



COMPAL Server™

SR410-2

User Manual



COMPALSERVER™ User Manual V1.1

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Safety and Warnings



CAUTION:

Before installing and starting up a device, please observe the safety instructions listed in the following sections. This will help you to avoid making serious errors that could impair your health, damage the device and endanger the data base.



CAUTION:

To reduce the risk of electric shock, this equipment must be installed by trained service personnel in a restricted-access location.



CAUTION:

Use certified Optical Fiber Transceiver Class I(1) Laser Product. Or

Laser Class 1 optical transceiver shall be used only.

When laser products (such as CD-ROMs, DVD drives, fiber optic devices, or transmitters) are installed, note the following:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation.
- There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.



CAUTION:

Connect all power cords to a properly wired and grounded electrical outlet. The power control button on the device and the power switch on the power supply do not turn off the electrical current supplied to the device. The device also might have more than one power cord. To remove all electrical current from the device, ensure that all power cords are disconnected from the power source.





CAUTION:

- Replacement of a battery with an incorrect type that can defeat a safeguard;
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion;
- leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas; and
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.



CAUTION:

The following label indicates a hot surface nearby.



CAUTION:

Hazardous energy is present when the server is connected to the power source. Always replace the blade cover before installing the server.



CAUTION:

Hazardous moving parts are nearby.



Installation Safety Information

Preparing for startup

The devices comply with the relevant safety regulations for information technology equipment.

The requirements, which need to be fulfilled at the site of installation, are described in the user documentation for this device. Please contact the service center if there is any doubt as to the safety of installing the device at the intended site.

Transporting, unpacking, installing

Condensation may form when the device is brought into the operations room from a colder environment. Wait until the device has warmed up to the room temperature and is totally dry before starting it. The acclimation time depends on the device and its design.

Please remove this unit from the rack before installation, service, and maintenance.

Connecting data cables



CAUTION:

No data transmission lines may be connected or disconnected during a storm (danger of being struck by lightning).

When wiring the devices, the cables need to be connected or removed in the order described in the user document for the device. When connecting or disconnecting any of the leads, always hold them by the plug. Never pull on the cables themselves. Doing so could cause a cable to become detached from the plug.

Connecting the system to the power mains

Please check devices with adjustable rated voltage to determine whether the preset rated voltage of the device conforms to the local mains voltage. An incorrect setting leads to damage to or destruction of the device.

Before operating, check whether all the cables and wires are in perfect, undamaged condition. Ensure in particular that the cables have not been bent, have not been laid too tightly round corners, and that there are no objects located on top of them. Also make sure that all connectors have a tight fit. Defective screening or wiring may damage your health (electric shock) and can damage other devices.

Devices with power plugs are equipped with a safety-tested AC power line of the country of use and may only be connected to an approved shock-proof socket. This may otherwise result in an electric shock.

Safety during operation

Avoiding short circuits

Make sure that no objects (e.g. jewelry, paper clips, etc.) or liquids get inside the device. This can lead to electric shocks or short-circuits.

Ventilation slots

Please make sure that the air vents are not blocked or collect dust as this may lead to the risk of overheating while the device is in operation. This could lead to operating faults.

Proper operation

Proper operation and compliance with the EMC (electromagnetic compatibility) limit values is only guaranteed when the housing cover is mounted correctly and the doors are closed (cooling, fire protection, screening against electrical, magnetic, and electromagnetic fields).

Switch off in the event of malfunction and during servicing

Devices are not disconnected from the mains by simply switching them off.

In the event of a malfunction or servicing, the devices need to be disconnected from the mains immediately.

Please proceed as follows:

- Switch off the devices,
- Pull out the mains plug (also refer to the device's user documentation),
- Inform Service.
- Devices that are connected to one or more uninterruptible power supplies (UPS's) will continue to operate even if the plug to the UPS ('s) is pulled. You therefore need to shut down the UPS ('s) in accordance with the accompanying user documentation.

Maintenance Safety

Expanding, repairing

When expanding the device, use only parts that have been approved for the device. Failure to observe this rule can lead to violation of the electromagnetic compatibility (EMC) or safety standards and cause device malfunctions.

The device may only be repaired by authorized, qualified personnel. Improper repairs may expose the user to considerable danger (electric shock, fire).

Unauthorized opening of the device or individual parts of the device can also expose the user to considerable danger. Unauthorized opening of the devices or parts thereof results in voiding of the warranty and exclusion of liability.

Handling batteries

The life of the batteries/accumulators in the devices is approx. three to five years. In order to ensure the functional reliability, they must be exchanged at the end of this time. The batteries may only be changed by authorized personnel. The local regulations for disposal of special waste must be observed when disposing of the batteries.

Batteries can cause danger, e.g. fire, if handled incorrectly. Therefore avoid opening, puncturing or pressing together batteries. Never throw batteries on a fire.

Special safety note for rack cabinets

Do not use device units mounted on pull-out rails as a surface on which to put things or as a work surface, and strictly avoid leaning on or against them.

Setting up a rack

At least two people must always be used to set up a rack because of its weight and their size.

This is the only way to avoid accidents and damage to the equipment.

To install the server in the rack cabinet, please observe the instructions in the relevant system installation manual.

Overload protection

Make sure if connecting a number of devices to the same circuit that you do not overload the current distribution. Please observe the nominal values indicated on the product ident plates.

Stabilizing the racks

Even when the rack has been secured against tipping over, only one slide-in module may be removed on its rails at any one time. There is no guarantee that the rack will remain stable if several modules are pulled out simultaneously.

Second person for work on racks

Two or more people are required to insert or remove rack trays as these are large and heavy.

This is particularly true regarding servers, peripheral devices and UPS's. This information can be found in the device's user documentation.

Regional EMC Compliance Information

FCC Verification Notice (USA only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Class A



This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

INDUSTRY CANADA (Canada only)

CAN ICES-003(A) / NMB-003(A)

This Class B (or Class A, if so indicated on the registration label) digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe B (ou Classe A, si ainsi indiqué sur l'étiquette d'enregistrement) respecte toutes les exigences du Règlement sur le Matériel Brouilleur du Canada.

CE Declaration of Conformity (EUROPE only)



This product has been tested in accordance to, and complies with the European Low Voltage Directive (2014/35/EU), European EMC Directive (2014/30/EU), Restriction

of the Use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2011/65/EU and Ecodesign requirements for energy-related products (ErP) Directive 2009/125/EC.

The product has been marked with the CE Mark to illustrate its compliance.

Warning

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

UKCA Declaration of Conformity (England, Wales and Scotland only)



This equipment is confirmed to comply with the requirements set out in the UK Conformity, assessed on the Approximation of the Laws of the Member States relating to Low-voltage Directive (Safety) Regulations 2016, Electromagnetic Compatibility Regulations 2016, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 and The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019.

CCC (China only)



The following CCC EMC Warning is marked on the product: EMC Warning is required for Class A products.

Environmental compliance

Restricted Material Compliance

EU RoHS

The devices are designed to comply with the applicable restricted substance requirements of the European Union's Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2011/65/EC) as amended, including Directive (2015/863/EU) which added four phthalates to the RoHS Directive's Annex II substance restriction list. The RoHS Directive requires self-declaration to RoHS restrictions through the **Declaration of Conformity (DoC)** process and CE marking.

EU REACH compliance

The European Union's Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (2006/1907/EC) entered into force on June 1, 2007. Pursuant to Article 33, COMPAL communicates information regarding Substances of Very High Concern (SVHC) that are contained in articles in a concentration above 0.1% by weight to its customers and to consumers, upon request. To meet these compliance obligations, COMPAL actively monitors the European Chemical Agency's (ECHA) SVHC candidate list and adds SVHCs that have been added to the ECHA authorization list.

EU Batteries Directive - Restricted Substances

The devices are designed to comply with the applicable restricted substance requirements of the European Union's Batteries Directive (2006/66/EC) as amended, including Directive (2013/56/EU). All batteries or accumulators shall not contain more than 0.0005% (5 ppm) of mercury by weight and portable batteries or accumulators, including those incorporated into appliances, shall not contain more than 0.002% of cadmium by weight.

Packaging - Restricted Substances

No CFCs (chlorofluorocarbons), HCFCs (hydrofluorocarbons) or other ozone depleting substances are used in the packaging material. Chromium, lead, mercury, cadmium are not intentionally added to packaging materials and are not present in a cumulative concentration greater than 100 ppm. No halogenated plastics or polymers are used for packaging material. Printed user documentation is bleached in a chlorine-free process.

California Proposition 65 (US CA only)

California's Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. The Proposition was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects or other reproductive harm, and to inform citizens about exposures to such chemicals. The device has warning label on exterior packaging

EU WEEE

The device may not be disposed of with household rubbish. This appliance is labelled in accordance with European Directive 2012/19/EU concerning used electrical and electronic appliances (waste electrical and electronic equipment – WEEE).

The guideline determines the frame-work for the return and recycling of used appliances as applicable throughout the EU. To return your used device, please use the return and collection systems available to you.



China RoHS (China only)

The device shipping directly into China which are manufactured on or after March 1st, 2007, are China RoHS compliant.

China RoHS Declaration Table

部件名称	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
PCB 板	×	○	○	○	○	○
结构件	×	○	○	○	○	○
芯片及 其他主动零件	×	○	○	○	○	○
连接器	×	○	○	○	○	○
风扇、散热件	×	○	○	○	○	○
硬盘	×	○	○	○	○	○
助焊剂, 散热膏, 标签及 其他耗材	×	○	○	○	○	○

本表格依据 SJ/T 11364 的规定编制。

○: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

×: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

注: 表中标记“×”的部件, 皆因全球技术发展水平限制而无法实现有害物质的替代。

Energy saving compliance

ErP Lot9 Information Sheet

- Servers & Storage Products -

The EU Commission Regulation (EU) 2019/424 of 15 March 2019 laying down ecodesign requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 617/2013. (ErP Lot9)

Information to be provided by manufacture (EU) 2019/424 – Annex II section 3.1 and 3.3

Annex II section 3.1 Requirement		Information
(a)	product type	Server
(b)	manufacturer's name, registered trade name and registered trade address at which they can be contacted	Compal Electronics Inc. No. 581 & 581-1, Ruiguang Rd., Neihu District Taipei City 11492, Taiwan (R.O.C.)
(c)	product model name, model number and serial number	(Model name) e.g. SR410-2
(d)	year of manufacture	(MP date) e.g. 2024
(e)	PSU efficiency at 10 %, (if applicable), 20 %, 50 % and 100 % of rated output power	reference PSU efficiency and power factor table
(f)	power factor at 50 % of the rated load level	reference PSU efficiency and power factor table
(g)	PSU rated power output (Watts)	reference PSU efficiency and power factor table
(h)	idle state power (Watts)	<u>High-end</u> 2P : 200.5 Watts <u>Low-end</u> 2P : 168.7 Watts
(i)	list of all components for additional idle power allowances, if any (additional PSU, HDDs or SSDs, additional memory, additional buffered DDR channels, additional I/O devices)	<u>High-end</u> 2P : 1 additional PSU, 3.5" HDD x2, additional 508GB memory, additional 1G Port x1, 10G Port x2, 25G port x2 <u>Low-end</u> 2P : 1 additional PSU, 3.5" HDDx2, additional 252GB memory, additional 1G Port x1
(j)	maximum power (Watts)	<u>High-end</u> 2P : 654.8 Watts <u>Low-end</u> 2P : 392.5 Watts
(k)	declared operating condition class	ASHRAE A2
(l)	idle state power (Watts) at the higher boundary temperature of the declared operating condition class	<u>High-end</u> 2P : 200.6 Watts <u>Low-end</u> 2P : 167.4 Watts
(m)	the active state efficiency and the performance in active state of the server	<u>High-end</u> 2P : Efficiency= 35.9 , Performance= 16.7 <u>Low-end</u> 2P : Efficiency= 23.5 , Performance= 7.2
(n)	information on the secure data deletion functionality	Compal offer two ways to accomplish secure data deletion:

		<p>1. Use Linux dd command to do the secure data deletion, please follow the steps below: Step 1: Plug in the drive (e.g. USB, other storage) to an available port. Step 2: Boot into Linux OS from the plug in device. Step 3: Run the following command as sudo in your Terminal application in order to check the available storage devices on your system and the file system they are using. Step 4: input test using “dd if=/dev/zero of=/dev/<destination partition> bs=xxxx”. Step 5: Reboot the OS.</p> <p>2. Erase Utilities provided by third-party vendors. Please contact the manufacturer of your storage device to obtain the deletion utility matching that device.</p>
(o)	list recommended combinations with compatible chassis (for blade servers)	None
(p)	if a product model is part of a server product family, a list of all model configurations that are represented by the model shall be supplied	reference PRD document
Annex II section 3.3 Requirement		Information
(a)	indicative weight range of the following critical raw materials: (a) Cobalt in the batteries; (b) Neodymium in the HDDs	(a) less than 5 g (b) above 25 g
(b)	instructions on the disassembly operations	reference Chapter3 Installation / Removal

PSU efficiency and power factor

Power Supply Model Number	Rating (Watt)	80 Plus Rating	Minimum PSU efficiency				Minimum power factor
			10%	20%	50%	100%	
FSP1200-21FM	1200	Platinum	NA	90.00%	94.00%	91.00%	0.98
FSP1300-20HM	1300	Titanium	92.79%	95.01%	96.13%	94.37%	0.99

Note: From 2024/1/1, only Titanium PSU can be shipped into EU and UK region.

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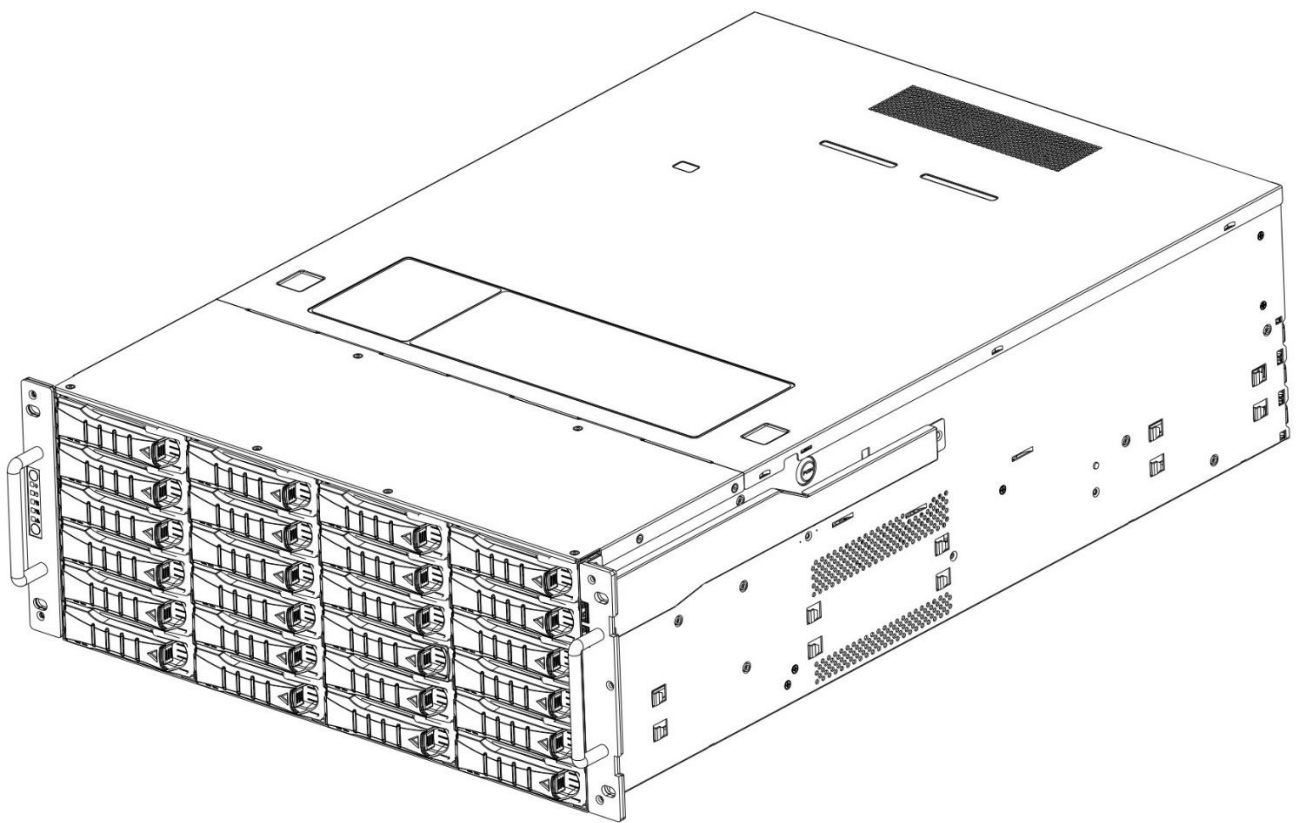
Chapter 1 Specifications

Form Factor	4U 19" Rack-mount Chassis dimension: 432.4(W) * 681.1(D) * 174.3(H) mm 17(W) * 26.8(D) * 6.8(H) Inch
Platform	3rd Generation Intel® Xeon® Scalable Processors family Intel Lewisburg PCH C621A
CPU	3rd Generation Intel® Xeon® Scalable Processors, Dual Socket LGA-4189 (Socket P+) supported Up to 185W
Memory	16 x DDR4 DIMM slots Support DDR4 RDIMM(3200 MT/s) Support 8GB/16GB/32GB/64GB/128GB DIMM
Storage	Front: 24 * 3.5" hot swappable drive (SATA/SAS) Rear: 12 * 3.5" hot swappable drive (SATA/SAS) 4 * 2.5" hot swappable drive (SATA or NVMe 7mm)
PCIe Slots	2 * FHFL PCIe Gen4 x16 1 * FHHL PCIe Gen4 x16 1 * FHFL PCIe Gen4 x8 1 * FHHL PCIe Gen4 x8 1 * OCP 2.0 (Connector A)
Front I/O and LED	1 * System Power Button with LED (Green) 1 * UID Button with LED (Blue) 1 * System Reset Button 1 * HDD Active LED(Yellow) 1 * System Status LED(Red) 1 * LAN Power LED (Not use) 2 * USB 3.0
Rear I/O	1 x UID Button with LED(BMC Reset, press UID button and hold 4 seconds) 1 x VGA port 2 x USB 3.0 (Type A) 1 x COM Port 1 x Dedicated Management RJ45 port 2 x 1G RJ45 LAN port
Internal I/O	1 x TPM/TCM Port 1 x USB 3.0 (Type A) 2 x SlimSAS x8 Connectors(For rear 4x SFF NVMe drives) 1 x SlimSAS x4 (For rear 4x SFF SATA drives)
Power Supply	Support 1 + 1 Redundant CRPS PSU, 1200W Platinum/1300W Titanium (Redundancy by system configuration)
Cooling	6 * 80 x 38mm PWM & Low-power consumption fans
Operating Temperature	5°C to 35°C

Chapter 2 Overview

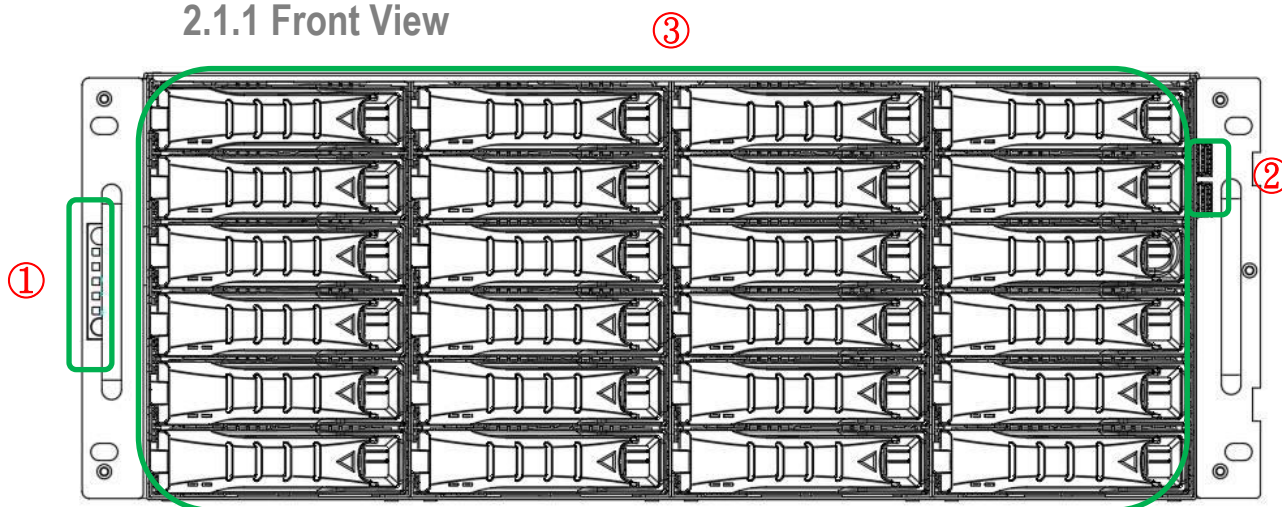
This 4U storage server supports 36-bays 3.5" SATA/SAS hot-swappable HDD, with powerful dual Intel Xeon® scalable CPU, it can provide a reliable storage system.

Five Gen 4 PCIe slots make this system more flexible to full range application. With extra 4 x 2.5" SATA or NVMe hot-swappable system disk space. Tool-less top cover and HDD back plane, tool-less rail slide make system easy to maintain.



2.1 Front View and HDD Order

2.1.1 Front View



Number	Component
1	Front Panel Button / LED
2	USB 3.0 x 2
3	24 x 3.5" HDD

2.1.2 Front 3.5" HDD Order with RAID card or HBA card








3.5" HDD RAID card

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

3.5" HDD HBA card

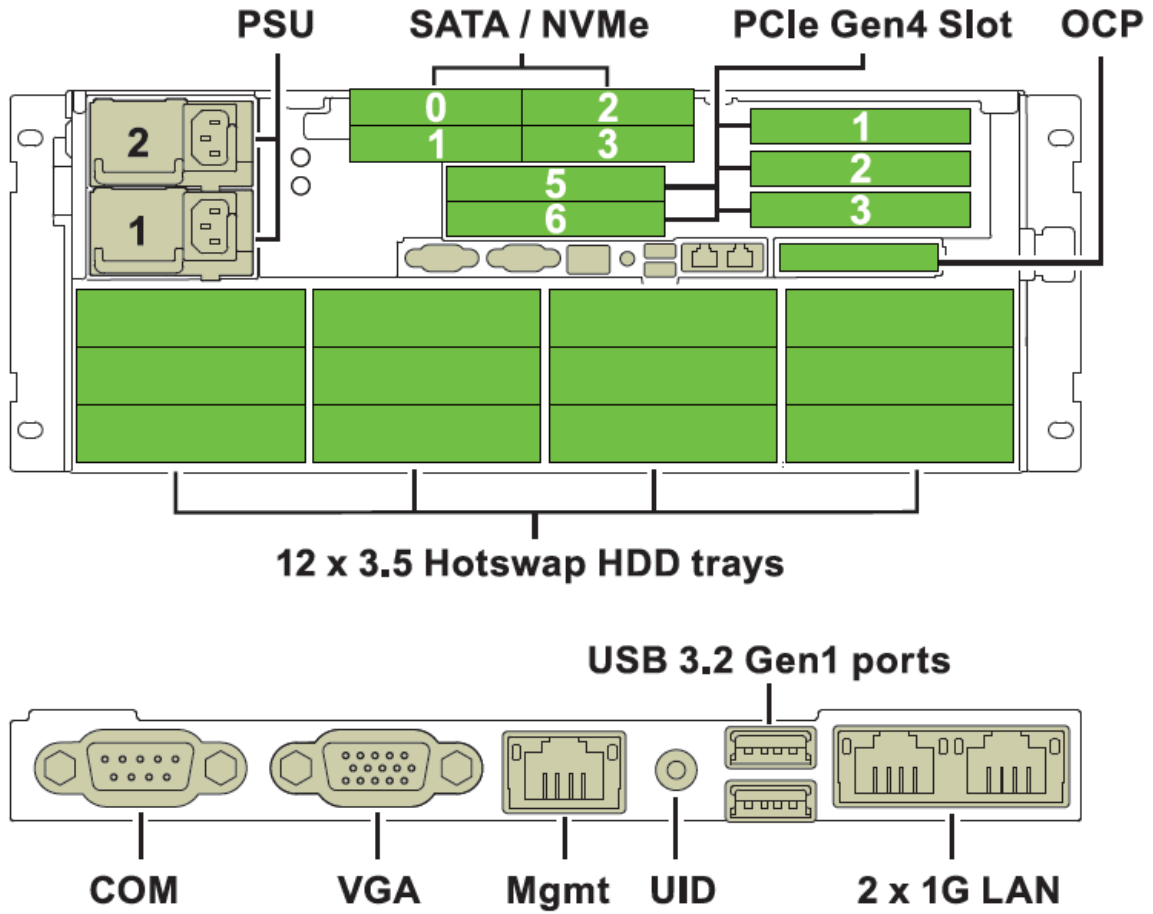
0	1	2	3
4	5	6	7
8	9	10	11
12	13	14	15
16	17	18	19
20	21	22	23

2.2 Front Panel Button / LED

	<p>System Power Button Push button to turn on system Push button to turn off system</p>
	<p>System Power LED(Green) Off – System power off On – System Power on</p>
	<p>System HDD Active LED (Yellow)</p>
	<p>N/A</p>
	<p>System Status LED (Red) Off – System good Blinking – System fault found</p>
<p>ID</p>	<p>UID LED (Blue) Off - System not identified On - System identified</p>
	<p>UID Button Push button to toggle UID LED</p>
	<p>Rest Button Push button to rest system</p>

2.3 Rear View

2.3.1 Rear I/O



2.3.2 Rear 3.5" HDD Order with RAID card or HBA card

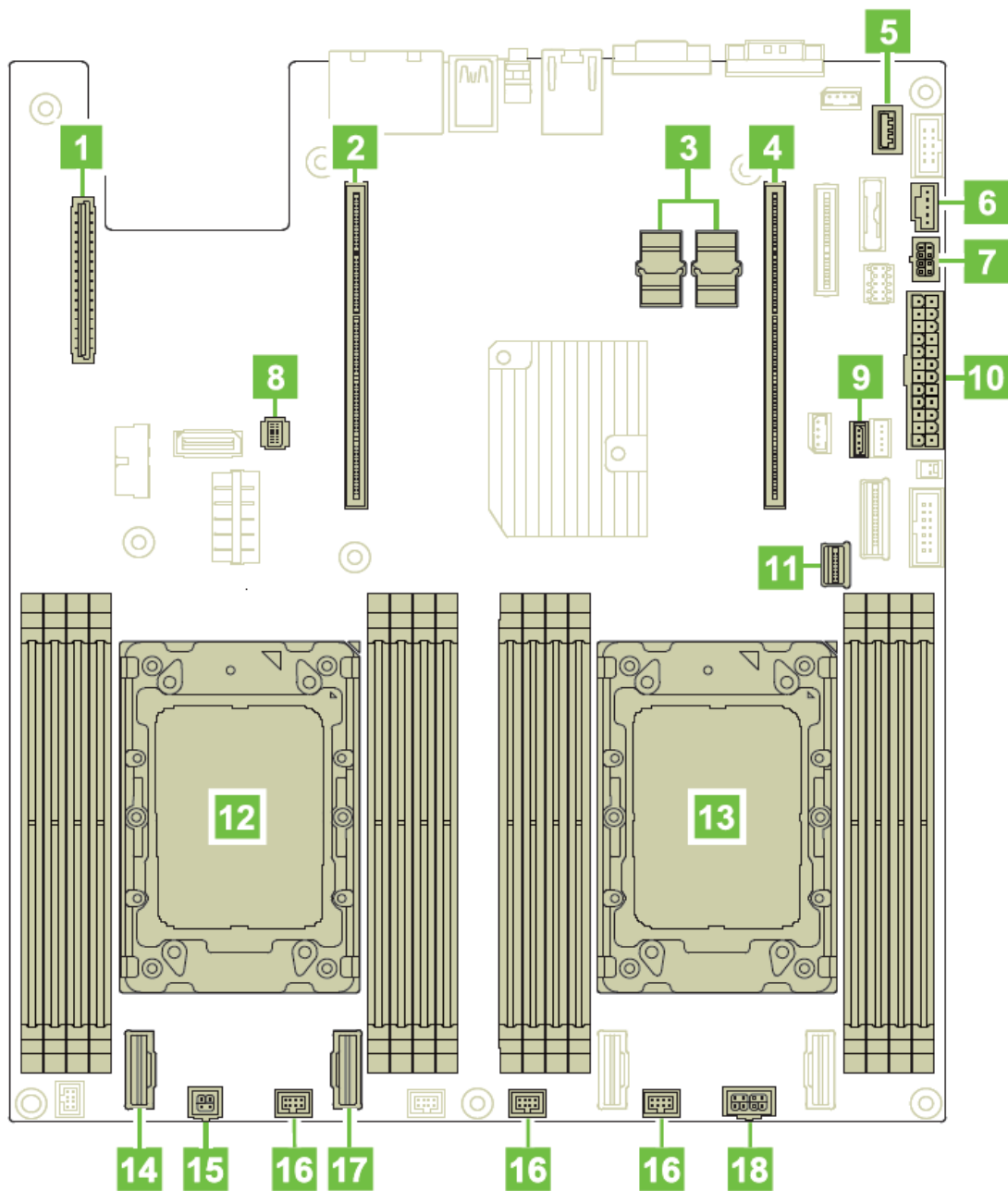
3.5" HDD HBA card

0	1	2	3
4	5	6	7
8	9	10	11

3.5" HDD RAID card

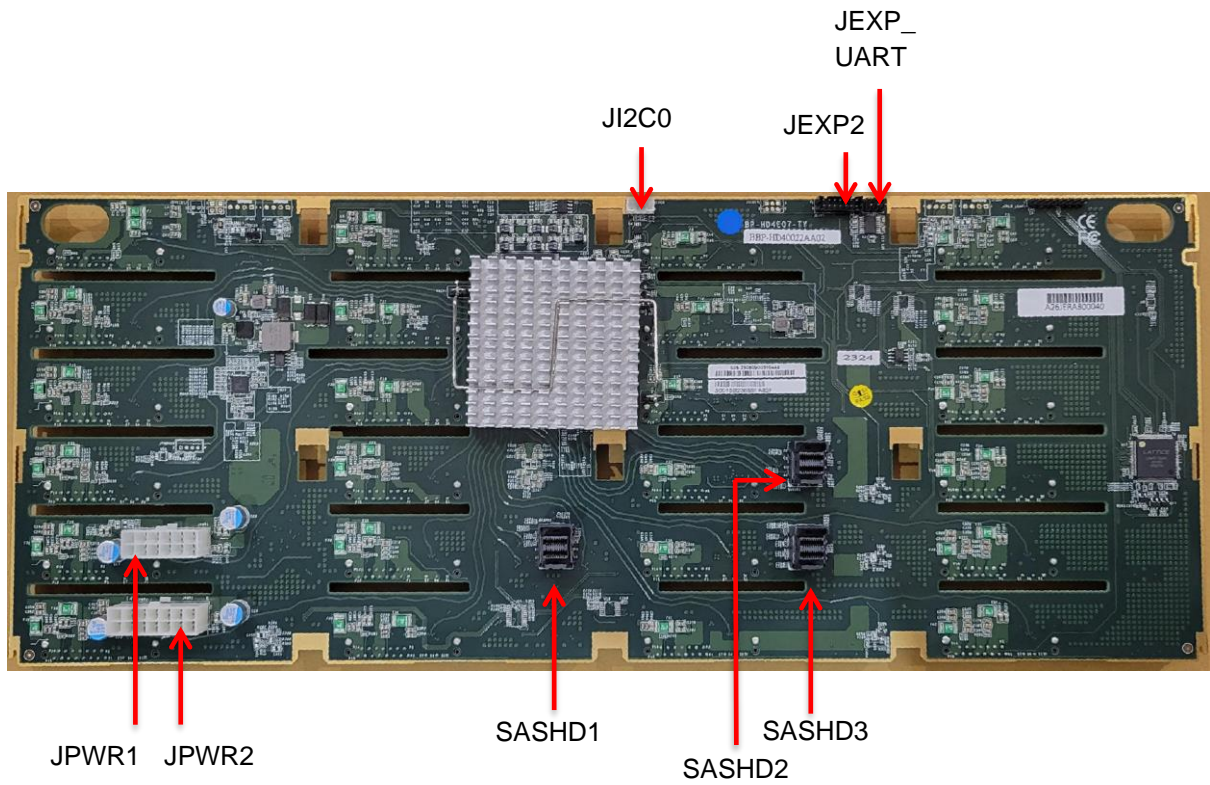
1	2	3	4
5	6	7	8
9	10	11	12

2.4 Motherboard Overview

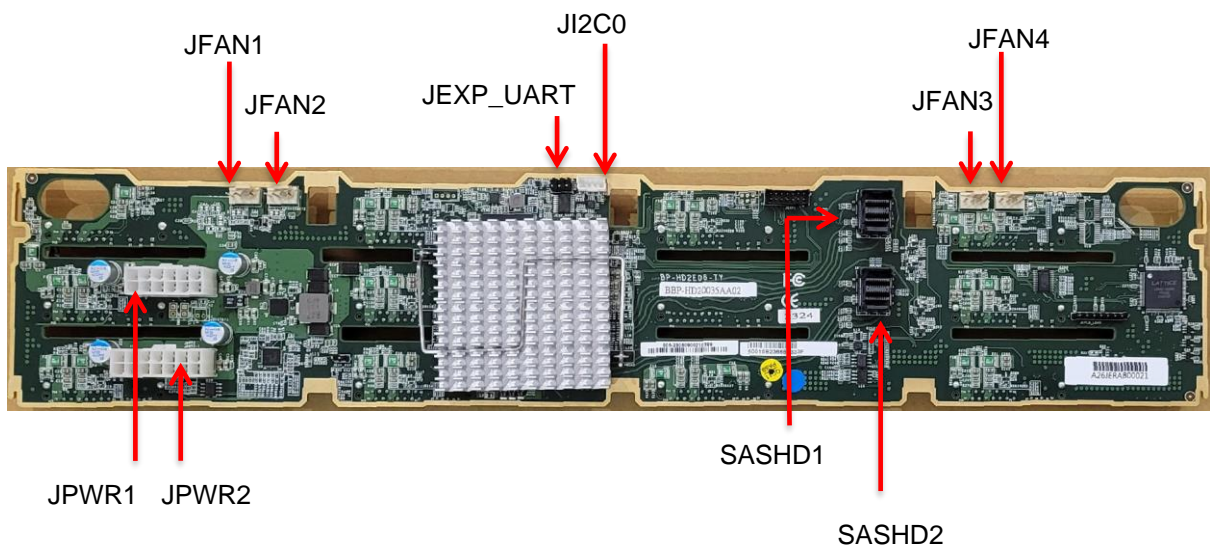


- | | | | |
|------------------------------------|----------------------------|-------------------------------|-------------------------------|
| 1 OCP Slot (CPU_0) | 6 PSU SMBus | 11 SATA P8-11 | 16 Fan CONN |
| 2 GenZ Slot x32 (CPU_0) | 7 PWR 2X3 Connector | 12 CPU_0 | 17 Slimline x8 (CPU_0) |
| 3 BIOS/BMC ROM | 8 HDDBP SMBus | 13 CPU_1 | 18 PWR 2x4 CONN |
| 4 GenZ Slot x32 (CPU_1) | 9 VROC | 14 Slimline x8 (CPU_0) | |
| 5 Internal USB3.2 Gen1 CONN | 10 PSU Connector | 15 PWR 2x2 CONN | |

2.5 Front 24 x HDD Backplane



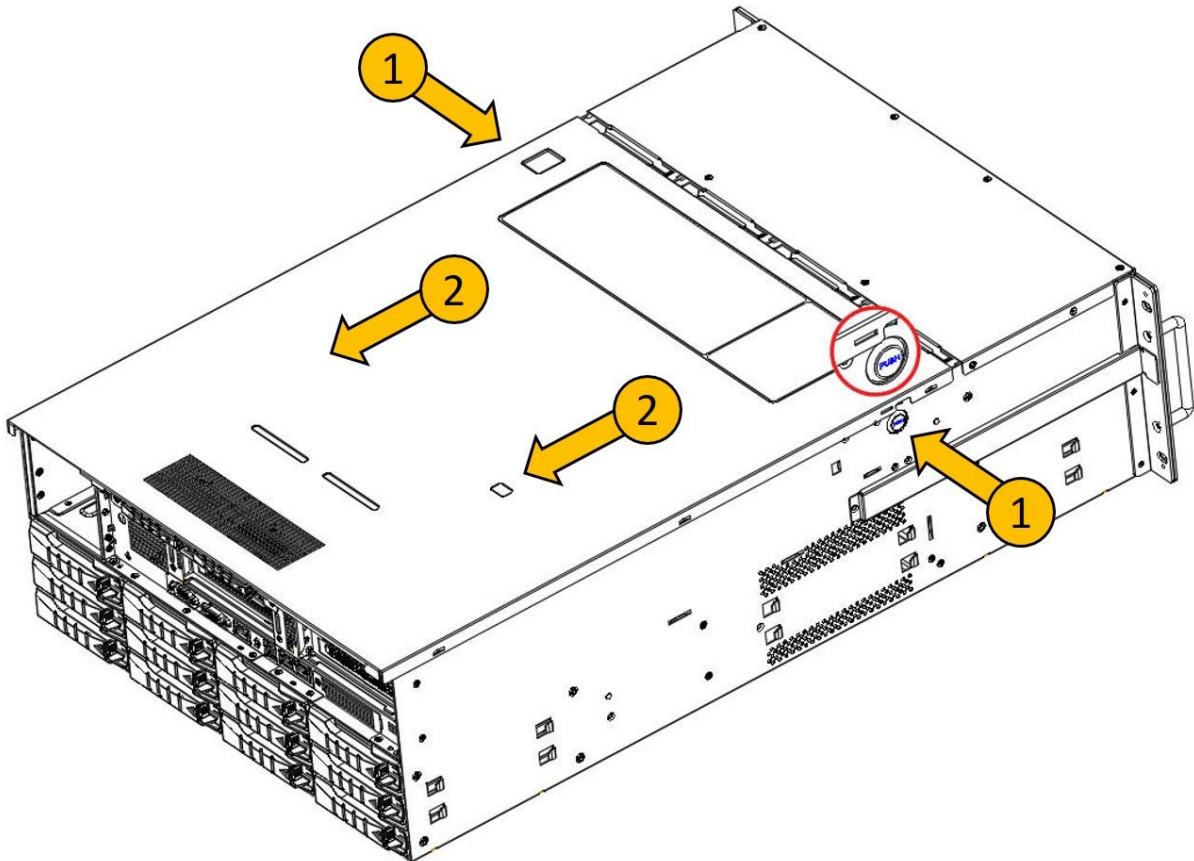
2.6 Rear 12 x HDD Backplane



Chapter 3 Hardware Removal and Assembly

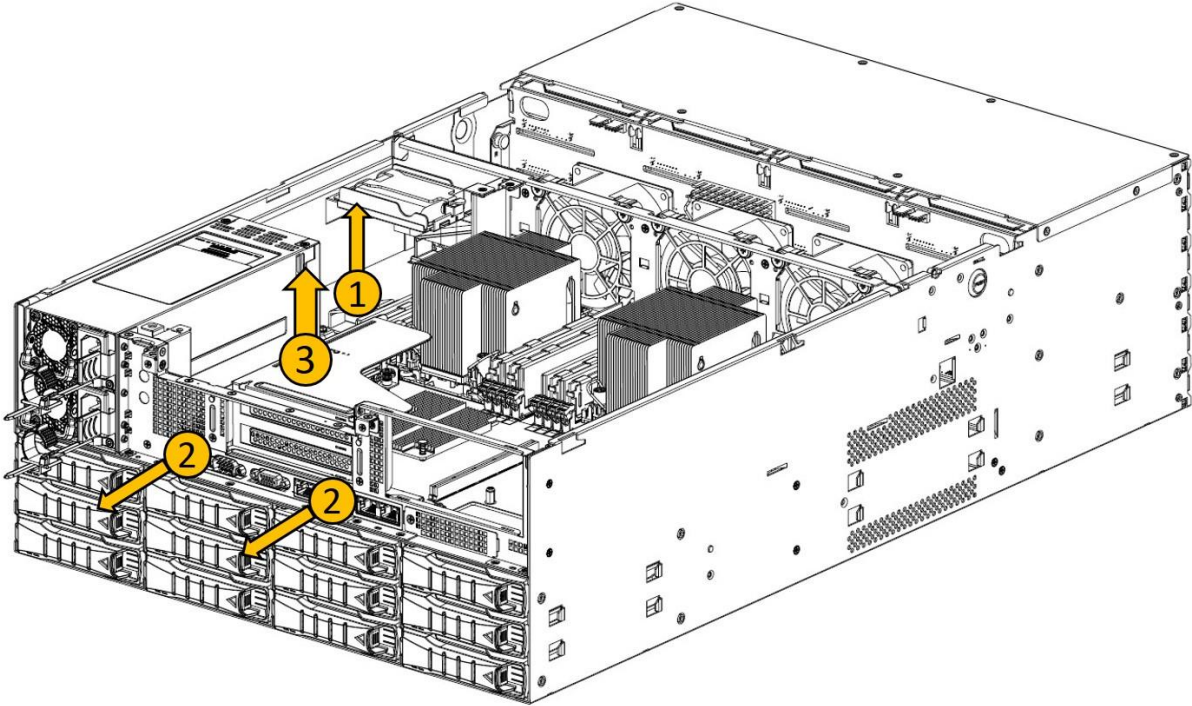
3.1 Top Cover Removal

Pushing release button on both side and slide forward the top cover to open cover.



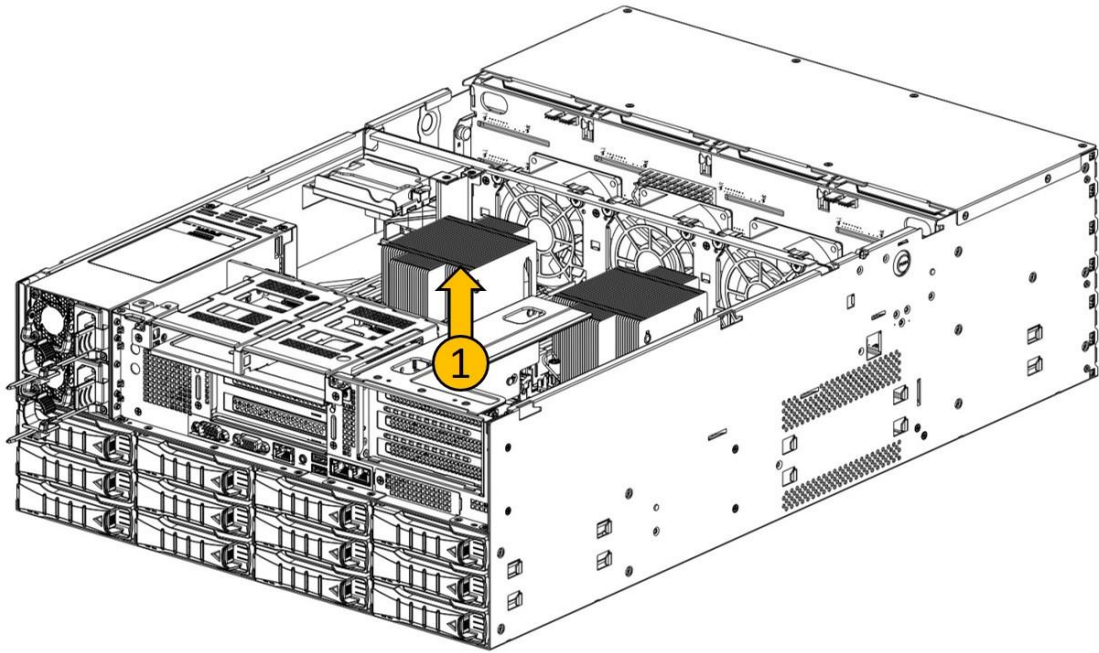
3.2 2 Slots Riser Cage Removal

1. Release screw.
2. Release screws.
3. Pull up riser cage.



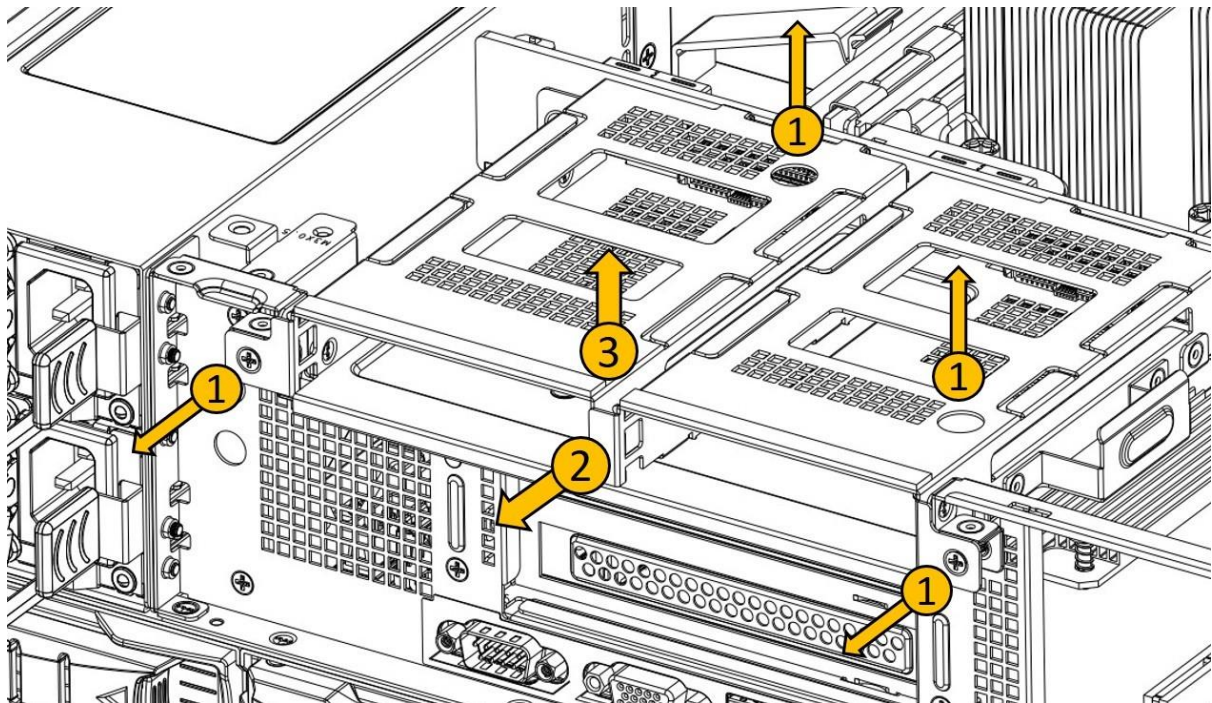
3.3 3 Slots Riser Cage Removal

1. Pull up riser cage.



3.4 Rear SFF HDD Cage Removal

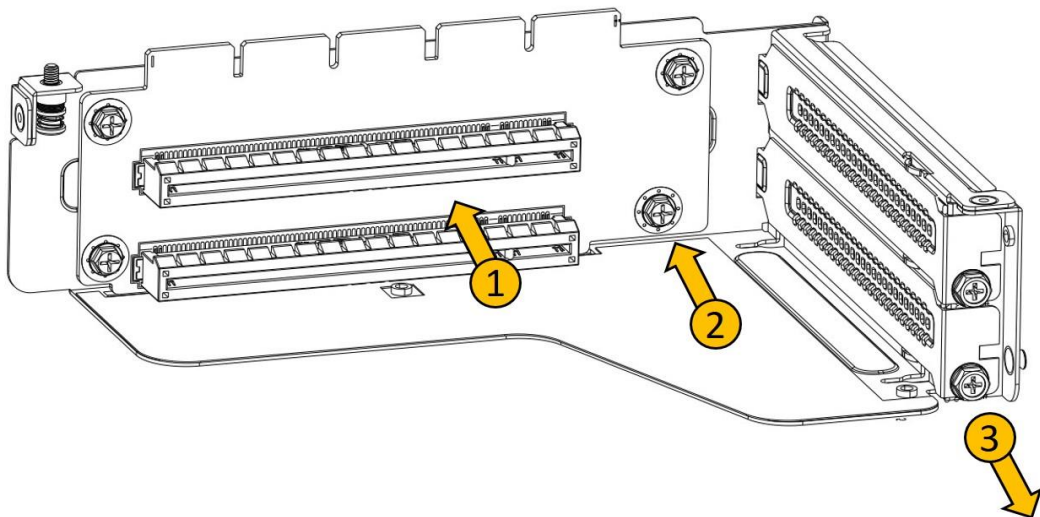
1. Release screws.
2. Follow arrow direction to move out HDD cage a little bit.
3. Pull up HDD cage.



3.5 2 Slots Riser Card/Cage Assembly

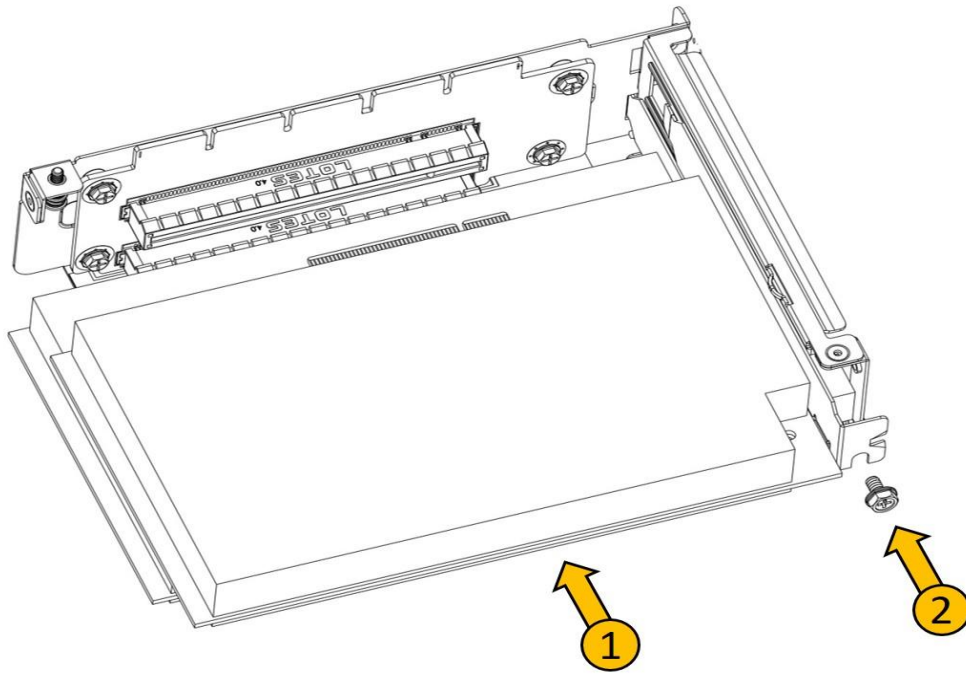
3.5.1 2 Slots Riser Card Assembly

1. Install riser card on the riser cage.
2. Locking screws.
3. Remove L dummy bracket.



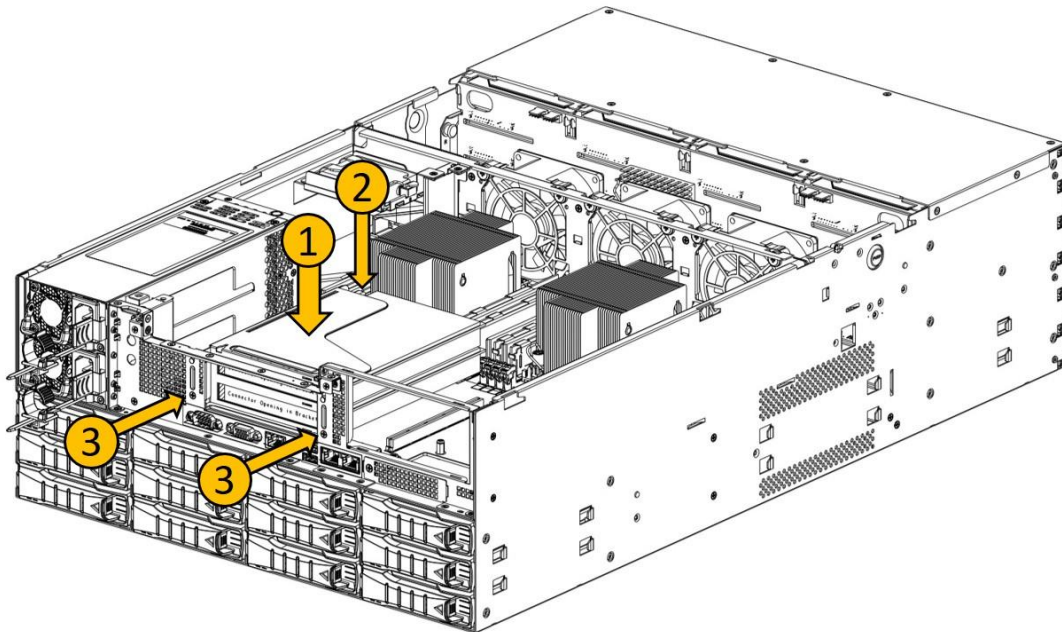
3.5.2 Add-on Card Installation

1. Install add-on card.
2. Locking screw.



3.5.3 2 Slots Riser Cage Assembly

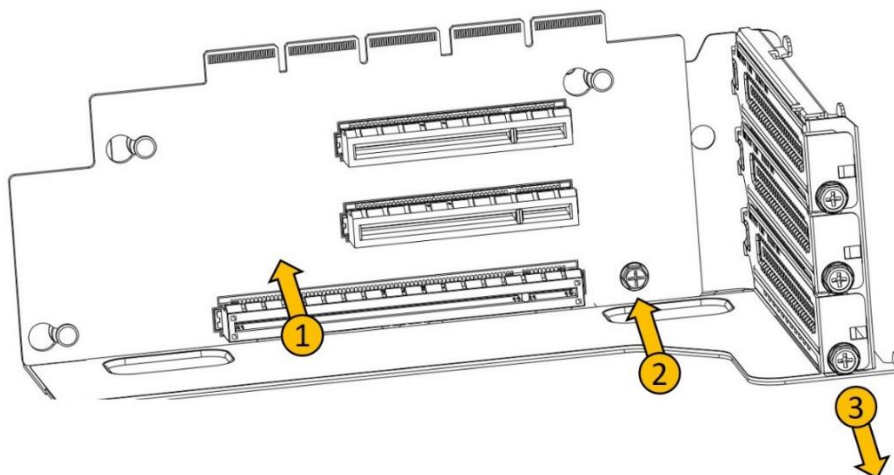
1. Install riser cage in chassis and Insert riser card into riser slot of MB in the meantime.
2. Locking screw
3. Locking screws



3.6 3 Slots Riser Card/Cage Assembly

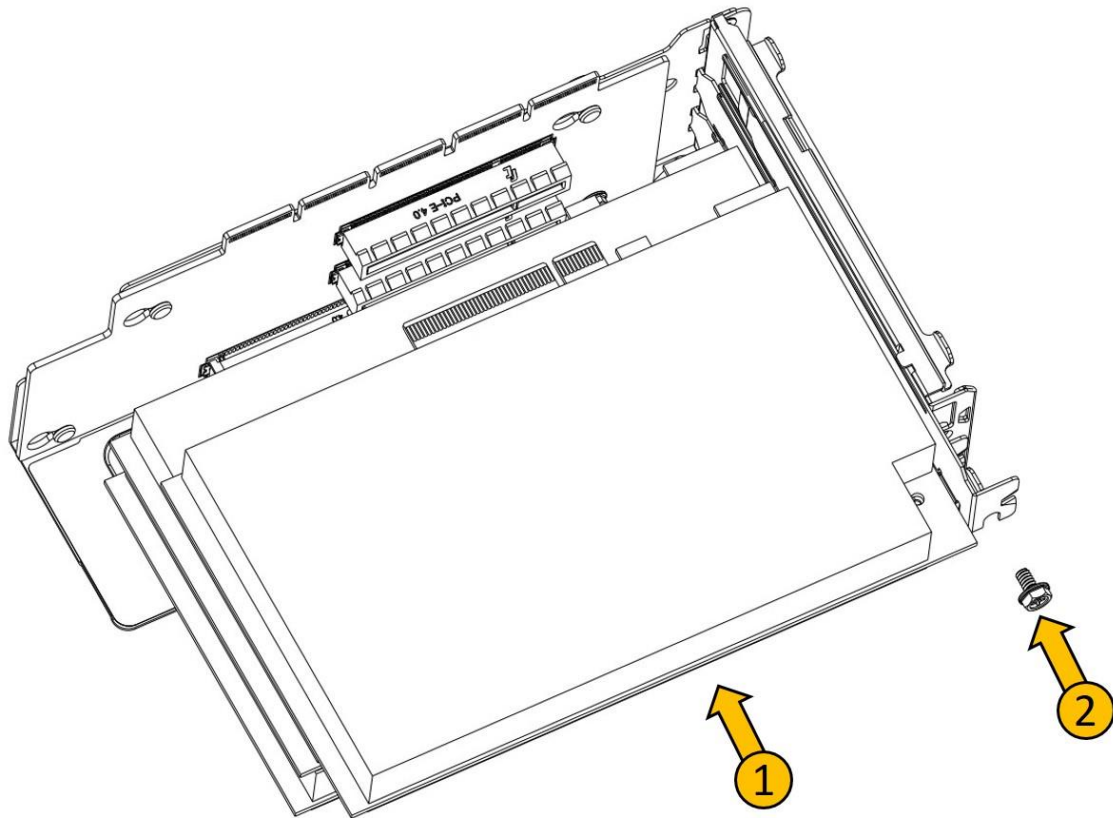
3.6.1 3 Slots Riser Card Assembly

1. Install riser card on the riser cage.
2. Locking screws.
3. Remove L dummy bracket.



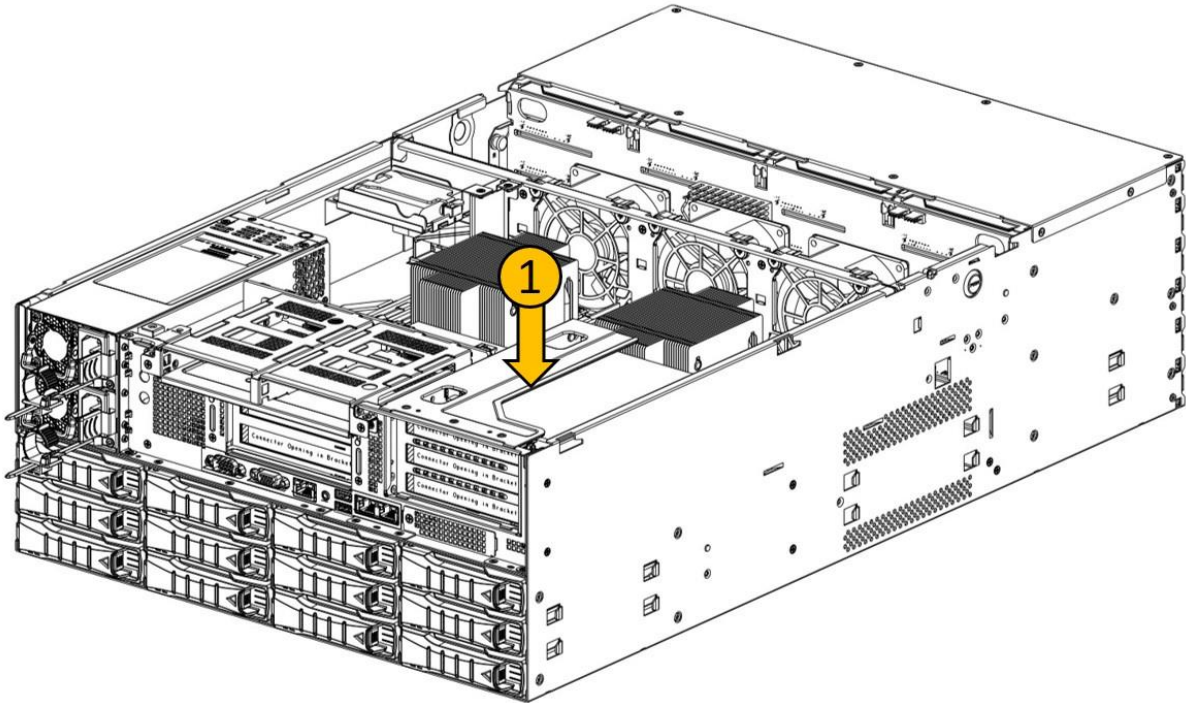
3.6.2 Add-on Card Installation

1. Install add-on card.
2. Locking screw.



3.6.3 3 Slots Riser Cage Assembly

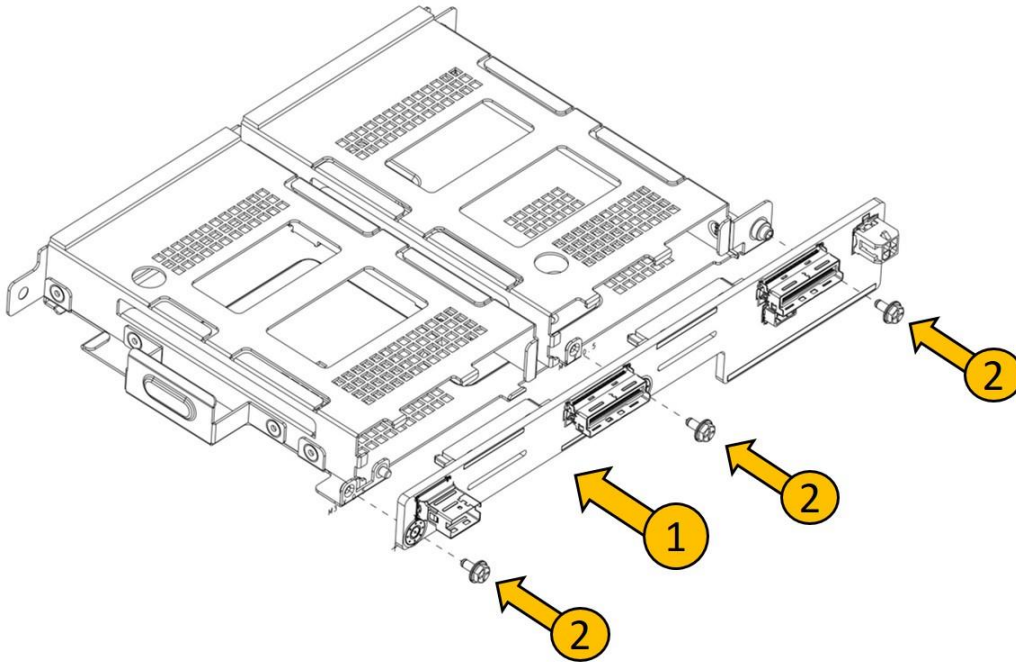
1. Install riser cage in chassis and Insert riser card into riser slot of MB in the meantime.



3.7 Rear SFF HDD Back Plane/Cage Assembly

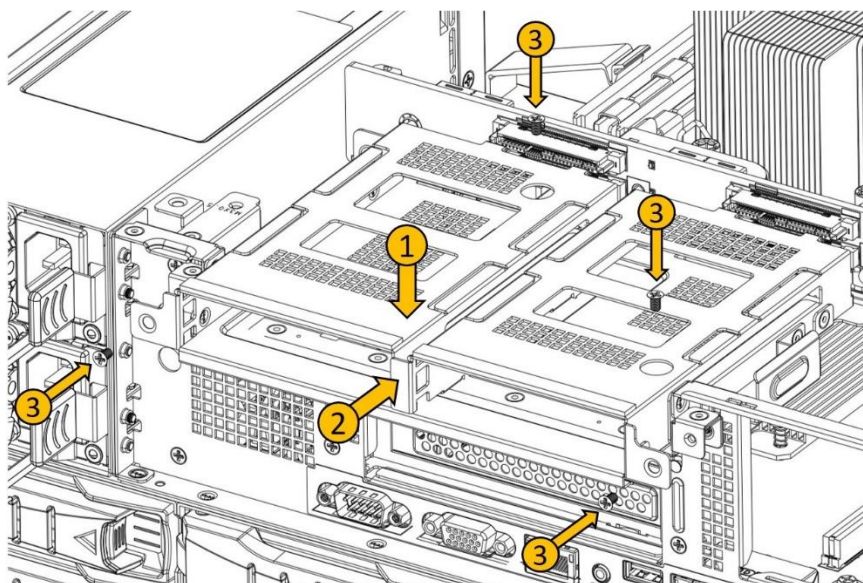
3.7.1 HDD Back Plane Assembly

1. HDD back plane assembly
2. Locking screws



3.7.2 HDD Cage Assembly

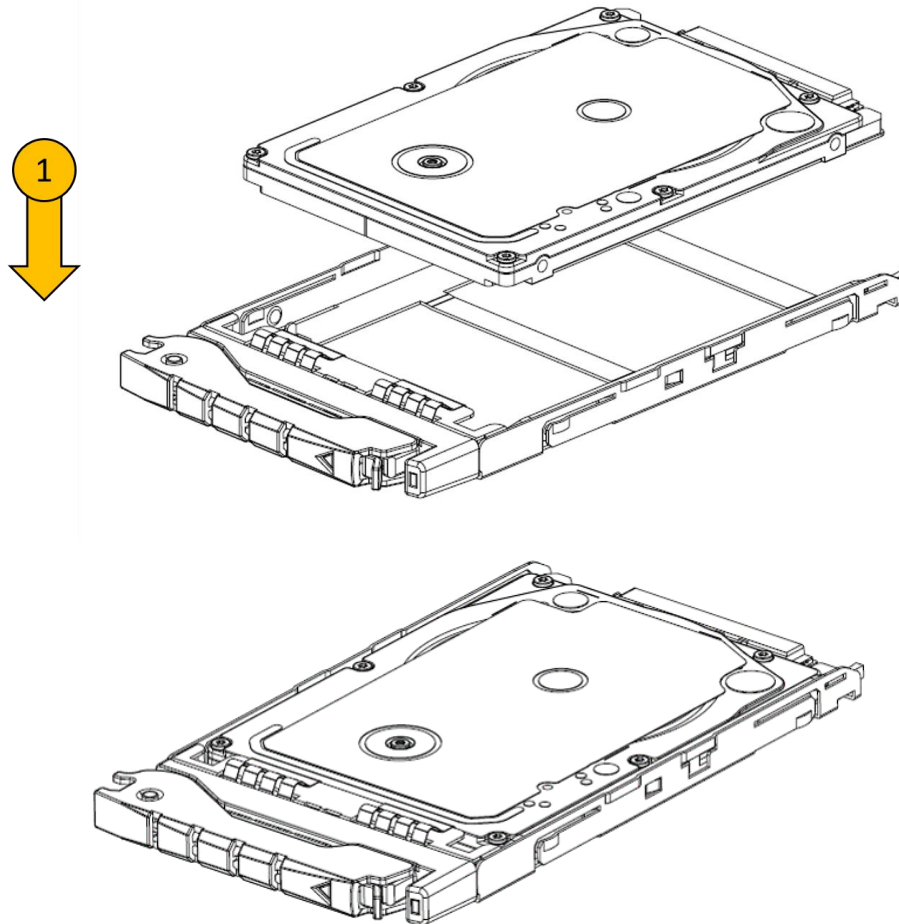
1. Follow arrow direction and put down the HDD cage.
2. Push HDD cage in the chassis.
3. Locking screws.



3.8 Hard Disk Drive Installation / Removal

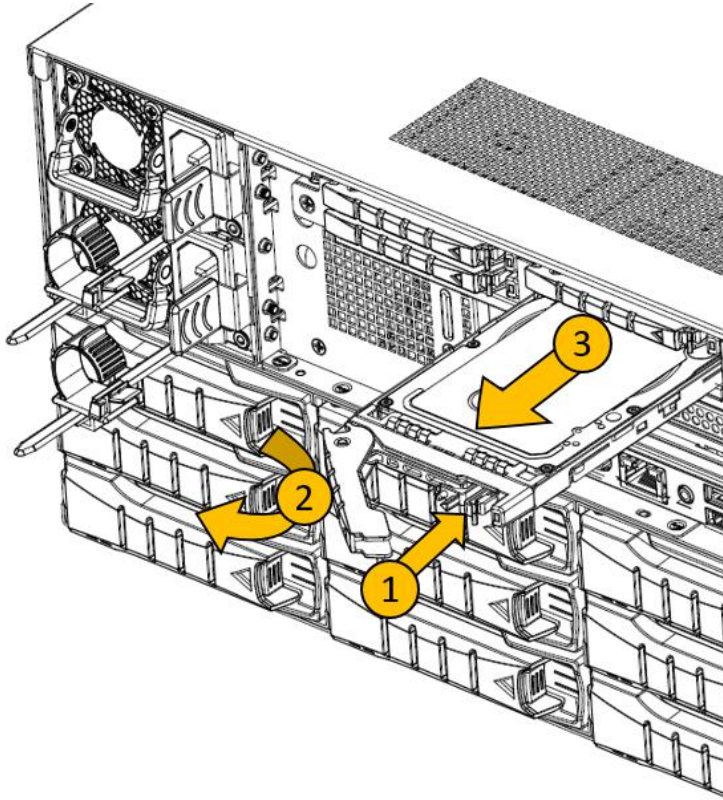
3.8.1 SFF Drive Installation

1. Put the drive on the tool-less HDD tray and make sure drive fit in the tray.



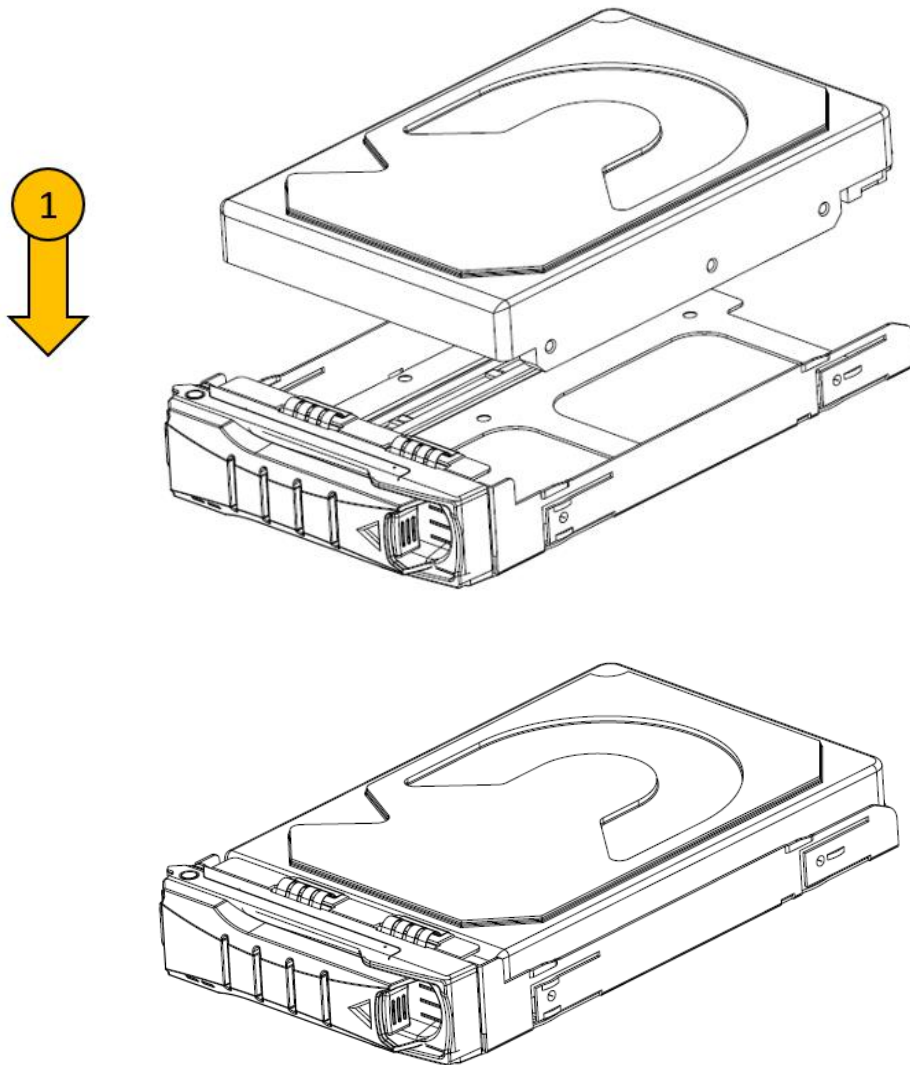
3.8.2 SFF Drive Removal

1. Press HDD tray push pin to release HDD tray.
2. Pull out the tray bar.
3. Pull out HDD tray.



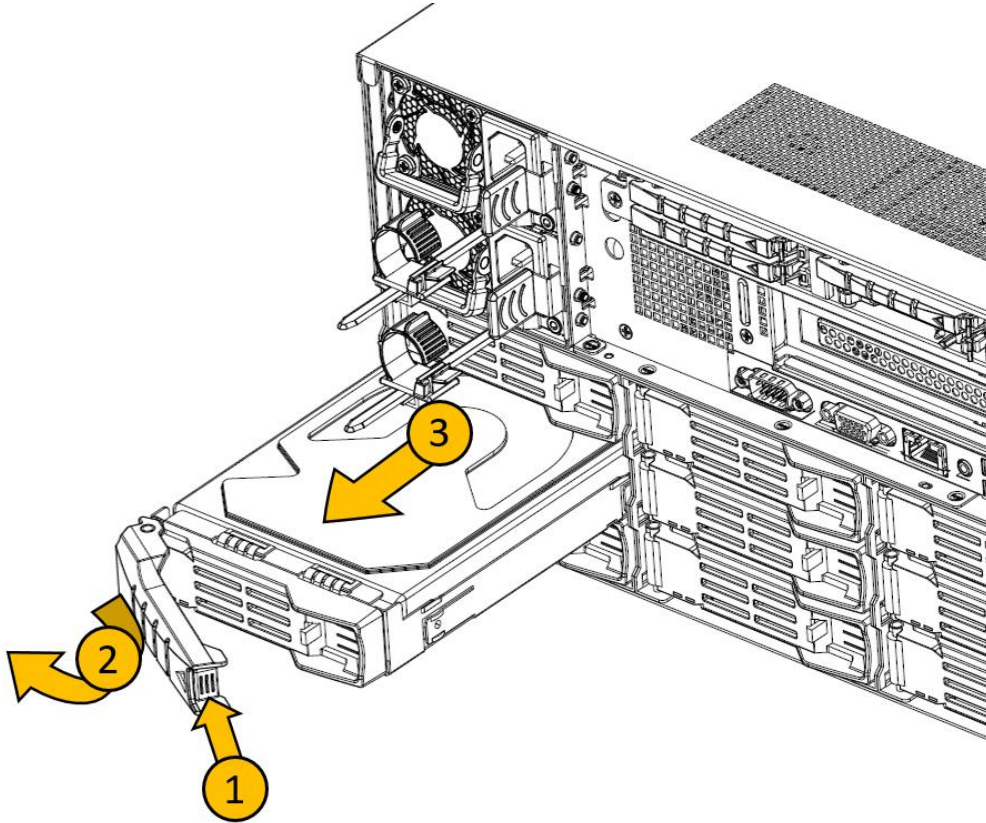
3.8.3 LFF Drive Installation

1. Put the drive on the tool-less HDD tray and make sure drive fit in the tray.



3.8.4 LFF Drive Removal

1. Press HDD tray push pin to release HDD tray.
2. Pull out the tray bar.
3. Pull out HDD tray.



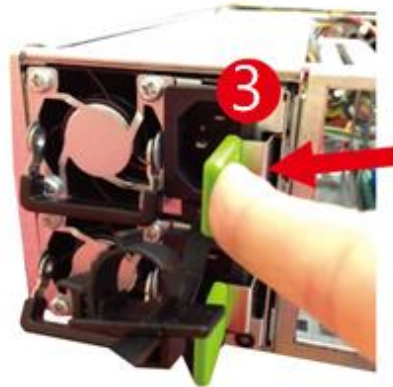
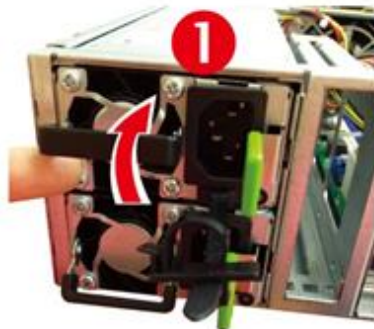
3.9 System PSU Installation/ Removal

PSU Module Installation:

1. Slide in PSU module.
2. Make sure the latch on the module is fully hooked onto the PSU housing.

PSU module Removal:

1. Remove power cables connected to the PSU module.
2. Allow a minute for fan to spin down.
3. Pushing the latch then hold the tray handle tab. Then pull the PSU out.
4. Module gently until it slides out of the enclosure.



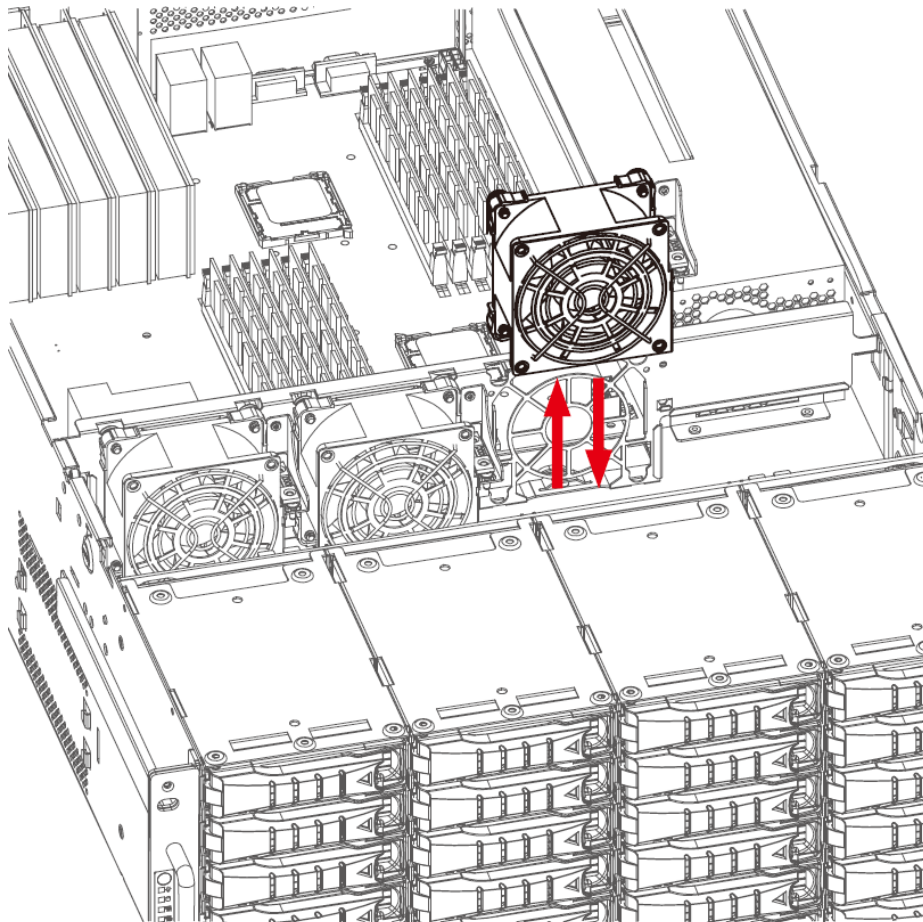
3.10 System Fan Installation/ Removal

Fan Removal:

Grabbing and removing the fan module from the fan slot.

Fan Installation:

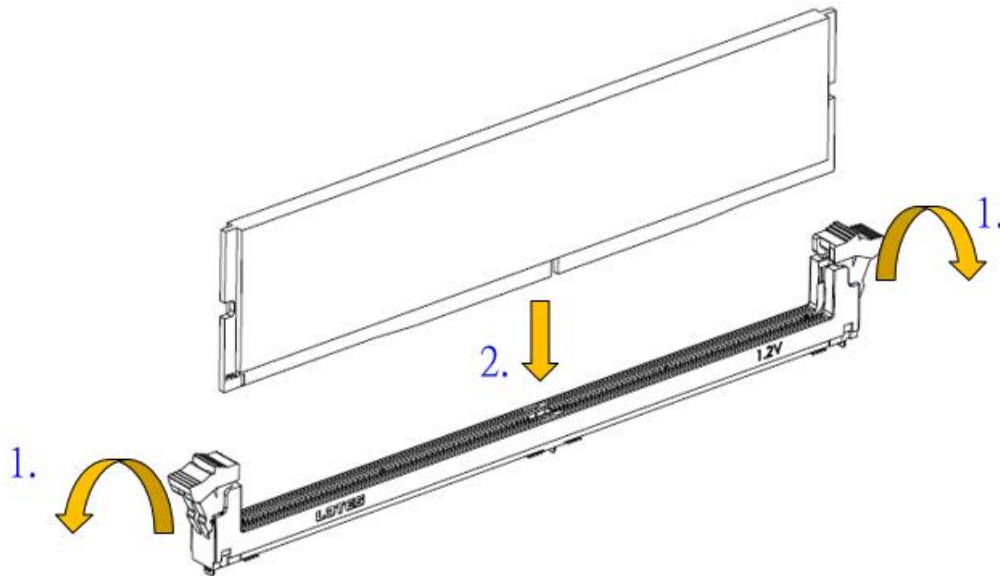
Make sure the 4 rubbers and connector insert firmly while fan module is inserted.



3.11 Memory Installation/ Removal

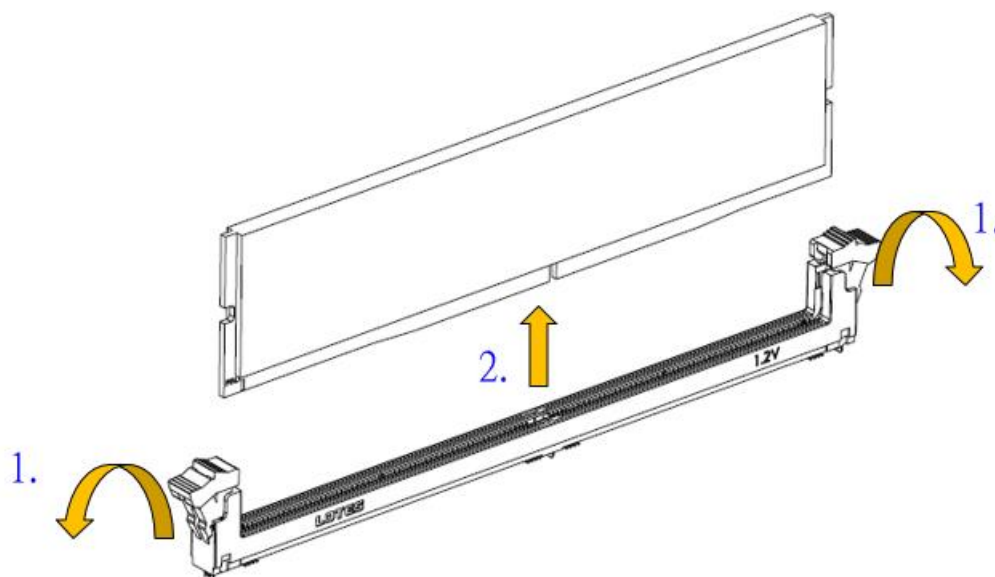
3.11.1 Memory Installation

1. Push the retention clips inwards to lock the memory DIMM.
2. Insert memory DIMM to slot, ensure module notch is aligned with slot key.



3.11.2 Memory Removal

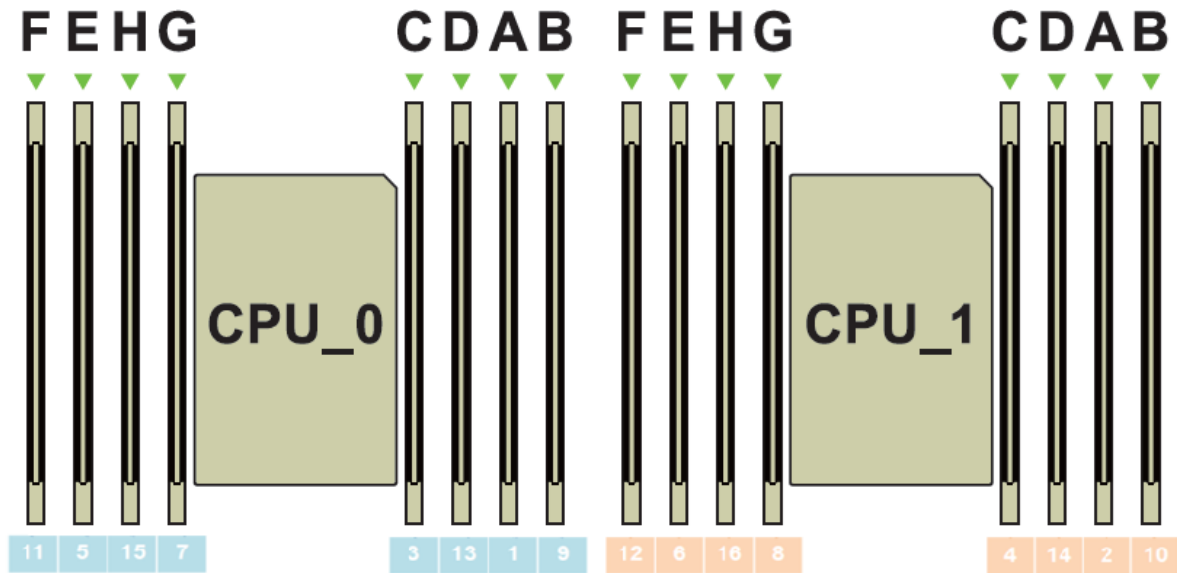
1. Push the retention clips outwards to release the memory DIMM.
2. Lift and remove the memory DIMM.



IMPORTANT: The server requires at least one DIMM per processor for functioning. When you install/remove memory DIMMs, please follow the sequence shown in below “chapter 3,5.1” to maintain performance.

3.11.3 Memory Population Guide

Processors within the Intel®Xeon® processor Scalable family include two integrated memory controllers (IMC), each supporting three memory channels



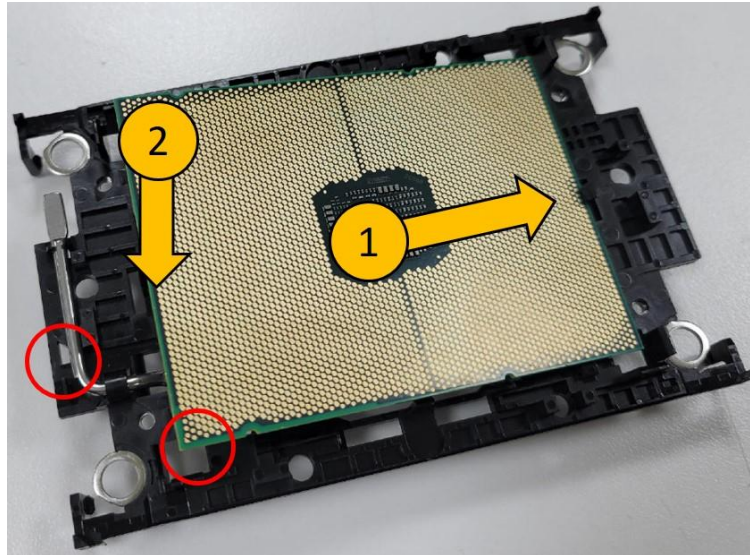
The installation sequences for each mode are demonstrated in the following tables.

Independent Mode

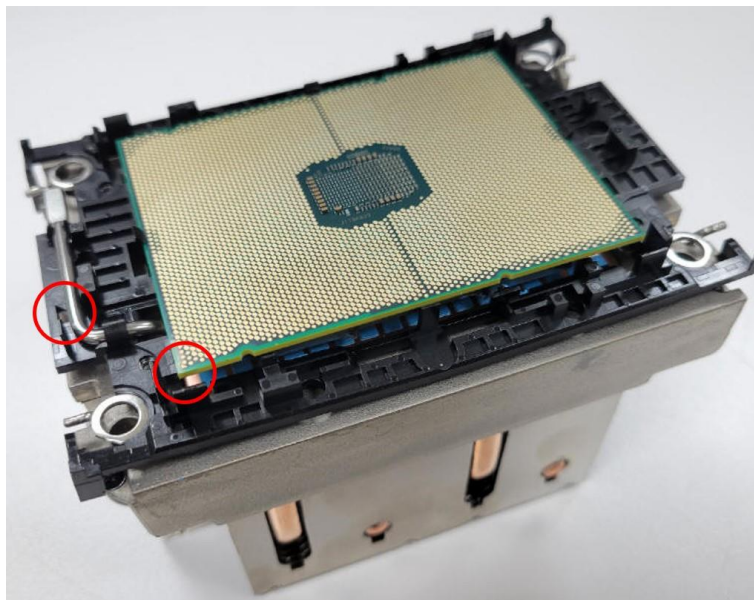
Number of Processor		Installation Sequence																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Processor x 1	CPU1	A0	C0	E0	G0	B0	F0	D0	E0																
	CPU2	A0		C0		E0		G0		B0		F0		D0		E0									

3.12 CPU Installation

1. Slide the CPU into the CPU carrier ensuring that the triangle mark on the CPU is aligned with the triangle mark on the CPU carrier, and then secure the CPU to the CPU carrier.

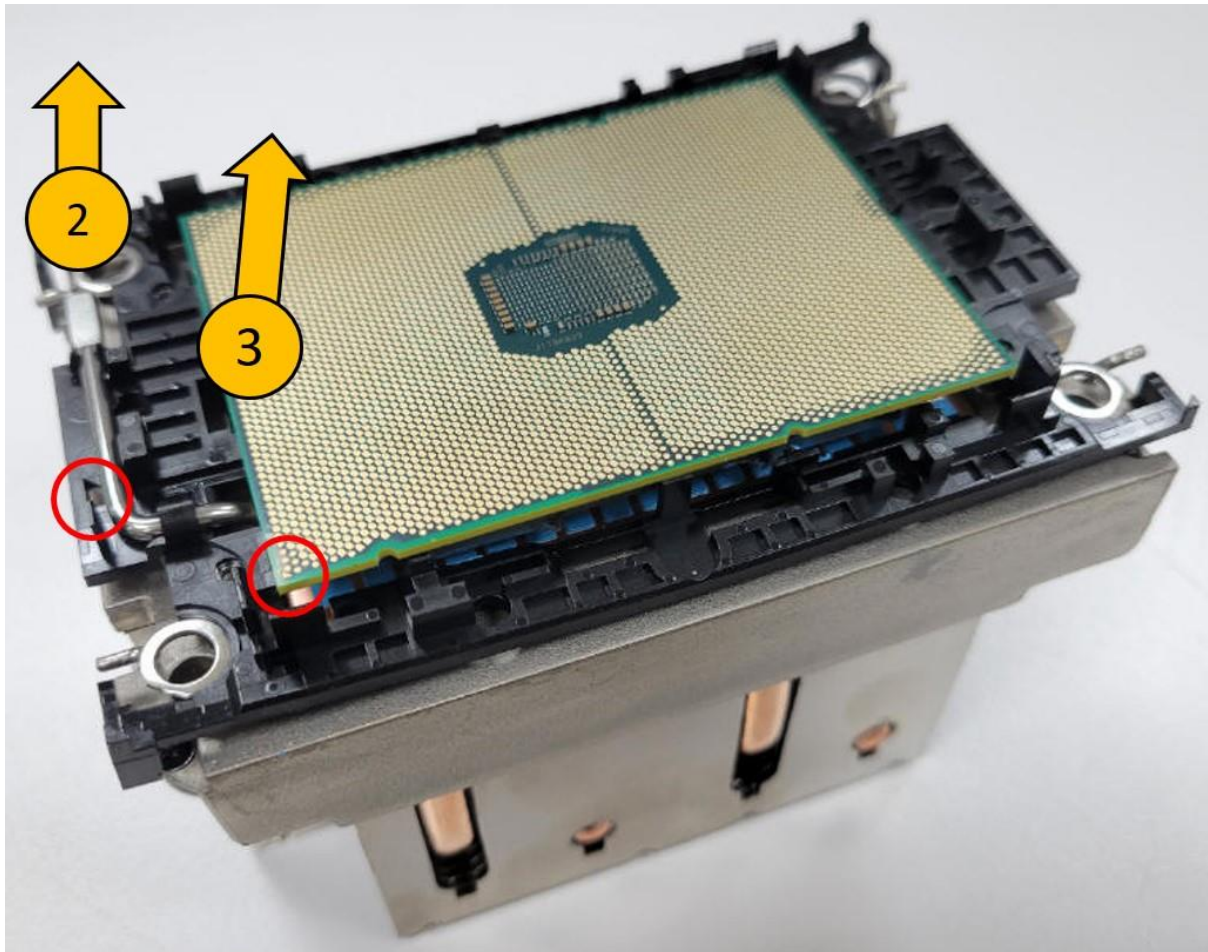


2. Install the CPU carrier onto the CPU heatsink. Ensure that the triangle mark on the CPU carrier is aligned with the blunt corner of the CPU heatsink and that the CPU carrier is firmly fixed on the CPU heatsink by the latches.



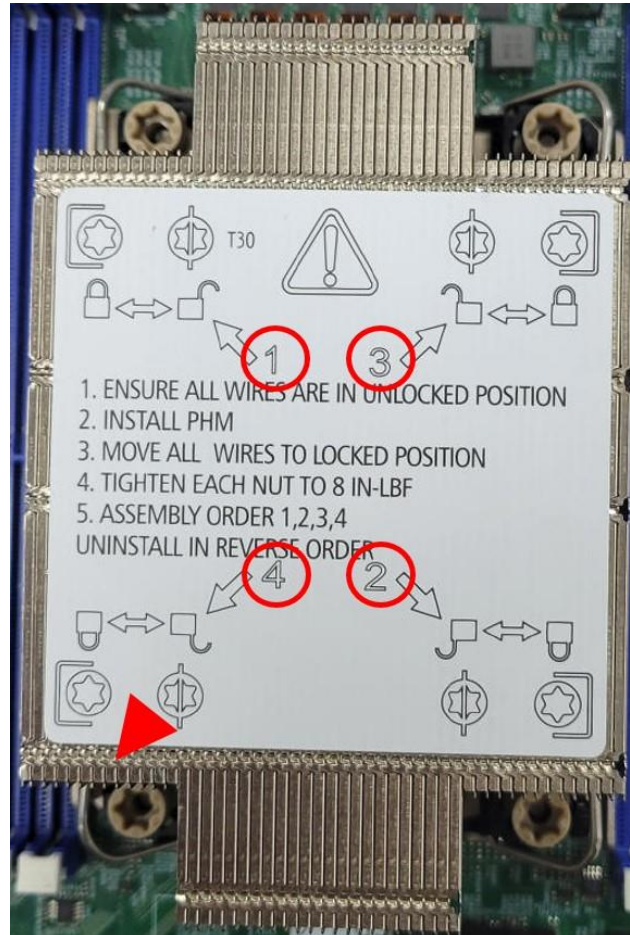
3.13 CPU Removal

1. Remove either the CPU heatsink 1 or CPU heatsink 2 from the chassis.
2. Turn the handle
3. Lift to remove the CPU from the CPU carrier.
4. Carefully push the CPU carrier tab outwards to release the CPU from the CPU carrier.



3.14 CPU Heatsink Installation

1. Move all CPU dummy cover
2. Put the CPU heatsink on socket.
3. Move all wires to locked position.

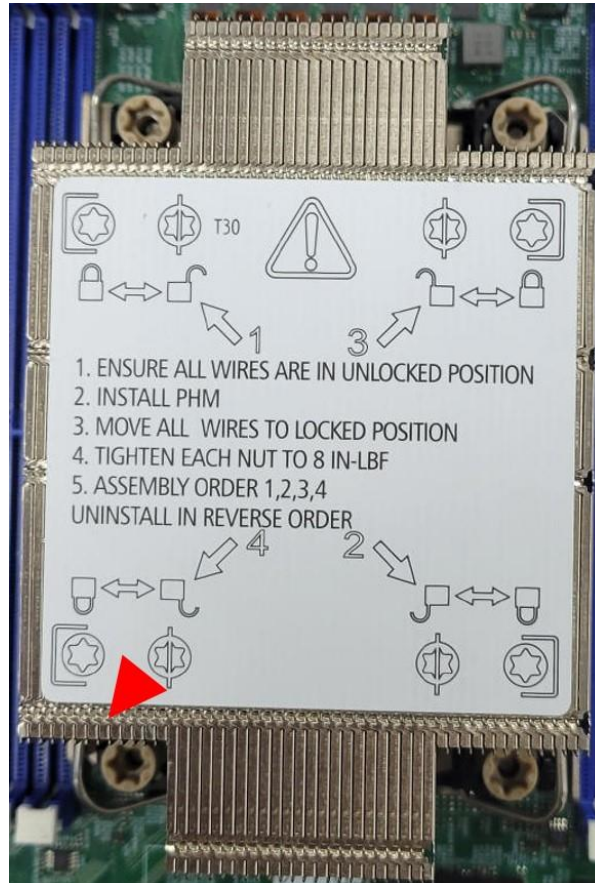


4. Tighten the 4 captive screws in sequential order based on the numbers indicated on the heatsink (1 > 2 > 3 > 4).

IMPORTANT: When installing the CPU heatsink, follow the sequence indicated on the heatsink. Incorrect sequence will result in an uneven application of the thermal grease on the CPU.

3.15 CPU Heatsink Removal

1. Loosen the 4 captive screws in sequential order based on the numbers indicated on the heatsink (4 > 3 > 2 > 1).



2. Mover all wires to unlocked position.
3. Lift and remove CPU heatsink.

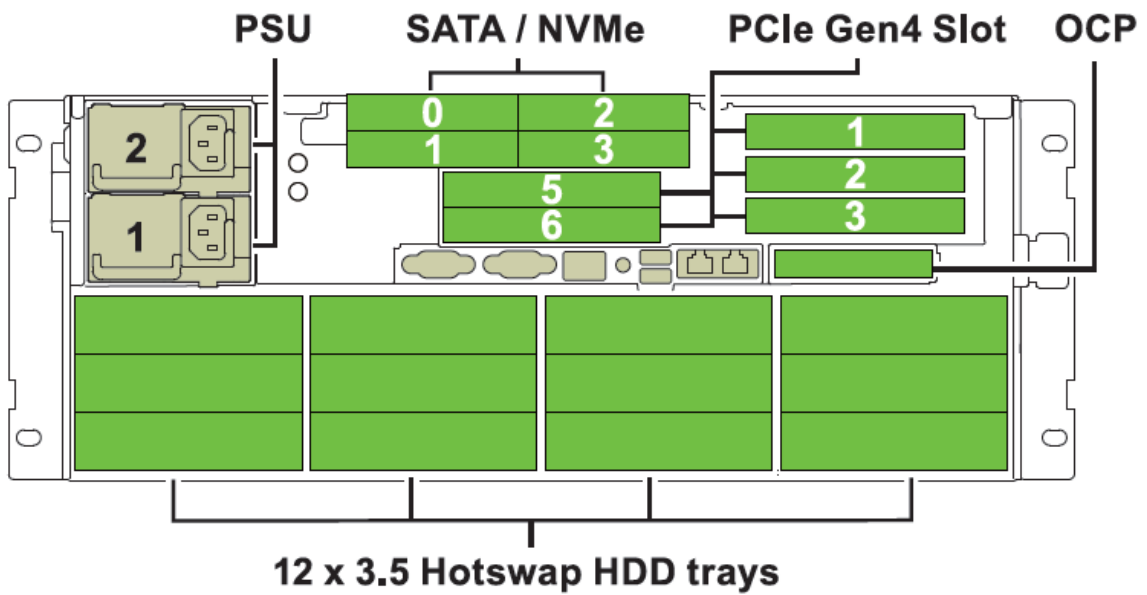
IMPORTANT: When removing the CPU heatsink, follow the sequential order based on the numbers indicated on the heatsink. Incorrect sequence *will result in an uneven application of the thermal grease on the CPU.*

Q&A

1. What if I want to install 5 PCIe add-on cards in this system, is there any suggestion?

Ans: Please install the add-on card in the PCIe slot 1/slot 2/slot 5/slot 6 If have 4 add-on cards need to be installed.

If want to install 5 add-on cards in system, the additional air baffle is required, for the detail information about air baffle, please contact sales of Compal.



2. RAID/HBA card installation suggestions.

Ans: The better location is PCIe slot1, slot2 and slot3 for RAID/HBA card installation, these 3 slots are optimized for RAID/HBA card, and offer good experience.

