing optional devices -> Installing an adapter for information describing which processors support which PCIe slots.

Related Links:

- "Removing an adapter" on page 244
- "Replacing an adapter" on page 245
- "Updating the firmware" on page 141
- "Removing a microprocessor and heat sink" on page 312
- "Replacing a microprocessor and heat sink" on page 316

S.3020007 [S.3020007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- "Updating the firmware" on page 141
- "Removing the system board" on page 331
- "Replacing the system board" on page 334

S.3028002 [S.3028002] **Boot permission timeout detected.**

Explanation: Boot Permission Negotiation Timeout

Severity: Error

User response: Complete the following steps:

1. Check the IMM logs for communication errors and resolve.
2. Reseat the system.
3. If the problem persists, contact Support.

S.3030007 [S.3030007] **A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3040007 [S.3040007] **A firmware fault has been detected in the UEFI image.**

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3050007 [S.3050007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3058004 [S.3058004] A Three Strike boot failure has occurred. The system has booted with default UEFI settings.

Explanation: POST failure has occurred! System booted with default settings.

Severity: Error

User response: Complete the following steps:

1. This event resets UEFI to the default settings for the next boot. If successful, the Setup Utility is displayed. The original UEFI settings are still present.
2. If you did not intentionally trigger the reboots, check logs for probable cause.
3. Undo recent system changes (settings or devices added). If there were no recent system changes, remove all options, and then remove the CMOS battery for 30 seconds to clear CMOS contents. Verify that the system boots. Then, re-install the options one at a time to locate the problem.
4. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
5. Update the UEFI firmware.
6. Replace the system board.

Related Links:

- “Removing the system battery” on page 291
- “Replacing the system battery” on page 293
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3060007 [S.3060007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3070007 [S.3070007] A firmware fault has been detected in the UEFI image.

Explanation: Internal UEFI Firmware Fault Detected, System halted

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the UEFI image.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.3108007 [S.3108007] The default system settings have been restored.

Explanation: System Configuration Restored to Defaults

Severity: Error

User response: Complete the following steps:

Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.

Related Links:

- “Updating the firmware” on page 141

S.3818004 [S.3818004] The CRTM flash driver could not successfully flash the staging area. A failure occurred.

Explanation: CRTM Update Failed

Severity: Error

User response: Complete the following steps:

1. Continue booting the system. If the system does not reset, manually reset the system.
2. If the error is not reported on the subsequent boot, no additional recovery action is required.
3. If the error persists, continue booting system and update the UEFI image.
4. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

S.3818007 [S.3818007] The firmware image capsules for both flash banks could not be verified.

Explanation: CRTM image capsule could not be verified

Severity: Error

User response: Complete the following steps:

1. If system failed to boot successfully, DC cycle system.
2. If system boots to F1 setup, update the UEFI image and reset bank to primary (if required). If the system boots without error, recovery is complete and no additional action is required.
3. If system fails to boot, or if the firmware update attempt fails, replace the system board.

Related Links:

- “Updating the firmware” on page 141
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

S.51003 [S.51003] An uncorrectable memory error was detected in DIMM slot % on rank %.

Explanation: [S.51003] An uncorrectable memory error was detected on processor % channel %. The failing DIMM within the channel could not be determined.

[S.51003] An uncorrectable memory error has been detected during POST. Fatal Memory Error Occurred

Severity: Error

User response: Complete the following steps:

1. If the system has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: The event Log might contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. If no problem is observed on the DIMM connectors or the problem persists, replace the DIMM identified by LightPath and/or event log entry.
3. If the problem recurs on the same DIMM connector, replace the other DIMMs on the same memory channel.
4. Check the IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
5. If the problem recurs on the same DIMM connector, inspect connector for damage. If found, replace the system board.
6. Replace the affected Processor.
7. Replace system board.

Related Links:

- “Removing a memory module” on page 256

S.51006 • S.51009

- “Replacing a memory module” on page 257
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.51006 **[S.51006] A memory mismatch has been detected. Please verify that the memory configuration is valid.**

Explanation: One or More Mismatched DIMMs Detected

Severity: Error

User response: Complete the following steps:

1. Could follow an uncorrectable memory error or failed memory test. Check the log and service that event first. DIMMs disabled by other errors or actions could cause this event.
2. Verify that the DIMMs are installed in the correct population sequence.
3. Disable memory mirroring and sparing. If this action eliminates the mismatch, check the IBM Support site for information related to this problem.
4. Update UEFI firmware.
5. Replace the DIMM
6. Replace the processor.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316

S.51009 **[S.51009] No system memory has been detected.**

Explanation: No Memory Detected

Severity: Error

User response: Complete the following steps:

1. If any memory errors are logged other than this one, take actions indicated for those codes first.
2. If no other memory diagnostic codes appear in the logs, verify that all DIMM connectors are enabled using the Setup utility or the Advanced Settings Utility (ASU).
3. If the problem remains, shut down the system and physically verify that one or more DIMMs are installed and that all DIMMs are installed in the correct population sequence.
4. If DIMMs are present and properly installed, check for any lit DIMM-connector LEDs, and if found, reseal those DIMMs.
5. If the problem remains, replace the processor.
6. If the problem remains, replace the system board.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.58008 [S.58008] A DIMM has failed the POST memory test.**Explanation:** DIMM Failed Memory Test**Severity:** Error**User response:** Complete the following steps:

1. You must AC-cycle the system to re-enable the affected DIMM connector or re-enable manually using the Setup utility.
2. If the system has been recently installed, serviced, moved, or upgraded, check to ensure that DIMMs are firmly seated and that no foreign material can be seen in the DIMM connector. If either condition is observed, correct and retry with the same DIMM. (Note: The event Log might contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
3. If the problem persists, replace the DIMM identified by LightPath and/or event log entry.
4. If the problem recurs on the same DIMM connector, swap the other DIMMs on the same memory channel across channels one at a time to a different memory channel or processor. If the problem follows a moved DIMM to a different memory channel, replace that DIMM.
5. Check the IBM support site for an applicable service bulletin or firmware update that applies to this memory error.
6. If the problem stays with the original DIMM connector, re-inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
7. Remove the affected processor and inspect the processor socket pins for damaged or mis-aligned pins. If damage is found, or this is an upgrade processor, replace the system board. If there are multiple processors, swap them to move affected processor to another processor socket and retry. If problem follows the affected processor (or there is only one processor), replace the affected processor.
8. Replace the system board.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.68005 [S.68005] An error has been detected by the IIO core logic on Bus %. The Global Fatal Error Status register contains %. The Global Non-Fatal Error Status register contains %. Please check error logs for the presence of additional downstream device error data.**Explanation:** Critical IOH-PCI Error**Severity:** Error**User response:** Complete the following steps:

1. Check the log for a separate error related to an associated PCIe device and resolve that error.
2. Check the IBM support site for an applicable service bulletin or firmware update for the system or adapter that applies to this error.
3. If there are multiple Processors, swap Processors to move affected processor to another processor socket and retry. If problem follows the affected processor, or this is a single processor system, replace the processor. Inspect the processor socket on each processor removal and replace system board first if the processor socket is damaged or mis-aligned pins are found.
4. Replace the system board.

Related Links:

- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.680B8 [S.680B8] Internal QPI Link Failure Detected.

Explanation: Internal QPI Link Failure Detected

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Inspect the processor sockets for foreign debris or damage. If debris is found, remove the debris.
3. If the error re-occurs, or socket damage is found, replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

S.680B9 [S.680B9] External QPI Link Failure Detected.

Explanation: External QPI Link Failure Detected

Severity: Error

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Inspect the processor sockets for foreign debris or damage. If debris is found, remove the debris.
3. If the error re-occurs, or socket damage is found, replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.11004 [W.11004] A processor within the system has failed the BIST.

Explanation: Processor Self Test Failure Detected

Severity: Warning

User response: Complete the following steps:

1. If the processor or firmware was just updated, check the IBM support site for an applicable service bulletin or firmware update that applies to this processor error.
2. If there are multiple Processors, swap Processors to move affected processor to another processor socket and retry. If problem follows the affected processor, or this is a single processor system, replace the processor. Inspect the processor socket on each processor removal and replace system board first if the processor socket is damaged or mis-aligned pins are found.
3. Replace the system board.

Related Links:

- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3048006 [W.3048006] UEFI has booted from the backup flash bank due to an Automatic Boot Recovery (ABR) event.

Explanation: Automated Boot Recovery, Booting Backup UEFI Image

Severity: Warning

User response: Complete the following steps:

1. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
2. Update the primary UEFI image and power cycle the system.
3. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

W.305000A [W.305000A] An invalid date and time have been detected.

Explanation: RTC Date and Time Incorrect

Severity: Warning

User response: Complete the following steps:

1. Check the IMM event log. This event should immediately precede 0068002 error. Resolve that event or any other battery related errors.
2. Use F1 Setup to reset date and time. If problem returns after a system reset, replace CMOS battery.
3. If the problem persists then check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Replace the system board.

Related Links:

- “Removing the system battery” on page 291
 - “Replacing the system battery” on page 293
 - “Updating the firmware” on page 141
 - “Removing the system board” on page 331
 - “Replacing the system board” on page 334
-

W.3058009 [W.3058009] DRIVER HEALTH PROTOCOL: Missing Configuraiton. Requires Change Settings From F1.

Explanation: DRIVER HEALTH PROTOCOL: Missing Configuration. Requires Change Settings From F1

Severity: Warning

User response: Complete the following steps:

1. Go to the Setup Utility (System Settings -> Settings -> Driver Health Status List) and find a driver/controller reporting Configuration Required status.
2. Search for the driver menu from System Settings and change settings appropriately.
3. Save settings and restart system.

Related Links:

- “Configuring the server” on page 142

W.305800A [W.305800A] DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller.

Explanation: DRIVER HEALTH PROTOCOL: Reports 'Failed' Status Controller

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If the controller is a PCIe card, update the firmware on the card or replace the card.
3. If the problem persists, switch to backup UEFI or update the current UEFI image.
4. Replace the system board.

Related Links:

- “Installing an adapter” on page 76
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.305800B [W.305800B] DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller.

Explanation: DRIVER HEALTH PROTOCOL: Reports 'Reboot' Required Controller

Severity: Warning

User response: Complete the following steps:

1. No action required. The system will reboot at the end of POST.
2. If the controller is a PCIe card, update the firmware on the card or replace the card.
3. If the problem persists, switch to the backup UEFI image or update the current UEFI image.
4. Replace the system board.

Related Links:

- “Installing an adapter” on page 76
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.305800C [W.305800C] DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller.

Explanation: DRIVER HEALTH PROTOCOL: Reports 'System Shutdown' Required Controller

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If the controller is a PCIe card, update the firmware on the card or replace the card.
3. If the problem persists, switch to the backup UEFI image or update the current UEFI image.
4. Replace system board.

Related Links:

- “Installing an adapter” on page 76
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.305800D [W.305800D] DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'.

Explanation: DRIVER HEALTH PROTOCOL: Disconnect Controller Failed. Requires 'Reboot'

Severity: Warning

User response: Complete the following steps:

1. Reboot the system to reconnect the controller.
2. If the controller is a PCIe card, update the firmware on the card or replace the card.
3. If the problem persists, switch to the backup UEFI image or update the current UEFI image.
4. Replace the system board.

Related Links:

- “Installing an adapter” on page 76
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.305800E [W.305800E] DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver.

Explanation: DRIVER HEALTH PROTOCOL: Reports Invalid Health Status Driver

Severity: Warning

User response: Complete the following steps:

1. Reboot the system.
2. If the controller is a PCIe card, update the firmware on the card or replace the card.
3. If the problem persists, switch to the backup UEFI image or update the current UEFI image.
4. Replace the system board.

Related Links:

- “Installing an adapter” on page 76
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3808000 [W.3808000] An IMM communication failure has occurred.

Explanation: IMM Communication Failure

Severity: Warning

User response: Complete the following steps:

1. Verify that the IMM firmware level is compatible with the UEFI firmware level. If not, update the IMM firmware.
2. Power cycle the system.
3. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3808002 [W.3808002] An error occurred while saving UEFI settings to the IMM.

Explanation: Error Updating System Configuration to IMM

Severity: Warning

User response: Complete the following steps:

1. Use the Setup Utility to verify and save the settings (which will recover the settings).
2. Power cycle the system.
3. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Verify that the IMM firmware level is compatible with the UEFI firmware level. If not, update the IMM firmware.
5. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
6. Replace the system board.

Related Links:

- “Removing the system battery” on page 291
- “Replacing the system battery” on page 293
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3808003 [W.3808003] Unable to retrieve the system configuration from the IMM.

Explanation: Error Retrieving System Configuration from IMM

Severity: Warning

User response: Complete the following steps:

1. Use the Setup Utility to verify and save the settings (which will recover the settings).
2. Power cycle the system.
3. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
4. Verify that the IMM firmware level is compatible with the UEFI firmware level. If not, update the IMM firmware.
5. Remove and re-install CMOS battery for 30 seconds to clear CMOS contents.
6. Replace the system board.

Related Links:

- “Removing the system battery” on page 291
- “Replacing the system battery” on page 293
- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3818005 [W.3818005] The CRTM flash driver could not successfully flash the staging area. The update was aborted

Explanation: CRTM Update Aborted

Severity: Warning

User response: Complete the following steps:

1. Continue booting system. If system does not reset, manually reset the system.
2. If the error is not reported on the subsequent boot, no additional recovery action is required.
3. If the event persists, continue booting system and update the UEFI image.
4. Replace the system board.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3868001 [W.3868001] BOFM: Reset loop avoided - Multiple resets not allowed.

Explanation: BOFM: Reset loop avoided - Multiple resets not allowed

Severity: Warning

User response: Complete the following steps:

1. Update all firmware (including adapter firmware) to the latest levels.
2. If the problem persists, contact Support.

Related Links:

- “Updating the firmware” on page 141

W.3868002 [W.3868002] BOFM: Error communicating with the IMM - BOFM may not be deployed correctly.

Explanation: BOFM: Error communicating with the IMM - BOFM may not be deployed correctly

Severity: Warning

User response: Complete the following steps:

1. Update all firmware (including adapter firmware) to the latest levels.
2. If the problem persists, contact Support.

Related Links:

- “Updating the firmware” on page 141
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.3938002 [W.3938002] A boot configuration error has been detected.

Explanation: Boot Configuration Error

Severity: Warning

User response: Complete the following steps:

1. F1 Setup -> Save Settings.
2. Retry the configuration update.

Related Links:

- "Configuring the server" on page 142

W.50001 [W.50001] A DIMM has been disabled due to an error detected during POST.

Explanation: DIMM Disabled

Severity: Warning

User response: Complete the following steps:

1. If the DIMM was disabled because of a memory fault, follow the procedure for that event.
2. If no memory fault is recorded in the logs and no DIMM connector error LEDs are lit, re-enable the DIMM through the Setup utility or the Advanced Settings Utility (ASU).
3. If the problem persists, Power cycle the system.
4. Reset the IMM to default settings.
5. Reset UEFI to default settings.
6. Update the IMM and UEFI firmware.
7. Replace the system board.

Related Links:

- "Updating the firmware" on page 141
- "Removing the system board" on page 331
- "Replacing the system board" on page 334

W.58001 [W.58001] The PFA Threshold limit (correctable error logging limit) has been exceeded on DIMM number % at address %. MC5 Status contains % and MC5 Misc contains %.

Explanation: DIMM PFA Threshold Exceeded

Severity: Warning

User response: Complete the following steps:

1. If the system has recently been installed, moved, serviced, or upgraded, verify that the DIMM is properly seated and visually verify that there is no foreign material in any DIMM connector on that memory channel. If either of these conditions is found, correct and retry with the same DIMM. (Note: The event Log might contain a recent 00580A4 event denoting detected change in DIMM population that could be related to this problem.)
2. Check the IBM support site for an applicable firmware update that applies to this memory error. The release notes will list the known problems the update addresses.
3. If the previous steps do not resolve the problem, at the next maintenance opportunity, replace the affected DIMM (as indicated by LightPath and/or failure log entry).
4. If PFA re-occurs on the same DIMM connector, swap the other DIMMs on the same memory channel one at a time to a different memory channel or processor. If PFA follows a moved DIMM to any DIMM connector on the different memory channel, replace the moved DIMM.
5. Check the IBM support site for an applicable Service Bulletins (Service bulletins) that applies to this memory error. (Link to IBM support service bulletins)
6. If the problem continues to re-occur on the same DIMM connector, inspect DIMM connector for foreign material and remove, if found. If connector is damaged, replace system board.
7. Remove the affected processor and inspect the processor socket pins for damaged or mis-aligned pins. If damage is found or the processor is an upgrade part, replace the system board.

8. Replace affected processor.
9. Replace the system board.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257
- “Removing a microprocessor and heat sink” on page 312
- “Replacing a microprocessor and heat sink” on page 316
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

W.58007 [W.58007] Invalid memory configuration (Unsupported DIMM Population) detected. Please verify memory configuration is valid.

Explanation: Unsupported DIMM Population

Severity: Warning

User response: Complete the following steps:

1. This event could follow an uncorrectable memory error or failed memory test. Check the log and resolve that event first. DIMMs disabled by other errors or actions could cause this event.
2. Ensure that the DIMM connectors are populated in the correct sequence.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257

W.580A1 [W.580A1] Invalid memory configuration for Mirror Mode. Please correct memory configuration.

Explanation: Unsupported DIMM Population for Mirror Mode

Severity: Warning

User response: Complete the following steps:

1. If a DIMM connector error LED is lit, resolve the failure.
2. Make sure that the DIMM connectors are correctly populated for mirroring mode.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257

W.580A2 [W.580A2] Invalid memory configuration for Sparing Mode. Please correct memory configuration.

Explanation: Unsupported DIMM Population for Spare Mode

Severity: Warning

User response: Complete the following step:

Make sure that the DIMM connectors are correctly populated for sparing mode.

Related Links:

- “Removing a memory module” on page 256
- “Replacing a memory module” on page 257

W.68002

W.68002 **[W.68002] A CMOS battery error has been detected**

Explanation: CMOS Battery Fault

Severity: Warning

User response: Complete the following steps:

1. If the system was recently installed, moved, or serviced, make sure the battery is properly seated.
2. Check the IBM support site for an applicable service bulletin or firmware update that applies to this error.
3. Replace the CMOS battery
4. Replace the system board.

Related Links:

- “Removing the system battery” on page 291
- “Replacing the system battery” on page 293
- “Removing the system board” on page 331
- “Replacing the system board” on page 334

Appendix D. Integrated management module II (IMM2) error messages

Use this information to resolve IMM2 error messages.

Note: This documentation includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x products.

When a hardware event is detected by the IMM on the server, the IMM logs that event in the system-event log in the server.

For each event code, the following fields are displayed:

Event identifier

A hexadecimal identifier that uniquely identifies an event or class of events. In this documentation, the event identifiers are prefixed with 0x and followed by eight characters.

Event description

The logged message string that appears for an event. When the event string is displayed in the system-event log, information such as a specific component is displayed. In this documentation, that additional information appears as variables, such as [arg1] or [arg2].

Explanation

Additional information to explain why the event occurred.

Severity

An indication of the level of concern for the condition. In the system-event log, severity is abbreviated to the first character. The following severities can be displayed.

Info: The event was recorded for audit purposes, usually a user action or a change of states that is normal behavior.

Warning:

The event is not as severe as an error, but if possible, the condition should be corrected before it becomes an error. It might also be a condition that requires additional monitoring or maintenance.

Error: The event is a failure or critical condition that impairs service or an expected function.

Alert Category

Similar events are grouped together in categories. The alert category is in the following format:

severity - device

severity is one of the following severity levels:

- **Critical:** A key component in the server is no longer functioning.
- **Warning:** The event might progress to a critical level.
- **System:** The event is the result of a system error or a configuration change.

device is the specific device in the server that caused the event to be generated.

Serviceable

Whether user action is required to correct the problem.

CIM Information

The prefix of the message ID and the sequence number that is used by the CIM message registry.

SNMP Trap ID

The SNMP trap ID that is found in the SNMP alert management information base (MIB).

Automatically contact Service

If this field is set to **Yes**, and you have enabled Electronic Service Agent (ESA), IBM Support will be notified automatically if the event is generated.

While you wait for Support to call, you can perform the recommended actions for the event.

User response

The actions that you should perform to solve the event.

Perform the steps listed in this section in the order shown until the problem is solved. After you perform all of the actions that are described in this field, if you cannot solve the problem, contact Support.

Note: This list includes error codes and messages that might not apply to this machine type and model.

The following is the list of IMM2 error messages and suggested actions to correct the detected server problems. For more information about IMM2, see the *Integrated Management Module II User's Guide* at <http://www.ibm.com/support/entry/portal/docdisplay?ln docid=MIGR-5086346>.

IMM Events that automatically notify Support

You can configure the Integrated Management Module II (IMM2) to automatically notify Support (also known as *call home*) if certain types of errors are encountered. If you have configured this function, see the table for a list of events that automatically notify Support.

Table 47. Events that automatically notify Support

Event ID	Message String	Automatically Notify Support
40000086-00000000	Test Call Home Generated by user [arg1].	Yes
40000087-00000000	Manual Call Home by user [arg1]: [arg2].	Yes
80010202-0701xxxx	Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.	Yes
80010202-2801xxxx	Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.	Yes
80010902-0701xxxx	Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f0021-0b01xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b02xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b03xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b04xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b05xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b06xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b07xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-0b08xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-2201xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0021-2582xxxx	Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].	Yes
806f0108-0a01xxxx	[PowerSupplyElementName] has Failed.	Yes
806f0108-0a02xxxx	[PowerSupplyElementName] has Failed.	Yes
806f010c-2581xxxx	Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].	Yes
806f010d-0400xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0401xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0402xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0403xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0404xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0405xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010d-0406xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0407xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0408xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0409xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040axxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040bxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040cxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040dxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040exxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-040fxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0410xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0411xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0412xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0413xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0414xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0415xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0416xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0417xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0418xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-0419xxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-041axxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-041bxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-041cxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f010d-041dxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-041exxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f010d-041fxxxx	The [StorageVolumeElementName] has been disabled due to a detected fault.	Yes
806f011b-0701xxxx	The connector [PhysicalConnectorElementName] has encountered a configuration error.	Yes
806f0207-0301xxxx	[ProcessorElementName] has Failed with FRB1/BIST condition.	Yes
806f0207-0302xxxx	[ProcessorElementName] has Failed with FRB1/BIST condition.	Yes
806f0207-0303xxxx	[ProcessorElementName] has Failed with FRB1/BIST condition.	Yes
806f0207-0304xxxx	[ProcessorElementName] has Failed with FRB1/BIST condition.	Yes
806f0207-2583xxxx	[ProcessorElementName] has Failed with FRB1/BIST condition.	Yes
806f020d-0400xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0401xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0402xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0403xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0404xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0405xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0406xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0407xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0408xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f020d-0409xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040axxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040bxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040cxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040dxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040exxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-040fxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0410xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0411xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0412xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0413xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0414xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0415xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0416xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0417xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-0418xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f020d-0419xxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041axxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041bxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041cxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041dxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041exxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f020d-041fxxxx	Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].	Yes
806f050c-2581xxxx	Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].	Yes
806f060d-0400xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0401xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0402xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0403xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0404xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0405xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0406xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0407xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0408xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0409xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-040axxxx	Array [ComputerSystemElementName] has failed.	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f060d-040bxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-040cxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-040dxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-040exxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-040fxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0410xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0411xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0412xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0413xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0414xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0415xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0416xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0417xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0418xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-0419xxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041axxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041bxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041cxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041dxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041exxxx	Array [ComputerSystemElementName] has failed.	Yes
806f060d-041fxxxx	Array [ComputerSystemElementName] has failed.	Yes
806f0813-2581xxxx	An Uncorrectable Bus Error has occurred on bus [SensorElementName].	Yes
806f0813-2582xxxx	An Uncorrectable Bus Error has occurred on bus [SensorElementName].	Yes

Table 47. Events that automatically notify Support (continued)

Event ID	Message String	Automatically Notify Support
806f0813-2583xxxx	An Uncorrectable Bus Error has occurred on bus [SensorElementName].	Yes

40000001-00000000 Management Controller [arg1] Network Initialization Complete.

Explanation: The IMM network subsystem initialization has completed.

May also be shown as 4000000100000000 or 0x4000000100000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0001

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

40000002-00000000 Certificate Authority [arg1] has detected a [arg2] Certificate Error.

Explanation: A problem has occurred with the SSL Server, SSL Client, or SSL Trusted CA certificate that has been imported into the IMM. The imported certificate must contain a public key that corresponds to the key pair that was previously generated by the **Generate a New Key and Certificate Signing Request**

May also be shown as 4000000200000000 or 0x4000000200000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0002

SNMP Trap ID: 22

Automatically notify Support: No

User response: Make sure that the certificate that you are importing is correct and properly generated.

40000003-00000000 Ethernet Data Rate modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Ethernet data rate of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000300000000 or 0x4000000300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0003

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000004-00000000 Ethernet Duplex setting modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Ethernet duplex setting of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000400000000 or 0x4000000400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0004

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000005-00000000 Ethernet MTU setting modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Ethernet maximum transmission unit (MTU) setting of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000500000000 or 0x4000000500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0005

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000006-00000000 Ethernet locally administered MAC address modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Ethernet locally administered MAC address of the Integrated Management Module external network interface to the specified value

May also be shown as 4000000600000000 or 0x4000000600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0006

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000007-00000000 Ethernet interface [arg1] by user [arg2].

Explanation: The specified user has enabled or disabled the Ethernet interface.

May also be shown as 4000000700000000 or 0x4000000700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0007

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000008-00000000 Hostname set to [arg1] by user [arg2].

Explanation: The specified user has changed the Integrated Management Module host name.

May also be shown as 4000000800000000 or 0x4000000800000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0008

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

40000009-00000000 IP address of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the IP address of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000900000000 or 0x4000000900000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0009

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

4000000a-00000000 IP subnet mask of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the subnet mask of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000a00000000 or 0x4000000a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0010

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000b-00000000 IP address of default gateway modified from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the gateway address of the Integrated Management Module external network interface to the specified value.

May also be shown as 4000000b00000000 or 0x4000000b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0011

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000c-00000000 OS Watchdog response [arg1] by [arg2] .

Explanation: This message is for the use case where an OS Watchdog has been enabled or disabled by a user.

May also be shown as 4000000c00000000 or 0x4000000c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0012

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000000d-00000000 DHCP[[arg1]] failure, no IP address assigned.

Explanation: A DHCP server has failed to assign an IP address to the IMM.

May also be shown as 4000000d00000000 or 0x4000000d00000000

Severity: Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0013

SNMP Trap ID:

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the IMM network cable is connected.
2. Make sure that there is a DHCP server on the network that can assign an IP address to the IMM.

4000000e-00000000 Remote Login Successful. Login ID: [arg1] from [arg2] at IP address [arg3].

Explanation: The specified user has logged in to the Integrated Management Module.

May also be shown as 4000000e00000000 or 0x4000000e00000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0014

SNMP Trap ID: 30

Automatically notify Support: No

User response: Information only; no action is required.

4000000f-00000000 Attempting to [arg1] server [arg2] by user [arg3].

Explanation: This message is for the use case where a user is using the Management Controller to perform a power function on the system.

May also be shown as 4000000f00000000 or 0x4000000f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0015

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000010-00000000 Security: Userid: [arg1] had [arg2] login failures from WEB client at IP address [arg3].

Explanation: A user has exceeded the maximum allowed number of unsuccessful login attempts from a web browser and has been prevented from logging in for the lockout period.

May also be shown as 4000001000000000 or 0x4000001000000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0016

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

40000011-00000000 Security: Login ID: [arg1] had [arg2] login failures from CLI at [arg3].

Explanation: A user has exceeded the maximum allowed number of unsuccessful login attempts from the command-line interface and has been prevented from logging in for the lockout period.

May also be shown as 4000001100000000 or 0x4000001100000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0017

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

40000012-00000000 Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from WEB browser at IP address [arg2].

Explanation: A user has attempted to log in from a web browser by using an invalid login ID or password.

May also be shown as 4000001200000000 or 0x4000001200000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0018

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID and password are being used.

40000013-00000000 Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from TELNET client at IP address [arg2].

Explanation: A user has attempted to log in from a Telnet session by using an invalid login ID or password.

May also be shown as 4000001300000000 or 0x4000001300000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0019

SNMP Trap ID: 30

Automatically notify Support: No

User response: Make sure that the correct login ID and password are being used.

40000014-00000000 The [arg1] on system [arg2] cleared by user [arg3].

Explanation: The specified user has deleted system log events or audit log events.

May also be shown as 4000001400000000 or 0x4000001400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0020

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000015-00000000 Management Controller [arg1] reset was initiated by user [arg2].

Explanation: The Integrated Management Module has been reset. The logs provide additional details.

May also be shown as 4000001500000000 or 0x4000001500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0021

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000016-00000000 ENET[[arg1]] DHCP-HSTN=[arg2], DN=[arg3], IP@=[arg4], SN=[arg5], GW@=[arg6], DNS1@=[arg7] .

Explanation: The DHCP server has assigned an IMM IP address and configuration.

May also be shown as 4000001600000000 or 0x4000001600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0022

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000017-00000000 ENET[[arg1]] IP-Cfg:HstName=[arg2], IP@=[arg3] ,NetMsk=[arg4], GW@=[arg5] .

Explanation: An IMM IP address and configuration have been assigned using client data.

May also be shown as 4000001700000000 or 0x4000001700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0023

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000018-00000000 LAN: Ethernet[[arg1]] interface is no longer active.

Explanation: The IMM Ethernet interface has been disabled.

May also be shown as 4000001800000000 or 0x4000001800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0024

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000019-00000000 LAN: Ethernet[[arg1]] interface is now active.

Explanation: The IMM Ethernet interface has been enabled.

May also be shown as 4000001900000000 or 0x4000001900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0025

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001a-00000000 DHCP setting changed to [arg1] by user [arg2].

Explanation: The specified user has changed the DHCP setting of the Integrated Management Module external network interface.

May also be shown as 4000001a00000000 or 0x4000001a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0026

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001b-00000000 Management Controller [arg1]: Configuration restored from a file by user [arg2].

Explanation: The specified user has restored the Integrated Management Module (IMM) configuration from a previously saved configuration file. Some configuration settings might require that the IMM be restarted before they take effect.

May also be shown as 4000001b00000000 or 0x4000001b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0027

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000001c-00000000 Watchdog [arg1] Screen Capture Occurred .

Explanation: An operating-system error has occurred, and the screen capture was successful.

May also be shown as 4000001c00000000 or 0x4000001c00000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0028

SNMP Trap ID: 22

Automatically notify Support: No

User response: If there was no operating-system error, complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.

If there was an operating-system error, check the integrity of the installed operating system.

4000001d-00000000 Watchdog [arg1] Failed to Capture Screen.

Explanation: An operating-system error has occurred, and the screen capture failed.

May also be shown as 4000001d00000000 or 0x4000001d00000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0029

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet over USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.
6. Update the IMM firmware. **Important:** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

4000001e-00000000 Running the backup Management Controller [arg1] main application.

Explanation: The IMM was unable to run the primary IMM image and has resorted to running the backup image.

May also be shown as 4000001e00000000 or 0x4000001e00000000

Severity: Warning

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0030

SNMP Trap ID: 22

Automatically notify Support: No

User response: Update the IMM firmware. **Important:** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

4000001f-00000000 Please ensure that the Management Controller [arg1] is flashed with the correct firmware. The Management Controller is unable to match its firmware to the server.

Explanation: The server does not support the installed IMM firmware version.

May also be shown as 4000001f00000000 or 0x4000001f00000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0031

SNMP Trap ID: 22

Automatically notify Support: No

User response: Update the IMM firmware to a version that the server supports. **Important:** Some cluster solutions require specific code levels or coordinated code updates. If the device is part of a cluster solution, verify that the latest level of code is supported for the cluster solution before you update the code.

40000020-00000000 Management Controller [arg1] Reset was caused by restoring default values.

Explanation: The default configuration has been restored to the Integrated Management Module.

May also be shown as 4000002000000000 or 0x4000002000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0032

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000021-00000000 Management Controller [arg1] clock has been set from NTP server [arg2].

Explanation: The IMM clock has been set to the date and time that are provided by the Network Time Protocol server.

May also be shown as 4000002100000000 or 0x4000002100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0033

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000022-00000000 SSL data in the Management Controller [arg1] configuration data is invalid. Clearing configuration data region and disabling SSL.

Explanation: There is a problem with the certificate that has been imported into the IMM. The imported certificate must contain a public key that corresponds to the key pair that was previously generated through the “Generate a New Key and Certificate Signing Request ” link.

May also be shown as 4000002200000000 or 0x4000002200000000

Severity: Error

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0034

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the certificate that you are importing is correct.
2. Try to import the certificate again.

40000023-00000000 Flash of [arg1] from [arg2] succeeded for user [arg3] .

Explanation: The specified firmware update has been completed.

May also be shown as 4000002300000000 or 0x4000002300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0035

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000024-00000000 Flash of [arg1] from [arg2] failed for user [arg3].

Explanation: The specified firmware has not been updated.

May also be shown as 4000002400000000 or 0x4000002400000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0036

SNMP Trap ID: 22

Automatically notify Support: No

User response: Information only; no action is required.

40000025-00000000 The [arg1] on system [arg2] is 75% full.

Explanation: The IMM event log is 75% full. When the event log is completely full, the new entries will overwrite the oldest entries. To avoid losing older log entries, save the log as a text file and clear the log.

May also be shown as 4000002500000000 or 0x4000002500000000

Severity: Info

Alert Category: System - Event Log Fullness

Serviceable: No

CIM Information: Prefix: IMM and ID: 0037

SNMP Trap ID: 35

Automatically notify Support: No

User response: Information only; no action is required.

40000026-00000000 The [arg1] on system [arg2] is 100% full.

Explanation: The IMM event log is full. New entries in the log will overwrite the oldest entries. To avoid losing older log entries, save the log as a text file and clear the log.

May also be shown as 4000002600000000 or 0x4000002600000000

Severity: Info

Alert Category: System - Event Log Fullness

Serviceable: No

CIM Information: Prefix: IMM and ID: 0038

SNMP Trap ID: 35

Automatically notify Support: No

User response: To avoid losing older log entries, save the log as a text file and clear the log.

40000027-00000000 Platform Watchdog Timer expired for [arg1].

Explanation: A “Platform Watchdog Timer Expired” event has occurred.

May also be shown as 4000002700000000 or 0x4000002700000000

Severity: Error

Alert Category: System - OS Timeout

Serviceable: No

CIM Information: Prefix: IMM and ID: 0039

SNMP Trap ID: 21

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet-over-USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.

40000028-00000000 Management Controller Test Alert Generated by [arg1].

Explanation: The Integrated Management Module has sent a test message to help verify connectivity.

May also be shown as 4000002800000000 or 0x4000002800000000

Severity: Info

Alert Category: System - other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0040

SNMP Trap ID: 22

Automatically notify Support: No

User response: Information only; no action is required.

40000029-00000000 Security: Userid: [arg1] had [arg2] login failures from an SSH client at IP address [arg3].

Explanation: A user has exceeded the maximum number of unsuccessful login attempts from SSH and has been prevented from logging in for the lockout period.

May also be shown as 4000002900000000 or 0x4000002900000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0041

SNMP Trap ID: 30

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the correct login ID and password are being used.
2. Have the system administrator reset the login ID or password.

4000002a-00000000 [arg1] firmware mismatch internal to system [arg2]. Please attempt to flash the [arg3] firmware.

Explanation: A specific type of firmware mismatch has been detected.

May also be shown as 4000002a00000000 or 0x4000002a00000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0042

SNMP Trap ID: 22

Automatically notify Support: No

User response: Reflash the IMM firmware to the latest version.

4000002b-00000000 Domain name set to [arg1].

Explanation: Domain name set by user

May also be shown as 4000002b00000000 or 0x4000002b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0043

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002c-00000000 Domain Source changed to [arg1] by user [arg2].

Explanation: Domain source changed by user

May also be shown as 4000002c00000000 or 0x4000002c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0044

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002d-00000000 • 4000002f-00000000

4000002d-00000000 DDNS setting changed to [arg1] by user [arg2].

Explanation: DDNS setting changed by user

May also be shown as 4000002d00000000 or 0x4000002d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0045

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002e-00000000 DDNS registration successful. The domain name is [arg1].

Explanation: The DDNS registration was successful.

May also be shown as 4000002e00000000 or 0x4000002e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0046

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000002f-00000000 IPv6 enabled by user [arg1] .

Explanation: The specified user has enabled IPv6 support on the Integrated Management Module.

May also be shown as 4000002f00000000 or 0x4000002f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0047

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000030-00000000 IPv6 disabled by user [arg1] .

Explanation: The specified user has disabled IPv6 support on the Integrated Management Module.

May also be shown as 4000003000000000 or 0x4000003000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0048

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000031-00000000 IPv6 static IP configuration enabled by user [arg1].

Explanation: The specified user has enabled IPv6 static address assignment on the Integrated Management Module.

May also be shown as 4000003100000000 or 0x4000003100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0049

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000032-00000000 IPv6 DHCP enabled by user [arg1].

Explanation: The specified user has enabled DHCPv6 on the Integrated Management Module.

May also be shown as 4000003200000000 or 0x4000003200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0050

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000033-00000000 IPv6 stateless auto-configuration enabled by user [arg1].

Explanation: IPv6 stateless address auto-configuration has been enabled on the Integrated Management Module by the specified user.

May also be shown as 4000003300000000 or 0x4000003300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0051

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000034-00000000 IPv6 static IP configuration disabled by user [arg1].

Explanation: The specified user has disabled IPv6 static address assignment on the Integrated Management Module.

May also be shown as 4000003400000000 or 0x4000003400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0052

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000035-00000000 IPv6 DHCP disabled by user [arg1].

Explanation: The specified user has disabled DHCPv6 on the Integrated Management Module.

May also be shown as 4000003500000000 or 0x4000003500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0053

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000036-00000000 IPv6 stateless auto-configuration disabled by user [arg1].

Explanation: IPv6 stateless address auto-configuration has been disabled on the Integrated Management Module by the specified user.

May also be shown as 4000003600000000 or 0x4000003600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0054

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000037-00000000 ENET[[arg1]] IPv6-LinkLocal:HstName=[arg2], IP@[arg3] ,Pref=[arg4] .

Explanation: The IPv6 link-local address is active.

May also be shown as 4000003700000000 or 0x4000003700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0055

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000038-00000000 ENET[[arg1]] IPv6-Static:HstName=[arg2], IP@[arg3] ,Pref=[arg4], GW@[arg5] .

Explanation: The IPv6 static address is active.

May also be shown as 4000003800000000 or 0x4000003800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0056

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000039-00000000 ENET[[arg1]] DHCPv6-HSTN=[arg2], DN=[arg3], IP@[arg4], Pref=[arg5].

Explanation: The IPv6 DHCP-assigned address is active.

May also be shown as 4000003900000000 or 0x4000003900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0057

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003a-00000000 IPv6 static address of network interface modified from [arg1] to [arg2] by user [arg3].

Explanation: A user modifies the IPv6 static address of a Management Controller

May also be shown as 4000003a00000000 or 0x4000003a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0058

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003b-00000000 DHCPv6 failure, no IP address assigned.

Explanation: The DHCPv6 server has failed to assign an IP address to a management controller.

May also be shown as 4000003b00000000 or 0x4000003b00000000

Severity: Warning

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0059

SNMP Trap ID:

Automatically notify Support: No

User response: Complete the following steps until the problem is solved:

1. Make sure that the IMM network cable is connected.
2. Make sure that there is a DHCP6 server on the network that can assign an IP address to the IMM.

4000003c-00000000 Platform Watchdog Timer expired for [arg1].

Explanation: IMM has detected an OS did not start in the expected amount of time.

May also be shown as 4000003c00000000 or 0x4000003c00000000

Severity: Error

Alert Category: System - Loader timeout

Serviceable: No

CIM Information: Prefix: IMM and ID: 0060

SNMP Trap ID: 26

Automatically notify Support: No

User response:

1. Reconfigure the watchdog timer to a higher value.
2. Make sure that the IMM Ethernet over USB interface is enabled.
3. Reinstall the RNDIS or cdc_ether device driver for the operating system.
4. Disable the watchdog.
5. Check the integrity of the installed operating system.

4000003d-00000000 Telnet port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Telnet port number.

May also be shown as 4000003d00000000 or 0x4000003d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003e-00000000 SSH port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Secure Shell (SSH) port number.

May also be shown as 4000003e00000000 or 0x4000003e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0062

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000003f-00000000 Web-HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the HTTP port number. New HTTP (web) connections must use the new port number.

May also be shown as 4000003f00000000 or 0x4000003f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0063

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000040-00000000 Web-HTTPS port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the HTTPS port number. New HTTPS (secure web) connections must use the new port number.

May also be shown as 4000004000000000 or 0x4000004000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0064

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000041-00000000 CIM/XML HTTP port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the CIM HTTP port number.

May also be shown as 4000004100000000 or 0x4000004100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0065

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000042-00000000 CIM/XML HTTPS port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the CIM HTTPS port number.

May also be shown as 4000004200000000 or 0x4000004200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0066

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000043-00000000 SNMP Agent port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Simple Network Management Protocol (SNMP) agent port number.

May also be shown as 4000004300000000 or 0x4000004300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0067

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000044-00000000 SNMP Traps port number changed from [arg1] to [arg2] by user [arg3].

Explanation: The specified user has changed the Simple Network Management Protocol (SNMP) traps port number.

May also be shown as 4000004400000000 or 0x4000004400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0068

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000045-00000000 Syslog port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Syslog receiver port number.

May also be shown as 4000004500000000 or 0x4000004500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0069

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000046-00000000 Remote Presence port number changed from [arg1] to [arg2] by user [arg3].

Explanation: A user has modified the Remote Presence port number.

May also be shown as 4000004600000000 or 0x4000004600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0070

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000047-00000000 LED [arg1] state changed to [arg2] by [arg3].

Explanation: The specified LED has changed state.

May also be shown as 4000004700000000 or 0x4000004700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0071

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000048-00000000 Inventory data changed for device [arg1], new device data hash=[arg2], new master data hash=[arg3] .

Explanation: Something has caused the physical inventory to change

May also be shown as 4000004800000000 or 0x4000004800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0072

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000049-00000000 SNMP [arg1] enabled by user [arg2] .

Explanation: The specified user has enabled the SNMPv1 or SNMPv3 agent.

May also be shown as 4000004900000000 or 0x4000004900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0073

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004a-00000000 SNMP [arg1] disabled by user [arg2] .

Explanation: The specified user has disabled the SNMPv1 or SNMPv3 agent.

May also be shown as 4000004a00000000 or 0x4000004a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0074

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004b-00000000 SNMPv1 [arg1] set by user [arg2]: Name=[arg3], AccessType=[arg4], Address=[arg5], .

Explanation: A user changed the SNMP community string

May also be shown as 4000004b00000000 or 0x4000004b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0075

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004c-00000000 LDAP Server configuration set by user [arg1]: SelectionMethod=[arg2], DomainName=[arg3], Server1=[arg4], Server2=[arg5], Server3=[arg6], Server4=[arg7].

Explanation: A user changed the LDAP server configuration

May also be shown as 4000004c00000000 or 0x4000004c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0076

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004d-00000000 LDAP set by user [arg1]: RootDN=[arg2], UIDSearchAttribute=[arg3], BindingMethod=[arg4], EnhancedRBS=[arg5], TargetName=[arg6], GroupFilter=[arg7], GroupAttribute=[arg8], LoginAttribute=[arg9].

Explanation: A user configured an LDAP Miscellaneous setting

May also be shown as 4000004d00000000 or 0x4000004d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0077

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004e-00000000 Serial Redirection set by user [arg1]: Mode=[arg2], BaudRate=[arg3], StopBits=[arg4], Parity=[arg5], SessionTerminateSequence=[arg6].

Explanation: A user configured the Serial Port mode

May also be shown as 4000004e00000000 or 0x4000004e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0078

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000004f-00000000 Date and Time set by user [arg1]: Date=[arg2], Time=[arg3], DST Auto-adjust=[arg4], Timezone=[arg5].

Explanation: The specified user has changed the date and time in the Integrated Management Module.

May also be shown as 4000004f00000000 or 0x4000004f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0079

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000050-00000000 Server General Settings set by user [arg1]: Name=[arg2], Contact=[arg3], Location=[arg4], Room=[arg5], RackID=[arg6], Rack U-position=[arg7].

Explanation: A user configured the Location setting

May also be shown as 4000005000000000 or 0x4000005000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0080

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000051-00000000 Server Power Off Delay set to [arg1] by user [arg2].

Explanation: A user configured the Server Power Off Delay

May also be shown as 4000005100000000 or 0x4000005100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0081

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000052-00000000 Server [arg1] scheduled for [arg2] at [arg3] by user [arg4].

Explanation: A user configured a Server Power action at a specific time

May also be shown as 4000005200000000 or 0x4000005200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0082

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000053-00000000 Server [arg1] scheduled for every [arg2] at [arg3] by user [arg4].

Explanation: A user configured a recurring Server Power Action

May also be shown as 4000005300000000 or 0x4000005300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0083

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000054-00000000 Server [arg1] [arg2] cleared by user [arg3].

Explanation: A user cleared a Server Power Action.

May also be shown as 4000005400000000 or 0x4000005400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0084

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000055-00000000 Synchronize time setting by user [arg1]: Mode=[arg2],
NTPServerHost=[arg3]:[arg4],NTPUpdateFrequency=[arg5].

Explanation: A user configured the Date and Time synchronize settings

May also be shown as 4000005500000000 or 0x4000005500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0085

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000056-00000000 SMTP Server set by user [arg1] to [arg2]:[arg3].

Explanation: A user configured the SMTP server

May also be shown as 4000005600000000 or 0x4000005600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0086

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000057-00000000 Telnet [arg1] by user [arg2].

Explanation: The specified user has enabled or disabled Telnet.

May also be shown as 4000005700000000 or 0x4000005700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0087

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000058-00000000 DNS servers set by user [arg1]: UseAdditionalServers=[arg2], PreferredDNStype=[arg3],
IPv4Server1=[arg4], IPv4Server2=[arg5], IPv4Server3=[arg6], IPv6Server1=[arg7], IPv6Server2=[arg8],
IPv6Server3=[arg9].

Explanation: The specified user has configured the DNS servers.

May also be shown as 4000005800000000 or 0x4000005800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0088

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000059-00000000 LAN over USB [arg1] by user [arg2].

Explanation: A user configured USB-LAN

May also be shown as 4000005900000000 or 0x4000005900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0089

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005a-00000000 LAN over USB Port Forwarding set by user [arg1]: ExternalPort=[arg2], USB-LAN port=[arg3].

Explanation: A user configured USB-LAN port forwarding

May also be shown as 4000005a00000000 or 0x4000005a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0090

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005b-00000000 Secure Web services (HTTPS) [arg1] by user [arg2].

Explanation: A user enables or disables Secure web services

May also be shown as 4000005b00000000 or 0x4000005b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0091

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005c-00000000 Secure CIM/XML(HTTPS) [arg1] by user [arg2].

Explanation: The secure CIM-XML port has been enabled or disabled.

May also be shown as 4000005c00000000 or 0x4000005c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0092

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005d-00000000 • 4000005f-00000000

4000005d-00000000 Secure LDAP [arg1] by user [arg2].

Explanation: A user enables or disables Secure LDAP services

May also be shown as 4000005d00000000 or 0x4000005d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0093

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005e-00000000 SSH [arg1] by user [arg2].

Explanation: The specified user has enabled or disabled the Secure Shell (SSH) service.

May also be shown as 4000005e00000000 or 0x4000005e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0094

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000005f-00000000 Server timeouts set by user [arg1]: EnableOSWatchdog=[arg2], OSWatchdogTimeout=[arg3], EnableLoaderWatchdog=[arg4], LoaderTimeout=[arg5].

Explanation: A user configures Server Timeouts

May also be shown as 4000005f00000000 or 0x4000005f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0095

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000060-00000000 License key for [arg1] added by user [arg2].

Explanation: A Integrated Management Module license that allows access to the specified feature was added to the system.

May also be shown as 4000006000000000 or 0x4000006000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0096

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000061-00000000 License key for [arg1] removed by user [arg2].

Explanation: The specified user has removed an Integrated Management Module license. Access to the specified feature is no longer allowed.

May also be shown as 4000006100000000 or 0x4000006100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0097

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000062-00000000 Global Login General Settings set by user [arg1]: AuthenticationMethod=[arg2], LockoutPeriod=[arg3], SessionTimeout=[arg4].

Explanation: A user changes the Global Login General Settings

May also be shown as 4000006200000000 or 0x4000006200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0098

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000063-00000000 Global Login Account Security set by user [arg1]: PasswordRequired=[arg2], PasswordExpirationPeriod=[arg3], MinimumPasswordReuseCycle=[arg4], MinimumPasswordLength=[arg5], MinimumPasswordChangeInterval=[arg6], MaxumLoginFailures=[arg7], LockoutAfterMaxFailures=[arg8], MinimumDifferentCharacters=[arg9], DefaultIDExpired=[arg10], ChangePasswordFirstAccess=[arg11].

Explanation: A user changes the Global Login Account Security Settings to Legacy

May also be shown as 4000006300000000 or 0x4000006300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0099

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000064-00000000 User [arg1] created.

Explanation: A user account has been created.

May also be shown as 4000006400000000 or 0x4000006400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0100

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000065-00000000 User [arg1] removed.

Explanation: A user account has been removed.

May also be shown as 4000006500000000 or 0x4000006500000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0101

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000066-00000000 User [arg1] password modified.

Explanation: The password for the specified user account has been changed.

May also be shown as 4000006600000000 or 0x4000006600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0102

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000067-00000000 User [arg1] role set to [arg2].

Explanation: A user account role assigned

May also be shown as 4000006700000000 or 0x4000006700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0103

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000068-00000000 User [arg1] custom privileges set: [arg2].

Explanation: User account privileges assigned

May also be shown as 4000006800000000 or 0x4000006800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0104

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000069-00000000 User [arg1] for SNMPv3 set: AuthenticationProtocol=[arg2], PrivacyProtocol=[arg3], AccessType=[arg4], HostforTraps=[arg5].

Explanation: User account SNMPv3 settings changed

May also be shown as 4000006900000000 or 0x4000006900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0105

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006a-00000000 SSH Client key added for user [arg1].

Explanation: User locally defined an SSH Client key

May also be shown as 4000006a00000000 or 0x4000006a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0106

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006b-00000000 SSH Client key imported for user [arg1] from [arg2].

Explanation: User imported an SSH Client key

May also be shown as 4000006b00000000 or 0x4000006b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0107

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006c-00000000 SSH Client key removed from user [arg1].

Explanation: User removed an SSH Client key

May also be shown as 4000006c00000000 or 0x4000006c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0108

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006d-00000000 Management Controller [arg1]: Configuration saved to a file by user [arg2].

Explanation: A user saves a Management Controller configuration to a file.

May also be shown as 4000006d00000000 or 0x4000006d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0109

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006e-00000000 Alert Configuration Global Event Notification set by user [arg1]: RetryLimit=[arg2],
RetryInterval=[arg3], EntryInterval=[arg4].

Explanation: A user changes the Global Event Notification settings.

May also be shown as 4000006e00000000 or 0x4000006e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0110

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000006f-00000000 Alert Recipient Number [arg1] updated: Name=[arg2], DeliveryMethod=[arg3], Address=[arg4], IncludeLog=[arg5], Enabled=[arg6], EnabledAlerts=[arg7], AllowedFilters=[arg8].

Explanation: The specified user has changed or reset the remote alert recipient configuration.

May also be shown as 4000006f00000000 or 0x4000006f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0111

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000070-00000000 SNMP Traps enabled by user [arg1]: EnabledAlerts=[arg2], AllowedFilters=[arg3] .

Explanation: The specified user has enabled Simple Network Management Protocol (SNMP) traps.

May also be shown as 4000007000000000 or 0x4000007000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0112

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000071-00000000 The power cap value changed from [arg1] watts to [arg2] watts by user [arg3].

Explanation: The power capping level has been changed.

May also be shown as 4000007100000000 or 0x4000007100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0113

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required

40000072-00000000 The minimum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: The minimum power cap value has been changed.

May also be shown as 4000007200000000 or 0x4000007200000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0114

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000073-00000000 The maximum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: The maximum power cap value has been changed.

May also be shown as 4000007300000000 or 0x4000007300000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0115

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000074-00000000 The soft minimum power cap value changed from [arg1] watts to [arg2] watts.

Explanation: The soft minimum power cap value has been changed.

May also be shown as 4000007400000000 or 0x4000007400000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0116

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000075-00000000 The measured power value exceeded the power cap value.

Explanation: The measured power value has exceeded the power cap value.

May also be shown as 4000007500000000 or 0x4000007500000000

Severity: Warning

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0117

SNMP Trap ID: 164

Automatically notify Support: No

User response:

- Make sure IMM firmware is at the latest level.
- Raise the system power cap value or adjust the system workload to be less than the currently applied power cap.

40000076-00000000 The new minimum power cap value exceeded the power cap value.

Explanation: Minimum Power Cap exceeds Power Cap

May also be shown as 4000007600000000 or 0x4000007600000000

Severity: Warning

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0118

SNMP Trap ID: 164

Automatically notify Support: No

User response: User may need to adjust the power cap value to be greater or equal to the minimum power cap.

40000077-00000000 Power capping was activated by user [arg1].

Explanation: The power capping control has been enabled.

May also be shown as 4000007700000000 or 0x4000007700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0119

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000078-00000000 Power capping was deactivated by user [arg1].

Explanation: The power capping control has been enabled.

May also be shown as 4000007800000000 or 0x4000007800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0120

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000079-00000000 Static Power Savings mode has been turned on by user [arg1].

Explanation: Static Power Savings mode turned on by user

May also be shown as 4000007900000000 or 0x4000007900000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0121

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007a-00000000 Static Power Savings mode has been turned off by user [arg1].

Explanation: Static Power Savings mode turned off by user

May also be shown as 4000007a00000000 or 0x4000007a00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0122

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007b-00000000 Dynamic Power Savings mode has been turned on by user [arg1].

Explanation: Dynamic Power Savings mode turned on by user

May also be shown as 4000007b00000000 or 0x4000007b00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0123

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007c-00000000 Dynamic Power Savings mode has been turned off by user [arg1].

Explanation: Dynamic Power Savings mode turned off by user

May also be shown as 4000007c00000000 or 0x4000007c00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0124

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007d-00000000 Power cap and external throttling occurred.

Explanation: Power cap and external throttling has occurred.

May also be shown as 4000007d00000000 or 0x4000007d00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0125

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007e-00000000 External throttling occurred .

Explanation: External throttling has occurred.

May also be shown as 4000007e00000000 or 0x4000007e00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0126

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

4000007f-00000000 Power cap throttling occurred.

Explanation: Power cap throttling has occurred.

May also be shown as 4000007f00000000 or 0x4000007f00000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0127

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000080-00000000 Remote Control session started by user [arg1] in [arg2] mode.

Explanation: Remote Control session started

May also be shown as 4000008000000000 or 0x4000008000000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0128

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000081-00000000 PXE boot requested by user [arg1].

Explanation: PXE boot requested

May also be shown as 4000008100000000 or 0x4000008100000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0129

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000082-00000000 The measured power value has returned below the power cap value.

Explanation: The measured power value has returned below the power cap value.

May also be shown as 4000008200000000 or 0x4000008200000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0130

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000083-00000000 The new minimum power cap value has returned below the power cap value.

Explanation: The new minimum power cap value has returned below the power cap value.

May also be shown as 4000008300000000 or 0x4000008300000000

Severity: Info

Alert Category: Warning - Power

Serviceable: No

CIM Information: Prefix: IMM and ID: 0131

SNMP Trap ID: 164

Automatically notify Support: No

User response: Information only; no action is required.

40000084-00000000 IMM firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the IMM firmware to the same level on all nodes.

Explanation: A mismatch of IMM firmware between nodes has been detected.

May also be shown as 4000008400000000 or 0x4000008400000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0132

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the IMM firmware to the same level on all nodes.

40000085-00000000 FPGA firmware mismatch between nodes [arg1] and [arg2]. Please attempt to flash the FPGA firmware to the same level on all nodes.

Explanation: A mismatch of FPGA firmware between nodes has been detected.

May also be shown as 4000008500000000 or 0x4000008500000000

Severity: Error

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0133

SNMP Trap ID: 22

Automatically notify Support: No

User response: Attempt to flash the FPGA firmware to the same level on all nodes.

40000086-00000000 Test Call Home Generated by user [arg1].

Explanation: The specified user has generated a test automatic support notification.

May also be shown as 4000008600000000 or 0x4000008600000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0134

SNMP Trap ID:

Automatically notify Support: Yes

User response: Information only; no action is required.

40000087-00000000 Manual Call Home by user [arg1]: [arg2].

Explanation: The specified user has submitted a service request.

May also be shown as 4000008700000000 or 0x4000008700000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0135

SNMP Trap ID:

Automatically notify Support: Yes

User response: IBM Support will address the problem.

40000088-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] completed.

Explanation: The specified user has successfully restored the configuration of the specified management controller from a file.

May also be shown as 4000008800000000 or 0x4000008800000000

Severity: Info

Alert Category: none

Serviceable: No

CIM Information: Prefix: IMM and ID: 0136

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

40000089-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to complete.

Explanation: Restoration of the configuration of the specified management controller from a file by the specified user has not been completed.

May also be shown as 4000008900000000 or 0x4000008900000000

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0137

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
2. After 45 seconds, reconnect the server to the power source and turn on the server.
3. Retry the operation

4000008a-00000000 Management Controller [arg1]: Configuration restoration from a file by user [arg2] failed to start.

Explanation: Restoration of the configuration of the specified management controller from a file by the specified user has failed to start.

May also be shown as 4000008a00000000 or 0x4000008a00000000

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: IMM and ID: 0138

SNMP Trap ID: 22

Automatically notify Support: No

User response:

1. Turn off the server and disconnect it from the power source. You must disconnect the server from ac power to reset the IMM.
2. After 45 seconds, reconnect the server to the power source and turn on the server.
3. Retry the operation

4000008b-00000000 One or more of the Storage Management IP addresses has changed.

Explanation: This message is for the use case where an IP address for the Storage Management has changed

May also be shown as 4000008b00000000 or 0x4000008b00000000

Severity: Info

Alert Category: System - IMM Network event

Serviceable: No

CIM Information: Prefix: IMM and ID: 0139

SNMP Trap ID: 37

Automatically notify Support: No

User response: Information only; no action is required.

4000008c-00000000 Security: Userid: [arg1] had [arg2] login failures from a CIM client at IP address [arg3].

Explanation: This message is for the use case where a user has failed to log in to a Management Controller from CIM.

May also be shown as 4000008c00000000 or 0x4000008c00000000

Severity: Warning

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0140

SNMP Trap ID: 30

Automatically notify Support: No

User response: :

4000008d-00000000 Remote access attempt failed. Invalid userid or password received. Userid is [arg1] from a CIM client at IP address [arg2].

Explanation: This message is for the use case where a remote user has failed to establish a remote control session from CIM.

May also be shown as 4000008d00000000 or 0x4000008d00000000

Severity: Info

Alert Category: System - Remote Login

Serviceable: No

CIM Information: Prefix: IMM and ID: 0141

SNMP Trap ID: 30

Automatically notify Support: No

User response: :

80010002-2801xxxx Numeric sensor [NumericSensorElementName] going low (lower non-critical) has asserted.

Explanation: The CMOS battery voltage has dropped below its specified threshold.

May also be shown as 800100022801xxxx or 0x800100022801xxxx

Severity: Warning

Alert Category: Warning - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0476

SNMP Trap ID: 13

Automatically notify Support: No

User response: Replace the CMOS battery.

80010202-0701xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: A Voltage has dropped below its specified threshold (sensor SysBrd 12V, SysBrd 3.3V, or SysBrd 5V).

May also be shown as 800102020701xxxx or 0x800102020701xxxx

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 1

Automatically notify Support: Yes

User response:

- (Trained service technician only) If the specified sensor is SysBrd 3.3V or SysBrd 5V, replace the system board.
- If the specified sensor is SysBrd 12V, check the IMM event log for power-supply-related issues, and resolve those issues. If the problem remains, (trained service technician only) replace the system board.

80010202-2801xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: The CMOS battery voltage has dropped below its specified threshold.

May also be shown as 800102022801xxxx or 0x800102022801xxxx

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 1

Automatically notify Support: Yes

User response: Replace the CMOS battery.

80010204-1d01xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 1 (Fan 1A Tach or Fan 1B Tach) has gone low.

May also be shown as 800102041d01xxxx or 0x800102041d01xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010204-1d02xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 2 (Fan 2A Tach or Fan 2B Tach) has gone low.

May also be shown as 800102041d02xxxx or 0x800102041d02xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010204-1d03xxxx • 80010204-1d05xxxx

80010204-1d03xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 3 (Fan 3A Tach or Fan 3B Tach) has gone low.

May also be shown as 800102041d03xxxx or 0x800102041d03xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010204-1d04xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 4 (Fan 4A Tach or Fan 4B Tach) has gone low.

May also be shown as 800102041d04xxxx or 0x800102041d04xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010204-1d05xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 5 (Fan 5A Tach or Fan 5B Tach) has gone low.

May also be shown as 800102041d05xxxx or 0x800102041d05xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010204-1d06xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has asserted.

Explanation: IMM has detected the speed of Fan 6 (Fan 6A Tach or Fan 6B Tach) has gone low.

May also be shown as 800102041d06xxxx or 0x800102041d06xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0480

SNMP Trap ID: 11

Automatically notify Support: No

User response:

- Reseat the failing fan indicated by the lit LED on the fan.
- Replace Fan.

80010701-1001xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the PCI riser temperature has risen above normal levels.

May also be shown as 800107011001xxxx or 0x800107011001xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011401xxxx or 0x800107011401xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.

80010701-1402xxxx • 80010701-1403xxxx

3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011402xxxx or 0x800107011402xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011403xxxx or 0x800107011403xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011404xxxx or 0x800107011404xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011405xxxx or 0x800107011405xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above normal levels.

May also be shown as 800107011406xxxx or 0x800107011406xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: IMM has detected that the ambient temperature has risen above normal.

May also be shown as 800107012701xxxx or 0x800107012701xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010701-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has asserted.

Explanation: The PCH temperature has risen above normal.

May also be shown as 800107012d01xxxx or 0x800107012d01xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0490

SNMP Trap ID: 12

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011401xxxx or 0x800109011401xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011402xxxx or 0x800109011402xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011403xxxx or 0x800109011403xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011404xxxx or 0x800109011404xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011405xxxx or 0x800109011405xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the temperature of a system board voltage regulator has risen above the upper critical threshold.

May also be shown as 800109011406xxxx or 0x800109011406xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: IMM has detected that the ambient temperature has risen above its upper critical threshold.

May also be shown as 800109012701xxxx or 0x800109012701xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010901-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: The PCH temperature sensor has risen above its upper critical threshold. A soft shutdown will be attempted.

May also be shown as 800109012d01xxxx or 0x800109012d01xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010902-0701xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has asserted.

Explanation: A voltage has risen above its specified threshold (sensor SysBrd 12V, SysBrd 3.3V, or SysBrd 5V).

May also be shown as 800109020701xxxx or 0x800109020701xxxx

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0494

SNMP Trap ID: 1

Automatically notify Support: Yes

User response:

- (Trained service technician only) If the specified sensor is SysBrd 3.3V or SysBrd 5V, replace the system board.
- If the specified sensor is SysBrd 12V, check the IMM Web event log for power-supply-related issues, and resolve those issues.: If the problem remains, (trained service technician only) replace the system board.

80010b01-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b011401xxxx or 0x80010b011401xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred. asserted.

May also be shown as 80010b011402xxxx or 0x80010b011402xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b011403xxxx or 0x80010b011403xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b011404xxxx or 0x80010b011404xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b011405xxxx or 0x80010b011405xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The temperature for a system board voltage regulator has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b011406xxxx or 0x80010b011406xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The ambient temperature has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b012701xxxx or 0x80010b012701xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80010b01-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has asserted.

Explanation: The PCH temperature sensor has risen above its threshold. A hard shutdown has occurred.

May also be shown as 80010b012d01xxxx or 0x80010b012d01xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0498

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. If this is the only temperature related event and the event persists, replace the system board (Trained Service personnel only).

80030006-2101xxxx Sensor [SensorElementName] has deasserted.

Explanation: Secure UEFI update completed Successfully.

May also be shown as 800300062101xxxx or 0x800300062101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

80030108-0a01xxxx Sensor [SensorElementName] has asserted.

Explanation: Power Supply load has reached maximum capacity.

May also be shown as 800301080a01xxxx or 0x800301080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

SNMP Trap ID:

Automatically notify Support: No

User response: PS Heavy Load: The system will throttle to lower the load. Information only; no action is required.

8003010e-2581xxxx Sensor [SensorElementName] has asserted.

Explanation: IMM has detected that the memory size has changed.

May also be shown as 8003010e2581xxxx or 0x8003010e2581xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80030112-0601xxxx Sensor [SensorElementName] has asserted.

Explanation: This message is for the use case when system firmware entered maintenance mode

May also be shown as 800301120601xxxx or 0x800301120601xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

SNMP Trap ID:

Automatically notify Support: No

User response: System firmware will enter system maintenance mode if firmware flash is in progress. Information only, no User Action is required.

80070101-0b09xxxx Sensor [SensorElementName] has transitioned from normal to non-critical state.

Explanation: IMM has detected that the temperature for ML2 Card has transitioned to a non critical state.

May also be shown as 800701010b09xxxx or 0x800701010b09xxxx

Severity: Warning

Alert Category: Warning - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 12

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. (Trained service technician only) Replace ML2 Card.

8007010f-2201xxxx Sensor [SensorElementName] has transitioned from normal to non-critical state.

Explanation: IMM has detected that disk GPT (GUID Partition Table) corruption or security boot error.

May also be shown as 8007010f2201xxxx or 0x8007010f2201xxxx

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 60

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Information Center for the appropriate user response.

80070114-2201xxxx Sensor [SensorElementName] has transitioned from normal to non-critical state.

Explanation: Trusted Platform Module (TPM) event has transitioned to non critical state.

May also be shown as 800701142201xxxx or 0x800701142201xxxx

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0520

SNMP Trap ID: 60

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070201-0301xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 1 temperature Sensor has transitioned to critical.

May also be shown as 800702010301xxxx or 0x800702010301xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80070201-0302xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 2 temperature Sensor has transitioned to critical.

May also be shown as 800702010302xxxx or 0x800702010302xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.

4. Make sure that the room temperature is within operating specifications.

80070201-0303xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 3 temperature Sensor has transitioned to critical.

May also be shown as 800702010303xxxx or 0x800702010303xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80070201-0304xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 4 temperature Sensor has transitioned to critical.

May also be shown as 800702010304xxxx or 0x800702010304xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 0

Automatically notify Support: No

User response:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.

80070202-0701xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: The Sys Board Fault sensor has detected a problem with the system board.

May also be shown as 800702020701xxxx or 0x800702020701xxxx

Severity: Error

Alert Category: Critical - Voltage

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 1

Automatically notify Support: No

User response: Complete the following steps:

1. Remove any recently installed components.
2. Try to power on the node.
 - If the node successfully powers on, complete the following steps:
 - a. Check the ServerProven website to make sure that recently installed components are compatible with the compute node.
 - b. Inspect the previously installed components for physical damage.
 - If the node does not successfully power on or if this is not the first occurrence of this problem, (trained service technician only) replace the system board.

80070204-2584xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a Power Supply Fan (PS Fan Fault) has transitioned to critical.

May also be shown as 800702042584xxxx or 0x800702042584xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 11

Automatically notify Support: No

User response:

1. Check for Power Supply with PS fault in the event log
2. Replace the Power Supply that has the PS Fault

80070208-2584xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a Power Supply Sensor has transitioned to critical. (PS CSF Fault or PS Therm Fault)

May also be shown as 800702082584xxxx or 0x800702082584xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 4

Automatically notify Support: No

User response:

1. Check for Power Supply with PS fault in the IMM event log
2. Replace the Power Supply that has the PS Fault

8007020f-2201xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a "Drive Key Fault" Sensor has transitioned to critical.

May also be shown as 8007020f2201xxxx or 0x8007020f2201xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8007020f-2582xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a "No I/O Resources" Sensor has transitioned to critical.

May also be shown as 8007020f2582xxxx or 0x8007020f2582xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070219-0701xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a System Board Fault Sensor has transitioned to critical.

May also be shown as 800702190701xxxx or 0x800702190701xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8007021b-0301xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 1 QPI Link Error.

May also be shown as 8007021b0301xxxx or 0x8007021b0301xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8007021b-0302xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 2 QPI Link Error.

May also be shown as 8007021b0302xxxx or 0x8007021b0302xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8007021b-0303xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 3 QPI Link Error.

May also be shown as 8007021b0303xxxx or 0x8007021b0303xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8007021b-0304xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 4 QPI Link Error.

May also be shown as 8007021b0304xxxx or 0x8007021b0304xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070221-0b09xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a ML2 card internal error.

May also be shown as 800702210b09xxxx or 0x800702210b09xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response:

1. Check the IMM event log for any cooling issues for ML2 card.
2. (Trained service technician only) Replace ML2 card.

80070221-1f01xxxx • 80070221-1f03xxxx

80070221-1f01xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 1 QPI Link Error.

May also be shown as 800702211f01xxxx or 0x800702211f01xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070221-1f02xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 2 QPI Link Error.

May also be shown as 800702211f02xxxx or 0x800702211f02xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070221-1f03xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 3 QPI Link Error.

May also be shown as 800702211f03xxxx or 0x800702211f03xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070221-1f04xxxx Sensor [SensorElementName] has transitioned to critical from a less severe state.

Explanation: IMM has detected a CPU 4 QPI Link Error.

May also be shown as 800702211f04xxxx or 0x800702211f04xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0522

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

80070301-0301xxxx Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state.

Explanation: IMM has detected that the temperature for CPU 1 has transitioned to a non recoverable state.

May also be shown as 800703010301xxxx or 0x800703010301xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 1 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 1 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 1.

80070301-0302xxxx Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state.

Explanation: IMM has detected that the temperature for CPU 2 has transitioned to a non recoverable state.

May also be shown as 800703010302xxxx or 0x800703010302xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 2 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 2 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 2.

80070301-0303xxxx Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state.

Explanation: IMM has detected that the temperature for CPU 3 has transitioned to a non recoverable state.

May also be shown as 800703010303xxxx or 0x800703010303xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 3 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 3 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 3.

80070301-0304xxxx Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state.

Explanation: IMM has detected that the temperature for CPU 4 has transitioned to a non recoverable state.

May also be shown as 800703010304xxxx or 0x800703010304xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 4 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 4 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 4.

80070301-0b09xxxx IMM has detected that the temperature for ML2 card has transitioned to a non recoverable state.

Explanation: IMM has detected that the temperature for ML2 Card has transitioned to a non recoverable state.

May also be shown as 800703010b09xxxx or 0x800703010b09xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. (Trained service technician only) Replace ML2 Card.

80070319-2201xxxx Sensor [SensorElementName] has transitioned to non-recoverable from a less severe state.

Explanation: IMM has detected system failed to resume from S3 power state.

May also be shown as 800703192201xxxx or 0x800703192201xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0524

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Information Center for the appropriate user response.

80070603-0701xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: IMM has detected Voltage Regulator Error.

May also be shown as 800706030701xxxx or 0x800706030701xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response:

- CPU 1 VRD: Indicates a problem with either the voltage regulator for CPU1 or CPU 1 itself
 - CPU 2 VRD: Indicates a problem with either the voltage regulator for CPU2 or CPU 2 itself
 - DIMM 01-06 VRD: Indicates a problem with either the voltage regulator for DIMMs 1-6 or 1 or more of the following components: DIMM1-DIMM6
 - DIMM 07-12 VRD: Indicates a problem with either the voltage regulator for DIMMs 7-12 or 1 or more of the following components: DIMM7-DIMM12
 - DIMM 13-18 VRD: Indicates a problem with either the voltage regulator for DIMMs 13-18 or 1 or more of the following components: DIMM13-DIMM18
 - DIMM 19-24 VRD: Indicates a problem with either the voltage regulator for DIMMs 19-24 or 1 or more of the following components: DIMM19-DIMM24
 - MainBrd ENET VRD: Indicates a problem with either the voltage regulator for the onboard Ethernet or ML2 card
 - MainBrd SAS VRD: Indicates a problem with either the voltage regulator for the onboard SAS or the RAID cache card
 - MainBrd VRD: Indicates a problem with a voltage regulator for the system board
 - System VRD: Indicates a problem with either a voltage regulator for the system board or the microprocessor and memory expansion tray
1. Check the IMM Web event log. This event may be a symptom of an earlier error.
 2. Depending on the error perform the following steps.

For a CPU 1 VRD or CPU 2 VRD error:

1. Replace system board.
2. Replace affected microprocessor.

For a DIMM 01-06 VRD, DIMM 07-12 VRD, DIMM 13-18 VRD, or DIMM 19-24 VRD error:

1. Replace DIMM(s) associated with error.
2. Replace system board.

For a MainBrd ENET VRD error:

1. Replace the ML2 Ethernet Adapter if installed.
2. Replace system board.

For a MainBrd SAS VRD error:

1. Replace the RAID cache card if installed.
2. Replace system board.

For a MainBrd VRD error:

1. Replace system board.

For a System VRD error:

1. Replace microprocessor and memory expansion tray if installed.
2. Replace system board.

80070603-0b01xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: IMM has detected Voltage Regulator Error.

May also be shown as 800706030b01xxxx or 0x800706030b01xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response: ML2 card VRD: Indicates a problem with either the voltage regulator for the ML2 card or the ML2 card itself

1. Check the IMM Web event log. This event may be a symptom of an earlier error.
2. Replace the ML2 Ethernet Adapter if installed.
3. Replace the system board.

80070603-2584xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: IMM has detected Voltage Regulator Error.

May also be shown as 800706032584xxxx or 0x800706032584xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response: Power Supply: Indicates a problem with either the system board voltage or the power supply is failing

1. Check the IMM Web event log. This event may be a symptom of an earlier error.
2. Replace any newly installed options.
3. Replace the power supplies.
4. Replace the power interposer card if installed.
5. Replace the system board.

80070603-2b01xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: IMM has detected a voltage regulator error on the microprocessor and memory expansion tray.

May also be shown as 800706032b01xxxx or 0x800706032b01xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response:

- CPU 3 VRD: Indicates a problem with either the voltage regulator for CPU3 or CPU 3 itself
 - CPU 4 VRD: Indicates a problem with either the voltage regulator for CPU4 or CPU 4 itself
 - DIMM 25-30 VRD: Indicates a problem with either the voltage regulator for DIMMs 25-30 or 1 or more of the following components: DIMM25-DIMM30
 - DIMM 31-36 VRD: Indicates a problem with either the voltage regulator for DIMMs 31-36 or 1 or more of the following components: DIMM31-DIMM36
 - DIMM 37-42 VRD: Indicates a problem with either the voltage regulator for DIMMs 37-42 or 1 or more of the following components: DIMM37-DIMM42
 - DIMM 43-48 VRD: Indicates a problem with either the voltage regulator for DIMMs 43-48 or 1 or more of the following components: DIMM43-DIMM48
1. Check the IMM Web event log. This event may be a symptom of an earlier error.
 2. Depending on the error perform the following steps.

For a CPU 3 VRD or CPU 4 VRD error:

1. Replace the microprocessor and memory expansion tray.
2. Replace affected microprocessor.

For a DIMM 25-30 VRD, DIMM 31-36 VRD, DIMM 37-42 VRD, or DIMM 43-48 VRD error:

1. Replace DIMM(s) associated with error.

2. Replace the microprocessor and memory expansion tray.

80070608-2584xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: IMM has detected Power Supply related fault. (PS 12V OC Fault, PS 12V OV Fault, PS 12V UV Fault, or PS AUX UV Fault)

May also be shown as 800706082584xxxx or 0x800706082584xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 4

Automatically notify Support: No

User response:

1. Check the power supply LEDs, see "Power-supply LEDs".
2. Replace the failing power supply.

8007060f-2201xxxx Sensor [SensorElementName] has transitioned to non-recoverable.

Explanation: Trusted Platform Module (TPM) initialization error.

May also be shown as 8007060f2201xxxx or 0x8007060f2201xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0530

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8008000f-2101xxxx Device [LogicalDeviceElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: IMM has detected that the TPM Physical Presence switch has been deasserted.

May also be shown as 8008000f2101xxxx or 0x8008000f2101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0537

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

80080128-2101xxxx Device [LogicalDeviceElementName] has been added.

Explanation: IMM has detected low security jumper has been added.

May also be shown as 800801282101xxxx or 0x800801282101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0536

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

800b0108-1381xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Power Supply Redundancy has been lost.

May also be shown as 800b01081381xxxx or 0x800b01081381xxxx

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Power Unit: Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"
3. Replace the affected power supply.

800b010a-1e81xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e81xxxx or 0x800b010a1e81xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 1

800b010a-1e82xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e82xxxx or 0x800b010a1e82xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 2

800b010a-1e83xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e83xxxx or 0x800b010a1e83xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 3

800b010a-1e84xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e84xxxx or 0x800b010a1e84xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 4

800b010a-1e85xxxx • 800b010c-2581xxxx

800b010a-1e85xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e85xxxx or 0x800b010a1e85xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 5

800b010a-1e86xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Fan Redundancy has been lost.

May also be shown as 800b010a1e86xxxx or 0x800b010a1e86xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 6

800b010c-2581xxxx Redundancy Lost for [RedundancySetElementName] has asserted.

Explanation: Backup Memory Redundancy has been lost.

May also be shown as 800b010c2581xxxx or 0x800b010c2581xxxx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0802

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

800b0208-1381xxxx Redundancy Degraded for [RedundancySetElementName] has asserted.

Explanation: Power unit is no longer in the redundant state.

May also be shown as 800b02081381xxxx or 0x800b02081381xxxx

Severity: Warning

Alert Category: Warning - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0804

SNMP Trap ID: 10

Automatically notify Support: No

User response:

1. Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"
3. Replace the affected power supply.

800b0308-1381xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted.

Explanation: Power Supply is supplying sufficient power but is no longer in a redundancy state.

May also be shown as 800b03081381xxxx or 0x800b03081381xxxx

Severity: Warning

Alert Category: Warning - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0806

SNMP Trap ID: 10

Automatically notify Support: No

User response:

1. Power Unit: Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"
3. Replace the affected power supply.

800b0309-0a01xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted.

Explanation: Power Supply is supplying sufficient power but is no longer in a redundancy state.

May also be shown as 800b03090a01xxxx or 0x800b03090a01xxxx

Severity: Warning

Alert Category: Warning - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0806

SNMP Trap ID: 10

Automatically notify Support: No

User response:

1. Power Unit: Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"

3. Replace the affected power supply.

800b030c-2581xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has asserted.

Explanation: Backup Memory has transitioned from Redundancy Degraded or Fully Redundant to Non-redundant:Sufficient.

May also be shown as 800b030c2581xxxx or 0x800b030c2581xxxx

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0806

SNMP Trap ID: 43

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

800b0508-1381xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Lost redundancy insufficient power for Power Unit

May also be shown as 800b05081381xxxx or 0x800b05081381xxxx

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Power Unit: Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"
3. Replace the affected power supply.

800b0509-0a01xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: This message is for the use case when a Redundancy Set has transitioned to Non-redundant:Insufficient Resources for Power supply.

May also be shown as 800b05090a01xxxx or 0x800b05090a01xxxx

Severity: Error

Alert Category: Critical - Redundant Power Supply

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 9

Automatically notify Support: No

User response:

1. Power Unit: Check if Power Supply is missing, unplugged.
2. Check the power supply LEDs, see "Power-supply LEDs"
3. Replace the affected power supply.
4. Check the power supply max rate and power capping policy, if the required power resource is not met, change the power supply or modify power capping mechanism.

800b050a-1e81xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 1.

May also be shown as 800b050a1e81xxxx or 0x800b050a1e81xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 1

800b050a-1e82xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 2.

May also be shown as 800b050a1e82xxxx or 0x800b050a1e82xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan2

800b050a-1e83xxxx • 800b050a-1e85xxxx

800b050a-1e83xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 3.

May also be shown as 800b050a1e83xxxx or 0x800b050a1e83xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 3

800b050a-1e84xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 4.

May also be shown as 800b050a1e84xxxx or 0x800b050a1e84xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 4

800b050a-1e85xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 5.

May also be shown as 800b050a1e85xxxx or 0x800b050a1e85xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 5

800b050a-1e86xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Insufficient cooling provided by fan 6.

May also be shown as 800b050a1e86xxxx or 0x800b050a1e86xxxx

Severity: Error

Alert Category: Critical - Fan Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 11

Automatically notify Support: No

User response: Replace Fan 6

800b050c-2581xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has asserted.

Explanation: Backup Memory Sensor has transitioned to Non-redundant:Insufficient Resources.

May also be shown as 800b050c2581xxxx or 0x800b050c2581xxxx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0810

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0007-0301xxxx [ProcessorElementName] has Failed with IERR.

Explanation: IMM has detected processor 1 failed - IERR condition.

May also be shown as 806f00070301xxxx or 0x806f00070301xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0007-0302xxxx [ProcessorElementName] has Failed with IERR.

Explanation: IMM has detected processor 2 failed - IERR condition.

May also be shown as 806f00070302xxxx or 0x806f00070302xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0007-0303xxxx [ProcessorElementName] has Failed with IERR.

Explanation: IMM has detected processor 3 failed - IERR condition.

May also be shown as 806f00070303xxxx or 0x806f00070303xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0007-0304xxxx [ProcessorElementName] has Failed with IERR.

Explanation: IMM has detected processor 4 failed - IERR condition.

May also be shown as 806f00070304xxxx or 0x806f00070304xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0042

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0008-0a01xxxx [PowerSupplyElementName] has been added to container [PhysicalPackageElementName].

Explanation: IMM has detected a Power Supply has been added.

May also be shown as 806f00080a01xxxx or 0x806f00080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0084

SNMP Trap ID:

Automatically notify Support: No

User response: Power Supply 1: Information only; no action is required.

806f0008-0a02xxxx [PowerSupplyElementName] has been added to container [PhysicalPackageElementName].

Explanation: IMM has detected a Power Supply has been added.

May also be shown as 806f00080a02xxxx or 0x806f00080a02xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0084

SNMP Trap ID:

Automatically notify Support: No

User response: Power Supply 2: Information only; no action is required.

806f0009-1381xxxx [PowerSupplyElementName] has been turned off.

Explanation: IMM has detected that the system power has been turned off.

May also be shown as 806f00091381xxxx or 0x806f00091381xxxx

Severity: Info

Alert Category: System - Power Off

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0106

SNMP Trap ID: 23

Automatically notify Support: No

User response: Host Power: Information only; no action is required.

806f000d-0400xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 0 has been installed.

May also be shown as 806f000d0400xxxx or 0x806f000d0400xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0401xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 1 has been installed.

May also be shown as 806f000d0401xxxx or 0x806f000d0401xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0402xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 2 has been installed.

May also be shown as 806f000d0402xxxx or 0x806f000d0402xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0403xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 3 has been installed.

May also be shown as 806f000d0403xxxx or 0x806f000d0403xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0404xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 4 has been installed.

May also be shown as 806f000d0404xxxx or 0x806f000d0404xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0405xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 5 has been installed.

May also be shown as 806f000d0405xxxx or 0x806f000d0405xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0406xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 6 has been installed.

May also be shown as 806f000d0406xxxx or 0x806f000d0406xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0407xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 7 has been installed.

May also be shown as 806f000d0407xxxx or 0x806f000d0407xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0408xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 8 has been installed.

May also be shown as 806f000d0408xxxx or 0x806f000d0408xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0409xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 9 has been installed.

May also be shown as 806f000d0409xxxx or 0x806f000d0409xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040axxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 10 has been installed.

May also be shown as 806f000d040axxxx or 0x806f000d040axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040bxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 11 has been installed.

May also be shown as 806f000d040bxxxx or 0x806f000d040bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040cxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 12 has been installed.

May also be shown as 806f000d040cxxxx or 0x806f000d040cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040dxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 13 has been installed.

May also be shown as 806f000d040dxxxx or 0x806f000d040dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040exxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 14 has been installed.

May also be shown as 806f000d040exxxx or 0x806f000d040exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-040fxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 15 has been installed.

May also be shown as 806f000d040fxxxx or 0x806f000d040fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0410xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 16 has been installed.

May also be shown as 806f000d0410xxxx or 0x806f000d0410xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0411xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 17 has been installed.

May also be shown as 806f000d0411xxxx or 0x806f000d0411xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0412xxxx • 806f000d-0414xxxx

806f000d-0412xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 18 has been installed.

May also be shown as 806f000d0412xxxx or 0x806f000d0412xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0413xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 19 has been installed.

May also be shown as 806f000d0413xxxx or 0x806f000d0413xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0414xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 20 has been installed.

May also be shown as 806f000d0414xxxx or 0x806f000d0414xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0415xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 21 has been installed.

May also be shown as 806f000d0415xxxx or 0x806f000d0415xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0416xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 22 has been installed.

May also be shown as 806f000d0416xxxx or 0x806f000d0416xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0417xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 23 has been installed.

May also be shown as 806f000d0417xxxx or 0x806f000d0417xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0418xxxx • 806f000d-041axxxx

806f000d-0418xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 24 has been installed.

May also be shown as 806f000d0418xxxx or 0x806f000d0418xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-0419xxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 25 has been installed.

May also be shown as 806f000d0419xxxx or 0x806f000d0419xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041axxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 26 has been installed.

May also be shown as 806f000d041axxxx or 0x806f000d041axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041bxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 27 has been installed.

May also be shown as 806f000d041bxxxx or 0x806f000d041bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041cxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 28 has been installed.

May also be shown as 806f000d041cxxxx or 0x806f000d041cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041dxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 29 has been installed.

May also be shown as 806f000d041dxxxx or 0x806f000d041dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041exxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 30 has been installed.

May also be shown as 806f000d041exxxx or 0x806f000d041exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000d-041fxxxx The [StorageVolumeElementName] has been added.

Explanation: Hard drive 31 has been installed.

May also be shown as 806f000d041fxxxx or 0x806f000d041fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0162

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

806f000f-220101xx The System [ComputerSystemElementName] has detected no memory in the system.

Explanation: IMM has detected that there is no memory in the system.

May also be shown as 806f000f220101xx or 0x806f000f220101xx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0794

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220102xx Subsystem [MemoryElementName] has insufficient memory for operation.

Explanation: IMM has detected that the usable Memory is insufficient for operation. (ABR Status, Firmware Error)

May also be shown as 806f000f220102xx or 0x806f000f220102xx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0132

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220103xx The System [ComputerSystemElementName] encountered firmware error - unrecoverable boot device failure.

Explanation: IMM has detected that System Firmware Error Unrecoverable boot device failure has occurred. (ABR Status or Firmware Error)

May also be shown as 806f000f220103xx or 0x806f000f220103xx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0770

SNMP Trap ID: 5

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220104xx The System [ComputerSystemElementName]has encountered a motherboard failure.

Explanation: IMM has detected a fatal motherboard error in the system.

May also be shown as 806f000f220104xx or 0x806f000f220104xx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0795

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220107xx The System [ComputerSystemElementName] encountered firmware error - unrecoverable keyboard failure.

Explanation: IMM has detected that System Firmware Error Unrecoverable Keyboard failure has occurred.

May also be shown as 806f000f220107xx or 0x806f000f220107xx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0764

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22010axx The System [ComputerSystemElementName] encountered firmware error - no video device detected.

Explanation: IMM has detected that System Firmware Error No video device detected has occurred.

May also be shown as 806f000f22010axx or 0x806f000f22010axx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0766

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22010bxx Firmware BIOS (ROM) corruption was detected on system [ComputerSystemElementName] during POST.

Explanation: Firmware BIOS (ROM) corruption was detected on the system during POST.

May also be shown as 806f000f22010bxx or 0x806f000f22010bxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0850

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22010cxx CPU voltage mismatch detected on [ProcessorElementName].

Explanation: IMM has detected a CPU voltage mismatch with the CPU socket voltage.

May also be shown as 806f000f22010cxx or 0x806f000f22010cxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0050

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-2201xxxx The System [ComputerSystemElementName] encountered a POST Error.

Explanation: IMM has detected a Post Error.

May also be shown as 806f000f2201xxxx or 0x806f000f2201xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0184

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220201xx The System [ComputerSystemElementName] has detected no memory in the system.

Explanation: IMM has detected no memory in the system.

May also be shown as 806f000f220201xx or 0x806f000f220201xx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0794

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220202xx Subsystem [MemoryElementName] has insufficient memory for operation.

Explanation: IMM has detected that the usable Memory is insufficient for operation.

May also be shown as 806f000f220202xx or 0x806f000f220202xx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0132

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220203xx The System [ComputerSystemElementName] encountered firmware error - unrecoverable boot device failure.

Explanation: IMM has detected that System Firmware Error Unrecoverable boot device failure has occurred.

May also be shown as 806f000f220203xx or 0x806f000f220203xx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0770

SNMP Trap ID: 5

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220204xx The System [ComputerSystemElementName]has encountered a motherboard failure.

Explanation: IMM has detected a fatal motherboard error in the system.

May also be shown as 806f000f220204xx or 0x806f000f220204xx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0795

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-220207xx The System [ComputerSystemElementName] encountered firmware error - unrecoverable keyboard failure.

Explanation: IMM has detected that System Firmware Error Unrecoverable Keyboard failure has occurred.

May also be shown as 806f000f220207xx or 0x806f000f220207xx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0764

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22020axx The System [ComputerSystemElementName] encountered firmware error - no video device detected.

Explanation: IMM has detected that System Firmware Error No video device detected has occurred.

May also be shown as 806f000f22020axx or 0x806f000f22020axx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0766

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22020bxx Firmware BIOS (ROM) corruption was detected on system [ComputerSystemElementName] during POST.

Explanation: Firmware BIOS (ROM) corruption was detected on the system during POST.

May also be shown as 806f000f22020bxx or 0x806f000f22020bxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0850

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-22020cxx CPU voltage mismatch detected on [ProcessorElementName].

Explanation: IMM has detected a CPU voltage mismatch with the socket voltage.

May also be shown as 806f000f22020cxx or 0x806f000f22020cxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0050

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f000f-2202xxxx The System [ComputerSystemElementName] encountered a POST Error.

Explanation: IMM has detected a Post Error.

May also be shown as 806f000f2202xxxx or 0x806f000f2202xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0184

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0013-1701xxxx A diagnostic interrupt has occurred on system [ComputerSystemElementName].

Explanation: The user has pressed the NMI button or there has been a malfunction with the button.

May also be shown as 806f00131701xxxx or 0x806f00131701xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0222

SNMP Trap ID: 50

Automatically notify Support: No

User response: If the NMI button has not been pressed, complete the following steps:

1. Make sure that the NMI button is not pressed.
2. Replace the system board (Trained service personnel only).

806f001e-2201xxxx No bootable media available for system [ComputerSystemElementName].

Explanation: This message is for the use case when an implementation has detected a System with No Bootable Media.

May also be shown as 806f001e2201xxxx or 0x806f001e2201xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0286

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0021-0b01xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 1.

May also be shown as 806f00210b01xxxx or 0x806f00210b01xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b02xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 2.

May also be shown as 806f00210b02xxxx or 0x806f00210b02xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b03xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IIMM has detected a Fault in PCIe slot 3.

May also be shown as 806f00210b03xxxx or 0x806f00210b03xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b04xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 4.

May also be shown as 806f00210b04xxxx or 0x806f00210b04xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b05xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 5.

May also be shown as 806f00210b05xxxx or 0x806f00210b05xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b06xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 6.

May also be shown as 806f00210b06xxxx or 0x806f00210b06xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b07xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 7.

May also be shown as 806f00210b07xxxx or 0x806f00210b07xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-0b08xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault in PCIe slot 8.

May also be shown as 806f00210b08xxxx or 0x806f00210b08xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: Replace PCIe card

806f0021-2201xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected No Op ROM Space.

May also be shown as 806f00212201xxxx or 0x806f00212201xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0021-2582xxxx Fault in slot [PhysicalConnectorSystemElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault in one of the PCI slots or the PCI bus without isolating the to a slot.

May also be shown as 806f00212582xxxx or 0x806f00212582xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0330

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0023-2101xxxx Watchdog Timer expired for [WatchdogElementName].

Explanation: The IPMI Watchdog Timer has expired.

May also be shown as 806f00232101xxxx or 0x806f00232101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0368

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f0028-2101xxxx Sensor [SensorElementName] is unavailable or degraded on management system [ComputerSystemElementName].

Explanation: Trusted Platform Module(TPM) initialization or start up commands have failed.

May also be shown as 806f00282101xxxx or 0x806f00282101xxxx

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0398

SNMP Trap ID: 60

Automatically notify Support: No

User response:

1. Reboot the system.
2. If error persists, or boot is unsuccessful, (Trained service technician only) Replace the system board.

806f0107-0301xxxx An Over-Temperature Condition has been detected on [ProcessorElementName].

Explanation: The microprocessor 1 temperature has risen above the critical level, causing a hard shutdown of the node.

May also be shown as 806f01070301xxxx or 0x806f01070301xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 1 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 1 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 1.

806f0107-0302xxxx An Over-Temperature Condition has been detected on [ProcessorElementName].

Explanation: The microprocessor 2 temperature has risen above the critical level, causing a hard shutdown of the node.

May also be shown as 806f01070302xxxx or 0x806f01070302xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 2 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 2 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 2.

806f0107-0303xxxx An Over-Temperature Condition has been detected on [ProcessorElementName].

Explanation: The microprocessor 3 temperature has risen above the critical level, causing a hard shutdown of the node.

May also be shown as 806f01070303xxxx or 0x806f01070303xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 3 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 3 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 3.

806f0107-0304xxxx An Over-Temperature Condition has been detected on [ProcessorElementName].

Explanation: The microprocessor 4 temperature has risen above the critical level, causing a hard shutdown of the node.

May also be shown as 806f01070304xxxx or 0x806f01070304xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0036

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan or cooling related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Ensure system cover is latched properly.
4. Make sure that the room temperature is within operating specifications.
5. Make sure that the microprocessor 4 heat sink is securely installed.
6. (Trained service technician only) Make sure that the microprocessor 4 heat sink is installed correctly and the thermal material is correctly applied.
7. (Trained service technician only) Replace microprocessor 4.

806f0108-0a01xxxx [PowerSupplyElementName] has Failed.

Explanation: IMM has detected a Fault on Power Supply 1.

May also be shown as 806f01080a01xxxx or 0x806f01080a01xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

User response: Check the log for additional Power Supply Failure. Replace the Power Supply 1, if needed

806f0108-0a02xxxx [PowerSupplyElementName] has Failed.

Explanation: IMM has detected a Fault on Power Supply 2.

May also be shown as 806f01080a02xxxx or 0x806f01080a02xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0086

SNMP Trap ID: 4

Automatically notify Support: Yes

User response: Check the log for additional Power Supply Failure. Replace the Power Supply 2, if needed

806f0109-1381xxxx [PowerSupplyElementName] has been Power Cycled.

Explanation: System has been power cycled.

May also be shown as 806f01091381xxxx or 0x806f01091381xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0108

SNMP Trap ID:

Automatically notify Support: No

User response: Host Power: Information only; no action is required.

806f010c-2581xxxx Uncorrectable error detected for [PhysicalMemoryElementName] on Subsystem
[MemoryElementName].

Explanation: IMM has detected a Memory uncorrectable error in one of the DIMMs.

May also be shown as 806f010c2581xxxx or 0x806f010c2581xxxx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0138

SNMP Trap ID: 41

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f010d-0400xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 0 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0400xxxx or 0x806f010d0400xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0401xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 1 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0401xxxx or 0x806f010d0401xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0402xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 2 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0402xxxx or 0x806f010d0402xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0403xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 3 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0403xxxx or 0x806f010d0403xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0404xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 4 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0404xxxx or 0x806f010d0404xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0405xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 5 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0405xxxx or 0x806f010d0405xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0406xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 6 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0406xxxx or 0x806f010d0406xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0407xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 7 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0407xxxx or 0x806f010d0407xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0408xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 8 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0408xxxx or 0x806f010d0408xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0409xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 9 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0409xxxx or 0x806f010d0409xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040axxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 10 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040axxxx or 0x806f010d040axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040bxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 11 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040bxxxx or 0x806f010d040bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040cxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 12 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040cxxxx or 0x806f010d040cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040dxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 13 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040dxxxx or 0x806f010d040dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040exxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 14 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040exxxx or 0x806f010d040exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-040fxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 15 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d040fxxxx or 0x806f010d040fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0410xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 16 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0410xxxx or 0x806f010d0410xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0411xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 17 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0411xxxx or 0x806f010d0411xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0412xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 18 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0412xxxx or 0x806f010d0412xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0413xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 19 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0413xxxx or 0x806f010d0413xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0414xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 20 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0414xxxx or 0x806f010d0414xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0415xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 21 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0415xxxx or 0x806f010d0415xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0416xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 22 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0416xxxx or 0x806f010d0416xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0417xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 23 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0417xxxx or 0x806f010d0417xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0418xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 24 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0418xxxx or 0x806f010d0418xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-0419xxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 25 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d0419xxxx or 0x806f010d0419xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041axxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 26 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041axxxx or 0x806f010d041axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041bxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 27 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041bxxxx or 0x806f010d041bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041cxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 28 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041cxxxx or 0x806f010d041cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041dxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 29 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041dxxxx or 0x806f010d041dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041exxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 30 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041exxxx or 0x806f010d041exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010d-041fxxxx The [StorageVolumeElementName] has been disabled due to a detected fault.

Explanation: The drive 31 has been disabled (defunct) due to a fault detected by the controller.

May also be shown as 806f010d041fxxxx or 0x806f010d041fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0164

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

1. Check IBM Support site for Service Bulletins/RETAIN tips related to your particular drive.
2. Check IBM Support site for firmware updates related to your particular drive and RAID controller firmware and device driver.
3. Check for any other RAID related errors.
4. Replace the drive.

806f010f-2201xxxx The System [ComputerSystemElementName] encountered a firmware hang.

Explanation: IMM has detected a System Firmware Hang.

May also be shown as 806f010f2201xxxx or 0x806f010f2201xxxx

Severity: Error

Alert Category: System - Boot failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0186

SNMP Trap ID: 25

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0113-0301xxxx A bus timeout has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130301xxxx or 0x806f01130301xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response: Try to reboot the system to recovery

806f0113-0302xxxx A bus timeout has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130302xxxx or 0x806f01130302xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response: Try to reboot the system to recovery

806f0113-0303xxxx • 806f0113-1701xxxx

806f0113-0303xxxx A bus timeout has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130303xxxx or 0x806f01130303xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response: Try to reboot the system to recovery

806f0113-0304xxxx A bus timeout has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01130304xxxx or 0x806f01130304xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response: Try to reboot the system to recovery

806f0113-1701xxxx A bus timeout has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Timeout.

May also be shown as 806f01131701xxxx or 0x806f01131701xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0224

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

806f011b-0701xxxx The connector [PhysicalConnectorElementName] has encountered a configuration error.

Explanation: IMM has detected Interconnect Configuration Error.

May also be shown as 806f011b0701xxxx or 0x806f011b0701xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0266

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: FPGA Comm Err:

1. AC cycle the machine.
2. Update IMM FW to the latest level.
3. (Trained service technician only) If error persists, replace system board.

USB Detect:

1. Reinsert the USB/Video cable.
2. Replace the USB/Video cable.

806f0123-2101xxxx Reboot of system [ComputerSystemElementName] initiated by [WatchdogElementName].

Explanation: The IPMI Watchdog Timer has expired. A reboot of the system was initiated.

May also be shown as 806f01232101xxxx or 0x806f01232101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0370

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f0125-0c01xxxx [ManagedElementName] detected as absent.

Explanation: IMM has detected the Operator Information panel is absent.

May also be shown as 806f01250c01xxxx or 0x806f01250c01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0392

SNMP Trap ID:

Automatically notify Support: No

User response:

1. Reinsert or replace the operator information panel cable.
2. Replace the operator information panel.

806f0207-0301xxxx [ProcessorElementName] has Failed with FRB1/BIST condition.

Explanation: IMM has detected a Miroprocessor 1 Failed - FRB1/BIST condition.

May also be shown as 806f02070301xxxx or 0x806f02070301xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0207-0302xxxx [ProcessorElementName] has Failed with FRB1/BIST condition.

Explanation: IMM has detected a Miroprocessor 2 Failed - FRB1/BIST condition.

May also be shown as 806f02070302xxxx or 0x806f02070302xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0207-0303xxxx [ProcessorElementName] has Failed with FRB1/BIST condition.

Explanation: IMM has detected a Miroprocessor 3 Failed - FRB1/BIST condition.

May also be shown as 806f02070303xxxx or 0x806f02070303xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0207-0304xxxx [ProcessorElementName] has Failed with FRB1/BIST condition.

Explanation: IMM has detected a Microprocessor 4 Failed - FRB1/BIST condition.

May also be shown as 806f02070304xxxx or 0x806f02070304xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0207-2583xxxx [ProcessorElementName] has Failed with FRB1/BIST condition.

Explanation: IMM has detected a Processor Failed - FRB1/BIST condition.

May also be shown as 806f02072583xxxx or 0x806f02072583xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0044

SNMP Trap ID: 40

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f020d-0400xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 0.

May also be shown as 806f020d0400xxxx or 0x806f020d0400xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0401xxxx • 806f020d-0403xxxx

806f020d-0401xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 1.

May also be shown as 806f020d0401xxxx or 0x806f020d0401xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0402xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 2.

May also be shown as 806f020d0402xxxx or 0x806f020d0402xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0403xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 3.

May also be shown as 806f020d0403xxxx or 0x806f020d0403xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0404xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 4.

May also be shown as 806f020d0404xxxx or 0x806f020d0404xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0405xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 5.

May also be shown as 806f020d0405xxxx or 0x806f020d0405xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0406xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 6.

May also be shown as 806f020d0406xxxx or 0x806f020d0406xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0407xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 7.

May also be shown as 806f020d0407xxxx or 0x806f020d0407xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0408xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 8.

May also be shown as 806f020d0408xxxx or 0x806f020d0408xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0409xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 9.

May also be shown as 806f020d0409xxxx or 0x806f020d0409xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040axxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 10.

May also be shown as 806f020d040axxxx or 0x806f020d040axxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040bxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 11.

May also be shown as 806f020d040bxxxx or 0x806f020d040bxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040cxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 12.

May also be shown as 806f020d040cxxxx or 0x806f020d040cxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040dxxxx • 806f020d-040fxxxx

806f020d-040dxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 13.

May also be shown as 806f020d040dxxxx or 0x806f020d040dxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040exxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 14.

May also be shown as 806f020d040exxxx or 0x806f020d040exxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-040fxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 15.

May also be shown as 806f020d040fxxxx or 0x806f020d040fxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0410xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 16.

May also be shown as 806f020d0410xxxx or 0x806f020d0410xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0411xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 17.

May also be shown as 806f020d0411xxxx or 0x806f020d0411xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0412xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 18.

May also be shown as 806f020d0412xxxx or 0x806f020d0412xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0413xxxx • 806f020d-0415xxxx

806f020d-0413xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 19.

May also be shown as 806f020d0413xxxx or 0x806f020d0413xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0414xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 20.

May also be shown as 806f020d0414xxxx or 0x806f020d0414xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0415xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 21.

May also be shown as 806f020d0415xxxx or 0x806f020d0415xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0416xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 22.

May also be shown as 806f020d0416xxxx or 0x806f020d0416xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0417xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 23.

May also be shown as 806f020d0417xxxx or 0x806f020d0417xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0418xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 24.

May also be shown as 806f020d0418xxxx or 0x806f020d0418xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-0419xxxx • 806f020d-041bxxxx

806f020d-0419xxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 25.

May also be shown as 806f020d0419xxxx or 0x806f020d0419xxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041axxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 26.

May also be shown as 806f020d041axxxx or 0x806f020d041axxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041bxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 27.

May also be shown as 806f020d041bxxxx or 0x806f020d041bxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041cxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 28.

May also be shown as 806f020d041cxxxx or 0x806f020d041cxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041dxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 29.

May also be shown as 806f020d041dxxxx or 0x806f020d041dxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041exxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 30.

May also be shown as 806f020d041exxxx or 0x806f020d041exxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f020d-041fxxxx Failure Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: Failure predicted (PFA) on the hard drive 31.

May also be shown as 806f020d041fxxxx or 0x806f020d041fxxxx

Severity: Warning

Alert Category: System - Predicted Failure

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0168

SNMP Trap ID: 27

Automatically notify Support: Yes

User response: Replace the hard disk drive at the next maintenance period.

806f0223-2101xxxx Powering off system [ComputerSystemElementName] initiated by [WatchdogElementName].

Explanation: The IPMI Watchdog Timer has expired. The system was powered off.

May also be shown as 806f02232101xxxx or 0x806f02232101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0372

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f0308-0a01xxxx [PowerSupplyElementName] has lost input.

Explanation: Power Supply 1 AC input has been lost.

May also be shown as 806f03080a01xxxx or 0x806f03080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0100

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f0308-0a02xxxx [PowerSupplyElementName] has lost input.

Explanation: Power Supply 2 AC input has been lost.

May also be shown as 806f03080a02xxxx or 0x806f03080a02xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0100

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f030c-2581xxxx Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected a Memory Scrub failure.

May also be shown as 806f030c2581xxxx or 0x806f030c2581xxxx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0136

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0313-1701xxxx A software NMI has occurred on system [ComputerSystemElementName].

Explanation: A software NMI has occurred. Your system may have been rebooted, depending on the configuration setting.

May also be shown as 806f03131701xxxx or 0x806f03131701xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0228

SNMP Trap ID: 50

Automatically notify Support: No

User response: Check Operating System logs and resolve any issues related to the NMI.

806f0323-2101xxxx Power cycle of system [ComputerSystemElementName] initiated by watchdog [WatchdogElementName].

Explanation: The IPMI Watchdog Timer has expired. The system was powered off and powered on.

May also be shown as 806f03232101xxxx or 0x806f03232101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0374

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f040c-2581xxxx [PhysicalMemoryElementName] Disabled on Subsystem [MemoryElementName].

Explanation: IMM has detected that Memory has been Disabled.

May also be shown as 806f040c2581xxxx or 0x806f040c2581xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0131

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0507-0301xxxx [ProcessorElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Processor Configuration Mismatch on CPU 1.

May also be shown as 806f05070301xxxx or 0x806f05070301xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0507-0302xxxx [ProcessorElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Processor Configuration Mismatch on CPU 2.

May also be shown as 806f05070302xxxx or 0x806f05070302xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0507-0303xxxx [ProcessorElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Processor Configuration Mismatch on CPU 3.

May also be shown as 806f05070303xxxx or 0x806f05070303xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0507-0304xxxx [ProcessorElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Processor Configuration Mismatch on CPU 4.

May also be shown as 806f05070304xxxx or 0x806f05070304xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0507-2583xxxx [ProcessorElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Processor Configuration Mismatch has occurred.

May also be shown as 806f05072583xxxx or 0x806f05072583xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0062

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f050c-2581xxxx Memory Logging Limit Reached for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that the Memory Logging Limit has been Reached.

May also be shown as 806f050c2581xxxx or 0x806f050c2581xxxx

Severity: Warning

Alert Category: Warning - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0144

SNMP Trap ID: 43

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f050d-0400xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0400xxxx or 0x806f050d0400xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0401xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0401xxxx or 0x806f050d0401xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0402xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0402xxxx or 0x806f050d0402xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0403xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0403xxxx or 0x806f050d0403xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0404xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0404xxxx or 0x806f050d0404xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0405xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0405xxxx or 0x806f050d0405xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0406xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0406xxxx or 0x806f050d0406xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0407xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0407xxxx or 0x806f050d0407xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0408xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0408xxxx or 0x806f050d0408xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0409xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0409xxxx or 0x806f050d0409xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040axxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040axxxx or 0x806f050d040axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040bxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040bxxxx or 0x806f050d040bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040cxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040cxxxx or 0x806f050d040cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040dxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040dxxxx or 0x806f050d040dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040exxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040exxxx or 0x806f050d040exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-040fxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d040fxxxx or 0x806f050d040fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0410xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0410xxxx or 0x806f050d0410xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0411xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0411xxxx or 0x806f050d0411xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0412xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0412xxxx or 0x806f050d0412xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0413xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0413xxxx or 0x806f050d0413xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0414xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0414xxxx or 0x806f050d0414xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0415xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0415xxxx or 0x806f050d0415xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0416xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0416xxxx or 0x806f050d0416xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0417xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0417xxxx or 0x806f050d0417xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0418xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0418xxxx or 0x806f050d0418xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-0419xxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d0419xxxx or 0x806f050d0419xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041axxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041axxxx or 0x806f050d041axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041bxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041bxxxx or 0x806f050d041bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041cxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041cxxxx or 0x806f050d041cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041dxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041dxxxx or 0x806f050d041dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041exxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041exxxx or 0x806f050d041exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f050d-041fxxxx Array [ComputerSystemElementName] is in critical condition.

Explanation: The Drive is part of an RAID array that is in critical condition. Immediate action is required to avoid a system outage. To identify drives in the critical array all member drives will report this message.

May also be shown as 806f050d041fxxxx or 0x806f050d041fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0174

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drive that is indicated by a lit status LED.

806f052b-2101xxxx Invalid or Unsupported firmware or software was detected on system [ComputerSystemElementName].

Explanation: The IMM primary firmware image has been corrupted. The IMM is running on the backup image.

May also be shown as 806f052b2101xxxx or 0x806f052b2101xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0446

SNMP Trap ID: 50

Automatically notify Support: No

User response: Reflash or update the IMM firmware.

806f0607-0301xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted.

Explanation: The UEFI has detected a configuration type issue with processor 1.

May also be shown as 806f06070301xxxx or 0x806f06070301xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0607-0302xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted.

Explanation: The UEFI has detected a configuration type issue with processor 2.

May also be shown as 806f06070302xxxx or 0x806f06070302xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0607-0303xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted.

Explanation: The UEFI has detected a configuration type issue with processor 3.

May also be shown as 806f06070303xxxx or 0x806f06070303xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0607-0304xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted.

Explanation: The UEFI has detected a configuration type issue with processor 4.

May also be shown as 806f06070304xxxx or 0x806f06070304xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0607-2583xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has asserted.

Explanation: The UEFI has detected a configuration type issue with the processors installed

May also be shown as 806f06072583xxxx or 0x806f06072583xxxx

Severity: Error

Alert Category: Critical - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0816

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0608-2584xxxx [PowerSupplyElementName] has a Configuration Mismatch.

Explanation: IMM has detected a Power Supply with a Configuration Error.

May also be shown as 806f06082584xxxx or 0x806f06082584xxxx

Severity: Error

Alert Category: Critical - Power

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0104

SNMP Trap ID: 4

Automatically notify Support: No

User response: Check If Power supplies have the same AC input. Check If Power supplies have the same power rating.

806f060d-0400xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0400xxxx or 0x806f060d0400xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0401xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0401xxxx or 0x806f060d0401xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0402xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0402xxxx or 0x806f060d0402xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0403xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0403xxxx or 0x806f060d0403xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0404xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0404xxxx or 0x806f060d0404xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0405xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0405xxxx or 0x806f060d0405xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0406xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0406xxxx or 0x806f060d0406xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0407xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0407xxxx or 0x806f060d0407xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0408xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0408xxxx or 0x806f060d0408xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0409xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0409xxxx or 0x806f060d0409xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040axxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040axxxx or 0x806f060d040axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040bxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040bxxxx or 0x806f060d040bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040cxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040cxxxx or 0x806f060d040cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040dxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040dxxxx or 0x806f060d040dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040exxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040exxxx or 0x806f060d040exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-040fxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d040fxxxx or 0x806f060d040fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0410xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0410xxxx or 0x806f060d0410xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0411xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0411xxxx or 0x806f060d0411xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0412xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0412xxxx or 0x806f060d0412xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0413xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0413xxxx or 0x806f060d0413xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0414xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0414xxxx or 0x806f060d0414xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0415xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0415xxxx or 0x806f060d0415xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0416xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0416xxxx or 0x806f060d0416xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0417xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0417xxxx or 0x806f060d0417xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0418xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0418xxxx or 0x806f060d0418xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-0419xxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d0419xxxx or 0x806f060d0419xxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041axxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041axxxx or 0x806f060d041axxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041bxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041bxxxx or 0x806f060d041bxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041cxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041cxxxx or 0x806f060d041cxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041dxxxx • 806f060d-041exxxx

806f060d-041dxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041dxxxx or 0x806f060d041dxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041exxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041exxxx or 0x806f060d041exxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f060d-041fxxxx Array [ComputerSystemElementName] has failed.

Explanation: The Drive is part of an RAID array that is in the failed condition. To identify drives in the failed array all member drives will report this message.

May also be shown as 806f060d041fxxxx or 0x806f060d041fxxxx

Severity: Error

Alert Category: Critical - Hard Disk drive

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0176

SNMP Trap ID: 5

Automatically notify Support: Yes

User response:

- Check IMM log for Predictive Fault (PFA) or other hard drive messages to help identify failing drive(s).
- Replace the hard disk drives that are indicated by a lit status LED.
- Recreate the array.
- Restore data from backup.

806f0707-0301xxxx [ProcessorElementName] in slot [SlotElementName] has been added.

Explanation: IMM has detected a Processor has been Added.

May also be shown as 806f07070301xxxx or 0x806f07070301xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0034

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070c-25810001 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 1 in Compute Book 1.

May also be shown as 806f070c25810001 or 0x806f070c25810001

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810002 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 2 in Compute Book 1.
May also be shown as 806f070c25810002 or 0x806f070c25810002

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810003 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 3 in Compute Book 1.
May also be shown as 806f070c25810003 or 0x806f070c25810003

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810004 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 4 in Compute Book 1.
May also be shown as 806f070c25810004 or 0x806f070c25810004

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810005 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 5 in Compute Book 1.

May also be shown as 806f070c25810005 or 0x806f070c25810005

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810006 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 6 in Compute Book 1.

May also be shown as 806f070c25810006 or 0x806f070c25810006

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810007 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 7 in Compute Book 1.

May also be shown as 806f070c25810007 or 0x806f070c25810007

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810008 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 8 in Compute Book 1.

May also be shown as 806f070c25810008 or 0x806f070c25810008

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810009 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 9 in Compute Book 1.

May also be shown as 806f070c25810009 or 0x806f070c25810009

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000a Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 10 in Compute Book 1.

May also be shown as 806f070c2581000a or 0x806f070c2581000a

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000b Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 11 in Compute Book 1. May also be shown as 806f070c2581000b or 0x806f070c2581000b

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000c Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 12 in Compute Book 1. May also be shown as 806f070c2581000c or 0x806f070c2581000c

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000d Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 13 in Compute Book 1. May also be shown as 806f070c2581000d or 0x806f070c2581000d

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000e Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 14 in Compute Book 1.
May also be shown as 806f070c2581000e or 0x806f070c2581000e

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581000f Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 15 in Compute Book 1.
May also be shown as 806f070c2581000f or 0x806f070c2581000f

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810010 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 16 in Compute Book 1.
May also be shown as 806f070c25810010 or 0x806f070c25810010

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810011 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 17 in Compute Book 1.

May also be shown as 806f070c25810011 or 0x806f070c25810011

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810012 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 18 in Compute Book 1.

May also be shown as 806f070c25810012 or 0x806f070c25810012

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810013 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 19 in Compute Book 1.

May also be shown as 806f070c25810013 or 0x806f070c25810013

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810014 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 20 in Compute Book 1.
May also be shown as 806f070c25810014 or 0x806f070c25810014

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810015 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 21 in Compute Book 1.
May also be shown as 806f070c25810015 or 0x806f070c25810015

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810016 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 22 in Compute Book 1.
May also be shown as 806f070c25810016 or 0x806f070c25810016

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810017 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 23 in Compute Book 1. May also be shown as 806f070c25810017 or 0x806f070c25810017

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810018 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 24 in Compute Book 1. May also be shown as 806f070c25810018 or 0x806f070c25810018

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810019 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 25 in Compute Book 1. May also be shown as 806f070c25810019 or 0x806f070c25810019

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001a Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 26 in Compute Book 1. May also be shown as 806f070c2581001a or 0x806f070c2581001a

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001b Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 27 in Compute Book 1. May also be shown as 806f070c2581001b or 0x806f070c2581001b

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001c Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 28 in Compute Book 1. May also be shown as 806f070c2581001c or 0x806f070c2581001c

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001d Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 29 in Compute Book 1. May also be shown as 806f070c2581001d or 0x806f070c2581001d

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001e Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 30 in Compute Book 1. May also be shown as 806f070c2581001e or 0x806f070c2581001e

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581001f Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 31 in Compute Book 1. May also be shown as 806f070c2581001f or 0x806f070c2581001f

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810020 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 32 in Compute Book 1. May also be shown as 806f070c25810020 or 0x806f070c25810020

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810021 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 33 in Compute Book 1. May also be shown as 806f070c25810021 or 0x806f070c25810021

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810022 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 34 in Compute Book 1. May also be shown as 806f070c25810022 or 0x806f070c25810022

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810023 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 35 in Compute Book 1. May also be shown as 806f070c25810023 or 0x806f070c25810023

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810024 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 36 in Compute Book 1. May also be shown as 806f070c25810024 or 0x806f070c25810024

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810025 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 37 in Compute Book 1. May also be shown as 806f070c25810025 or 0x806f070c25810025

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810026 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 38 in Compute Book 1. May also be shown as 806f070c25810026 or 0x806f070c25810026

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810027 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 39 in Compute Book 1. May also be shown as 806f070c25810027 or 0x806f070c25810027

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810028 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 40 in Compute Book 1. May also be shown as 806f070c25810028 or 0x806f070c25810028

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810029 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 41 in Compute Book 1. May also be shown as 806f070c25810029 or 0x806f070c25810029

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002a Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 42 in Compute Book 1. May also be shown as 806f070c2581002a or 0x806f070c2581002a

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002b Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 43 in Compute Book 1. May also be shown as 806f070c2581002b or 0x806f070c2581002b

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002c Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 44 in Compute Book 1.
May also be shown as 806f070c2581002c or 0x806f070c2581002c

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002d Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 45 in Compute Book 1.
May also be shown as 806f070c2581002d or 0x806f070c2581002d

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002e Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 46 in Compute Book 1.
May also be shown as 806f070c2581002e or 0x806f070c2581002e

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581002f Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 47 in Compute Book 1.
May also be shown as 806f070c2581002f or 0x806f070c2581002f

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-25810030 Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory configuration error has occurred on DIMM 48 in Compute Book 1.
May also be shown as 806f070c25810030 or 0x806f070c25810030

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070c-2581xxxx Configuration Error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that a Memory DIMM configuration error has occurred.
May also be shown as 806f070c2581xxxx or 0x806f070c2581xxxx

Severity: Error

Alert Category: Critical - Memory

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0126

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f070d-0400xxxx • 806f070d-0402xxxx

806f070d-0400xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0400xxxx or 0x806f070d0400xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0401xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0401xxxx or 0x806f070d0401xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0402xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0402xxxx or 0x806f070d0402xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0403xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0403xxxx or 0x806f070d0403xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0404xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0404xxxx or 0x806f070d0404xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0405xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0405xxxx or 0x806f070d0405xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0406xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0406xxxx or 0x806f070d0406xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0407xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0407xxxx or 0x806f070d0407xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0408xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0408xxxx or 0x806f070d0408xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0409xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0409xxxx or 0x806f070d0409xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040axxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040axxxx or 0x806f070d040axxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040bxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040bxxxx or 0x806f070d040bxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040cxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040cxxxx or 0x806f070d040cxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040dxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040dxxxx or 0x806f070d040dxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040exxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040exxxx or 0x806f070d040exxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-040fxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d040fxxxx or 0x806f070d040fxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0410xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0410xxxx or 0x806f070d0410xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0411xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0411xxxx or 0x806f070d0411xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0412xxxx • 806f070d-0414xxxx

806f070d-0412xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0412xxxx or 0x806f070d0412xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0413xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0413xxxx or 0x806f070d0413xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0414xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0414xxxx or 0x806f070d0414xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0415xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0415xxxx or 0x806f070d0415xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0416xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0416xxxx or 0x806f070d0416xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0417xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0417xxxx or 0x806f070d0417xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0418xxxx • 806f070d-041axxxx

806f070d-0418xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0418xxxx or 0x806f070d0418xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-0419xxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d0419xxxx or 0x806f070d0419xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041axxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041axxxx or 0x806f070d041axxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041bxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041bxxxx or 0x806f070d041bxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041cxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041cxxxx or 0x806f070d041cxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041dxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041dxxxx or 0x806f070d041dxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041exxxx • 806f072b-2101xxxx

806f070d-041exxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041exxxx or 0x806f070d041exxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f070d-041fxxxx Rebuild in progress for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild is in Progress.

May also be shown as 806f070d041fxxxx or 0x806f070d041fxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0178

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f072b-2101xxxx A successful software or firmware change was detected on system [ComputerSystemElementName].

Explanation: IMM has been recovered from a system firmware problem automatically.

May also be shown as 806f072b2101xxxx or 0x806f072b2101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0450

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f072b-2201xxxx A successful software or firmware change was detected on system
[ComputerSystemElementName].

Explanation: UEFI has been recovered from a firmware corruption by IMM automatically.

May also be shown as 806f072b2201xxxx or 0x806f072b2201xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0450

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f0807-0301xxxx [ProcessorElementName] has been Disabled.

Explanation: IMM has detected that Processor 1 has been disabled.

May also be shown as 806f08070301xxxx or 0x806f08070301xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0807-0302xxxx [ProcessorElementName] has been Disabled.

Explanation: IMM has detected that Processor 2 has been disabled.

May also be shown as 806f08070302xxxx or 0x806f08070302xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0807-0303xxxx [ProcessorElementName] has been Disabled.

Explanation: IMM has detected that Processor 3 has been disabled.

May also be shown as 806f08070303xxxx or 0x806f08070303xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0807-0304xxxx [ProcessorElementName] has been Disabled.

Explanation: IMM has detected that Processor 4 has been disabled.

May also be shown as 806f08070304xxxx or 0x806f08070304xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0807-2583xxxx [ProcessorElementName] has been Disabled.

Explanation: IMM has detected a Processor has been Disabled.

May also be shown as 806f08072583xxxx or 0x806f08072583xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0061

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0813-2581xxxx An Uncorrectable Bus Error has occurred on bus [SensorElementName].

Explanation: IMM has detected a Bus Uncorrectable Error.

May also be shown as 806f08132581xxxx or 0x806f08132581xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0813-2582xxxx An Uncorrectable Bus Error has occurred on bus [SensorElementName].

Explanation: IMM has detected a Bus Uncorrectable Error.

May also be shown as 806f08132582xxxx or 0x806f08132582xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0813-2583xxxx An Uncorrectable Bus Error has occurred on bus [SensorElementName].

Explanation: IMM has detected a Bus Uncorrectable Error.

May also be shown as 806f08132583xxxx or 0x806f08132583xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0240

SNMP Trap ID: 50

Automatically notify Support: Yes

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0823-2101xxxx Watchdog Timer interrupt occurred for [WatchdogElementName].

Explanation: The Watchdog Timer has expired. A watchdog interrupt has occurred.

May also be shown as 806f08232101xxxx or 0x806f08232101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0376

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

806f090c-2581xxxx [PhysicalMemoryElementName] on Subsystem [MemoryElementName] Throttled.

Explanation: An implementation has detected Memory has been Throttled.

May also be shown as 806f090c2581xxxx or 0x806f090c2581xxxx

Severity: Warning

Alert Category: System - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0142

SNMP Trap ID: 22

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan, cooling, or power related issues.
 2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
 3. Make sure that the room temperature is within operating specifications.
-

806f0a07-0301xxxx [ProcessorElementName] is operating in a Degraded State.

Explanation: The processor 1 is being throttled due to thermal or power conditions.

May also be shown as 806f0a070301xxxx or 0x806f0a070301xxxx

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response: Check the IMM event log for any fan, cooling, or power related issues.

For a thermal condition:

1. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
2. Make sure that the room temperature is within operating specifications.

For a power condition:

1. If Power Supply Unit is rated 1400 Watt, Make sure it is connected to 220V AC input

2. If using a 900 Watt rated power supply (connected at either 110V or 220 V), may need to upgrade to a 1400 Watt rated power supply (connected at 220V).

806f0a07-0302xxxx [ProcessorElementName] is operating in a Degraded State.

Explanation: The processor 2 is being throttled due to thermal or power conditions.

May also be shown as 806f0a070302xxxx or 0x806f0a070302xxxx

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response: Check the IMM event log for any fan, cooling, or power related issues.

For a thermal condition:

1. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
2. Make sure that the room temperature is within operating specifications.

For a power condition:

1. If Power Supply Unit is rated 1400 Watt, Make sure it is connected to 220V AC input
2. If using a 900 Watt rated power supply (connected at either 110V or 220 V), may need to upgrade to a 1400 Watt rated power supply (connected at 220V).

806f0a07-0303xxxx [ProcessorElementName] is operating in a Degraded State.

Explanation: The processor 3 is being throttled due to thermal or power conditions.

May also be shown as 806f0a070303xxxx or 0x806f0a070303xxxx

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response: Check the IMM event log for any fan, cooling, or power related issues.

For a thermal condition:

1. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
2. Make sure that the room temperature is within operating specifications.

For a power condition:

1. If Power Supply Unit is rated 1400 Watt, Make sure it is connected to 220V AC input
2. If using a 900 Watt rated power supply (connected at either 110V or 220 V), may need to upgrade to a 1400 Watt rated power supply (connected at 220V).

806f0a07-0304xxxx [ProcessorElementName] is operating in a Degraded State.

Explanation: The processor 4 is being throttled due to thermal or power conditions.

May also be shown as 806f0a070304xxxx or 0x806f0a070304xxxx

Severity: Warning

Alert Category: Warning - CPU

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0038

SNMP Trap ID: 42

Automatically notify Support: No

User response: Check the IMM event log for any fan, cooling, or power related issues.

For a thermal condition:

1. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
2. Make sure that the room temperature is within operating specifications.

For a power condition:

1. If Power Supply Unit is rated 1400 Watt, Make sure it is connected to 220V AC input
2. If using a 900 Watt rated power supply (connected at either 110V or 220 V), may need to upgrade to a 1400 Watt rated power supply (connected at 220V).

806f0a0c-2581xxxx An Over-Temperature Condition has been detected on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected an over temperature condition on the memory.

May also be shown as 806f0a0c2581xxxx or 0x806f0a0c2581xxxx

Severity: Error

Alert Category: Critical - Temperature

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0146

SNMP Trap ID: 0

Automatically notify Support: No

User response: Complete the following steps:

1. Check the IMM event log for any fan, cooling, or power related issues.
2. Make sure that the airflow at the front and rear of the chassis is not obstructed and that fillers are in place and correctly installed.
3. Make sure that the room temperature is within operating specifications.

806f0a13-0301xxxx A Fatal Bus Error has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130301xxxx or 0x806f0a130301xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0a13-0302xxxx A Fatal Bus Error has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130302xxxx or 0x806f0a130302xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0a13-0303xxxx A Fatal Bus Error has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130303xxxx or 0x806f0a130303xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0a13-0304xxxx A Fatal Bus Error has occurred on bus [SensorElementName].

Explanation: This message is for the use case when an implementation has detected a Bus Fatal Error.

May also be shown as 806f0a130304xxxx or 0x806f0a130304xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0a13-2401xxxx A Fatal Bus Error has occurred on bus [SensorElementName].

Explanation: IMM has detected a Bus Fatal Error.

May also be shown as 806f0a132401xxxx or 0x806f0a132401xxxx

Severity: Error

Alert Category: Critical - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0244

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

806f0b13-3101xxxx Bus [SensorElementName] is operating in a degraded state.

Explanation: IMM has detected that the DMI Bus is degraded.

May also be shown as 806f0b133101xxxx or 0x806f0b133101xxxx

Severity: Warning

Alert Category: Warning - Other

Serviceable: Yes

CIM Information: Prefix: PLAT and ID: 0246

SNMP Trap ID: 60

Automatically notify Support: No

User response: Complete the following steps:

1. AC cycle the machine
2. Remove CPU 1 and inspect the CPU socket for bent pins.
3. Swap CPU 1 and CPU 2. If the error goes away, replace the original CPU 1.
4. If the problem persists, System board may need to be replaced.(Trained service personnel only)

81010002-2801xxxx Numeric sensor [NumericSensorElementName] going low (lower non-critical) has deasserted.

Explanation: A previously low CMOS battery voltage has returned to above its specified threshold

May also be shown as 810100022801xxxx or 0x810100022801xxxx

Severity: Info

Alert Category: Warning - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0477

SNMP Trap ID: 13

Automatically notify Support: No

User response: Information only; no action is required.

81010202-0701xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: A previously low voltage has returned to above its specified threshold (sensor SysBrd 12V, SysBrd 3.3V, or SysBrd 5V).

May also be shown as 810102020701xxxx or 0x810102020701xxxx

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 1

Automatically notify Support: No

User response: Information only; no action is required.

81010202-2801xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: The previously low CMOS battery voltage has returned to above its specified threshold.

May also be shown as 810102022801xxxx or 0x810102022801xxxx

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 1

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d01xxxx • 81010204-1d03xxxx

81010204-1d01xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 1 (Fan 1A Tach, Fan 1B Tach) going low has deasserted.

May also be shown as 810102041d01xxxx or 0x810102041d01xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d02xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 2 (Fan 2A Tach, Fan 2B Tach) going low has deasserted.

May also be shown as 810102041d02xxxx or 0x810102041d02xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d03xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 3 (Fan 3A Tach, Fan 3B Tach) going low has deasserted.

May also be shown as 810102041d03xxxx or 0x810102041d03xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d04xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 4 (Fan 4A Tach, Fan 4B Tach) going low has deasserted.

May also be shown as 810102041d04xxxx or 0x810102041d04xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d05xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 5 (Fan 5A Tach, Fan 5B Tach) going low has deasserted.

May also be shown as 810102041d05xxxx or 0x810102041d05xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010204-1d06xxxx Numeric sensor [NumericSensorElementName] going low (lower critical) has deasserted.

Explanation: IMM has detected a Fan 6 (Fan 6A Tach, Fan 6B Tach) going low has deasserted.

May also be shown as 810102041d06xxxx or 0x810102041d06xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0481

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1001xxxx • 81010701-1402xxxx

81010701-1001xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that the PCI Riser temperature has returned to a normal range.

May also be shown as 810107011001xxxx or 0x810107011001xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011401xxxx or 0x810107011401xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011402xxxx or 0x810107011402xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011403xxxx or 0x810107011403xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011404xxxx or 0x810107011404xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011405xxxx or 0x810107011405xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810107011406xxxx or 0x810107011406xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that the ambient temperature has returned to a normal range.

May also be shown as 810107012701xxxx or 0x810107012701xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010701-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper non-critical) has deasserted.

Explanation: IMM has detected that the PCH temperature has returned to a normal range.

May also be shown as 810107012d01xxxx or 0x810107012d01xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0491

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011401xxxx or 0x810109011401xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011402xxxx or 0x810109011402xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011403xxxx or 0x810109011403xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1404xxxx • 81010901-1406xxxx

81010901-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011404xxxx or 0x810109011404xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011405xxxx or 0x810109011405xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 810109011406xxxx or 0x810109011406xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that the ambient temperature has returned to a normal range.

May also be shown as 810109012701xxxx or 0x810109012701xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010901-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: IMM has detected that the PCH temperature has returned to a normal range.

May also be shown as 810109012d01xxxx or 0x810109012d01xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010902-0701xxxx Numeric sensor [NumericSensorElementName] going high (upper critical) has deasserted.

Explanation: A previously high voltage has returned to below its specified threshold (sensor SysBrd 12V, SysBrd 3.3V, or SysBrd 5V).

May also be shown as 810109020701xxxx or 0x810109020701xxxx

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0495

SNMP Trap ID: 1

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1401xxxx • 81010b01-1403xxxx

81010b01-1401xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011401xxxx or 0x81010b011401xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1402xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011402xxxx or 0x81010b011402xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1403xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011403xxxx or 0x81010b011403xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1404xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011404xxxx or 0x81010b011404xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1405xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011405xxxx or 0x81010b011405xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-1406xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that a system board voltage regulator temperature has returned to the normal range.

May also be shown as 81010b011406xxxx or 0x81010b011406xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-2701xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that the ambient temperature has returned to a normal range.

May also be shown as 81010b012701xxxx or 0x81010b012701xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81010b01-2d01xxxx Numeric sensor [NumericSensorElementName] going high (upper non-recoverable) has deasserted.

Explanation: IMM has detected that the PCH temperature has returned to a normal range.

May also be shown as 81010b012d01xxxx or 0x81010b012d01xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0499

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81030006-2101xxxx Sensor [SensorElementName] has asserted.

Explanation: Signature verification of one of the Firmware Volumes or Capsules in UEFI BIOS failed.

May also be shown as 810300062101xxxx or 0x810300062101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0508

SNMP Trap ID:

Automatically notify Support: No

User response: Automatic BIOS Recovery (ABR) should cause system to come up from UEFI image in backup bank. Reflash UEFI image in the primary bank. If error does not persist no additional recovery action is required.

81030108-0a01xxxx Sensor [SensorElementName] has deasserted.

Explanation: The power supply load has returned to a normal state.

May also be shown as 810301080a01xxxx or 0x810301080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

8103010e-2581xxxx Sensor [SensorElementName] has deasserted.

Explanation: IMM has detected that the memory size has returned to a previous configuration.

May also be shown as 8103010e2581xxxx or 0x8103010e2581xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

81030112-0601xxxx Sensor [SensorElementName] has deasserted.

Explanation: This message is for the use case when system firmware has exited maintenance mode.

May also be shown as 810301120601xxxx or 0x810301120601xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0509

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

81070101-0b09xxxx Sensor [SensorElementName] has deasserted the transition from normal to non-critical state.

Explanation: Temperature of ML2 Card has been back to normal from non-critical state

May also be shown as 810701010b09xxxx or 0x810701010b09xxxx

Severity: Info

Alert Category: Warning - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 12

Automatically notify Support: No

User response: Information only; no action is required.

8107010f-2201xxxx Sensor [SensorElementName] has deasserted the transition from normal to non-critical state.

Explanation: This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2201xxxx or 0x8107010f2201xxxx

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 60

Automatically notify Support: No

User response: Information only; no action is required.

8107010f-2582xxxx Sensor [SensorElementName] has deasserted the transition from normal to non-critical state.

Explanation: This message is for the use case when an implementation has detected that a Sensor has deasserted a transition to non-critical from normal.

May also be shown as 8107010f2582xxxx or 0x8107010f2582xxxx

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 60

Automatically notify Support: No

User response: Information only; no action is required.

81070114-2201xxxx Sensor [SensorElementName] has deasserted the transition from normal to non-critical state.

Explanation: Trusted Platform Module (TPM) event has transitioned back to a normal state.

May also be shown as 810701142201xxxx or 0x810701142201xxxx

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0521

SNMP Trap ID: 60

Automatically notify Support: No

User response: Information only; no action is required.

81070201-0301xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected a CPU 1 Overtemp Sensor transition to less severe from critical.

May also be shown as 810702010301xxxx or 0x810702010301xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070201-0302xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected a CPU 2 Overtemp Sensor transition to less severe from critical.

May also be shown as 810702010302xxxx or 0x810702010302xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070201-0303xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected a CPU 3 Overtemp Sensor transition to less severe from critical.

May also be shown as 810702010303xxxx or 0x810702010303xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070201-0304xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected a CPU 4 Overtemp Sensor transition to less severe from critical.

May also be shown as 810702010304xxxx or 0x810702010304xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070202-0701xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: The SysBrd Fault sensor no longer detects a problem with the system board.

May also be shown as 810702020701xxxx or 0x810702020701xxxx

Severity: Info

Alert Category: Critical - Voltage

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 1

Automatically notify Support: No

User response: Information only; no action is required.

81070204-2584xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that the power supply fan sensor has transitioned to a less severe state from a critical state.

May also be shown as 810702042584xxxx or 0x810702042584xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

81070208-2584xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected a Sensor has transitioned to less severe state from critical.

May also be shown as 810702082584xxxx or 0x810702082584xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

8107020f-2201xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that the "Drive Key Fault" sensor has transitioned to a less severe state.

May also be shown as 8107020f2201xxxx or 0x8107020f2201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8107020f-2582xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that the "No I/O Resources" sensor has transitioned to a less severe state.

May also be shown as 8107020f2582xxxx or 0x8107020f2582xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

81070219-0701xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: The Sys Board Fault sensor no longer detects a problem with the system board.

May also be shown as 810702190701xxxx or 0x810702190701xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

8107021b-0301xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 1 has recovered from a QPI Link Error.

May also be shown as 8107021b0301xxxx or 0x8107021b0301xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

8107021b-0302xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 2 has recovered from a QPI Link Error.

May also be shown as 8107021b0302xxxx or 0x8107021b0302xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

8107021b-0303xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 3 has recovered from a QPI Link Error.

May also be shown as 8107021b0303xxxx or 0x8107021b0303xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

8107021b-0304xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 4 has recovered from a QPI Link Error.

May also be shown as 8107021b0304xxxx or 0x8107021b0304xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070221-0b09xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that ML2 card has recovered from an internal error.

May also be shown as 810702210b09xxxx or 0x810702210b09xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070221-1f01xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 1 has recovered from a QPI Link Error.

May also be shown as 810702211f01xxxx or 0x810702211f01xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070221-1f02xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 2 has recovered from a QPI Link Error.

May also be shown as 810702211f02xxxx or 0x810702211f02xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070221-1f03xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 3 has recovered from a QPI Link Error.

May also be shown as 810702211f03xxxx or 0x810702211f03xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070221-1f04xxxx Sensor [SensorElementName] has transitioned to a less severe state from critical.

Explanation: IMM has detected that CPU 4 has recovered from a QPI Link Error.

May also be shown as 810702211f04xxxx or 0x810702211f04xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0523

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070301-0301xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: The microprocessor 1 temperature has returned to below its specified threshold.

May also be shown as 810703010301xxxx or 0x810703010301xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070301-0302xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: The microprocessor 2 temperature has returned to below its specified threshold.

May also be shown as 810703010302xxxx or 0x810703010302xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070301-0303xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: The microprocessor 3 temperature has returned to below its specified threshold.

May also be shown as 810703010303xxxx or 0x810703010303xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070301-0304xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: The microprocessor 4 temperature has returned to below its specified threshold.

May also be shown as 810703010304xxxx or 0x810703010304xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070301-0b09xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: The ML2 Card temperature has returned to below its specified threshold.

May also be shown as 810703010b09xxxx or 0x810703010b09xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

81070319-2201xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable from a less severe state.

Explanation: System has been recovered from S3 power state resume failure.

May also be shown as 810703192201xxxx or 0x810703192201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0525

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

81070603-0701xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Sensor is no longer in a fault condition.

May also be shown as 810706030701xxxx or 0x810706030701xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

81070603-0b01xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Sensor is no longer in a fault condition.

May also be shown as 810706030b01xxxx or 0x810706030b01xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

81070603-2584xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Sensor is no longer in a fault condition.

May also be shown as 810706032584xxxx or 0x810706032584xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

81070603-2b01xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Sensor is no longer in a fault condition.

May also be shown as 810706032b01xxxx or 0x810706032b01xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

81070608-2584xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Sensor is no longer in a fault condition. (PS 12V OC Fault, PS 12V OV Fault, PS 12V UV Fault, or PS AUX UV Fault)

May also be shown as 810706082584xxxx or 0x810706082584xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

8107060f-2201xxxx Sensor [SensorElementName] has deasserted the transition to non-recoverable.

Explanation: IMM has detected that the Trusted Platform Module (TPM) has recovered from the initialization error.

May also be shown as 8107060f2201xxxx or 0x8107060f2201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0531

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

8108000f-2101xxxx Device [LogicalDeviceElementName] has been added.

Explanation: IMM has detected a Trusted Platform Module (TPM) physical presence switch was asserted.

May also be shown as 8108000f2101xxxx or 0x8108000f2101xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0536

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

810b0108-1381xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Power unit redundancy has been regained.

May also be shown as 810b01081381xxxx or 0x810b01081381xxxx

Severity: Info

Alert Category: Critical - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 9

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e81xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 1 redundancy has been regained.

May also be shown as 810b010a1e81xxxx or 0x810b010a1e81xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e82xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 2 redundancy has been regained.

May also be shown as 810b010a1e82xxxx or 0x810b010a1e82xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e83xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 3 redundancy has been regained.

May also be shown as 810b010a1e83xxxx or 0x810b010a1e83xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e84xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 4 redundancy has been regained.

May also be shown as 810b010a1e84xxxx or 0x810b010a1e84xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e85xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 5 redundancy has been regained.

May also be shown as 810b010a1e85xxxx or 0x810b010a1e85xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010a-1e86xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Fan 6 redundancy has been regained.

May also be shown as 810b010a1e86xxxx or 0x810b010a1e86xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b010c-2581xxxx Redundancy Lost for [RedundancySetElementName] has deasserted.

Explanation: Memory component group has regained its redundancy

May also be shown as 810b010c2581xxxx or 0x810b010c2581xxxx

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0803

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

810b0208-1381xxxx Redundancy Degraded for [RedundancySetElementName] has deasserted.

Explanation: Power unit has regained its redundancy

May also be shown as 810b02081381xxxx or 0x810b02081381xxxx

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0805

SNMP Trap ID: 10

Automatically notify Support: No

User response: Information only; no action is required.

810b0308-1381xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted.

Explanation: Power unit has regained its redundancy.

May also be shown as 810b03081381xxxx or 0x810b03081381xxxx

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0807

SNMP Trap ID: 10

Automatically notify Support: No

User response: Information only; no action is required.

810b0309-0a01xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted.

Explanation: Power unit has regained its redundancy.

May also be shown as 810b03090a01xxxx or 0x810b03090a01xxxx

Severity: Info

Alert Category: Warning - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0807

SNMP Trap ID: 10

Automatically notify Support: No

User response: Information only; no action is required.

810b030c-2581xxxx Non-redundant:Sufficient Resources from Redundancy Degraded or Fully Redundant for [RedundancySetElementName] has deasserted.

Explanation: Memory component group has regained its redundancy.

May also be shown as 810b030c2581xxxx or 0x810b030c2581xxxx

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0807

SNMP Trap ID: 43

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

810b0508-1381xxxx • 810b050a-1e81xxxx

810b0508-1381xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Power unit has regained its redundancy.

May also be shown as 810b05081381xxxx or 0x810b05081381xxxx

Severity: Info

Alert Category: Critical - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 9

Automatically notify Support: No

User response: Information only; no action is required.

810b0509-0a01xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Power unit has regained its redundancy.

May also be shown as 810b05090a01xxxx or 0x810b05090a01xxxx

Severity: Info

Alert Category: Critical - Redundant Power Supply

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 9

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e81xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 1 has regained its redundancy.

May also be shown as 810b050a1e81xxxx or 0x810b050a1e81xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e82xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 2 has regained its redundancy.

May also be shown as 810b050a1e82xxxx or 0x810b050a1e82xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e83xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 3 has regained its redundancy.

May also be shown as 810b050a1e83xxxx or 0x810b050a1e83xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e84xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 4 has regained its redundancy.

May also be shown as 810b050a1e84xxxx or 0x810b050a1e84xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e85xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 5 has regained its redundancy.

May also be shown as 810b050a1e85xxxx or 0x810b050a1e85xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050a-1e86xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Fan 6 has regained its redundancy.

May also be shown as 810b050a1e86xxxx or 0x810b050a1e86xxxx

Severity: Info

Alert Category: Critical - Fan Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 11

Automatically notify Support: No

User response: Information only; no action is required.

810b050c-2581xxxx Non-redundant:Insufficient Resources for [RedundancySetElementName] has deasserted.

Explanation: Memory component group has regained its redundancy.

May also be shown as 810b050c2581xxxx or 0x810b050c2581xxxx

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0811

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0007-0301xxxx [ProcessorElementName] has Recovered from IERR.

Explanation: IMM has detected that processor 1 recovered from an IERR condition.

May also be shown as 816f00070301xxxx or 0x816f00070301xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0007-0302xxxx [ProcessorElementName] has Recovered from IERR.

Explanation: IMM has detected that processor 2 recovered from an IERR condition.

May also be shown as 816f00070302xxxx or 0x816f00070302xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0007-0303xxxx [ProcessorElementName] has Recovered from IERR.

Explanation: IMM has detected that processor 3 recovered from an IERR condition.

May also be shown as 816f00070303xxxx or 0x816f00070303xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0007-0304xxxx [ProcessorElementName] has Recovered from IERR.

Explanation: IMM has detected that processor 4 recovered from an IERR condition.

May also be shown as 816f00070304xxxx or 0x816f00070304xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0043

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0008-0a01xxxx [PowerSupplyElementName] has been removed from container
[PhysicalPackageElementName].

Explanation: IMM has detected that Power Supply 1 has been removed.

May also be shown as 816f00080a01xxxx or 0x816f00080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0085

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0008-0a02xxxx [PowerSupplyElementName] has been removed from container
[PhysicalPackageElementName].

Explanation: IMM has detected that Power Supply 2 has been removed.

May also be shown as 816f00080a02xxxx or 0x816f00080a02xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0085

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0009-1381xxxx [PowerSupplyElementName] has been turned on.

Explanation: IMM has detected that the system power has been turned on.

May also be shown as 816f00091381xxxx or 0x816f00091381xxxx

Severity: Info

Alert Category: System - Power On

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0107

SNMP Trap ID: 24

Automatically notify Support: No

User response: Information only; no action is required.

816f000d-0400xxxx The [StorageVolumeElementName] has been removed from unit
[PhysicalPackageElementName].

Explanation: Presence of drive 0 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0400xxxx or 0x816f000d0400xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
 - Make sure that the drive properly seated.
 - If drive is properly seated, replace the drive.
-

816f000d-0401xxxx The [StorageVolumeElementName] has been removed from unit
[PhysicalPackageElementName].

Explanation: Presence of drive 1 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0401xxxx or 0x816f000d0401xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0402xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 2 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0402xxxx or 0x816f000d0402xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0403xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 3 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0403xxxx or 0x816f000d0403xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0404xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 4 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0404xxxx or 0x816f000d0404xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0405xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 5 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0405xxxx or 0x816f000d0405xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0406xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 6 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0406xxxx or 0x816f000d0406xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0407xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 7 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0407xxxx or 0x816f000d0407xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0408xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 8 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0408xxxx or 0x816f000d0408xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0409xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 9 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0409xxxx or 0x816f000d0409xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040axxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 10 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040axxxx or 0x816f000d040axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040bxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 11 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040bxxxx or 0x816f000d040bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040cxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 12 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040cxxxx or 0x816f000d040cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040dxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 13 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040dxxxx or 0x816f000d040dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040exxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 14 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040exxxx or 0x816f000d040exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-040fxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 15 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d040fxxxx or 0x816f000d040fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0410xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 16 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0410xxxx or 0x816f000d0410xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0411xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 17 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0411xxxx or 0x816f000d0411xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0412xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 18 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0412xxxx or 0x816f000d0412xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0413xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 19 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0413xxxx or 0x816f000d0413xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0414xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 20 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0414xxxx or 0x816f000d0414xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0415xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 21 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0415xxxx or 0x816f000d0415xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0416xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 22 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0416xxxx or 0x816f000d0416xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0417xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 23 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0417xxxx or 0x816f000d0417xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0418xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 24 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0418xxxx or 0x816f000d0418xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-0419xxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 25 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d0419xxxx or 0x816f000d0419xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041axxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 26 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041axxxx or 0x816f000d041axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041bxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 27 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041bxxxx or 0x816f000d041bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041cxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 28 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041cxxxx or 0x816f000d041cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041dxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 29 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041dxxxx or 0x816f000d041dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041exxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 30 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041exxxx or 0x816f000d041exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000d-041fxxxx The [StorageVolumeElementName] has been removed from unit [PhysicalPackageElementName].

Explanation: Presence of drive 31 is no longer detected. If hard drive is absent from drive bay a filler is required.

May also be shown as 816f000d041fxxxx or 0x816f000d041fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0163

SNMP Trap ID: 5

Automatically notify Support: No

User response:

- If drive was intentionally removed, no action required.
- Make sure that the drive properly seated.
- If drive is properly seated, replace the drive.

816f000f-2201xxxx The System [ComputerSystemElementName] has detected a POST Error deassertion.

Explanation: IMM has detected that Post Error has deasserted. (ABR Status or Firmware Error).

May also be shown as 816f000f2201xxxx or 0x816f000f2201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0185

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f000f-2202xxxx The System [ComputerSystemElementName] has detected a POST Error deassertion.

Explanation: This message is for the use case when an implementation has detected that Post Error has deasserted.

May also be shown as 816f000f2202xxxx or 0x816f000f2202xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0185

SNMP Trap ID: 50

Automatically notify Support: No

User response: Sys Boot Status :

816f0013-1701xxxx System [ComputerSystemElementName] has recovered from a diagnostic interrupt.

Explanation: The system has recovered from a NMI / Diagnostic Interrupt.

May also be shown as 816f00131701xxxx or 0x816f00131701xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0223

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b01xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 1 has been removed.

May also be shown as 816f00210b01xxxx or 0x816f00210b01xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b02xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 2 has been removed.

May also be shown as 816f00210b02xxxx or 0x816f00210b02xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b03xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 3 has been removed.

May also be shown as 816f00210b03xxxx or 0x816f00210b03xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b04xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 4 has been removed.

May also be shown as 816f00210b04xxxx or 0x816f00210b04xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b05xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 5 has been removed.

May also be shown as 816f00210b05xxxx or 0x816f00210b05xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b06xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 6 has been removed.

May also be shown as 816f00210b06xxxx or 0x816f00210b06xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b07xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 7 has been removed.

May also be shown as 816f00210b07xxxx or 0x816f00210b07xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-0b08xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a fault condition in PCIe slot 8 has been removed.

May also be shown as 816f00210b08xxxx or 0x816f00210b08xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-2201xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault condition in a slot has been removed.

May also be shown as 816f00212201xxxx or 0x816f00212201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0021-2582xxxx Fault condition removed on slot [PhysicalConnectorElementName] on system [ComputerSystemElementName].

Explanation: IMM has detected a Fault condition in a slot has been removed.

May also be shown as 816f00212582xxxx or 0x816f00212582xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0331

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0028-2101xxxx Sensor [SensorElementName] has returned to normal on management system [ComputerSystemElementName].

Explanation: Trusted Platform Module (TPM) was initialized and started successfully.

May also be shown as 816f00282101xxxx or 0x816f00282101xxxx

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0399

SNMP Trap ID: 60

Automatically notify Support: No

User response: Information Only; no action is required.

816f0107-0301xxxx An Over-Temperature Condition has been removed on [ProcessorElementName].

Explanation: The microprocessor 1 temperature has returned to below the critical level.

May also be shown as 816f01070301xxxx or 0x816f01070301xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

816f0107-0302xxxx An Over-Temperature Condition has been removed on [ProcessorElementName].

Explanation: The microprocessor 2 temperature has returned to below the critical level.

May also be shown as 816f01070302xxxx or 0x816f01070302xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

816f0107-0303xxxx An Over-Temperature Condition has been removed on [ProcessorElementName].

Explanation: The microprocessor 3 temperature has returned to below the critical level.

May also be shown as 816f01070303xxxx or 0x816f01070303xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

816f0107-0304xxxx An Over-Temperature Condition has been removed on [ProcessorElementName].

Explanation: The microprocessor 4 temperature has returned to below the critical level.

May also be shown as 816f01070304xxxx or 0x816f01070304xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0037

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

816f0108-0a01xxxx [PowerSupplyElementName] has returned to OK status.

Explanation: IMM has detected that Power Supply 1 has returned to a normal operational status.

May also be shown as 816f01080a01xxxx or 0x816f01080a01xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0087

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

816f0108-0a02xxxx [PowerSupplyElementName] has returned to OK status.

Explanation: IMM has detected that Power Supply 2 has returned to a normal operational status.

May also be shown as 816f01080a02xxxx or 0x816f01080a02xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0087

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

816f010c-2581xxxx Uncorrectable error recovery detected for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected a recovery from an uncorrectable memory error.

May also be shown as 816f010c2581xxxx or 0x816f010c2581xxxx

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0139

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f010d-0400xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 0 has been enabled.

May also be shown as 816f010d0400xxxx or 0x816f010d0400xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0401xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 1 has been enabled.

May also be shown as 816f010d0401xxxx or 0x816f010d0401xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0402xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 2 has been enabled.

May also be shown as 816f010d0402xxxx or 0x816f010d0402xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0403xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 3 has been enabled.

May also be shown as 816f010d0403xxxx or 0x816f010d0403xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0404xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 4 has been enabled.

May also be shown as 816f010d0404xxxx or 0x816f010d0404xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0405xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 5 has been enabled.

May also be shown as 816f010d0405xxxx or 0x816f010d0405xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0406xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 6 has been enabled.

May also be shown as 816f010d0406xxxx or 0x816f010d0406xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0407xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 7 has been enabled.

May also be shown as 816f010d0407xxxx or 0x816f010d0407xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0408xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 8 has been enabled.

May also be shown as 816f010d0408xxxx or 0x816f010d0408xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0409xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 9 has been enabled.

May also be shown as 816f010d0409xxxx or 0x816f010d0409xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040axxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 10 has been enabled.

May also be shown as 816f010d040axxxx or 0x816f010d040axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040bxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 11 has been enabled.

May also be shown as 816f010d040bxxxx or 0x816f010d040bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040cxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 12 has been enabled.

May also be shown as 816f010d040cxxxx or 0x816f010d040cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040dxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 13 has been enabled.

May also be shown as 816f010d040dxxxx or 0x816f010d040dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040exxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 14 has been enabled.

May also be shown as 816f010d040exxxx or 0x816f010d040exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-040fxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 15 has been enabled.

May also be shown as 816f010d040fxxxx or 0x816f010d040fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0410xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 16 has been enabled.

May also be shown as 816f010d0410xxxx or 0x816f010d0410xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0411xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 17 has been enabled.

May also be shown as 816f010d0411xxxx or 0x816f010d0411xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0412xxxx • 816f010d-0414xxxx

816f010d-0412xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 18 has been enabled.

May also be shown as 816f010d0412xxxx or 0x816f010d0412xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0413xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 19 has been enabled.

May also be shown as 816f010d0413xxxx or 0x816f010d0413xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0414xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 20 has been enabled.

May also be shown as 816f010d0414xxxx or 0x816f010d0414xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0415xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 21 has been enabled.

May also be shown as 816f010d0415xxxx or 0x816f010d0415xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0416xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 22 has been enabled.

May also be shown as 816f010d0416xxxx or 0x816f010d0416xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0417xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 23 has been enabled.

May also be shown as 816f010d0417xxxx or 0x816f010d0417xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0418xxxx • 816f010d-041axxxx

816f010d-0418xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 24 has been enabled.

May also be shown as 816f010d0418xxxx or 0x816f010d0418xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-0419xxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 25 has been enabled.

May also be shown as 816f010d0419xxxx or 0x816f010d0419xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041axxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 26 has been enabled.

May also be shown as 816f010d041axxxx or 0x816f010d041axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041bxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 27 has been enabled.

May also be shown as 816f010d041bxxxx or 0x816f010d041bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041cxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 28 has been enabled.

May also be shown as 816f010d041cxxxx or 0x816f010d041cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041dxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 29 has been enabled.

May also be shown as 816f010d041dxxxx or 0x816f010d041dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041exxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 30 has been enabled.

May also be shown as 816f010d041exxxx or 0x816f010d041exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010d-041fxxxx The [StorageVolumeElementName] has been enabled.

Explanation: The previously disabled drive 31 has been enabled.

May also be shown as 816f010d041fxxxx or 0x816f010d041fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0167

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f010f-2201xxxx The System [ComputerSystemElementName] has recovered from a firmware hang.

Explanation: IMM has recovered from a System Firmware Hang.

May also be shown as 816f010f2201xxxx or 0x816f010f2201xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0187

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0113-0301xxxx Bus [SensorElementName] has recovered from a bus timeout.

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130301xxxx or 0x816f01130301xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0113-0302xxxx Bus [SensorElementName] has recovered from a bus timeout.

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130302xxxx or 0x816f01130302xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0113-0303xxxx Bus [SensorElementName] has recovered from a bus timeout.

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130303xxxx or 0x816f01130303xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0113-0304xxxx Bus [SensorElementName] has recovered from a bus timeout.

Explanation: This message is for the use case when an implementation has detected that a system has recovered from a Bus Timeout.

May also be shown as 816f01130304xxxx or 0x816f01130304xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0225

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f011b-0701xxxx The connector [PhysicalConnectorElementName] configuration error has been repaired.

Explanation: IMM has detected an Interconnect Configuration error has been repaired.

May also be shown as 816f011b0701xxxx or 0x816f011b0701xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0267

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0125-0c01xxxx [ManagedElementName] detected as present.

Explanation: IMM has detected the operator information panel is present.

May also be shown as 816f01250c01xxxx or 0x816f01250c01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0390

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0207-0301xxxx [ProcessorElementName] has Recovered from FRB1/BIST condition.

Explanation: IMM has detected that Processor 1 has recovered from a FRB1/BIST condition.

May also be shown as 816f02070301xxxx or 0x816f02070301xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0207-0302xxxx [ProcessorElementName] has Recovered from FRB1/BIST condition.

Explanation: IMM has detected that Processor 2 has recovered from a FRB1/BIST condition.

May also be shown as 816f02070302xxxx or 0x816f02070302xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0207-0303xxxx [ProcessorElementName] has Recovered from FRB1/BIST condition.

Explanation: IMM has detected that Processor 3 has recovered from a FRB1/BIST condition.

May also be shown as 816f02070303xxxx or 0x816f02070303xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0207-0304xxxx [ProcessorElementName] has Recovered from FRB1/BIST condition.

Explanation: IMM has detected that Processor 4 has recovered from a FRB1/BIST condition.

May also be shown as 816f02070304xxxx or 0x816f02070304xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0207-2583xxxx [ProcessorElementName] has Recovered from FRB1/BIST condition.

Explanation: IMM has detected that a Processor has recovered from a FRB1/BIST condition.

May also be shown as 816f02072583xxxx or 0x816f02072583xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0045

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f020d-0400xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 0 no longer exists.

May also be shown as 816f020d0400xxxx or 0x816f020d0400xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0401xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 1 no longer exists.

May also be shown as 816f020d0401xxxx or 0x816f020d0401xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0402xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 2 no longer exists.

May also be shown as 816f020d0402xxxx or 0x816f020d0402xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0403xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 3 no longer exists.

May also be shown as 816f020d0403xxxx or 0x816f020d0403xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0404xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 4 no longer exists.

May also be shown as 816f020d0404xxxx or 0x816f020d0404xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0405xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 5 no longer exists.

May also be shown as 816f020d0405xxxx or 0x816f020d0405xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0406xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 6 no longer exists.

May also be shown as 816f020d0406xxxx or 0x816f020d0406xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0407xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 7 no longer exists.

May also be shown as 816f020d0407xxxx or 0x816f020d0407xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0408xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 8 no longer exists.

May also be shown as 816f020d0408xxxx or 0x816f020d0408xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0409xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 9 no longer exists.

May also be shown as 816f020d0409xxxx or 0x816f020d0409xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040axxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 10 no longer exists.

May also be shown as 816f020d040axxxx or 0x816f020d040axxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040bxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 11 no longer exists.

May also be shown as 816f020d040bxxxx or 0x816f020d040bxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040cxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 12 no longer exists.

May also be shown as 816f020d040cxxxx or 0x816f020d040cxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040dxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 13 no longer exists.

May also be shown as 816f020d040dxxxx or 0x816f020d040dxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040exxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 14 no longer exists.

May also be shown as 816f020d040exxxx or 0x816f020d040exxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-040fxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 15 no longer exists.

May also be shown as 816f020d040fxxxx or 0x816f020d040fxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0410xxxx • 816f020d-0412xxxx

816f020d-0410xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 16 no longer exists.

May also be shown as 816f020d0410xxxx or 0x816f020d0410xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0411xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 17 no longer exists.

May also be shown as 816f020d0411xxxx or 0x816f020d0411xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0412xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 18 no longer exists.

May also be shown as 816f020d0412xxxx or 0x816f020d0412xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0413xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 19 no longer exists.

May also be shown as 816f020d0413xxxx or 0x816f020d0413xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0414xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 20 no longer exists.

May also be shown as 816f020d0414xxxx or 0x816f020d0414xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0415xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 21 no longer exists.

May also be shown as 816f020d0415xxxx or 0x816f020d0415xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0416xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 22 no longer exists.

May also be shown as 816f020d0416xxxx or 0x816f020d0416xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0417xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 23 no longer exists.

May also be shown as 816f020d0417xxxx or 0x816f020d0417xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0418xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 24 no longer exists.

May also be shown as 816f020d0418xxxx or 0x816f020d0418xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-0419xxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 25 no longer exists.

May also be shown as 816f020d0419xxxx or 0x816f020d0419xxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041axxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 26 no longer exists.

May also be shown as 816f020d041axxxx or 0x816f020d041axxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041bxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 27 no longer exists.

May also be shown as 816f020d041bxxxx or 0x816f020d041bxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041cxxxx • 816f020d-041exxxx

816f020d-041cxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 28 no longer exists.

May also be shown as 816f020d041cxxxx or 0x816f020d041cxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041dxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 29 no longer exists.

May also be shown as 816f020d041dxxxx or 0x816f020d041dxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041exxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 30 no longer exists.

May also be shown as 816f020d041exxxx or 0x816f020d041exxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f020d-041fxxxx Failure no longer Predicted on [StorageVolumeElementName] for array [ComputerSystemElementName].

Explanation: The predicted failure for Drive 31 no longer exists.

May also be shown as 816f020d041fxxxx or 0x816f020d041fxxxx

Severity: Info

Alert Category: System - Predicted Failure

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0169

SNMP Trap ID: 27

Automatically notify Support: No

User response: Information only; no action is required.

816f0308-0a01xxxx [PowerSupplyElementName] has returned to a Normal Input State.

Explanation: IMM has detected that the input power for Power Supply 1 has returned to normal.

May also be shown as 816f03080a01xxxx or 0x816f03080a01xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0099

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0308-0a02xxxx [PowerSupplyElementName] has returned to a Normal Input State.

Explanation: IMM has detected that the input power for Power Supply 2 has returned to normal.

May also be shown as 816f03080a02xxxx or 0x816f03080a02xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0099

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f030c-2581xxxx Scrub Failure for [PhysicalMemoryElementName] on Subsystem [MemoryElementName] has recovered.

Explanation: IMM has detected a Memory Scrub failure recovery. (Planar DIMMs)

May also be shown as 816f030c2581xxxx or 0x816f030c2581xxxx

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0137

SNMP Trap ID: 41

Automatically notify Support: No

User response: Information only; no action is required.

816f0313-1701xxxx System [ComputerSystemElementName] has recovered from an NMI.

Explanation: IMM has detected a Software NMI has been Recovered from.

May also be shown as 816f03131701xxxx or 0x816f03131701xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0230

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f040c-2581xxxx [PhysicalMemoryElementName] Enabled on Subsystem [MemoryElementName].

Explanation: IMM has detected that Memory has been Enabled.

May also be shown as 816f040c2581xxxx or 0x816f040c2581xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0130

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0507-0301xxxx [ProcessorElementName] has Recovered from a Configuration Mismatch.

Explanation: Processor 1 has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070301xxxx or 0x816f05070301xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0507-0302xxxx [ProcessorElementName] has Recovered from a Configuration Mismatch.

Explanation: Processor 2 has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070302xxxx or 0x816f05070302xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0507-0303xxxx [ProcessorElementName] has Recovered from a Configuration Mismatch.

Explanation: Processor 3 has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070303xxxx or 0x816f05070303xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0507-0304xxxx [ProcessorElementName] has Recovered from a Configuration Mismatch.

Explanation: Processor 4 has Recovered from a Processor Configuration Mismatch.

May also be shown as 816f05070304xxxx or 0x816f05070304xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0507-2583xxxx [ProcessorElementName] has Recovered from a Configuration Mismatch.

Explanation: One or more processors have recovered from a processor configuration mismatch.

May also be shown as 816f05072583xxxx or 0x816f05072583xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0063

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f050c-2581xxxx Memory Logging Limit Removed for [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected that the Memory Logging Limit has been Removed.

May also be shown as 816f050c2581xxxx or 0x816f050c2581xxxx

Severity: Info

Alert Category: Warning - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0145

SNMP Trap ID: 43

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f050d-0400xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0400xxxx or 0x816f050d0400xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0401xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0401xxxx or 0x816f050d0401xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0402xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0402xxxx or 0x816f050d0402xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0403xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0403xxxx or 0x816f050d0403xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0404xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0404xxxx or 0x816f050d0404xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0405xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0405xxxx or 0x816f050d0405xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0406xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0406xxxx or 0x816f050d0406xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0407xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0407xxxx or 0x816f050d0407xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0408xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0408xxxx or 0x816f050d0408xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0409xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0409xxxx or 0x816f050d0409xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040axxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040axxxx or 0x816f050d040axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040bxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040bxxxx or 0x816f050d040bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040cxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040cxxxx or 0x816f050d040cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040dxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040dxxxx or 0x816f050d040dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040exxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040exxxx or 0x816f050d040exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-040fxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d040fxxxx or 0x816f050d040fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0410xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0410xxxx or 0x816f050d0410xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0411xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0411xxxx or 0x816f050d0411xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0412xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0412xxxx or 0x816f050d0412xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0413xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0413xxxx or 0x816f050d0413xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0414xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0414xxxx or 0x816f050d0414xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0415xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0415xxxx or 0x816f050d0415xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0416xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0416xxxx or 0x816f050d0416xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0417xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0417xxxx or 0x816f050d0417xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0418xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0418xxxx or 0x816f050d0418xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-0419xxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d0419xxxx or 0x816f050d0419xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041axxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041axxxx or 0x816f050d041axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041bxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041bxxxx or 0x816f050d041bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041cxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041cxxxx or 0x816f050d041cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041dxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041dxxxx or 0x816f050d041dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041exxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041exxxx or 0x816f050d041exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f050d-041fxxxx Critical Array [ComputerSystemElementName] has deasserted.

Explanation: The RAID array is no longer in a critical condition.

May also be shown as 816f050d041fxxxx or 0x816f050d041fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0175

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f0607-0301xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted.

Explanation: An SM BIOS uncorrectable CPU complex error has been deasserted for microprocessor 1.

May also be shown as 816f06070301xxxx or 0x816f06070301xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0607-0302xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted.

Explanation: An SM BIOS uncorrectable CPU complex error has been deasserted for microprocessor 2.

May also be shown as 816f06070302xxxx or 0x816f06070302xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0607-0303xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted.

Explanation: An SM BIOS uncorrectable CPU complex error has been deasserted for microprocessor 3.

May also be shown as 816f06070303xxxx or 0x816f06070303xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0607-0304xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted.

Explanation: An SM BIOS uncorrectable CPU complex error has been deasserted for microprocessor 4.

May also be shown as 816f06070304xxxx or 0x816f06070304xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0607-2583xxxx An SM BIOS Uncorrectable CPU complex error for [ProcessorElementName] has deasserted.

Explanation: SM BIOS Uncorrectable CPU complex error has deasserted.

May also be shown as 816f06072583xxxx or 0x816f06072583xxxx

Severity: Info

Alert Category: Critical - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0817

SNMP Trap ID: 40

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0608-2584xxxx [PowerSupplyElementName] Configuration is OK.

Explanation: Power Supply configuration is OK.

May also be shown as 816f06082584xxxx or 0x816f06082584xxxx

Severity: Info

Alert Category: Critical - Power

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0105

SNMP Trap ID: 4

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0400xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0400xxxx or 0x816f060d0400xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0401xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0401xxxx or 0x816f060d0401xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0402xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0402xxxx or 0x816f060d0402xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0403xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0403xxxx or 0x816f060d0403xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0404xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0404xxxx or 0x816f060d0404xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0405xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0405xxxx or 0x816f060d0405xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0406xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0406xxxx or 0x816f060d0406xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0407xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0407xxxx or 0x816f060d0407xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0408xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0408xxxx or 0x816f060d0408xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0409xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0409xxxx or 0x816f060d0409xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040axxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040axxxx or 0x816f060d040axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040bxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040bxxxx or 0x816f060d040bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040cxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040cxxxx or 0x816f060d040cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040dxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040dxxxx or 0x816f060d040dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040exxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040exxxx or 0x816f060d040exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-040fxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d040fxxxx or 0x816f060d040fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0410xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0410xxxx or 0x816f060d0410xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0411xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0411xxxx or 0x816f060d0411xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0412xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0412xxxx or 0x816f060d0412xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0413xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0413xxxx or 0x816f060d0413xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0414xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0414xxxx or 0x816f060d0414xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0415xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0415xxxx or 0x816f060d0415xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0416xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0416xxxx or 0x816f060d0416xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0417xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0417xxxx or 0x816f060d0417xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0418xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0418xxxx or 0x816f060d0418xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-0419xxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d0419xxxx or 0x816f060d0419xxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041axxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041axxxx or 0x816f060d041axxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041bxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041bxxxx or 0x816f060d041bxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041cxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041cxxxx or 0x816f060d041cxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041dxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041dxxxx or 0x816f060d041dxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041exxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041exxxx or 0x816f060d041exxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f060d-041fxxxx Array in system [ComputerSystemElementName] has been restored.

Explanation: IMM has detected that a Failed Array has been Restored.

May also be shown as 816f060d041fxxxx or 0x816f060d041fxxxx

Severity: Info

Alert Category: Critical - Hard Disk drive

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0177

SNMP Trap ID: 5

Automatically notify Support: No

User response: Information only; no action is required.

816f0707-0301xxxx [ProcessorElementName] in slot [SlotElementName] has been removed.

Explanation: IMM has detected that Processor 1 has been removed.

May also be shown as 816f07070301xxxx or 0x816f07070301xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0035

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070c-2581xxxx Configuration error for [PhysicalMemoryElementName] on Subsystem [MemoryElementName] has deasserted.

Explanation: IMM has detected a Memory DIMM configuration error has deasserted.

May also be shown as 816f070c2581xxxx or 0x816f070c2581xxxx

Severity: Info

Alert Category: Critical - Memory

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0127

SNMP Trap ID: 41

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f070d-0400xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0400xxxx or 0x816f070d0400xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0401xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0401xxxx or 0x816f070d0401xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0402xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0402xxxx or 0x816f070d0402xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0403xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0403xxxx or 0x816f070d0403xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0404xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0404xxxx or 0x816f070d0404xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0405xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0405xxxx or 0x816f070d0405xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0406xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0406xxxx or 0x816f070d0406xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0407xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0407xxxx or 0x816f070d0407xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0408xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0408xxxx or 0x816f070d0408xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0409xxxx • 816f070d-040bxxxx

816f070d-0409xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0409xxxx or 0x816f070d0409xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040axxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040axxxx or 0x816f070d040axxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040bxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040bxxxx or 0x816f070d040bxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040cxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040cxxxx or 0x816f070d040cxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040dxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040dxxxx or 0x816f070d040dxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040exxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040exxxx or 0x816f070d040exxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-040fxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d040fxxxx or 0x816f070d040fxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0410xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0410xxxx or 0x816f070d0410xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0411xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0411xxxx or 0x816f070d0411xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0412xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0412xxxx or 0x816f070d0412xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0413xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0413xxxx or 0x816f070d0413xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0414xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0414xxxx or 0x816f070d0414xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0415xxxx • 816f070d-0417xxxx

816f070d-0415xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0415xxxx or 0x816f070d0415xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0416xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0416xxxx or 0x816f070d0416xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0417xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0417xxxx or 0x816f070d0417xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0418xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0418xxxx or 0x816f070d0418xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-0419xxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d0419xxxx or 0x816f070d0419xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041axxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041axxxx or 0x816f070d041axxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041bxxxx • 816f070d-041dxxxx

816f070d-041bxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041bxxxx or 0x816f070d041bxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041cxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041cxxxx or 0x816f070d041cxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041dxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041dxxxx or 0x816f070d041dxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041exxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041exxxx or 0x816f070d041exxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f070d-041fxxxx Rebuild completed for Array in system [ComputerSystemElementName].

Explanation: IMM has detected that an Array Rebuild has Completed.

May also be shown as 816f070d041fxxxx or 0x816f070d041fxxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0179

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0807-0301xxxx [ProcessorElementName] has been Enabled.

Explanation: IMM has detected Processor 1 has been Enabled.

May also be shown as 816f08070301xxxx or 0x816f08070301xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0807-0302xxxx [ProcessorElementName] has been Enabled.

Explanation: IMM has detected Processor 2 has been Enabled.

May also be shown as 816f08070302xxxx or 0x816f08070302xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0807-0303xxxx [ProcessorElementName] has been Enabled.

Explanation: IMM has detected Processor 3 has been Enabled.

May also be shown as 816f08070303xxxx or 0x816f08070303xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0807-0304xxxx [ProcessorElementName] has been Enabled.

Explanation: IMM has detected Processor 4 has been Enabled.

May also be shown as 816f08070304xxxx or 0x816f08070304xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0807-2583xxxx [ProcessorElementName] has been Enabled.

Explanation: IMM has detected that one or more processors have been enabled.

May also be shown as 816f08072583xxxx or 0x816f08072583xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0060

SNMP Trap ID:

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0813-2581xxxx Bus [SensorElementName] has recovered from an Uncorrectable Bus Error.

Explanation: IMM has detected that the system has recovered from a bus uncorrectable error.

May also be shown as 816f08132581xxxx or 0x816f08132581xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0813-2582xxxx Bus [SensorElementName] has recovered from an Uncorrectable Bus Error.

Explanation: IMM has detected that the system has recovered from a bus uncorrectable error.

May also be shown as 816f08132582xxxx or 0x816f08132582xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0813-2583xxxx Bus [SensorElementName] has recovered from an Uncorrectable Bus Error.

Explanation: IMM has detected that the system has recovered from a bus uncorrectable error.

May also be shown as 816f08132583xxxx or 0x816f08132583xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0241

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f090c-2581xxxx [PhysicalMemoryElementName] on Subsystem [MemoryElementName] is no longer Throttled.

Explanation: IMM has detected Memory component group is no longer Throttled. (Planar DIMMs)

May also be shown as 816f090c2581xxxx or 0x816f090c2581xxxx

Severity: Info

Alert Category: System - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0143

SNMP Trap ID:

Automatically notify Support: No

User response: Information only; no action is required.

816f0a07-0301xxxx The Processor [ProcessorElementName] is no longer operating in a Degraded State.

Explanation: IMM has detected Processor 1 is no longer running in the Degraded state.

May also be shown as 816f0a070301xxxx or 0x816f0a070301xxxx

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

User response: Information only; no action is required.

816f0a07-0302xxxx The Processor [ProcessorElementName] is no longer operating in a Degraded State.

Explanation: IMM has detected Processor 2 is no longer running in the Degraded state.

May also be shown as 816f0a070302xxxx or 0x816f0a070302xxxx

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

816f0a07-0303xxxx The Processor [ProcessorElementName] is no longer operating in a Degraded State.

Explanation: IMM has detected Processor 3 is no longer running in the Degraded state.

May also be shown as 816f0a070303xxxx or 0x816f0a070303xxxx

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

User response: Information only; no action is required.

816f0a07-0304xxxx The Processor [ProcessorElementName] is no longer operating in a Degraded State.

Explanation: IMM has detected Processor 4 is no longer running in the Degraded state.

May also be shown as 816f0a070304xxxx or 0x816f0a070304xxxx

Severity: Info

Alert Category: Warning - CPU

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0039

SNMP Trap ID: 42

Automatically notify Support: No

User response: Information only; no action is required.

816f0a0c-2581xxxx An Over-Temperature Condition has been removed on the [PhysicalMemoryElementName] on Subsystem [MemoryElementName].

Explanation: IMM has detected an Over Temperature Condition for Memory component group that has been Removed.

May also be shown as 816f0a0c2581xxxx or 0x816f0a0c2581xxxx

Severity: Info

Alert Category: Critical - Temperature

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0147

SNMP Trap ID: 0

Automatically notify Support: No

User response: Information only; no action is required.

816f0a13-0301xxxx Bus [SensorElementName] has recovered from a Fatal Bus Error.

Explanation: CPU 1 PECE Bus has recovered from a Fatal Bus Error.

May also be shown as 816f0a130301xxxx or 0x816f0a130301xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0a13-0302xxxx Bus [SensorElementName] has recovered from a Fatal Bus Error.

Explanation: CPU 2 PECE Bus has recovered from a Fatal Bus Error.

May also be shown as 816f0a130302xxxx or 0x816f0a130302xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0a13-0303xxxx Bus [SensorElementName] has recovered from a Fatal Bus Error.

Explanation: CPU 3 PECI Bus has recovered from a Fatal Bus Error.

May also be shown as 816f0a130303xxxx or 0x816f0a130303xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0a13-0304xxxx Bus [SensorElementName] has recovered from a Fatal Bus Error.

Explanation: CPU 4 PECI Bus has recovered from a Fatal Bus Error.

May also be shown as 816f0a130304xxxx or 0x816f0a130304xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: Information only; no action is required.

816f0a13-2401xxxx Bus [SensorElementName] has recovered from a Fatal Bus Error.

Explanation: IMM has detected that the system has recovered from a fatal bus error.

May also be shown as 816f0a132401xxxx or 0x816f0a132401xxxx

Severity: Info

Alert Category: Critical - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0245

SNMP Trap ID: 50

Automatically notify Support: No

User response: This is a UEFI detected event. The UEFI diagnostic code for this event can be found in the logged IMM message text. Please refer to the UEFI diagnostic code in the "UEFI diagnostic code" section of the Info Center for the appropriate user response.

816f0b13-3101xxxx

816f0b13-3101xxxx Bus [SensorElementName] is no longer operating in a degraded state.

Explanation: IMM has detected the DMI Bus is No Longer Degraded.

May also be shown as 816f0b133101xxxx or 0x816f0b133101xxxx

Severity: Info

Alert Category: Warning - Other

Serviceable: No

CIM Information: Prefix: PLAT and ID: 0247

SNMP Trap ID: 60

Automatically notify Support: No

User response: Information only; no action is required.

Appendix E. Getting help and technical assistance

If you need help, service, or technical assistance or just want more information about Lenovo products, you will find a wide variety of sources available from Lenovo to assist you.

Use this information to obtain additional information about Lenovo and Lenovo products, and determine what to do if you experience a problem with your Lenovo system or optional device.

Note: This section includes references to IBM web sites and information about obtaining service. IBM is Lenovo's preferred service provider for the System x, Flex System, and NeXtScale System products.

Before you call

Before you call, make sure that you have taken these steps to try to solve the problem yourself.

If you believe that you require warranty service for your Lenovo product, the service technicians will be able to assist you more efficiently if you prepare before you call.

- Check all cables to make sure that they are connected.
- Check the power switches to make sure that the system and any optional devices are turned on.
- Check for updated software, firmware, and operating-system device drivers for your Lenovo product. The Lenovo Warranty terms and conditions state that you, the owner of the Lenovo product, are responsible for maintaining and updating all software and firmware for the product (unless it is covered by an additional maintenance contract). Your service technician will request that you upgrade your software and firmware if the problem has a documented solution within a software upgrade.
- If you have installed new hardware or software in your environment, check <http://www.ibm.com/systems/info/x86servers/serverproven/compat/us> to make sure that the hardware and software is supported by your product.
- Go to <http://www.ibm.com/supportportal> to check for information to help you solve the problem.
- Gather the following information to provide to the service technician. This data will help the service technician quickly provide a solution to your problem and ensure that you receive the level of service for which you might have contracted.
 - Hardware and Software Maintenance agreement contract numbers, if applicable
 - Machine type number (Lenovo 4-digit machine identifier)
 - Model number
 - Serial number
 - Current system UEFI and firmware levels
 - Other pertinent information such as error messages and logs
- Go to http://www.ibm.com/support/entry/portal/Open_service_request to submit an Electronic Service Request. Submitting an Electronic Service Request

will start the process of determining a solution to your problem by making the pertinent information available to the service technicians. The IBM service technicians can start working on your solution as soon as you have completed and submitted an Electronic Service Request.

You can solve many problems without outside assistance by following the troubleshooting procedures that Lenovo provides in the online help or in the Lenovo product documentation. The Lenovo product documentation also describes the diagnostic tests that you can perform. The documentation for most systems, operating systems, and programs contains troubleshooting procedures and explanations of error messages and error codes. If you suspect a software problem, see the documentation for the operating system or program.

Using the documentation

Information about your Lenovo system and preinstalled software, if any, or optional device is available in the product documentation. That documentation can include printed documents, online documents, readme files, and help files.

See the troubleshooting information in your system documentation for instructions for using the diagnostic programs. The troubleshooting information or the diagnostic programs might tell you that you need additional or updated device drivers or other software. Lenovo maintains pages on the World Wide Web where you can get the latest technical information and download device drivers and updates. To access these pages, go to <http://www.ibm.com/supportportal>.

Getting help and information from the World Wide Web

Up-to-date information about Lenovo products and support is available on the World Wide Web.

On the World Wide Web, up-to-date information about Lenovo systems, optional devices, services, and support is available at <http://www.ibm.com/supportportal>. The most current version of the product documentation is available in the following product-specific Information Centers:

Flex System products:

System x products:

<http://www.ibm.com/systems/x>

NeXtScale System products:

How to send DSA data

You can use the Enhanced Customer Data Repository to send diagnostic data to IBM.

Before you send diagnostic data to IBM, read the terms of use at <http://www.ibm.com/de/support/ecurep/terms.html>.

You can use any of the following methods to send diagnostic data:

- **Standard upload:** http://www.ibm.com/de/support/ecurep/send_http.html
- **Standard upload with the system serial number:** http://www.ecurep.ibm.com/app/upload_hw
- **Secure upload:** http://www.ibm.com/de/support/ecurep/send_http.html#secure
- **Secure upload with the system serial number:** https://www.ecurep.ibm.com/app/upload_hw

Creating a personalized support web page

You can create a personalized support web page by identifying Lenovo products that are of interest to you.

To create a personalized support web page, go to <http://www.ibm.com/support/mynotifications>. From this personalized page, you can subscribe to weekly email notifications about new technical documents, search for information and downloads, and access various administrative services.

Software service and support

Through IBM Support Line, you can get telephone assistance, for a fee, with usage, configuration, and software problems with your Lenovo products.

For more information about Support Line and other IBM services, see <http://www.ibm.com/services> or see <http://www.ibm.com/planetwide> for support telephone numbers. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

Hardware service and support

IBM is Lenovo's preferred service provider for the System x, Flex System and NeXtScale System products.

You can receive hardware service through your Lenovo reseller or from IBM. To locate a reseller authorized by Lenovo to provide warranty service, go to <http://www.ibm.com/partnerworld/> and click **Business Partner Locator**. For IBM support telephone numbers, see <http://www.ibm.com/planetwide>. In the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

In the U.S. and Canada, hardware service and support is available 24 hours a day, 7 days a week. In the U.K., these services are available Monday through Friday, from 9 a.m. to 6 p.m.

Taiwan product service

Use this information to contact IBM Taiwan product service.

台灣 IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

IBM Taiwan product service contact information:

IBM Taiwan Corporation
3F, No 7, Song Ren Rd.
Taipei, Taiwan
Telephone: 0800-016-888

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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard-disk-drive bays with the largest currently supported drives that are available from Lenovo.

Maximum memory might require replacement of the standard memory with an optional memory module.

Each solid-state memory cell has an intrinsic, finite number of write cycles that the cell can incur. Therefore, a solid-state device has a maximum number of write cycles that it can be subjected to, expressed as total bytes written (TBW). A device that has exceeded this limit might fail to respond to system-generated commands or might be incapable of being written to. Lenovo is not responsible for replacement of a device that has exceeded its maximum guaranteed number of program/erase cycles, as documented in the Official Published Specifications for the device.

Lenovo makes no representations or warranties with respect to non-Lenovo products. Support (if any) for the non-Lenovo products is provided by the third party, not Lenovo.

Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

Recycling information

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information on recycling Lenovo products, go to:

Particulate contamination

Attention: Airborne particulates (including metal flakes or particles) and reactive gases acting alone or in combination with other environmental factors such as humidity or temperature might pose a risk to the device that is described in this document.

Risks that are posed by the presence of excessive particulate levels or concentrations of harmful gases include damage that might cause the device to malfunction or cease functioning altogether. This specification sets forth limits for particulates and gases that are intended to avoid such damage. The limits must not be viewed or used as definitive limits, because numerous other factors, such as temperature or moisture content of the air, can influence the impact of particulates or environmental corrosives and gaseous contaminant transfer. In the absence of specific limits that are set forth in this document, you must implement practices that maintain particulate and gas levels that are consistent with the protection of human health and safety. If Lenovo determines that the levels of particulates or gases in your environment have caused damage to the device, Lenovo may condition provision of repair or replacement of devices or parts on implementation of appropriate remedial measures to mitigate such environmental contamination. Implementation of such remedial measures is a customer responsibility.

Table 48. Limits for particulates and gases

Contaminant	Limits
Particulate	<ul style="list-style-type: none">• The room air must be continuously filtered with 40% atmospheric dust spot efficiency (MERV 9) according to ASHRAE Standard 52.2¹.• Air that enters a data center must be filtered to 99.97% efficiency or greater, using high-efficiency particulate air (HEPA) filters that meet MIL-STD-282.• The deliquescent relative humidity of the particulate contamination must be more than 60%².• The room must be free of conductive contamination such as zinc whiskers.
Gaseous	<ul style="list-style-type: none">• Copper: Class G1 as per ANSI/ISA 71.04-1985³• Silver: Corrosion rate of less than 300 Å in 30 days

Table 48. Limits for particulates and gases (continued)

Contaminant	Limits
	<p>¹ ASHRAE 52.2-2008 - <i>Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size</i>. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.</p> <p>² The deliquescent relative humidity of particulate contamination is the relative humidity at which the dust absorbs enough water to become wet and promote ionic conduction.</p> <p>³ ANSI/ISA-71.04-1985. <i>Environmental conditions for process measurement and control systems: Airborne contaminants</i>. Instrument Society of America, Research Triangle Park, North Carolina, U.S.A.</p>

Telecommunication regulatory statement

This product may not be certified in your country for connection by any means whatsoever to interfaces of public telecommunications networks. Further certification may be required by law prior to making any such connection. Contact a Lenovo representative or reseller for any questions.

Electronic emission notices

When you attach a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices that are supplied with the monitor.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Lenovo is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

Industry Canada Class A emission compliance statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Australia and New Zealand Class A statement

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

European Union EMC Directive conformance statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia

Germany Class A statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG (früher 89/336/EWG) zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der Lenovo empfohlene Kabel angeschlossen werden. Lenovo übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der Lenovo verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der Lenovo gesteckt/eingebaut werden.

Deutschland:

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Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EMV EG Richtlinie 2004/108/EC (früher 89/336/EWG), für Geräte der Klasse A.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Gropiusplatz 10, D-70563 Stuttgart.

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Nach der EN 55022: „Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen.“

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Japan VCCI Class A statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用する
と電波妨害を引き起こすことがあります。この場合には使用者が適切な対策
を講ずるよう要求されることがあります。 VCCI-A

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

Korea Communications Commission (KCC) statement

이 기기는 업무용(A급)으로 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

This is electromagnetic wave compatibility equipment for business (Type A). Sellers and users need to pay attention to it. This is for any areas other than home.

Russia Electromagnetic Interference (EMI) Class A statement

ВНИМАНИЕ! Настоящее изделие относится к классу А. В жилых помещениях оно может создавать радиопомехи, для снижения которых необходимы дополнительные меры

People's Republic of China Class A electronic emission statement

中华人民共和国“A类”警告声明

声明

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

Taiwan Class A compliance statement

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Index

A

- ABR, automatic boot failure recovery 221
- ac good LED 186
- ac power LED 23, 24
- acoustical noise emissions 9
- Active Energy Manager plug-in 12
- adapter
 - flash power module
 - installing remotely in the server 286
 - removing remotely in the server 285
 - installing 84
 - PCI Express bus 244
 - PCI-X bus 244
 - removing the ServeRAID N2125 SAS/SATA 264
 - replacing 244
- adapter installation instructions 84
- adapter, I350-T4 ML2
 - replacing 280
- adapter, I350-T4 ML2 Adapter
 - removing 279
- adapter, ML Dual-port 10 GbE SFP+ Adapter
 - removing 281
- adapter, ML2 Dual-port 10 Gbase-T Adapter
 - removing 281
 - replacing 282, 284
- adapter, ML2 Dual-port 10 GbE SFP+ Adapter
 - replacing 282, 284
- adapter, N2215 host bus adapter
 - host bus adapter 266
 - removing 266
- adapter, replacing 245
- adapter, ServeRAID M5120
 - installing 89
- adapter, ServeRAID M5120 SAS/SATA
 - installing 263
 - removing 262
- adapter, ServeRAID M5210
 - installing 86
- adapter, ServeRAID M5210 SAS/SATA
 - installing 260
 - removing 259
- adapter, ServeRAID N2125 controller for IBM System x
 - installing 91
- adapter, ServeRAID N2125 SAS/SATA Host Bus
 - installing 91
- adapter, ServeRAID N2215
 - host bus adapter 266
 - replacing 266
- adapter, ServeRAID N2215 Host Bus
 - installing 92
- adapter, supported in the server 78
- adapters supported 76

- adapters, Ethernet 78
- adapters, ServeRAID 78
- administrator password 152
- Advanced Settings Utility (ASU) 166
- air baffle
 - removing from microprocessor 47
- applying current firmware
 - using best practices 27
- arrays, RAID
 - configuring 164
- ASM event log 12
- assertion event, system-event log 188, 189
- assistance, getting 867
- Australia Class A statement 875
- automated service request 195
- automatic boot failure recovery (ABR) 221
- availability, server 17

B

- backplane
 - 8x1.8-inch hot-swap drive backplane assembly
 - with RAID expansion 118
 - 8x2.5-inch hot-swap drive backplane assembly 122
 - with controller expander 126
 - for 4x2.5-inch drives 62
 - for 8x1.8-inch drives 62, 63
 - for 8x2.5-inch drives 62, 63
- backplane assembly, 8x1.8-inch SSD drive
 - removing 306
 - replacing 307
- backplane configurations
 - supported SAS/SATA 62, 64
- backplane with controller expander
 - for 8x2.5-inch drives 62, 63
- backplane, 4x2.5-inch hot-swap SAS/SATA
 - removing 304
 - replacing 305
- backplane, drive
 - configuration for 28 drives 70
 - configuration for 4 drives 64
 - configurations for 12 drives 65
 - configurations for 16 drives 66
 - configurations for 20 drives 68
 - configurations for 24 drives 69
 - configurations for 32 drives 70
 - configurations for 8 drives 65
 - connecting the SAS cables 70
 - supported configurations 62
- backup firmware
 - starting 155
- battery, replacing 293
- battery, system
 - installing 293
 - replacing 291
- bays 6, 7

- best practices
 - use to apply current firmware and device-driver updates 27
- bezel
 - removing 238
- blue screen capture features 12, 15, 142
- blue-screen capture feature
 - overview 12, 15, 143, 157, 158
- blue-screen feature 157
- boot code display area 21, 22
- boot code display, on the light path
 - diagnostics panel error codes 349
- boot failure, Nx 221
- boot manager program
 - using 155
- Business Partners instructions 27, 28
- button, light path 32, 34
- button, presence detection 20, 21
- buttons
 - on the system board 32
- buttons, available on the server 32, 34

C

- cables
 - connecting 139
- cables, power and signal
 - connecting to internal drives 336
- cache card, RAID
 - installing 95
 - removing 287
 - replacing 289
- cache cards
 - supported in the server 81
- cache cards, RAID 81
- call home feature
 - IBM Electronic Service Agent 196
- call home tools 195
- Canada Class A electronic emission statement 875
- capturing
 - the FFDC log data using IMM2 CLI commands 196
 - the FFDC log data using IPMI commands 197
 - the FFDC log data using the IMM2 web interface 196
- capturing using IMM2 CLI commands 196
- capturing using IPMI commands 197
- capturing using the IMM2 web interface 196
- CD drive
 - installing 254
 - problems 198
 - removing 253
 - replacing 250
- CD-RW/DVD
 - drive activity LED 19, 20
 - eject button 19, 20

- CD/DVD
 - replacing 73
- CD/DVD drive
 - installing 251
- channels, memory
 - associated with the DIMM connectors 49, 50
- checkout procedure 174
 - performing 175
- checkpoint codes display
 - on the light path diagnostics panel display 178, 179
- China Class A electronic emission statement 877
- Class A electronic emission notice 874
- clearing CMOS 217
- CMOS memory
 - clearing 32, 33
- CMOS, clearing 217
- collecting 196, 197
- collecting data 171
- completing
 - the options installation 134
- components
 - on the server 29, 223
- configuration
 - ServerGuide Setup and Installation CD 141
 - Setup utility 141
- configuration, Nx boot failure 221
- configuration, server
 - updating 140
- configurations, backplane
 - supported 62, 64
- configuring
 - LAN over USB manually 161
 - RAID arrays 164
 - with ServerGuide 144
- configuring the server 142
- configuring your server 141
- connecting
 - the cables 139
- connecting drive cables 336
- connector
 - Ethernet systems-management 23
 - power supply 23, 24
 - serial 23
 - USB 23, 24
 - video
 - front 19, 20
 - rear 23
- connector, electrostatic-discharge 19, 20
- connectors
 - for options on the system board 35
 - memory expansion tray 36
 - on the rear of the server 23
 - optional microprocessor 36
 - PCIe riser-card 37
 - rear 23
- connectors, external system board 30
- connectors, internal system board 30
- consumable parts 229
 - removing and replacing 236
- contamination, particulate and gaseous 873

- controller expander backplane, 8x2.5-inch drive
 - removing 309
 - replacing 310
- controllers, RAID 78
- controls and LEDs
 - on the light path diagnostics panel 21, 22
- controls, LEDs, and power 19
- cooling 15
- cover
 - removing 236
- cover, removing 44
- cover, server
 - installing 237
 - replacing 138
- creating a personalized support web page 869
- CRUs, replacing
 - adapter 244
 - CD or DVD drive 250
 - DIMMs 256
 - memory 256
 - server cover 237
 - system battery 291
- custom support web page 869
- customer replaceable units (CRUs), server 223

D

- data collection 171
- dc good LED 186
- dc power LED 23, 24
- deassertion event, system-event log 188, 189
- device drivers 156
- devices
 - installing 27
- devices, static-sensitive
 - handling 43
- diagnostic
 - on-board programs, starting 194
 - test log, viewing 195
 - text message format 195
 - tools, overview 176
- diagnostic event log 188, 189
- diagnostics
 - program overview 192
- diagnostics program
 - DSA Preboot 12
- DIMM air baffle
 - removing 46
 - replacing 134
- DIMM air baffle
 - removing 242
 - replacing 243
- DIMM connector population sequence
 - with the optional microprocessor and memory expansion tray 54
 - without the optional microprocessor and memory expansion tray 52, 53, 54
- DIMM connectors
 - associated with each microprocessor 49, 51
- DIMM connectors on
 - each memory channel 49, 50
- DIMM installation instructions 57
- DIMM population sequence
 - memory mirroring mode 52, 53
 - memory sparing mode 54
 - with the microprocessor and memory expansion tray installed 52
 - without the microprocessor and memory expansion tray installed 52
- DIMMs
 - installation sequence for non-mirroring mode 52
 - installing 49
 - order of installation for non-mirroring mode 52
 - removing 256
 - replacing 257, 258
- DIMMs, ranked
 - supported configurations 54, 55
- display area
 - on the light path diagnostics panel 178, 179
- display area, boot
 - for the light path diagnostics 21, 22
- display problems 206
- DMI/SMBIOS data
 - updating 166
- DMI/SMBIOS data, updating
 - locally: keyboard controller style 167
 - locally: LAN over USB 167
 - remotely over a LAN 169
- documentation
 - Documentation Browser 4
 - Documentation CD 3
 - using 868
- documentation, updated
 - finding 5
- drive
 - hot-swap SAS/SATA
 - removing 246
- drive backplane
 - configuration for 28 drives 70
 - configuration for 4 drives 64
 - configurations for 12 drives 65
 - configurations for 16 drives 66
 - configurations for 20 drives 68
 - configurations for 24 drives 69
 - configurations for 32 drives 70
 - configurations for 8 drives 65
 - connecting the SAS cables 70
 - for 4x2.5-inch drives 62
 - for 8x1.8-inch drives 62, 63
 - for 8x2.5-inch drives 62, 63
 - supported configurations 62
- drive backplane assembly, 4x2.5-inch hot-swap
 - installing 130
- drive backplane assembly, 8x1.8-inch hot-swap
 - installing 118
- drive backplane assembly, 8x2.5-inch hot-swap
 - installing 122, 126
 - with controller expander 126

- drive backplane configurations
 - supported SAS/SATA 62, 64
- drive backplane with controller expander
 - for 8x2.5-inch drives 62, 63
- drive backplane, 8x2.5-inch with controller expander
 - removing 309
 - replacing 310
- drive, 1.8-inch hot-swap
 - replacing 248
- SCSI
 - installing 71
 - removing 246
- drive, 2.5-inch hot-swap
 - replacing 248
- SCSI 246
 - installing 71
- drive, CD/DVD
 - installing 254
 - removing 253
- drive, hot-swap
 - removing 246
 - replacing 248
- SAS/SATA IDs 61
- drives 12, 13
 - connecting power and signal cables 336
 - installing 60
- drives, SAS/SATA
 - hot-swap 71
- DSA
 - program, overview 192
- DSA data
 - how to send 28
- DSA event log 188, 189
- DSA log 12
- DSA Portable 176, 193
- DSA Preboot 177, 193
- DSA Preboot diagnostic program 12
- DSA, sending data 869
- DVD drive
 - installing 254
 - problems 198
 - removing 253
 - replacing 250
- DVD drive, installing 251
- Dynamic System Analysis (DSA) Preboot diagnostics program 12

E

- electrical input 6, 10
- electronic emission Class A notice 874
- electrostatic-discharge connector 19, 20
- embedded hypervisor
 - using 163
- enabling
 - Features on Demand Ethernet software upgrade key 164
 - Features on Demand RAID software 164
- environment 6, 9
- error codes
 - on the boot code display
 - of the light path diagnostics panel 349
- error codes and messages 197

- error codes and messages (*continued*)
 - IMM2 517
 - UEFI/POST 491
- error logs
 - clearing 192
 - viewing 189
- error messages, IMM2 517
- error symptoms
 - CD drive, DVD drive 198
 - fan 199
 - general 200
 - hard disk drive 200
 - hypervisor flash device 199
 - keyboard, non-USB 203
 - memory 205
 - microprocessor 206
 - monitor 206
 - mouse, non-USB 203
 - observable problems 208
 - optional devices 210
 - pointing device, non-USB 203
 - power 211
 - serial port 212
 - ServerGuide 213
 - software 214
 - USB port 215
- errors
 - format, diagnostic code 195
 - power supply LEDs 186
- Ethernet 12, 15
 - controller
 - troubleshooting 216
 - link status LED 23
 - systems-management connector 23
- Ethernet activity
 - LED 20, 21, 23
- Ethernet adapter slot, 10 Gb 23
- Ethernet adapters 78
- Ethernet software key
 - Features on Demand 164
- Ethernet support 12
- European Union EMC Directive conformance statement 875
- event log, DSA 188, 189
- event log, IMM2 188, 189
- event log, POST 188
- event log, system 188
- event log, viewing through the web interface 188, 189
- event logs 188
 - viewing through the Setup utility 189
 - viewing without restarting the server 190
- event logs, methods for viewing 190
- events, IMM 517
- expansion bays 6, 7
- external, system board connectors 30

F

- fan
 - problems 199
 - replacing 275
- fan cage assembly
 - removing 48, 277
 - replacing 137

- fans 15
 - weight 6, 9
- FCC Class A notice 874
- features 6
 - ServerGuide 144
- features on demand software, supported 83
- Features on Demand, Ethernet software key
 - enabling 164
- Features on Demand, RAID software
 - enabling 164
- Features On Demand, software RAID 83
- features, remote presence and blue-screen 12, 15, 142
- FFDC feature, IMM2 196
- FFDC log data
 - capturing using IMM2 CLI commands 196
 - capturing using IPMI commands 197
 - capturing using the IMM2 web interface 196
- field replaceable units (FRUs), server 223
- finding
 - updated documentation 5
- firmware updates 2
- firmware updates best practices 27
- firmware, server
 - updating 100, 102
- firmware, server, recovering 219
- firmware, updating 141
- first failure data capture feature, IMM2 196
- flash power module
 - installing remotely in the server 98
- flash power module, adapter
 - installing remotely in the server 286
 - removing 285
 - removing remotely in the server 285
 - replacing 286
- force NMI button
 - function 32, 34
- front view
 - LED location 19
- front view of the server 19
- FRUs, replacing
 - the ServeRAID N2125 SAS/SATA adapter 264

G

- gaseous contamination 873
- Germany Class A statement 875
- grease, thermal 108, 322
- guidelines
 - for options installation 41
 - for system reliability 43

H

- handling static-sensitive devices 43
- hard disk drive
 - problems 200
- hard disk drive activity LED 19, 20
- hard disk drive status LED 19, 20

- hardware service and support telephone numbers 869
- heat output 6, 10
- heat sink
 - installing 100, 106
 - replacing 316
- help
 - from the World Wide Web 868
 - from World Wide Web 868
 - sending diagnostic data 869
 - sources of 867
- host bus adapter
 - N2215 host bus adapter removing 266
 - ServeRAID N2215 replacing 266
- host name
 - obtaining for the IMM2 158
- hot-swap
 - fans, replacing 275
- hot-swap 4x2.5-inch SAS/SATA backplane
 - removing 304
- hot-swap drive
 - replacing 248
 - SAS/SATA IDs 61
- hot-swap drive backplane assembly, 4x2.5-inch hot-swap
 - installing 130
- hot-swap drive backplane assembly, 8x1.8-inch hot-swap
 - installing 118
- hot-swap drive backplane assembly, 8x2.5-inch hot-swap
 - installing 122, 126
 - with controller expander 126
- hot-swap drive, SAS/SATA
 - removing 246
- hot-swap SAS/SATA backplane, 4x2.5-inch
 - installing 305
- hot-swap SAS/SATA drive
 - installing 71
- how to send DSA data 28
- humidity 6, 9
- hypervisor flash device
 - installing 117
 - problems 199
- hypervisor flash device
 - installing 269

I

- I350-T4 ML2 Adapter
 - replacing 280
- IBM Advanced Settings Utility program
 - overview 165
- IBM Electronic Service Agent 196
- IBM Systems Director
 - systems management tool 18
 - updating 165
- IBM, next generation technology 15
- IDs for SAS/SATA hot-swap drives 61
- IMM events 517
- IMM2 CLI interface
 - logging on to using SSH 160
 - logging on to using telnet 160

- IMM2 error messages 517
- IMM2 event log 188, 189
- IMM2 first failure data capture feature
 - using 196
- IMM2 host name
 - obtaining 158
- IMM2 IP address
 - obtaining 159
- important notices 872
- independent memory mode 52
- independent mode
 - DIMM population 52
 - DIMM population sequence 52
- information center 868
- installation guidelines 41
- installation instructions, adapter 84
- installation, options
 - completing 134
- installing
 - 1.8-inch hot-swap drive 71
 - 2.5-inch hot-swap drive 71
 - a 750-watt -48 volt to -60 volt dc power supply 112
 - a flash power module 286
 - a flash power module remotely in the server 98
 - a heat sink 100, 106
 - a hot-swap fan 275
 - a hot-swap power supply 109
 - a microprocessor 100, 103
 - a PCI riser-card assembly 75
 - a power interposer card assembly 303
 - a RAID adapter flash power module remotely in the server 98
 - a RAID cache card 95
 - an adapter 84
 - an optical CD/DVD drive 251
 - battery, system 293
 - hot-swap SAS/SATA drive 71
 - hypervisor flash device 117, 269
 - memory modules 49
 - remotely in the server 286
 - ServeRAID N2125 controller for IBM System x 91
 - the 4x2.5-inch hot-swap drive backplane assembly 130
 - the 4x2.5-inch hot-swap SAS/SATA backplane 305
 - the 8x1.8-inch hot-swap drive backplane assembly 118
 - the 8x2.5-inch hot-swap drive backplane assembly 122
 - with SAS expander 126
 - the CD/DVD cable 254
 - the DIMM air baffle 134
 - the fan cage assembly 137
 - the heat sink 100, 107, 321
 - the microprocessor air baffle 135
 - the microprocessor and memory expansion tray 136, 324
 - the power interposer card assembly 116
 - the server cover 237
 - the ServeRAID M5120 controller for System x 89

- installing (*continued*)
 - the ServeRAID M5120 SAS/SATA adapter 263
 - the ServeRAID M5210 controller for System x 86
 - the ServeRAID M5210 SAS/SATA adapter 260
 - the ServeRAID N2125 SAS/SATA adapter 265
 - the ServeRAID N2125 SAS/SATA Host Bus Adapter 91
 - the ServeRAID N2215 Host Bus Adapter 92
 - the system board 334
- installing adapters 78
- installing DIMMs
 - instructions 57
- installing drives 60
- installing options 27
- installing, DIMMs 49
- instructions
 - for installing DIMMs 57
- instructions for Business Partners 27, 28
- integrated baseboard management controller 25, 26
- integrated functions 6, 8
- integrated management module
 - event log 12
- integrated management module II
 - overview 12
- internal, system board connectors 30
- IP address
 - obtaining for the IMM2 159
- IPMI event log 12
- IPMITool 190

J

- Japan Class A electronic emission statement 876
- jumper
 - UEFI boot recovery 219
- jumpers
 - on the system board 32
- jumpers, on the system board 32
- jumpers, switches, and buttons
 - on the system board 32

K

- keyboard problems 203
- Korea Class A electronic emission statement 877

L

- LAN over USB
 - configuring manually 161
 - Linux driver installation 162
 - Windows driver installation 161
- LED
 - ac power 23, 24
 - dc power 23, 24
 - Ethernet-link status 23
 - for CD-RW/DVD drive activity 19, 20

- LED (*continued*)
 - for Ethernet activity 23
 - for Ethernet port activity 20, 21
 - for hard disk drive activity 19, 20
 - for hard disk drive status 19, 20
 - for solid state drive activity 19, 20
 - for solid state drive status 19, 20
 - log 20, 21
 - power-on 20
 - rear 23
 - power-supply 23, 24
 - system locator 20, 21
 - system-error 20, 21
 - rear 23
 - system-locator
 - rear 23
- LED errors
 - power supply 186
- LEDs
 - DIMM 36
 - ML2 adapters 38
 - on the PCIe riser-card 188
 - on the system board 34
 - optional microprocessor 36
 - PCIe riser-card 37
- light path button
 - description 32, 34
- light path diagnostics 12, 13, 178
 - LEDs 181
 - panel 178, 179
- light path diagnostics LEDs 181
- light path diagnostics panel
 - boot code display 21, 22, 178, 179
 - controls and LEDs 21, 22
 - NMI button 23, 24
- light path diagnostics panel display
 - checkpoint codes 178, 179
- light path diagnostics panel, boot code display
 - error codes 349
- Linux driver, LAN over USB 162
- local area network 12, 14
- log data, FFDC 196, 197
- log LED 20, 21
- log, capturing the FFDC 196
- log, event, viewing through the web interface 188, 189
- logging on to the IMM2 CLI interface
 - using SSH 160
 - using telnet 160
- logs, event 188

M

- major components on the server 29
- management, system 12
- memory 12, 13
 - removing 256
 - replacing 257, 258
 - specifications 6, 7
- memory and microprocessor expansion tray
 - removing 45, 323
- memory expansion tray 36
- memory installation sequence
 - for non-mirroring mode 52
- memory mirroring mode 52

- memory mirroring population sequence
 - with the optional microprocessor and memory expansion tray 52, 53
 - without the optional microprocessor and memory expansion tray 52, 53
- memory module
 - installing 49
- memory problems 205
- memory sparing 14
- memory sparing mode 54
- memory sparing population sequence
 - DIMM connector population sequence
 - with the optional microprocessor and memory expansion tray 54
 - memory sparing population sequence
 - with the optional microprocessor and memory expansion tray 54
 - with the optional microprocessor and memory expansion tray 54
 - without the optional microprocessor and memory expansion tray 54
- memory support 12, 13
- memory-sparing mode DIMM population sequence
 - on the server 54
- menu choices
 - for the Setup utility 146
- messages, error
 - POST 491
- methods, for viewing event logs 190
- microprocessor 12, 14
 - and thermal grease 108
 - associated with each DIMM 49, 51
 - installing 100, 103
 - problems 206
 - replacing 316
 - specifications 6
- microprocessor air baffle
 - removing 47
 - replacing 135
- microprocessor air baffler
 - removing 240
 - replacing 241
- microprocessor and memory expansion tray
 - removing 45, 323
 - replacing 136, 324
- mirroring 12, 13
- mirroring mode DIMM population sequence
 - on the server 52, 53
- mirroring, memory 52
- ML adapter slot, 1 Gb 23
- ML2 adapter
 - I350-T4 ML2
 - removing 279
 - replacing 280
 - LEDs 38
 - ML2 Dual-port 10 Gbase-T
 - removing 281
 - replacing 282, 284
 - ML2 Dual-port 10 GbE SFP+
 - removing 281
 - replacing 282, 284
- ML2 Dual-port 10 Gbase-T Adapter
 - removing 281
 - replacing 282, 284

- ML2 Dual-port 10 GbE SFP+ Adapter
 - removing 281
 - replacing 282, 284
- model and serial number
 - location 218
- monitor problems 206

N

- network support 14
- New Zealand Class A statement 875
- next generation technology 12, 14, 15, 16
- NMI button 32, 34
 - on the light path diagnostics panel 23, 24
- non-mirroring mode 52
 - DIMM population sequence 52
- NOS installation
 - with ServerGuide 145
 - without ServerGuide 145
- notes, important 872
- notices 871
 - electronic emission 874
 - FCC, Class A 874
- Nx boot failure 221

O

- observable problems 208
- obtaining
 - the host name for the IMM2 158
 - the IP address for the IMM2 159
- online documentation 2
- online publications 5
- operating-system event log 12
- operator information panel
 - removing 297, 298
- operator information panel release latch 19, 20
- optical drive, optional
 - specifications 6, 7
- optional device connectors
 - on the system board 35
- optional device problems 210
- optional microprocessor 36
- options
 - installing 27
- overriding
 - the power-on password 32, 33

P

- particulate contamination 873
- parts list, structural 230
- parts listing, server 223, 225
- parts listing, System x3750 M4 225
- parts, consumable 229
- password 153
 - administrator 153
 - power-on 153
- password, power-on
 - switch on the system board 153
- PCI
 - riser-card assembly 295
 - replacing 296
- PCI expansion slots 6, 7

- PCIe adapter
 - slots 23, 24
- PCIe riser-card
 - connectors 37
 - LEDs 37
 - LEDs location 188
- PCIe riser-card assembly
 - installing 75
- PCIe slots
 - installation sequence 76
- People's Republic of China Class A
 - electronic emission statement 877
- POST
 - error codes 491
 - error log 189
- POST event log 188
- POST test 192
- power
 - specifications 6, 10
 - supply 8
- power and signal cables
 - connecting to internal drives 336
- power features
 - of the server 24
- power interposer card assembly
 - installing 116
 - removing 302
 - replacing 303
- power module, flash
 - installing 286
 - installing remotely in the server 98
 - removing 285
- power problems 211, 215
- power supply
 - a 750-watt -48 volt to -60 volt dc 112
 - installing 109, 112
- power supply LED errors 186
- power supply, 1400-watt or 900-watt
 - hot-swap
 - replacing 272, 273
- power supply, 750-watt -48 volt to -60 volt dc
 - removing 326
- power supply, 750watt -48 volt to -60 volt dc
 - replacing 328
- power supply, hot-swap
 - removing 270
- power-on
 - button 20
 - LED
 - rear 23
- power-on LED 20, 24
- power-on password 152
 - override 32, 33
- power-supply LED 23, 24
- Preboot, DSA diagnostics program 12
- presence detection button 20, 21
- problem isolation tables 197
- problems
 - CD/DVD drive 198
 - Ethernet controller 216
 - fan 199
 - hard disk drive 200
 - hypervisor flash device 199
 - memory 205
 - microprocessor 206

- problems (*continued*)
 - monitor 206
 - mouse 203, 204
 - optional devices 210
 - pointing device 203, 204
 - power 211, 215
 - serial port 212
 - software 214
 - troubleshooting 171
 - undetermined 217
 - USB port 215
 - video 206, 215
- problems, observable 208
- procedure, checkout 175
- product service, Taiwan 870

R

- rack release latches 19, 20
- RAID adapter
 - installing remotely in the server 98
- RAID arrays
 - configuring 164
- RAID cache card
 - installing 95
- RAID cache cards 81
- RAID cache cards supported in the server 81
- RAID controllers 78
- RAID software
 - Features on Demand 164
- RAID, software
 - Features On Demand 83
- ranked LR-DIMMs
 - supported configurations 54, 55
- ranked RDIMMs
 - supported configurations 54, 55
- RAS features, server 17
- rear view 23
 - of the server 23
- recovering from a
 - UEFI image corruption 219
- recovering the server firmware (UEFI update failure) 219
- redundant
 - cooling 15
 - Ethernet connection 15
- Redundant
 - Ethernet capabilities 17
 - hot-swap power supplies 17, 18
- redundant array of independent disks (RAID)
 - adapter 72
- Redundant connection 15
- reliability, server 17
- remote presence feature
 - using 157
- remote presence features 142
- removing
 - 1.8-inch hot-swap SAS/SATA drives 246
 - 2.5-inch hot-swap SAS/SATA drives 246
 - a 1400-watt or 900-watt hot-swap power supply 270
 - a 750-watt -48 volt to -60 volt dc power supply 326

- removing (*continued*)
 - a flash power module 285
 - a hot-swap drive 246
 - a hot-swap fan 275
 - a power interposer card assembly 302
 - a RAID cache card 287
- adapter 244
- battery, system 291
- CD or DVD drive 250
- DIMM 256
- hypervisor 268
- microprocessor air baffle 47
- remotely in the server 285
- the 4x2.5-inch hot-swap SAS/SATA backplane 304
- the 8x1.8-inch SSD drive backplane assembly 306
- the 8x2.5-inch drive backplane
 - with controller expander 309
- the bezel 238
- the CD/DVD cable 253
- the DIMM air baffle 46, 242
- the fan cage assembly 48, 277
- the host bus adapter
 - N2215 266
- the I350-T4 ML2 Adapter 279
- the microprocessor air baffle 240
- the microprocessor and memory expansion tray 45, 323
- the ML2 Dual-port 10 Gbase-T Adapter 281
- the ML2 Dual-port 10 GbE SFP+ Adapter 281
- the ServeRAID M5120 SAS/SATA adapter 262
- the ServeRAID M5210 SAS/SATA adapter 259
- the ServeRAID N2125 SAS/SATA adapter 264
- the USB/video tray assembly 300
- removing and replacing
 - consumable parts 236
 - structural parts 236
 - Tier 1 CRUs 240
- removing the cover 44, 236
- removing/replacing
 - operator information panel 297, 298
 - the system board 331
- replacement parts for the server 223
- replacing
 - 1.8-inch hot-swap SATA drives 248
 - 2.5-inch hot-swap SAS/SATA drives 248
 - a 1400-watt or 900-watt hot-swap power supply 272, 273
 - a 750-watt -48 volt to -60 volt dc power supply 328
 - a CD/DVD 73
 - a flash power module 286
 - a heat sink 316
 - a hot-swap drive 248
 - a microprocessor 316
 - a PCI riser-card assembly 296
 - a power interposer card assembly 303
 - a RAID cache card 289

- replacing (*continued*)
 - an optical CD/DVD drive 251
 - battery, system 291, 293
 - CD or DVD drive 250
 - consumable parts 236
 - hypervisor flash device 269
 - memory DIMMs 257, 258
 - structural parts 236
 - the 4x2.5-inch hot-swap SAS/SATA backplane 305
 - the 8x1.8-inch SSD drive backplane assembly 307
 - the 8x2.5-inch drive backplane with controller expander 310
 - the CD/DVD cable 254
 - the DIMM air baffle 134, 243
 - the fan cage assembly 137
 - the host bus adapter
 - ServeRAID N2215 266
 - the I350-T4 ML2 Adapter 280
 - the microprocessor air baffle 135, 241
 - the microprocessor and memory expansion tray 136, 324
 - the ML2 Dual-port 10 Gbase-TAdapter 282, 284
 - the ML2 Dual-port 10 GbE SFP+ Adapter 282, 284
 - the server cover 138
 - the system board 334
 - notes to consider 334
 - the USB hypervisor flash device 269
 - the USB/video tray assembly 301
- replacing an adapter 245
- replacing Tier 1 CRUs 240
- reset button 21, 22, 179
- riser-card assembly
 - location 244
- Russia Class A electronic emission statement 877

S

- Safety Information 6
- SAS/SATA backplane
 - supported configurations 62, 64
- SAS/SATA controller
 - hypervisor 268
- SAS/SATA drive
 - hot-swap
 - removing 246
- SAS/SATA hot-swap drive
 - installing 71
 - replacing 248
- SAS/SATA IDs
 - for hot-swap drives 61
- sending diagnostic data 869
- sending DSA data 28
- serial and model number
 - location 218
- serial connector 23
- serial number 2
- serial port problems 212
- server
 - buttons function 32, 34
 - configuring 142
 - does not turn off 211
 - error codes and messages 197

- server (*continued*)
 - power features 24
 - turning it off 25
 - turning it on 25
- server , backup firmware
 - starting 155
- server components 29, 223
- server configuration
 - updating 140
- server controls, LEDs, and power 19
- server cover
 - installing 237
- server DIMM population sequence
 - memory-sparing mode 54
 - mirroring mode 52, 53
- server firmware
 - updating 100, 102
- server firmware, recovering 219
- server rear view 23
- server replaceable parts list 223, 225
- server shutdown 25
- server, front view 19
- ServeRAID controllers 78
- ServeRAID M5120 controller
 - installing 89
 - removing 262
- ServeRAID M5120 SAS/SATA adapter
 - installing 263
- ServeRAID M5210 controller
 - installing 86
- ServeRAID N2125 ontroller for IBM System x
 - installing 91
- ServeRAID N2125 SAS/SATA Host Bus Adapter
 - installing 91
- ServeRAID N2215 Host Bus, adapter
 - installing 92
- ServeRAID SAS/SATA adapter
 - installing 265
- ServeRAID support 12, 16
- ServerGuide
 - features 144
 - NOS installation 145
 - setup 144
 - Setup and Installation CD 141
 - using 143
- ServerGuide CD 3
- service and support
 - before you call 867
 - hardware 869
 - software 869
- service bulletins 174
- service request, automated 195
- serviceability, server 17
- Setup utility 141
 - menu choices 146
 - starting 146
 - using 145
- shutting down the server 25
- signal and power cables
 - connecting to internal drives 336
- slot
 - ML adapter, 1 Gb 23
 - ML2 dual port 10 Gbase-T adapter 24

- slot (*continued*)
 - ML2 dual port 10GbE SFP+ adapter 24
 - ML2 quad port GbE adapter 24
- slots
 - PCI expansion 6, 7
- SMBIOS data
 - updating 166
- SMBIOS data, updating
 - locally: LAN over USB 167
 - remotely over a LAN 169
- SMIBIOS data, updating
 - locally: keyboard controller style 167
- SMP 12, 14
- software problems 214
- software service and support telephone numbers 869
- solid state drive
 - hot-swap SAS/SATA
 - removing 246
- solid state drive activity LED 19, 20
- solid state drive backplane assembly, 8x1.8-inch
 - removing 306
 - replacing 307
- solid state drive status LED 19, 20
- sparing, memory 54
- specifications 6
- SSH, using to log on to the IMM2 CLI interface 160
- standby mode 24
- starting
 - the backup firmware 155
 - the Setup utility 146
- static-sensitive devices
 - handling 43
- structural parts 230
 - removing and replacing 236
- support web page, custom 869
- supported configurations
 - for ranked RDIMMs and LR-DIMMs 54, 55
- switch block, on the system board 32, 33
- switches
 - on the system board 32
- switches, jumpers, and buttons
 - on the system board 32
- symmetric multiprocessing 12, 14
- system
 - error LED front 20, 21
 - locator LED, front 20, 21
 - system-error LED
 - rear 23
- system board
 - installing 334
 - LEDs 34
 - power-on password switch 153
 - removing 331
 - SW7 switch block description 32, 33
 - switches, jumpers, and buttons 32
- system board external connectors 30
- system board internal connectors 30
- system board jumpers
 - description 32
- system board optional devices
 - connectors 35
- system event logs 189

- system reliability guidelines 43
- system-event log 188
- system-event log, assertion event 188, 189
- system-event log, deassertion event 188, 189
- system-locator
 - LED
 - rear 23
- Systems Director, IBM
 - systems management tool 18
- systems management 12, 16
- systems management tool 18
 - IBM Systems Director 18
- systems-management
 - Ethernet connector 23

T

- Taiwan Class A electronic emission statement 877
- Taiwan product service 870
- telecommunication regulatory statement 874
- telephone numbers 869
- telnet
 - using to log on to the IMM2 CLI interface 160
- temperature 6, 9
- test log, viewing 195
- the FFDC log data using IMM2 CLI commands 196
- the FFDC log data using IPMI commands 197
- the FFDC log data using the IMM2 web interface 196
- thermal grease 108, 322
- Tier 1 CRUs
 - removing and replacing 240
- TOE 6, 8
- tools, call home 195
- tools, diagnostic 176
- trademarks 872
- troubleshooting 171
- turning off the server 25
 - integrated baseboard management controller 25, 26
- turning on the server 25

U

- UEFI
 - boot recovery jumper 219
 - error codes 491
- UEFI image corruption
 - recovering from 219
- UEFI update failure
 - recovering from 219
- undetermined problems 217
- undocumented problems 173
- United States FCC Class A notice 874
- Universal Serial Bus (USB) problems 215
- universal unique identifier, updating
 - locally: keyboard controller style 167
 - locally: LAN over USB 167
 - remotely over a LAN 169

- UpdateXpress 156
- updating
 - IBM Systems Director 165
 - server firmware 100, 102
 - Systems Director, IBM 165
 - the DMI/SMBIOS data 166
 - the server configuration 140
 - the universal unique identifier 166
- updating firmware 141
- USB
 - connector 23, 24
- USB/video tray assembly
 - removing 300
 - replacing 301
- using 196
 - embedded hypervisor 163
 - the boot manager program 155
 - the IMM2 first failure data capture feature 196
 - the remote presence feature 157
 - the Setup utility 145
- using best practices
 - to apply firmware and device-driver updates 27
- Utility program
 - Advanced Settings Utility, IBM 165
 - IBM Advanced Settings 165
- utility, Setup
 - menu choices 146
 - starting 146
 - using 145
- UUID data
 - updating 166
- UUID, updating
 - locally: keyboard controller style 167
 - locally: LAN over USB 167
 - remotely over a LAN 169

V

- video connector
 - front 19, 20
 - rear 23
- video controller, integrated
 - specifications 6, 8
- video problems 206
- video/USB tray
 - removing 300
- video/USB tray assembly
 - replacing 301
- viewing
 - event logs through the Setup utility 189
- viewing event logs
 - without restarting the server 190

W

- Web site
 - UEFI flash CD 219
- Windows driver, LAN over USB 161



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