HPE ProLiant m710x and m710x-L Server Blade User and Maintenance Guide for the Moonshot 1500 Chassis

Abstract

This document is for the person who installs, administers, services, and troubleshoots blades. This guide describes identification and maintenance procedures, and specifications and requirements for hardware components and software. Hewlett Packard Enterprise assumes you are qualified in the servicing of computer equipment, trained in recognizing hazards in products, and are familiar with weight and stability precautions.

Notices

Acknowledgments

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Removal and replacement procedures...46

Warranty and regulatory information...52

Component identification

Blade LEDs and buttons
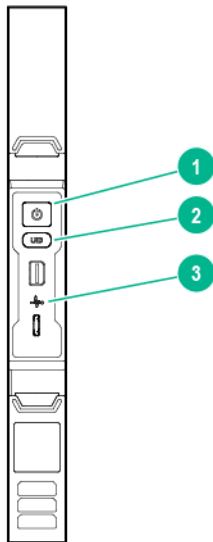
Item	Description	Status
1	Blade power LED/button	• Green = Normal operation • Amber = Standby operation • Off = No power
2	Blade UID LED/button	• Blue = Blade ID is selected. • Flashing blue = Blade firmware update is in progress. • Off = Blade ID is not selected.
3	Blade health LED	• Green = Normal operation • Flashing amber = Degraded condition • Flashing red = Critical condition • Off = No power

Blade components
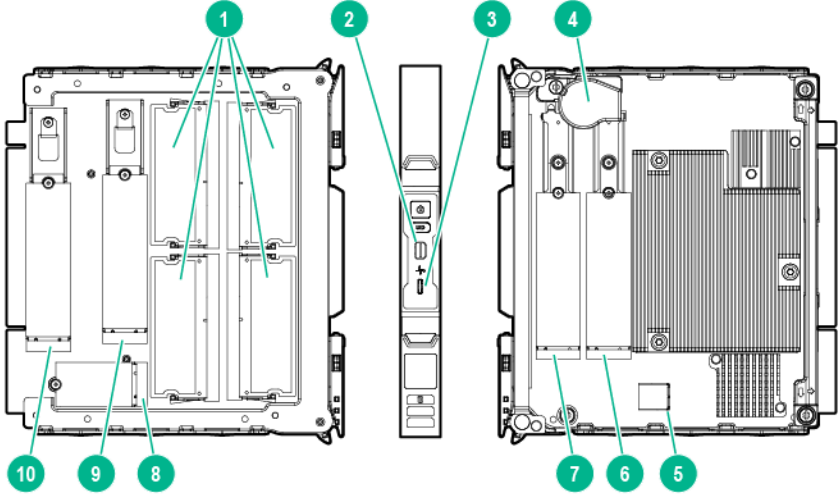
Item	Description
1	DIMM slots (4)
2	Mini display port
3	Micro USB port
4	Battery
5	USB port
6	Device connector 5 for 80/110 mm M.2 SSDs
7	Device connector 4 for 80/110 mm M.2 SSDs
8	Device connector 3 for 42 mm M.2 SSDs
9	Device connector 2 for 110 mm M.2 devices
10	Device connector 1 for 110 mm M.2 devices

DIMM slot numbering
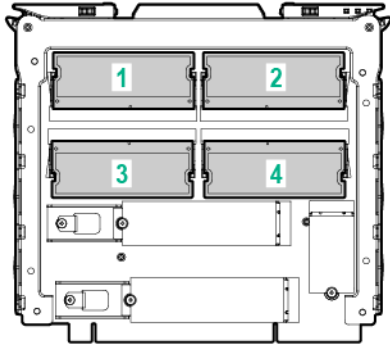
M.2 slot numbering
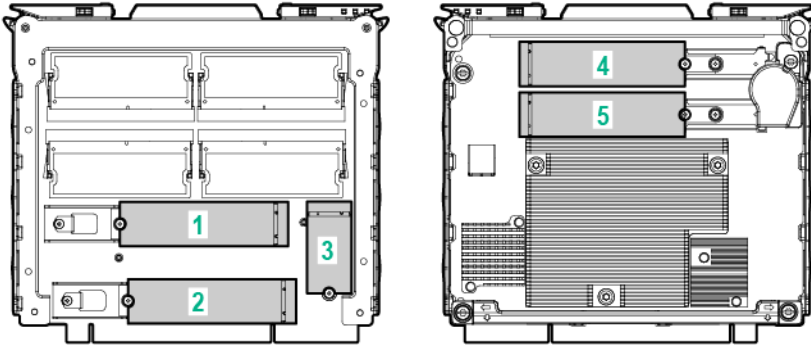
Item	Description	BIOS numbering
1	M.2 slot 1	PCIe Slot 3
2	M.2 slot 2	PCIe Slot 2
3	M.2 slot 3	PCIe/SATA Slot 1
4	M.2 slot 4	PCIe Slot 4
5	M.2 slot 5	PCIe Slot 5

To identify the M .2 slots, view **System Information** -> **PCIe information**.

Blade slot and switch module bay identification

The chassis provides 45 blade slots (1-45) and two switch module bays (A-B).
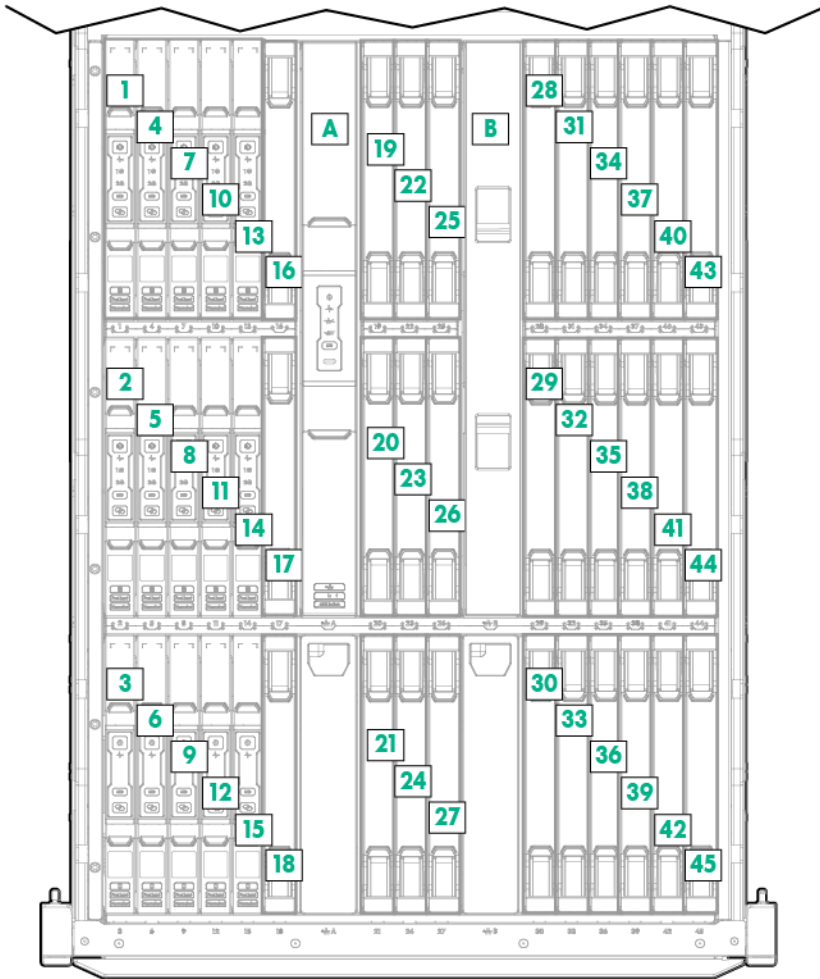
Operations

Power down the blade

Review the following information before powering down the blade:

- Before powering down a blade for any upgrade or maintenance procedures, always perform a backup of critical blade data and programs.

- Depending on the blade model, the blade may be a single-node or a multi-node blade. Always power down all nodes on the blade before removing it from the chassis.

- If you are powering down one node but leaving other nodes in a powered up state on the blade, the blade power LED will remain illuminated, indicating at least one node is powered up.

Blades can be powered down individually and as a group of all blades in the chassis. Choose the procedure in this section that fits your need.

When entering blade commands provided in this section, you can use one command to address multiple blades. Use commas to separate non-contiguous numbers (omit spaces), or a dash to denote a range (for example, `C1,3-9N1-4`). For more information about using commands, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Power down a blade remotely

Procedure

1. **Logging in to the iLO CM firmware** on page 17.

2. Power down the blade by issuing the appropriate command:

   - For a blade running a functioning OS:

     ◦ Single node:

       `set node power off shutdown C<x>N<y>`

     ◦ Multiple nodes (4):

       `set node power off shutdown C<x>N1-4`

   - For a nonresponsive system or when an OS has not been installed:

     ◦ Multiple nodes (4):

       `set node power off force C<x>N1-4`

   - For all blades:

     `set node power off force all`

3. Verify that the power is off by issuing the following command:
   `show node power {CxNy}`

Power down a blade locally

Procedure

1. **Logging in to the iLO CM firmware** on page 17.

2. Power down the blade according to the current blade state:

   - If the blade power LED is green, press and release the blade power button.

     This method initiates a controlled shutdown of applications and the OS on any active nodes before the blade enters standby mode.

   - If the blade is unresponsive, press and hold the blade power button for 4 seconds to initiate a forced shutdown of any active nodes.

   - If the blade power LED is amber, the blade is in standby mode and no nodes are active. No further action is required.

3. Verify that the power is off by reviewing the status of the blade power LED.

   For more information, see **Blade LEDs and buttons** on page 6."

Extend the chassis from the rack

Procedure

1. Pull down the quick release levers on each side of the chassis.

   ⚠ **WARNING:** To reduce the risk of personal injury or equipment damage, be sure that the rack is adequately stabilized before extending a component from the rack.

2. Extend the chassis from the rack until it locks once.

3. Press the push tab on the rail, and then fully extend the chassis.
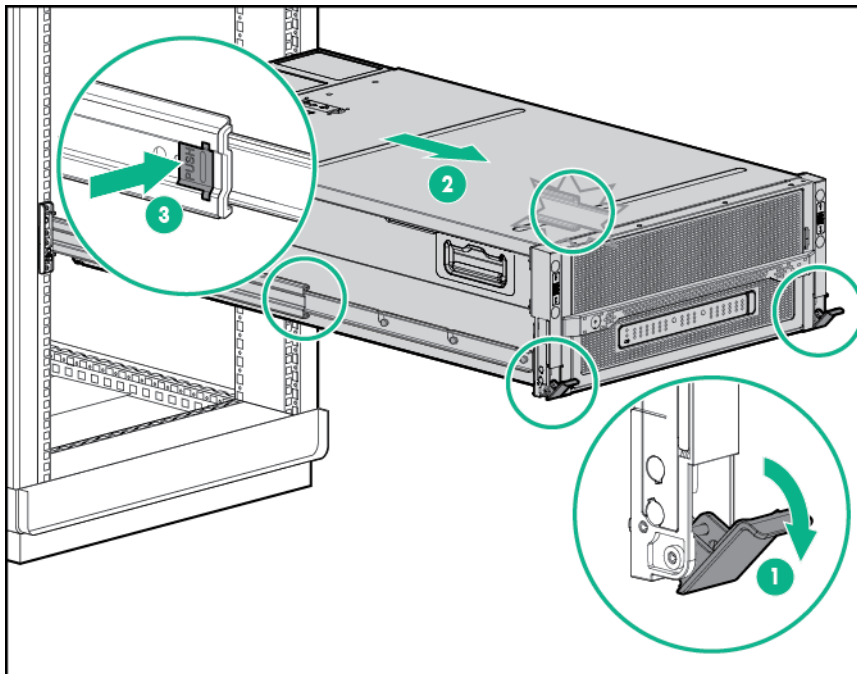
⚠ WARNING: To reduce the risk of personal injury, be careful when pressing the server rail-release latches and sliding the server into the rack. The sliding rails could pinch your fingers.

4. After installing or maintaining the system, slide the chassis back into the rack, and then press the chassis firmly into the rack to secure it in place.
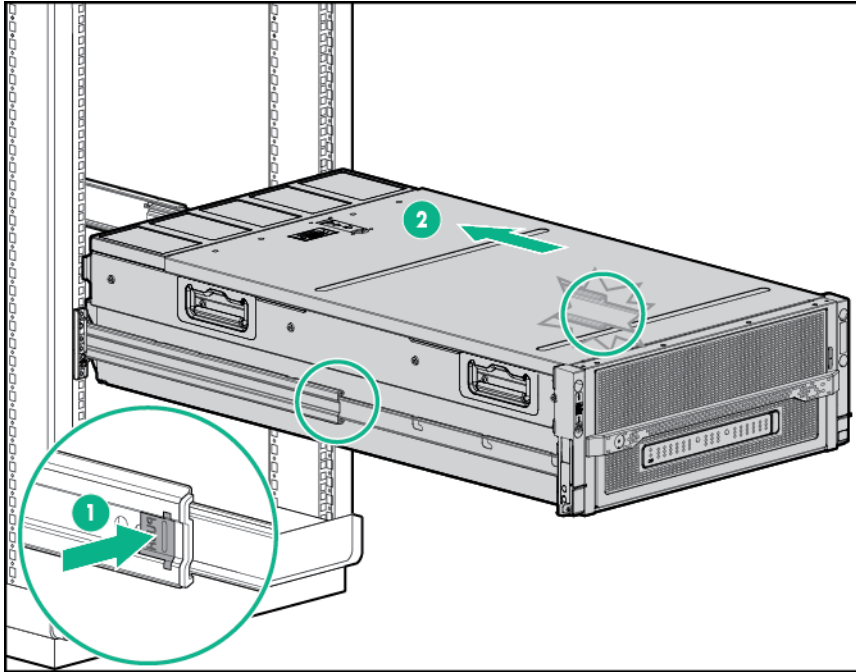
Remove the access panel

ⓘ IMPORTANT: After performing a procedure inside the chassis, always install the access panel on the chassis when complete. Do not operate the chassis for long periods of time with the access panel removed.

ⓘ IMPORTANT: To maintain appropriate cooling, fans will operate at a high speed when the access panel is removed.

ⓘ IMPORTANT: When the access panel is removed, the blade might be placed into a low power operating state to reduce thermal stress.

Procedure

1. If the locking latch is locked, use a T-15 Torx screwdriver to unlock the latch.

2. Open the locking latch.
   The access panel slides back, releasing it from the chassis.

3. Lift and remove the access panel.
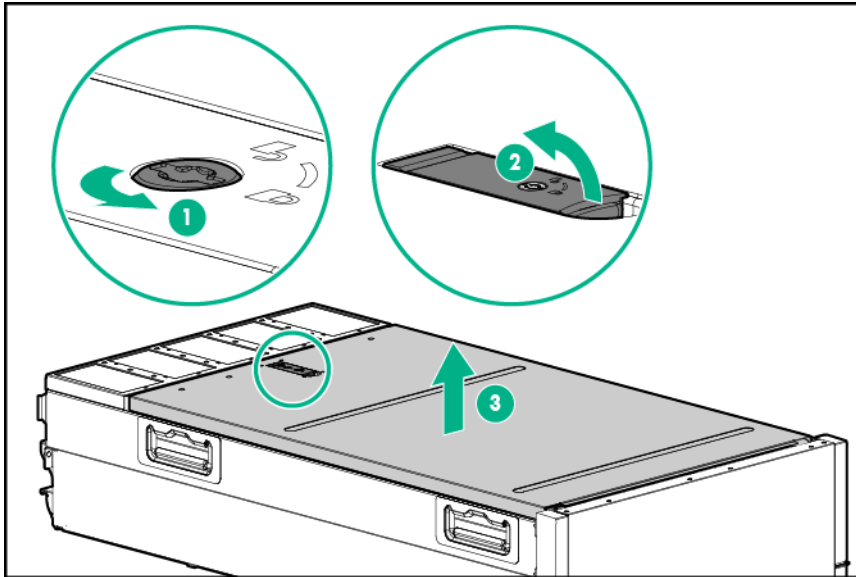
Turn the access panel over to locate the HPE Moonshot 1500 Chassis label. This label provides information on LED status indicators, component identification, and blade and switch installation procedures.

Remove the blade blank

⚠ **CAUTION:** For proper cooling, be sure that a blade or a blade blank is always installed in each blade slot in the chassis. When replacing a blade, leave the blade slot empty for no more than 30 seconds. Failure to do so can disrupt airflow in the chassis.

Procedure

1. **Extend the chassis from the rack** on page 11.

2. **Remove the access panel** on page 12.

3. Remove the blade blank from the chassis.
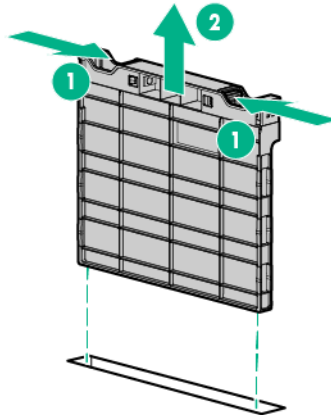
Remove the blade

⚠ **CAUTION:** For proper cooling, be sure that a blade or a blade blank is always installed in each blade slot in the chassis. When replacing a blade, leave the blade slot empty for no more than 30 seconds. Failure to do so can disrupt airflow in the chassis.

Procedure

1. Power down the node or blade (**Power down the blade**).

2. **Extend the chassis from the rack** on page 11.

3. **Remove the access panel** on page 12.

4. Remove the blade.
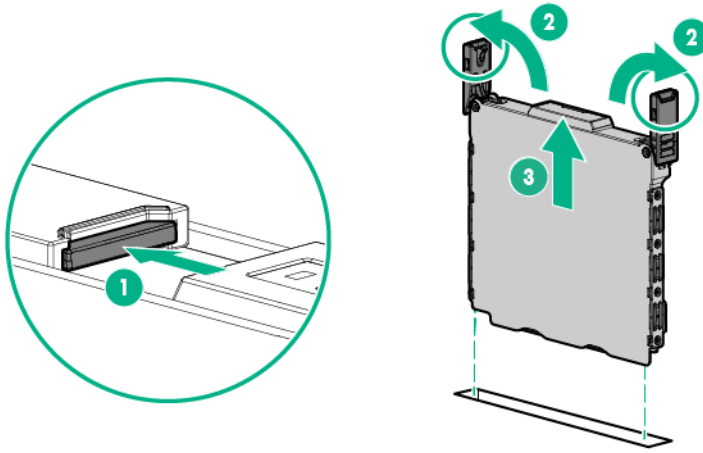
Install the blade

⚠ **CAUTION:** For proper cooling, be sure that a blade or a blade blank is always installed in each blade slot in the chassis. When replacing a blade, leave the blade slot empty for no more than 30 seconds. Failure to do so can disrupt airflow in the chassis.

Procedure

1. **Extend the chassis from the rack** on page 11.

2. **Remove the access panel** on page 12.

3. Prepare the blade.
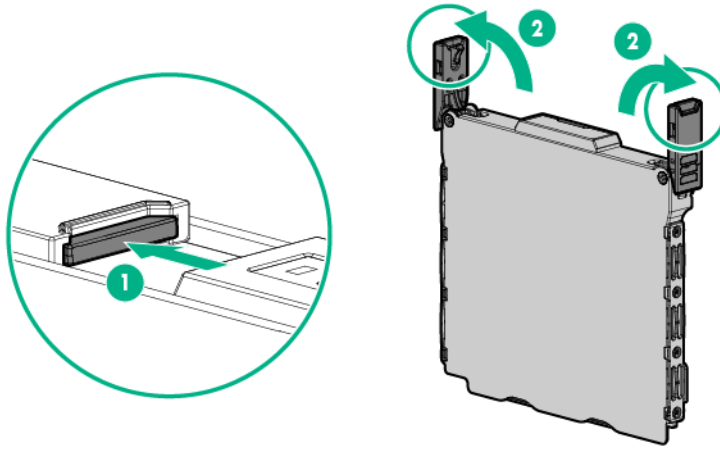
4. Do one of the following:

   • **Remove the blade** on page 14.

   • **Remove the blade blank** on page 13.

5. Align and install the blade into the chassis.
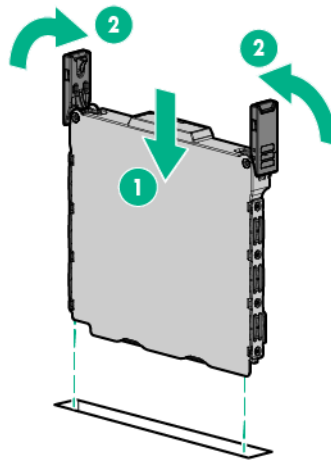
6. **Install the access panel** on page 16.

7. Slide the chassis back into the rack (**Extend the chassis from the rack** on page 11).

Install the blade blank

⚠ **CAUTION:** For proper cooling, be sure that a blade or a blade blank is always installed in each blade slot in the chassis. When replacing a blade, leave the blade slot empty for no more than 30 seconds. Failure to do so can disrupt airflow in the chassis.

Procedure

1. **Extend the chassis from the rack** on page 11.

2. **Remove the access panel** on page 12

3. Align and install the blade into the chassis.
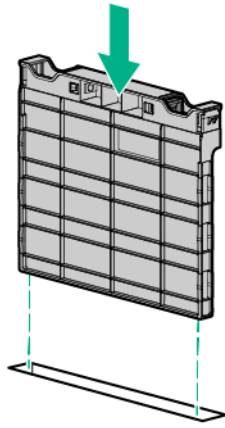
Install the access panel

> (!) **IMPORTANT:** After performing a procedure inside the chassis, always install the access panel on the chassis when complete. Do not operate the chassis for long periods of time with the access panel removed.

Procedure

1. Place the access panel on top of the chassis.

2. Slide the access panel toward the front of the chassis. The access panel locks into position.

Power up the blade

Review the following information before powering up the blade:

- Depending on the blade model, the blade may be a single-node or a multi-node blade.

- Upon installation into the chassis, auxiliary power is automatically provided to the blade. Depending on the chassis autopower setting, nodes may power up automatically upon blade installation.

Blades can be powered up individually and as a group of all blades in the chassis. Choose the procedure in this section that fits your need.

When entering blade commands provided in this section, you can use one command to address multiple blades. Use commas to separate non-contiguous numbers (omit spaces), or a dash to denote a range (for example, `C1,3-9N1-4`). For more information about using commands, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Power up a blade remotely

Procedure

1. **Logging in to the iLO CM firmware** on page 17.

2. Show the installed blades to determine node status:

    ```
    show node power {C<x>N<y>|all}
    ```

3. Power up the blade by issuing the appropriate command:

   - Single node:

     `set node power on C<x>N<y>`

   - Multiple nodes (4):

     `set node power on C<x>N1-4`

   - For all blades:

     `set node power on all`

4. Verify that the power is on by issuing the following command:

   `show node power {CxNy}`

Power up a blade locally

Procedure

1. Press and release the blade power button.

   This method powers on all nodes.

2. Verify that the power is on by reviewing the status of the blade power LED.

   For more information, see **Blade LEDs and buttons** on page 6.

Logging in to the iLO CM firmware

Procedure

1. Connect to the iLO CM firmware locally or remotely.

   To access the iLO CM firmware through the GUI, enter **`https://<iLO CM firmware host name or IP address>`**. You must access the iLO CM firmware web interface through HTTPS.

   - To connect remotely, use a browser or SSH session over the network.

   - To connect locally, use a serial cable to connect a PC or terminal to the iLO CM management serial port on the Moonshot 1500 CM module.

2. If no changes were made, enter the user name and password assigned for the chassis or the default user name and password:

   Default username:

   `Administrator`

   Default password:

   `password`

For more information about the iLO CM firmware, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Setup

Overview

Installation of a blade requires the following steps:

Procedure

1. Install and configure the HPE Moonshot 1500 Chassis (**Installing and configuring the HPE Moonshot 1500 Chassis** on page 18).

2. Install and configure the switch and uplink modules (**Installing and configuring the switch and uplink modules** on page 18).

3. Install the solid state device (**Installing an M.2 device** on page 26).

4. **Install the blade** on page 14.

5. Power up the chassis (**Powering up the chassis** on page 19).

6. Power up the node (**Powering up the node** on page 19).

7. Update the blade firmware (**Updating blade firmware** on page 19).

8. Install the operating system (**Installing the operating system** on page 20).

9. Register the product (**Registering the product** on page 20).

Installing and configuring the HPE Moonshot 1500 Chassis

Before performing any blade-specific procedures, install the HPE ProLiant Moonshot 1500 Chassis. For more information on installing a chassis, see the *HPE Moonshot 1500 Chassis Setup and Installation Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Installing and configuring the switch and uplink modules

For specific steps to install the switch modules and uplink modules, see the switch documentation in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Installing the blade

Procedure

1. Do one of the following:

   • **Remove the blade blank** on page 13.

   • **Remove the blade** on page 14.

2. **Install the blade** on page 14.

Powering up the chassis

If the chassis was powered off while installing the blade, then power up the chassis. The blades are hot-pluggable and do not require that you power down the chassis for the installation.

Procedure

1. Connect the power cables to the power supplies.

2. Connect the power cables to the power source (UPS or wall outlet) or to an installed PDU.

3. Wait while the chassis powers on. Verify the status of the power LED on the front panel of the chassis. For more information on the chassis power LEDs, see the *HPE Moonshot 1500 Chassis Setup and Installation Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/ moonshot/docs**).

Powering up the node

Upon installation into the chassis, auxiliary power is provided to the blade. Depending on chassis autopower state, nodes may power up automatically upon blade installation.

Procedure

1. **Logging in to the iLO CM firmware** on page 17.

2. Show the installed blades to determine node status:
   hpiLO -> show node list

3. Power up the preferred node:
   hpiLO -> set node power on C<x>N<y>

   For more information on configuring the blade, see the following documents in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**):

   • *HPE Moonshot System Configuration and Compatibility Guide*

   • *HPE Moonshot iLO Chassis Management CLI User Guide*

Updating blade firmware

The minimum supported iLO CM firmware version for use with this blade is iLO Chassis Manager Firmware version 1.50.

> (i) **IMPORTANT:** To ensure that the latest firmware version is loaded correctly, power down the blade node before updating the blade firmware.

A system ROM flash does not take effect on a node until the node is rebooted. The iLO CM firmware will reflect the system ROM flash immediately.

Procedure

1. Verify the firmware version by entering one of the following commands at the CLI:

   • `show firmware revisions all`

   • `show firmware revisions list`

2. Download the latest firmware version from the **HPE Moonshot Component Pack download site**.

For more information on updating the firmware, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Installing the operating system

The HPE Moonshot 1500 Chassis supports up to 45 blades, each with a processor, drive, and memory, and can run an operating system. It is possible to load each blade individually with an OS via PXE. For OS deployment procedures, see the *Operating System Deployment on HPE ProLiant Moonshot Server Cartridges User Guide* (**http://www.hpe.com/support/moonshot_os_deployment_en**).

To provision a full complement of blades quickly, Hewlett Packard Enterprise recommends the HPE Insight Cluster Management Utility for large-scale image deployment. The Insight CMU is an efficient and robust hyperscale cluster lifecycle management framework and suite of tools for large Linux clusters.

For more information on Insight CMU features and links to technical documents, QuickSpecs, and a product demonstration, see the **Hewlett Packard Enterprise website**.

Registering the product

To experience quicker service and more efficient support, register the product at the **Hewlett Packard Enterprise Product Registration website**.

HPE Trusted Platform Module

Trusted Platform Module (TPM) Notice

HP Special Reminder: Before enabling Trusted Platform Module (TPM) functionality on this system, you must ensure that your intended use of TPM complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable.

For any compliance issues arising from your operation/usage of TPM which violates the above mentioned requirement, you shall bear all the liabilities wholly and solely. HP will not be responsible for any related liabilities.

可信任平台模块 (Trusted Platform Module，TPM) 声明

HPE 特别提醒：在您在系统中启用 TPM 功能前，请您务必确认，您将要对 TPM 的使用遵守相关的当地法律、法规及政策，并已获得所需的一切事先批准及许可(如适用)。

若因您未获得相应的操作/使用许可而发生的合规问题，皆由您自行承担全部责任，与 HPE 无涉。

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the Hewlett Packard Enterprise website (**http://www.hpe.com/info/qs**).

The TPM is embedded in the system board of the server. Use these instructions to enable a TPM on a supported blade. This procedure includes two sections:

1. **Retaining the recovery key/password** on page 20.

2. **Enabling the Trusted Platform Module** on page 21.

   Enabling the TPM requires accessing BIOS/Platform Configuration (RBSU) in UEFI System Utilities.

Retaining the recovery key/password

The recovery key/password is generated during BitLocker setup, and can be saved and printed after BitLocker is enabled. When using BitLocker, always retain the recovery key/password. The recovery key/

password is required to enter Recovery Mode after BitLocker detects a possible compromise of system integrity.

To help ensure maximum security, observe the guidelines listed in the following procedure list when retaining the recovery key/password.

Procedure

- Always store the recovery key/password in multiple locations.

- Always store copies of the recovery key/password away from the blade.

- Do not save the recovery key/password on the encrypted hard drive.

Enabling the Trusted Platform Module

Procedure

1. During the server startup sequence, press the **F9** key to access System Utilities.

2. From the System Utilities screen, select **System Configuration** > **BIOS/Platform Configuration (RBSU)** > **Server Security**.

3. Select **Trusted Platform Module Options** and press the **Enter** key.

4. Select **Enabled** to enable the TPM and BIOS secure startup. The TPM is fully functional in this mode.

5. Press the **F10** key to save your selection.

6. When prompted to save the change in System Utilities, press the **Y** key.

7. Press the **ESC** key to exit System Utilities. Then, press the **Enter** key when prompted to reboot the server.

   The server then reboots a second time without user input. During this reboot, the TPM setting becomes effective.

   You can now enable TPM functionality in the OS, such as Microsoft Windows BitLocker or measured boot.

   △ **CAUTION:** When a TPM is installed and enabled on the server, data access is locked if you fail to follow the proper procedures for updating the system or option firmware, replacing the system board, replacing a hard drive, or modifying OS application TPM settings.

For more information on firmware updates and hardware procedures, see the Trusted Platform Module Best Practices White Paper on the **Hewlett Packard Enterprise Support Center website**.

For more information on adjusting TPM usage in BitLocker, see the **Microsoft website**.

Configuration

Enabling video on monitor

To enable video on monitor during installation and inside the OS, you must disable iLO video. The procedure for disabling iLO video depends on the operating system. Perform one of the following procedures depending on the OS installed:

- **Enabling video on monitor for Windows 2012, Windows 8, Windows 8.1, Windows 10, RHEL 7.3, and CentOS 7.3** on page 22

- **Enabling video on monitor for Windows 7** on page 23

- **Enabling video on monitor for Linux (except RHEL 7.3 and CentOS 7.3)** on page 25

Enabling video on monitor for Windows 2012, Windows 8, Windows 8.1, Windows 10, RHEL 7.3, and CentOS 7.3

To enable video on monitor during installation and inside the OS, you must disable iLO video.

When you disable iLO video, you will lose the video on the iLO Integrated Remote Console after the blade enters BIOS.

Procedure

1. Connect the monitor to the blade.

2. Power up the node (see **Powering up the node** on page 19).

3. When the BIOS screen is displayed, press the **F9** key.

4. Go to **System Options** -> **BIOS/Platform Configuration (RBSU)** -> **Advanced Options** -> **Video Options**.

5. Select **Integrated/Add-in Video Enabled, iLO Video Disabled**.
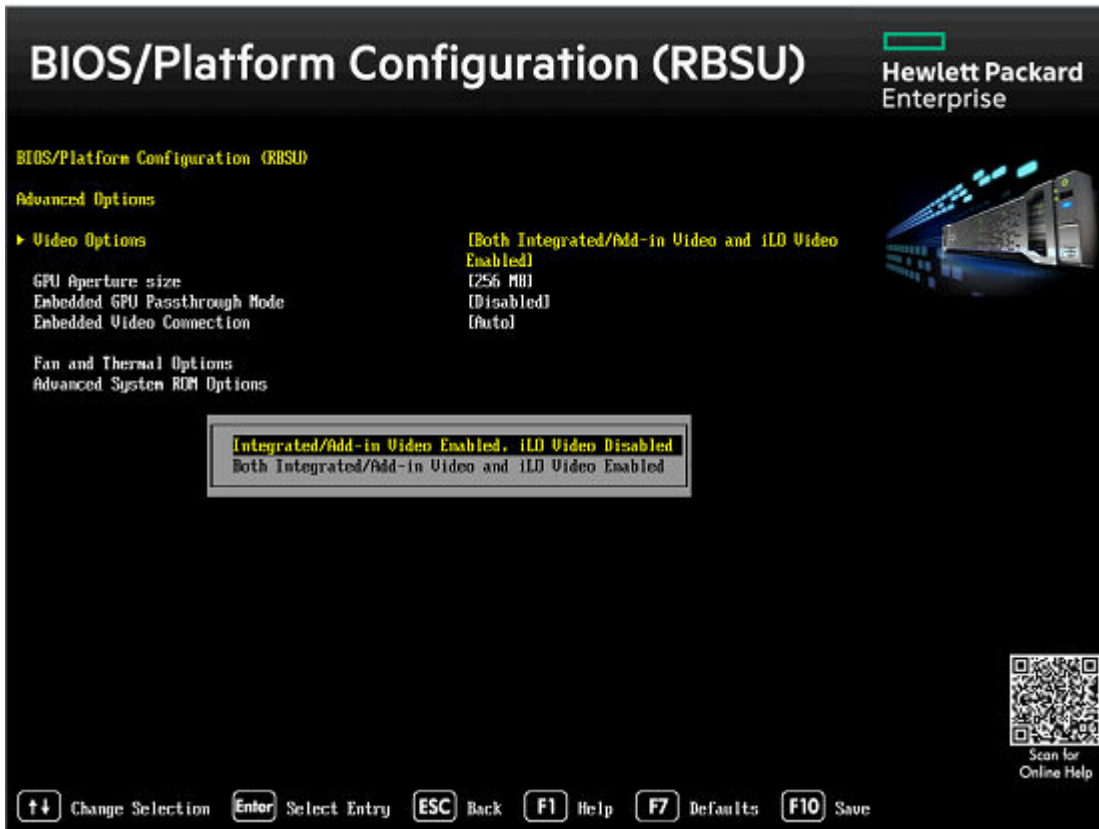
6. Press the **F10** key to Save the changes.

   A prompt asking whether to save the changes is displayed.

7. Select **Yes**.

8. Power down the node.

9. **Power up the blade** on page 16.

The video is displayed on the monitor during OS installation and inside the OS.

To revert to displaying video on iLO, change the RBSU setting in BIOS to **Both Integrated/Add-in Video and iLO Video Enabled**. You can do this using the monitor, or the Virtual Serial Port.

HPE recommends installing the GPU driver after enabling the video on monitor, for better user experience. For information on installing the GPU driver, see the 'Installing graphics packages (m710x)' topic in the *Operating System Deployment on HPE ProLiant Moonshot Server Cartridges User Guide* on the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

Enabling video on monitor for Windows 7

Installing Windows 7 using a monitor is not supported. Use iLO Integrated Remote Console to install Windows 7 OS. After installing the OS, you can enable video on monitor.

To enable video on monitor inside the OS, you must disable iLO video.

When you disable iLO video, you will lose the video on the iLO Integrated Remote Console after the blade enters BIOS.

Procedure

1. Log in to the OS using the iLO Remote Console.

2. Install GPU driver.
   For information on installing the GPU driver, see the 'Installing graphics packages (m710x)' topic in the *Operating System Deployment on HPE ProLiant Moonshot Server Cartridges User Guide* on the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

3. Reboot the blade. (**Power up the blade** on page 16).

4. When the BIOS screen is displayed, press the **F9** key.

5. Go to **System Options** -> **BIOS/Platform Configuration (RBSU)** -> **Advanced Options** -> **Video Options**.

6. Select **Integrated/Add-in Video Enabled, iLO Video Disabled**.
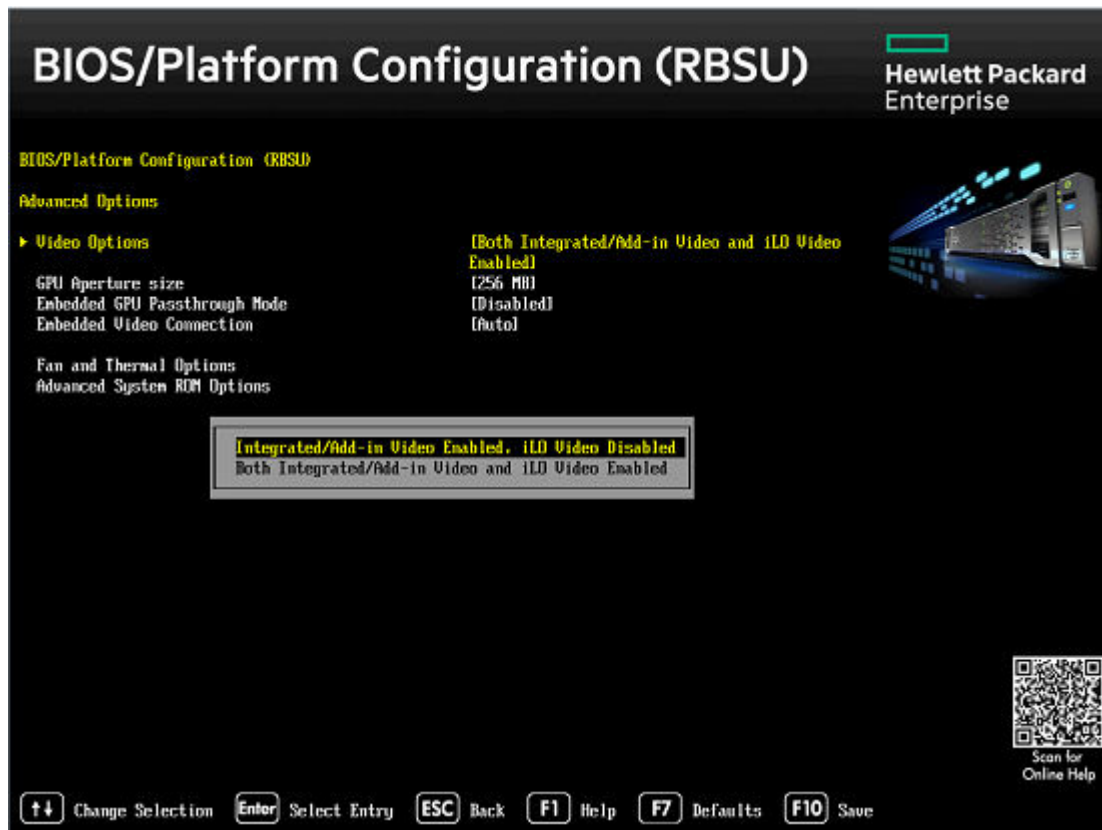
7. Press the **F10** key to Save the changes.

   A prompt asking whether to save the changes is displayed.

8. Select **Yes**.

9. Power down the node.

10. Connect the monitor to the blade.

11. **Power up the blade** on page 16.

    The video is displayed on the monitor inside the OS.

To revert to displaying video on iLO, change the RBSU setting in BIOS to **Both Integrated/Add-in Video and iLO Video Enabled**. You can do this using the monitor, or the Virtual Serial Port.

Enabling video on monitor for Linux (except RHEL 7.3 and CentOS 7.3)

Only RHEL 7.3 and CentOS 7.3 support using monitor during OS installation. Install all other Linux operating systems using iLO Integrated Remote Console.

Procedure

To enable video on the monitor after the OS is installed, install Media Server Studio from Intel.

Media Server Studio has the graphics driver for the GPU. For more information, see the getting started guides on the Intel website (**https://software.intel.com/en-us/intel-media-server-studio-support/documentation**).

Hardware options installation

Hewlett Packard Enterprise product QuickSpecs

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the Hewlett Packard Enterprise website (**http://www.hpe.com/info/qs**).

Installing a DIMM

The blade supports HPE Smart Memory. The HPE SmartMemory authenticates and unlocks certain features available only on Qualified memory and verifies whether installed memory has passed Hewlett Packard Enterprise qualification and test processes. Qualified memory is performance-tuned for ProLiant and BladeSystem servers and provides future enhanced support through Active Health and manageability software.

The blade has four DIMM slots. For DIMM slot population order and DIMM slot locations, see **DIMM slot numbering** on page 7.

Procedure

1. **Power down the blade** on page 10.

2. **Extend the chassis from the rack** on page 11.

3. **Remove the access panel** on page 12.

4. **Remove the blade** on page 14.

5. Install the DIMM.
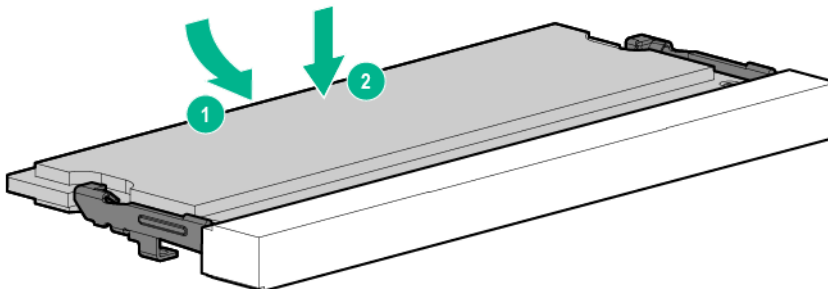
Installing an M.2 device

You can install M.2 devices of the following lengths in this blade:

- 42 mm M.2 device (**Install a 42 mm M.2 device** on page 27): Supported only in slot 3

- 80 mm M.2 device (**Install an 80 mm M.2 device** on page 27): Supported in all slots except slot 3

- 110 mm M.2 device (**Install a 110 mm M.2 device** on page 28): Supported in slots 4 and 5

Install the devices in the following population order: 4->1->2->5

For M.2 slot locations, see **M.2 slot numbering** on page 8.

Install a 42 mm M.2 device

Procedure

1. **Power down the blade** on page 10.
2. **Extend the chassis from the rack** on page 11.
3. **Remove the access panel** on page 12.
4. **Remove the blade** on page 14.
5. Remove the device mounting screw.
6. Install the device, and then install the device mounting screw.
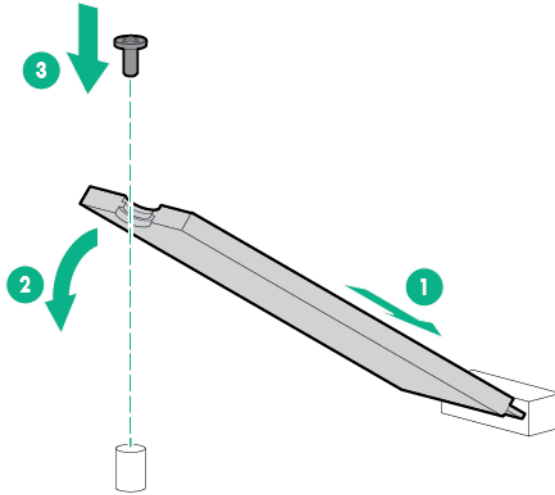
Install an 80 mm M.2 device

Procedure

1. **Power down the blade** on page 10.
2. **Extend the chassis from the rack** on page 11.
3. **Remove the access panel** on page 12.
4. **Remove the blade** on page 14.
5. Install the device.
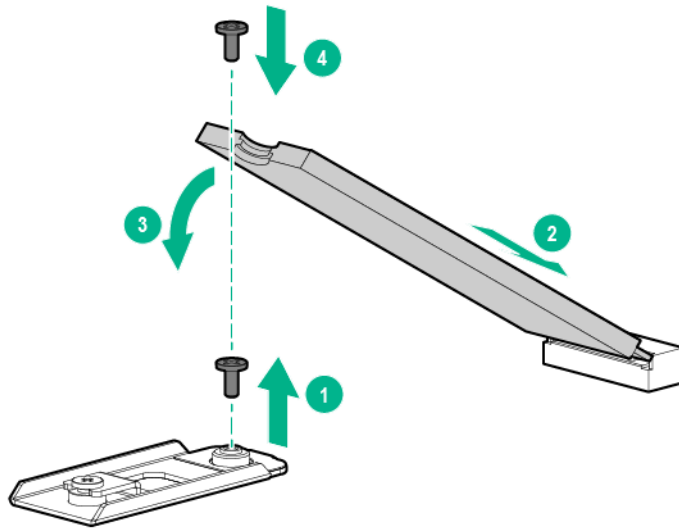
Install a 110 mm M.2 device

Procedure

1. **Power down the blade** on page 10.

2. **Extend the chassis from the rack** on page 11.

3. **Remove the access panel** on page 12.

4. **Remove the blade** on page 14.

5. Remove the device mounting clip screws.
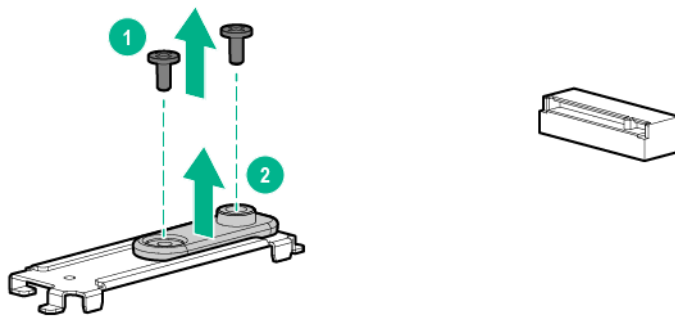
6. Rotate the mounting clip, and then install the clip on the mounting bracket.
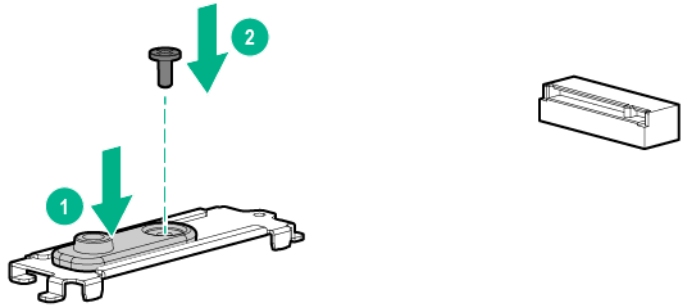
7. Install the device.
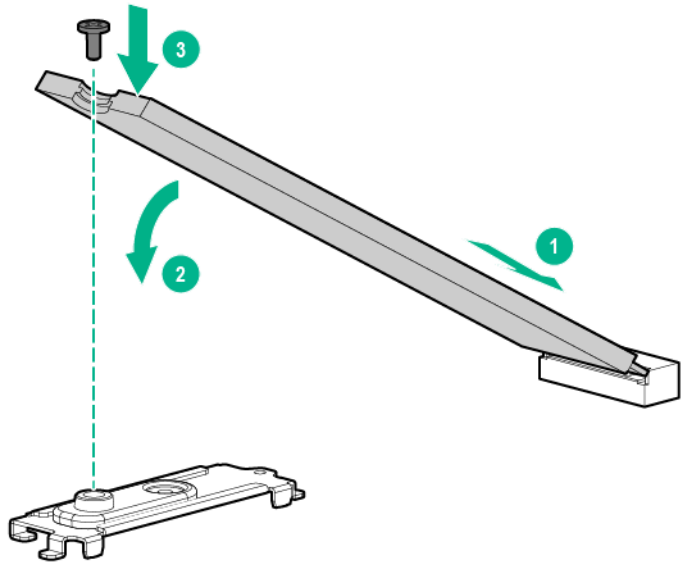
Software and configuration utilities

Product QuickSpecs

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the Hewlett Packard Enterprise website (**http://www.hpe.com/info/qs**).

Supported operating systems and drivers matrix

Operating system support

For more information on Hewlett Packard Enterprise Certified and Supported systems for the operating systems available for your system, see the Hewlett Packard Enterprise OS support website:

http://www.hpe.com/info/ossupport

ROM, BIOS, and driver support

For more information on Hewlett Packard Enterprise Certified and Supported systems for the latest software ROM, BIOS, and drivers available for your system, see the Hewlett Packard Enterprise Support Center website:

http://www.hpe.com/support/hpesc

HPE Moonshot iLO Chassis Management Firmware

The Moonshot iLO Chassis Management Firmware is the gateway for aggregated chassis management on the Moonshot System. As a single point of access to the chassis, iLO CM firmware enables you to configure, update, and operate the Moonshot System through the GUI, CLI, IPMI, and remote serial console access.

For more information, see the *HPE Moonshot iLO Chassis Management CLI User Guide* or the *Moonshot iLO Chassis Manager Web Interface User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

HPE Moonshot iLO CM Integrated Management Log

The iLO CM IML records hundreds of events and stores them in an easy-to-view form. The iLO CM IML timestamps each event with 1-minute granularity. Logged events include fan, power supply, blade and switch insertion, removal or failure events, temperature events, and firmware updates. To view recorded events in the iLO CM IML, use the GUI or enter the `show log iml all` command in iLO CM firmware.

For more information, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

HPE Moonshot iLO CM Event Log

The iLO CM Event Log is an operating system-independent log that maintains a record of events by date and time. Logged events include major events, such as a power outage or a reset, login events, node power on/off events, configuration changes, and iLO CM firmware events. To view recorded events in the iLO CM Event Log, use the GUI or enter `show log ilo all` command in iLO CM firmware.

For more information, see the *HPE Moonshot iLO Chassis Management CLI User Guide* in the Hewlett Packard Enterprise Information Library (**http://www.hpe.com/info/moonshot/docs**).

iLO for Moonshot

iLO for Moonshot is a remote server management processor embedded on HPE ProLiant m510, m710x, and m710x-L server blades when installed in an HPE Moonshot 1500 Chassis. iLO for Moonshot enables the monitoring and controlling of server blades from remote locations and provides an integrated remote console. iLO for Moonshot comes preconfigured on HPE ProLiant m510, m710x, and m710x-L server blades without an additional cost or license.

iLO for Moonshot firmware is available by downloading the latest Moonshot Component Pack from the Hewlett Packard Enterprise Support Center **website**.

HPE Moonshot Component Pack

The Moonshot Component Pack is a comprehensive firmware solution tested on the Moonshot System and delivered as a compressed file. The compressed file includes the firmware files to update a Moonshot Chassis. Users deploy the firmware updates from a command line with the iLO Chassis Manager GUI or CLI (iLO Chassis Manager) or the Moonshot 45Gc, 45XGc, and 180XGc Switch Module CLI (switch firmware only). Download the latest **Moonshot Component Pack** from the Hewlett Packard Enterprise Support Center website.

The MCP Firmware can also be deployed using the Moonshot 1500 Firmware Update Utility, which is included in the MCP deliverable. The Moonshot 1500 Firmware Update Utility is a tool for applying firmware to one or more Moonshot 1500 chassis in one session. It currently supports client or server versions of Windows as the Management Workstation from which to deploy firmware. There is no Linux support at this time. To learn more, see *Moonshot 1500 Firmware Update Utility* on the **HPE website**.

Users can also use Smart Update Manager (SUM), which was included with the Moonshot Component Pack 2018.02.0 and 2018.02.1. For more information on SUM, see *Smart Update Manager Release Notes*.

Firmware Deployment Change

The MCP Firmware will now be deployed using the Moonshot 1500 Firmware Update Utility, which is included in the MCP deliverable. The Moonshot 1500 Firmware Update Utility is a tool for applying firmware to one or more Moonshot 1500 chassis in one session. It currently supports client or server versions of Windows as the Management Workstation from which to deploy firmware. There is no Linux support at this time. To learn more, see **Moonshot 1500 Firmware Update Utility**.

SUM is no longer included in the MCP. To deploy the firmware using SUM, you can use SUM that was included in a previous MCP.

UEFI System Utilities

The UEFI System Utilities is embedded in the system ROM. The UEFI System Utilities enable you to perform a wide range of configuration activities, including:

• Displaying system information

• Selecting the primary boot controller

• Launching other pre-boot environments such as the Embedded UEFI Shell

For more information on the UEFI System Utilities, see the *UEFI System Utilities User Guide for HPE Proliant m510 and m710x and m710x-L Server Blades* on the Hewlett Packard Enterprise website (**http:// www.hpe.com/info/UEFI/docs**).

For on-screen help, press the **F1** key.

Using UEFI System Utilities

To use the System Utilities, use the following keys.

Action	Key
Access System Utilities	F9 during server POST
Navigate menus	Up and Down arrows
Select items	Enter
Save selections	F10
Access Help for a highlighted configuration option[1]	F1

[1] Scan the QR code on the screen to access online help for the UEFI System Utilities and UEFI Shell.

Default configuration settings are applied to the server at one of the following times:

- Upon the first system power-up

- After defaults have been restored

Default configuration settings are sufficient for typical server operations; however, you can modify configuration settings as needed. The system prompts you for access to the UEFI System Utilities each time the system is powered up.

Restore default system settings

Use this option to reset all configuration settings to their default values. Changes that have been made might be lost. You need to reboot the system for changes to take effect.

Embedded UEFI shell

The system BIOS includes an Embedded UEFI Shell in the ROM. The UEFI Shell environment provides an API, a command line prompt, and a set of CLIs that allow scripting, file manipulation, and system information. These features enhance the capabilities of the UEFI System Utilities.

For more information, see the following documents:

- *UEFI System Utilities User Guide for HPE Proliant m510 and m710x and m710x-L Server Blades* on the **Hewlett Packard Enterprise Information Library**

- *UEFI Shell Specification* on the **UEFI website**

Powering on and selecting boot options

This server blade supports UEFI and Legacy boot modes. The boot controller and boot order are set automatically. You can configure the boot options manually as well.

Procedure

1. Press the Power On/Standby button.

2. During the initial boot, press the **F9** key in the HPE ProLiant POST screen to enter the UEFI System Utilities screen.

3. To navigate to the boot options, select **System Configuration**→**BIOS/Platform Configuration (RBSU)**→**Boot Options**.

For more information on boot options, see the UEFI documentation on the Hewlett Packard Enterprise website (**http://www.hpe.com/info/UEFI/docs**).

Troubleshooting

Troubleshooting resources

The *HPE Moonshot System Troubleshooting Guide* provides procedures for resolving common problems and comprehensive courses of action for fault isolation and identification, issue resolution, and software maintenance on the Moonshot System. The document is available in the **Hewlett Packard Enterprise Information Library**.

Illustrated parts catalog

Customer self repair

Hewlett Packard Enterprise products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period Hewlett Packard Enterprise (or Hewlett Packard Enterprise service providers or service partners) identifies that the repair can be accomplished by the use of a CSR part, Hewlett Packard Enterprise will ship that part directly to you for replacement. There are two categories of CSR parts:

*   **Mandatory**—Parts for which customer self repair is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

*   **Optional**—Parts for which customer self repair is optional. These parts are also designed for customer self repair. If, however, you require that Hewlett Packard Enterprise replace them for you, there may or may not be additional charges, depending on the type of warranty service designated for your product.

NOTE: Some Hewlett Packard Enterprise parts are not designed for customer self repair. In order to satisfy the customer warranty, Hewlett Packard Enterprise requires that an authorized service provider replace the part. These parts are identified as "No" in the Illustrated Parts Catalog.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the Hewlett Packard Enterprise Support Center and a technician will help you over the telephone. Hewlett Packard Enterprise specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to Hewlett Packard Enterprise. In cases where it is required to return the defective part to Hewlett Packard Enterprise, you must ship the defective part back to Hewlett Packard Enterprise within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in Hewlett Packard Enterprise billing you for the replacement. With a customer self repair, Hewlett Packard Enterprise will pay all shipping and part return costs and determine the courier/carrier to be used.

For more information about the Hewlett Packard Enterprise CSR program, contact your local service provider. For the North American program, go to the **Hewlett Packard Enterprise CSR website**

Parts only warranty service

Your Hewlett Packard Enterprise Limited Warranty may include a parts only warranty service. Under the terms of parts only warranty service, Hewlett Packard Enterprise will provide replacement parts free of charge.

For parts only warranty service, CSR part replacement is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

Réparation par le client (CSR)

Les produits Hewlett Packard Enterprise comportent de nombreuses pièces CSR (Customer Self Repair = réparation par le client) afin de minimiser les délais de réparation et faciliter le remplacement des pièces défectueuses. Si pendant la période de diagnostic, Hewlett Packard Enterprise (ou ses partenaires ou mainteneurs agréés) détermine que la réparation peut être effectuée à l'aide d'une pièce CSR, Hewlett Packard Enterprise vous l'envoie directement. Il existe deux catégories de pièces CSR :

- **Obligatoire**—Pièces pour lesquelles la réparation par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.

- **Facultatif**—Pièces pour lesquelles la réparation par le client est facultative. Ces pièces sont également conçues pour permettre au client d'effectuer lui-même la réparation. Toutefois, si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, l'intervention peut ou non vous être facturée, selon le type de garantie applicable à votre produit.

REMARQUE: Certaines pièces Hewlett Packard Enterprise ne sont pas conçues pour permettre au client d'effectuer lui-même la réparation. Pour que la garantie puisse s'appliquer, Hewlett Packard Enterprise exige que le remplacement de la pièce soit effectué par un Mainteneur Agréé. Ces pièces sont identifiées par la mention "Non" dans le Catalogue illustré.

Les pièces CSR sont livrées le jour ouvré suivant, dans la limite des stocks disponibles et selon votre situation géographique. Si votre situation géographique le permet et que vous demandez une livraison le jour même ou dans les 4 heures, celle-ci vous sera facturée. Pour toute assistance, appelez le Centre d'assistance Hewlett Packard Enterprise pour qu'un technicien vous aide au téléphone Dans les documents envoyés avec la pièce de rechange CSR, Hewlett Packard Enterprise précise s'il est nécessaire de lui retourner la pièce défectueuse. Si c'est le cas, vous devez le faire dans le délai indiqué, généralement cinq (5) jours ouvrés. La pièce et sa documentation doivent être retournées dans l'emballage fourni. Si vous ne retournez pas la pièce défectueuse, Hewlett Packard Enterprise se réserve le droit de vous facturer les coûts de remplacement. Dans le cas d'une pièce CSR, Hewlett Packard Enterprise supporte l'ensemble des frais d'expédition et de retour, et détermine la société de courses ou le transporteur à utiliser.

Pour plus d'informations sur le programme CSR de Hewlett Packard Enterprise, contactez votre Mainteneur Agrée local. Pour plus d'informations sur ce programme en Amérique du Nord, consultez le site **Web Hewlett Packard Enterprise**.

Service de garantie "pièces seules"

Votre garantie limitée Hewlett Packard Enterprise peut inclure un service de garantie "pièces seules". Dans ce cas, les pièces de rechange fournies par Hewlett Packard Enterprise ne sont pas facturées.

Dans le cadre de ce service, la réparation des pièces CSR par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.

Riparazione da parte del cliente

Per abbreviare i tempi di riparazione e garantire una maggiore flessibilità nella sostituzione di parti difettose, i prodotti Hewlett Packard Enterprise sono realizzati con numerosi componenti che possono essere riparati direttamente dal cliente (CSR, Customer Self Repair). Se in fase di diagnostica Hewlett Packard Enterprise (o un centro di servizi o di assistenza Hewlett Packard Enterprise) identifica il guasto come riparabile mediante un ricambio CSR, Hewlett Packard Enterprise lo spedirà direttamente al cliente per la sostituzione. Vi sono due categorie di parti CSR:

- **Obbligatorie**—Parti che devono essere necessariamente riparate dal cliente. Se il cliente ne affida la riparazione ad Hewlett Packard Enterprise, deve sostenere le spese di spedizione e di manodopera per il servizio.

- **Opzionali**—Parti la cui riparazione da parte del cliente è facoltativa. Si tratta comunque di componenti progettati per questo scopo. Se tuttavia il cliente ne richiede la sostituzione ad Hewlett Packard Enterprise, potrebbe dover sostenere spese addizionali a seconda del tipo di garanzia previsto per il prodotto.

NOTA: alcuni componenti Hewlett Packard Enterprise non sono progettati per la riparazione da parte del cliente. Per rispettare la garanzia, Hewlett Packard Enterprise richiede che queste parti siano sostituite da

un centro di assistenza autorizzato. Tali parti sono identificate da un "No" nel Catalogo illustrato dei componenti.

In base alla disponibilità e alla località geografica, le parti CSR vengono spedite con consegna entro il giorno lavorativo seguente. La consegna nel giorno stesso o entro quattro ore è offerta con un supplemento di costo solo in alcune zone. In caso di necessità si può richiedere l'assistenza telefonica di un addetto del centro di supporto tecnico Hewlett Packard Enterprise. Nel materiale fornito con una parte di ricambio CSR, Hewlett Packard Enterprise specifica se il cliente deve restituire dei component. Qualora sia richiesta la resa ad Hewlett Packard Enterprise del componente difettoso, lo si deve spedire ad Hewlett Packard Enterprise entro un determinato periodo di tempo, generalmente cinque (5) giorni lavorativi. Il componente difettoso deve essere restituito con la documentazione associata nell'imballo di spedizione fornito. La mancata restituzione del componente può comportare la fatturazione del ricambio da parte di Hewlett Packard Enterprise. Nel caso di riparazione da parte del cliente, Hewlett Packard Enterprise sostiene tutte le spese di spedizione e resa e sceglie il corriere/vettore da utilizzare.

Per ulteriori informazioni sul programma CSR di Hewlett Packard Enterprise, contattare il centro di assistenza di zona. Per il programma in Nord America fare riferimento **al sito Web**.

Servizio di garanzia per i soli componenti

La garanzia limitata Hewlett Packard Enterprise può includere un servizio di garanzia per i soli componenti. Nei termini di garanzia del servizio per i soli componenti, Hewlett Packard Enterprise fornirà gratuitamente le parti di ricambio.

Per il servizio di garanzia per i soli componenti è obbligatoria la formula CSR che prevede la riparazione da parte del cliente. Se il cliente invece richiede la sostituzione ad Hewlett Packard Enterprise dovrà sostenere le spese di spedizione e di manodopera per il servizio.

Customer Self Repair

Hewlett Packard Enterprise Produkte enthalten viele CSR-Teile (Customer Self Repair), um Reparaturzeiten zu minimieren und höhere Flexibilität beim Austausch defekter Bauteile zu ermöglichen. Wenn Hewlett Packard Enterprise (oder ein Hewlett Packard Enterprise Servicepartner) bei der Diagnose feststellt, dass das Produkt mithilfe eines CSR-Teils repariert werden kann, sendet Ihnen Hewlett Packard Enterprise dieses Bauteil zum Austausch direkt zu. CSR-Teile werden in zwei Kategorien unterteilt:

- **Zwingend**—Teile, für die das Customer Self Repair-Verfahren zwingend vorgegeben ist. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

- **Optional**—Teile, für die das Customer Self Repair-Verfahren optional ist. Diese Teile sind auch für Customer Self Repair ausgelegt. Wenn Sie jedoch den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen möchten, können bei diesem Service je nach den für Ihr Produkt vorgesehenen Garantiebedingungen zusätzliche Kosten anfallen.

HINWEIS: Einige Hewlett Packard Enterprise Teile sind nicht für Customer Self Repair ausgelegt. Um den Garantieanspruch des Kunden zu erfüllen, muss das Teil von einem Hewlett Packard Enterprise Servicepartner ersetzt werden. Im illustrierten Teilekatalog sind diese Teile mit „No" bzw. „Nein" gekennzeichnet.

CSR-Teile werden abhängig von der Verfügbarkeit und vom Lieferziel am folgenden Geschäftstag geliefert. Für bestimmte Standorte ist eine Lieferung am selben Tag oder innerhalb von vier Stunden gegen einen Aufpreis verfügbar. Wenn Sie Hilfe benötigen, können Sie das Hewlett Packard Enterprise Support Center anrufen und sich von einem Mitarbeiter per Telefon helfen lassen. Den Materialien von Hewlett Packard Enterprise, die mit einem CSR-Ersatzteil geliefert werden, können Sie entnehmen, ob das defekte Teil an Hewlett Packard Enterprise zurückgeschickt werden muss. Wenn es erforderlich ist, das defekte Teil an Hewlett Packard Enterprise zurückzuschicken, müssen Sie dies innerhalb eines vorgegebenen Zeitraums tun, in der Regel innerhalb von fünf (5) Geschäftstagen. Das defekte Teil muss mit der zugehörigen Dokumentation in der Verpackung zurückgeschickt werden, die im Lieferumfang enthalten ist. Wenn Sie das defekte Teil nicht zurückschicken, kann Hewlett Packard Enterprise Ihnen das

Ersatzteil in Rechnung stellen. Im Falle von Customer Self Repair kommt Hewlett Packard Enterprise für alle Kosten für die Lieferung und Rücksendung auf und bestimmt den Kurier-/Frachtdienst.

Weitere Informationen über das Hewlett Packard Enterprise Customer Self Repair Programm erhalten Sie von Ihrem Servicepartner vor Ort. Informationen über das CSR-Programm in Nordamerika finden Sie auf der **Hewlett Packard Enterprise Website unter**.

Parts-only Warranty Service (Garantieservice ausschließlich für Teile)

Ihre Hewlett Packard Enterprise Garantie umfasst möglicherweise einen Parts-only Warranty Service (Garantieservice ausschließlich für Teile). Gemäß den Bestimmungen des Parts-only Warranty Service stellt Hewlett Packard Enterprise Ersatzteile kostenlos zur Verfügung.

Für den Parts-only Warranty Service ist das CSR-Verfahren zwingend vorgegeben. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

Reparaciones del propio cliente

Los productos de Hewlett Packard Enterprise incluyen muchos componentes que el propio usuario puede reemplazar (Customer Self Repair, CSR) para minimizar el tiempo de reparación y ofrecer una mayor flexibilidad a la hora de realizar sustituciones de componentes defectuosos. Si, durante la fase de diagnóstico, Hewlett Packard Enterprise (o los proveedores o socios de servicio de Hewlett Packard Enterprise) identifica que una reparación puede llevarse a cabo mediante el uso de un componente CSR, Hewlett Packard Enterprise le enviará dicho componente directamente para que realice su sustitución. Los componentes CSR se clasifican en dos categorías:

- **Obligatorio**—Componentes cuya reparación por parte del usuario es obligatoria. Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

- **Opcional**—Componentes cuya reparación por parte del usuario es opcional. Estos componentes también están diseñados para que puedan ser reparados por el usuario. Sin embargo, si precisa que Hewlett Packard Enterprise realice su sustitución, puede o no conllevar costes adicionales, dependiendo del tipo de servicio de garantía correspondiente al producto.

NOTA: Algunos componentes de Hewlett Packard Enterprise no están diseñados para que puedan ser reparados por el usuario. Para que el usuario haga valer su garantía, Hewlett Packard Enterprise pone como condición que un proveedor de servicios autorizado realice la sustitución de estos componentes. Dichos componentes se identifican con la palabra "No" en el catálogo ilustrado de componentes.

Según la disponibilidad y la situación geográfica, los componentes CSR se enviarán para que lleguen a su destino al siguiente día laborable. Si la situación geográfica lo permite, se puede solicitar la entrega en el mismo día o en cuatro horas con un coste adicional. Si precisa asistencia técnica, puede llamar al Centro de asistencia técnica de Hewlett Packard Enterprise y recibirá ayuda telefónica por parte de un técnico. Con el envío de materiales para la sustitución de componentes CSR, Hewlett Packard Enterprise especificará si los componentes defectuosos deberán devolverse a Hewlett Packard Enterprise. En aquellos casos en los que sea necesario devolver algún componente a Hewlett Packard Enterprise, deberá hacerlo en el periodo de tiempo especificado, normalmente cinco días laborables. Los componentes defectuosos deberán devolverse con toda la documentación relacionada y con el embalaje de envío. Si no enviara el componente defectuoso requerido, Hewlett Packard Enterprise podrá cobrarle por el de sustitución. En el caso de todas sustituciones que lleve a cabo el cliente, Hewlett Packard Enterprise se hará cargo de todos los gastos de envío y devolución de componentes y escogerá la empresa de transporte que se utilice para dicho servicio.

Para obtener más información acerca del programa de Reparaciones del propio cliente de Hewlett Packard Enterprise, póngase en contacto con su proveedor de servicios local. Si está interesado en el programa para Norteamérica, visite **la página web de Hewlett Packard Enterprise CSR**.

Servicio de garantía exclusivo de componentes

La garantía limitada de Hewlett Packard Enterprise puede que incluya un servicio de garantía exclusivo de componentes. Según las condiciones de este servicio exclusivo de componentes, Hewlett Packard Enterprise le facilitará los componentes de repuesto sin cargo adicional alguno.

Para este servicio de garantía exclusivo de componentes, es obligatoria la sustitución de componentes por parte del usuario (CSR). Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

Customer Self Repair

Veel onderdelen in Hewlett Packard Enterprise producten zijn door de klant zelf te repareren, waardoor de reparatieduur tot een minimum beperkt kan blijven en de flexibiliteit in het vervangen van defecte onderdelen groter is. Deze onderdelen worden CSR-onderdelen (Customer Self Repair) genoemd. Als Hewlett Packard Enterprise (of een Hewlett Packard Enterprise Service Partner) bij de diagnose vaststelt dat de reparatie kan worden uitgevoerd met een CSR-onderdeel, verzendt Hewlett Packard Enterprise dat onderdeel rechtstreeks naar u, zodat u het defecte onderdeel daarmee kunt vervangen. Er zijn twee categorieën CSR-onderdelen:

*   **Verplicht**—Onderdelen waarvoor reparatie door de klant verplicht is. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht.

*   **Optioneel**—Onderdelen waarvoor reparatie door de klant optioneel is. Ook deze onderdelen zijn ontworpen voor reparatie door de klant. Als u echter Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, kunnen daarvoor extra kosten in rekening worden gebracht, afhankelijk van het type garantieservice voor het product.

OPMERKING: Sommige Hewlett Packard Enterprise onderdelen zijn niet ontwikkeld voor reparatie door de klant. In verband met de garantievoorwaarden moet het onderdeel door een geautoriseerde Service Partner worden vervangen. Deze onderdelen worden in de geïllustreerde onderdelencatalogus aangemerkt met "Nee".

Afhankelijk van de leverbaarheid en de locatie worden CSR-onderdelen verzonden voor levering op de eerstvolgende werkdag. Levering op dezelfde dag of binnen vier uur kan tegen meerkosten worden aangeboden, indien dit mogelijk is gezien de locatie. Indien assistentie is gewenst, belt u het Hewlett Packard Enterprise Support Center om via de telefoon ondersteuning van een technicus te ontvangen. Hewlett Packard Enterprise vermeldt in de documentatie bij het vervangende CSR-onderdeel of het defecte onderdeel aan Hewlett Packard Enterprise moet worden geretourneerd. Als het defecte onderdeel aan Hewlett Packard Enterprise moet worden teruggezonden, moet u het defecte onderdeel binnen een bepaalde periode, gewoonlijk vijf (5) werkdagen, retourneren aan Hewlett Packard Enterprise. Het defecte onderdeel moet met de bijbehorende documentatie worden geretourneerd in het meegeleverde verpakkingsmateriaal. Als u het defecte onderdeel niet terugzendt, kan Hewlett Packard Enterprise u voor het vervangende onderdeel kosten in rekening brengen. Bij reparatie door de klant betaalt Hewlett Packard Enterprise alle verzendkosten voor het vervangende en geretourneerde onderdeel en kiest Hewlett Packard Enterprise zelf welke koerier/transportonderneming hiervoor wordt gebruikt.

Neem contact op met een Service Partner voor meer informatie over het Customer Self Repair programma van Hewlett Packard Enterprise. Informatie over Service Partners vindt u op de **Hewlett Packard Enterprise website**.

Garantieservice "Parts Only"

Het is mogelijk dat de Hewlett Packard Enterprise garantie alleen de garantieservice "Parts Only" omvat. Volgens de bepalingen van de Parts Only garantieservice zal Hewlett Packard Enterprise kosteloos vervangende onderdelen ter beschikking stellen.

Voor de Parts Only garantieservice is vervanging door CSR-onderdelen verplicht. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht

Reparo feito pelo cliente

Os produtos da Hewlett Packard Enterprise são projetados com muitas peças para reparo feito pelo cliente (CSR) de modo a minimizar o tempo de reparo e permitir maior flexibilidade na substituição de peças com defeito. Se, durante o período de diagnóstico, a Hewlett Packard Enterprise (ou fornecedores/parceiros da Hewlett Packard Enterprise) concluir que o reparo pode ser efetuado pelo uso de uma peça CSR, a Hewlett Packard Enterprise enviará a peça diretamente ao cliente. Há duas categorias de peças CSR:

- **Obrigatória**—Peças cujo reparo feito pelo cliente é obrigatório. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

- **Opcional**—Peças cujo reparo feito pelo cliente é opcional. Essas peças também são projetadas para o reparo feito pelo cliente. No entanto, se desejar que a Hewlett Packard Enterprise as substitua, pode haver ou não a cobrança de taxa adicional, dependendo do tipo de serviço de garantia destinado ao produto.

OBSERVAÇÃO: Algumas peças da Hewlett Packard Enterprise não são projetadas para o reparo feito pelo cliente. A fim de cumprir a garantia do cliente, a Hewlett Packard Enterprise exige que um técnico autorizado substitua a peça. Essas peças estão identificadas com a marca "No" (Não), no catálogo de peças ilustrado.

Conforme a disponibilidade e o local geográfico, as peças CSR serão enviadas no primeiro dia útil após o pedido. Onde as condições geográficas permitirem, a entrega no mesmo dia ou em quatro horas pode ser feita mediante uma taxa adicional. Se precisar de auxílio, entre em contato com o Centro de suporte técnico da Hewlett Packard Enterprise para que um técnico o ajude por telefone. A Hewlett Packard Enterprise especifica nos materiais fornecidos com a peça CSR de reposição se a peça com defeito deve ser devolvida à Hewlett Packard Enterprise. Nos casos em que isso for necessário, é preciso enviar a peça com defeito à Hewlett Packard Enterprise, você deverá enviar a peça com defeito de volta para a Hewlett Packard Enterprise dentro do período de tempo definido, normalmente em 5 (cinco) dias úteis. A peça com defeito deve ser enviada com a documentação correspondente no material de transporte fornecido. Caso não o faça, a Hewlett Packard Enterprise poderá cobrar a reposição. Para as peças de reparo feito pelo cliente, a Hewlett Packard Enterprise paga todas as despesas de transporte e de devolução da peça e determina a transportadora/serviço postal a ser utilizado.

Para obter mais informações sobre o programa de reparo feito pelo cliente da Hewlett Packard Enterprise, entre em contato com o fornecedor de serviços local. Para o programa norte-americano, **visite o site da Hewlett Packard Enterprise**.

Serviço de garantia apenas para peças

A garantia limitada da Hewlett Packard Enterprise pode incluir um serviço de garantia apenas para peças. Segundo os termos do serviço de garantia apenas para peças, a Hewlett Packard Enterprise fornece as peças de reposição sem cobrar nenhuma taxa.

No caso desse serviço, a substituição de peças CSR é obrigatória. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

カスタマーセルフリペア

修理時間を短縮し、故障部品の交換における高い柔軟性を確保するために、Hewlett Packard Enterprise製品には多数のカスタマーセルフリペア（CSR）部品があります。診断の際に、CSR部品を使用すれば修理ができるとHewlett Packard Enterprise（Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店）が判断した場合、Hewlett Packard Enterpriseはその部品を直接、お客様に発送し、お客様に交換していただきます。CSR部品には以下の2種類があります。

- **必須** - カスタマーセルフリペアが必須の部品。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様に請求されます。
- **任意** - カスタマーセルフリペアが任意である部品。この部品もカスタマーセルフリペア用です。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、お買い上げの製品に適用される保証サービス内容の範囲内においては、別途費用を負担していただくことなく保証サービスを受けることができます。

注：Hewlett Packard Enterprise製品の一部の部品は、カスタマーセルフリペアの対象外です。製品の保証を継続するためには、Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店による交換作業が必須となります。部品カタログには、当該部品がカスタマーセルフリペア除外品である旨が記載されています。

部品供給が可能な場合、地域によっては、CSR部品を翌営業日に届くように発送します。また、地域によっては、追加費用を負担いただくことにより同日または4時間以内に届くように発送することも可能な場合があります。サポートが必要なときは、Hewlett Packard Enterpriseサポートセンターに電話していただければ、技術者が電話でアドバイスします。交換用のCSR部品または同梱物には、故障部品をHewlett Packard Enterpriseに返送する必要があるかどうかが表示されています。故障部品をHewlett Packard Enterpriseに返送する必要がある場合は、指定期限内（通常は5営業日以内）に故障部品をHewlett Packard Enterpriseに返送してください。故障部品を返送する場合は、届いた時の梱包箱に関連書類とともに入れてください。故障部品を返送しない場合、Hewlett Packard Enterpriseから部品費用が請求されます。カスタマーセルフリペアの際には、Hewlett Packard Enterpriseは送料および部品返送費を全額負担し、使用する宅配便会社や運送会社を指定します。

部品のみ保証サービス

Hewlett Packard Enterprise保証サービスには、部品のみ保証サービスが適用される場合があります。このサービスでは、交換部品は無償で提供されます。

部品のみ保証サービスにおいては、CSR部品をお客様により交換作業していただくことが必須になります。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様のご負担となります。

客户自行维修

Hewlett Packard Enterprise 产品提供许多客户自行维修 (CSR) 部件，以尽可能缩短维修时间和在更换缺陷部件方面提供更大的灵活性。如果在诊断期间 Hewlett Packard Enterprise（或Hewlett Packard Enterprise 服务提供商或服务合作伙伴）确定可以通过使用 CSR 部件完成维修，Hewlett Packard Enterprise 将直接把该部件发送给您进行更换。有两类 CSR 部件：

- **强制性的** — 要求客户必须自行维修的部件。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。
- **可选的** — 客户可以选择是否自行维修的部件。这些部件也是为客户自行维修设计的。不过，如果您要求 Hewlett Packard Enterprise 为您更换这些部件，则根据为您的产品指定的保修服务类型，Hewlett Packard Enterprise 可能收取或不再收取任何附加费用。

注：某些 Hewlett Packard Enterprise 部件的设计并未考虑客户自行维修。为了满足客户保修的需要，Hewlett Packard Enterprise 要求授权服务提供商更换相关部件。这些部件在部件图解目录中标记为"否"。

CSR 部件将在下一个工作日发运（取决于备货情况和允许的地理范围）。在允许的地理范围内，可在当天或四小时内发运，但要收取额外费用。如果需要帮助，您可以致电 Hewlett Packard Enterprise 技术支持中心，将会有技术人员通过电话为您提供帮助。Hewlett Packard Enterprise 会在随更换的 CSR 部件发运的材料中指明是否必须将有缺陷的部件返还给 Hewlett Packard Enterprise。如果要求您将有缺陷的部件返还给 Hewlett Packard Enterprise，那么您必须在规定的期限内（通常是五 (5) 个工作日）将缺陷部件发给 Hewlett Packard Enterprise。有缺陷的部件必须随所提供的发运材料中的相关文件一起返还。如果未能送还有缺陷的部件，Hewlett Packard Enterprise 可能会要求您支付更换费用。客户自行维修时，Hewlett Packard Enterprise 将承担所有相关运输和部件返回费用，并指定快递商/承运商。

有关 Hewlett Packard Enterprise 客户自行维修计划的详细信息，请与您当地的服务提供商联系。有关北美地区的计划，请访问 Hewlett Packard Enterprise 网站 (http://www.hpe.com/support/selfrepair)。

仅部件保修服务

您的 Hewlett Packard Enterprise 有限保修服务可能涉及仅部件保修服务。根据仅部件保修服务条款的规定，Hewlett Packard Enterprise 将免费提供更换的部件。

仅部件保修服务要求进行 CSR 部件更换。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。

客戶自行維修

Hewlett Packard Enterprise 產品設計了許多「客戶自行維修」(CSR) 的零件以減少維修時間，並且使得更換瑕疵零件時能有更大的彈性。如果在診斷期間，Hewlett Packard Enterprise (或 Hewlett Packard Enterprise 服務供應商或維修夥伴) 辨認出此項維修工作可以藉由使用 CSR 零件來完成，則 Hewlett Packard Enterprise 將直接寄送該零件給您作更換。CSR 零件分為兩種類別：

- **強制的** — 客戶自行維修所使用的零件是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。
- **選購的** — 客戶自行維修所使用的零件是選購的。這些零件也設計用於客戶自行維修之用。不過，如果您要求 Hewlett Packard Enterprise 為您更換，則可能需要也可能不需要負擔額外的費用，端視針對此產品指定的保固服務類型而定。

備註：某些 Hewlett Packard Enterprise 零件沒有消費者可自行維修的設計。為符合客戶保固，Hewlett Packard Enterprise 需要授權的服務供應商更換零件。這些零件在圖示的零件目錄中，被標示為「否」。

基於材料取得及環境允許的情況下，CSR 零件將於下一個工作日以快遞寄送。在環境的允許下當天或四小時內送達，則可能需要額外的費用。若您需要協助，可致電 Hewlett Packard Enterprise 支援中心，會有一位技術人員透過電話來協助您。不論損壞的零件是否必須退回，Hewlett Packard Enterprise 皆會在與 CSR 替換零件一起運送的材料中註明。若要將損壞的零件退回 Hewlett Packard Enterprise，您必須在指定的一段時間內 (通常為五 (5) 個工作天)，將損壞的零件寄回 Hewlett Packard Enterprise。損壞的零件必須與寄送資料中隨附的相關技術文件一併退還。如果無法退還損壞的零件，Hewlett Packard Enterprise 可能要向您收取替換費用。針對客戶自行維修情形，Hewlett Packard Enterprise 將負責所有運費及零件退還費用，並指定使用何家快遞/貨運公司。

如需 Hewlett Packard Enterprise 的 CSR 方案詳細資訊，請連絡您當地的服務供應商。至於北美方案，請參閱 Hewlett Packard Enterprise 的 CSR 網站frepair (http://www.hpe.com/support/selfrepair)。

僅限零件的保固服務

您的「Hewlett Packard Enterprise 有限保固」可能包含僅限零件的保固服務。在僅限零件的保固服務情況下，Hewlett Packard Enterprise 將免費提供替換零件。

針對僅限零件的保固服務，CSR 零件替換是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。

고객 셀프 수리

Hewlett Packard Enterprise 제품은 수리 시간을 최소화하고 결함이 있는 부품 교체 시 더욱 융통성을 발휘할 수 있도록 하기 위해 고객 셀프 수리(CSR) 부품을 다량 사용하여 설계되었습니다. 진단 기간 동안 Hewlett Packard Enterprise(또는 Hewlett Packard Enterprise 서비스 공급업체 또는 서비스 협력업체)에서 CSR 부품을 사용하여 수리가 가능하다고 판단되면 Hewlett Packard Enterprise는 해당 부품을 바로 사용자에게 보내어 사용자가 교체할 수 있도록 합니다. CSR 부품에는 두 가지 종류가 있습니다.

- 필수 - 고객 셀프 수리가 의무 사항인 필수 부품. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.

- 선택 사항 - 고객 셀프 수리가 선택 사항인 부품. 이 부품들도 고객 셀프 수리가 가능하도록 설계되었습니다. 하지만 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 사용자가 구입한 제품에 해당하는 보증 서비스 유형에 따라 추가 비용 없이 교체가 가능할 수 있습니다.

참고: 일부 Hewlett Packard Enterprise 부품은 고객 셀프 수리가 불가능하도록 설계되었습니다. Hewlett Packard Enterprise는 만족스러운 고객 보증을 위해 공인 서비스 제공업체를 통해 부품을 교체하도록 하고 있습니다. 이러한 부품들은 Illustrated Parts Catalog에 "No"라고 표시되어 있습니다.

CSR 부품은 재고 상태와 지리적 조건이 허용하는 경우 다음 영업일 납품이 가능하도록 배송이 이루어집니다. 지리적 조건이 허용하는 경우 추가 비용이 청구되는 조건으로 당일 또는 4시간 배송이 가능할 수도 있습니다. 도움이 필요하시면 Hewlett Packard Enterprise Support Center로 전화하십시오. 전문 기술자가 전화로 도움을 줄 것입니다. Hewlett Packard Enterprise는 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는지 여부를 CSR 교체 부품과 함께 배송된 자료에 지정합니다. 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는 경우에는 지정된 기간 내에(통상 영업일 기준 5일)에 Hewlett Packard Enterprise로 반환해야 합니다. 이때 결함이 발생한 부품은 제공된 포장 재료에 넣어 관련 설명서와 함께 반환해야 합니다. 결함이 발생한 부품을 반환하지 않는 경우 Hewlett Packard Enterprise가 교체 부품에 대해 비용을 청구할 수 있습니다. 고객 셀프 수리의 경우, Hewlett Packard Enterprise는 모든 운송 및 부품 반환 비용을 부담하며 이용할 운송업체 및 택배 서비스를 결정합니다.

Hewlett Packard Enterprise CSR 프로그램에 대한 자세한 내용은 가까운 서비스 제공업체에 문의하십시오. 북미 지역의 프로그램에 대해서는 Hewlett Packard Enterprise CSR 웹 사이트(http://www.hpe.com/support/selfrepair)를 참조하십시오.

부품 제공 보증 서비스

Hewlett Packard Enterprise 제한 보증에는 부품 제공 보증 서비스가 포함될 수 있습니다. 이러한 경우 Hewlett Packard Enterprise는 부품 제공 보증 서비스의 조건에 따라 교체 부품만을 무료로 제공합니다.

부품 제공 보증 서비스 제공 시 CSR 부품 교체는 의무 사항입니다. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.

Blade replaceable components

Hewlett Packard Enterprise continually improves and changes product parts. For complete and current supported parts information, see the Hewlett Packard Enterprise PartSurfer website (**http://www.hpe.com/info/partssurfer**).
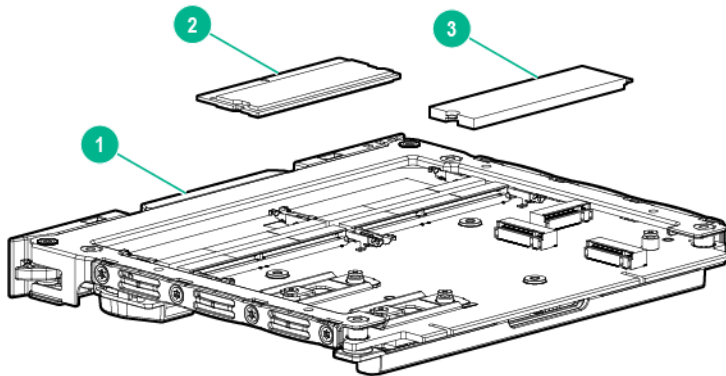
Item	Description
1	**Server blade spare parts** on page 44
2	**DIMM spare parts** on page 44

Table Continued

Item	Description
3	**M.2 device spare parts** on page 44
4	**HPE ProLiant m710x to EL1000 cable Kit spare parts** on page 44[1]

[1] Not shown

Server blade spare parts

Customer self repair on page 58: **mandatory**

Description	Spare part number
HPE ProLiant m710x Server Blade	846832-001
HPE ProLiant m710x-L Server Blade	P10857-001

DIMM spare parts

Customer self repair on page 58: **mandatory**

Description	Spare part number
8 GB PC4-2400T-T, 512Mx8 SODIMM	863371-001
16 GB PC4-2400T-T, 1Gx8 SODIMM	863372-001

M.2 device spare parts

Customer self repair on page 58: **mandatory**

Description	Spare part number
HPE 64 GB SATA M.2 2242 SSD Kit	867635-001
HPE 120 GB SATA M.2 2280 SSD Kit	867636-001
HPE 240 GB SATA M.2 2280 SSD Kit	867637-001
HPE 256 GB PCIe M.2 2280 SSD Kit	867896-001
HPE 512 GB PCIe M.2 2280 SSD Kit	867633-001
HPE 1.024 TB M.2 2280 PCI-e-PLP SSD	867632-001
VPU module with Myriad X	P10163-001

HPE ProLiant m710x to EL1000 cable Kit spare parts

Customer self repair on page 58: **mandatory**

Description	Spare part number
HPE ProLiant m710x to EL1000 cable Kit includes: • Mini display port-to-display port female adapter cable[1] • Mini display port-to-HDMI adapter cable • Micro USB-to-USB Type A female adapter cable	868390-001

[1] The cable with the RDPDM-0023/REV AX2 label requires a pin-to-pin type DisplayPort cable.

Removal and replacement procedures

Preparation procedures

To access some components and perform certain service procedures, you must perform one or more of the following procedures:

- **Remove the access panel** on page 12.

- **Install the access panel** on page 16.

- **Remove the blade** on page 14.

- **Install the blade** on page 14.

Safety considerations

Before performing service procedures, review all the safety information.

Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

To prevent electrostatic damage:

- Avoid hand contact by transporting and storing products in static-safe containers.

- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.

- Place parts on a grounded surface before removing them from their containers.

- Avoid touching pins, leads, or circuitry.

- Always be properly grounded when touching a static-sensitive component or assembly.

Symbols on equipment

The following symbols might be found on the equipment to indicate the presence of potentially hazardous conditions.

	This symbol indicates the presence of hazardous energy circuits or electric shock hazards. Refer all servicing to qualified personnel. **WARNING:** To reduce the risk of injury from electric shock hazards, do not open this enclosure. Refer all maintenance, upgrades, and servicing to qualified personnel.
	This symbol indicates the presence of electric shock hazards. The area contains no user or field serviceable parts. Do not open for any reason. **WARNING:** To reduce the risk of injury from electric shock hazards, do not open this enclosure.
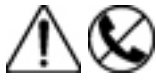
This symbol on an RJ-45 receptacle indicates a network interface connection.

WARNING: To reduce the risk of electric shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.

This symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists.

WARNING: To reduce the risk of injury from a hot component, allow the surface to cool before touching.

This symbol indicates that the component exceeds the recommended weight for one individual to handle safely.

81.65 kg

180.00 lb

WARNING: To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manual material handling.

These symbols, on power supplies or systems, indicate that the equipment is supplied by multiple sources of power.

WARNING: To reduce the risk of injury from electric shock, remove all power cords to disconnect power from the system completely.

Warnings and cautions

Before installing a chassis, be sure that you understand the following warnings and cautions.

⚠️ **WARNING:** To reduce the risk of electric shock or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.

- Connect the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

- Disconnect the power cord from the power supply to disconnect power to the equipment.

- Do not route the power cord where it can be walked on or pinched by items placed against it. Pay particular attention to the plug, electrical outlet, and the point where the cord extends from the chassis.

⚠️ **CAUTION:** Do not operate the chassis for long periods with the access panel open or removed. Operating the chassis in this manner results in improper airflow and improper cooling that can lead to thermal damage.

Removing and replacing a blade

When a blade fails and a replacement blade is installed in the chassis, you must update the serial number and the product ID to preserve the warranty entitlement for that blade.

Before you begin the replacement procedure, make note of the blade slot number for the blade being replaced.

Procedure

1. **Logging in to the iLO CM firmware** on page 17.

2. Capture the blade serial number using the following command:`SHOW CARTRIDGE SN C<x>`

3. Capture the blade product ID using the following command:`SHOW CARTRIDGE PID C<x>`

4. If the failed blade is powered on, then power down the failed blade using the following command:`SET NODE POWER OFF FORCE C<x>N<y>`

   For multinode blades, use the command:

   `SET NODE POWER OFF FORCE C<x>N<1-4>`

5. **Extend the chassis from the rack** on page 11.

6. **Remove the access panel** on page 12.

7. Remove the failed blade.
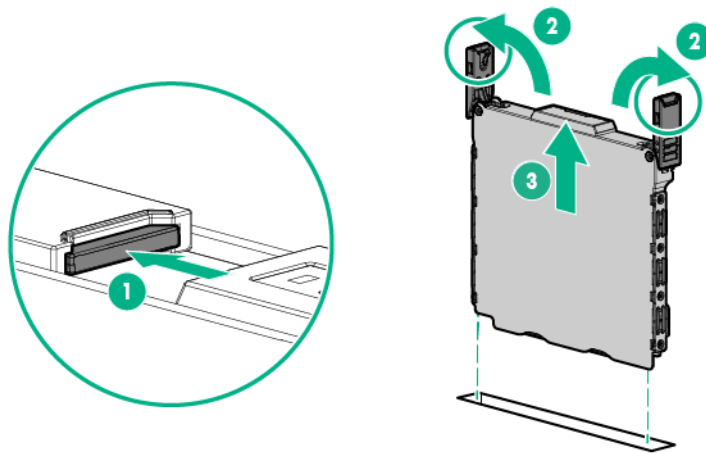
8. To minimize the amount of time that the blade slot is empty, **install a blade blank** in the blade slot while moving the options to the replacement blade.

9. If installed, remove the solid state device.

To replace the component:

1. If necessary, install the solid state device removed from the failed blade on the replacement blade.

2. **If installed, remove the blade blank**.

3. Prepare the replacement blade for installation.
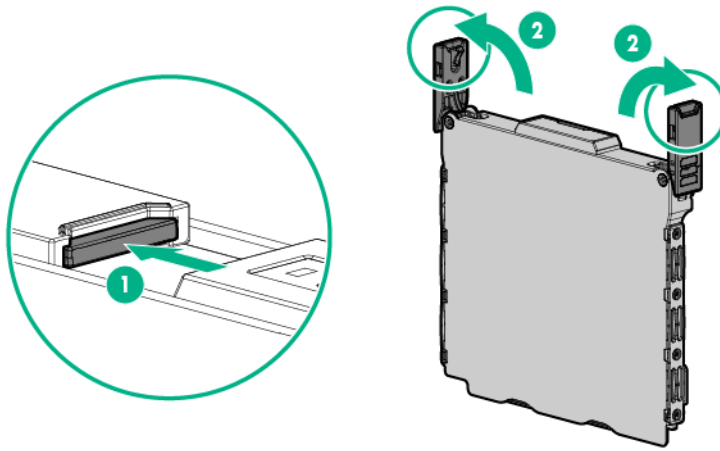
4. Install the replacement blade.
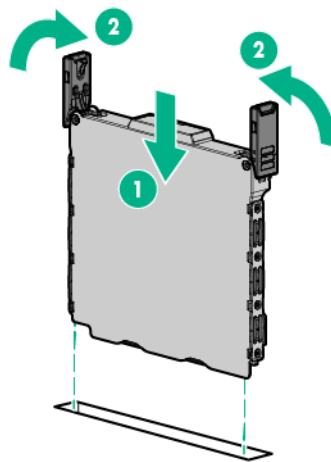
5. **Install the access panel** on page 16.

6. Slide the chassis into the rack.

7. Allow the iLO CM firmware to discover the replacement blade. The blade link LED flashes when this process is complete.

8. Assign the original serial number to the replacement blade using the following command:`SET CARTRIDGE SN <original SN> C<cartridge number>`

9. Assign the original product ID number to the replacement blade using the following command:`SET CARTRIDGE PID <original PID> C<cartridge number>`

Removing and replacing a blade blank

△ **CAUTION:** For proper cooling, be sure that a blade or a blade blank is always installed in each blade slot in the chassis. When replacing a blade, leave the blade slot empty for no more than 30 seconds. Failure to do so can disrupt airflow in the chassis.

Procedure

1. **Extend the chassis from the rack** on page 11.

2. **Remove the access panel** on page 12.

3. Remove the blade blank from the chassis.
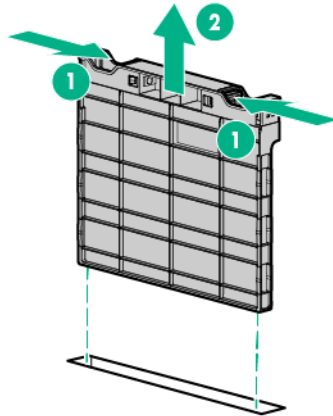
To replace the component, reverse the removal procedure.

Removing and replacing a DIMM

Procedure

1. Back up all blade data.

2. **Power down the blade** on page 10.

3. **Extend the chassis from the rack** on page 11.

4. **Remove the access panel** on page 12.

5. **Remove the blade** on page 14.

6. Remove the DIMM.
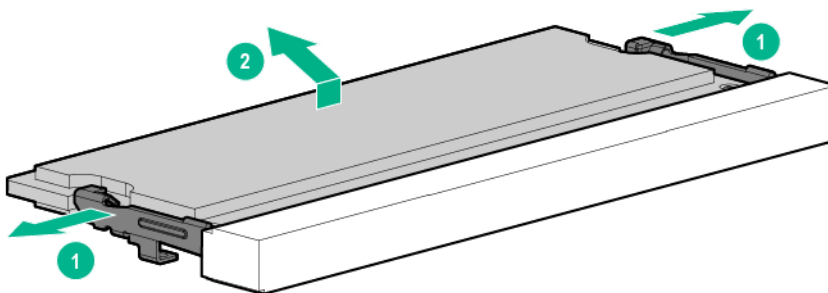
To replace the component, reverse the removal procedure.

Removing and replacing a solid state device

Procedure

1. Back up all data on the solid-state device.

2. **Power down the blade** on page 10.

3. **Extend the chassis from the rack** on page 11.

4. **Remove the access panel** on page 12.

5. **Remove the blade** on page 14.

6. Remove the solid state device.
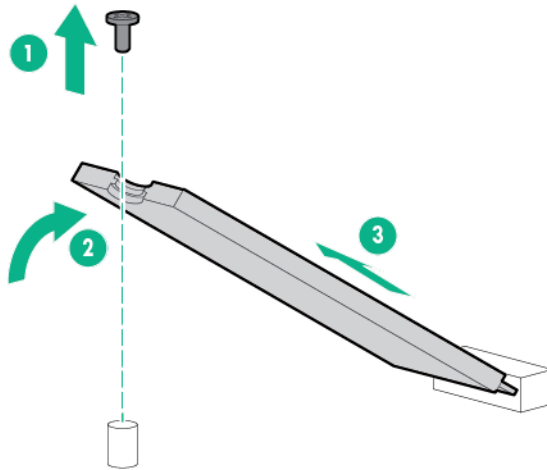

To replace the component, reverse the removal procedure. If you are replacing the solid state device with a different M.2 device type, see the procedure for installing the new M.2 device type (**Installing an M.2 device** on page 26).

Warranty and regulatory information

Warranty information

To view the warranty for your product or to view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products* reference document, go to the Enterprise Safety and Compliance website:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional warranty information

HPE ProLiant and x86 Servers and Options

 www.hpe.com/support/ProLiantServers-Warranties

HPE Enterprise Servers

 www.hpe.com/support/EnterpriseServers-Warranties

HPE Storage Products

 www.hpe.com/support/Storage-Warranties

HPE Networking Products

 www.hpe.com/support/Networking-Warranties

Regulatory information

To view the regulatory information for your product, view the *Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products*, available at the Hewlett Packard Enterprise Support Center:

www.hpe.com/support/Safety-Compliance-EnterpriseProducts

Additional regulatory information

Hewlett Packard Enterprise is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

www.hpe.com/info/reach

For Hewlett Packard Enterprise product environmental and safety information and compliance data, including RoHS and REACH, see:

www.hpe.com/info/ecodata

For Hewlett Packard Enterprise environmental information, including company programs, product recycling, and energy efficiency, see:

www.hpe.com/info/environment

Turkey RoHS material content declaration

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Ukraine RoHS material content declaration

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

Electrostatic discharge

Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

Procedure

- Avoid hand contact by transporting and storing products in static-safe containers.

- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.

- Place parts on a grounded surface before removing them from their containers.

- Avoid touching pins, leads, or circuitry.

- Always be properly grounded when touching a static-sensitive component or assembly.

Grounding methods to prevent electrostatic discharge

Several methods are used for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm ±10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.

- Use heel straps, toe straps, or boot straps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.

- Use conductive field service tools.

- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, have an authorized reseller install the part.

For more information on static electricity or assistance with product installation, contact the Hewlett Packard Enterprise Support Center.

Specifications

Chassis environmental specifications

Specification	Value
Temperature range [1]	
Operating	10°C to 35°C (50°F to 95°F)
Nonoperating	-30°C to 60°C (-22°F to 140°F)
Maximum wet bulb temperature	
Operating	28ºC (82.4ºF)
Nonoperating	38.7ºC (101.7ºF)
Relative humidity (non condensing) [2]	
Operating	10% to 90%
Nonoperating	5% to 95%

[1] All temperature ratings shown are for sea level. An altitude derating of 1°C per 304.8 m (1.8°F per 1000 ft) to 3048 m (10,000 ft) is applicable. No direct sunlight allowed. Upper operating limit is 3,048 m (10,000 ft) or 70 kPa/10.1 psia. Upper nonoperating limit is 9,144 m (30,000 ft).

[2] Storage maximum humidity of 95% is based on a maximum temperature of 45°C (113°F). Altitude maximum for storage corresponds to a pressure minimum of 70 kPa (10.1 psia).

Chassis specifications

Specification	Value
Height	18.96 cm (7.46 in)
Depth	84.91 cm (33.43 in)
Width	44.33 cm (17.45 in)
Weight, fully loaded	81.65 kg (180.00 lb)
Weight, empty	43.09 kg (95.00 lb)

Blade specifications

Specification	Value
Height	16.71 cm (6.57 in)
Depth	1.98 cm (0.78 in)
Width	18.37 cm (7.23 in)
Weight (approx.)	0.60 kg (1.32 lb)

Websites

General websites

Hewlett Packard Enterprise Information Library

    www.hpe.com/info/EIL

Single Point of Connectivity Knowledge (SPOCK) Storage compatibility matrix

    www.hpe.com/storage/spock

Storage white papers and analyst reports

    www.hpe.com/storage/whitepapers

For additional websites, see **Support and other resources**.

Support and other resources

Accessing Hewlett Packard Enterprise Support

- For live assistance, go to the Contact Hewlett Packard Enterprise Worldwide website:

   http://www.hpe.com/assistance

- To access documentation and support services, go to the Hewlett Packard Enterprise Support Center website:

   http://www.hpe.com/support/hpesc

Information to collect

- Technical support registration number (if applicable)

- Product name, model or version, and serial number

- Operating system name and version

- Firmware version

- Error messages

- Product-specific reports and logs

- Add-on products or components

- Third-party products or components

Accessing updates

- Some software products provide a mechanism for accessing software updates through the product interface. Review your product documentation to identify the recommended software update method.

- To download product updates:

   Hewlett Packard Enterprise Support Center
   www.hpe.com/support/hpesc
   Hewlett Packard Enterprise Support Center: Software downloads
   www.hpe.com/support/downloads
   Software Depot
   www.hpe.com/support/softwaredepot

- To subscribe to eNewsletters and alerts:

   www.hpe.com/support/e-updates

- To view and update your entitlements, and to link your contracts and warranties with your profile, go to the Hewlett Packard Enterprise Support Center **More Information on Access to Support Materials** page:

   www.hpe.com/support/AccessToSupportMaterials

> ⚠ **IMPORTANT:** Access to some updates might require product entitlement when accessed through the Hewlett Packard Enterprise Support Center. You must have an HPE Passport set up with relevant entitlements.

Customer self repair

Hewlett Packard Enterprise customer self repair (CSR) programs allow you to repair your product. If a CSR part needs to be replaced, it will be shipped directly to you so that you can install it at your convenience. Some parts do not qualify for CSR. Your Hewlett Packard Enterprise authorized service provider will determine whether a repair can be accomplished by CSR.

For more information about CSR, contact your local service provider or go to the CSR website:

http://www.hpe.com/support/selfrepair

Remote support

Remote support is available with supported devices as part of your warranty or contractual support agreement. It provides intelligent event diagnosis, and automatic, secure submission of hardware event notifications to Hewlett Packard Enterprise, which will initiate a fast and accurate resolution based on your product's service level. Hewlett Packard Enterprise strongly recommends that you register your device for remote support.

If your product includes additional remote support details, use search to locate that information.

Remote support and Proactive Care information
HPE Get Connected
　　www.hpe.com/services/getconnected
HPE Proactive Care services
　　www.hpe.com/services/proactivecare
HPE Proactive Care service: Supported products list
　　www.hpe.com/services/proactivecaresupportedproducts
HPE Proactive Care advanced service: Supported products list
　　www.hpe.com/services/proactivecareadvancedsupportedproducts

Proactive Care customer information
Proactive Care central
　　www.hpe.com/services/proactivecarecentral
Proactive Care service activation
　　www.hpe.com/services/proactivecarecentralgetstarted

Acronyms and abbreviations

CM

chassis management

CMU

HPE Insight Cluster Management Utility

CSR

Customer Self Repair

IML

Integrated Management Log

IPMI

Intelligent Platform Management Interface

PDU

power distribution unit

PXE

preboot execution environment

SATA

serial ATA

SSD

solid-state device

UID

unit identification

UPS

uninterruptible power system

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (**docsfeedback@hpe.com**). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.