HPE ProLiant BL460c Server Blade - Parts Support Guide

Part Number: External
Published: 2020
Edition: 1

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Abstract
This document will help you identify parts of the product and also gives a step-by-step instruction on how to remove and replace the components.

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Front view





Hot-plug hard drives



Access panel



Back view



Internal view



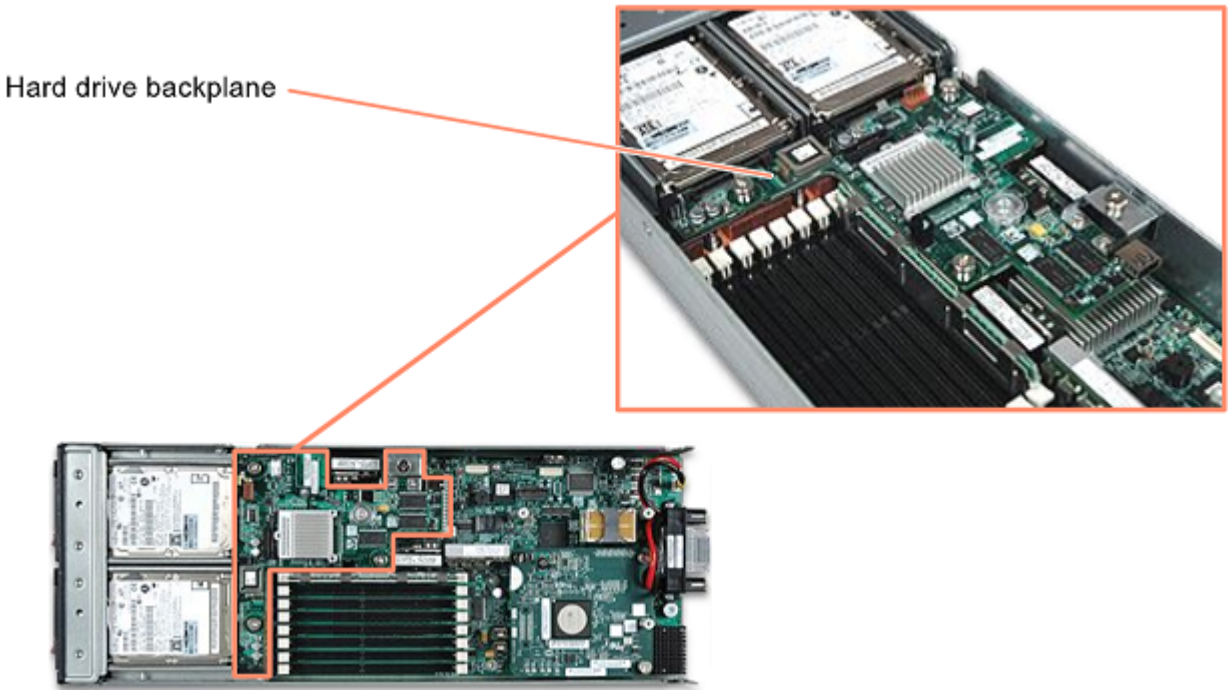
LED board



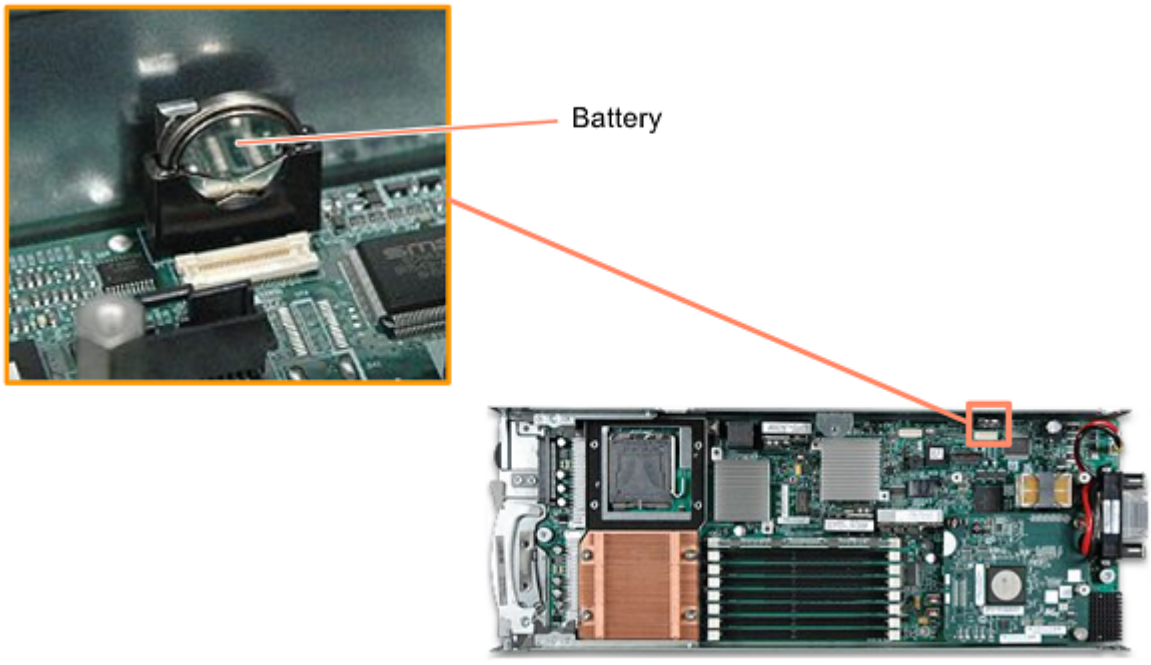
Hard drive



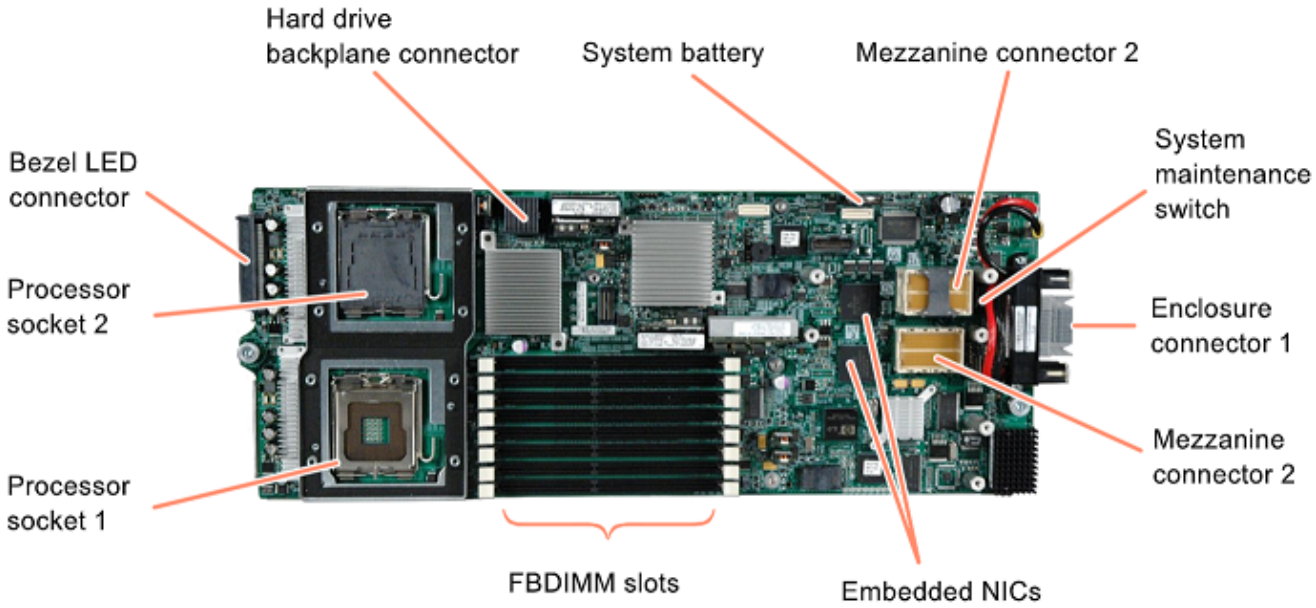
Hard drive backplane



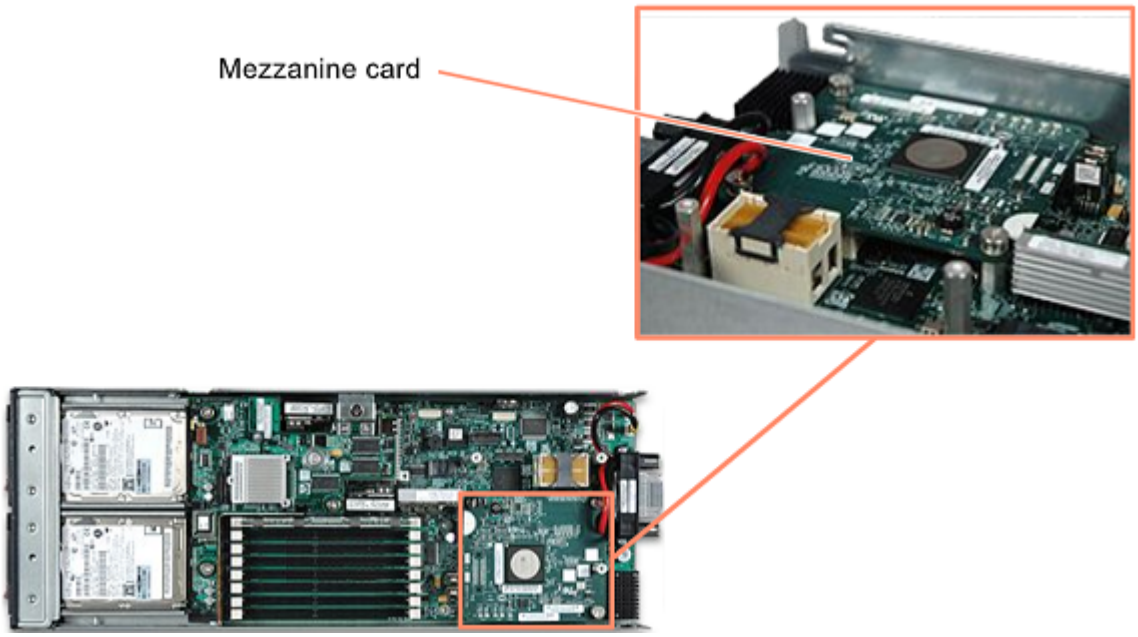
Battery



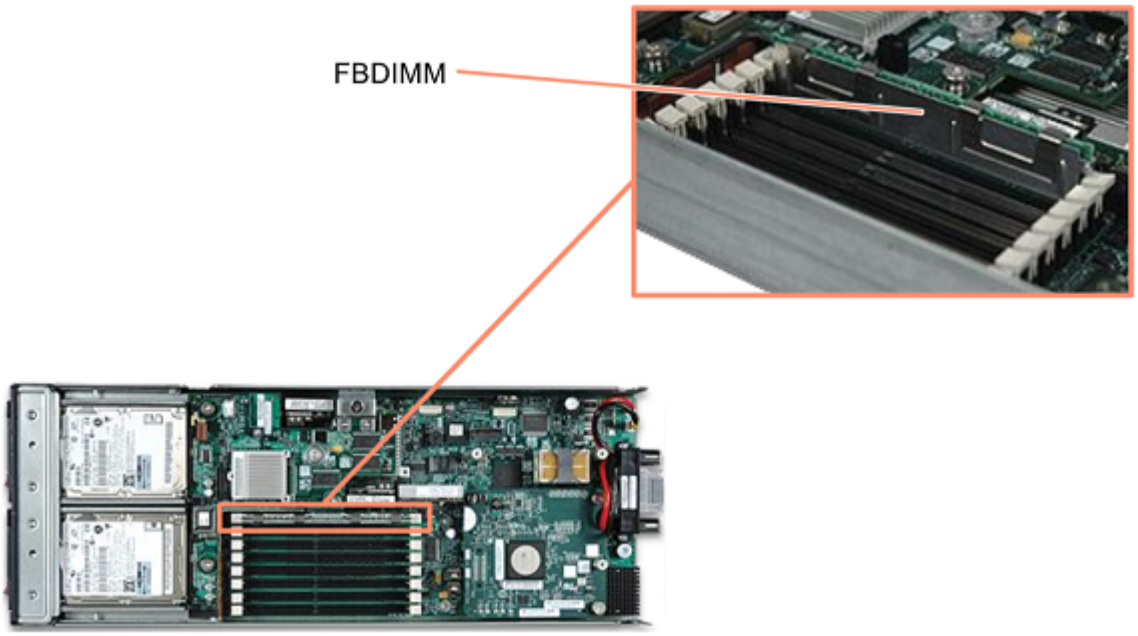
System board



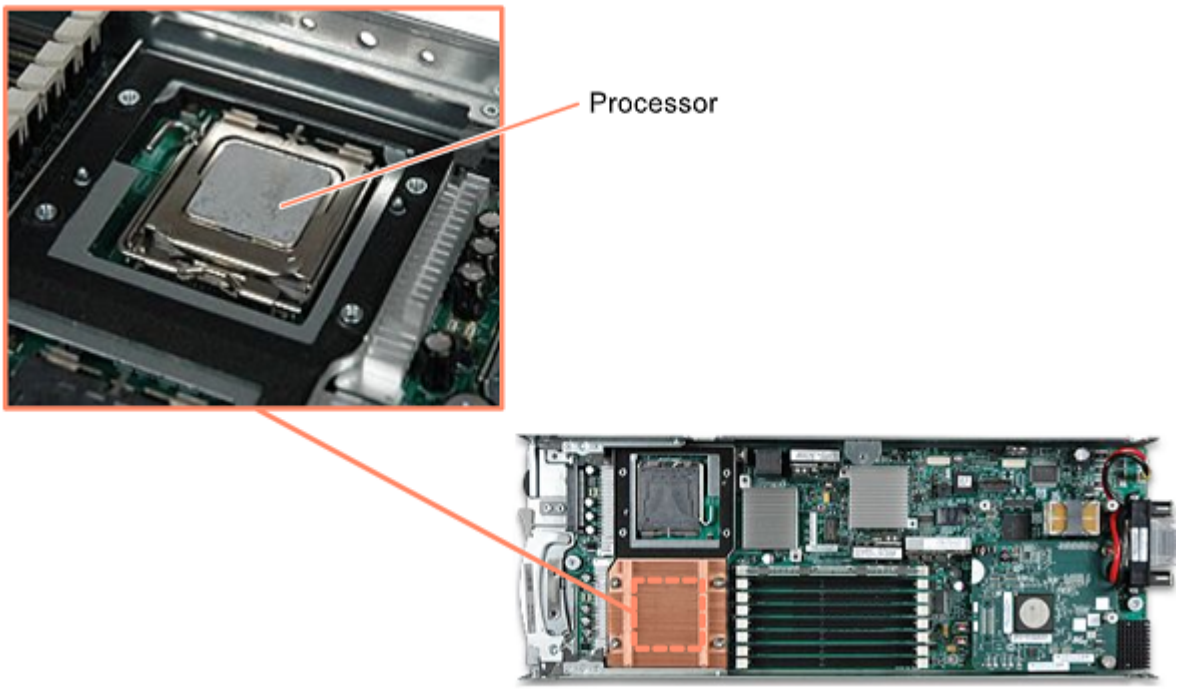
Mezzanine card



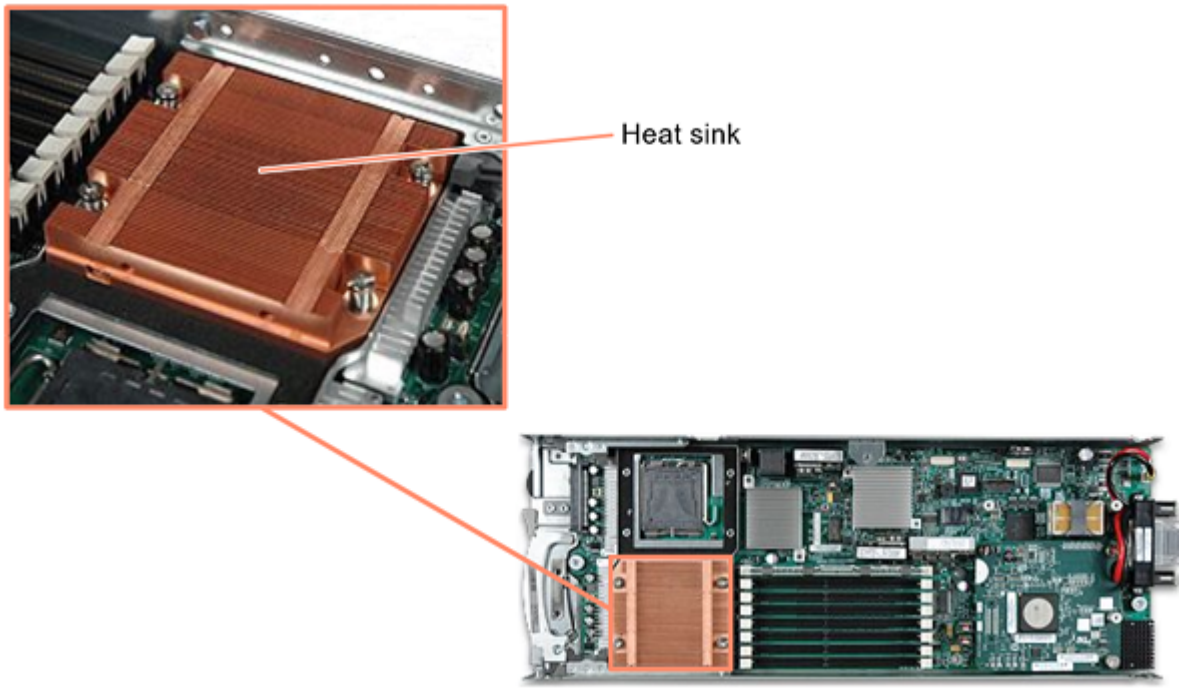
FBDIMM



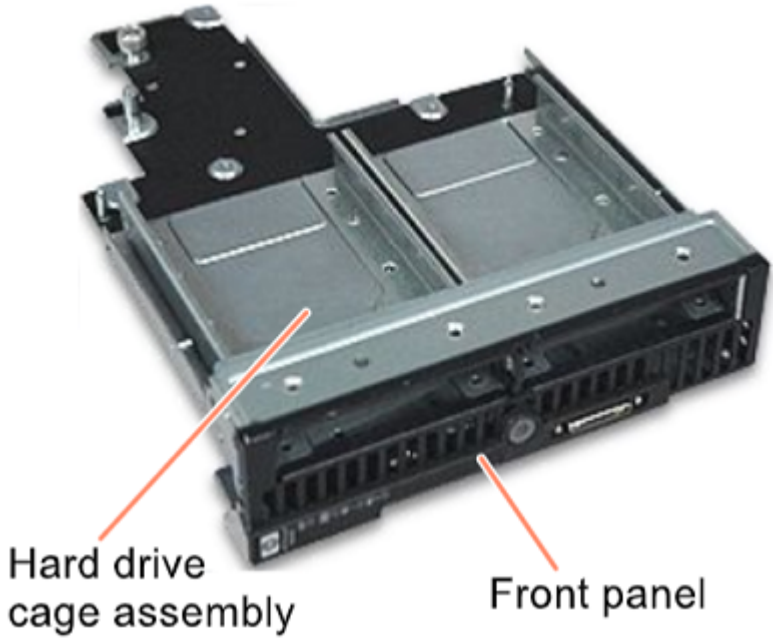
Processor



Heatsink



Front panel and Hard drive cage assembly



Server blade handle



Precautions

Before you begin

1. Put on your electrostatic discharge (ESD) wrist strap to avoid damaging any circuitry.
2. Remove all devices (such as diskettes and CD-ROMs) from the computer.
3. Power off the computer and any peripheral devices that are connected to it.
4. Disconnect the power cord from the electrical outlet and then from the computer. When the computer is plugged into an AC power source, there is always voltage applied to the system board. You must disconnect the power cord from the power source before opening the computer to prevent system board or component damage.
5. Disconnect all peripheral device cables from the computer.

Static electricity

Static electricity can damage electrical components. Before removing or replacing a component, touch a grounded metal object to discharge static electricity. Also observe the following precautions to prevent damage to electric components and accessories:

- To avoid hand contact, transport products in static-safe containers such as tubes, bags, or boxes.

- Protect all electrostatic parts and assemblies with conductive or approved containers or packaging.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free stations.
- Place items on a grounded surface before removing them from their container.
- Always be properly grounded when touching a sensitive component or assembly.
- Avoid contact with pins, leads, or circuitry.
- Place reusable electrostatic-sensitive parts from assemblies in protective packaging or conductive foam.

Disassembly

- During disassembly, label each cable as you remove it, noting its position and routing. This will make the replacement of the cables much easier, and will ensure that the cables are rerouted properly to protect the cables.
- Keep all screws with the units removed. The screws used in the computer are of different thread sizes and lengths; using the wrong screw in a component could damage the unit.

Tools And Materials

Tools used in removal and replacement

- Torx-15

Access Panel

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Access panel removal

1. Using a T-15 screwdriver, unlock the latch.
2. Pull up on the latch and the access panel will slide back.

3. Lift it off of the server.

Access panel replacement

1. Set the access panel on the server about a half-inch back, so the standoffs are engaged in the slots.
2. Press the latch down and the access panel will slide into place.
3. Relock the latch.

Hot-Plug Hard Drive

https://support.hpe.com/hpesc/public/videoDisplay?videoId=vpsg00000886en_us&noframe
Note: This is a hot plug procedure only if more than one drive is installed.

Hot-plug hard drive removal

1. Press the ejector latch to release the handle.
2. Grasp the handle and pull out.
3. Slide the drive from the server.

Hot-plug hard drive replacement

1. With the label facing the outside wall of the blade, slide the drive into the bay.
2. Press the handle so that it snaps in place under the ejector latch.

FBDIMM

https://support.hpe.com/hpesc/public/videoDisplay?videoId=vpsg00000887en_us&noframe
Before you begin

1. Remove the access panel.

Fully-buffered DIMM removal

1. Press down on the latches on either side of the DIMM.
2. Lift the DIMM straight up and out of the server.

Fully-buffered DIMM replacement

1. Position DIMM so the notch in the module lines up with the key in the connector.
2. Insert and press down firmly to seat.
3. The locking latches will snap in place.

Mezzanine Card

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Before you begin

1. Remove the access panel.

Mezzanine card removal

1. Loosen (3) thumbscrews.
2. Pull the board up and away from the server.

Mezzanine card replacement

1. Line up the connector on the board with the connector on the system board.
2. Press firmly to seat.
3. Tighten the screws.

Hard Drive Backplane

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Before you begin

1. Remove the hard drives.
2. Remove the access panel.

Hard drive backplane removal

1. Loosen (4) T-15 thumbscrews.
2. Lift the backplane up and out of the server.

Hard drive backplane replacement

1. Position the backplane so it's lined up over the (3) standoffs and the connectors are facing the front of the server.
2. Press firmly to seat.
3. Tighten (4) thumbscrews.

Front Panel/Hard Drive Cage Assembly

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Before you begin

1. Remove the hard drives.
2. Remove the access panel.
3. Remove the hard drive backplane.

Front panel/hard drive cage assembly removal

1. Loosen (1) thumbscrew.
2. Pull out on the release levers that are on either side of the server to release the cage.
3. Slide the cage out of the front of the server.

Front panel/hard drive cage assembly replacement

1. Position the hard drive cage so the hard drive bays are at the top.
2. Slide the cage toward the back of the server until it engages with the standoffs on both sides and clicks into place.
3. Tighten the thumbscrew.

Server Blade Handle

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Before you begin

1. Remove the hard drives.
2. Remove the access panel.
3. Remove the hard drive backplane.
4. Remove the front panel/hard drive cage assembly.

Server blade handle removal

1. Open the handle.
2. Remove (1) T-15 screw from the handle.
3. Lift the handle away from the chassis.
4. Remove the (2) T-15 screws from the release button.
5. Lift the release button away from the chassis.

Server blade handle replacement

1. Place the release button over the two posts on the chassis.
2. Replace the (2) T-15 screws.
3. Place the handle over the post on the chassis.
4. Replace the screw.

Processor And Heatsink

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Before you begin

1. Remove the hard drives.
2. Remove the access panel.
3. Remove the hard drive backplane.
4. Remove the front panel/hard drive cage assembly.

Heatsink removal

1. Loosen (4) thumbscrews in an -X- pattern on the heatsink.
2. Lift the heatsink up and away from server.

Processor removal

1. Press to release the processor locking lever and lift it up.
2. Lift the processor cover.
3. Lift the processor out.

Processor replacement

1. Install the processor in the socket so the triangle on the processor lines up with the notch on the connector.
2. Close the processor cover.
3. Secure the processor locking lever.

Heatsink replacement

1. Position so the notch on the heatsink matches the notch on the processor bracket.
2. Set the heatsink in place.
3. Tighten the thumbscrews in an -X- pattern.

System Board

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Before you begin

1. Remove the hard drives.
2. Remove the access panel.
3. Remove the hard drive backplane.
4. Remove the front panel/hard drive cage assembly.
5. Remove the DIMMs.
6. Remove the mezzanine card.
7. Remove the heatsink.
8. Remove the processor.

System board removal

1. Loosen (2) thumbscrews.
2. Slide the system board back to clear the brackets.
3. Lift it out of the server.

System board replacement

1. Position the system board far enough back in the chassis and tilt one side down to clear all brackets in the chassis.
2. Slide the system board toward the front of the chassis to secure it on the stand-offs.
3. Tighten the screws.

Battery

https://support.hpe.com/hpesc/public/videoDisplay?videoId=vpsg00000895en_us&noframe

Before you begin

1. Remove the hard drives.
2. Remove the access panel.
3. Remove the hard drive backplane.
4. Remove the front panel/hard drive cage assembly.
5. Remove the DIMMs.
6. Remove the mezzanine card.

7. Remove the heatsink.
8. Remove the processor.
9. Remove the system board.

Battery removal

1. Push the tab aside and pull the battery straight up.

Battery replacement

1. Position the battery so the markings face the chassis wall.
2. Push the battery into the socket until the tab locks in place.