

FWA-5082 QSG



NSP, Alan.Ku

07/08th , 2025

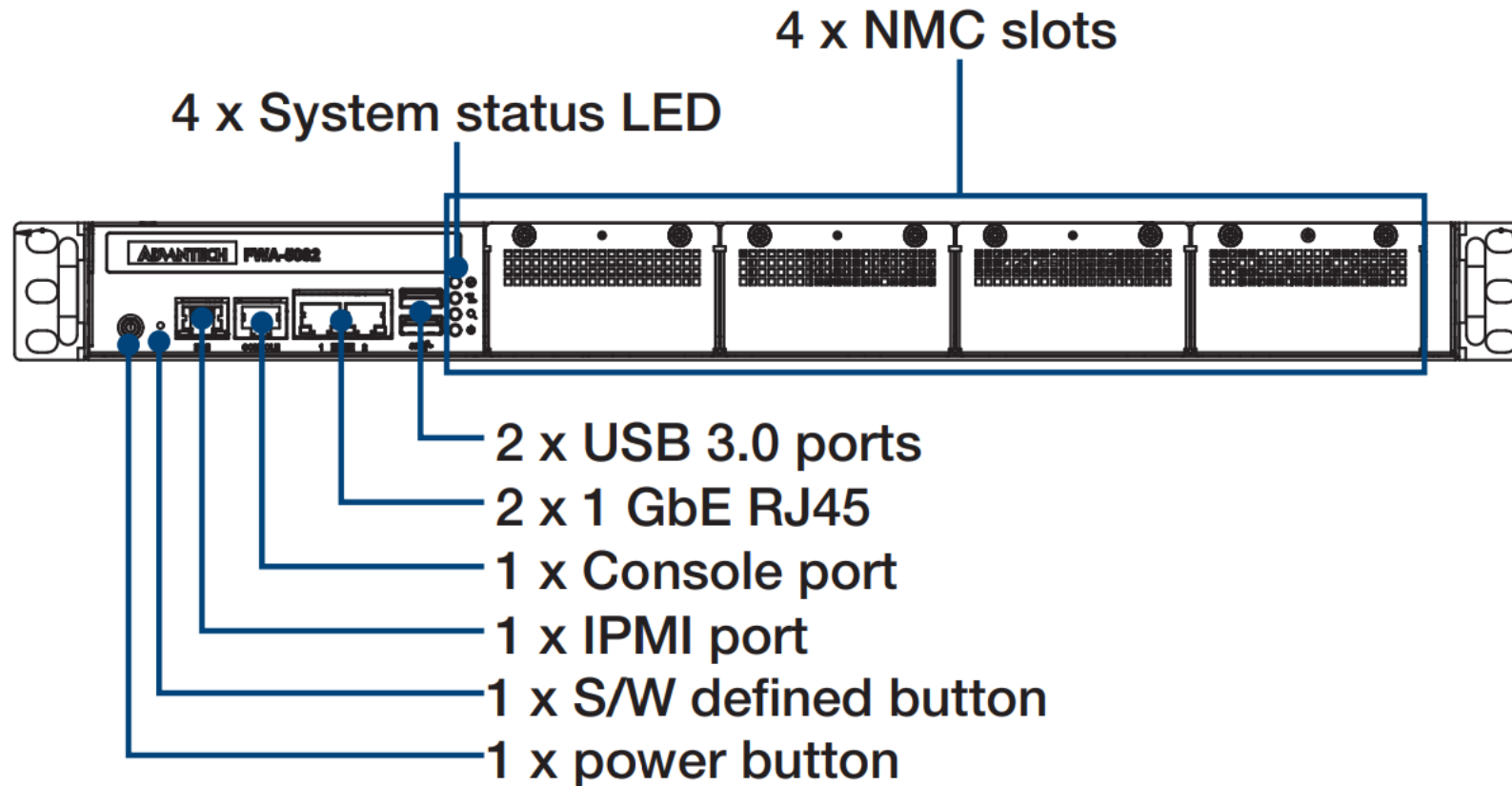
History

Version	Date	Handled by	Note
V01	2025/07/08	Alan.Ku	Release version

Agenda

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

Server Front Side [1/4]- Overview



Server Front Side [2/4]- Status LEDs



SW_DEF LED

Alert LED

Locate LED

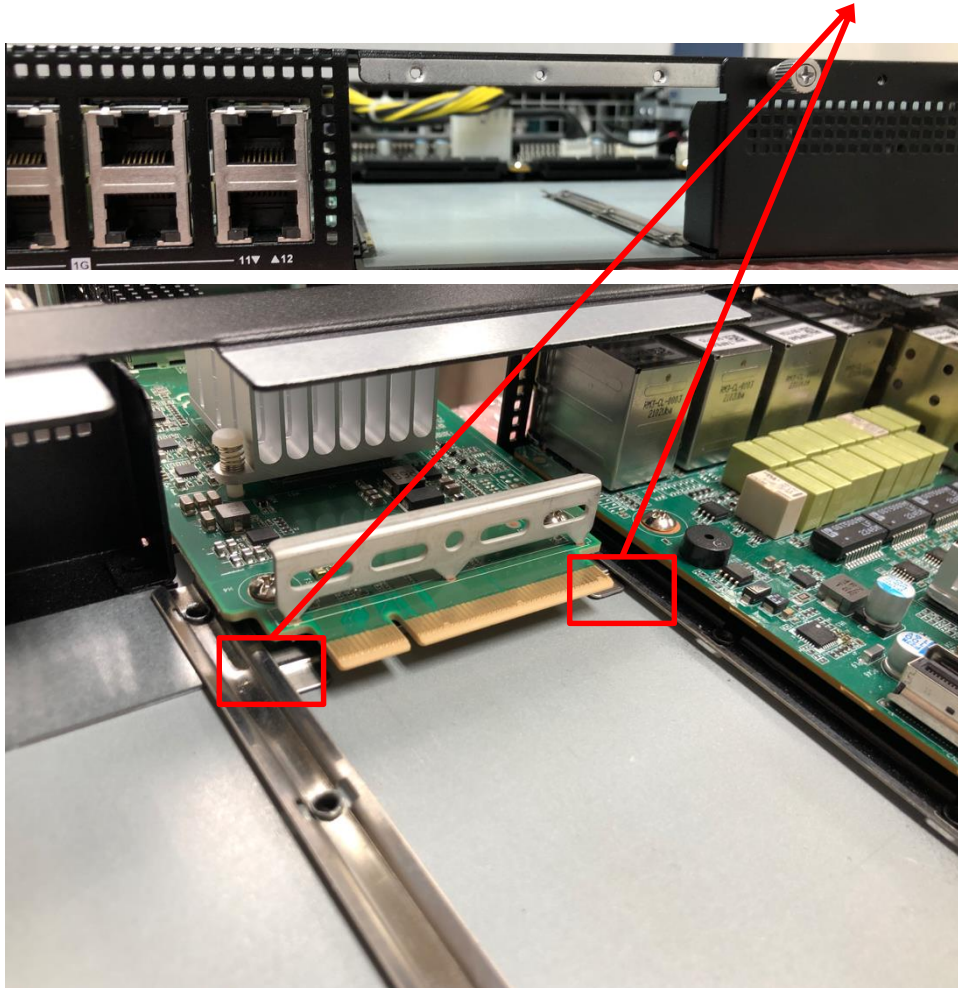
Power LED

Server Front Side [3/4]- NMC slots



Server Front Side [4/4]- NMC modules

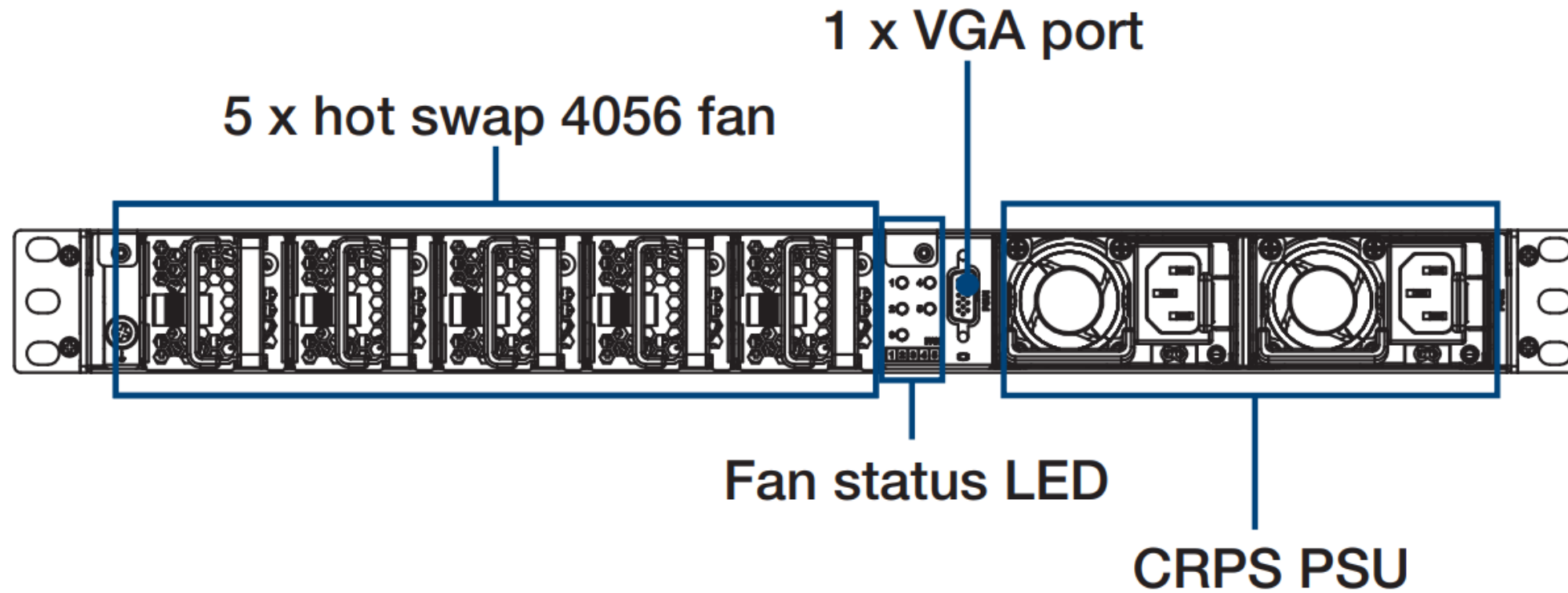
1. Align NMC module to slide trails



2. Push to the end



Server Rear Side [1/6]- Overview

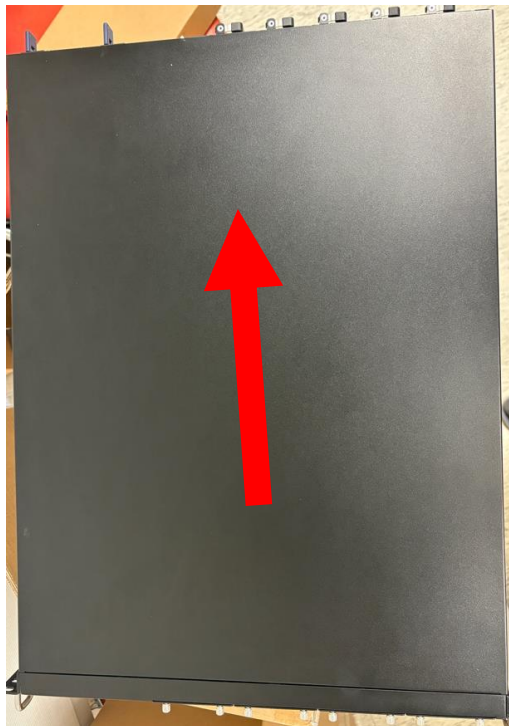


Server Rear Side [2/6]- Remove top cover

1. Remove all screw

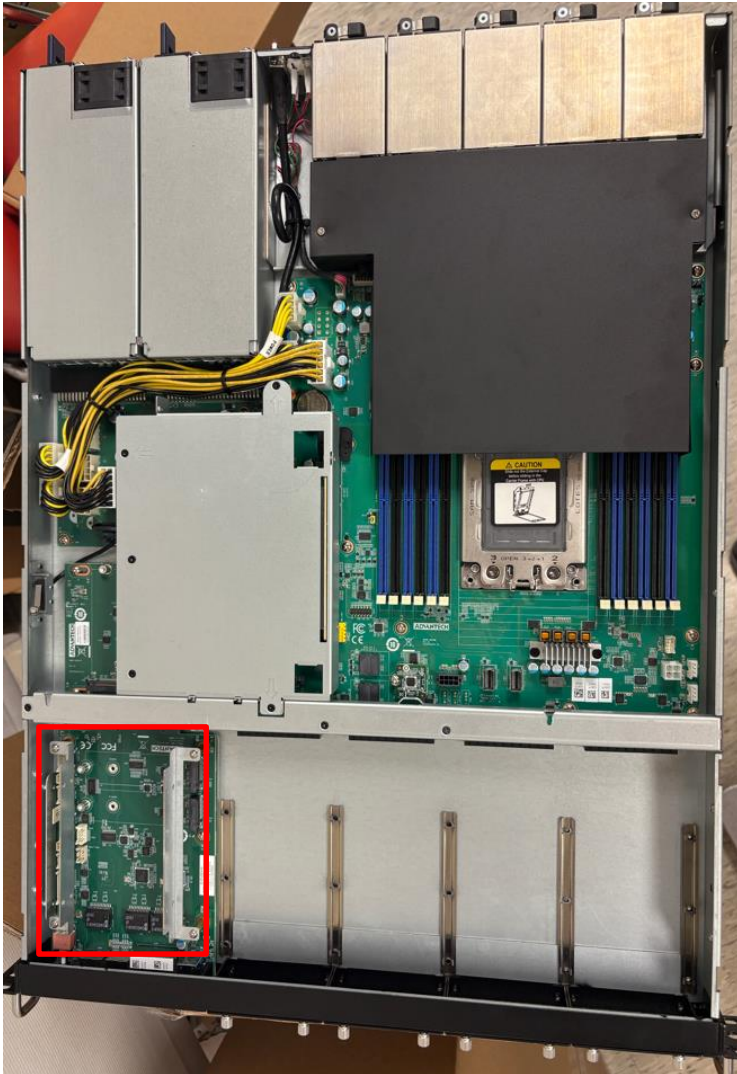


2. Push top cover backward



Server Rear Side [3/6]- Install 2.5' HDD/SSD

1. Find disk holder.



2. Find SATA cable and it power cable.

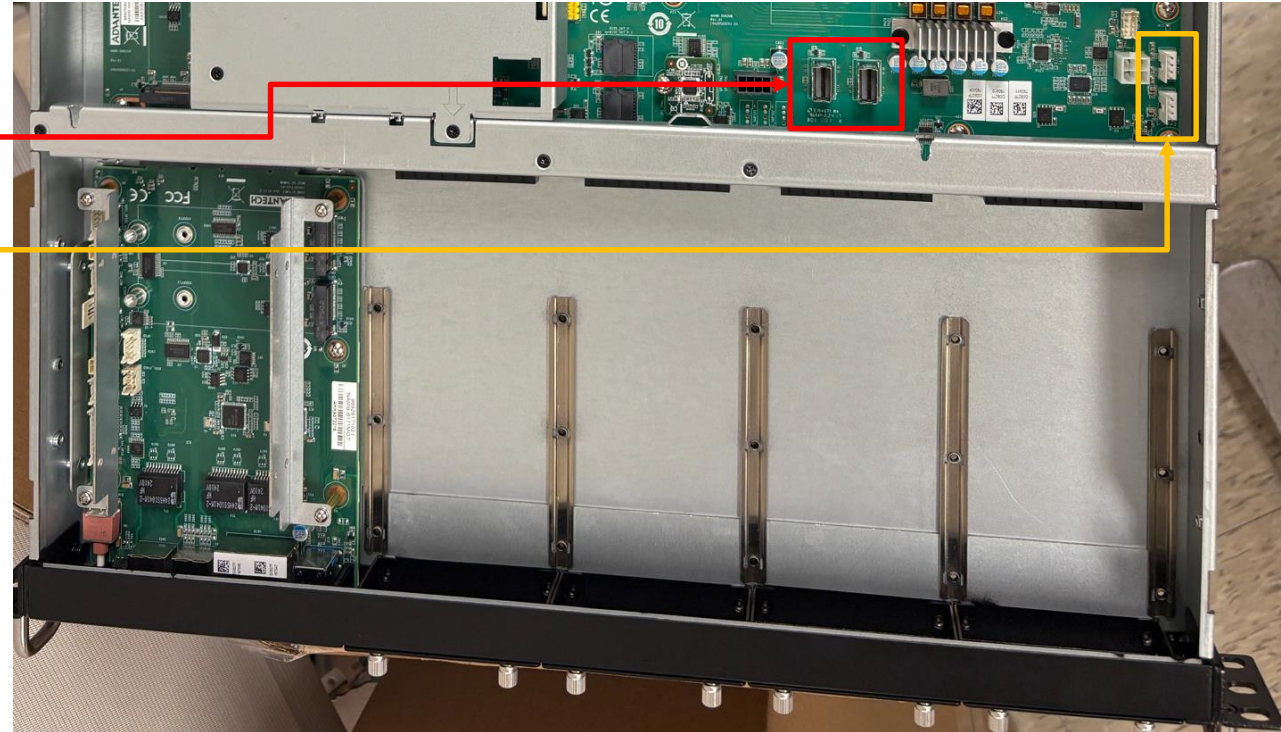


Server Rear Side [4/6]- Install 2.5' HDD/SSD

3. Fit 2.5 inch disks in the holder.

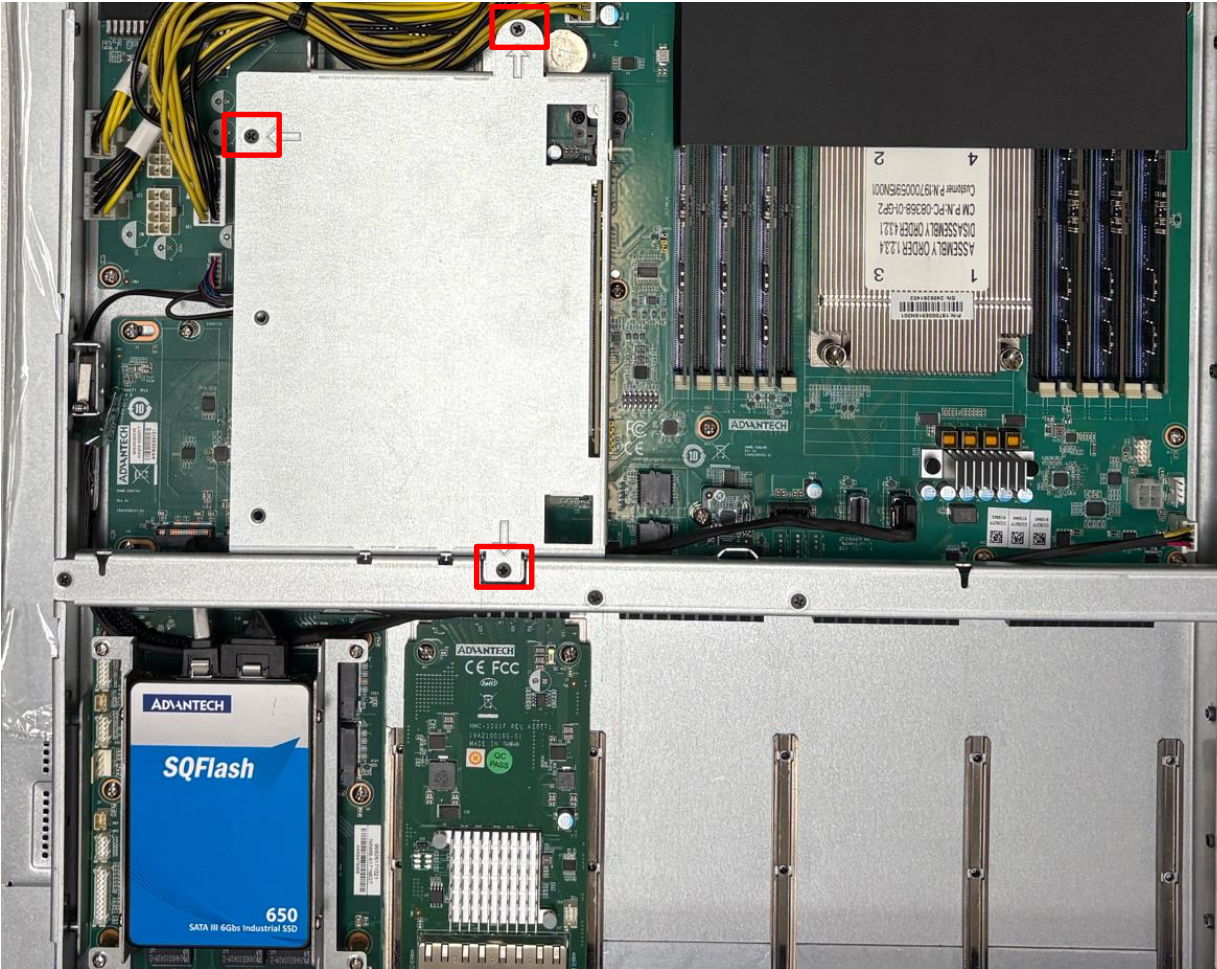


4. Plug cables to following connectors

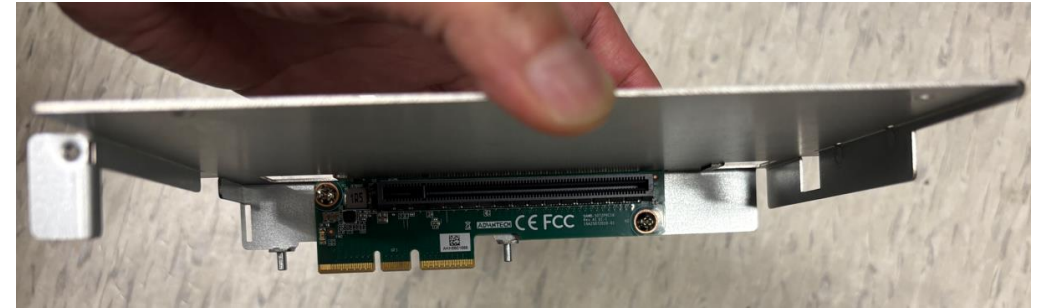


Server Rear Side [5/6]- PCIe Cage

1. Loose three screws from top.

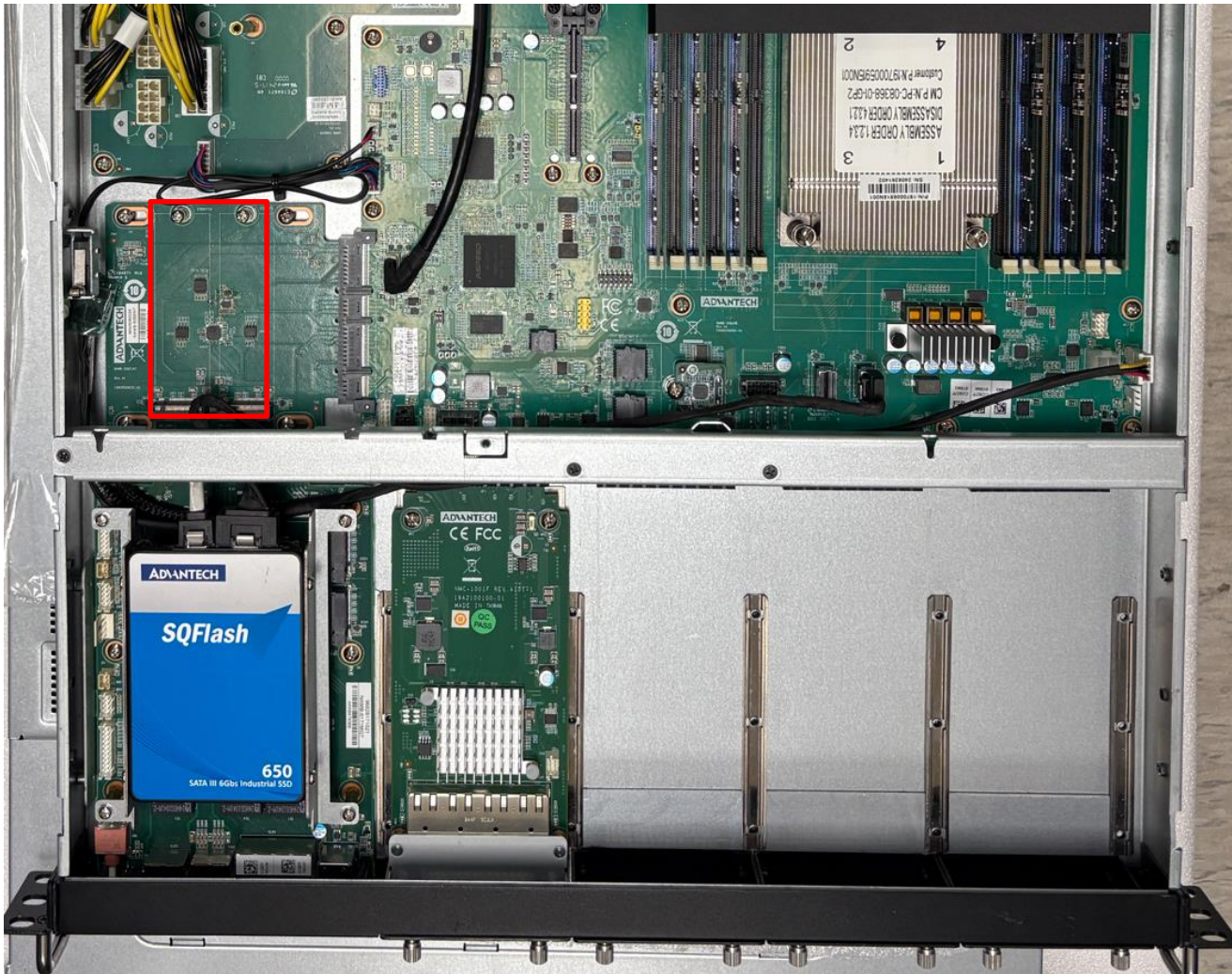


2. Slightly pull up the cage.

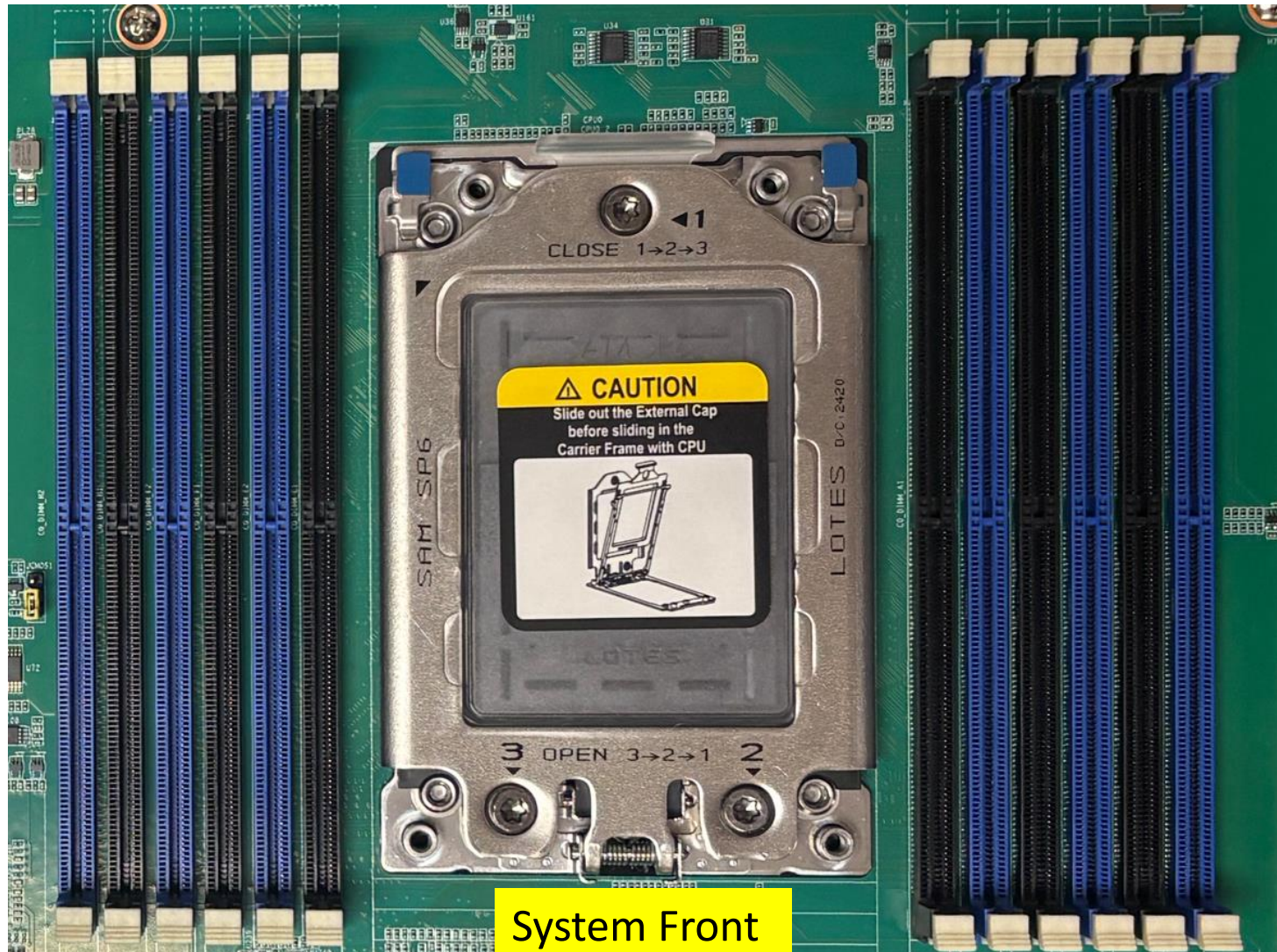


Server Rear Side [6/6]- Install M.2 disks

M.2 connectors are under PCIe cage.



DIMMs Population [1/4]- Notes



H2

H1

F2

F1

E2

E1

A1

A2

B1

B2

D1

D2

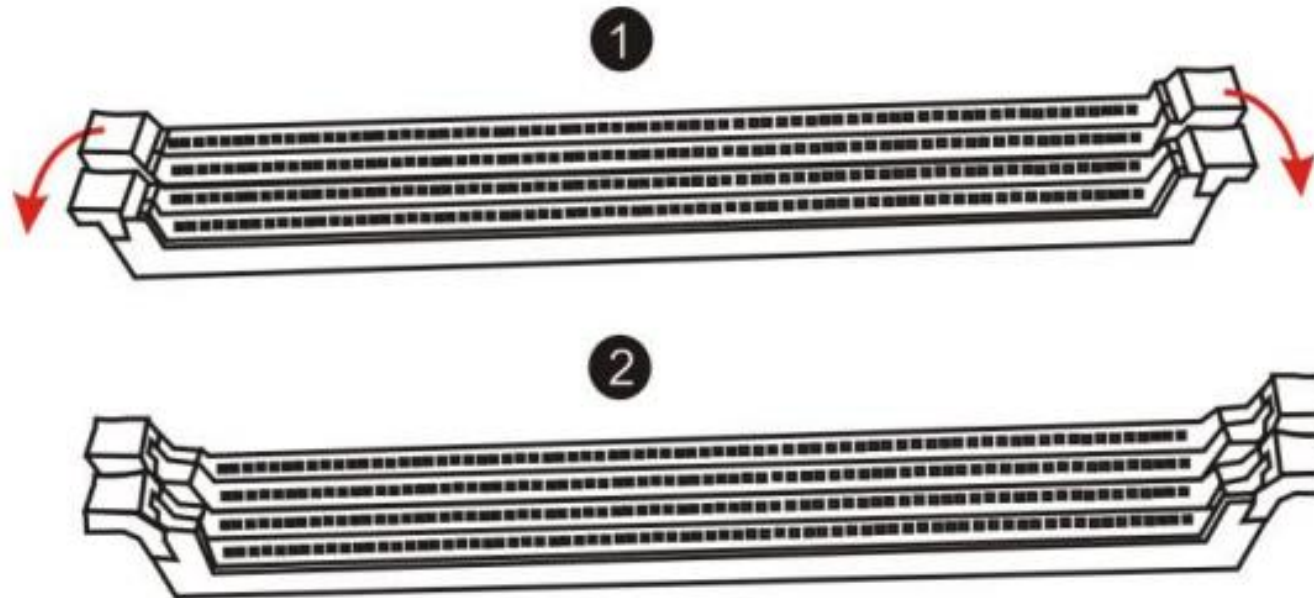
DIMMs Population [1/4]- Notes

Refer AMD document #57609 “Memory Population Guidelines for AMD Family 19h Models A0h-Afh Socket SP6 Processors”

CPU0	H2	H1	F2	F1	E2	E1	A1	A2	B1	B2	D1	D2
1								DDR5				
2							DDR5	DDR5				
2					DDR5			DDR5				
4					DDR5	DDR5	DDR5	DDR5				
4	DDR5				DDR5			DDR5				DDR5
6	DDR5		DDR5		DDR5			DDR5		DDR5		DDR5
8	DDR5	DDR5			DDR5	DDR5	DDR5	DDR5			DDR5	DDR5
12	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5	DDR5

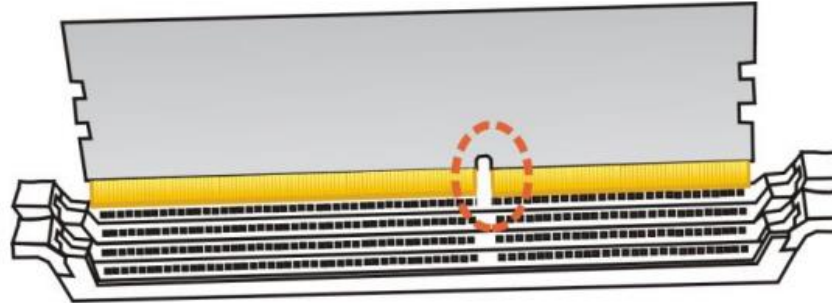
DIMMs Population [2/4]- Opening DIMM latches

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

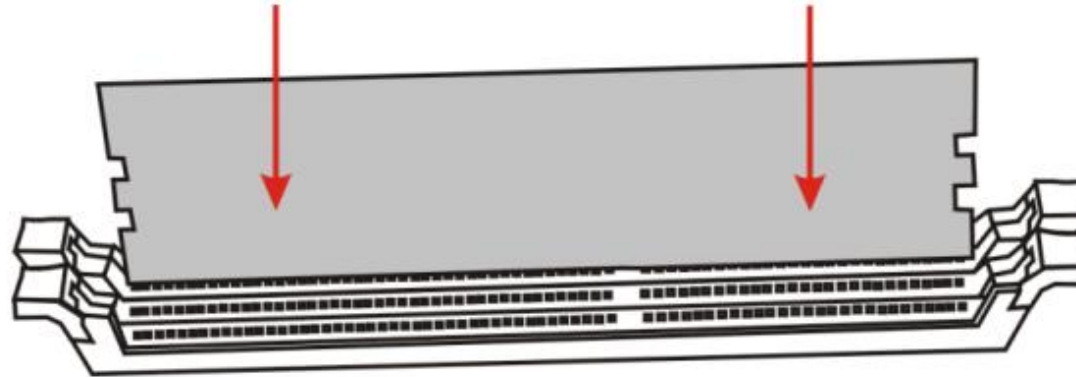


DIMMs Population [3/4]- DIMM Key Alignment

- ❑ 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:

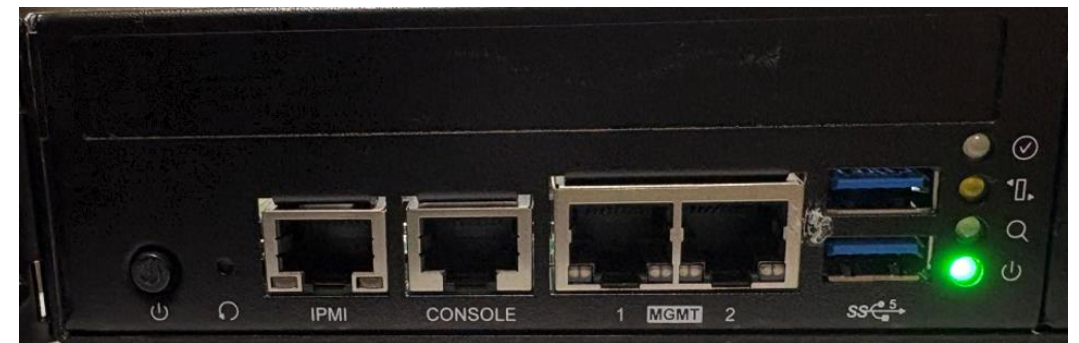
✓ Get AC: 100 - 240VAC, 550W

○ 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



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

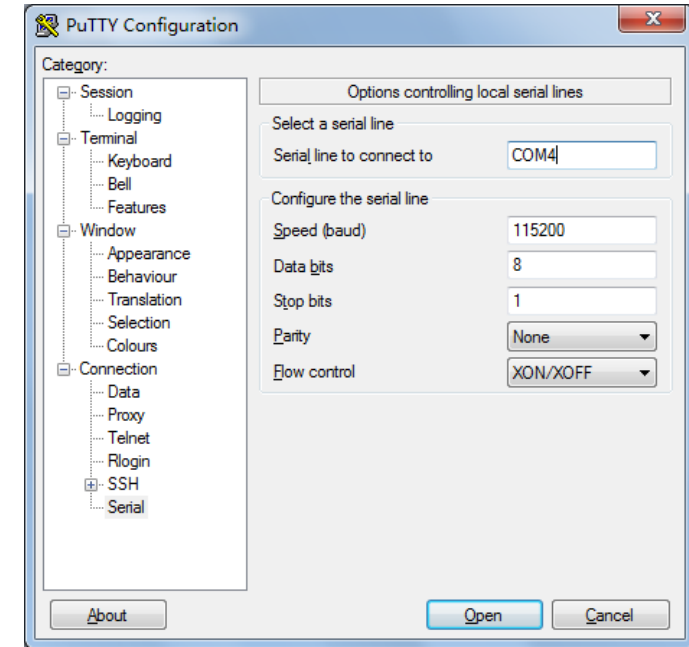


RJ-45

DB9
Connector



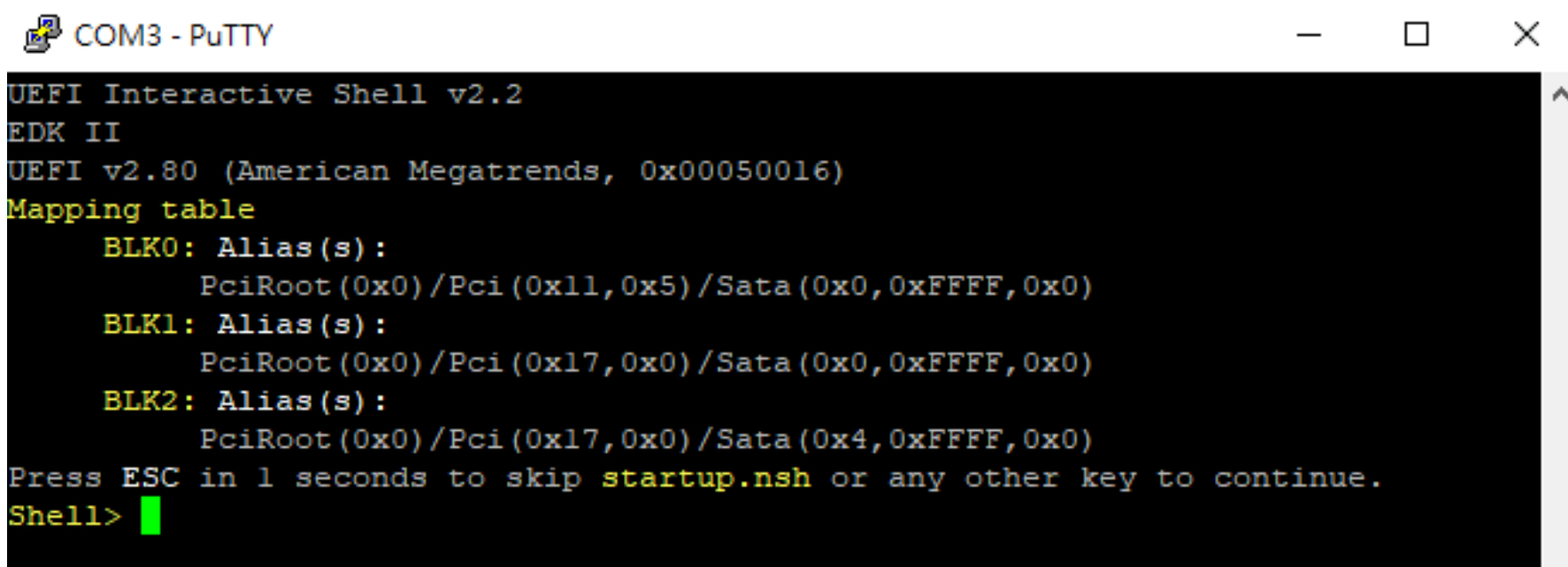
Terminal settings



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

WebUI access

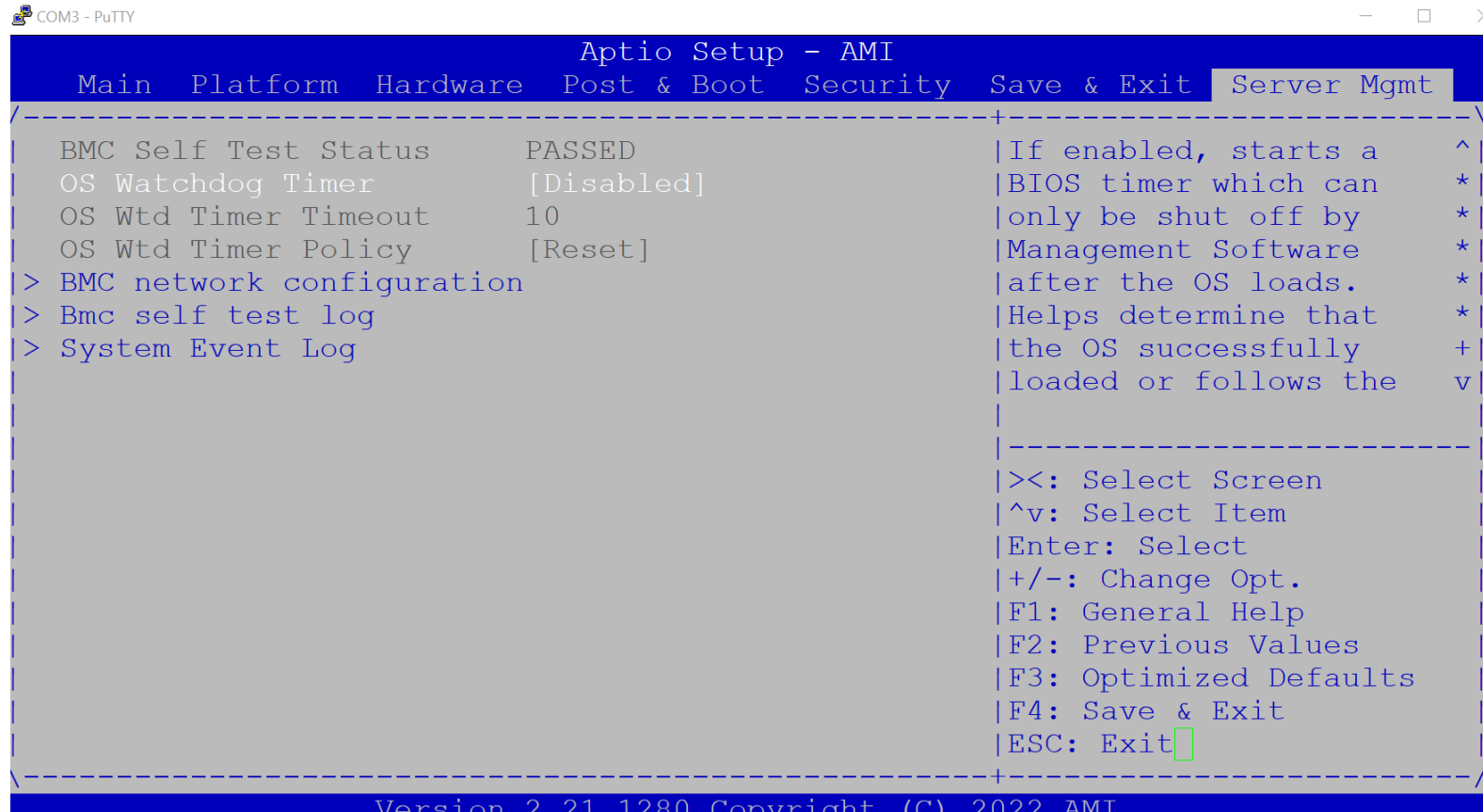
- ❑ In order to access the WebUI, we need to configure the IP address. In this part, we will describe how to set up WebUI IP address via BIOS



NS-SI channel #1

WebUI [1/3]- Configure BMC IP from BIOS

- ❑ Step#1- Press **DEL** after boot up to enter BIOS, and select "**Server Mgmt**" page.



The screenshot shows the Aptio Setup - AMI BIOS interface. The 'Server Mgmt' tab is selected, displaying the following settings and help text:

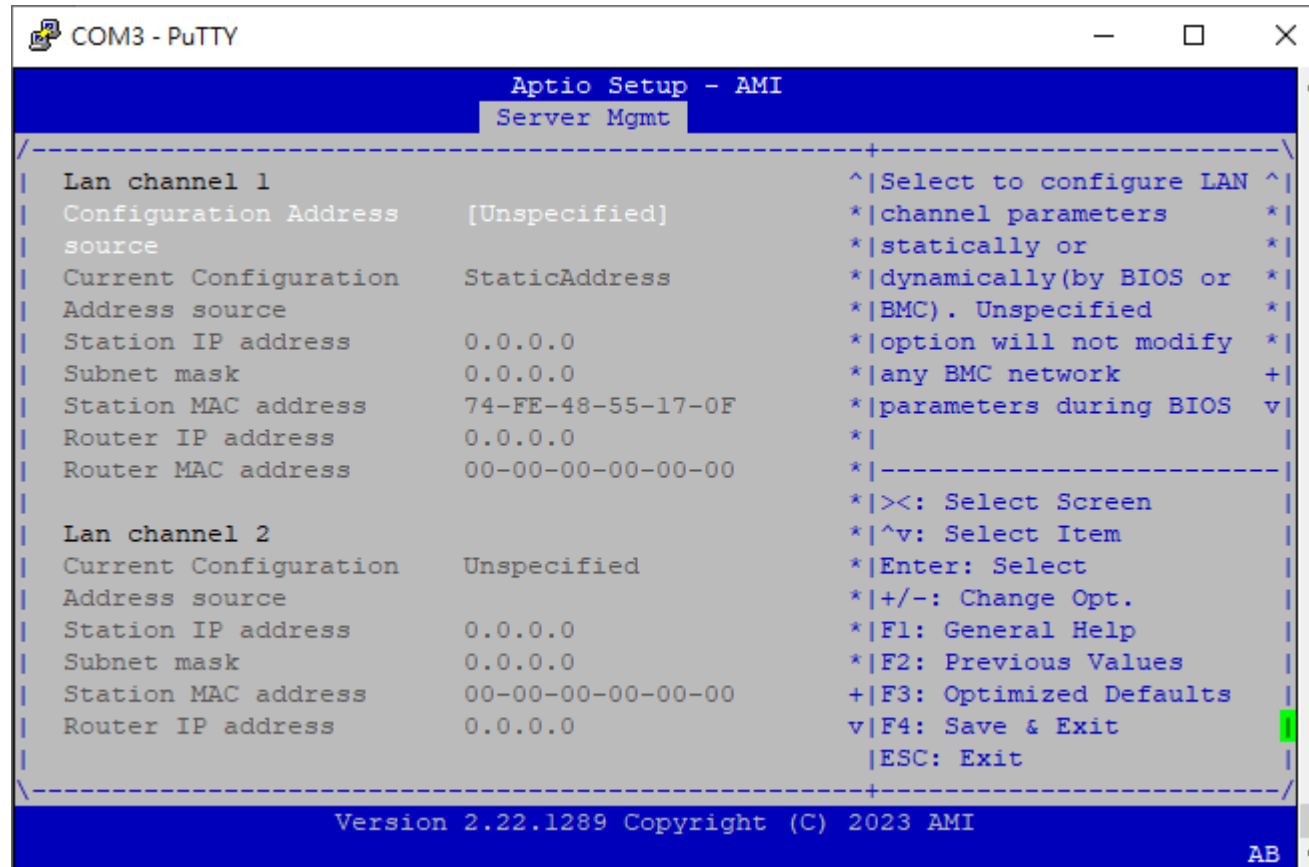
Setting	Value	Description
BMC Self Test Status	PASSED	If enabled, starts a
OS Watchdog Timer	[Disabled]	BIOS timer which can
OS Wtd Timer Timeout	10	only be shut off by
OS Wtd Timer Policy	[Reset]	Management Software
> BMC network configuration		after the OS loads.
> Bmc self test log		Helps determine that
> System Event Log		the OS successfully
		loaded or follows the

><: Select Screen
^v: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

Version 2.21.1280 Copyright (C) 2022 AMI

WebUI [2/3]- Configure BMC IP from BIOS

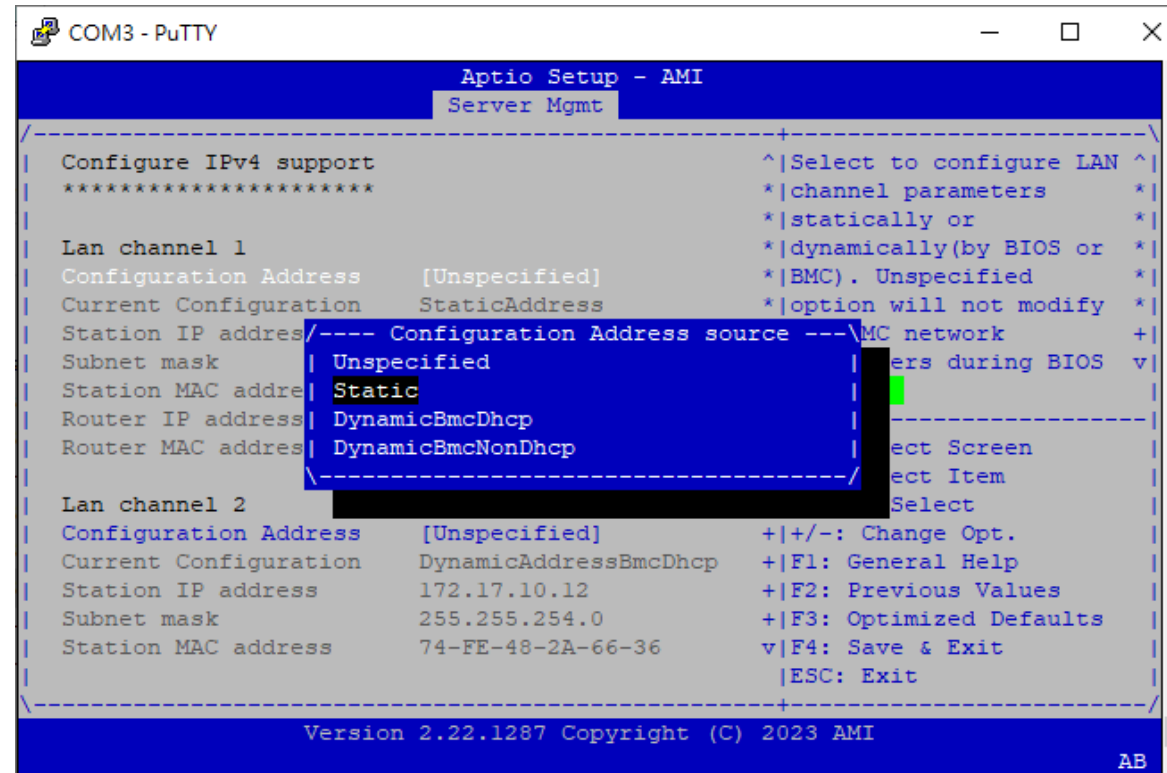
- ❑ Step#2- Choose "BMC network configuration"



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

❑ Step#3- Set "Configuration Address" -> "Static", and then key in the IP address and subnet mask.

*You can choose DHCP to obtain an IP address from your DHCP server.



❑ Step#4- Save and Exit

WebUI access from browser

After completing the steps above (WebUI IP configured via either BIOS or ipmitool), open your favorite browser and enter the WebUI IP as below: <https://BMCIP>

The default login credentials:

- User: administrator
- Password: advantech

Node Explorer User Manual

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

The screenshot displays the Advantech Node Explorer WebUI interface in a browser window. The address bar shows the URL <https://172.17.10.111/nodeexp/ne/overview>. The interface features a dark blue header with the Advantech logo and the device identifier FWA-3051. Below the header, there is a navigation menu on the left with options like Overview, Health, Advanced Inventory, Sensor Status, Event Log, Web Alert, Session, Configuration, Alerts, Network, Extra Configurations, Maintenance, BMC Interface Control, RAID Management, Remote Control, System Power Control, Front Panel, iKVM Redirection, Remote Serial Console, and Node Explorer. The main content area is divided into four panels: General Information, Firmware Versions, Software Versions, and Network Information. The General Information panel shows BMC Up Time (0 Hours 18 Minutes 10 Seconds), BMC Booted on (August 24, 2023 08:39:19 +08:00), and Hostname (bmc-AKA1234567). The Firmware Versions panel lists BL (0.30.00000000), BMC (0.65.00000000), BMCONF (0.03.00000000), FPGA (0.03.00000000), BIOS (0.11.00000000), and NVRAM (4.00.00000000). The Software Versions panel shows Advantech Node Explorer (1.28.1 3383) and Advantech iKVM (1.11.4 386). The Network Information panel shows LAN Channel #1, MAC Address (74:fe:48:55:17:0f), and IPv4 mode. A yellow pencil icon is visible in the bottom right corner of the Network Information panel.

General Information	Firmware Versions
BMC Up Time 0 Hours 18 Minutes 10 Seconds	BL 0.30.00000000
BMC Booted on August 24, 2023 08:39:19 +08:00	BMC 0.65.00000000
Hostname bmc-AKA1234567	BMCONF 0.03.00000000
	FPGA 0.03.00000000
	BIOS 0.11.00000000
	NVRAM 4.00.00000000

Software Versions	Network Information
Advantech Node Explorer 1.28.1 3383	LAN Channel #1
Advantech iKVM 1.11.4 386	MAC Address 74:fe:48:55:17:0f
	IPv4 mode

OS installation

You could install your OS by following one of the below methods:

Method #1- Via Console Redirection

Reference: <https://advantech-ncg.zendesk.com/hc/en-us/articles/360017541092-How-to-install-Linux-in-non-VGA-system-with-console-redirection>

Method #2- Via BMC Web UI

Reference: <https://advantech-ncg.zendesk.com/hc/en-us/articles/360047012912-How-to-install-operating-system-remotely-through-BMC-Web-UI-Remote-Storage->

*Go Together,
We Go Far and Grow Big*

