



WEEE DISASSEMBLY INSTRUCTIONS

SUPERMICRO SYS-621BT-HNTR ENCLOSURE

Abstract

This document provides clear guidance for end-of-life recyclers on how to identify and disassemble reportable materials in compliance with the Waste Electrical and Electronic Equipment (WEEE) directive.

Table of Contents

1. Product Views.....	1
2. Reportable Materials on SYS-621BT-HNTR.....	3
3. Disassemble Instructions	4
3.3 Step-by-Step Disassembly Instructions	7
1. Removing Cable and Chassis Top Cover	7
2. Removing Hard Disk Drive (HDDD) / Solid State Drive (SDD).....	8
3. Removing Power Supply	10
4. Removing Power Distributor.....	11
5. Removing Backplane	12
6. Removing Fan	13
7. Removing the Air shroud, Riser, and the Riser Bracket	13
8. Removing Processor	14
9. Removing DIMM.....	16
10. Removing the Storage Controller Cards and M.2.....	16
11. Removing Advanced Input/Output Module (AIOM)	17
12. Removing Motherboard.....	18
13. Removing Control Panel.....	18

1. Product Views

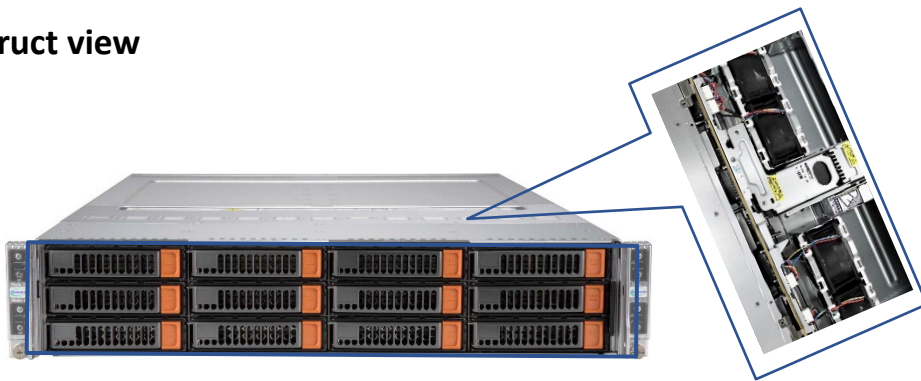
Front view



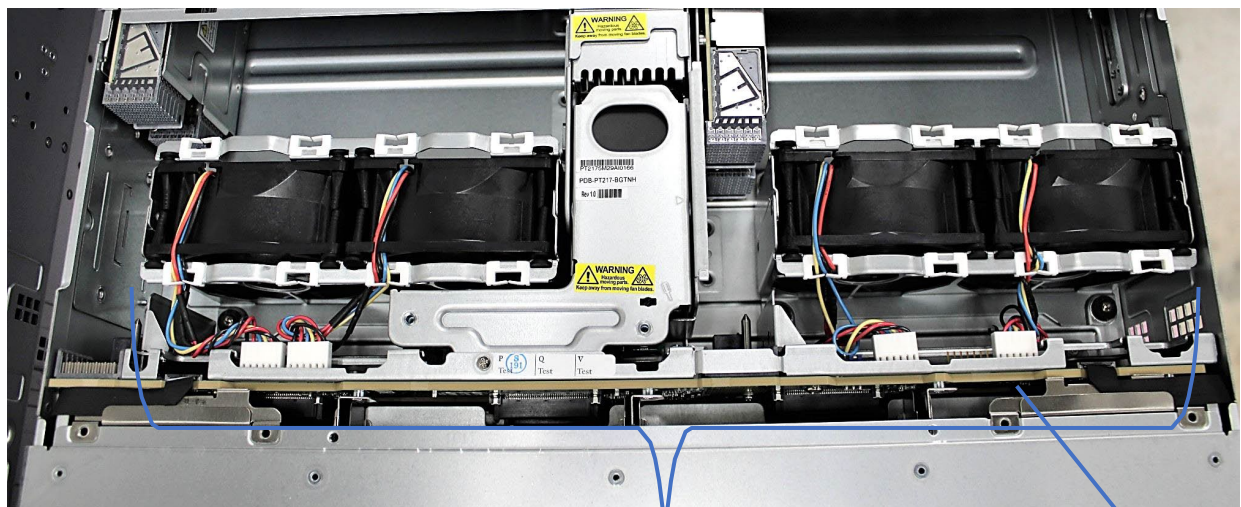
Rear view



Product construct view

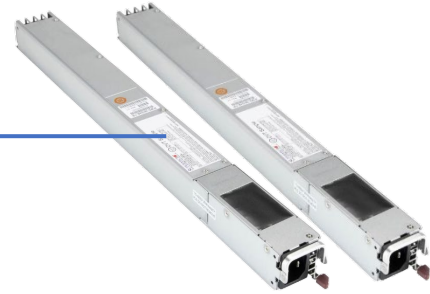
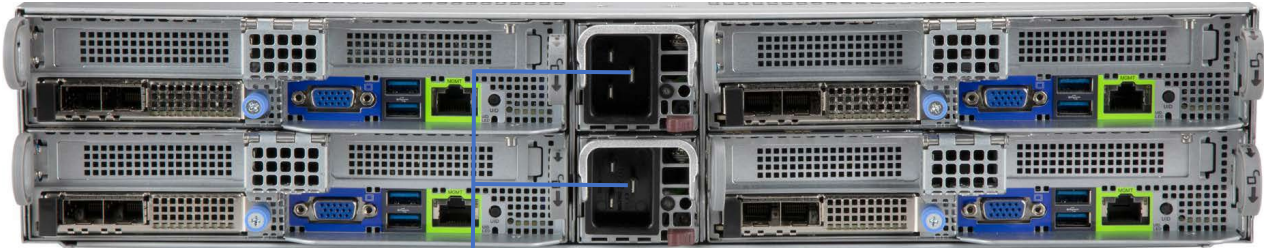


Hard Disk Drive/ Solid State Drive



Fans

Backplane



Power Supply

M.2 Card Carrier

Storage Adapter

DIMM

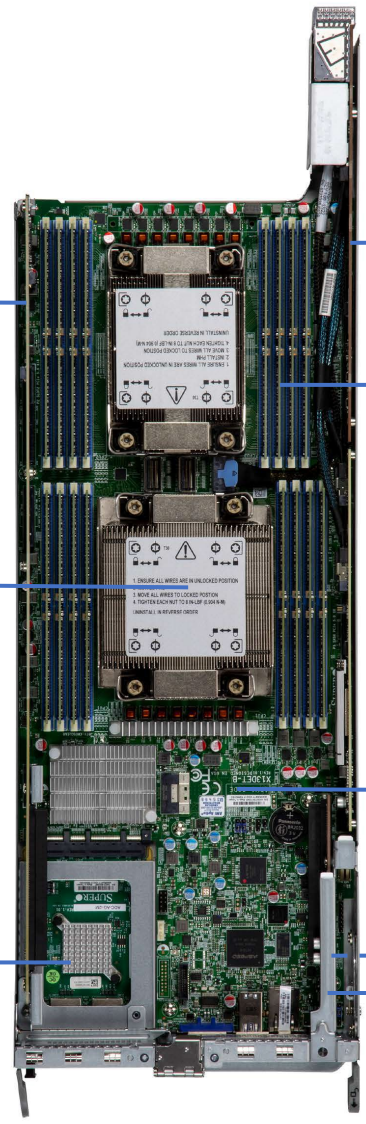
Processor

Motherboard

AIOM

Riser Card

Riser Card Bracket



2. Reportable Materials on SYS-621BT-HNTR

According to Article 8(2) and Annex VII of WEEE directive 2012/19/EU, Below materials and components should be selectively treated.

Description	Notes	No.	Quantity
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)	With a surface greater than 10 sq cm	2.4, 3.5, 4.2, 5.1, 7.2, 8.2, 9.1, 10.1, 10.2, 11.1, 12.1	86
Batteries	All types, including standard alkaline and lithium coin or button style batteries	12.2	4
Mercury-containing components	For example, mercury in lamps, display backlights, scanner lamps, switches, batteries		
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm	Includes background illuminated displays with gas discharge lamps		
Cathode Ray Tubes (CRT)			
Capacitors / condensers (Containing PCB/PCT)			
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height	Depending on the power supply model	3.6	8
External electrical cables and cords		1.1	2
Gas Discharge Lamps			
Plastics containing Brominated Flame Retardants weighing		13.1, 13.2	4
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.		
Components and waste containing asbestos			
Components, parts, and materials containing refractory ceramic fibers			
Components, parts, and materials containing radioactive substances			



3. Disassemble Instructions

The intent of this document is to provide guidance to recyclers on the presence of materials and components at the product / family level, as required by the EU WEEE Directive 2012/10/EU. This document should also help direct recyclers to proper methods for removing parts and general product disassembly instructions.

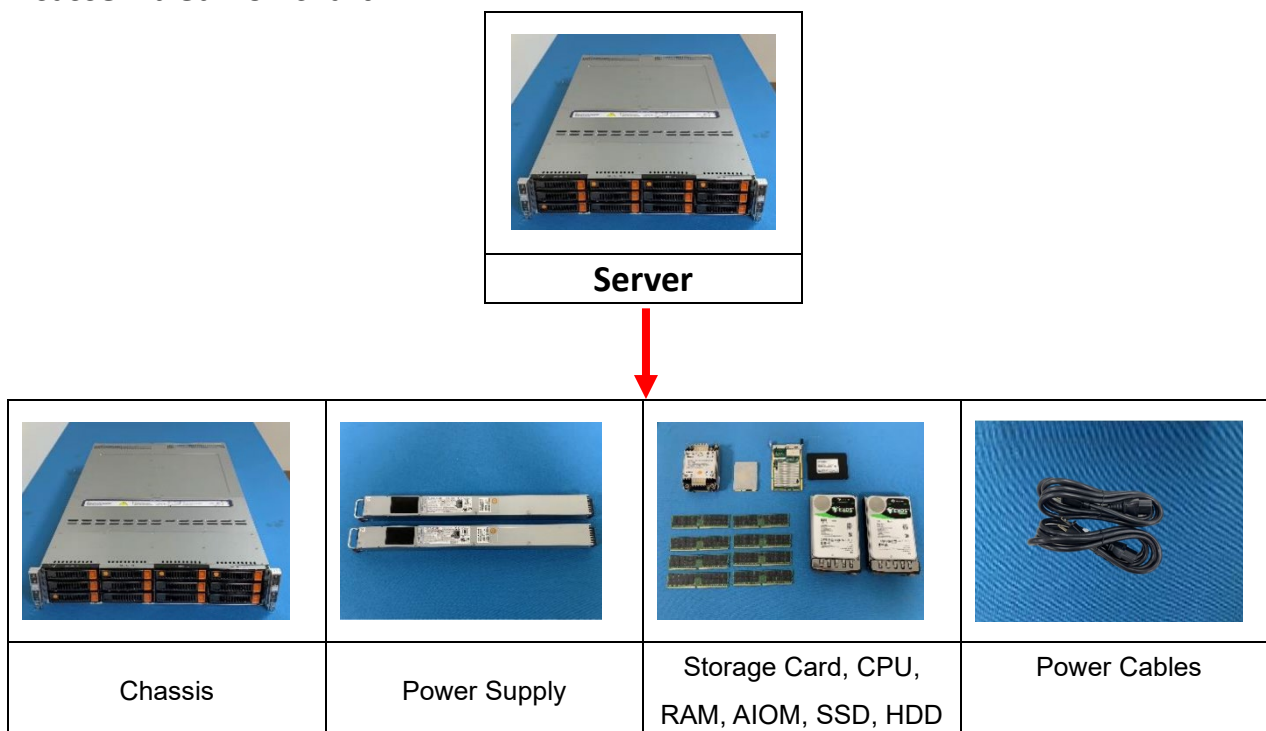
This chapter consists of three subsections:

Recommended disassembly tools, disassembled flowchart, and step-by-step disassembly instructions to direct recycler proper methods to treat.

3.1 Recommended Disassembly Tools

Disassembly tool	Cross screwdriver	
	Flathead screwdriver	

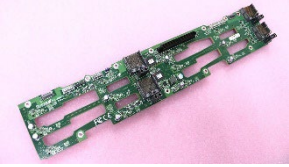


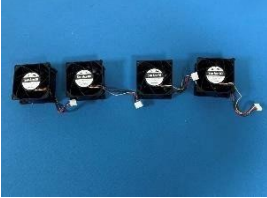








3.2 Disassembled flowchart

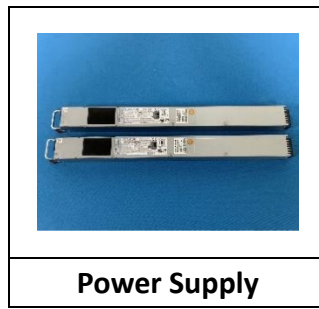




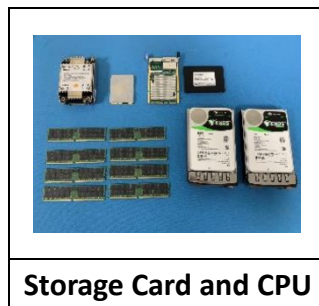
Chassis



			
Backplane	Fan Holder	Sponge	Fan
			
Screw, Stand-off	Motherboard	Storage Controller Card	Storage Controller Card
			
Riser Card	Cable	Battery	Storage Controller Card



Power Enclosure*2	Screw and Standoff*2 Set	Power Supply Module*2

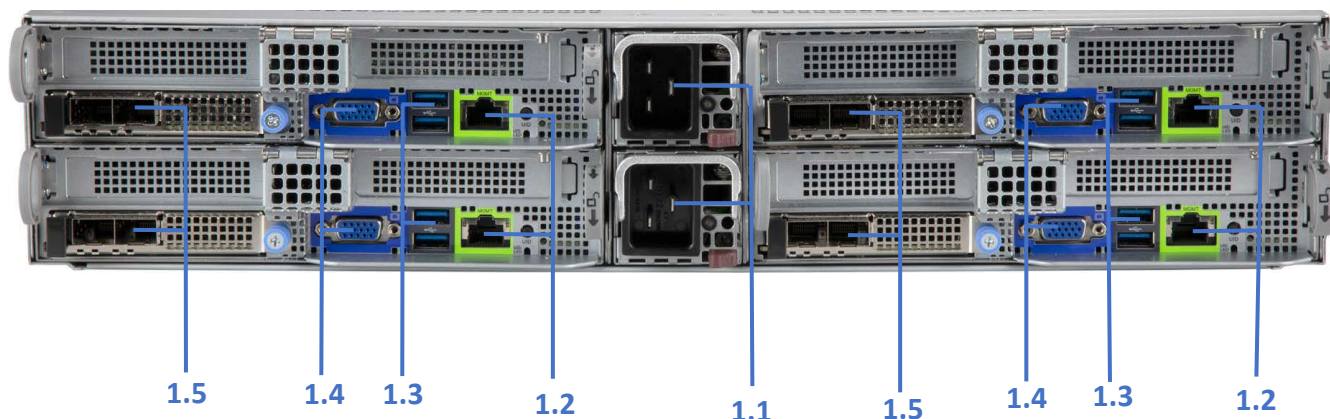


Heat Sink* 8	Processor* 8	HDD *6 Set	M.2*8
Add-On Module*2	DIMM *4Set	Power Cable	

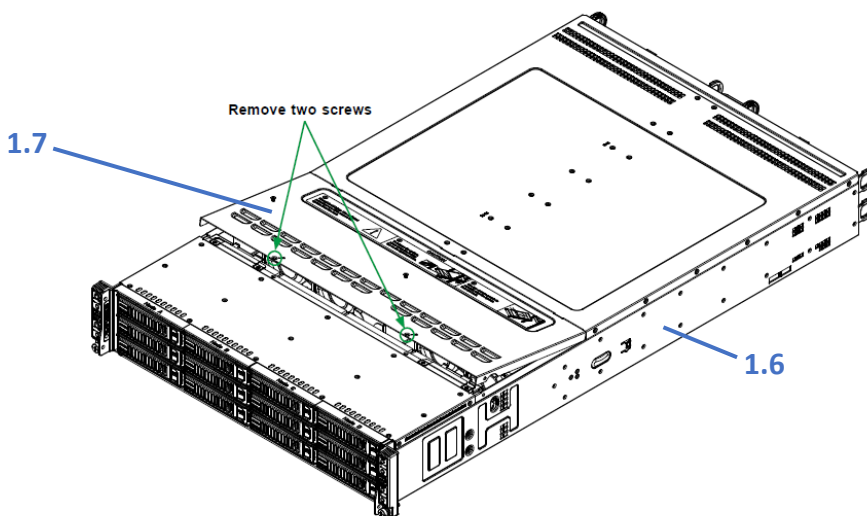
3.3 Step-by-Step Disassembly Instructions

1. Removing Cable and Chassis Top Cover

1. Use the operating system to power down the system.
2. After the system has completely shut-down, disconnect the power cords from the power supply modules.
3. Remove all cables/ unit from the server IO port.



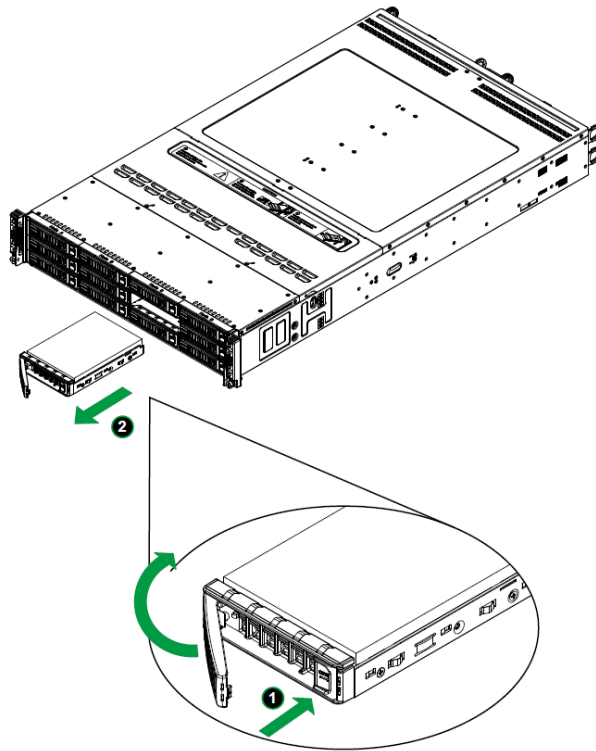
4. The chassis top cover can be lifted off after removing the two screws.



No.	Description	No.	Description
1.1	Power Cable	1.6	Chassis
1.2	BMC LAN Ports	1.7	Top Cover
1.3	USB Ports		
1.4	VGA Ports		
1.5	AIOM Slot PCIe 5.0 x16		

2. Removing Hard Disk Drive (HDDD) / Solid State Drive (SDD)

1. Press the release button on the drive carrier.
2. Pull the drive carrier out from the chassis as shown below using the drive carrier handle:

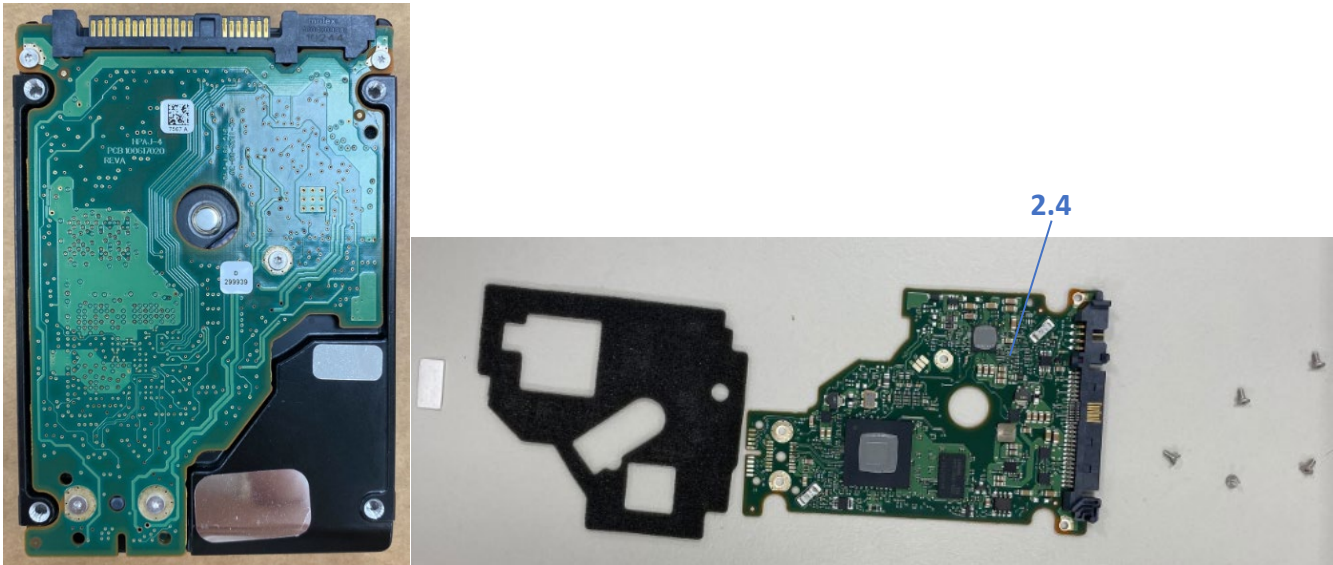


3. Remove the dummy tray insert by first removing the four screws, then pull out the dummy tray and remove the drive.





5. Use a cross screwdriver to remove drive enclosure

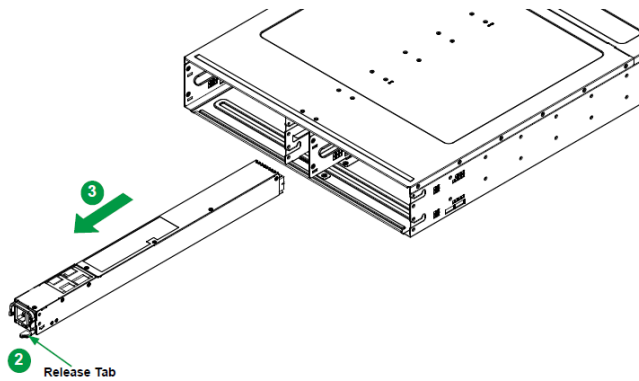


6. Use a cross screwdriver to remove screws and lift off the PCB

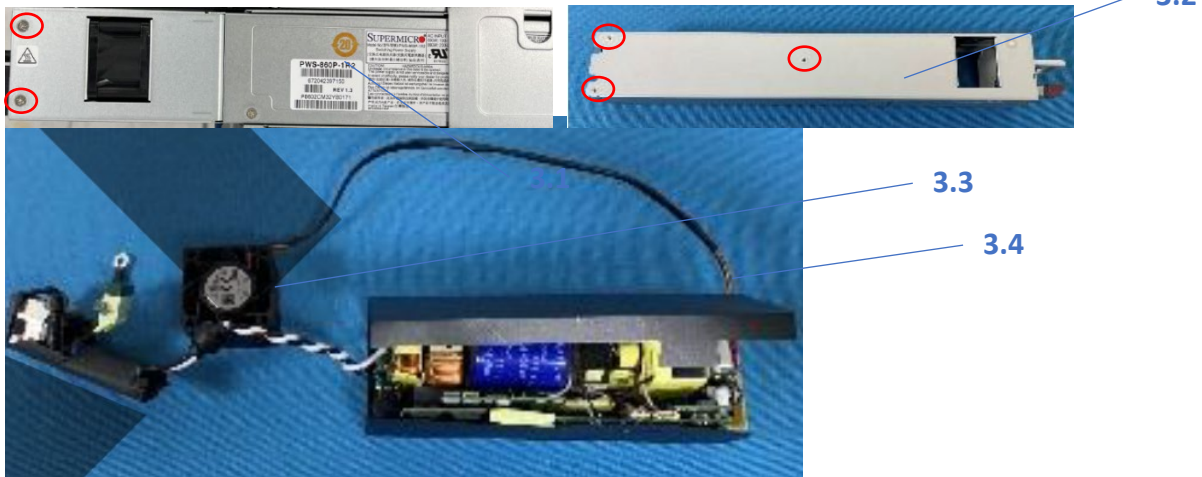
No.	Description
2.1	Dummy Tray
2.2	HDD/ SSD
2.3	Hard Drive Enclosure
2.4	Hard Drive PCB

3. Removing Power Supply

1. Unplug the AC Power Cord from the Power Supply.
2. Press the release tab on the power supply as shown below.
3. Use the handle to gently slide the power supply out the back of the chassis.



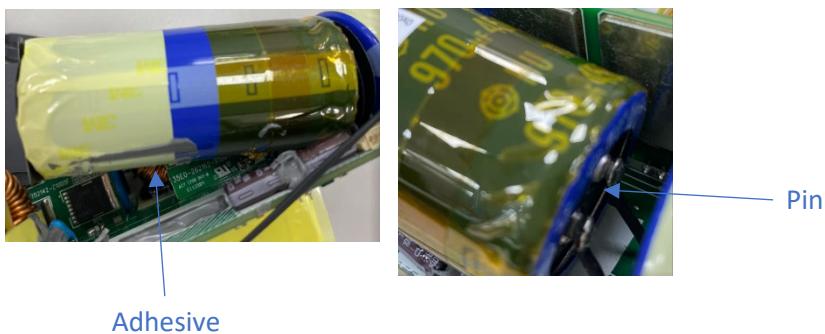
3. Remove the screws from the enclosure



4. Cut the power leads connected to the fan and lift the main board from the chassis



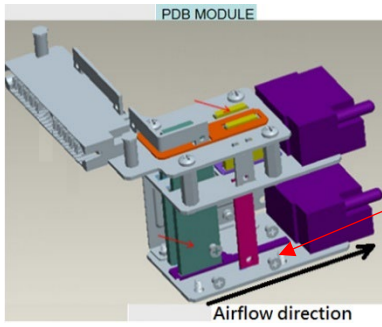
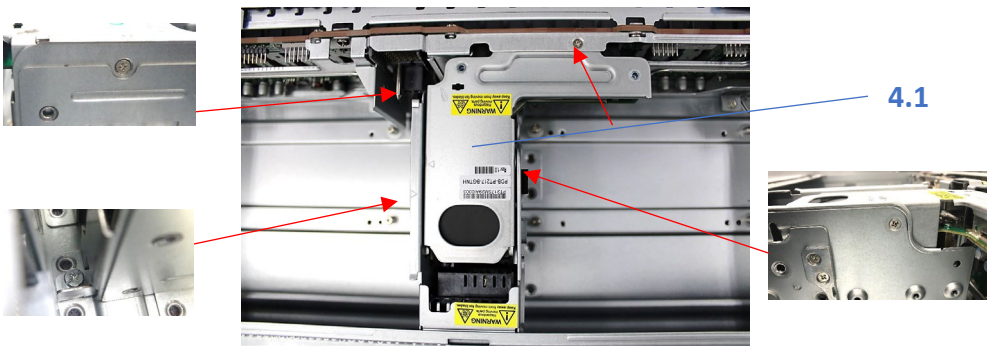
5. Use a flathead screwdriver to cut the capacitor adhesive and pin solder.



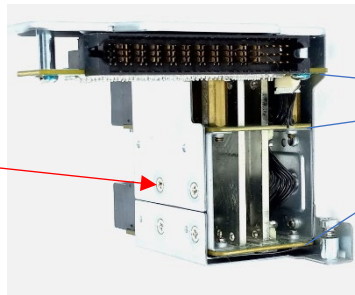
No.	Description
3.1	Power Supply
3.2	Power Enclosure
3.3	Fan
3.4	Fan Cable
3.5	Power Module PCB
3.6	Capacitor

4. Removing Power Distributor

1. Disconnect the power cords from the power supply modules.
2. Unplug the power distributor from the motherboard and backplane.
3. Remove 4 screws and lift out the power distributor from the chassis
4. Remove power distributor screw and standoffs then take three PCBs from the power distributor.



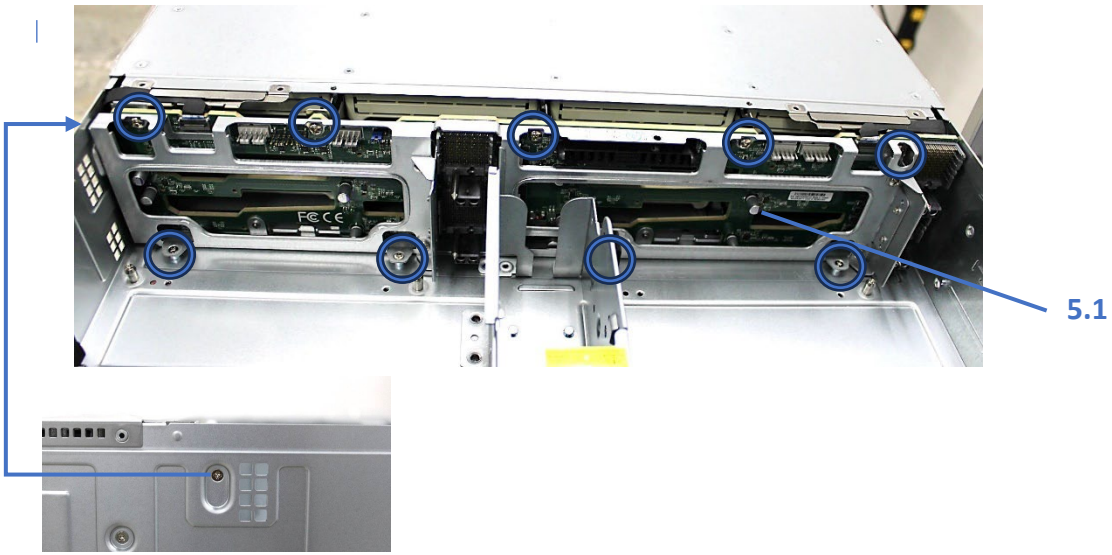
Remove screws and standoff



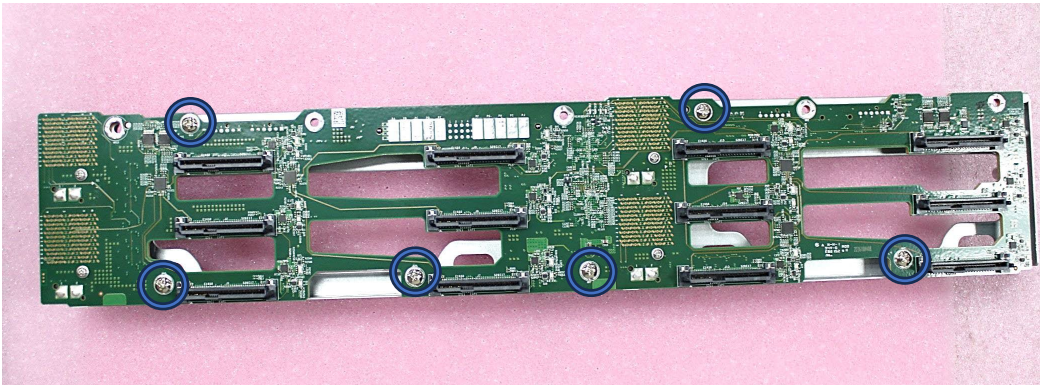
No.	Description
4.1	Power Distributor
4.2	Power Distributor PCBs

5. Removing Backplane

1. Remove the backplane screws from the chassis and then remove the backplane and backplane bracket from chassis.



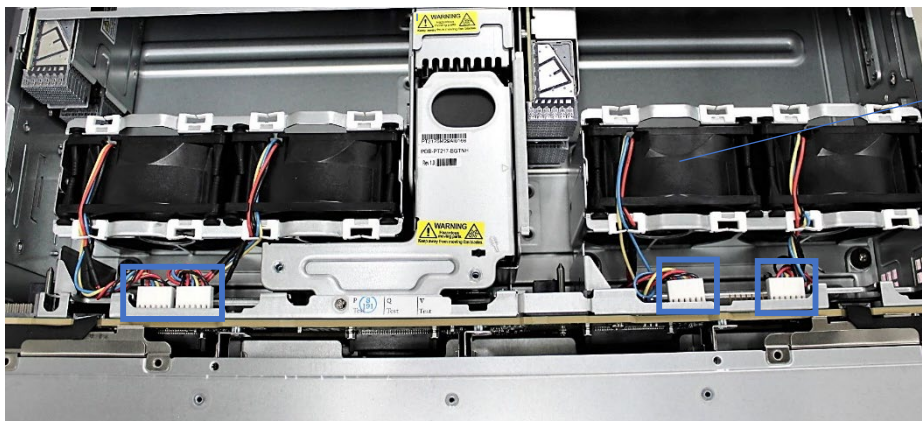
2. Remove the screws as shown below to remove the backplane bracket from the backplane.



No.	Description
5.1	Backplane

6. Removing Fan

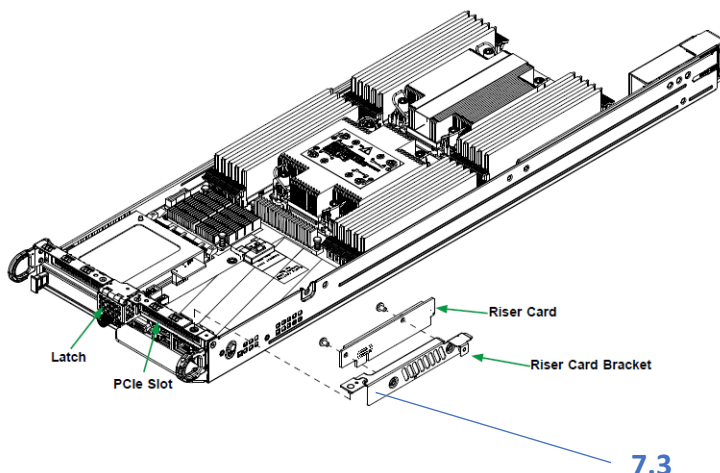
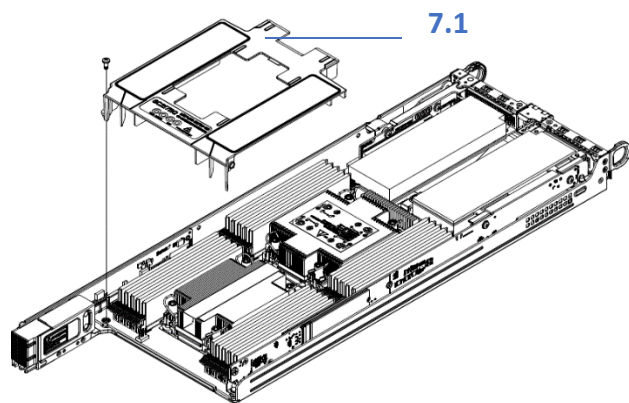
1. Disconnect the chassis fan from the backplane fan connectors and lift fans out of chassis.



No.	Description
6.1	Cooling Fans

7. Removing the Air shroud, Riser, and the Riser Bracket

1. Lift the air shroud out of the chassis by hand
2. Remove screws each from the riser card bracket
3. Take the riser card and bracket away from the chassis
4. Unscrew the two screws holding each riser card to remove riser cards from bracket.

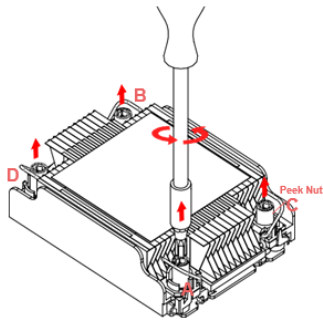




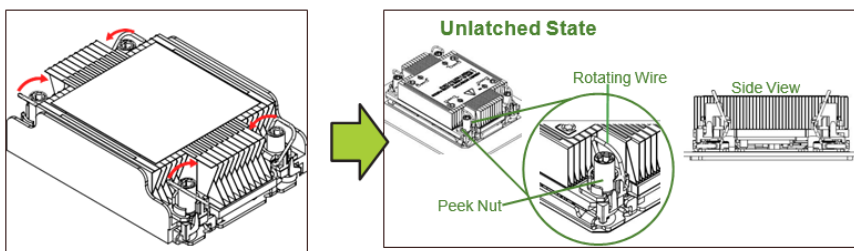
No.	Description
7.1	Air shroud
7.2	Riser Cards
7.3	Riser Bracket

8. Removing Processor

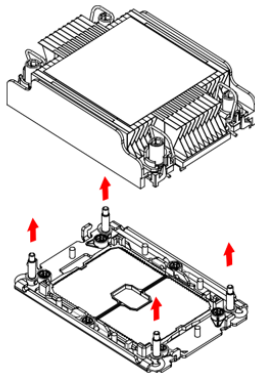
1. Removing the PHM (Processor Heatsink Module) from the motherboard, first shut down the system and unplug the AC power cord from all power supplies
2. Use a T30-bit screwdriver to loosen the four peek nuts on the heatsink in the sequence of A, B, C, and D



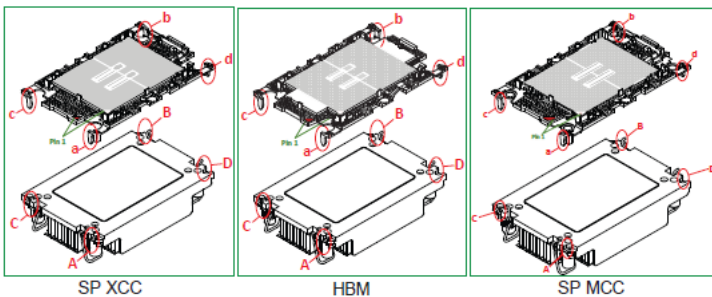
3. Once the peek nuts have been loosened from the CPU socket, press the rotating wires inward to unlatch the PHM from the socket, as shown below



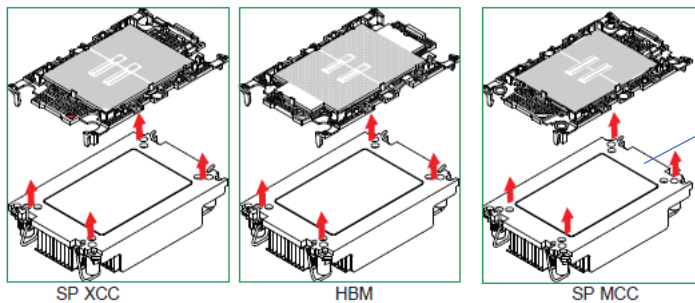
4. Gently lift the PHM upward to remove it from the CPU socket



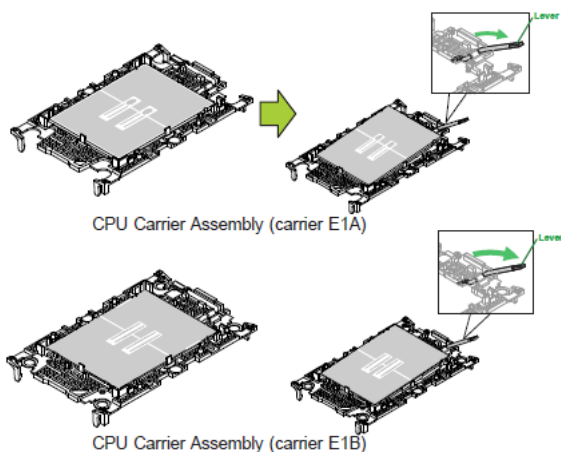
5. Use your hand to detach the four plastic clips (marked a, b, c, d) on the processor carrier assembly from the four corners of the heatsink (marked A, B, C, D), as shown below



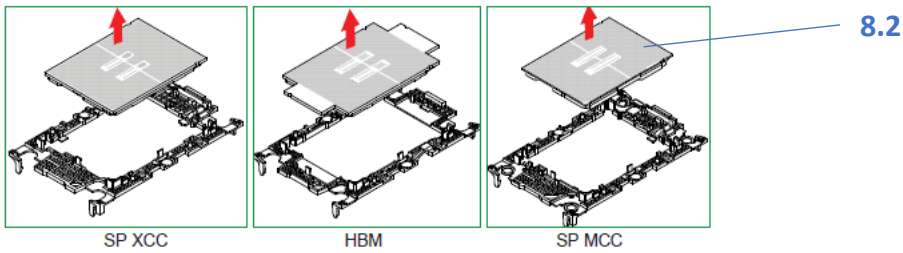
6. When all plastic clips have been detached from the heatsink, remove the processor carrier assembly from the heatsink



7. Unlock the lever from its locked position and push it upwards to disengage the processor from the processor carrier, as shown below right



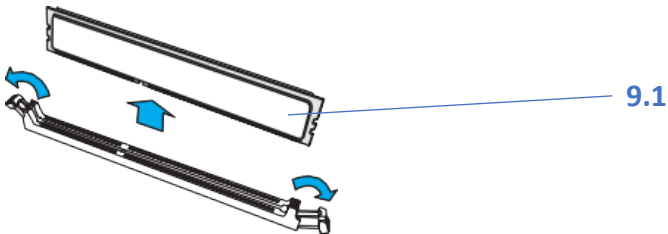
8. Once the processor has been loosened from the carrier, carefully remove the processor from the carrier



Note: Please handle the processor with care to avoid damaging it or its pins

No.	Description
8.1	Heat Sink
8.2	Processor

9. Removing DIMM

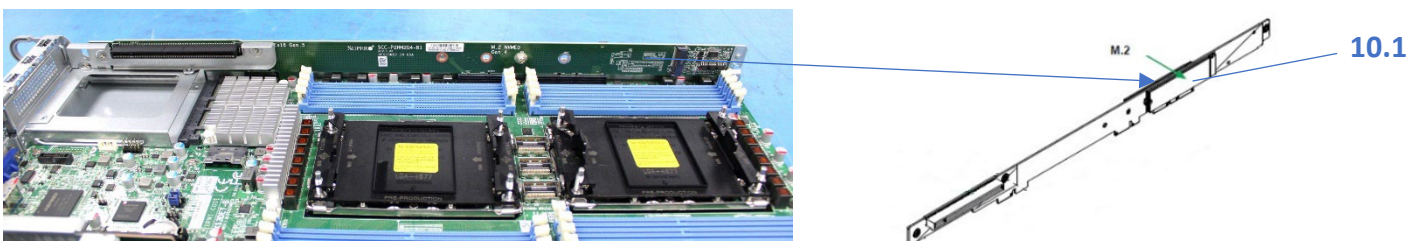


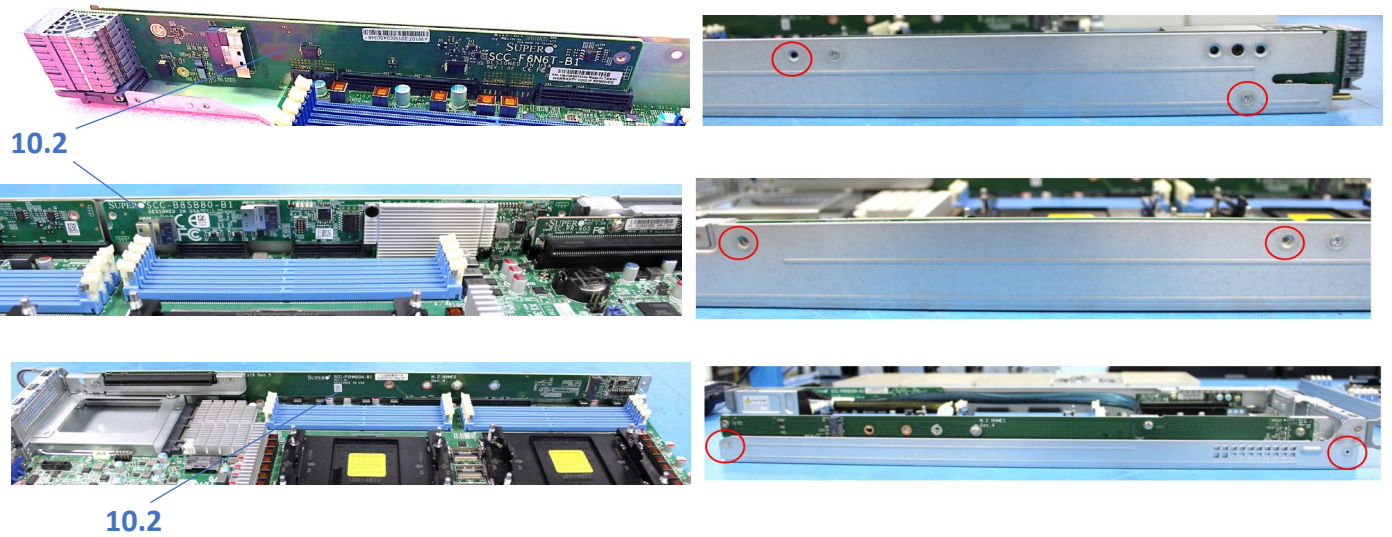
1. Hand press both release tabs on the ends of the DIMM module to unlock it
2. Once the DIMM module is loose, remove it from the memory slot

No.	Description
9.1	DIMM

10. Removing the Storage Controller Cards and M.2

1. Locate the M.2 on the storage controller card and remove the screw for the M.2.
2. Gently remove the M.2 from the Motherboard.

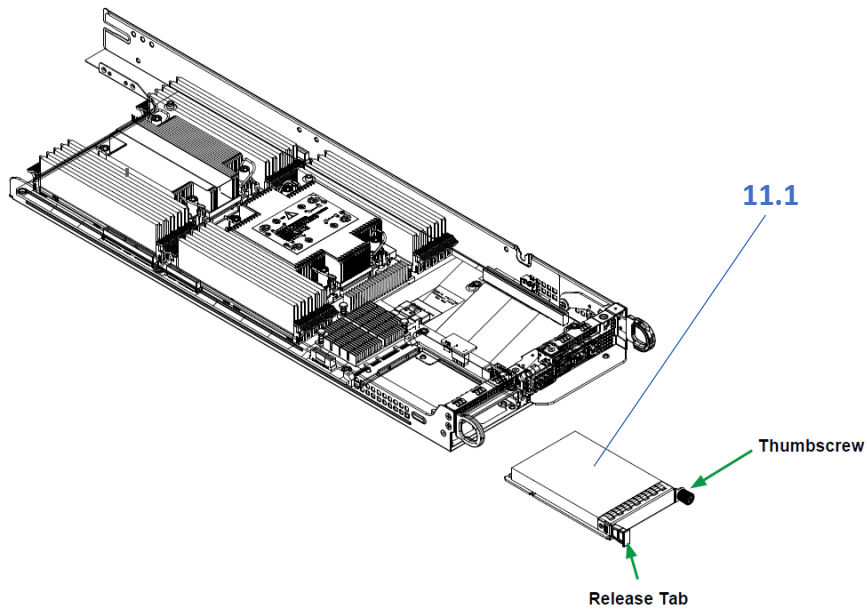




No.	Description
10.1	M.2
10.2	Storage Controller Cards

11. Removing Advanced Input/Output Module (AIOM)

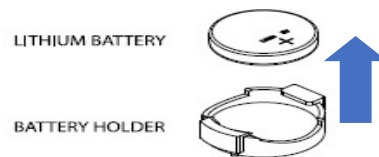
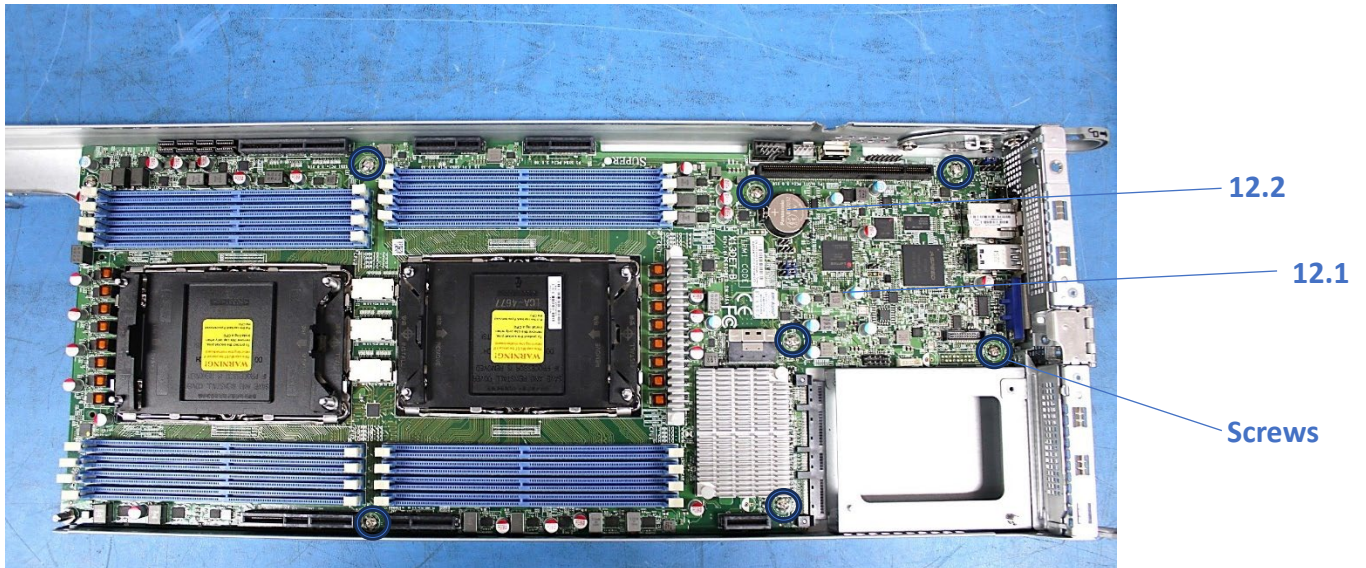
1. Press the release tab and loosen the thumbscrew on the AIOM card.
2. Grasp the release tab and the thumbscrew and pull the AIOM out of the node tray.



No.	Description
11.1	Advanced Input/Output Module (AIOM)

12. Removing Motherboard

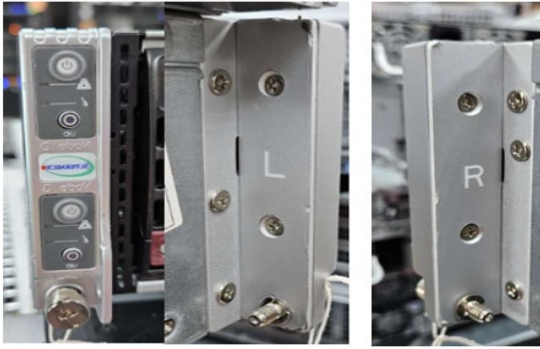
1. Remove screws, lift out motherboard
2. Push aside the small clamp that covers the edge of the battery. When the battery is released, lift it out of the holder.
3. When the motherboard is removed, the node enclosure can be recycled



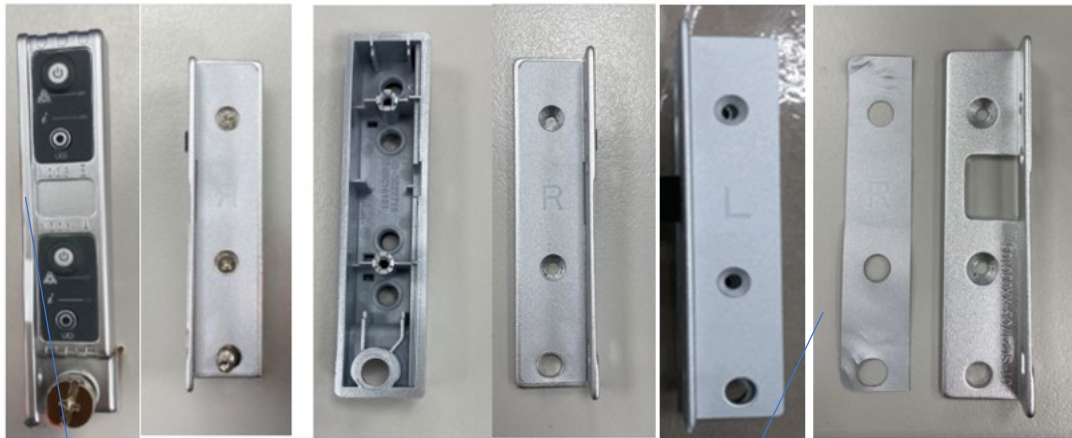
No.	Description
12.1	Motherboard
12.2	Battery

13. Removing Control Panel





Remove control panel screw (R and L) from chassis



13.1

13.2

Remove basket screw and hand screw (R and L) from control panel and used hand remove basket mylar.

No.	Description
13.1	Control Panel Cover L & R
13.2	MYLAR_L & R

Note: Repeat steps 1-12 of each node(A,B,C,D) disassembled (Step 5 and 13 is only done once), then the chassis enclosure can be recycled.