SKY-8134S-11 QSG

ICVG

2/7th , 2024
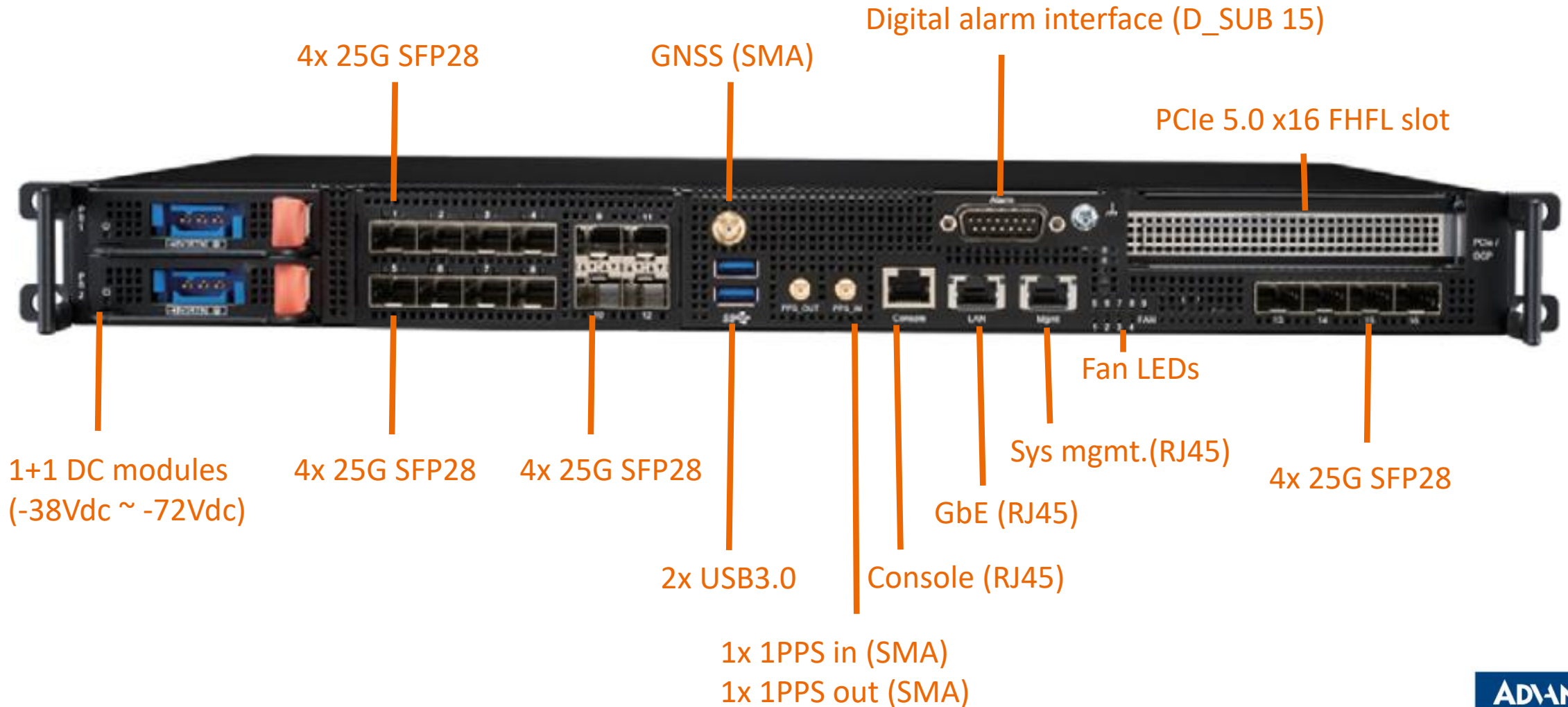
History

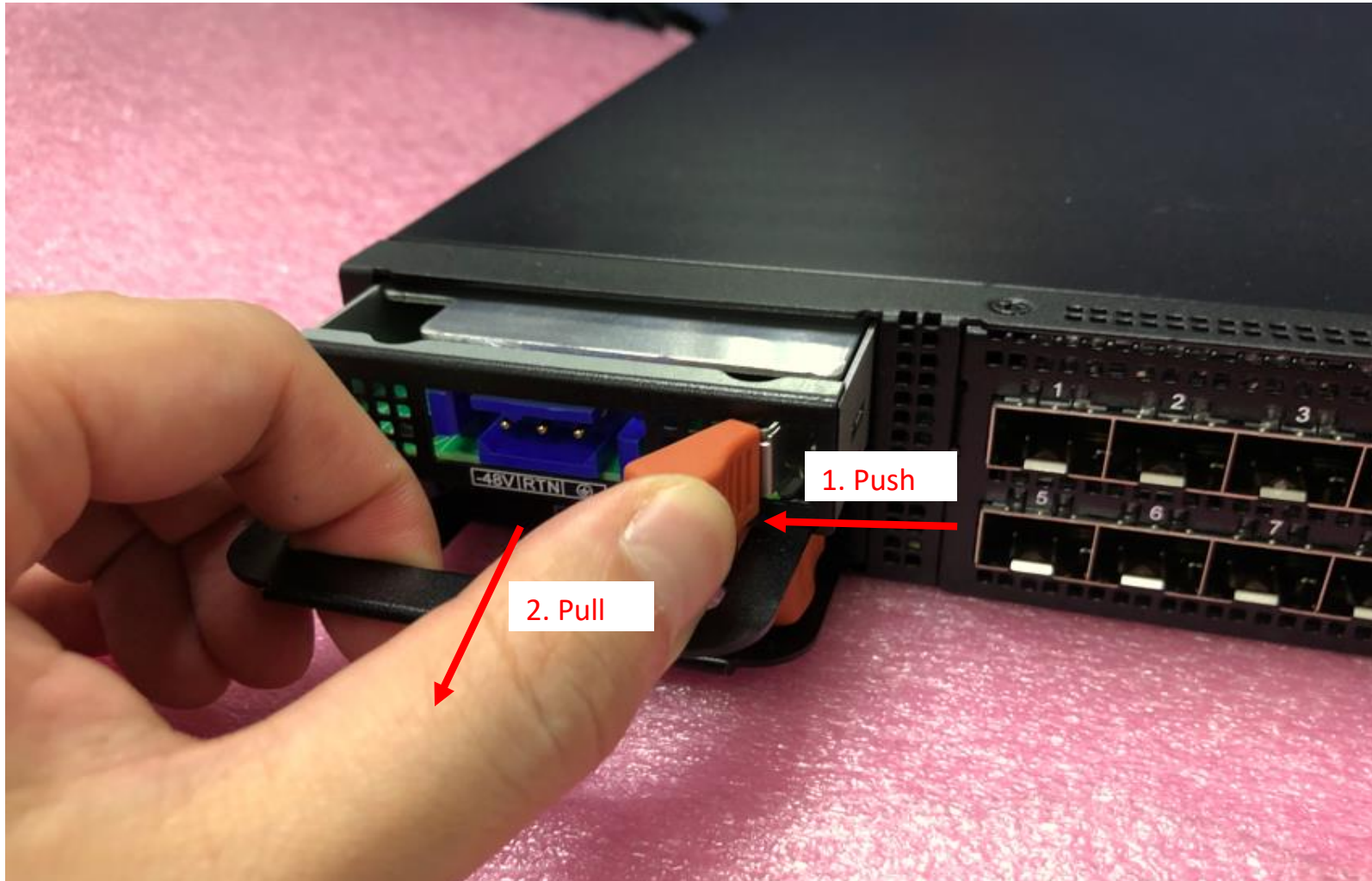| Version	Date	Handled by	Note
Draft	2023/1/11	Alan.Ku	
V01	2023/1/17	Alan.Ku	first publishing
V02	2023/2/7	Alan.Ku	Update p12, 21, 23~25
V03	2024/2/4	Alan.Ku	Update p4, 7, 10, 18, 19, 21

Agenda

- ❑ Server Front Side

- ❑ Server Rear Side

- ❑ DIMMs Population

- ❑ Access the device via console

- ❑ WebUI Access

- ❑ OS installation

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Server Front Side [1/5] – Overview

4x 25G SFP28

GNSS (SMA)

Digital alarm interface (D_SUB 15)

PCIe 5.0 x16 FHFL slot

Fan LEDs

Sys mgmt.(RJ45)

4x 25G SFP28

1+1 DC modules
(-38Vdc ~ -72Vdc)

4x 25G SFP28

4x 25G SFP28

GbE (RJ45)

2x USB3.0

Console (RJ45)

1x 1PPS in (SMA)
1x 1PPS out (SMA)

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Server Front Side [2/5]-DC PSU Swap

❑ Unlock PSU by step 1 and remove it by step 2.

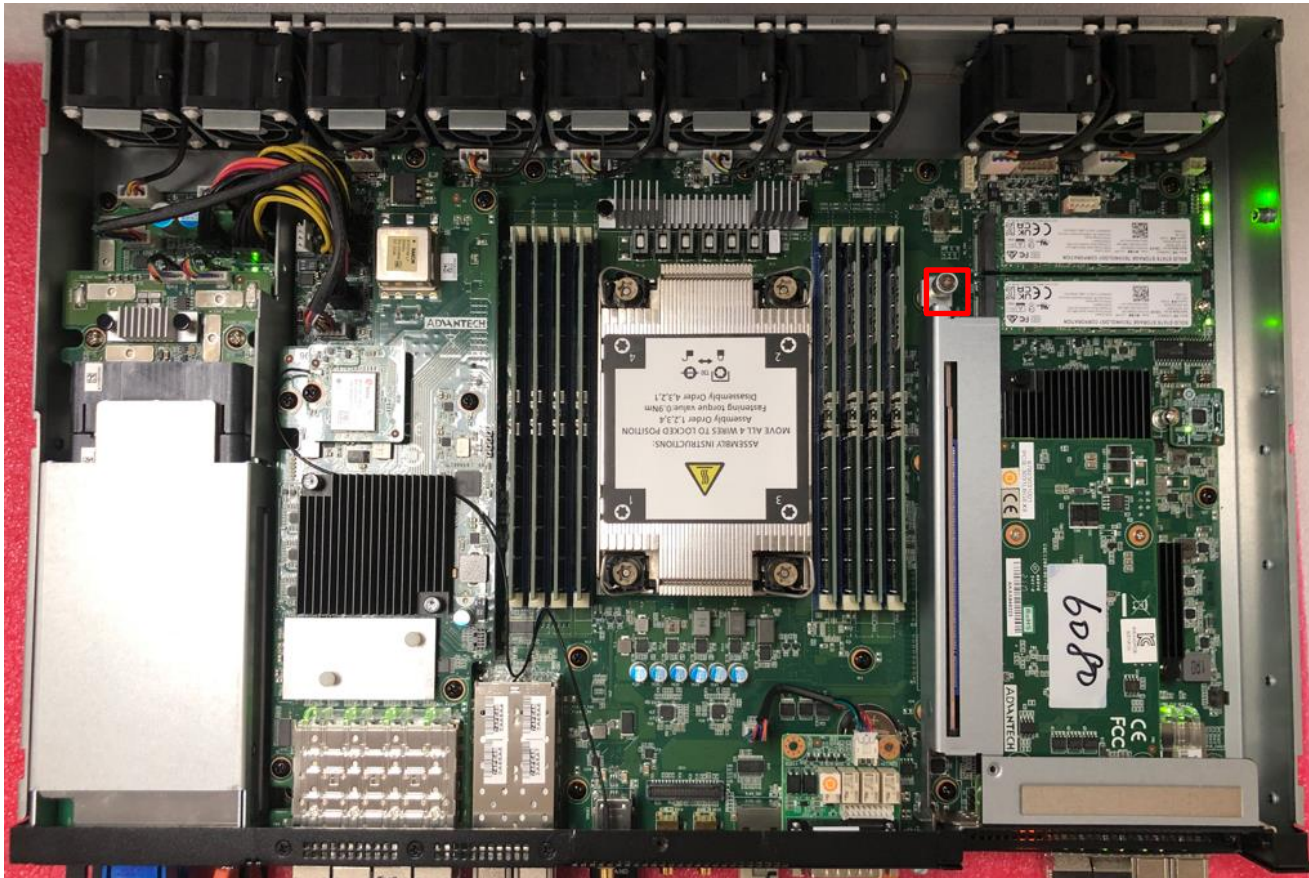# Server Front Side [3/5]- Remove PCIe Cage

❑ Step #1 Loose screws on rear

❑ Step #2 Loose the screw on top

Server Front Side [3/5]- Remove PCIe Cage

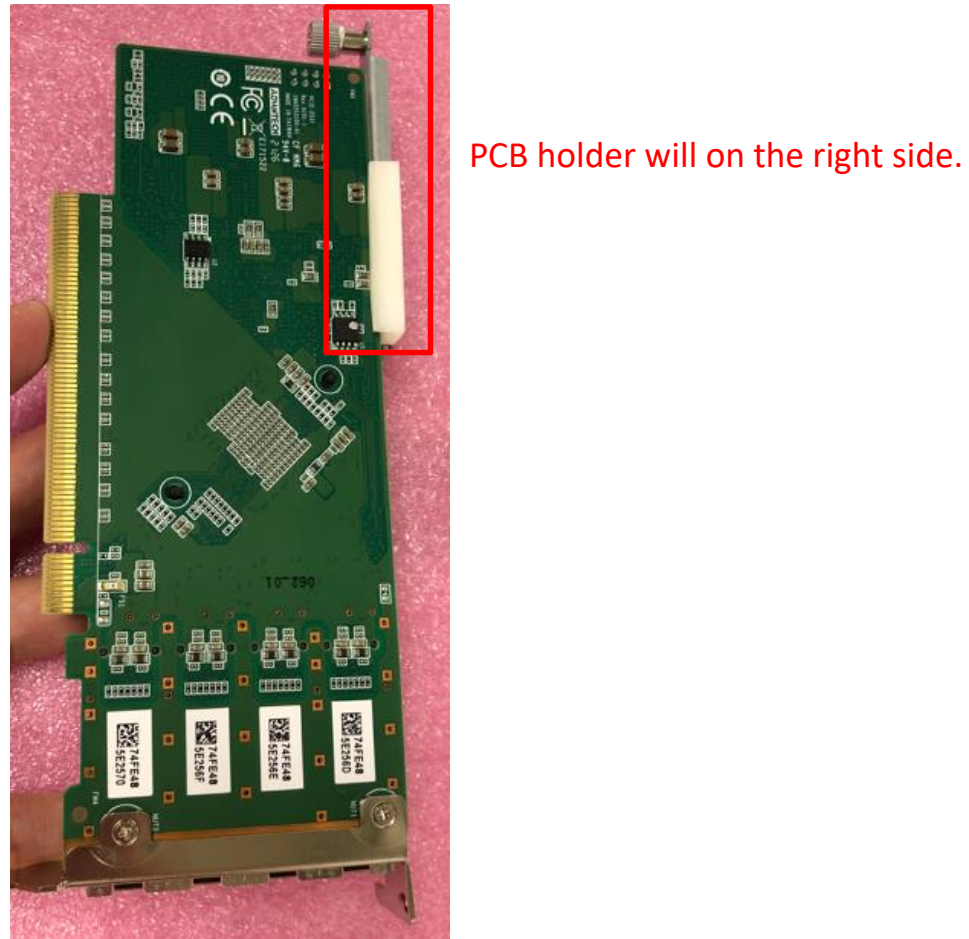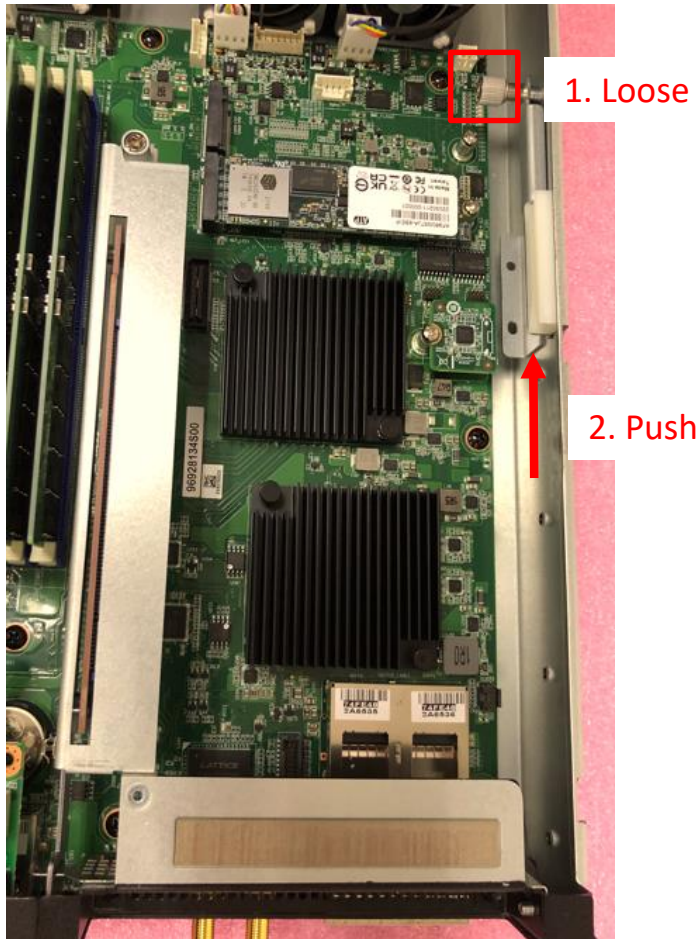❑ Step #3 Loose the screw on following position

Server Front Side [3/5]- Remove PCIe Cage

☐ Step #4 Slightly pull up and remove PCIe cage

Server Front Side [3/5]- Remove PCIe Cage

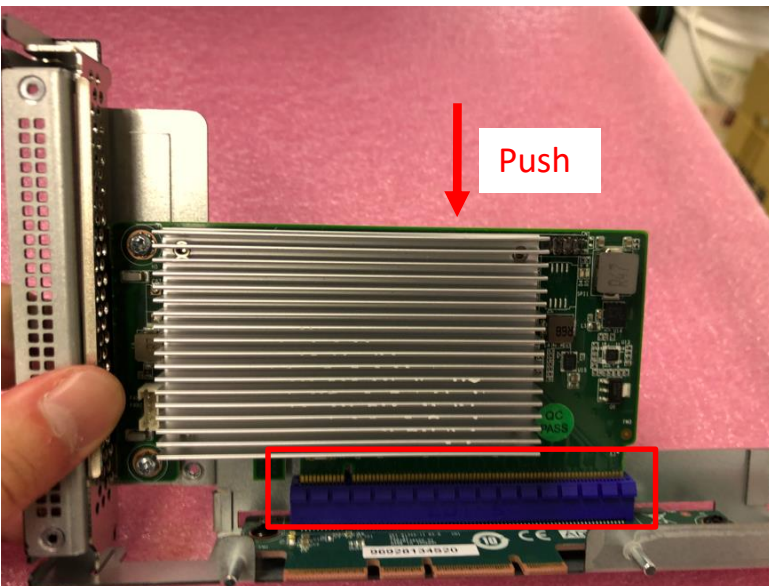❑ Step #5 For wide width PCIe card, install cage and PCB holder at the same time.

1. Loose

2. Push

PCB holder will on the right side.

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Server Front Side [4/5]- Insert PCIe card
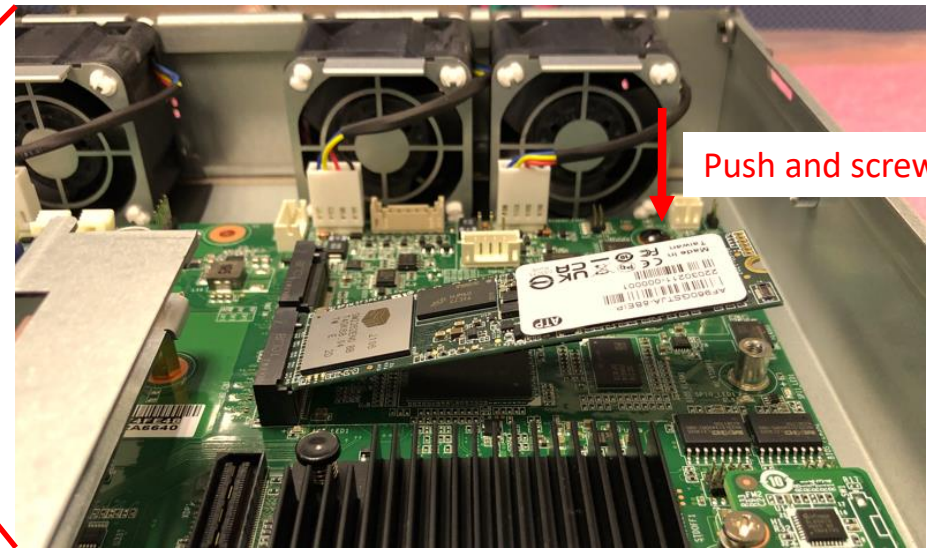
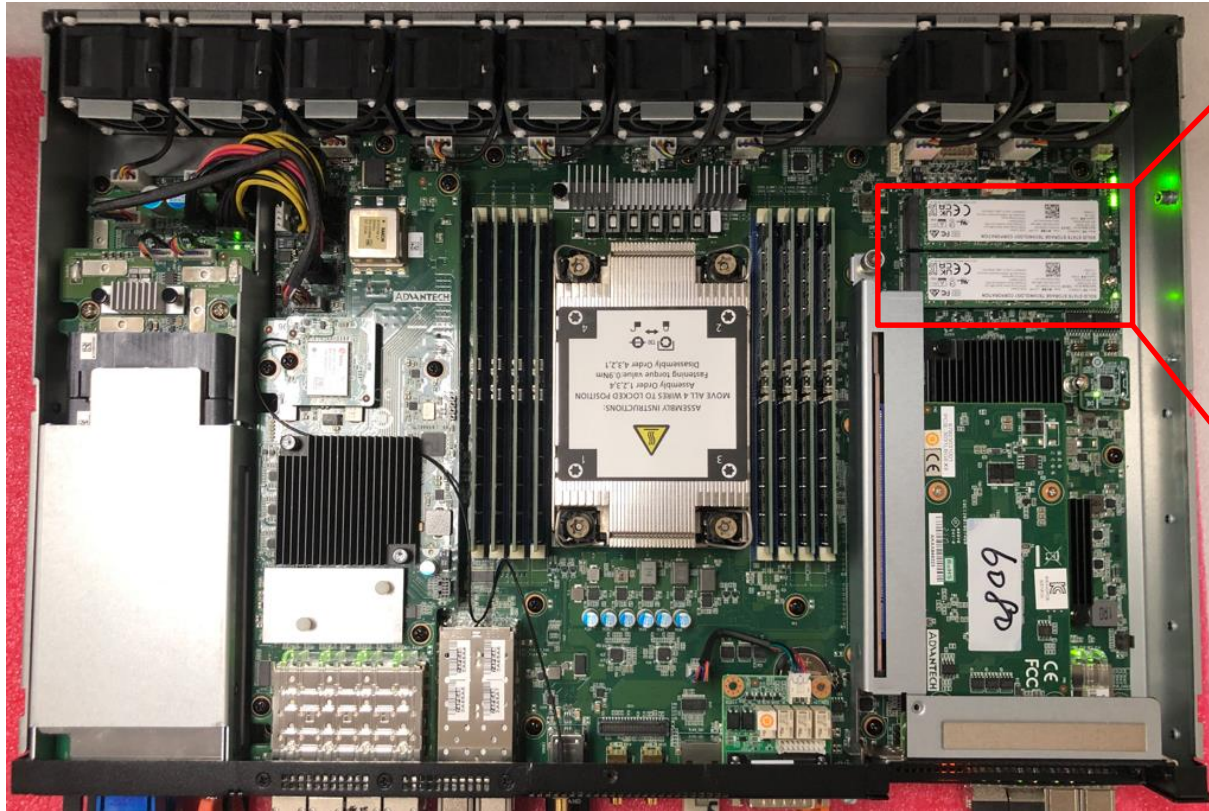❑ Step #1 Loose the screw and remove PCIe dummy

❑ Step #2 Align golden finger to the slot, push the card to end.

Push

Server Front Side [5/5]-Storage M.2

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

Push and screw it

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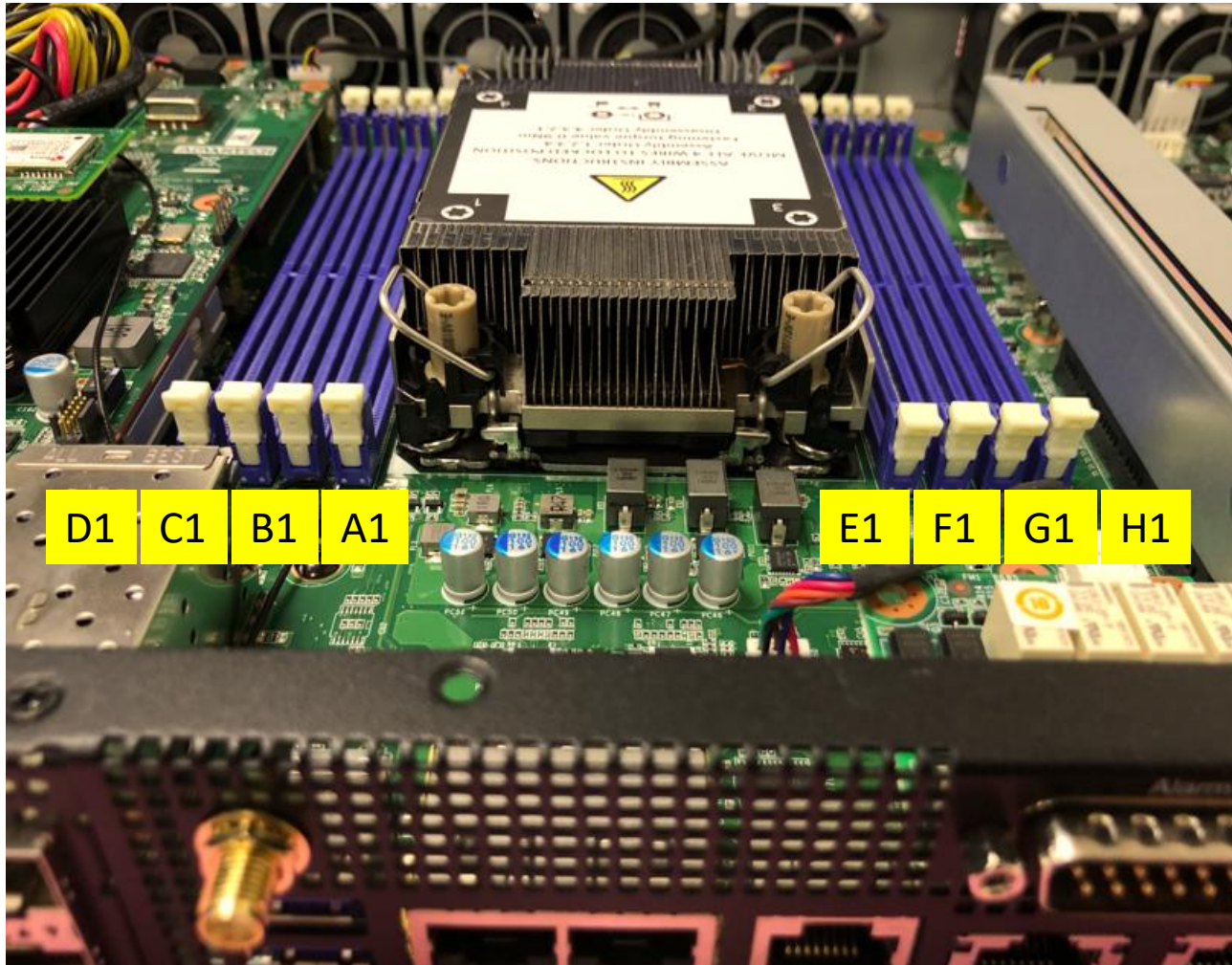
Server Rear Side

❑ System rear view.

❑ FAN physical locations and its naming.

|	PCIe	PCIe	CPU	CPU	CPU	Mezz Card	Mezz Card	PW	PW
SYS front LEDs	#9	#8	#7	#6	#5	#4	#3	#2	#1
BMC Sensor	RISER_FAN2	RISER_FAN1	CPU_FAN3	CPU_FAN2	CPU_FAN1	MEZZ_FAN2	MEZZ_FAN1	PSU_FAN2	PSU_FAN1

DIMMs Population [1/4]- Notes

PCB DIMM slot printing as below.

DIMMs Population [1/4]- Notes

Refer table below to populate DIMMs on Sapphire Rapids platforms.

| iMC#	iMC3				iMC2				CPU	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		G1		F1		E1			A1		B1		C1		D1	
	Slot0	Slot1	Slot0	Slot1	Slot0	Slot1	Slot0	Slot1		Slot1	Slot0	Slot1	Slot0	Slot1	Slot0	Slot1	Slot0
1+0											DDR5						
							DDR5										
													DDR5				
2+0					DDR5												
			DDR5								DDR5						
							DDR5								DDR5		
4+0			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
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
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:
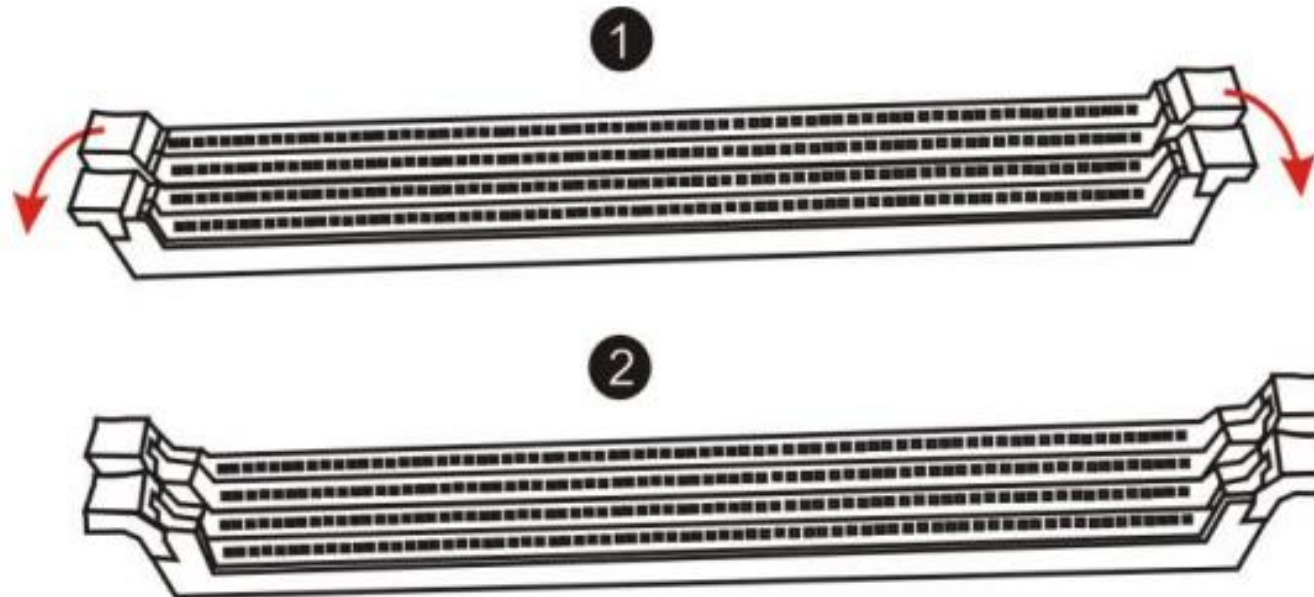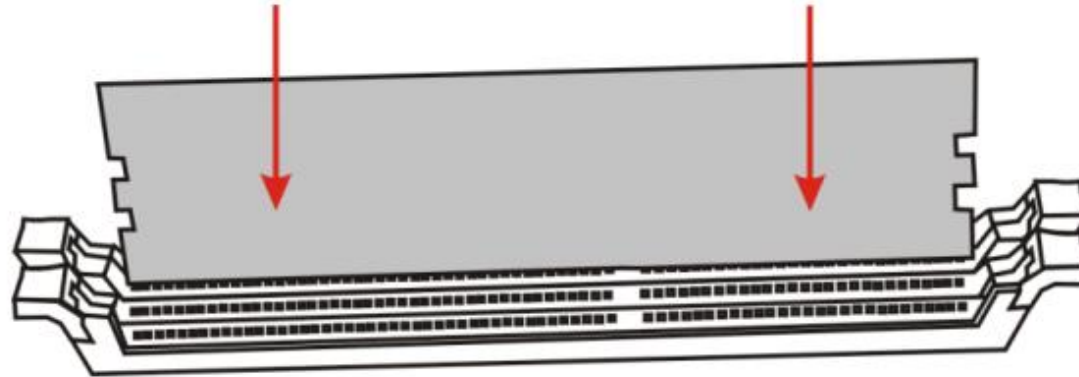
DIMMs Population [3/4]- DIMM Key Alignment

❏ Step#2 – Select DIMM orientation so that the keys in the DIMM module and socket match
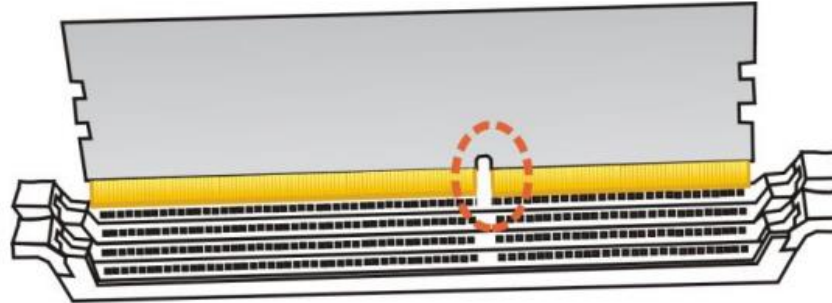
❏ Step#3 – Insert the DIMM from the top using the guide rails on the left and right of the DIMM sockets

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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

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Access the device via Console

❑ Step#1 – Power on the device

- o Prerequisite:
  - ✓ Get DC -40V~-72V power source
- o 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 green

Picture depicted how to plug in the PSU cable

Picture depicted the light color while device booting

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Access the device via Console

❑ Step#2 – Access the device

    ○ Prerequisite:

        ✓ Console cable and PC + Terminal

    ○ Connect the PC to the server console
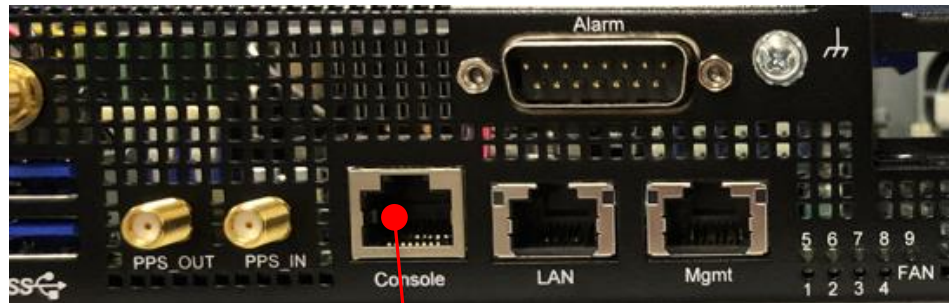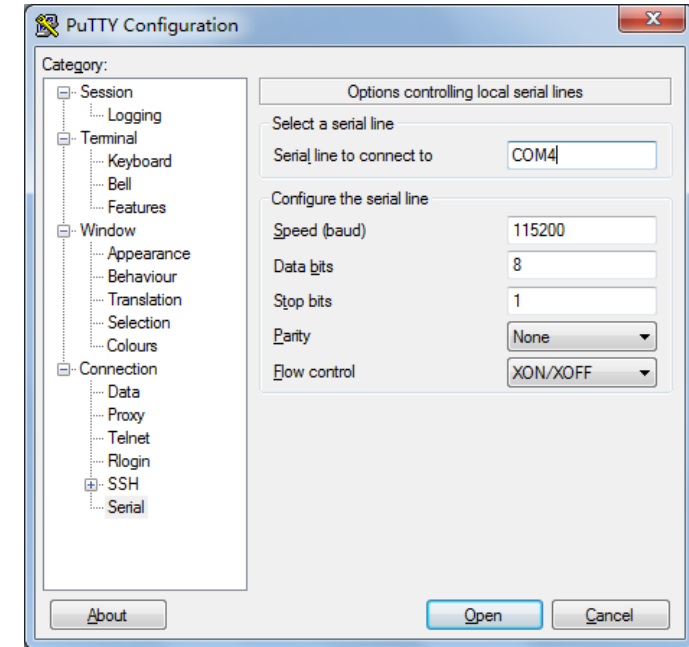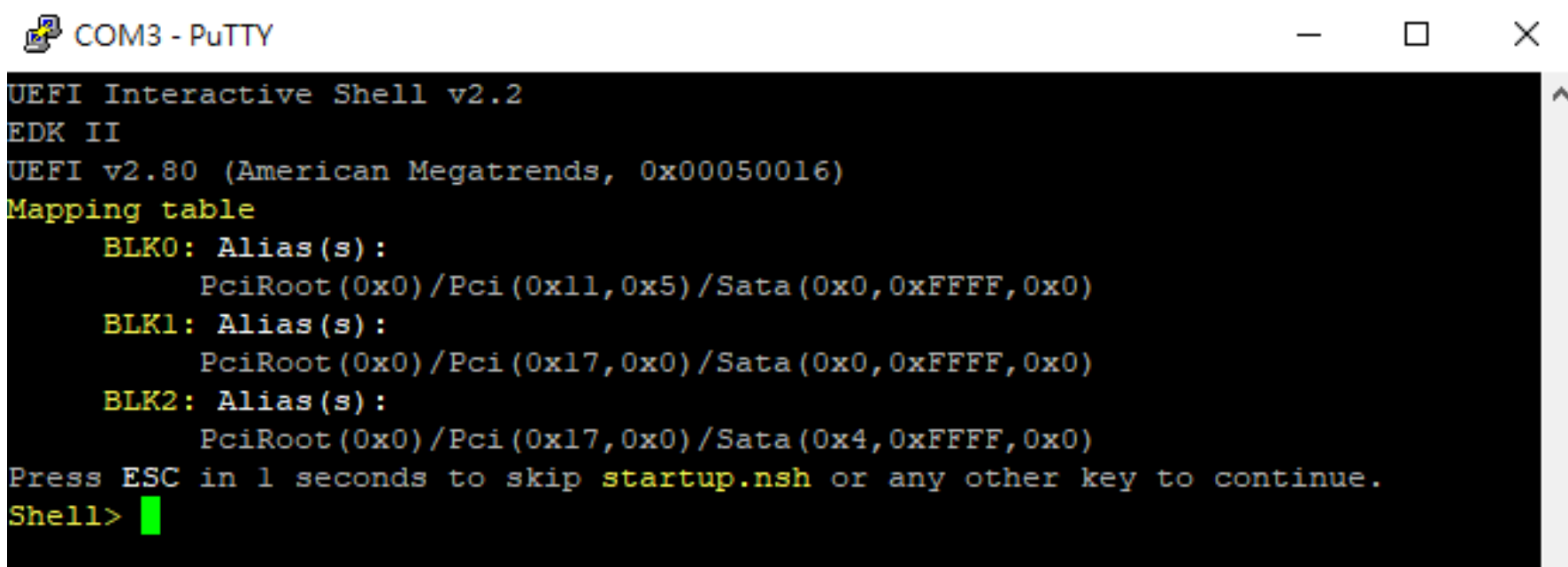
Terminal Setting:
- Baud rate: 115200
- Data bits : 8
- Stop bits: 1

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Access the device via Console

Picture depicted successfully server access via console

Web UI access
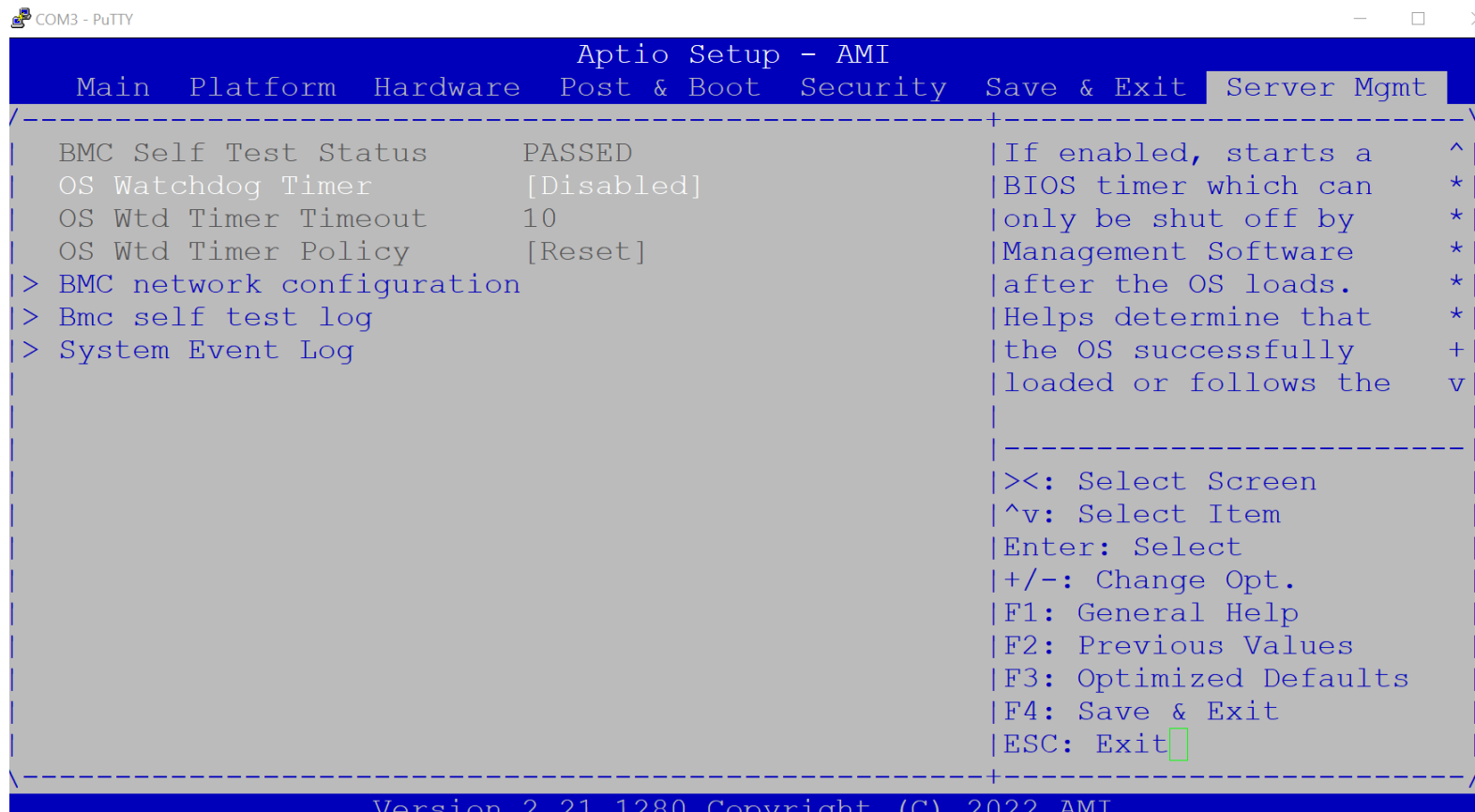
❑ In order to access the Web UI, we need to configure the IP address. In this part, we will describe how to set up Web UI IP address via BIOS
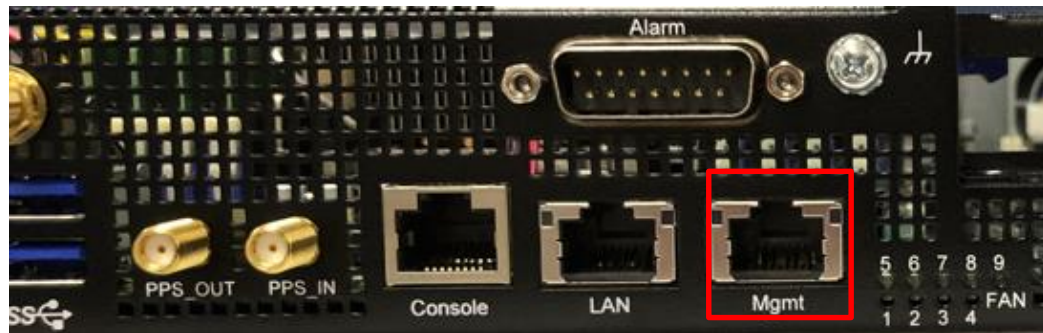
NS-SI channel #1

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

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

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

❑ Step#4- Save and Exit
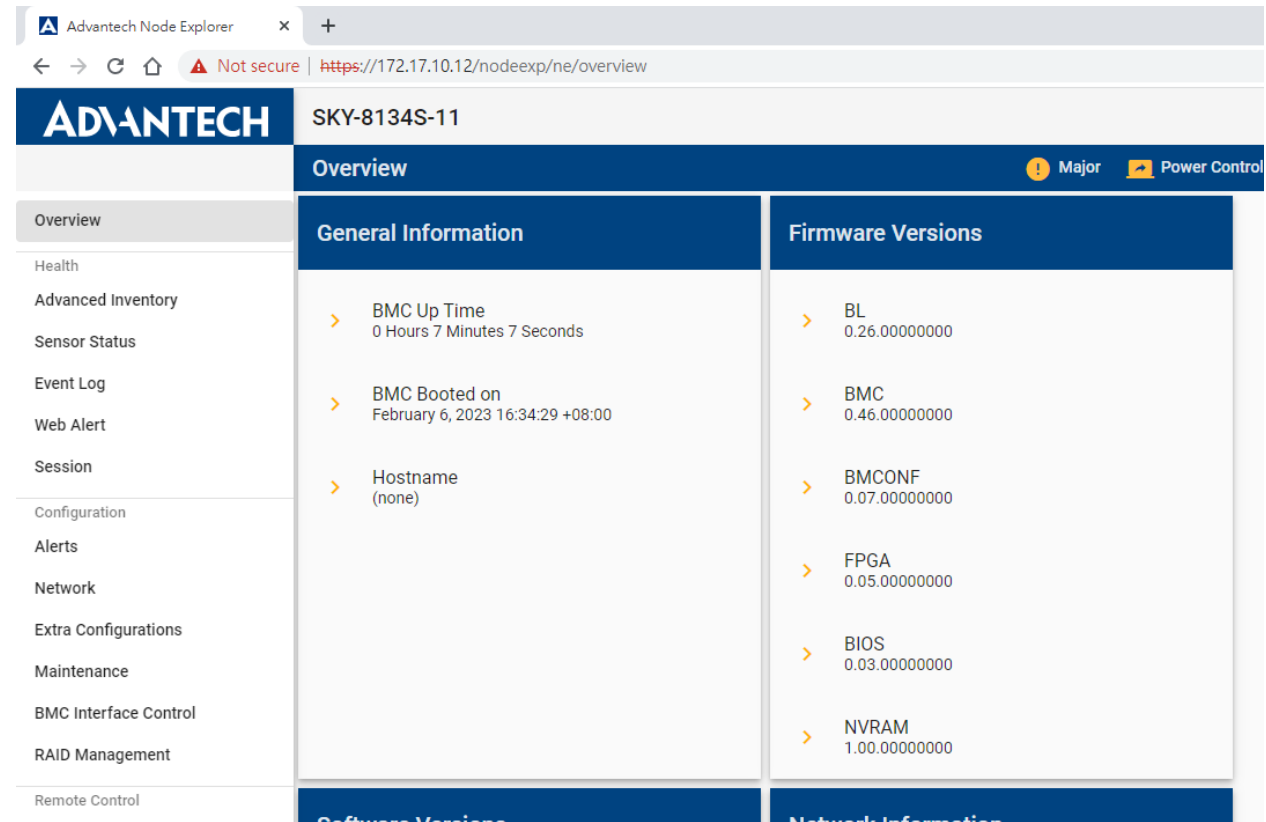
Web UI access from browser

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

Node Explorer User Manual
https://www.advantech.com/support/details/manual?id=1-1MU1KB1

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-

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