



WEEE DISASSEMBLY INSTRUCTIONS

SUPERMICRO SYS-211GT-HNC8R 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.

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1. Product Views

Front view



Rear view



Product construct view



Hard Disk Drive/ Solid State Drive

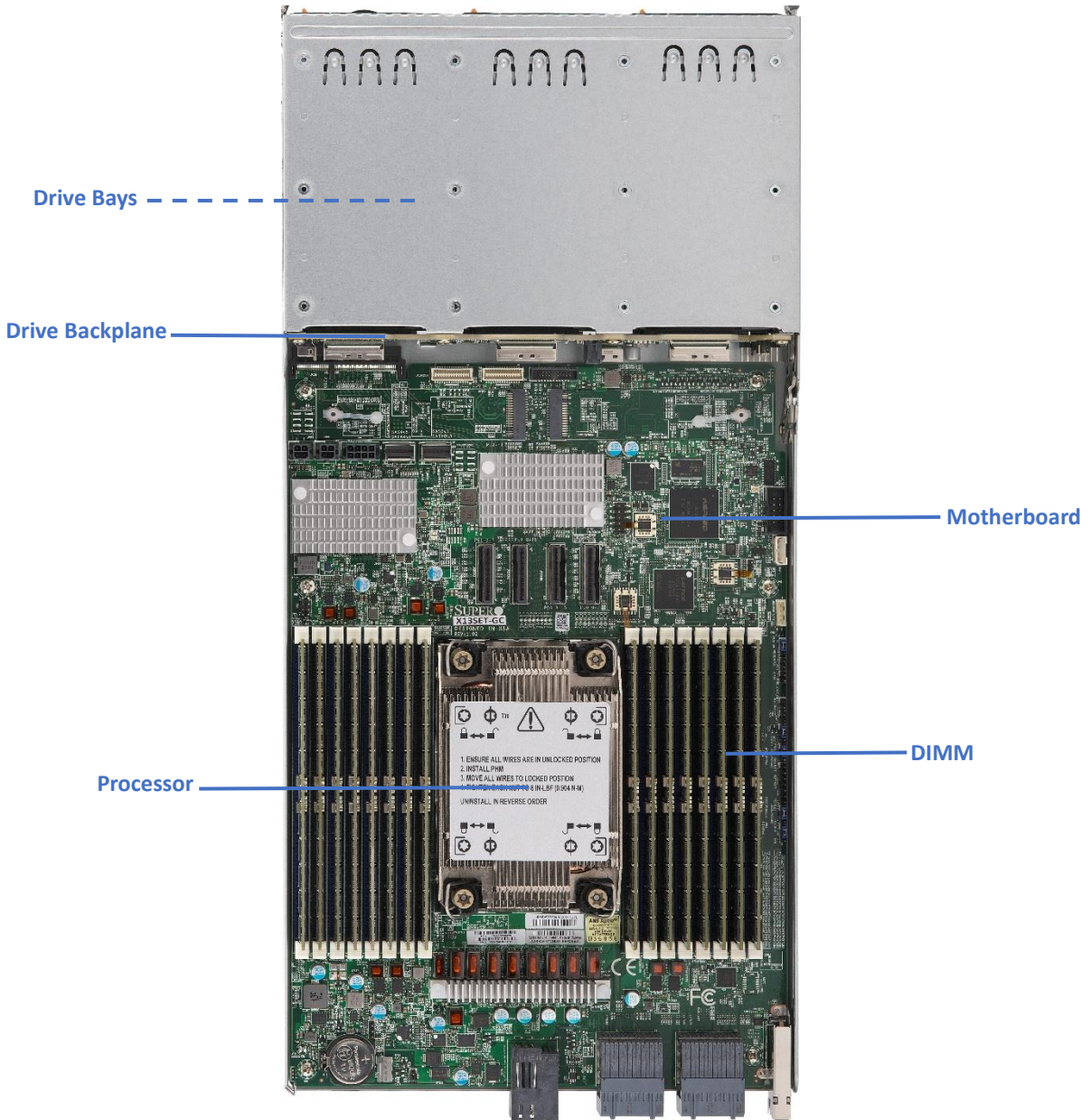
Power Distributor Backplane



Fans



Power Supply



Drive Bays

Drive Backplane

Motherboard

DIMM

Processor

2. Reportable Materials on SYS-211GT-HNC8R

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 (Depending on the system configuration)	2.3, 3.5, 4.1, 5.2, 6.1, 7.1, 9.2, 10.1, 11.1, 13.1	85
Batteries	All types, including standard alkaline and lithium coin or button style batteries	13.2	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	2
External electrical cables and cords		1.1	2
Gas Discharge Lamps			
Plastics containing Brominated Flame Retardants		14.1, 14.2	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. Disassembly 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.

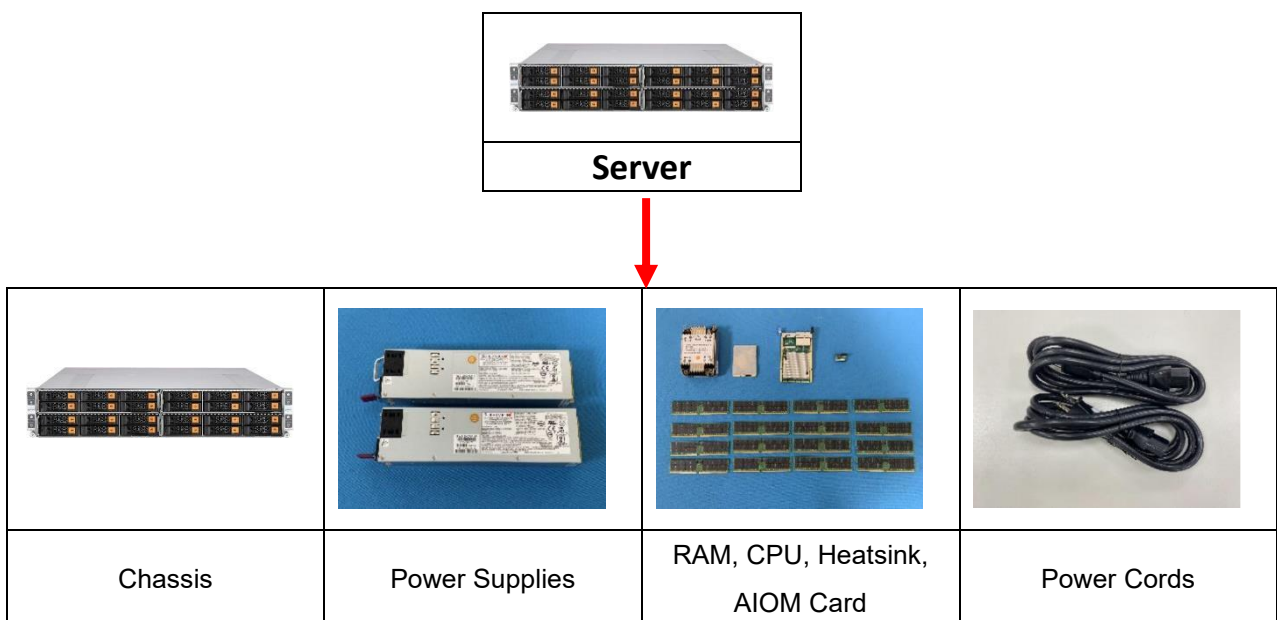
This chapter consists of three subsections:

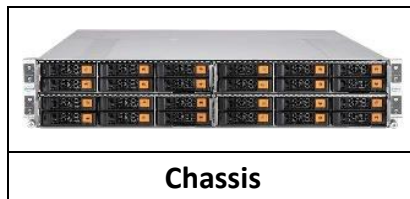
Recommended disassembly tools, disassembled flowchart, and step-by-step disassembly instructions to direct recycler proper methods to treat.

3.1 Recommended Disassembly Tools

Disassembly tool	Cross screwdriver	
	Flathead screwdriver	








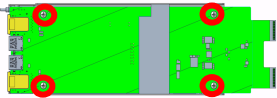
3.2 Disassembled flowchart





Chassis



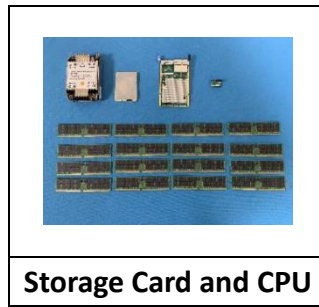
			
Storage Backplane *4 set	Fans *2 set	Screws	Motherboard*4
			
Battery*4	Cables	Power Distributor Backplane	IPMI Board




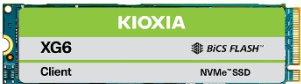
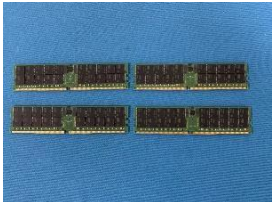



Power Supply



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

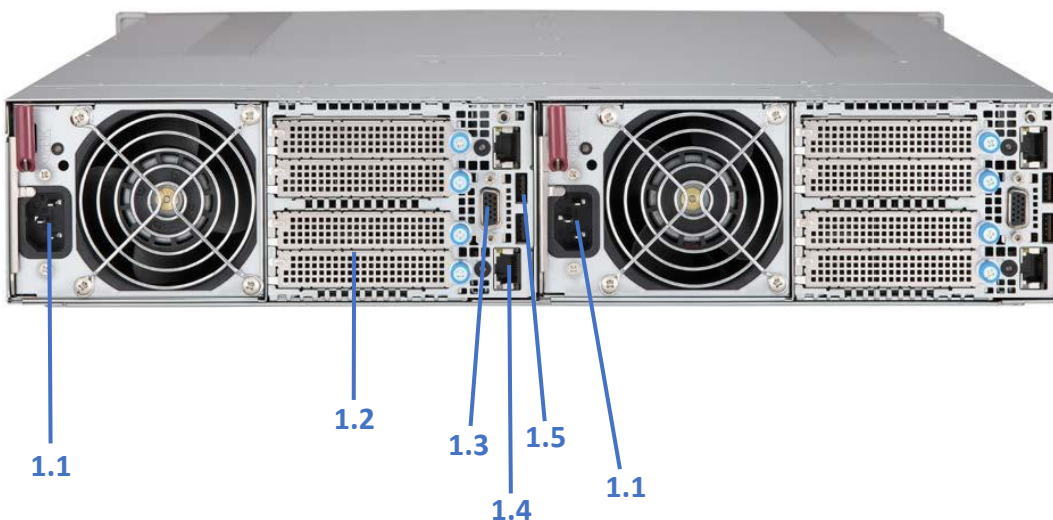


		
Heat Sink*4 set	Processor*4 set	SSD *12 set
		
M.2 *8 Set	DIMM *8 Set	AIOM Card

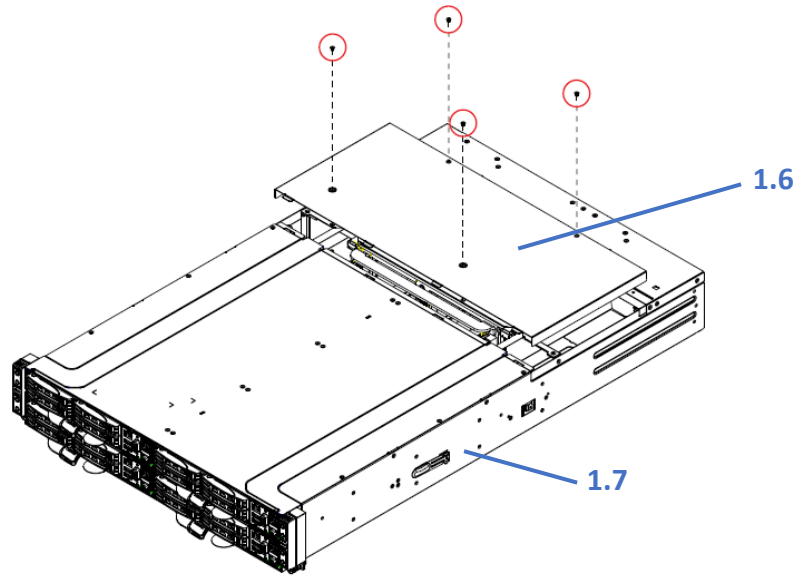
3.3 Step-by-Step Disassembly Instructions

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.



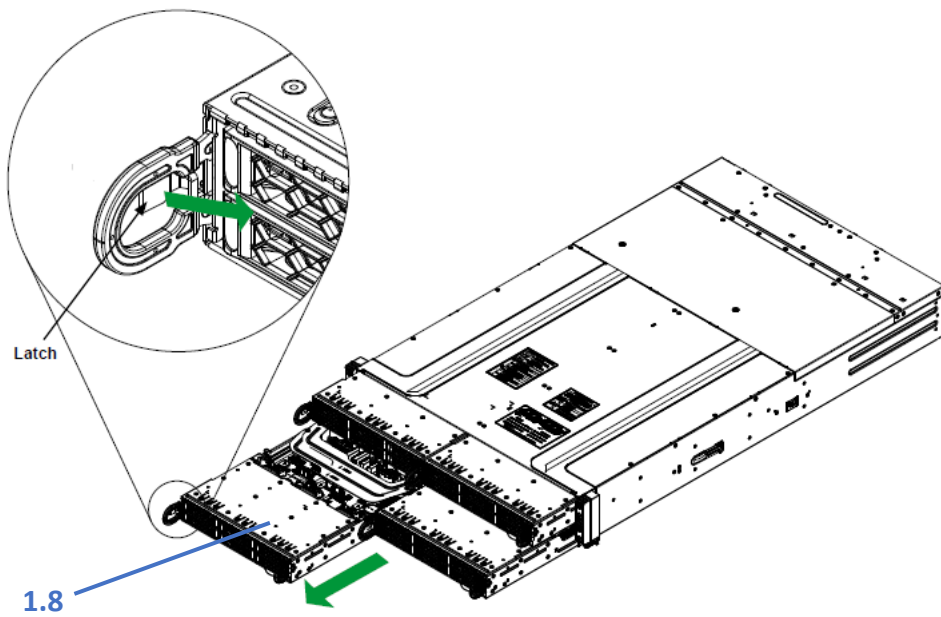
4. The chassis top cover can be lifted off after removing the four screws as shown below.



5. Push on the latch of the left handle to disengage the node tray.

6. While pressing on the left latch, carefully pull the left node release handle out a small section.

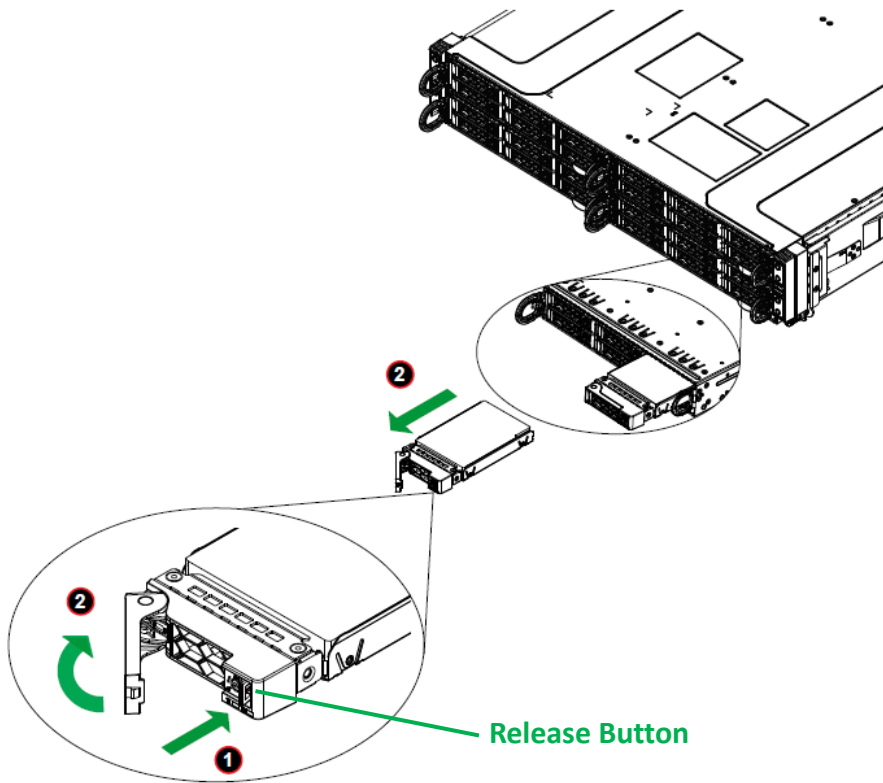
7. Grasp the node by the handles on both sides of the front, then pull the node forward and out of the chassis.



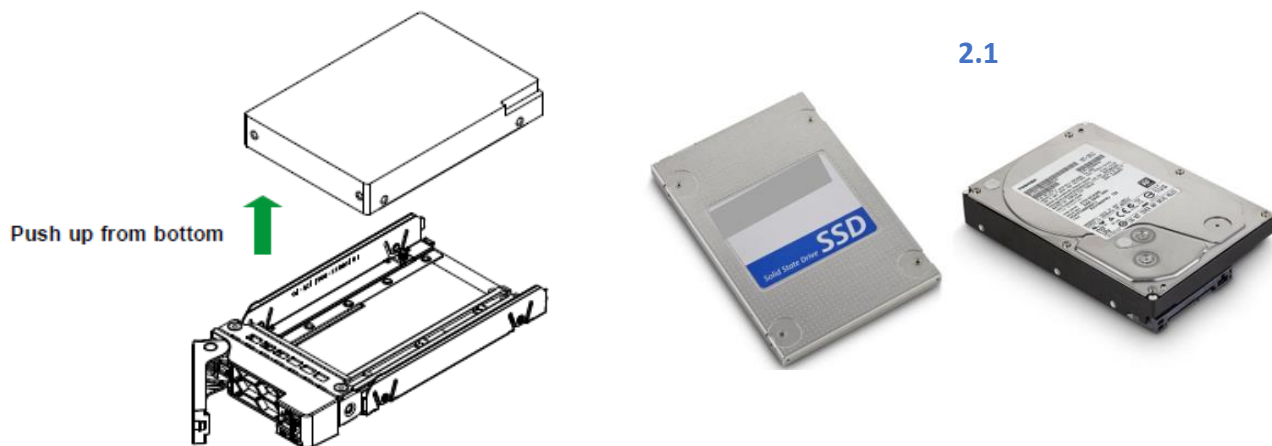
No.	Description	No.	Description
1.1	Power Cable	1.6	Top Cover
1.2	AIOM Expansion Slots	1.7	Chassis
1.3	VGA Port	1.8	System Node
1.4	BMC LAN Port		
1.5	USB 3.0 Ports		

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

1. Press the release button to extend the drive carrier handle.
2. Use the drive carrier handle to pull the drive out of the chassis.



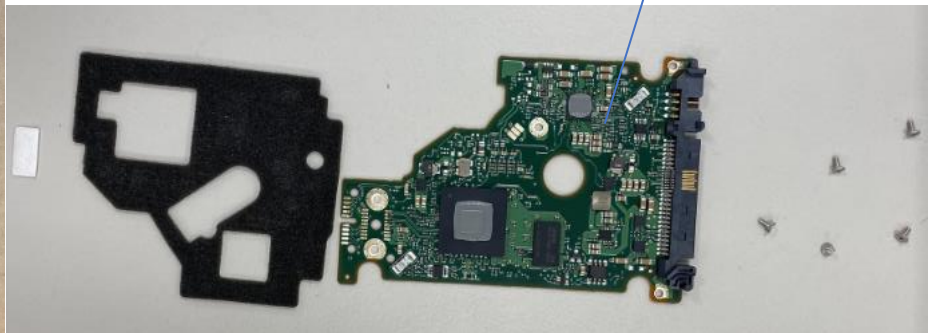
3. Push up from the bottom of the SSD as shown below to remove it from the drive tray.





2.2

5. Use a cross screwdriver to remove drive enclosure



2.3

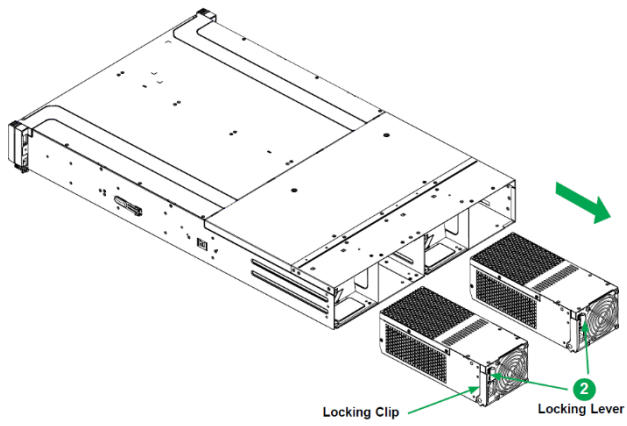
6. Use a cross screwdriver to remove screws and lift off the PCB

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

3. Removing Power Supply

1. Ensure the system is unplugged and powered down.
2. Release the locking clip to unlock the power supply module

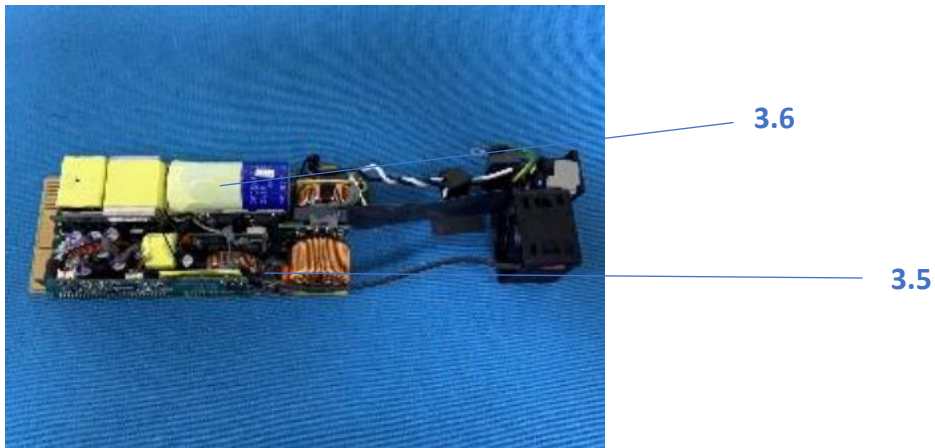
2. Pull out the locking lever and remove the unit.



3. Remove the screw from the enclosure



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



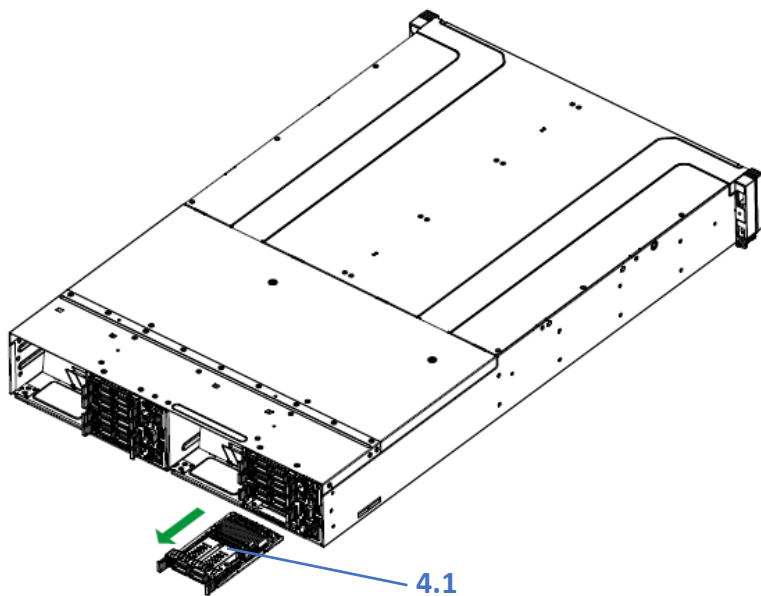
5. Use a flathead screwdriver to cut the capacitor adhesive and pin solder.



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 Advanced I/O (AIOM) Network Card

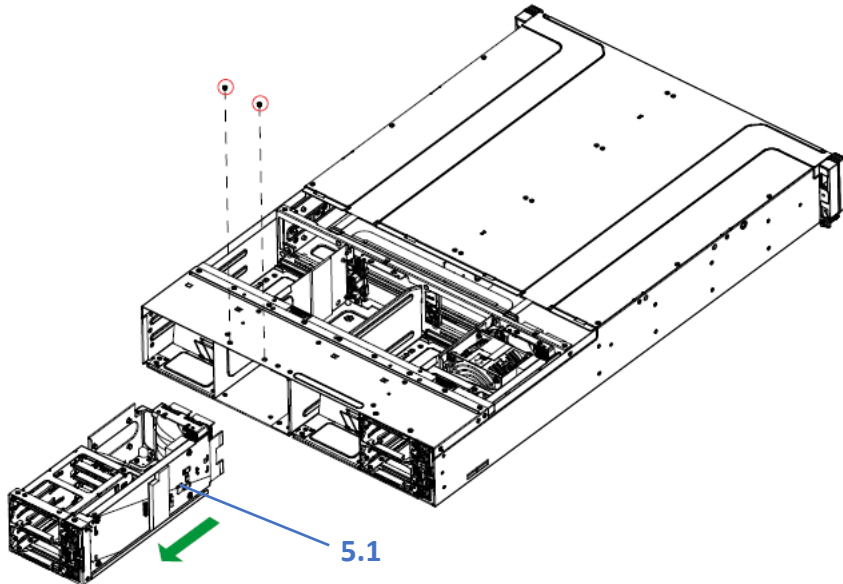
1. Loosen the thumbscrew using your hand.
2. Slide the AIOM out of the opening.



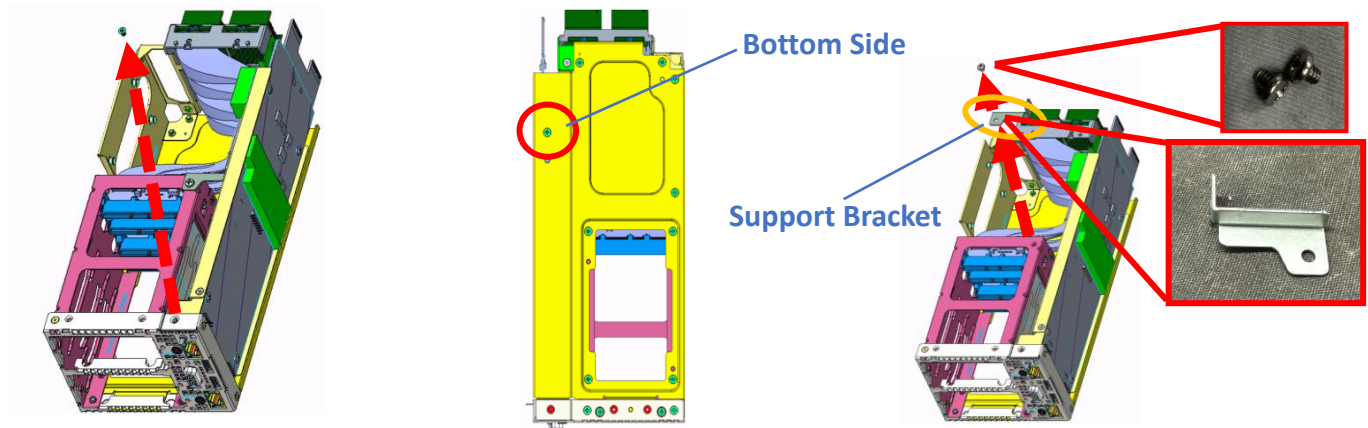
No.	Description
4.1	AIOM Network Card

5. Removing I/O Card Module

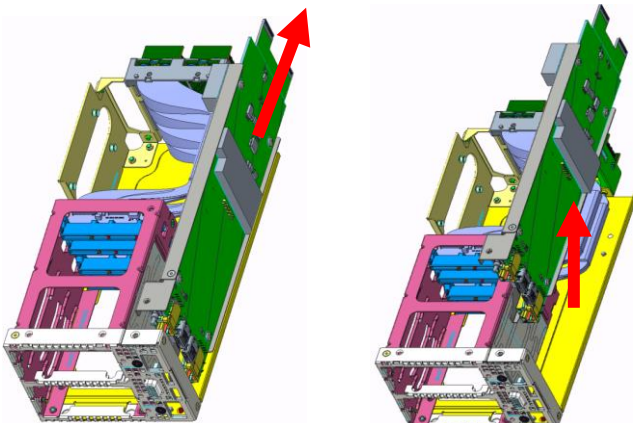
1. Remove the cables that are connected from the power distributor backplane.
2. Loosen the two screws securing the module to the chassis.
3. Gently pull the I/O card module out of the chassis.



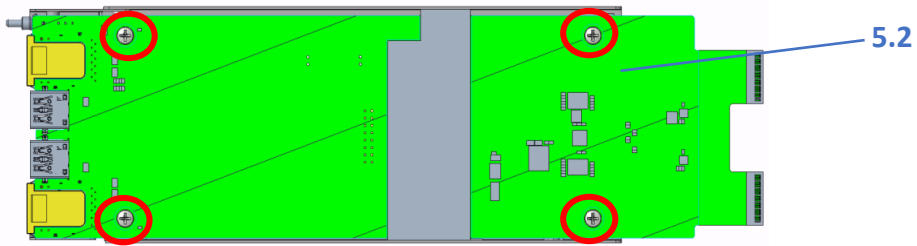
4. From the RIO, remove the screws and bracket as shown below.



5. Disconnect the cables connected to the IPMI board and bracket and slide the IPMI module back then out from the RIO Card Module.



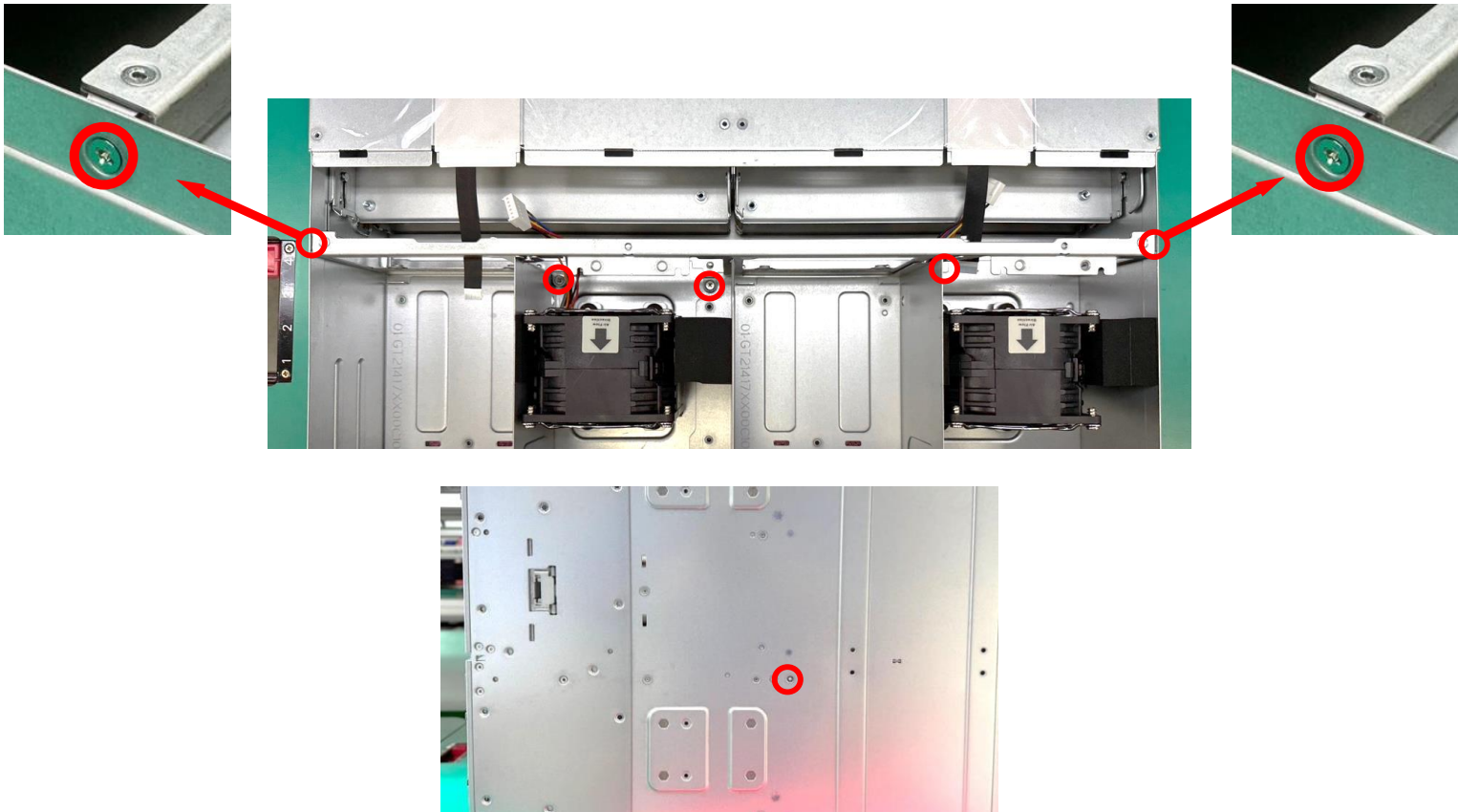
6. Unscrew the screws (circled in red) and remove the IPMI board from the bracket.



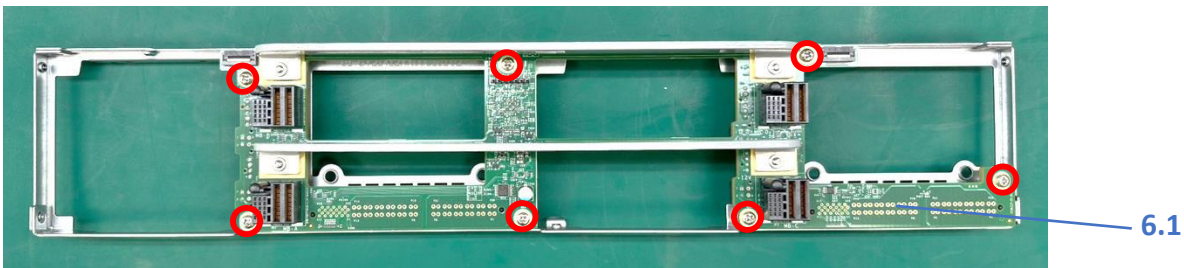
No.	Description
5.1	RIO Card Module
5.2	IPMI Board

6. Removing Power Distributor Backplane

1. Unscrew the screws (circled in red) holding the Power Distributor (PDB) bracket from the chassis.



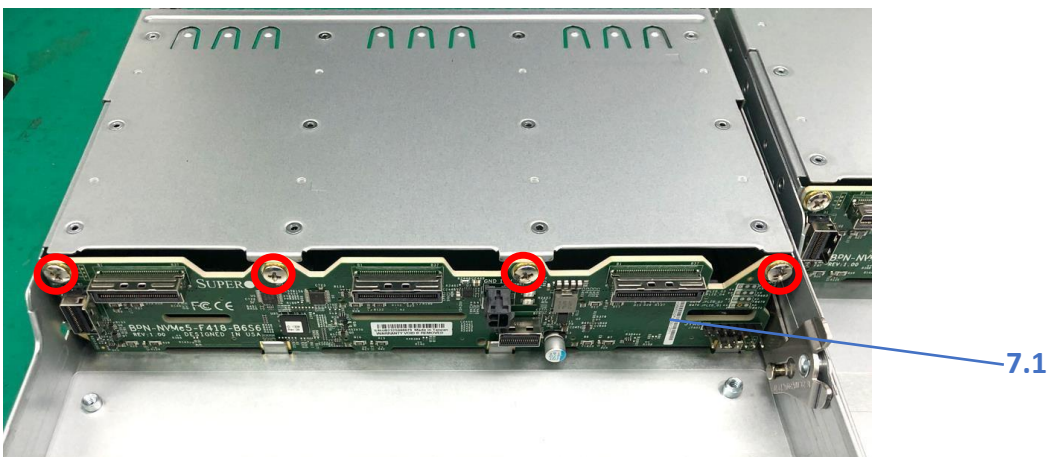
2. Unscrew the PDB backplane from the bracket as shown below.



No.	Description
6.1	Power Distributor Backplane

7. Removing Backplane

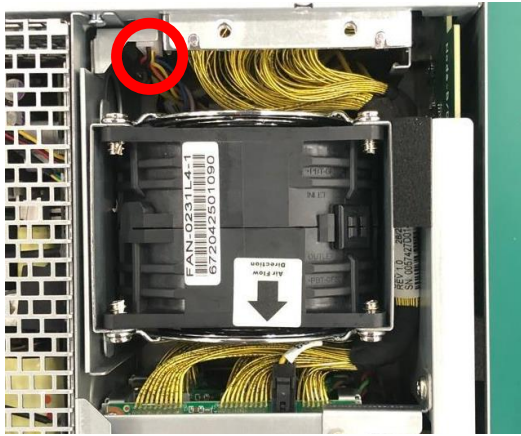
1. Unscrew the 4 screws holding the backplane using a screwdriver as shown below.
2. Pull the backplane out of the node.



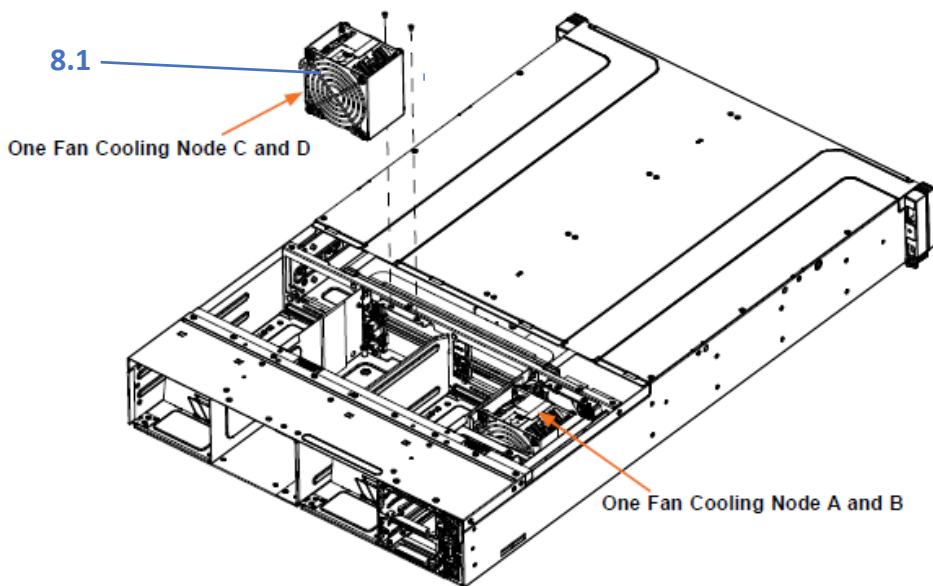
No.	Description
7.1	Backplane

8. Removing Fan

1. Disconnect the chassis fan from the midplane as shown below.



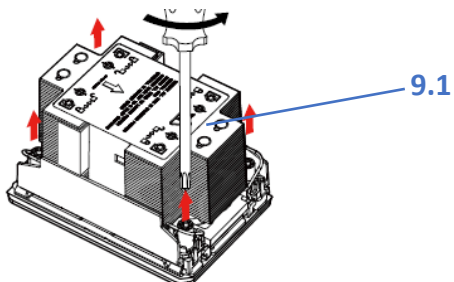
2. Use a screwdriver to unscrew the 4 screws for each fan from the chassis.
3. Lift the fan housing up and out of the chassis for each fan.



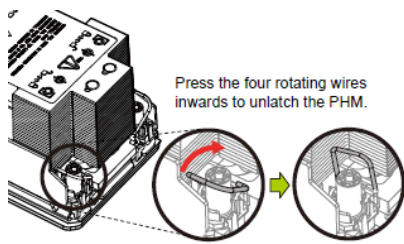
No.	Description
8.1	Cooling Fans

9. Removing Processor

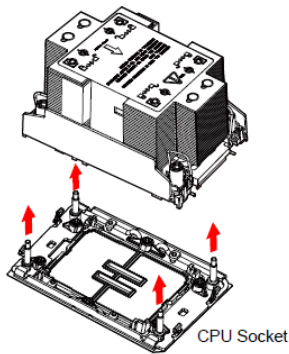
1. Removing the PHM (Processor Heatsink Module) from the motherboard, first shut down the system and unplug the AC power cord from all power supplies
2. Use a T30-bit screwdriver to loosen the four screws in a diagonal pattern on the heatsink as shown in the picture below:



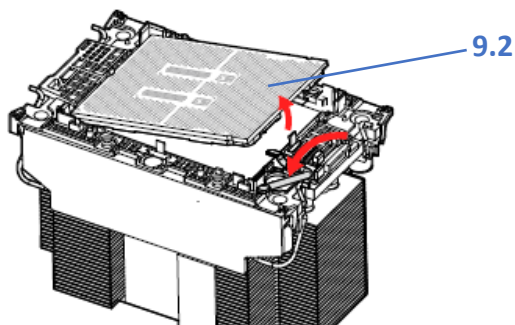
3. Press the four rotating wires inwards to unlatch the heatsink from the socket.



4. Lift the heatsink from the socket.



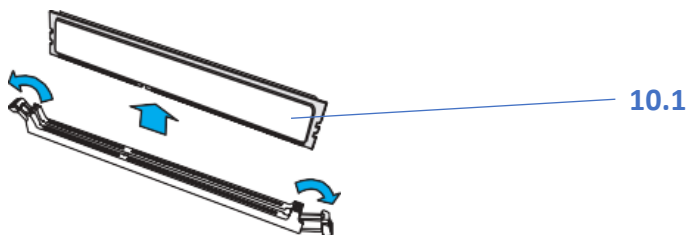
5. Move the lever to its unlocked position and gently remove the CPU.



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

No.	Description
9.1	Heat Sink
9.2	Processor

10. Removing DIMM

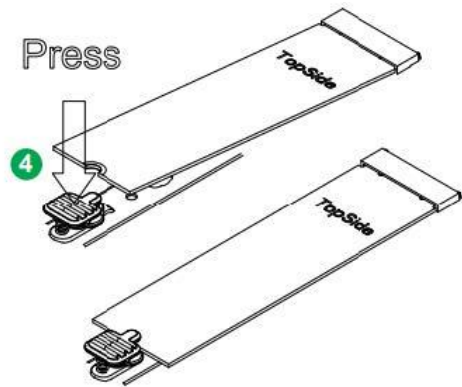
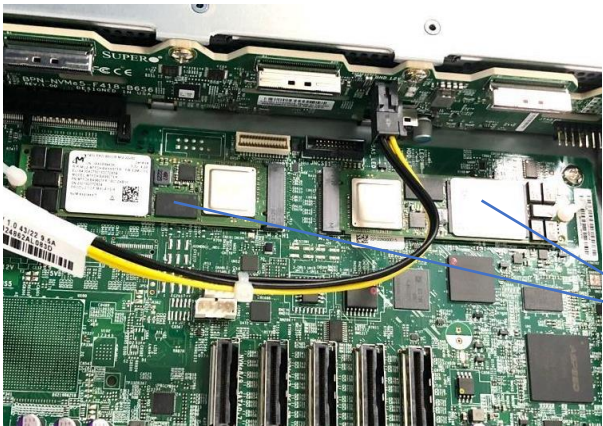


1. Hand press both release tabs on the ends of the DIMM module to unlock it
2. Once the DIMM module is loose, remove it from the memory slot

No.	Description
10.1	DIMM

11. Removing the M.2 from the Motherboard

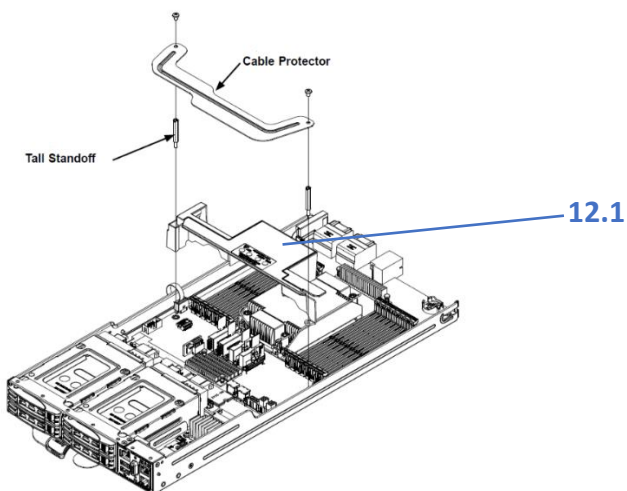
1. Locate the M.2 on the motherboard near the JMD1 and JMD2 connections and press down on the clip holding the M.2 in place.
2. Turn the clip and release the M.2.
2. Gently pull the M.2 out of the socket.



No.	Description
11.1	M.2

12. Removing the Air Shroud

1. Remove the Cable protector and tall standoffs from the node using a screwdriver as shown below.

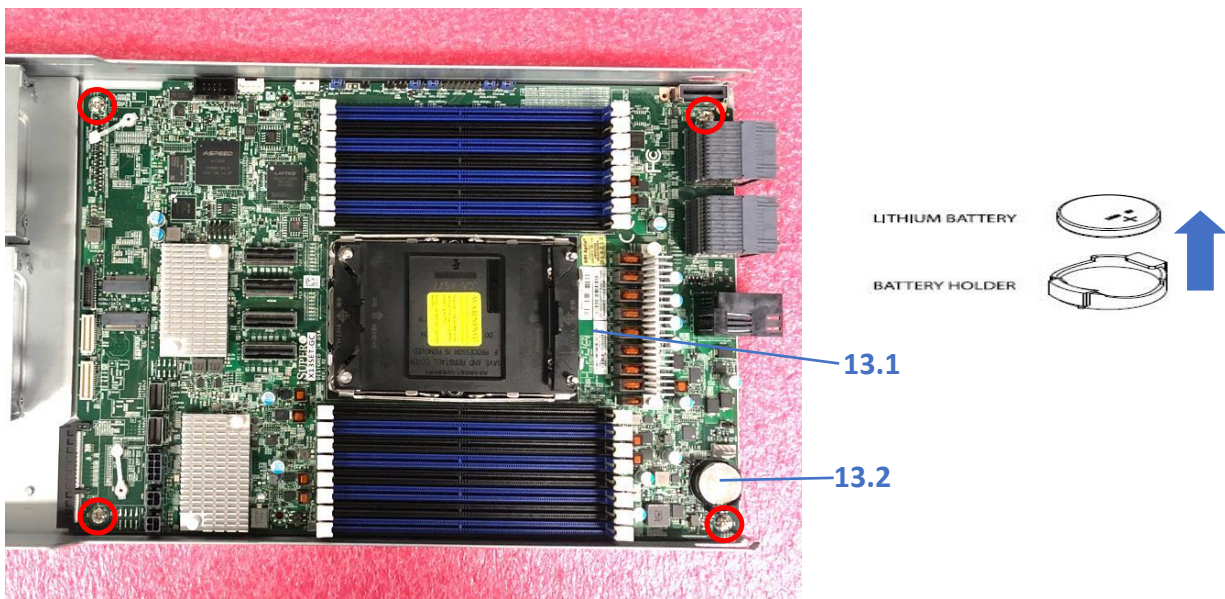


2. Lift and remove the air shroud from the node.

No.	Description
12.1	Air Shroud

13. Removing Motherboard

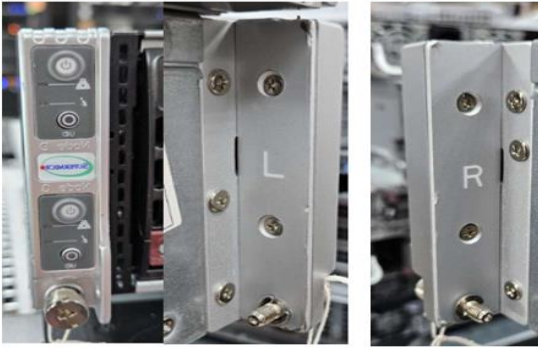
1. Unscrew the screws (circled in red) on the motherboard and lift the motherboard out of the chassis.
2. Push aside the small clamp that covers the edge of the battery. When the battery is released, lift it out of the holder.



No.	Description
13.1	Motherboard
13.2	Battery

14. Removing Control Panel





Remove control panel screw (R and L) from the chassis.



14.1

14.2

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

No.	Description
14.1	Control Panel Cover L & R
14.2	MYLAR_L & R

When the all the steps are complete, the chassis enclosure can be recycled.