HPE Edgeline EL1000 Converged Edge System - FRU 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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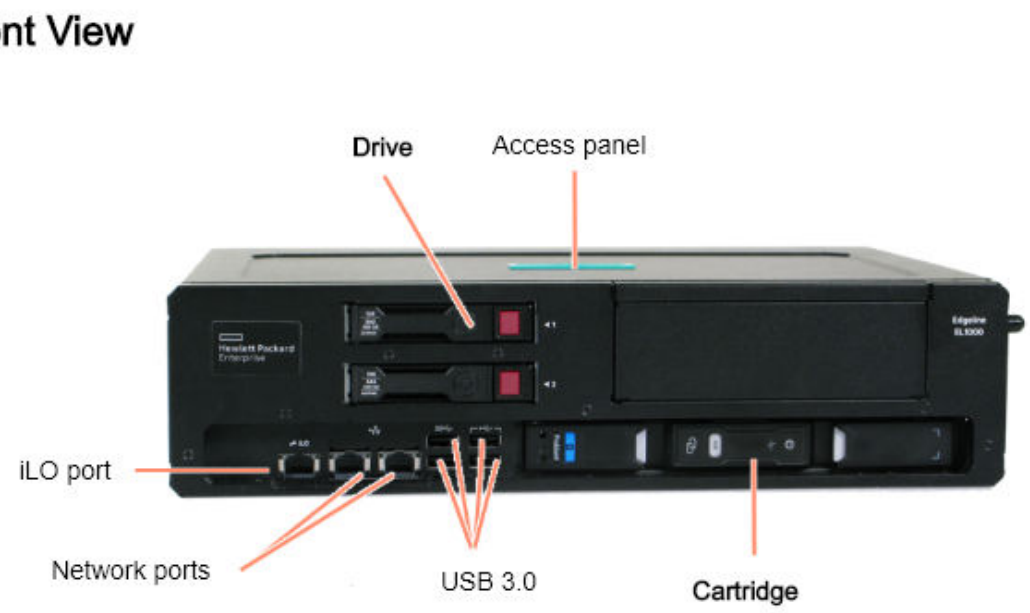
Front View



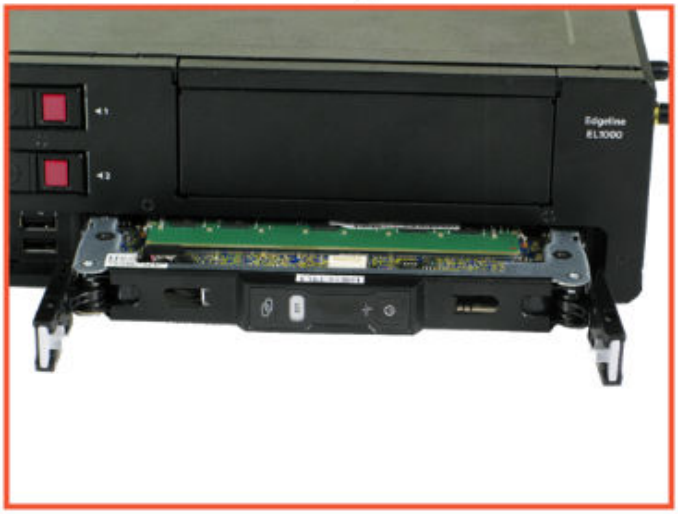
Drive

Drive



Cartridge

Cartridge



Back View

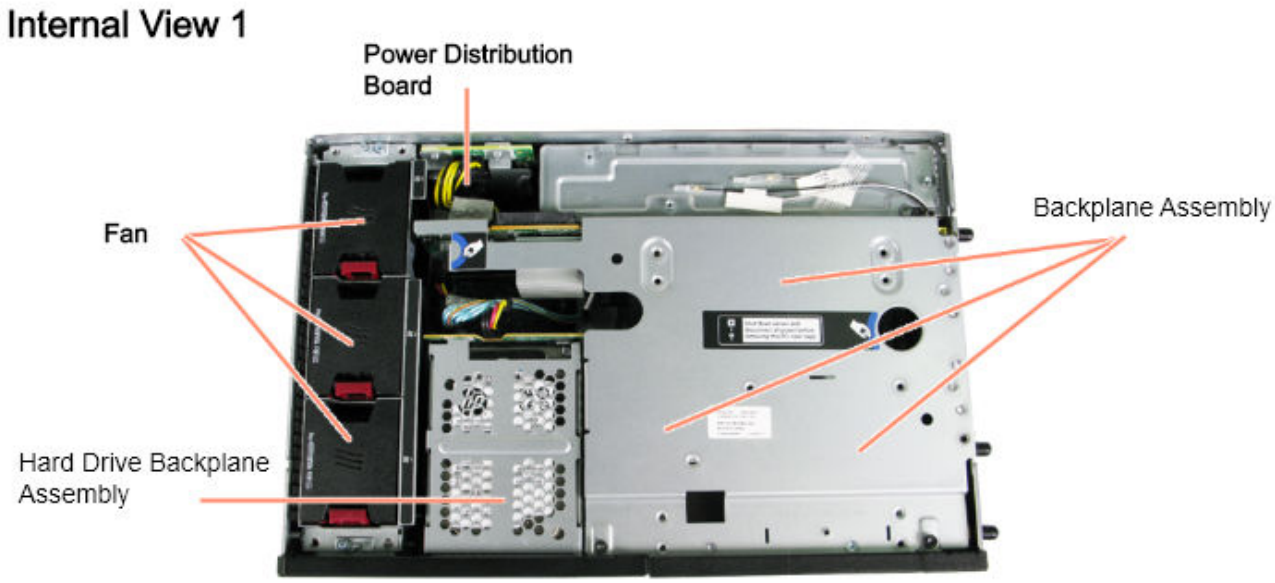


Power Supply

Power Supply



Internal View 1



Fan

Fan



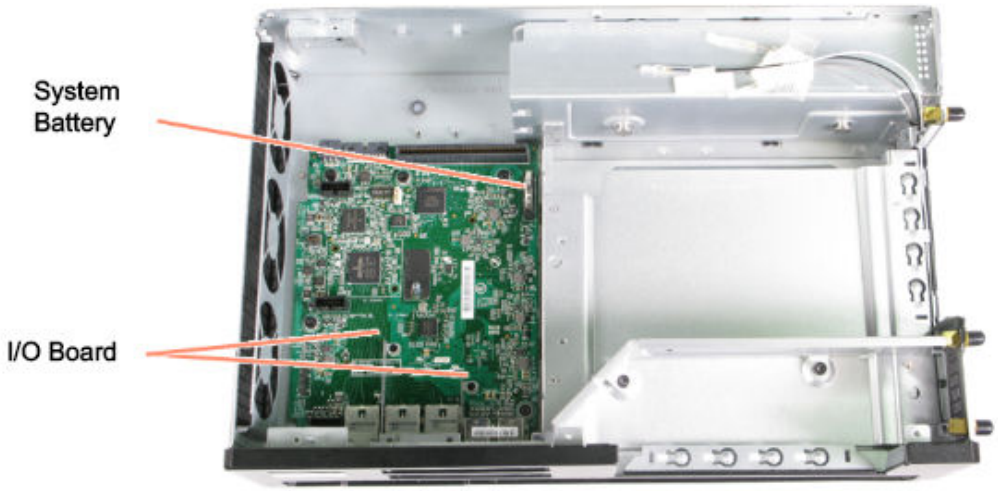
Power Distribution Board

Power Distribution Board



Internal View 2

Internal View 2



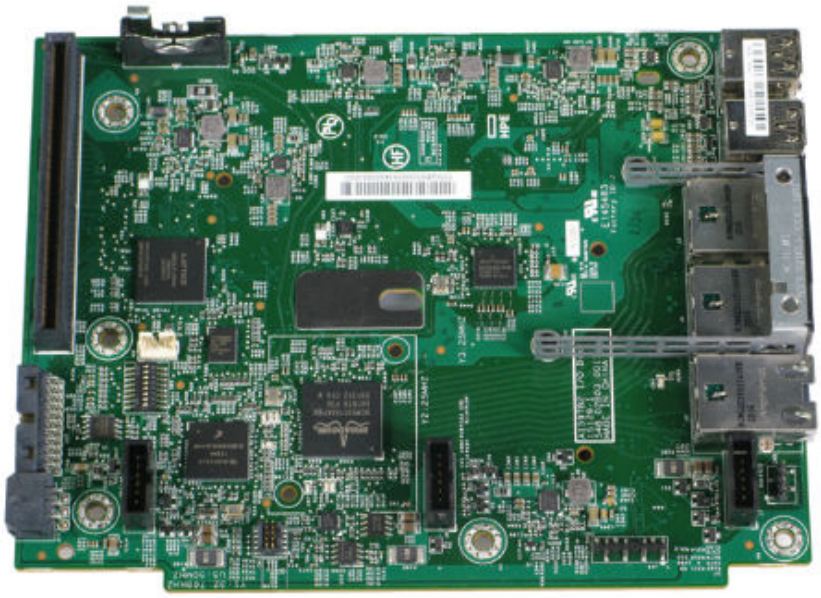
System battery

System battery



I/O board

I/O board



Precautions

To prevent damage to the unit, protect data, and avoid personal injury, review and follow these precautions.

Before you begin

1. If the unit contains heated components, wait until the components have cooled off before proceeding. Refer to the service manual for details on how long each component requires to adequately cool off.
2. Put on your electrostatic discharge (ESD) wrist or shoe strap to avoid damaging any circuitry.
3. Place an ESD mat on a suitably grounded surface, and then place the unit on the mat.
4. Remove any devices from the unit being serviced, such as diskettes, tape cartridges, or CD-ROMs.
5. Power off the unit and any peripheral devices that are connected to it.**Note: Replacing a hot-plug device does not require powering down the unit.**
6. Disconnect the power cord from the electrical outlet and then from the unit. When a unit is plugged into an AC power source, voltage is always applied to the unit. You must therefore disconnect the power cord from the power source before opening the unit.
7. Disconnect all peripheral device cables from the unit.

Static electricity

Static electricity can damage electrical components. Before removing or replacing a component, observe the following precautions to prevent damage to electric components and accessories:

- Remove all ESD-generating materials from your work area.
- To avoid hand contact, transport and store all electrostatic parts and assemblies in conductive or approved ESD packaging such as ESD tubes, bags, or boxes.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free stations. Before removing items from their containers, place the containers on a grounded surface.
- Do not take the new component out of its ESD package or handle any component before connecting your ESD wrist or shoe strap to a suitably grounded surface.
- Always use an ESD-protected work station when servicing the unit. If an ESD work station is not available, ground yourself to discharge body static by touching the metal chassis of the unit you are servicing.
- Avoid contact with pins, leads, or circuitry.
- Use the ESD package provided with the new part to return the old part.

Disassembly

Ensure that you take the following precautions when disassembling a unit:

- Label each cable as you remove it, noting its position and routing. This will make replacing the cables much easier and will ensure that the cables are rerouted properly.
- Keep all screws with the component removed, if applicable. The screws used in each component can be of different thread sizes and lengths. Using the wrong screw in a component could damage the unit.
- If the unit contains light-sensitive components such as toner cartridges, store the component in its original packaging or in a dark location to avoid damage.

Tools And Materials

Tools used in removal and replacement

Ensure that you have the tools you need before you begin. These should include:

- Tool 1
- Tool 2
- etc.

Screws

[Insert graphic of screws, if applicable. Place image files in the SML/FruVideo subfolder.]

Note: If worn or damaged screwdriver tips are used, the small screw heads could become stripped.

Code	Description	Quantity

Access Panel

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Access Panel

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.

Access Panel removal

1. On the rear of the unit, remove the two Torx-15 screws securing the Access Panel to the server.
2. Slide the access panel back until it stops, then lift the access panel off of the server.

Access Panel replacement

1. Lower the Access Panel onto the server.
2. Slide the access panel forward until it stops in place.
3. Replace the two Torx-15 screws securing the Access Panel to the server.

Backplane Assembly

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Backplane Assembly

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Cartridge.
6. Remove the Access Panel.

Backplane Assembly removal

1. Disconnect the power cable and the two hard drive cables from the Backplane Assembly.
2. Remove the two Torx-15 screws securing the Backplane Assembly to the server.
3. If equipped, move any cabling to the side of the server to ensure proper removal of the backplane assembly.
4. Lift the Backplane Assembly out of the server.

Backplane Assembly replacement

1. Lower the Backplane Assembly into the server.
2. Replace any cabling previously set aside.
3. Replace the two Torx-15 screws securing the Backplane Assembly to the server.
4. Reconnect the power cable and the two hard drive cables to the Backplane Assembly.

Power Supply

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Power Supply

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.

Power Supply removal

1. Unwrap the cable tie wrap and disconnect the power cord from the power supply.
2. Press the power supply release lever and pull away from the server to remove the power supply from the unit.

Power Supply replacement

1. Slide the power supply into the empty slot on the server until it clicks.
2. Reconnect the power cord to the power supply and re-wrap the cable tie wrap around the power cord.

Fan

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Fan

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Access Panel.

Fan removal

1. Squeeze the tabs on each side of the fan to release it from the fan slot.
2. Lift up to remove the fan from the server.

Fan replacement

1. Slide the fan into the empty slot on the server until it clicks.

Cartridge

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Cartridge

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.

3. Power down the server.
4. Remove the server from the rack.

Cartridge removal

1. Press the cartridge latch buttons and open the cartridge latches.
2. Noting the orientation for replacement, grasp the cartridge and pull away from the server to remove the cartridge from the slot.

Cartridge replacement

1. Noting the orientation from removal, grasp the cartridge and slide it into the slot and towards the server until it stops.
2. Close the cartridge latches.

Drive

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Drive

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.

Drive removal

1. Press the ejector button to release the drive handle.
2. Grasp the drive handle and slide the drive out of the bay.

Drive replacement

1. With the drive handle extended, slide the drive into the bay until the handle starts to engage.
2. Push the drive handle in to lock the drive in place.

Hard Drive Backplane Assembly

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Hard Drive Backplane Assembly

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Cartridge.
6. Remove the Access Panel.
7. Remove all drives
8. Remove the Backplane Assembly

Hard Drive Backplane Assembly removal

1. Remove the two Torx-15 screws securing the bracket to the chassis and remove the bracket.
2. Remove the three Torx-10 screws securing the Hard Drive Backplane Assembly to the chassis.
3. Grasp the Hard Drive Backplane Assembly, slide it back and lift it out of the server.

Hard Drive Backplane Assembly replacement

1. Making sure to align with the guide pin on the chassis, lower the Hard Drive Backplane Assembly into the server and slide it forward.
2. Replace the three Torx-10 screws securing the Hard Drive Backplane Assembly to the chassis.
3. Making sure to align the screw holes, lower the bracket into the server.
4. Replace the two Torx-15 screws securing the bracket to the chassis.

Power Distribution Board

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Power Distribution Board

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Power Supply
6. Remove the Cartridge.
7. Remove the Access Panel.
8. Remove the Backplane Assembly
9. Remove all fans

Power Distribution Board removal

1. Remove the two Torx-15 captive screws securing the fan cage assembly to the server.
2. Lift up to remove the fan cage assembly.
3. Remove the power cable from the Power Distribution Board.
4. Remove the cables connecting the I/O Board to the Power Distribution Board.

5. Remove the 2 Torx-15 screws securing the Power Distribution Board to the chassis.
6. Grasp the Power Distribution Board and lift vertically remove it from the chassis.

Power Distribution Board replacement

1. Making sure to align with the notches on the chassis, lower the Power Distribution Board into the chassis.
2. Replace the two Torx-15 screws securing the Power Distribution Board to the chassis.
3. Replace the cables connecting the I/O Board to the Power Distribution Board.
4. Replace the power cable connected to the Power Distribution Board.
5. Lower the fan cage assembly into the server and replace the two Torx-15 captive screws.

I/O Board

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I/O Board

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Cartridge.
6. Remove the Access Panel.
7. Remove all drives
8. Remove the Backplane Assembly
9. Remove the Hard Drive Backplane Assembly
10. Remove all fans

I/O Board removal

1. Loosen the two Torx-15 captive screws, and then remove the fan cage assembly.
2. Remove the drive power and data cables from the I/O Board.
3. Remove the 6 Torx-15 screws securing the I/O Board to the chassis.
4. Grasp the I/O Board, rotate it towards the front of the server and lift up to remove it.

I/O Board replacement

1. Making sure to align with the guide pin on the chassis, lower the I/O Board into the server.
2. Replace the 6 Torx-15 screws securing the I/O Board to the chassis.
3. Replacethe drive power and data cables to the I/O Board.
4. Lower the fan cage assembly into the server and replace the two Torx-15 captive screws.

System Battery

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System Battery

Before you begin:

1. Review and follow Precautions.
2. Backup all data on the server.
3. Power down the server.
4. Remove the server from the rack.
5. Remove the Cartridge.
6. Remove the Access Panel.
7. Remove the Backplane Assembly

System Battery removal

1. Pull the retaining clip away from the battery.
2. Noting the orientation for replacement, lift the battery out of the socket.

System Battery replacement

IMPORTANT: Replacing the system board battery resets the system ROM to its default configuration.After replacing the battery, reconfigure the system through UEFI System Utilities.

1. Using the same orientation as when removed, slide the battery into the socket.