Product End-of-Life Disassembly Instructions

Product Category: Servers
Marketing Name / Model [List multiple models if applicable.]
HP Integrity BL860c i4 Server Blades
HP Integrity BL870c i4 Server Blades
HP Integrity BL890c i4 Server Blades

Purpose: The document is intended for use by end-of-life recyclers or treatment facilities. It provides the basic instructions for the disassembly of HP products to remove components and materials requiring selective treatment, as defined by EU directive 2002/96/EC, Waste Electrical and Electronic Equipment (WEEE).

1.0 Items Requiring Selective Treatment

1.1 Items listed below are classified as requiring selective treatment.
1.2 Enter the quantity of items contained within the product which require selective treatment in the right column, as applicable.

Item Description	Notes	Quantity of items included in product
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)	With a surface greater than 10 sq cm Server unit is configurable and may contain some of the following assemblies: AM377-60001 PCA, BL8x0c i4 System Board AD399-2134A CPU Socket Airflow baffle AM377-60002 PCA, BL1 AM377-60003 PCA, BL2 AM377-60010 PCA, BL2EM AM377-60011 PCA, BL2ES AM377-60006 PCA, BL4M AM377-60007 PCA, BL4S AM377-60033 PCA, Upgrade BL2 AM377-60036 PCA, Upgrade BL4M AD399-60009 PCA, SAS BackPlane AM377-60013 PCA, ICH w/TPM AD399-60013 PCA, ICH-WITHOUT TPM AT085-2022A HP BL8x0c i4 Itanium 9560 8c Proc AT085-2021A HP BL8x0c i4 Itanium 9540 8c Proc AT085-2020A HP BL8x0c i4 Itanium 9550 4c Proc AT085-2019A HP BL8x0c i4 Itanium 9520 4c Proc AT085-2026A HP BL8x0c i4 Itanium 9560 8c Proc AT085-2025A HP BL8x0c i4 Itanium 9540 8c Proc	Up to 137 (when fully loaded)

	AT085-2024A HP BL8x0c i4 Itanium 9550 4c Proc AT085-2023A HP BL8x0c i4 Itanium 9520 4c Proc 605312-371 DIMM,4GB PC3L-10600R,512Mx4 605313-371 DIMM,8GB PC3L-10600R,512Mx4 628974-381 DIMM,16GB PC3L-10600R,1Gx4 507129-009 HP 146GB 6G SAS 15K 2.5in DP HDD 507129-003 HP 300GB 6G SAS 10K 2.5in DP HDD 507129-019 HP 300GB 6G SAS 15K 2.5in DP HDD 507129-011 HP 450GB 6G SAS 10K 2.5in DP HDD 507129-013 HP 600GB 6G SAS 10K 2.5in DP HDD 507129-017 HP 900GB 6G SAS 10K 2.5in DP HDD 632520-003 HP 200GB SAS 2.5in SSD SLC Drive 632520-005 HP 400GB SAS 2.5in SSD SLC Drive 613433-001 HP NC553m DP FlexFabric Adptr 580153-001 HP NC551m DP FlexFabric Adptr 454521-002 HP NC532m NIC Adapter 445976-001 HP NC360m NIC Adapter 610607-001 HP NC552m Flex-10GbE Dual Port 447881-001 HP NC364m NIC Adapter 451872-001 HP QLogic QMH2562 8Gb FC HBA 456973-001 HP Emulex LPe1205 8Gb FC HBA 592519-B21 HP 4X QDR IB CX2 Dual Port HCA 613811-001 HP Smart Array P711M/1G FBWC	
Batteries	All types including standard alkaline and lithium coin or button style batteries 452348-B21 - HP SA P-Series Low Profile Battery CR2032 on System Board	Up to 8 (when fully loaded)
Mercury-containing components	For example, mercury in lamps, display backlights, scanner lamps, switches, batteries	None
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm	Includes background illuminated displays with gas discharge lamps	None
Cathode Ray Tubes (CRT)		None
Capacitors / condensers (Containing PCB/PCT)		None
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height		None
External electrical cables and cords		None
Gas Discharge Lamps		None
Plastics containing Brominated Flame Retardants weighing > 25 grams (not including PCBs or PCAs already listed as a separate item above)		None
Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste) and toner	Include the cartridges, print heads, tubes, vent chambers, and service stations.	None
Components and waste containing asbestos		None
Components, parts and materials containing refractory ceramic fibers		None
Components, parts and materials containing radioactive substances		None

2.0 Tools Required

List the type and size of the tools that would typically be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

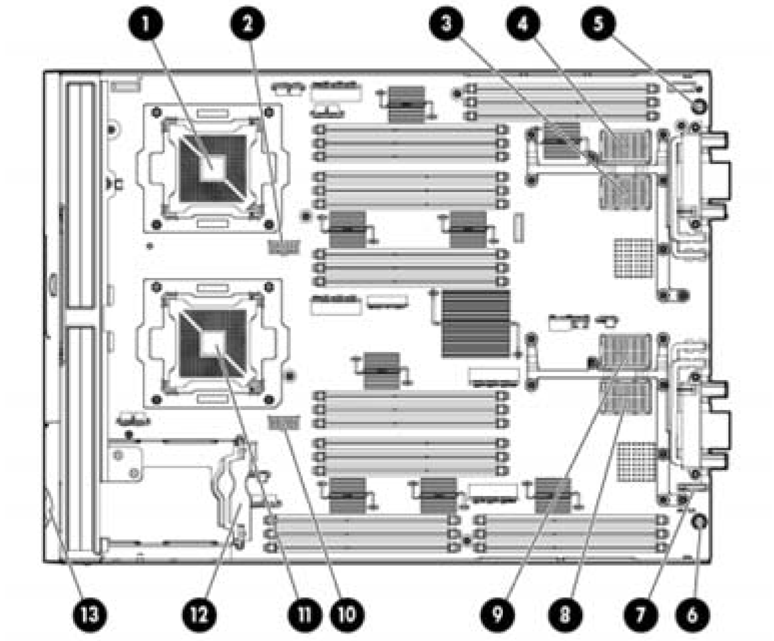
Tool Description	Tool Size (if applicable)
Torx Driver	T10 T15 T20 T25 T27 T30
Phillips screw driver	#0 #1 #2 #3
Flat-head screw driver	1/8" 5/32"

3.0 Product Disassembly Process

3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment:

1. Power off the server, and remove it from the enclosure before continuing
2. Remove BladeLink assembly from the front of the Blade, if attached.
3. Remove panels from the Blade by either Torx or screwdriver.
4. Server Battery – locate battery and remove by hand or small flat blade screw driver. See visual below.
5. Supercap Pack (if applicable) – locate capacitor and pry from the printed circuit board with a large flat head screw driver. See visual below.
6. Printed Circuit Boards – follow removal instructions found in the system specific documentation if needed. Some details below.
7.
8.
9.
10.
11.
12.
13.
14.

3.2 Optional Graphic. If the disassembly process is complex, insert a graphic illustration below to identify the items contained in the product that require selective treatment (with descriptions and arrows identifying locations).



1 CPU0
2 CPU0 power connector
3 Mezzanine connector 1 (type 1)
4 Mezzanine connector 2 (type 1 or 2)
5 System board thumbscrew
6 System board thumbscrew
7 Battery (CR2032)
8 ICH mezzanine connector
9 Mezzanine connector 3 (type 1 or 2)
10 CPU1 power connector
11 CPU1
12 SAS backplane
13 Pull tab

NOTE: The iLO 3 password is located on the pull tab.

WARNING! Before proceeding with Disassembling a Blade that requires
Physical contact with electrical or electronic components, ensure that power is removed or safety precautions are followed to prevent electric shock and equipment damage. Observe all warning and caution labels on equipment.

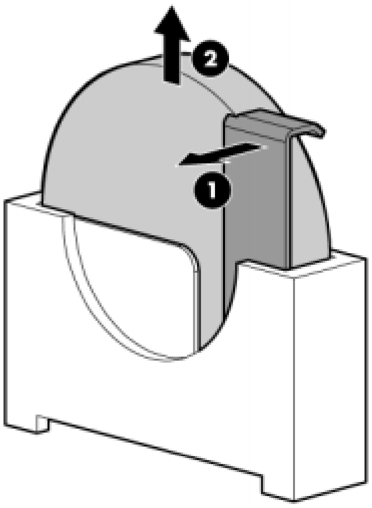
CAUTION: Electrostatic discharge can damage electronic components. Ensure you are properly grounded before beginning an installation procedure.

WARNING! The computer contains an internal lithium manganese dioxide, a vanadium pent oxide, or an alkaline battery pack. A risk of fire and burns exists if the battery pack is not properly handled. To reduce the risk of personal injury:

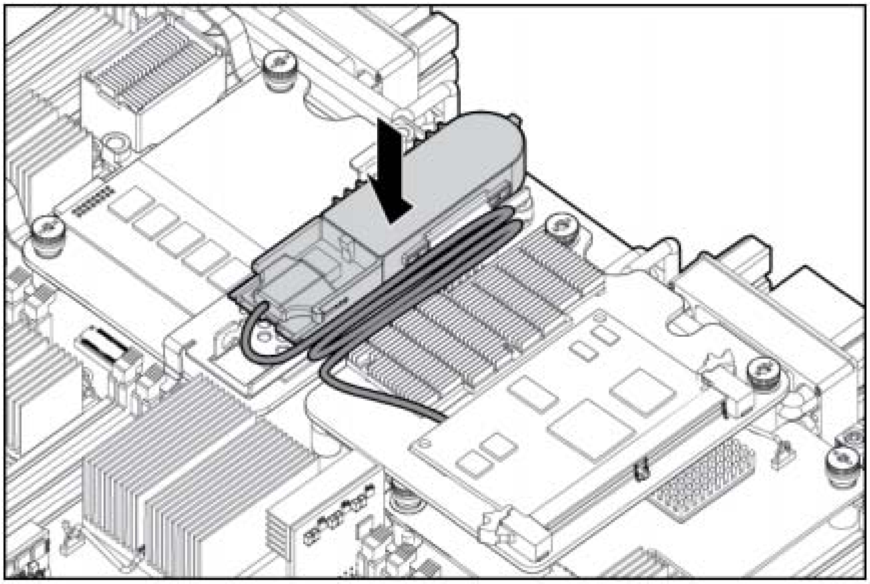
- Do not attempt to recharge the battery.
- Do not expose the battery to temperatures higher than 60°C (140°F).

- Do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.
- Replace only with the spare designated for this product.

Server battery

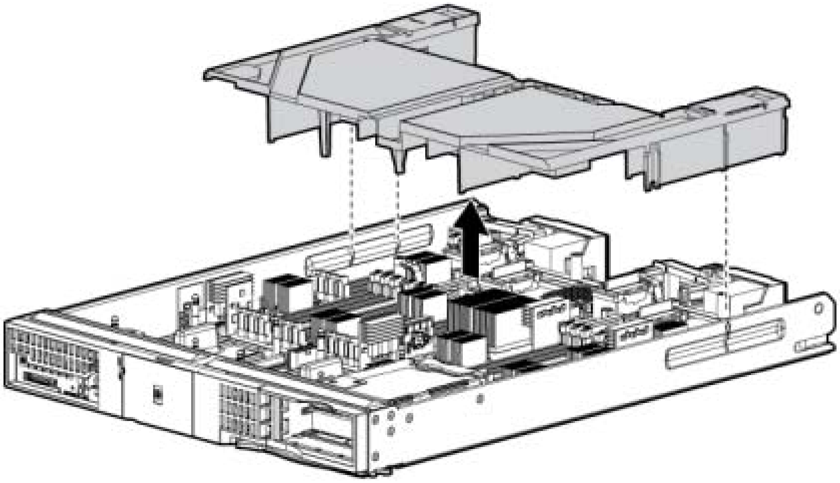


Supercap Pack (if applicable)



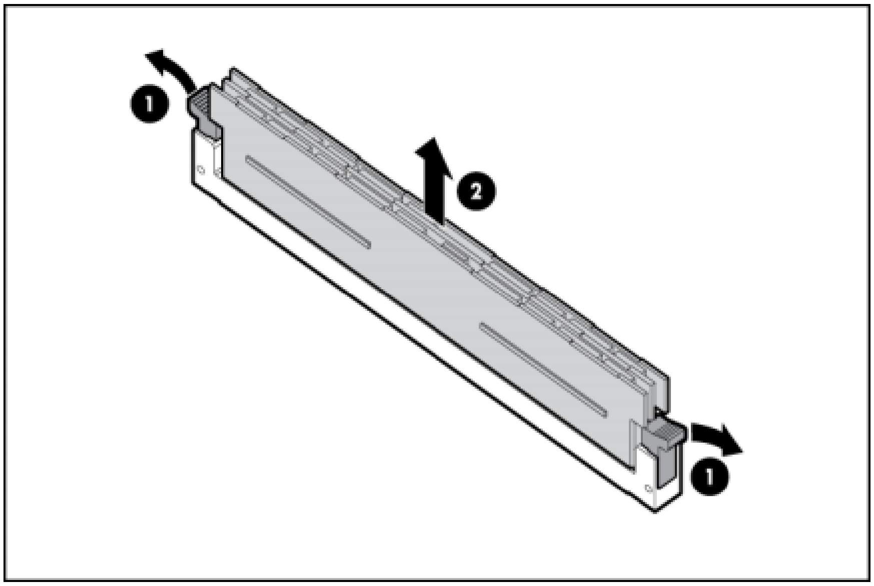
DIMM baffle

PSG instructions for this template are available at EL-MF877-01

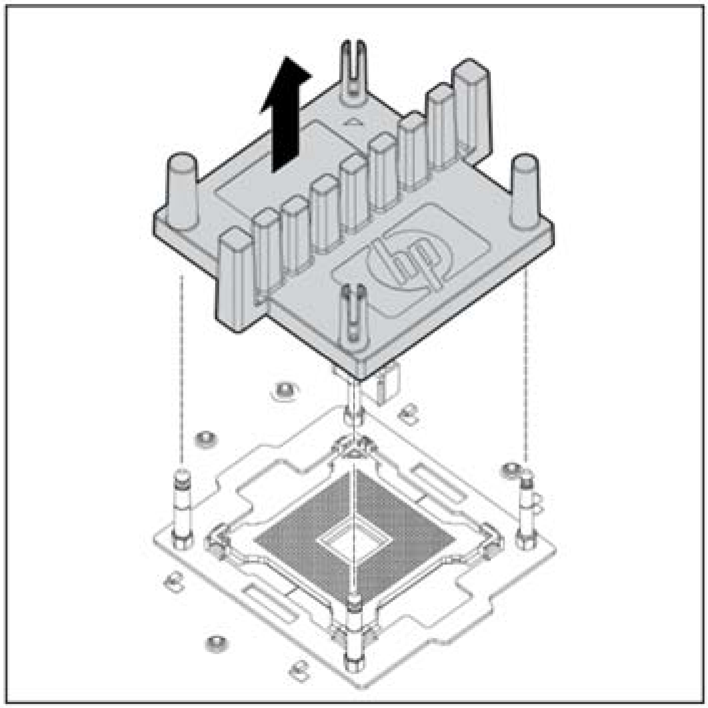


DIMMs

1. Open the DIMM slot latches.
2. Remove the DIMM from the slot.



Processor Baffle

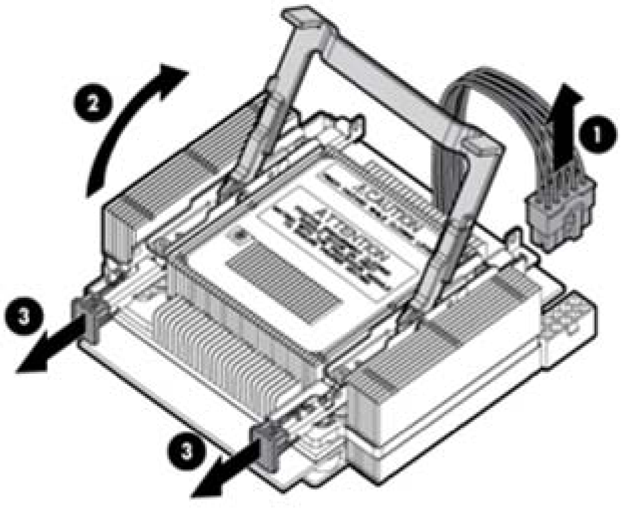


Processor and heatsink module

1. Rotate the processor locking handle up and back until it reaches a hard stop (see 2 below).

WRNING! The heatsink locking lever can constitute a pinch hazard; keep your hands on top of the lever during installation to avoid personal injury.

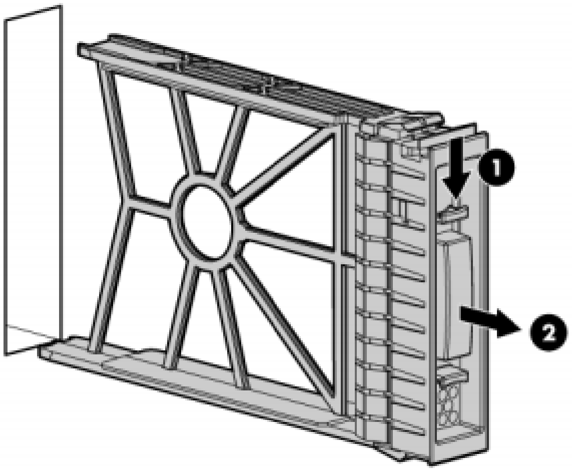
2. Pull both plastic tabs out



3. Lift the processor and heatsink off of the socket, pulling straight up.

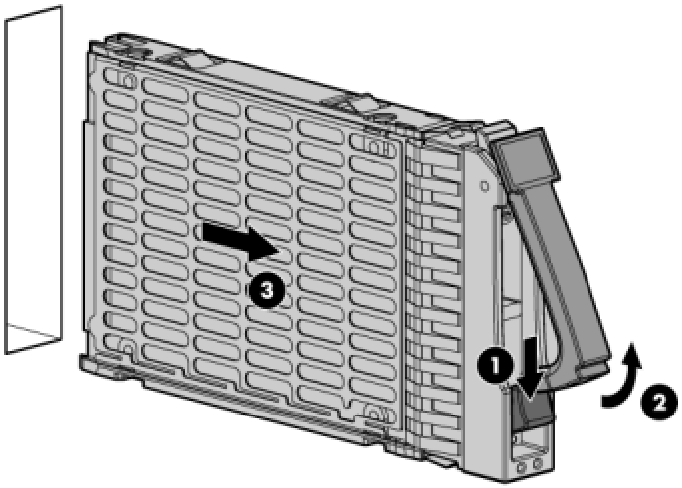
Removing a disk drive blank

Remove the component as indicated:



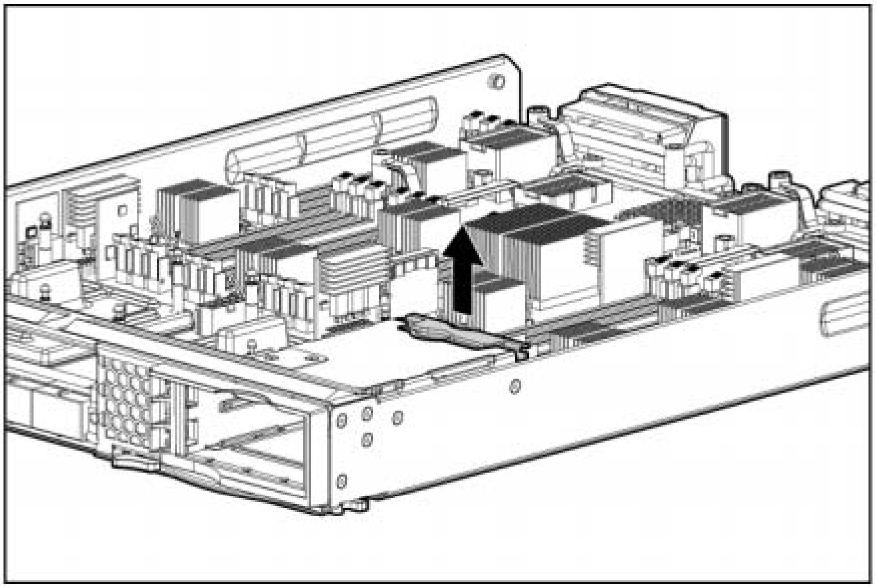
Removing a disk drive

1. Press the release button.
2. Open the ejector lever.
3. Slide the disk drive out of the drive cage.

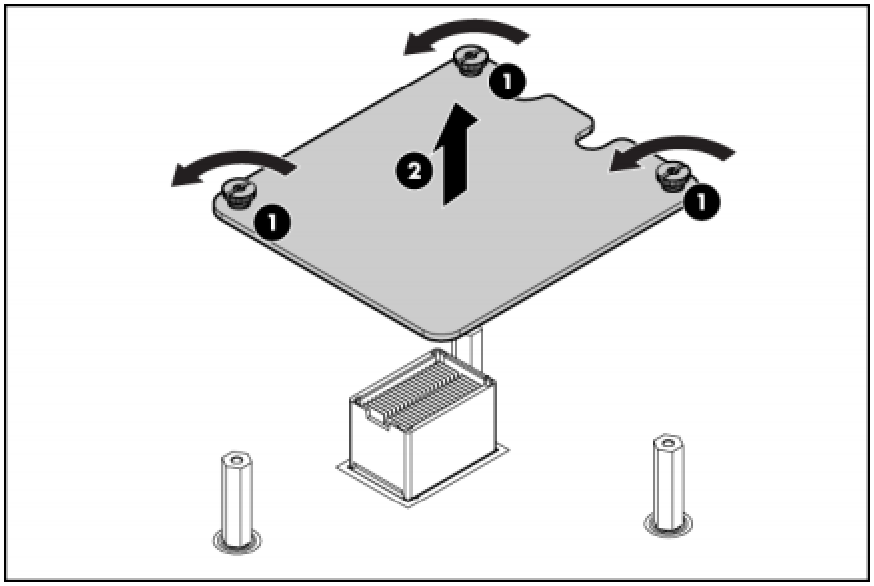


SAS backplane

1. Remove the disk drives or disk drive blanks ("Removing a disk drive" or "Removing a disk drive blank").
2. Lift the SAS back plane straight out of the server by the backplane handle.



Mezzanine card



For more details on removing components, see HP Integrity BL860c i4, BL870c i4 & BL890c i4 Server Blade User Service Guide.