



## WEEE DISASSEMBLY INSTRUCTIONS

### SUPERMICRO SYS-621BT-DNC8R ENCLOSURE

#### **Abstract**

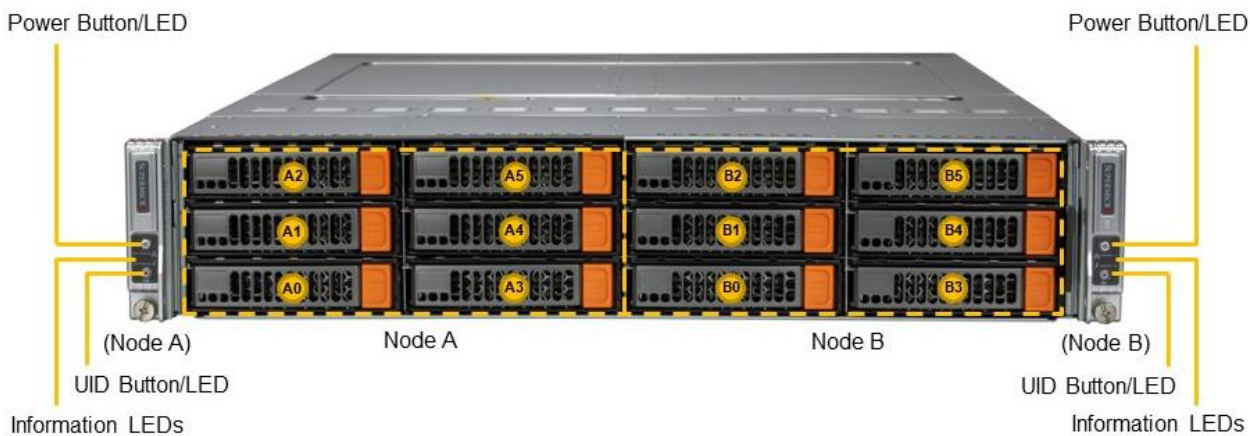
This document provides clear guidance for end-of-life recyclers on how to identify and disassemble reportable materials in compliance with the Waste Electrical and Electronic Equipment (WEEE) directive.

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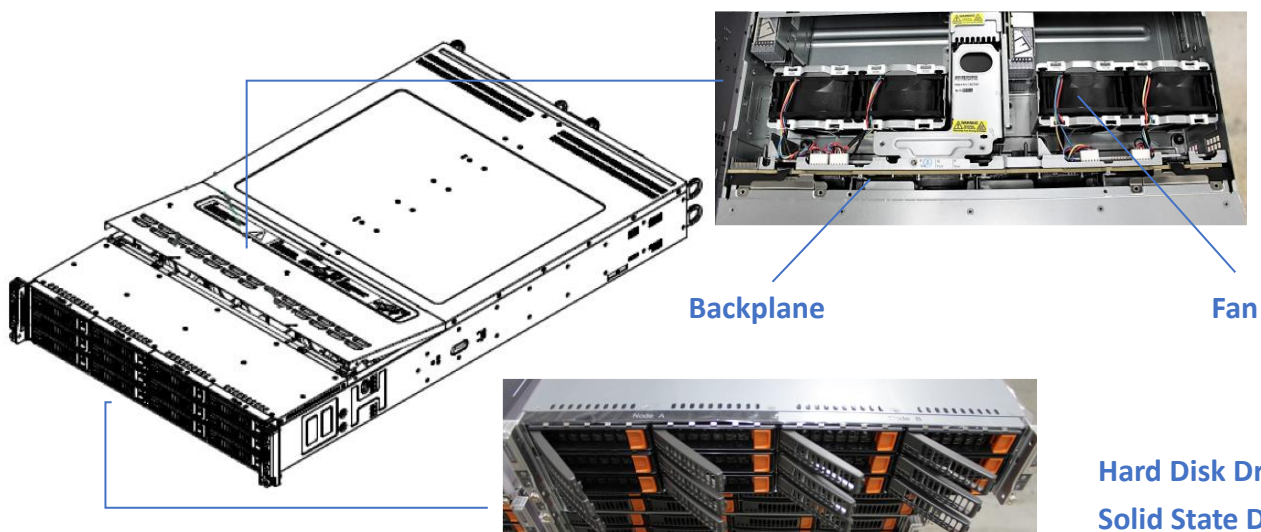
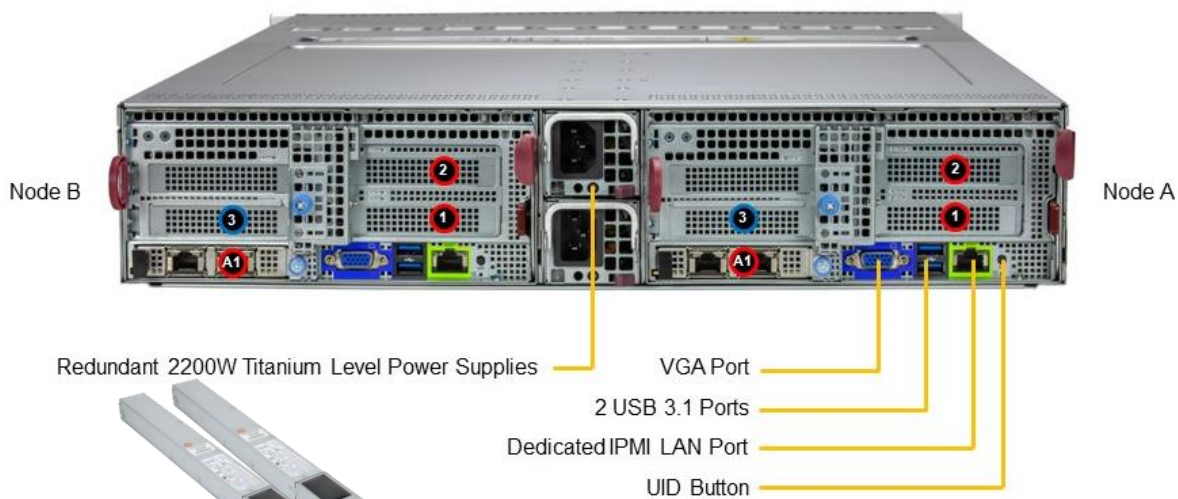
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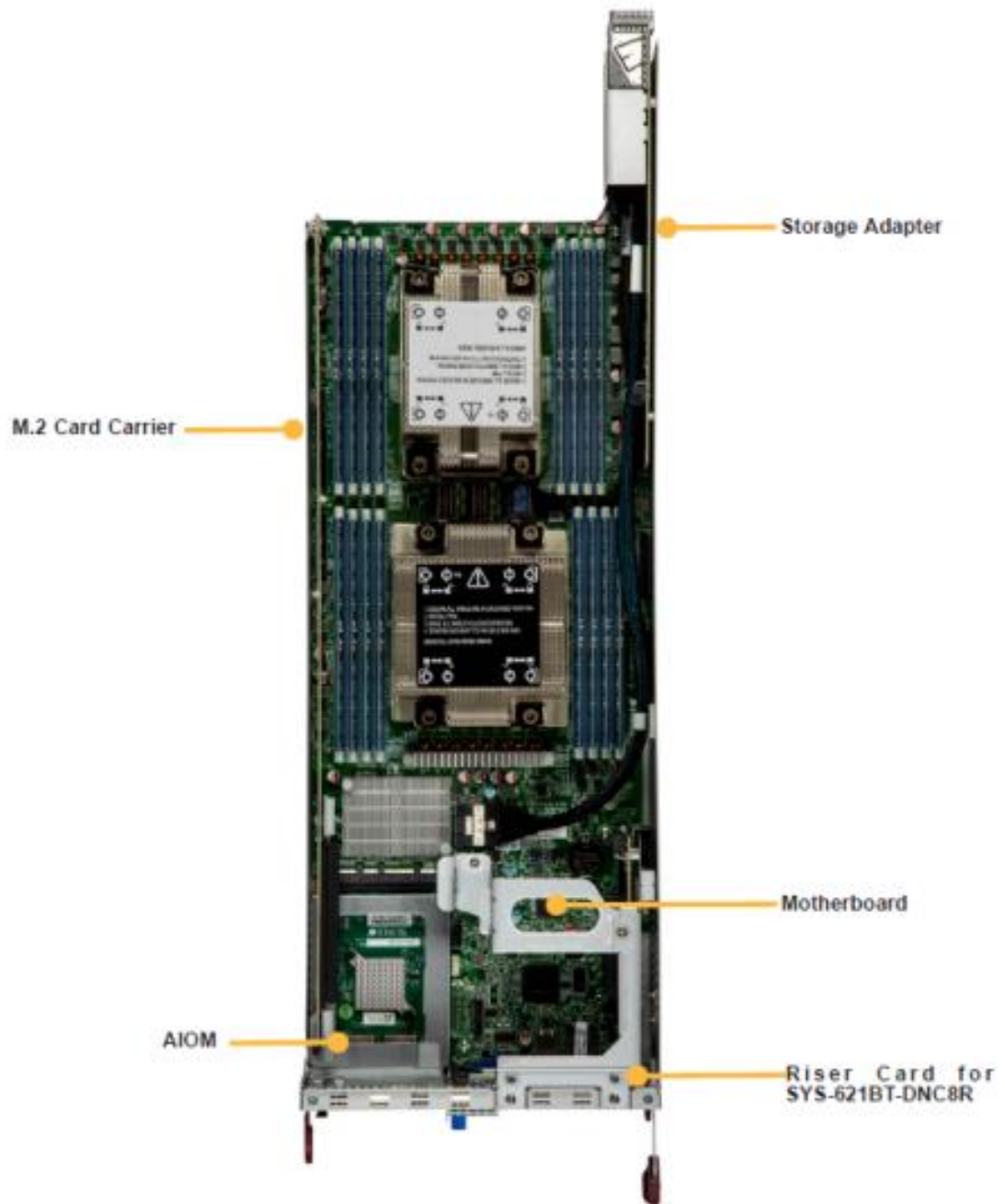
# 1. Product Views

## Front view



## Rear view





## 2. Reportable Materials on SYS-621BT-DNC8R

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 configuration)	2.4,3.5,4.2,5.1, 7.3, 8.2, 9.2,10.1, ,11.1,11.2,12.1,	36
Batteries	All types, including standard alkaline and lithium coin or button style batteries	12.2	2
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		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.

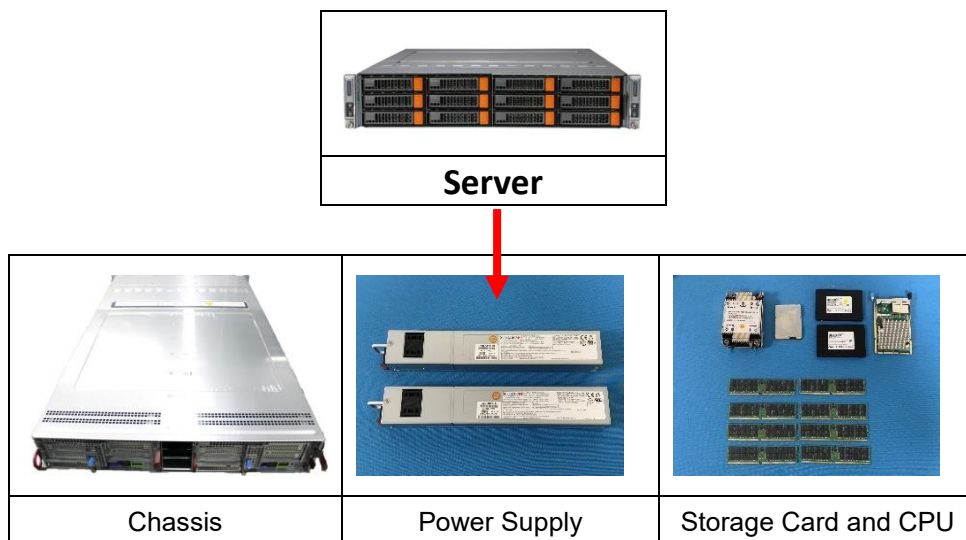
This chapter consists of three subsections:

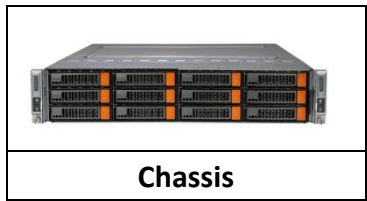
Recommended disassembly tools, disassembled flowchart, and step-by-step disassembly instructions to direct recycler proper methods to treat.

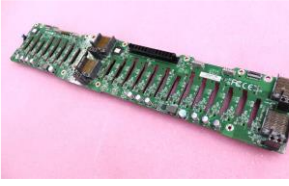
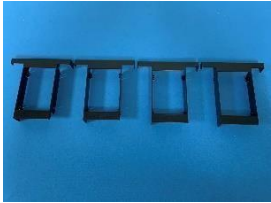
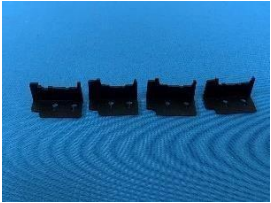
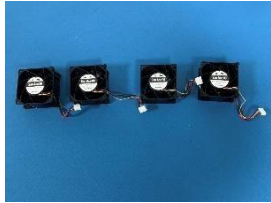

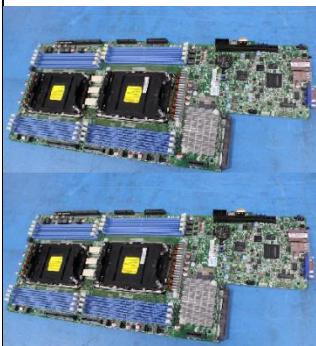





### 3.1 Recommended Disassembly Tools

<b>Disassembly tool</b>	T30-bit screwdriver	
	Cross screwdriver	
	Flathead screwdriver	

### 3.2 Disassembled flowchart

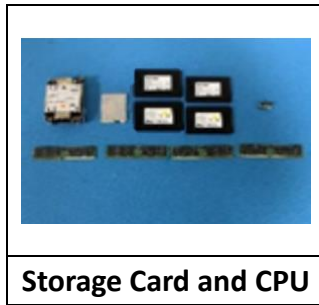




			
Backplane	Fan Holder	Sponge	Fan
			
Screw, Stand-off	Motherboard	Storage Controller Card	Storage Controller Card
			
Riser Card	Storage Controller Card	Cable	Battery



Power Enclosure*2	Screw and Standoff*2 Set	Power Supply Module*2	Power Distributor*1



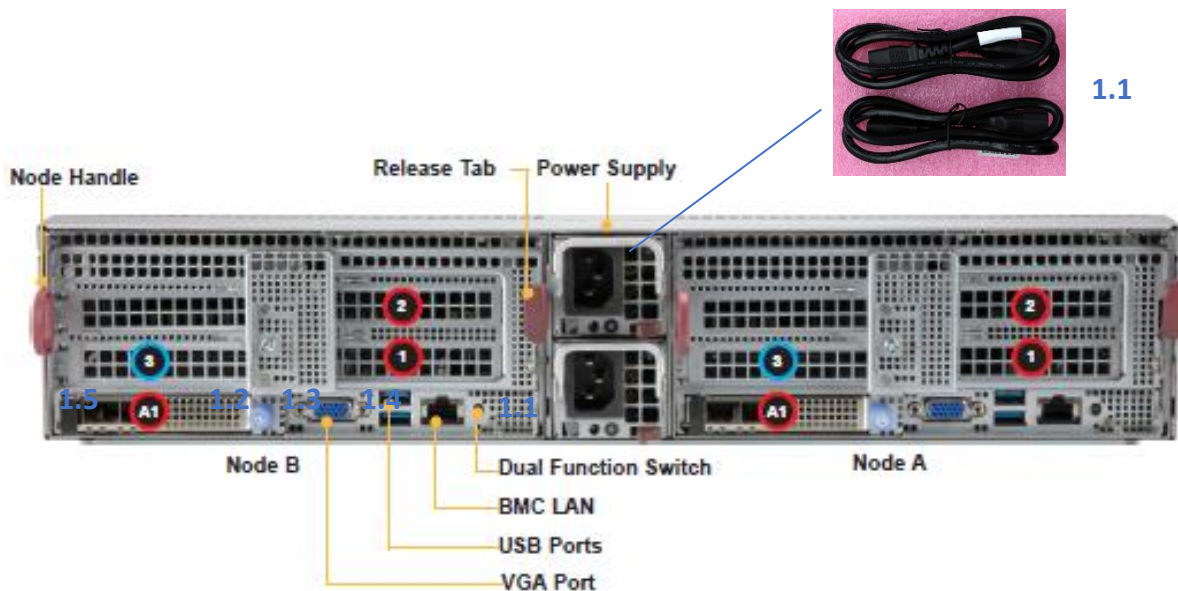
Heat Sink *2Set	Processor* 2Set	SSD * 2set	AIOM *2
DIMM *2Set	M.2 *8	Power Cable	



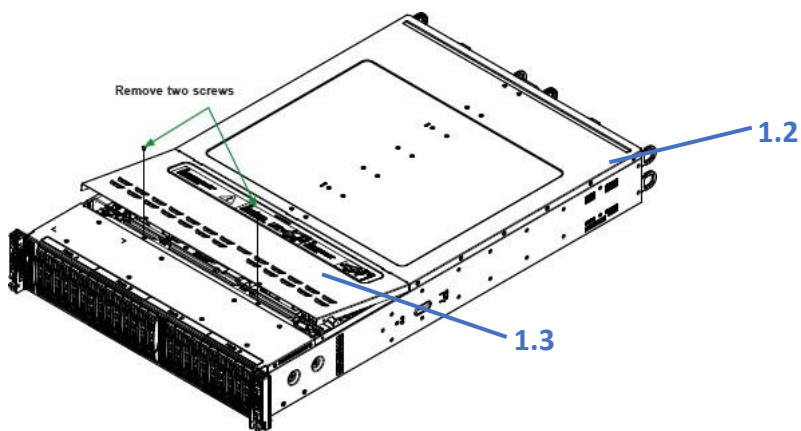
### 3.3 Step-by-Step Disassembly Instructions

#### 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



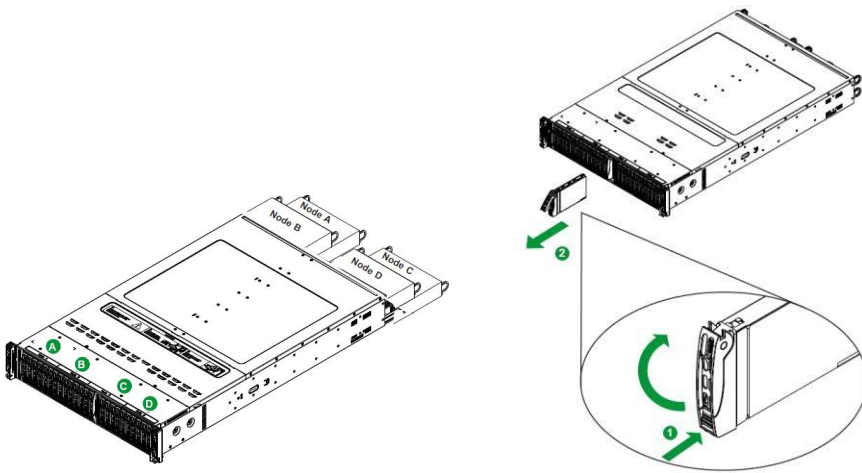
4. The chassis top cover can be lifted off after removing two screws



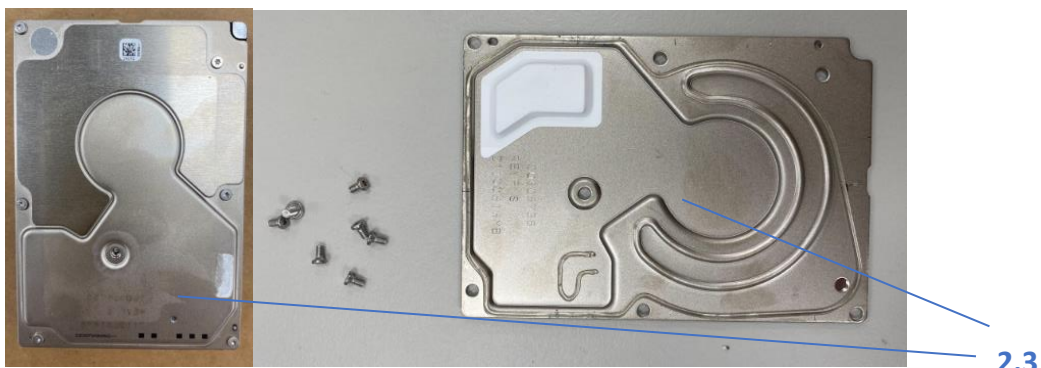
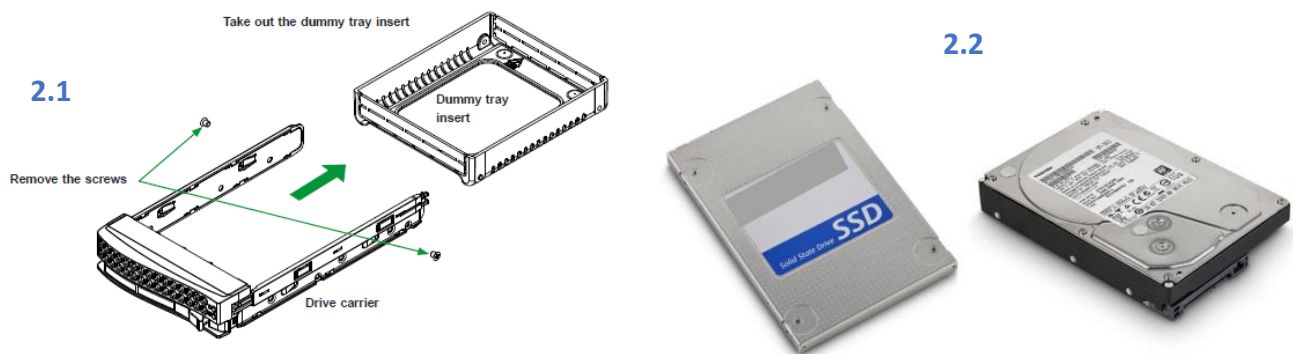
No.	Description
<a href="#">1.1</a>	Power Cable
1.2	Chassis
1.3	Top Cover

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

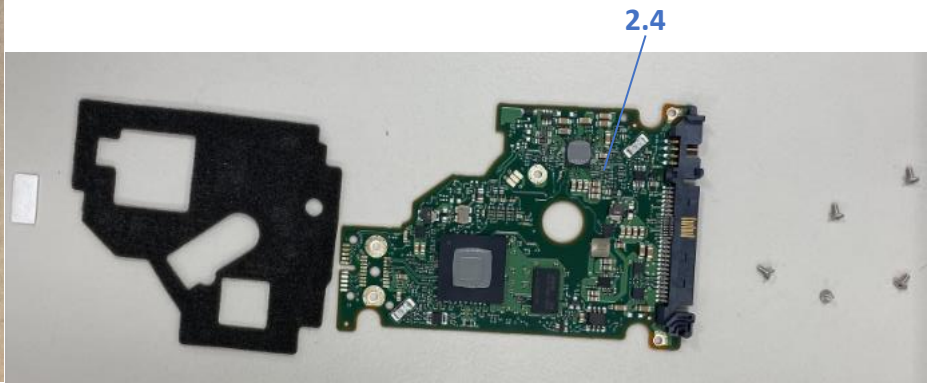
1. Push the release button on the drive carrier, which will extend the drive bay handle
2. Use the drive bay handle to pull the drive carrier out of the chassis



3. Remove the dummy tray insert by first removing two screws, then pull out the dummy tray



5. Use a cross screwdriver to remove drive enclosure

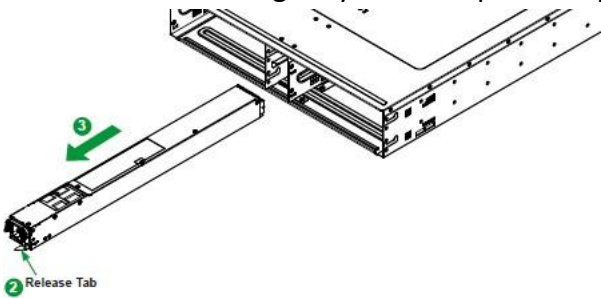


6. Use a cross screwdriver to remove screws and lift off the PCB

No.	Description
2.1	Dummy Tray
2.2	HDD/ SSD
2.3	Hard Drive Enclosure
<a href="#">2.4</a>	HDD/ SSD PCB

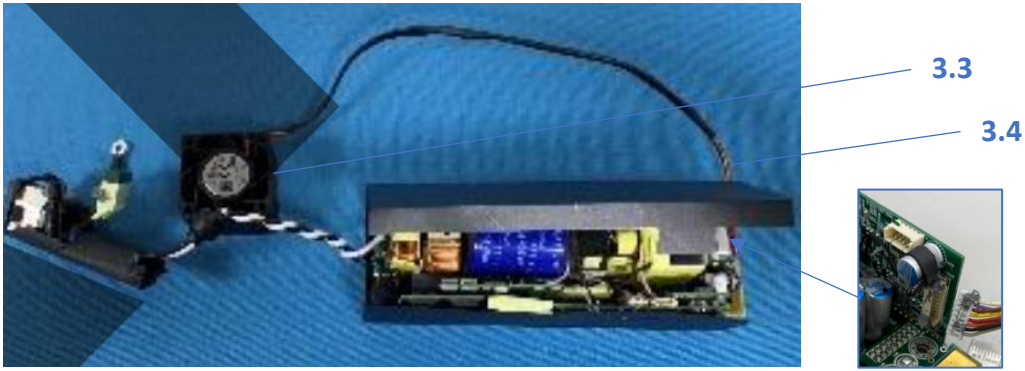
### 3. Removing Power Supply

1. Press the release tab on the failed power supply
2. Use the handle to gently slide the power supply out the back of the chassis



3. Remove the screw from the enclosure





4. Disconnected to the fan and lift the main board from the chassis by hand



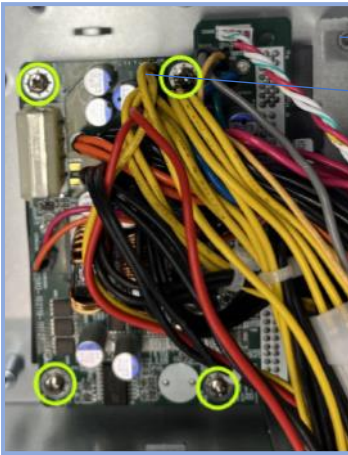
5. Use flathead screwdriver cutting capacitor adhesive and pin solder.



No.	Description
3.1	Power Supply
3.2	Power Enclosure
3.3	Fan
3.4	Fan Cable
<a href="#">3.5</a>	Power Module PCB
<a href="#">3.6</a>	Capacitor

#### 4. Removing Power Distributor

1. Disconnect the power cords from the power supply modules
2. Remove 4 screws and lift out the power distributor from the chassis



4.1

4.2

No.	Description
4.1	Power Distributor
<a href="#">4.2</a>	Power Distributor PCB

## 5. Removing Backplane

1. Remove the backplane 8 screws from the chassis



5.1

No.	Description
<a href="#">5.1</a>	Backplane

## 6. Removing Fan

1. Disconnect the chassis fan to the motherboard Fan connector

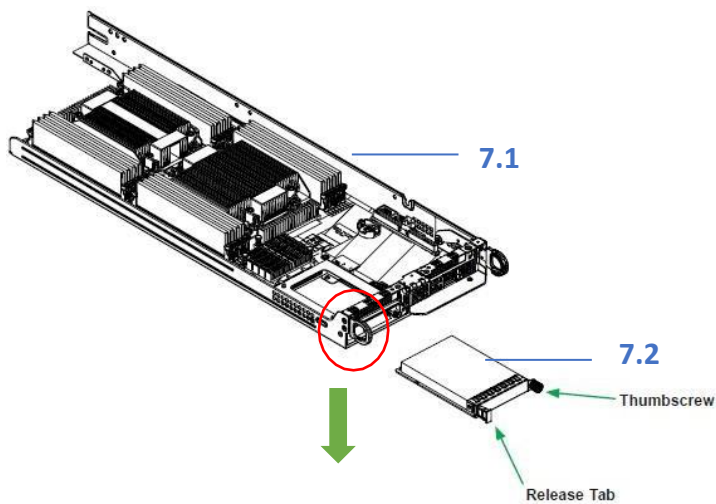


6.1

No.	Description
6.1	Cooling Fan

## 7. Removing AIOM Card

1. Press the node holder, then hold the node and pull the node from the chassis
2. Press the release tab and loosen the thumbscrew on the AIOM card
3. Grasp the release tab and the thumbscrew and pull the AIOM out of the node tray
4. Grasp the release tab and the thumbscrew and pull the AIOM out of the node tray



5. Press the pin and remove the pin and take off the PCB from AIOM



Press the pin

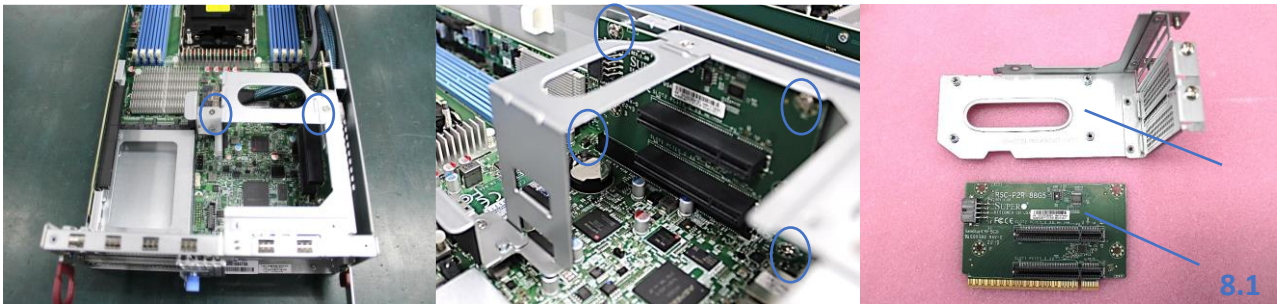


7.3

No.	Description
7.1	Node
7.2	AIOM Card
<a href="#">7.3</a>	AIOM PCB

## 8. Removing Riser Card and Riser Bracket

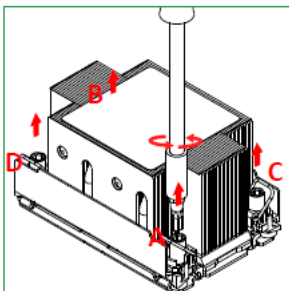
1. Remove screws each from the riser card bracket
2. Take the riser card and bracket away from the chassis



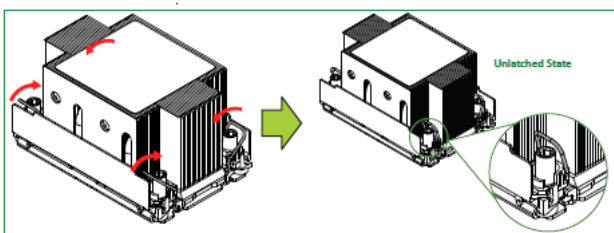
No.	Description
8.1	Riser Bracket
<a href="#">8.2</a>	Riser Card

## 9. Removing Processor

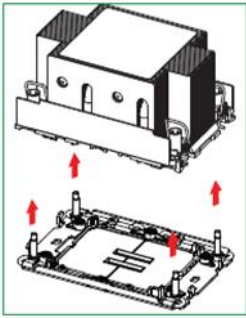
1. Use a T30 screwdriver to loosen the four PEEK nuts on the heatsink in the sequence of A, B, C, and D



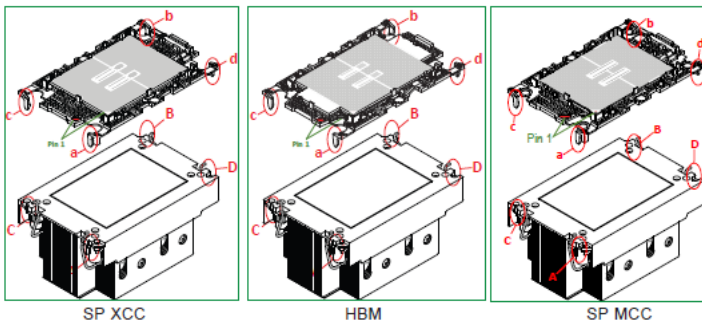
2. Once the PEEK nuts are loosened from the CPU socket, press the rotating wires inwards to unlatch the PHM from the socket as shown in the drawings below



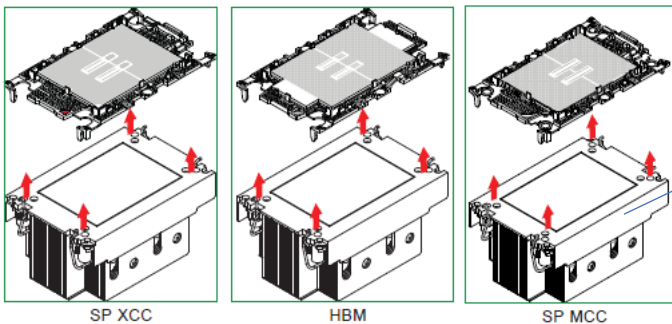
3. Gently pull the PHM upwards to remove it from the CPU socket



4. 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 in the drawings below. 2U Heatsink  
(View of Component Side and Heatsink Bottom Side)

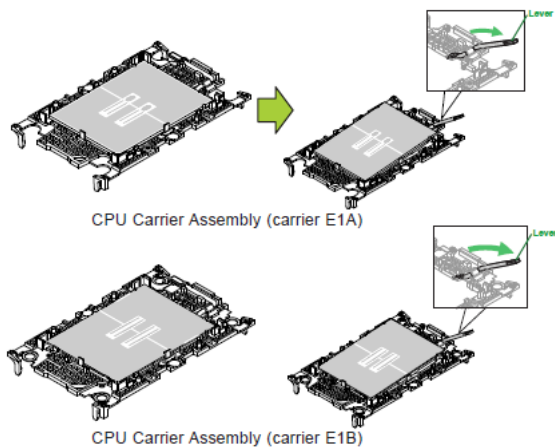


5. When all plastic clips are detached from the heatsink, remove the processor carrier assembly from the heatsink



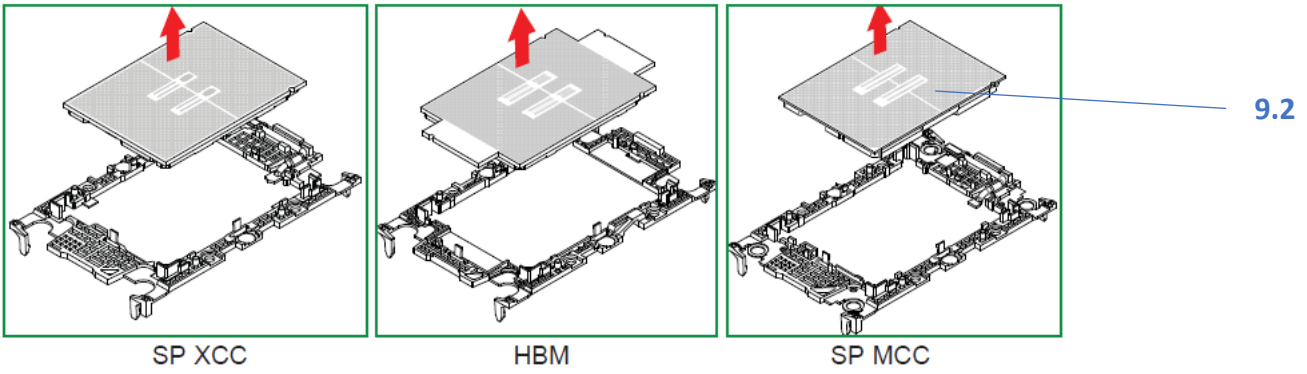
9.1

6. Unlock the lever from its locked position and push the lever upwards to disengage the processor from the processor carrier as shown in the drawing on the right below



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

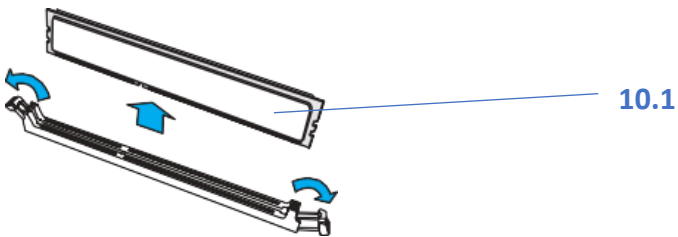




**Note:** Please handle the processor with care to avoid damaging it or its pins

No.	Description
9.1	Heat Sink
<a href="#">9.2</a>	Processor

## 10. Removing DIMM

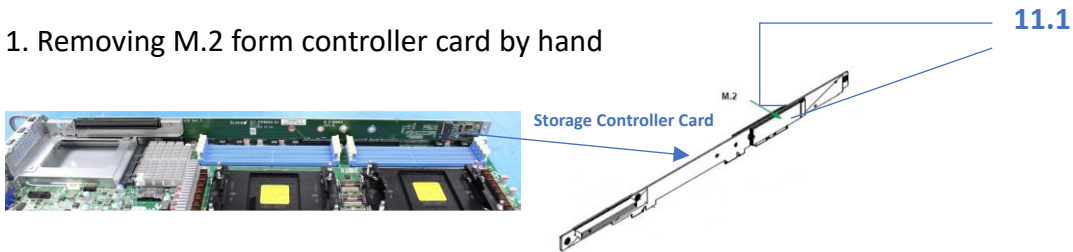


1. Hand press both release tabs on the ends of the DIMM module to unlock it
2. Once the DIMM module is loose, remove it from the memory slot

No.	Description
<a href="#">10.1</a>	DIMM

## 11. Removing Storage Controller Card and M.2

1. Removing M.2 form controller card by hand



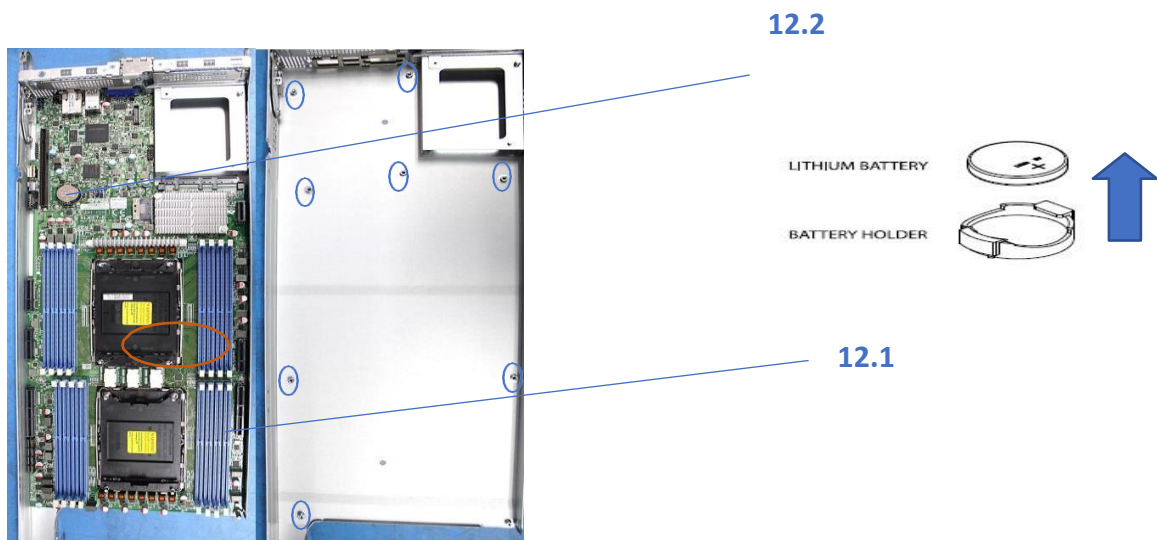
2. Removing the screw(in the red frame) from chassis then take off 3pcs controller card



No.	Description
<a href="#">11.1</a>	M.2
<a href="#">11.2</a>	Storage Controller Card

## 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
<a href="#">12.1</a>	Motherboard
<a href="#">12.2</a>	Battery

**Note: Repeat steps 1-12 of each node(A,B,C,D) disassembled, then the chassis enclosure can be recycled**

### 13. Removing Control Panel



Remove control panel screw (R and L) from chassis



13.1

13.2

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

No.	Description
<a href="#">13.1</a>	Control Panel Cover L & R
<a href="#">13.2</a>	Mylar_L & R

