

SKY-8134DU2501

7/2th, 2025



History

| Version | Date | Handled by | Note |
|---------|----------|------------|----------------|
| V01 | 2025/7/2 | Alan.Ku | Update Content |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Agenda

- ☐ Server Front Side
- ☐ Server Rear Side
- ☐ DIMMs Population
- ☐ Access the device via console
- ☐ WebUI Access
- ☐ OS installation

Server Front Side [1/4] – Overview



USB 3.0

2 x SATA3 2.5' trays

Service Tag

| | |
|--------------|---|
| POWER BUTTON | : Blue color, indicate the system power state. |
| ID BUTTON | : Blue color, allow users to identify the system. |
| RESET BUTTON | : Hard reset the system. |
| STATUS LED | : Red color, indicate system events asserted. |

Server Front Side [2/4]-Storage Swap

- ❑ Step #1 Press the button



- ❑ Step #2 Tray handle will be released



- ❑ Step #3 Grab the tray handle and pull it evenly towards you



Server Front Side [2/4]-Storage Swap

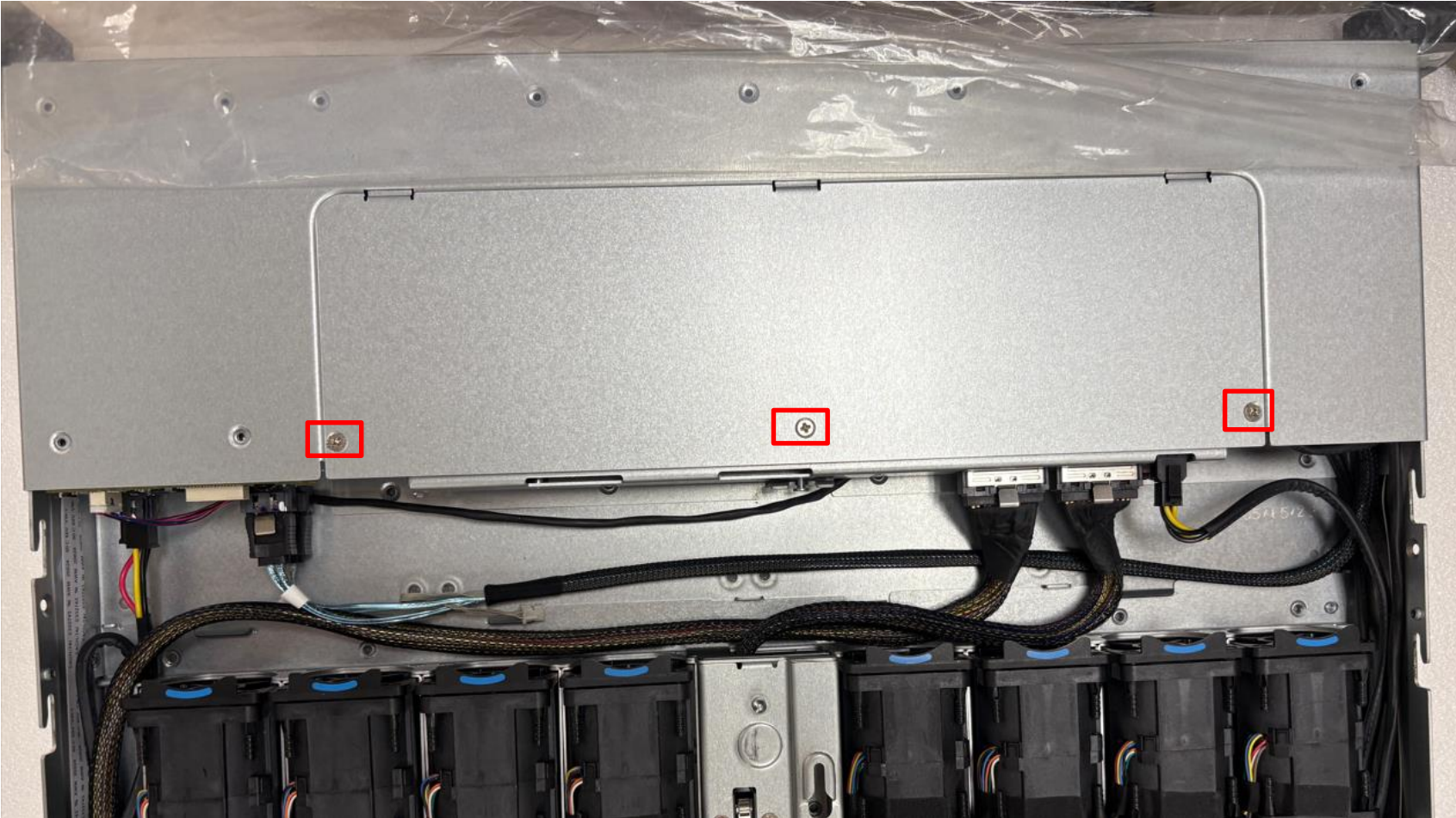
- ❑ Step #4 Install the drive with four screws contained in the disk screw kit



- ❑ Step #4 Insert the tray into the disk bay until the drive engages with the connector on the HDD backplane. Then, click the handle back to the tray.

Server Rear Side [3/4]- Remove PCIe Cover

❑ Step #1 Loose the three screws from top.



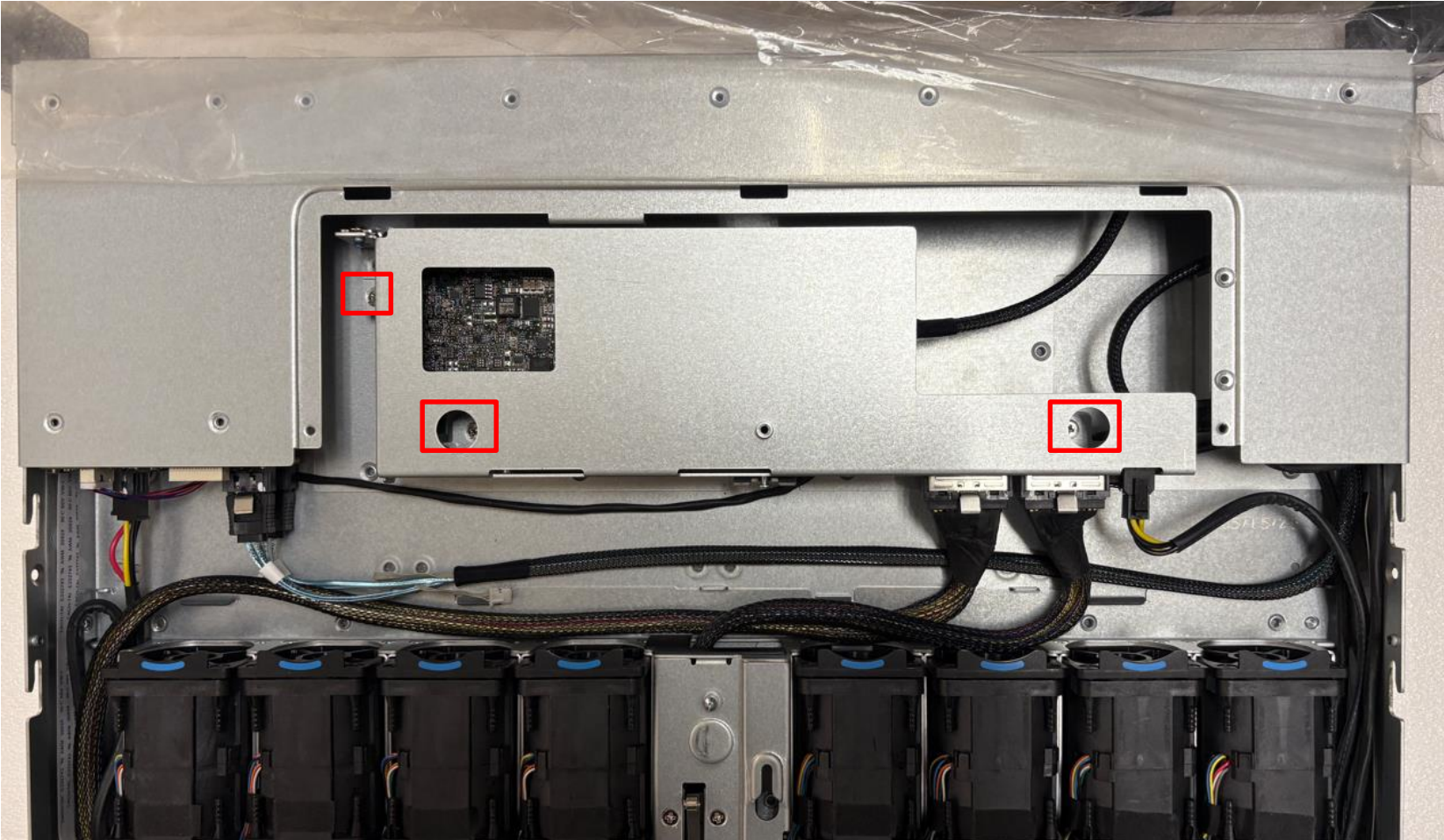
Server Rear Side [3/4]- Remove PCIe Cover

❑ Step #2 Slightly pull up the cover.



Server Rear Side [4/4]- Remove PCIe Cage

❑ Step #1 Loose the three screws from top.

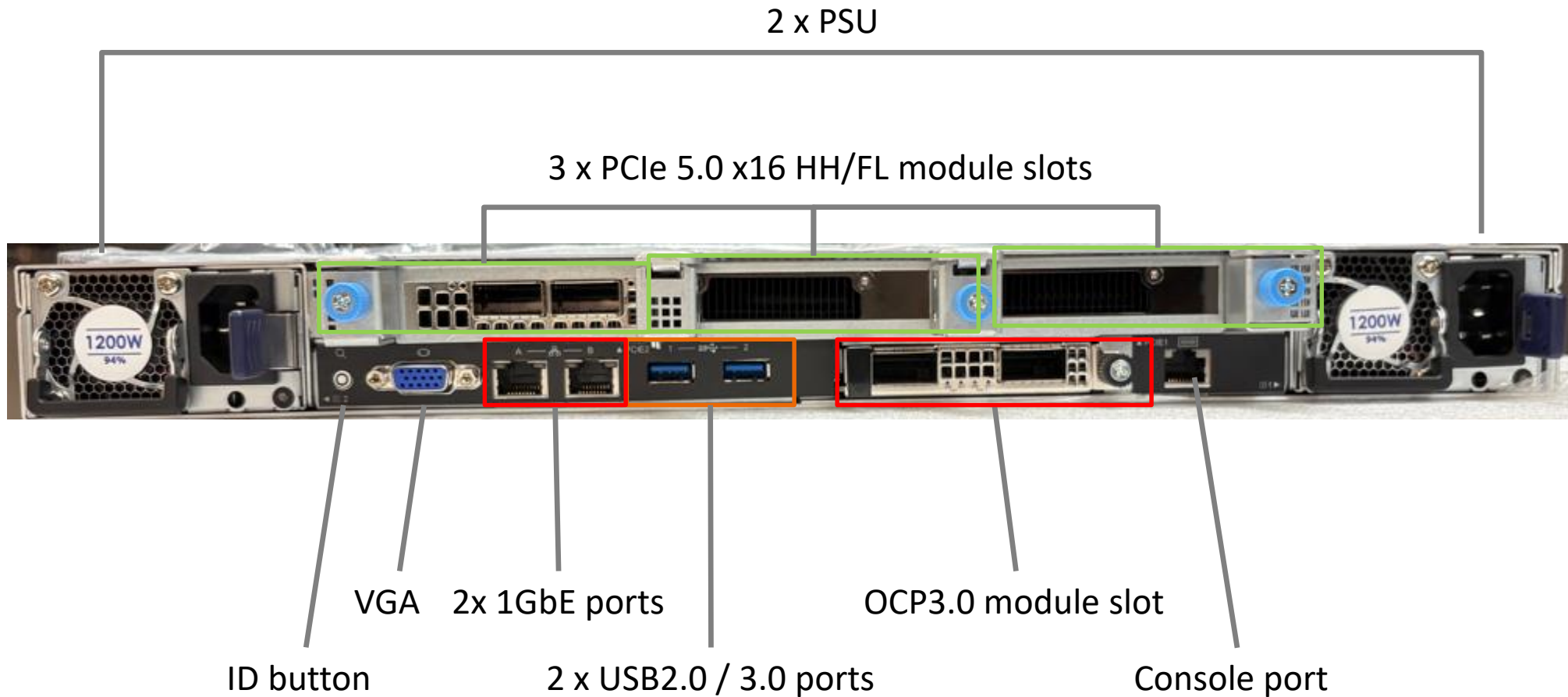


Server Rear Side [4/4]- Remove PCIe Cage

- ❑ Step #2 Take out the PCIe cage, install or remove PCIe cards.

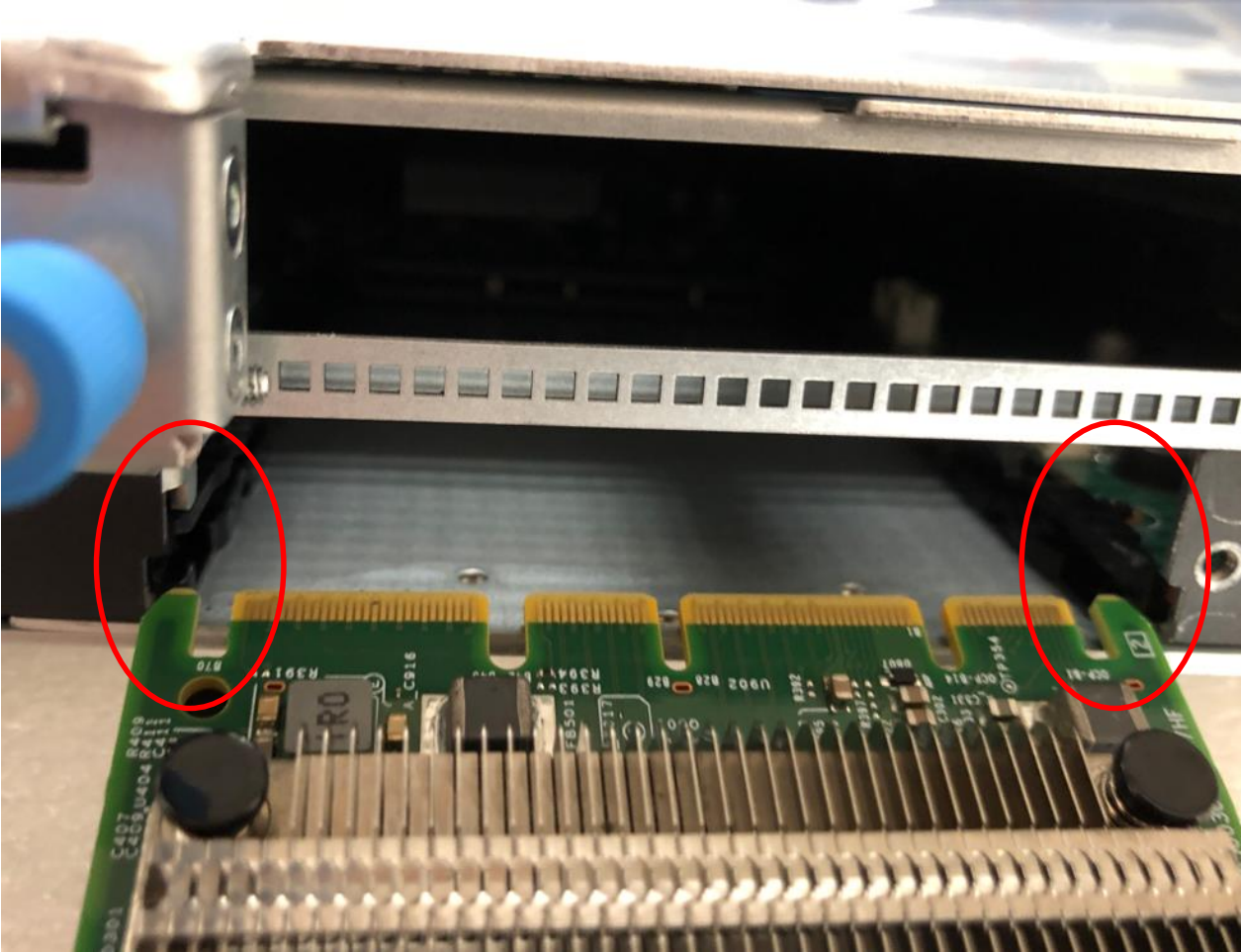


Server Rear Side [1/6] – Overview



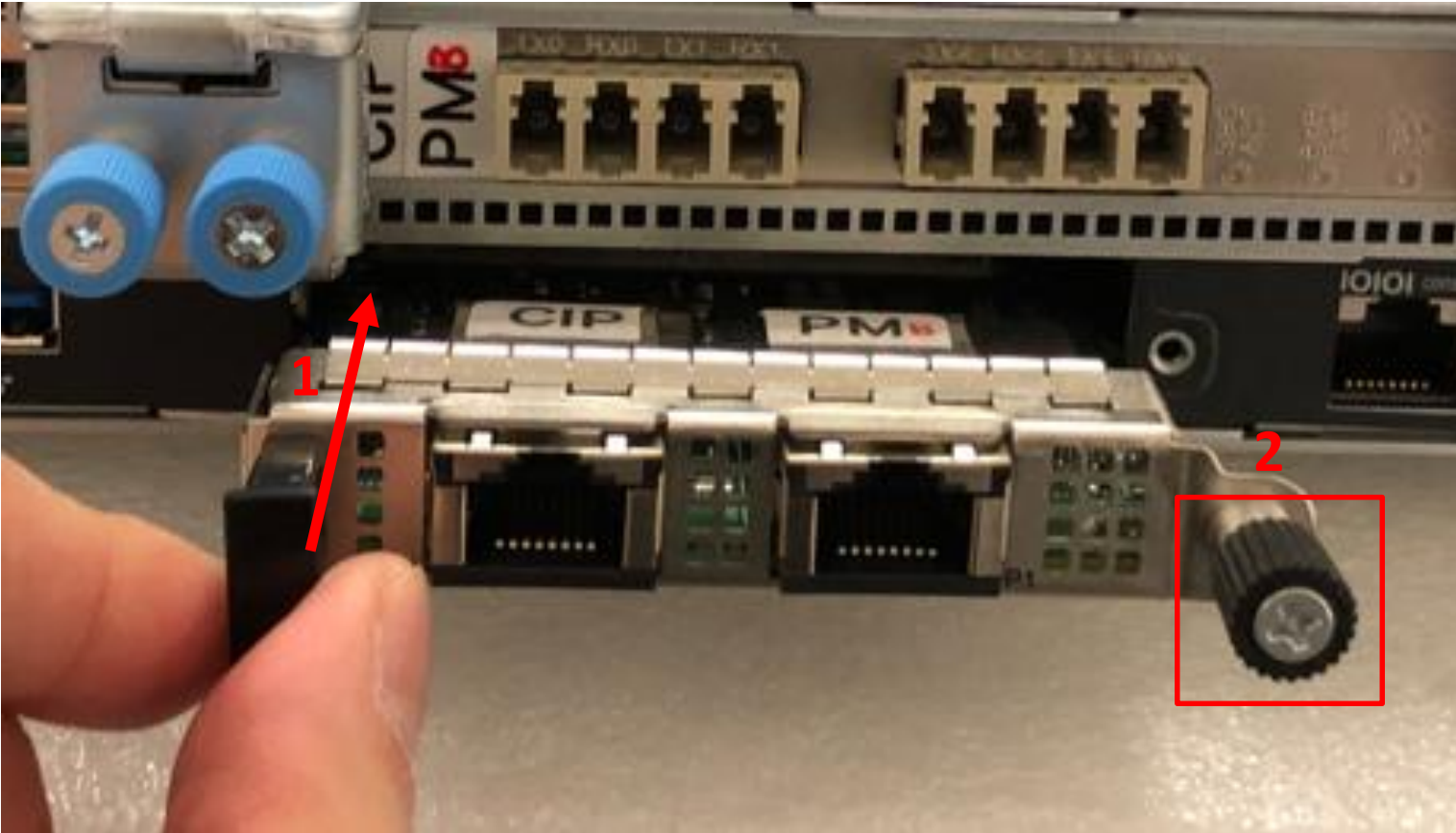
Server Rear Side [2/6] – OCP3.0 Installation

- ❑ Step#1 – Align the module PCB board to slideways.



Server Rear Side [2/6] – OCP3.0 Installation

□ Step#2 – Push the OCP module to the end and tight up the screw.



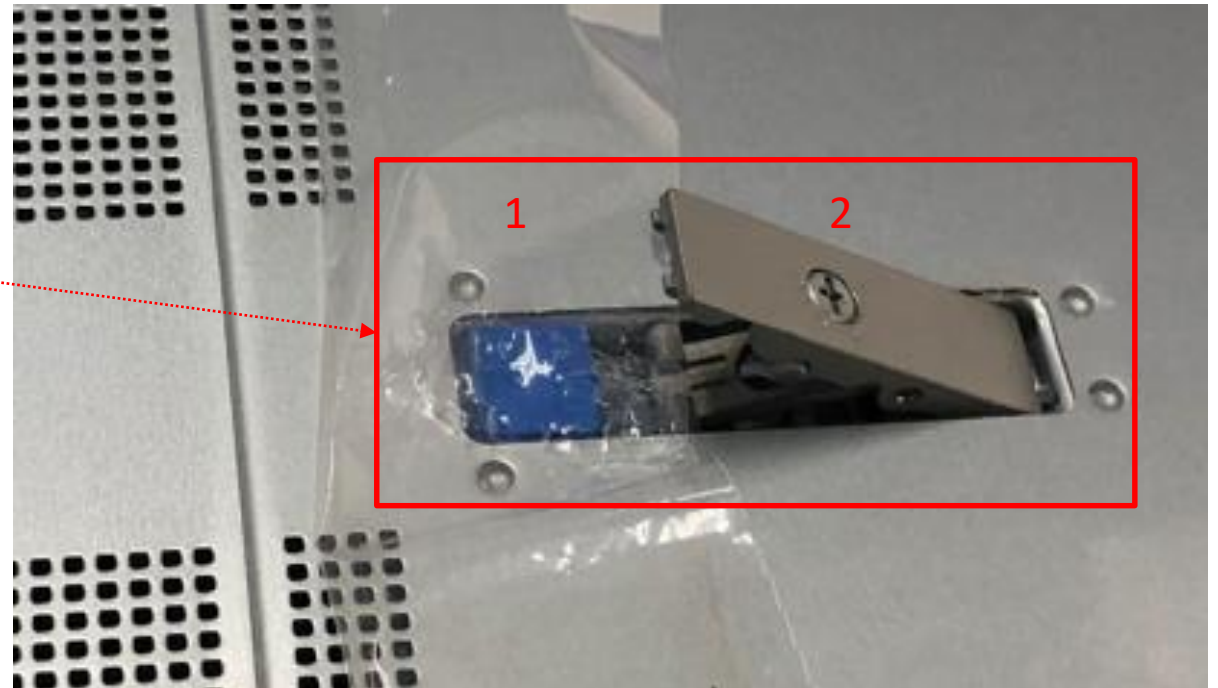
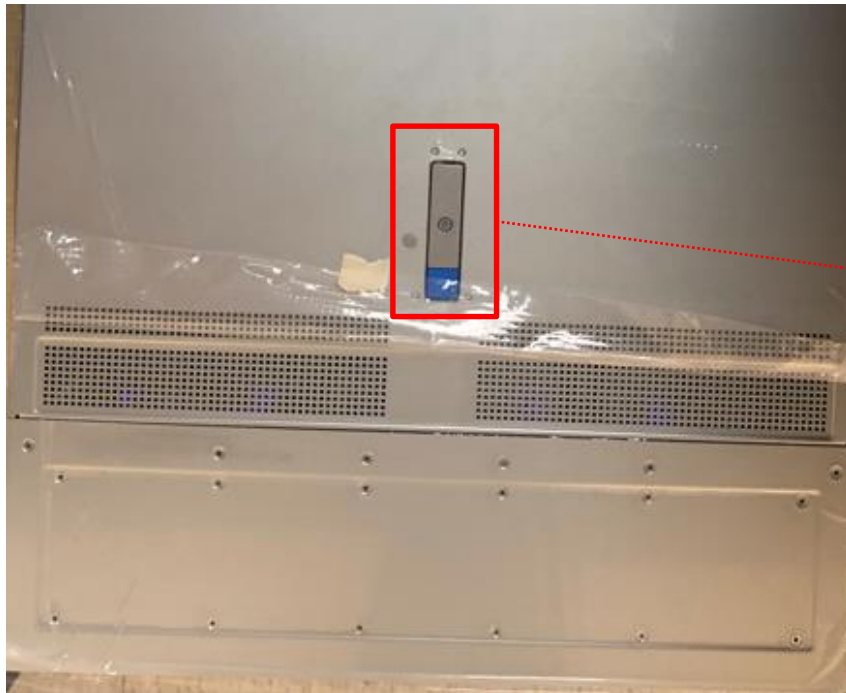
Server Rear Side [3/6]- Remove PCIe Cage

❑ Step #1 Loose the screws on both side



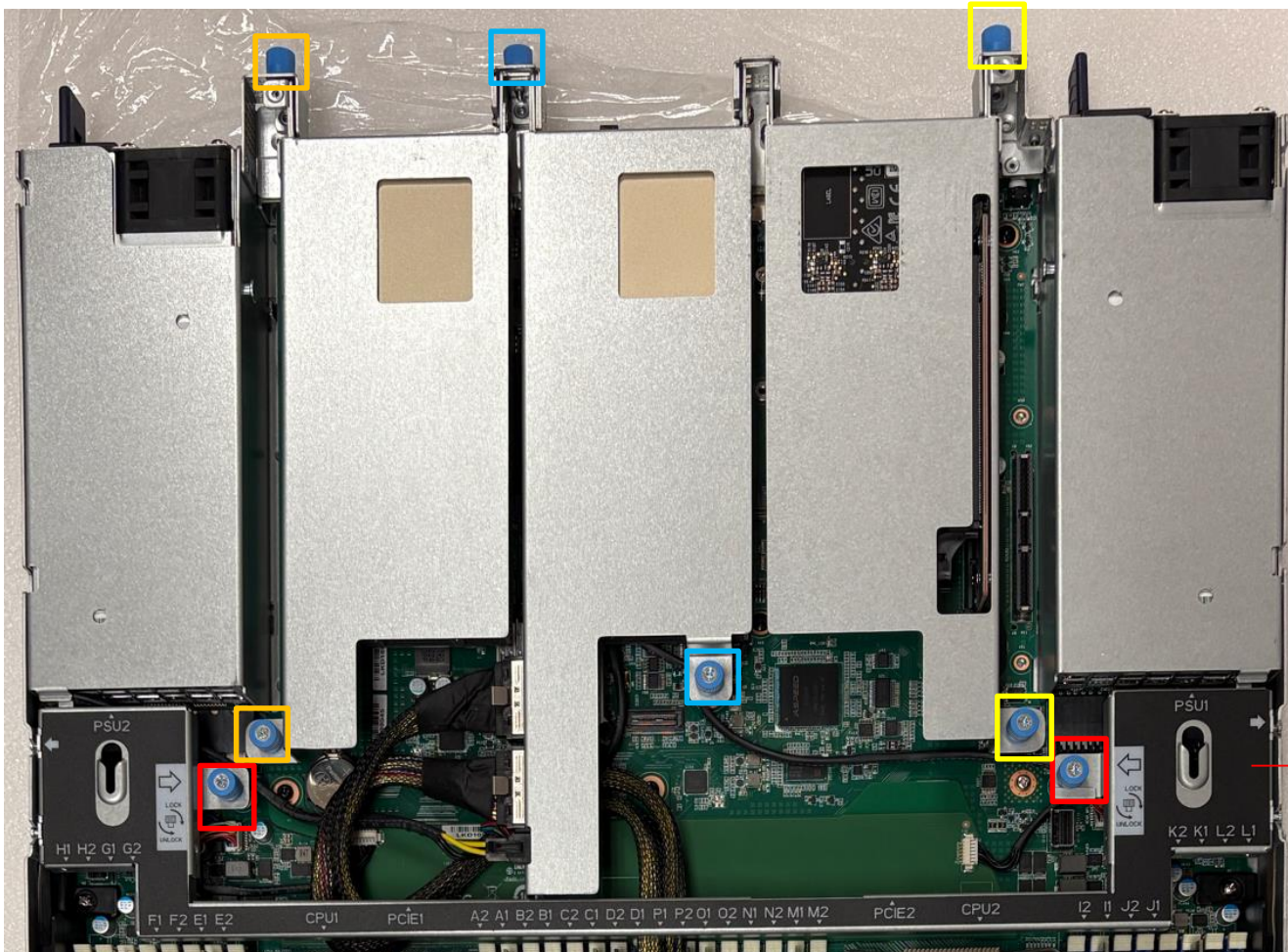
Server Rear Side [3/6]- Remove PCIe Cage

- ❑ Step #2 Unlock the locker and push down blue button, slightly pull up the locker handler and open top cover.



Server Rear Side [3/6]- Remove PCIe Cage

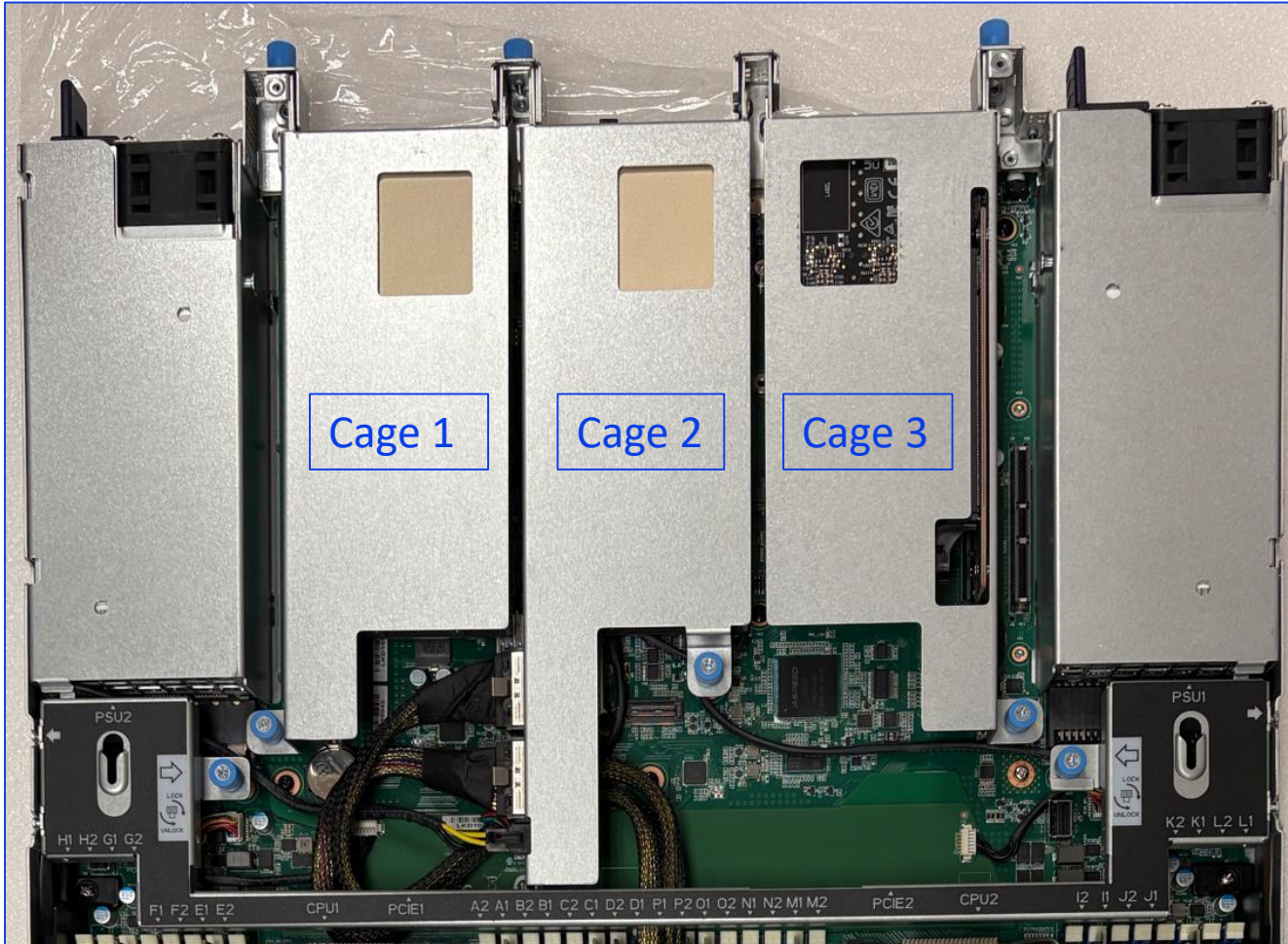
- ❑ Step #3 Loose screws on following positions and remove the cage fixer.



Cage fixer

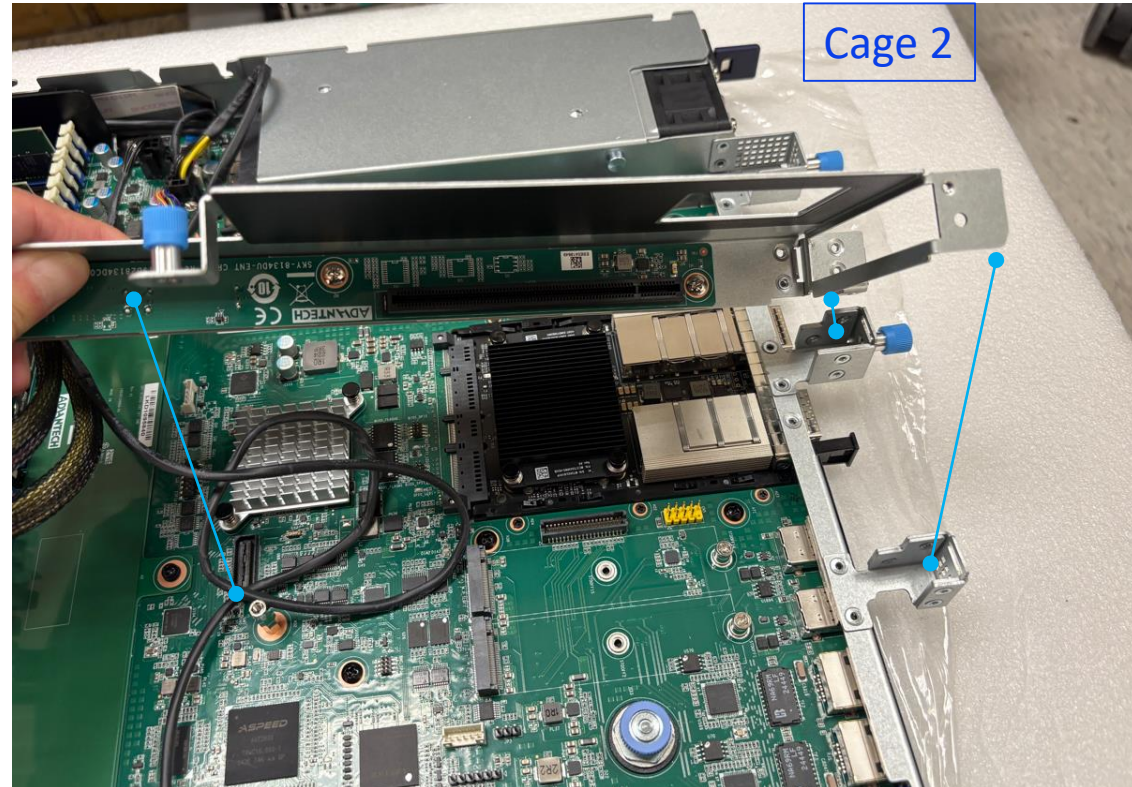
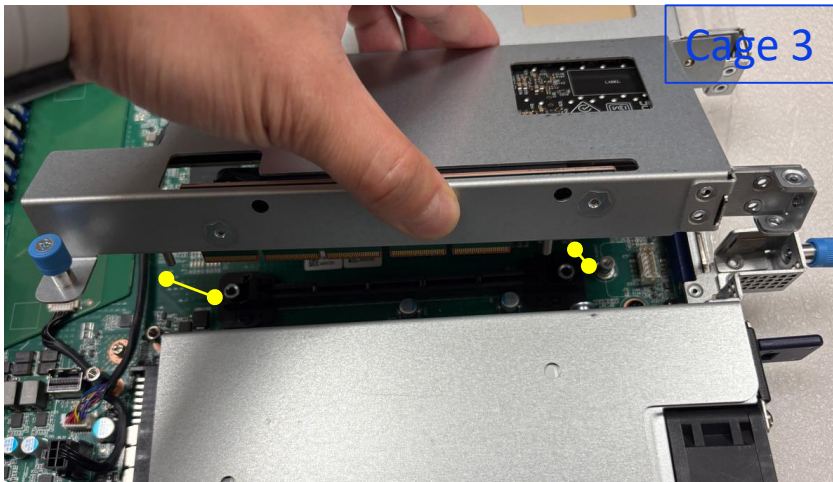
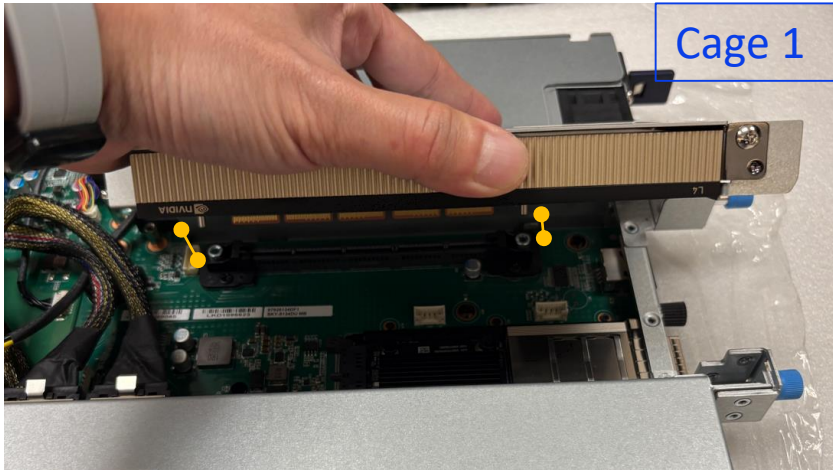
Server Rear Side [3/6]- Remove PCIe Cage

- ❑ Step #4 Use both hand to pull up the cage at same time, once a cage.



Server Rear Side [4/6]- Install PCIe Cage

- ❑ Step #5 Align PCIe golden finger to connector, be carefully to push down then.



Server Rear Side [5/6]- Insert PCIe card

- ❑ Step #1 Loose the screw and remove PCIe dummy

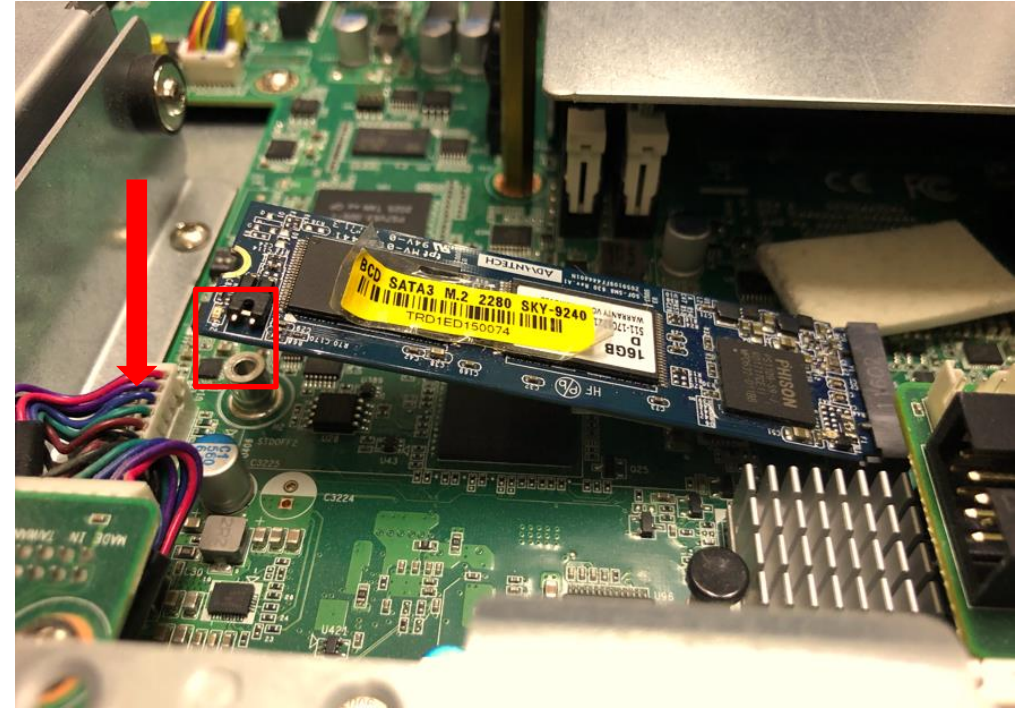
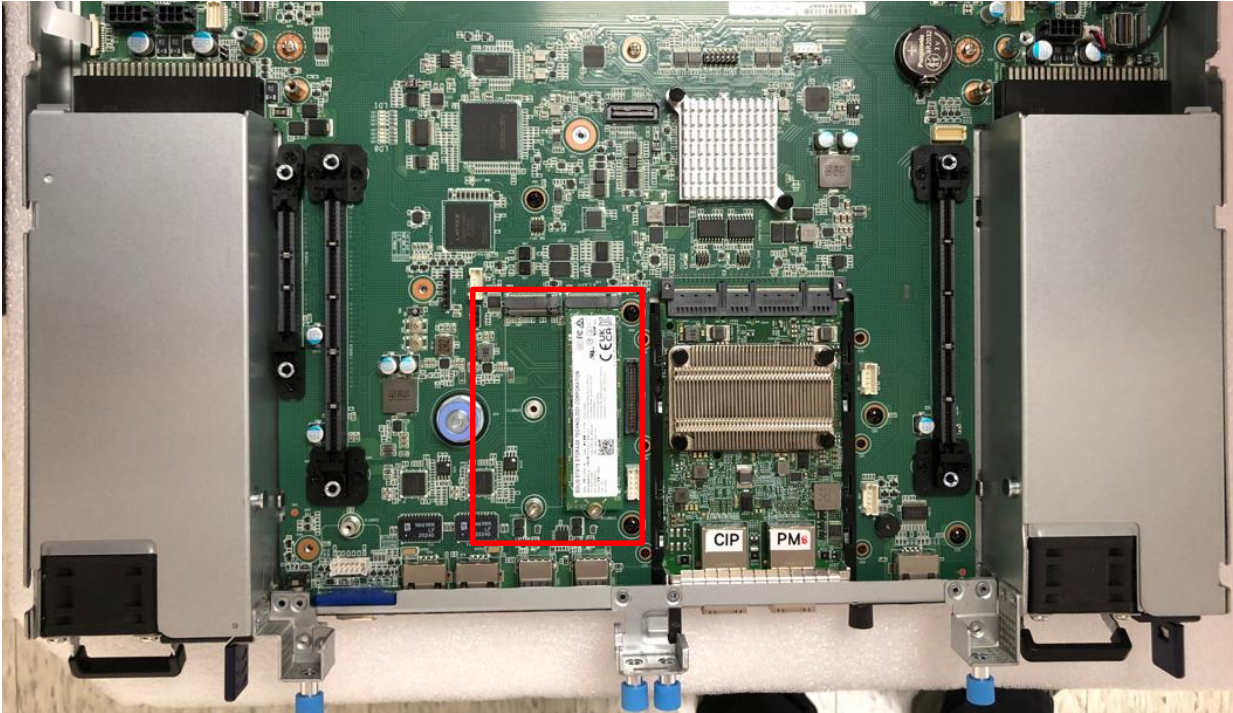


- ❑ Step #2 Insert PCIe card and tight up the screw



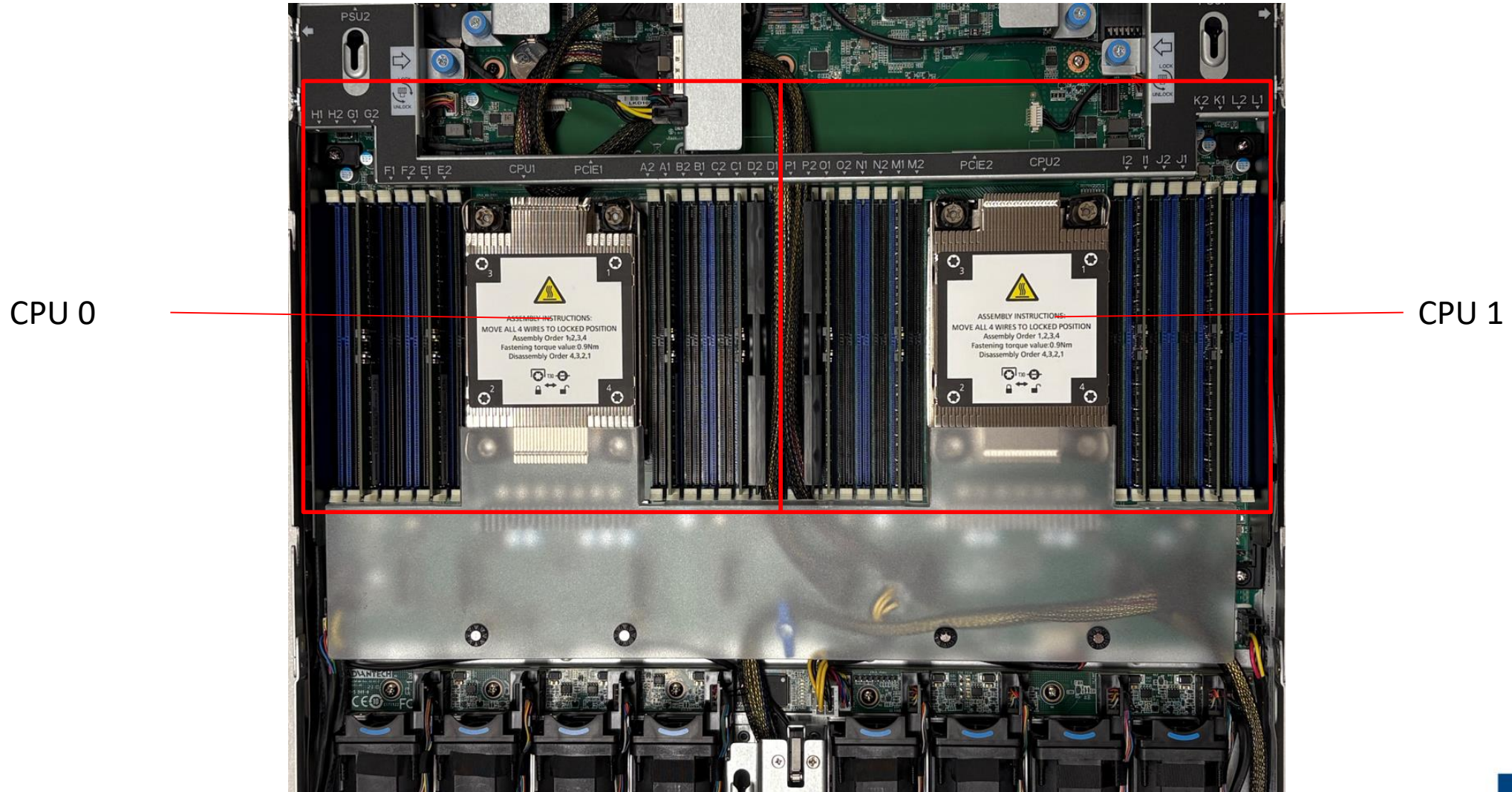
Server Rear Side [6/6]-Storage M.2

- ❑ Insert 2280 M.2 storage, push down and screw it up



DIMMs Population [1/4]- Notes

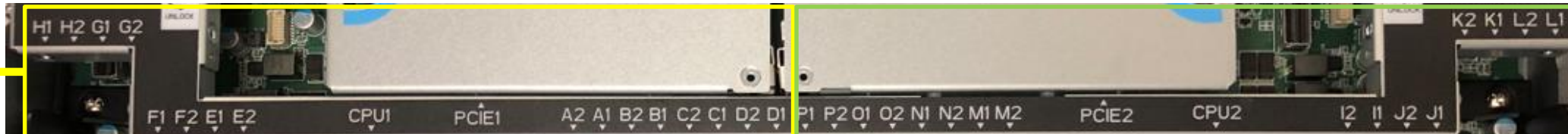
DIMMs A1~H2 are for CPU 0, I1 ~ P2 are for CPU 1.



DIMMs Population [1/4]- Notes

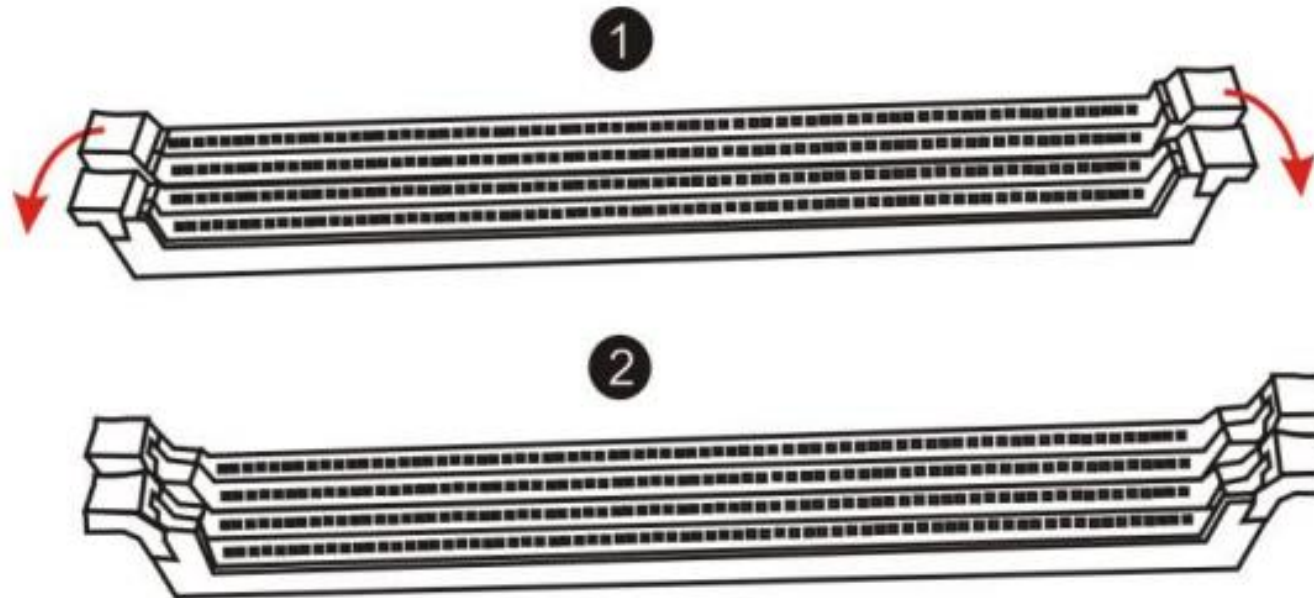
Refer table below to populate DIMMs.

| IMC# | iMC3 | | | | iMC2 | | | | | iMC0 | | | | iMC1 | | | |
|------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|-------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| | Chan 1 (7/H) | | Chan 0 (6/G) | | Chan 1 (5/F) | | Chan 0 (4/E) | | | Chan 0 (0/A) | | Chan 1 (1/B) | | Chan 0 (2/C) | | Chan 1 (3/D) | |
| DDR5 | H1 | H2 | G1 | G2 | F1 | F2 | E1 | E2 | | A2 | A1 | B2 | B1 | C2 | C1 | D2 | D1 |
| | P1 | P2 | O1 | O2 | N1 | N2 | M1 | M2 | | I2 | I1 | J2 | J1 | K2 | K1 | L2 | L1 |
| | Slot0 | Slot1 | Slot0 | Slot1 | Slot0 | Slot1 | Slot0 | Slot1 | | Slot1 | Slot0 | Slot1 | Slot0 | Slot1 | Slot0 | Slot1 | Slot0 |
| 1+0 | | | | | | | | | C P U | | DDR5 | | | | | | |
| | | | | | | | | DDR5 | | | | | DDR5 | | | | |
| | | | | | DDR5 | | | | | | | | | | | | |
| 2+0 | | | DDR5 | | | | | | | DDR5 | | | | | | | |
| | | | | | | | DDR5 | | | | | | | DDR5 | | | |
| | | | | | | | | DDR5 | | | | | | | DDR5 | | |
| 4+0 | | | DDR5 | | | | DDR5 | | | DDR5 | | | | DDR5 | | | |
| | | | DDR5 | | DDR5 | | DDR5 | | | DDR5 | | | | DDR5 | | | DDR5 |
| | | | DDR5 | | DDR5 | | DDR5 | | | DDR5 | | | | DDR5 | | | DDR5 |
| 6+0 | DDR5 | | DDR5 | | | | DDR5 | | | DDR5 | | DDR5 | | DDR5 | | | |
| | DDR5 | | | | DDR5 | | DDR5 | | | | | DDR5 | | DDR5 | | | DDR5 |
| | DDR5 | | DDR5 | | DDR5 | | | | | DDR5 | | DDR5 | | | | | DDR5 |
| 8+0 | DDR5 | | DDR5 | | DDR5 | | DDR5 | | | DDR5 | | DDR5 | | DDR5 | | | DDR5 |
| | DDR5 | | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | | DDR5 | DDR5 | | DDR5 | DDR5 | | | DDR5 |
| | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | DDR5 | | | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | | DDR5 |
| 12+0 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 |
| | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | DDR5 | | | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 |
| | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 |
| 16+0 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 | DDR5 |



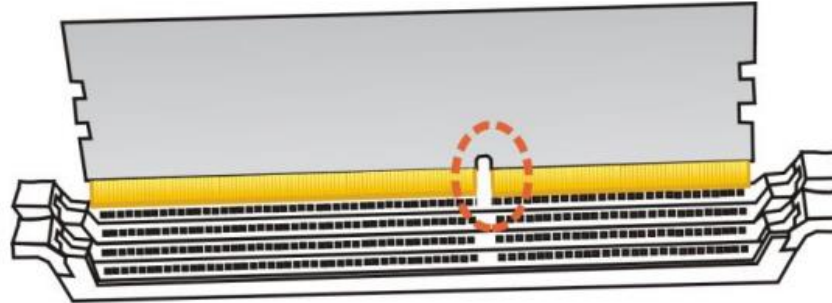
DIMMs Population [2/4]- Opening DIMM latches

❑ Step#1 – Open the latches on the left and right sides of the DIMMs by turning it outwards as indicated by the arrows below:

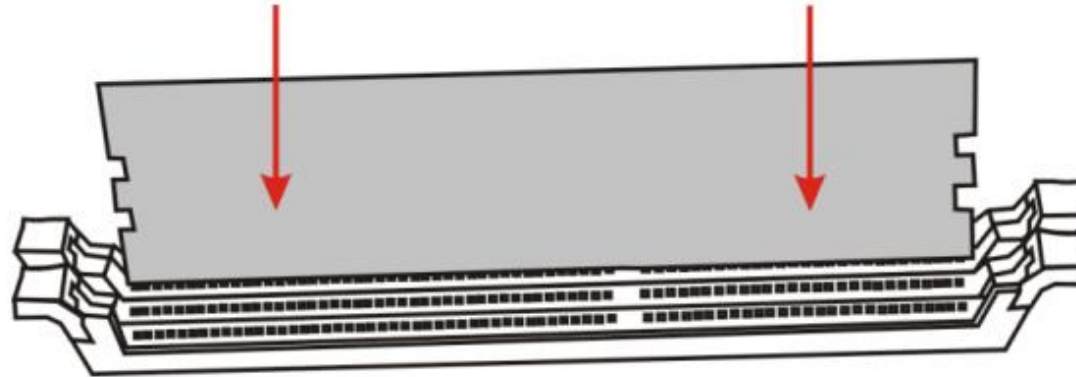


DIMMs Population [3/4]- DIMM Key Alignment

- ❑ Step#2 – Select DIMM orientation so that the keys in the DIMM module and socket match



- ❑ Step#3 – Insert the DIMM from the top using the guide rails on the left and right of the DIMM sockets



DIMMs Population [4/4]- fixing DIMM in the Socket

- ❑ Step#4 – Put your thumbs near the right and left end of the DIMM and press down the DIMM evenly until the white latches fully close with a click



Access the device via Console

❑ Step#1 – Power on the device

○ Prerequisite:

✓ Get AC 100-240V @ 50-60Hz, full range

○ Device will boot:

✓ Correct behavior: you can hear FAN rotating in maximum speed for a while then down and also the Power LEDs should light up in blue color



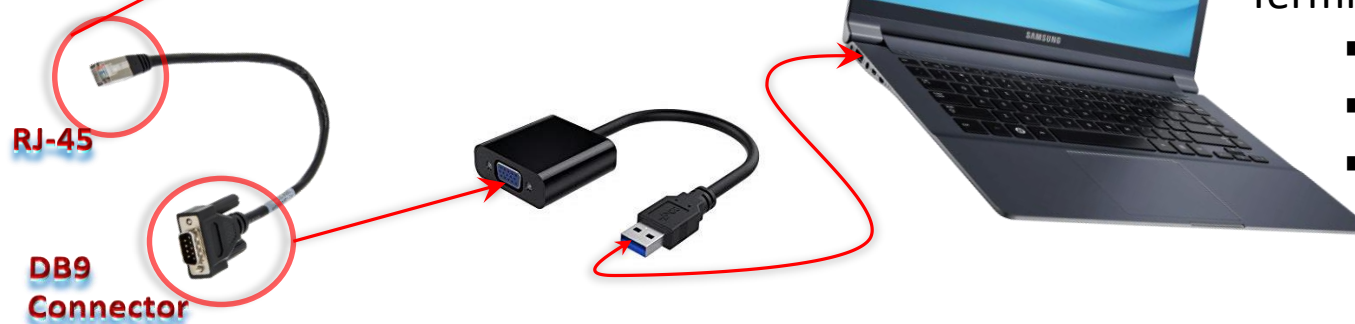
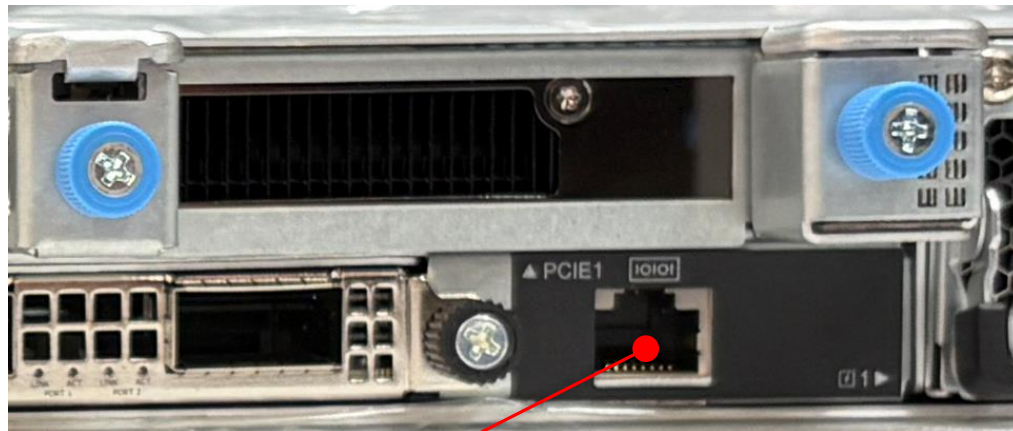
Picture depicted how to plug in the PSU cable



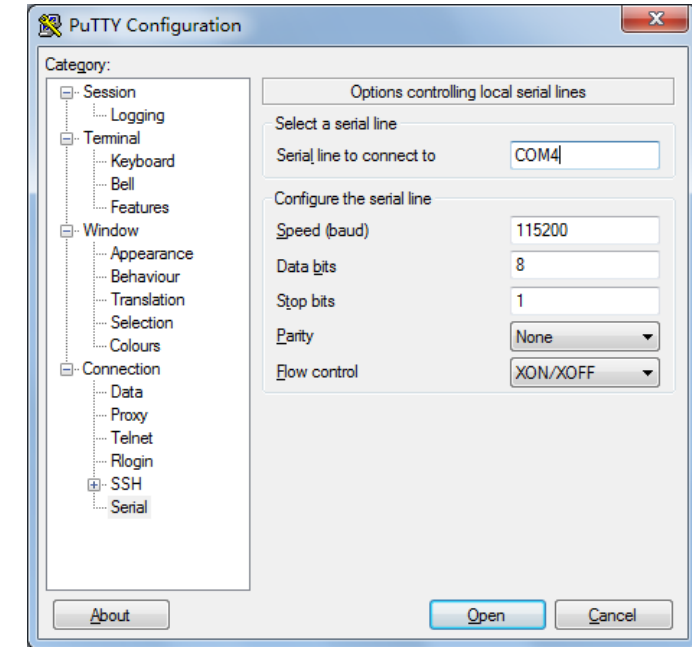
Picture depicted the light color while device booting

Access the device via Console

- ❑ Step#2 – Access the device
 - Prerequisite:
 - ✓ Console cable and PC + Terminal
 - Connect the PC to the server console



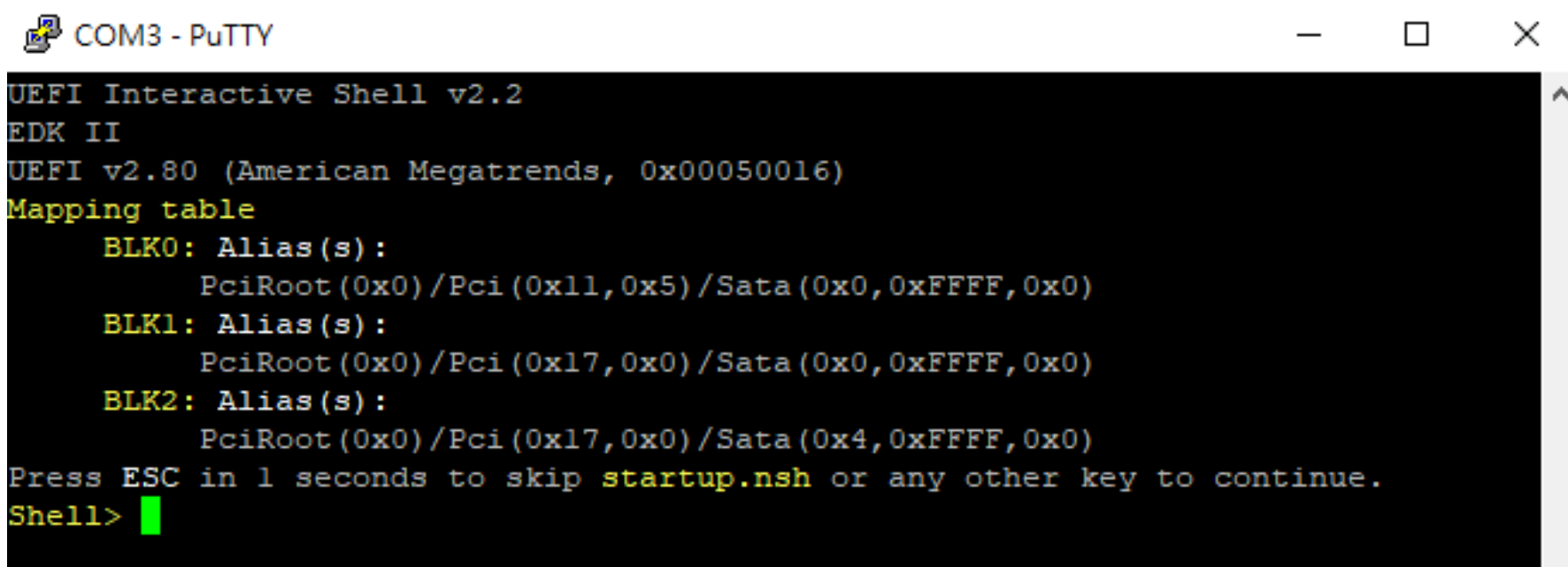
Terminal settings



Terminal Setting:

- Baud rate: 115200
- Data bits : 8
- Stop bits: 1

Access the device via Console

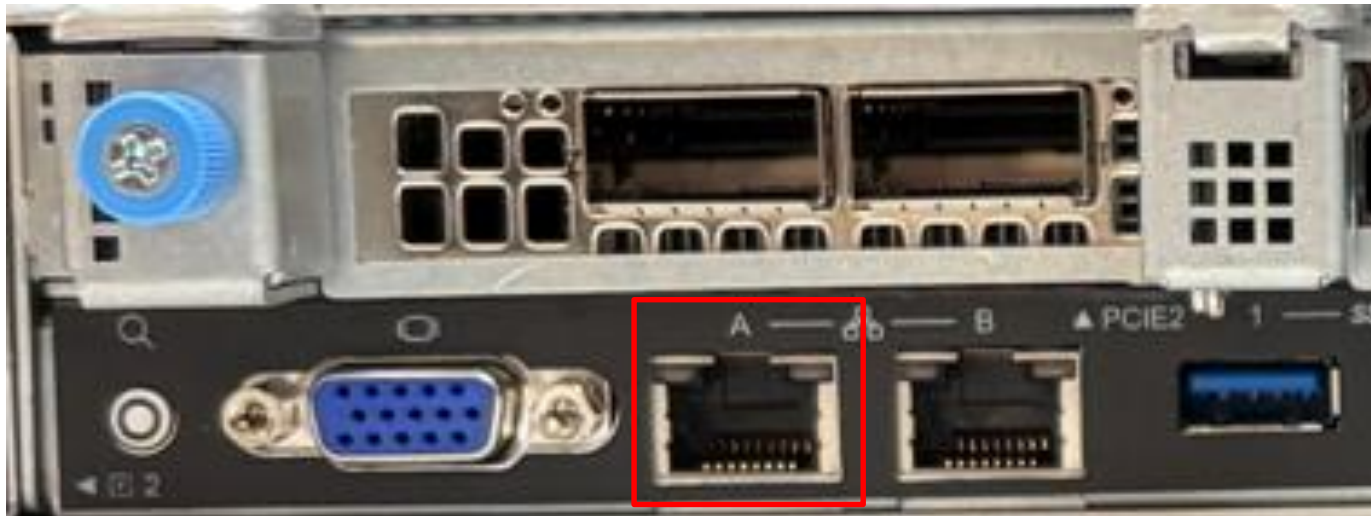


```
COM3 - PuTTY
UEFI Interactive Shell v2.2
EDK II
UEFI v2.80 (American Megatrends, 0x00050016)
Mapping table
  BLK0: Alias(s):
        PciRoot(0x0)/Pci(0x11,0x5)/Sata(0x0,0xFFFF,0x0)
  BLK1: Alias(s):
        PciRoot(0x0)/Pci(0x17,0x0)/Sata(0x0,0xFFFF,0x0)
  BLK2: Alias(s):
        PciRoot(0x0)/Pci(0x17,0x0)/Sata(0x4,0xFFFF,0x0)
Press ESC in 1 seconds to skip startup.nsh or any other key to continue.
Shell>
```

Picture depicted successfully server access via console

Web UI access

- ❑ In order to access the Web UI, we need to configure the IP address. In this part, we will describe how to set up Web UI IP address via BIOS



WebUI [1/4]- Configure BMC IP from BIOS

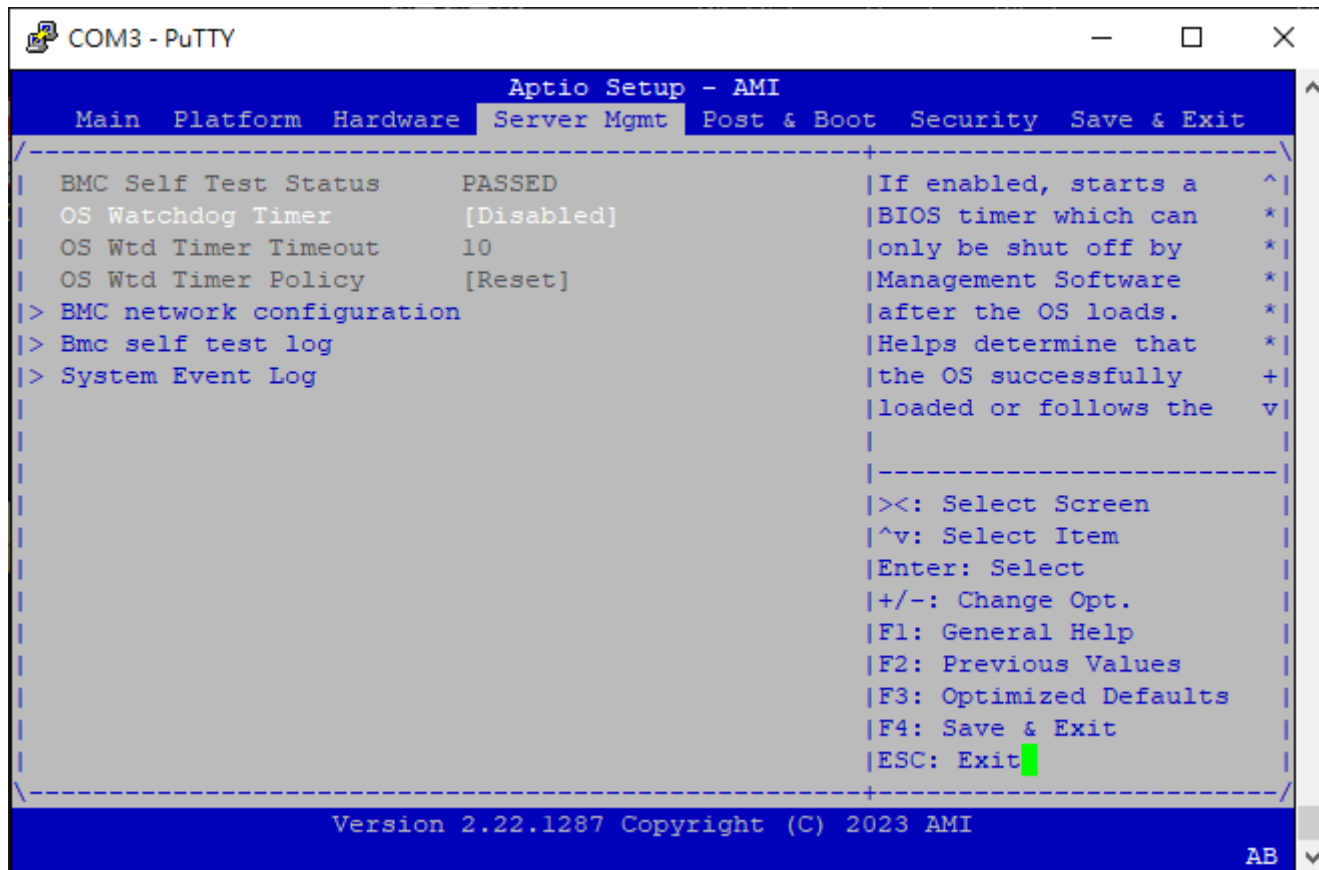
- ❑ Step#1- Press [Delete] entering BIOS setup menu

```
COM3 - PuTTY
```

```
Version 2.22.1287. Copyright (C) 2023 AMI  
**** SKY-8134DU BIOS V1.03 (05/31/2023) ****  
Press <DEL> or <F2> to enter setup.  
  
"Evaluation ROM only, not for sale."  
  
@ The Evaluation Start Date : 10/26/2023 @  
@ The Evaluation Expired Date : 04/26/2024 @  
Entering Setup...
```

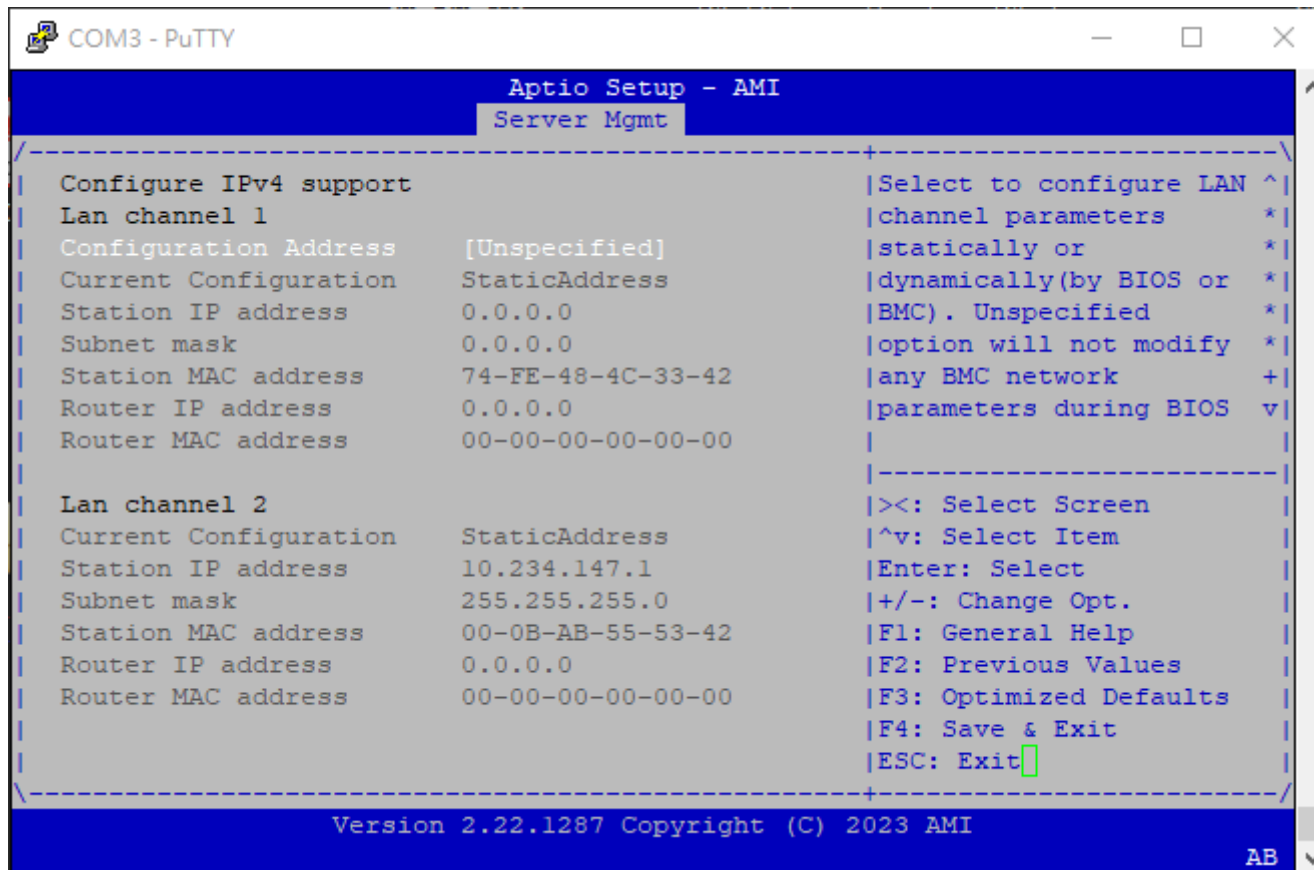
WebUI [2/4]- Configure BMC IP from BIOS

- ❑ Step#2- Select "Server Mgmt" page.



WebUI [3/4]- Configure BMC IP from BIOS

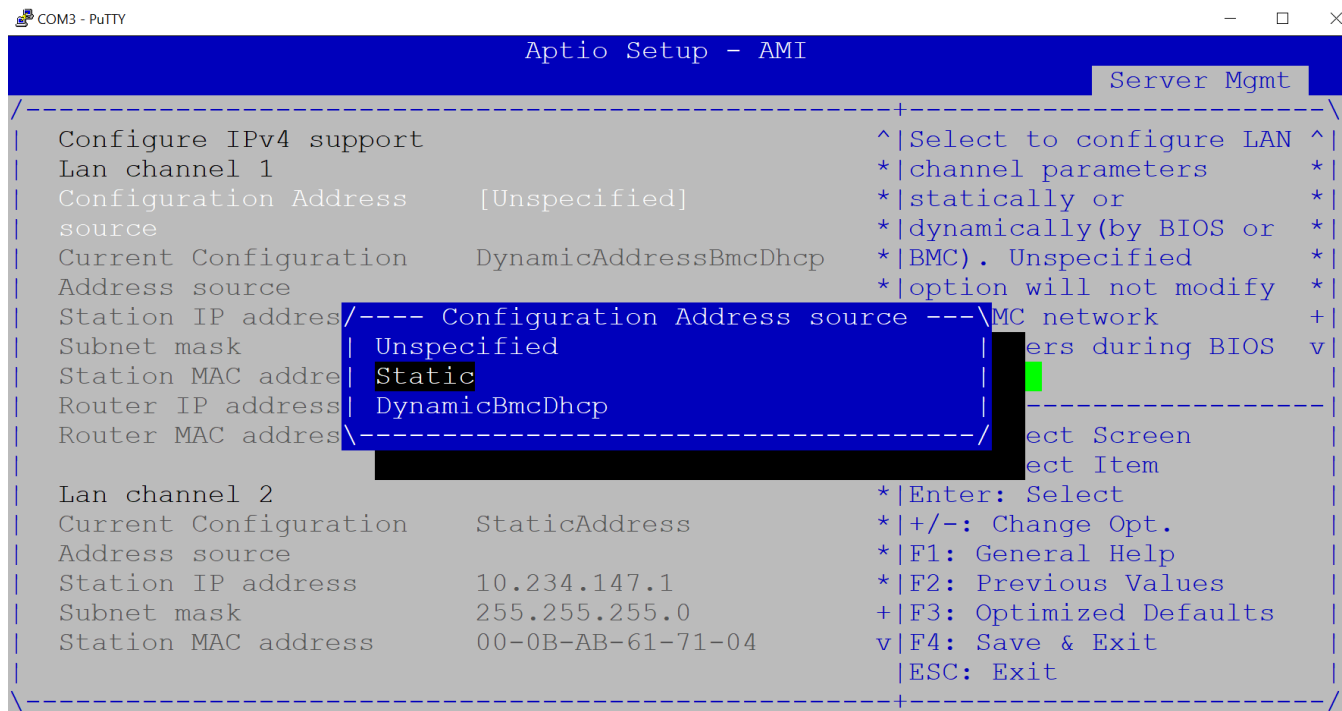
- ❑ Step#3- Choose "BMC network configuration"



WebUI [4/4]- Configure BMC IP from BIOS

❑ Step#4- Set "Configuration Address" -> "Static", and then key in the IP address and subnet mask.

*You could also choose DHCP as well to obtain an IP address from your DHCP server.



❑ Step#5- "Save and Exit" -> "Save Changes and Reset".

❑ Step#6- Repeat Step#1 ~ Step#3 to check the BMC IP address.

Web UI access from browser

After completing the steps above (Web UI IP configured via either BIOS or IPMI commands), open your favorite browser the enter the Web UI IP as below: <https://BMCIP>

The default login credentials:

- User: administrator
- Password: advantech

The screenshot displays the Advantech Web UI for a device identified as SKY-8134DU. The interface features a dark blue header with the Advantech logo and a navigation sidebar on the left. The main content area is titled 'Overview' and is divided into two columns: 'General Information' and 'Firmware Versions'. The 'General Information' column lists BMC Up Time (5 Hours 26 Minutes 49 Seconds), BMC Booted on (October 30, 2023 10:23:44 +08:00), and Hostname (bmc-AKA0390593). The 'Firmware Versions' column lists BL (0.30.00000000), BMC (0.71.00000000), BMCONF (0.03.00000001), FPGA (0.17.00000000), BIOS (1.03.00000000), and NVRAM (21.00.00000000). The top right of the interface includes status indicators (OK, Power Control), navigation links (BIOS Post, Refresh, English, Logout), and a language selector.

| General Information | Firmware Versions |
|---|-------------------------|
| BMC Up Time 5 Hours 26 Minutes 49 Seconds | BL 0.30.00000000 |
| BMC Booted on October 30, 2023 10:23:44 +08:00 | BMC 0.71.00000000 |
| Hostname bmc-AKA0390593 | BMCONF 0.03.00000001 |
| | FPGA 0.17.00000000 |
| | BIOS 1.03.00000000 |
| | NVRAM 21.00.00000000 |

Node Explorer User Manual

<https://www.advantech.com/support/details/manual?id=1-1MU1KB1>

*Go Together,
We Go Far and Grow Big*

