

FWA-6173 QSG



ESGGroup

06/12 , 2025

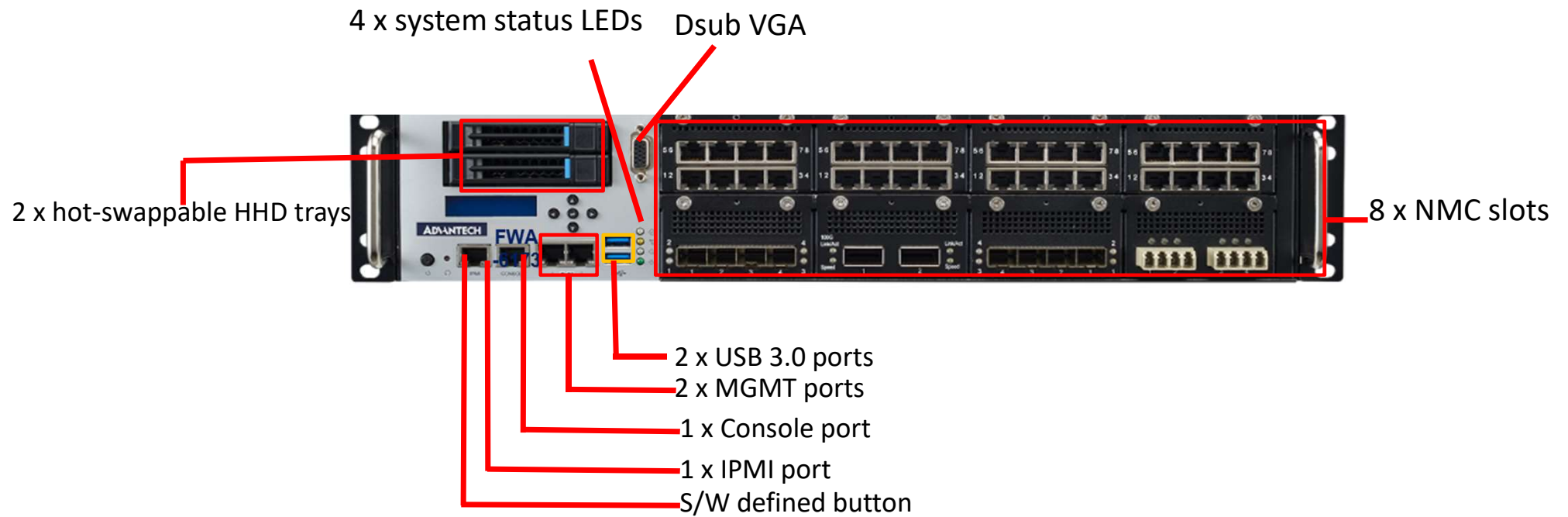
History

Version	Date	Handled by	Note
V01	2025/06/17	SS.Chang	Draft

Agenda

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

Server Front Side [1/7] – Overview



Server Front Side [2/7]- System LEDs



Software-defined LED

Alert LED

Locate LED

Power Status LED

Server Front Side [3/7]-Storage Swap

- Step #1 Press the button



- Step #2 Grab the tray handle and pull it evenly towards you



Server Front Side [4/7]-Storage Swap

- ❑ Step #3 Install the drive with four screws contained in the disk screw kit

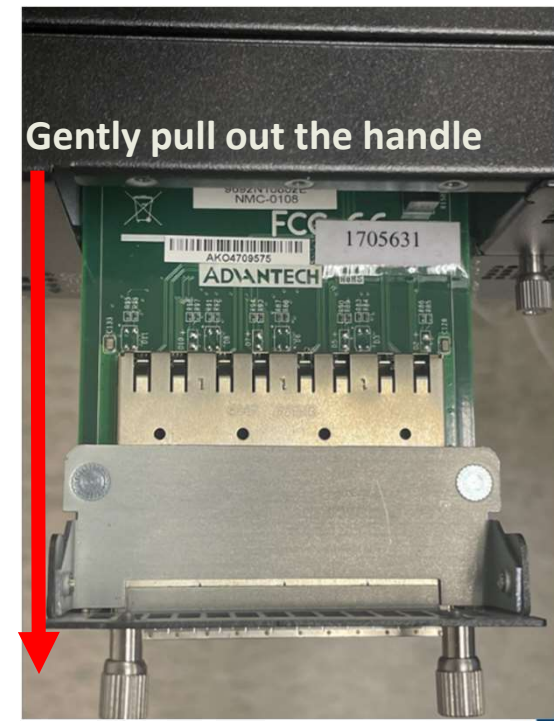


- ❑ Step #4 Insert the tray into the disk bay until the drive engages with the connector on the HDD backplane. Then, click the handle back to the tray.

Server Front Side [5/7]- Remove NMC card

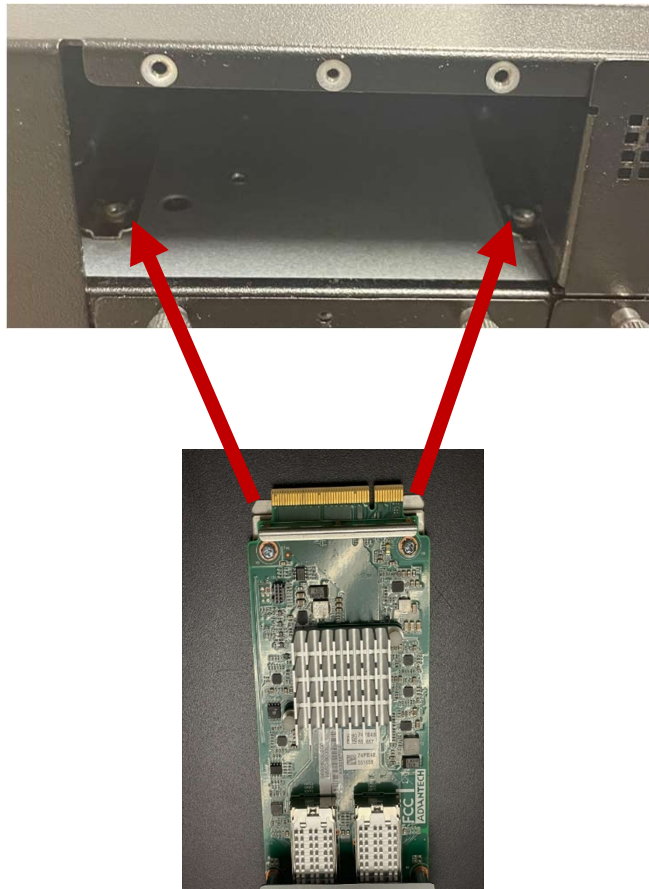


❑ Steps to remove NMC card



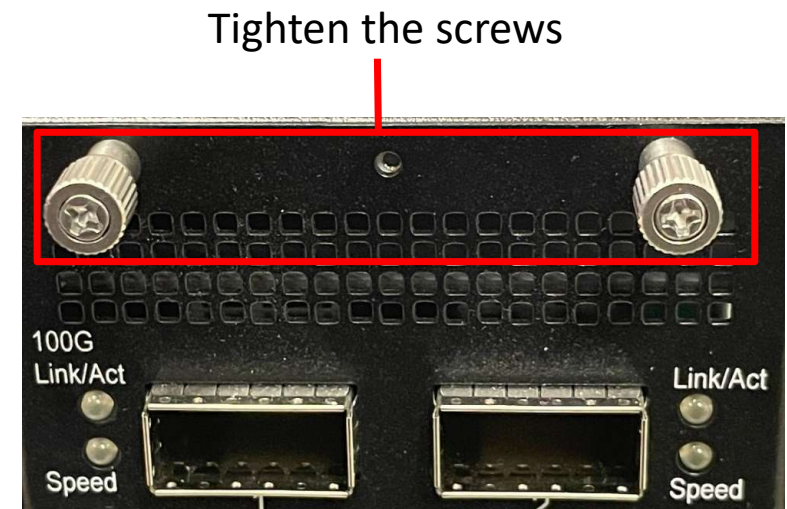
Server Front Side [6/7]- Insert NMC card

- ❑ Step #1- Ensure the brackets fit in the slot

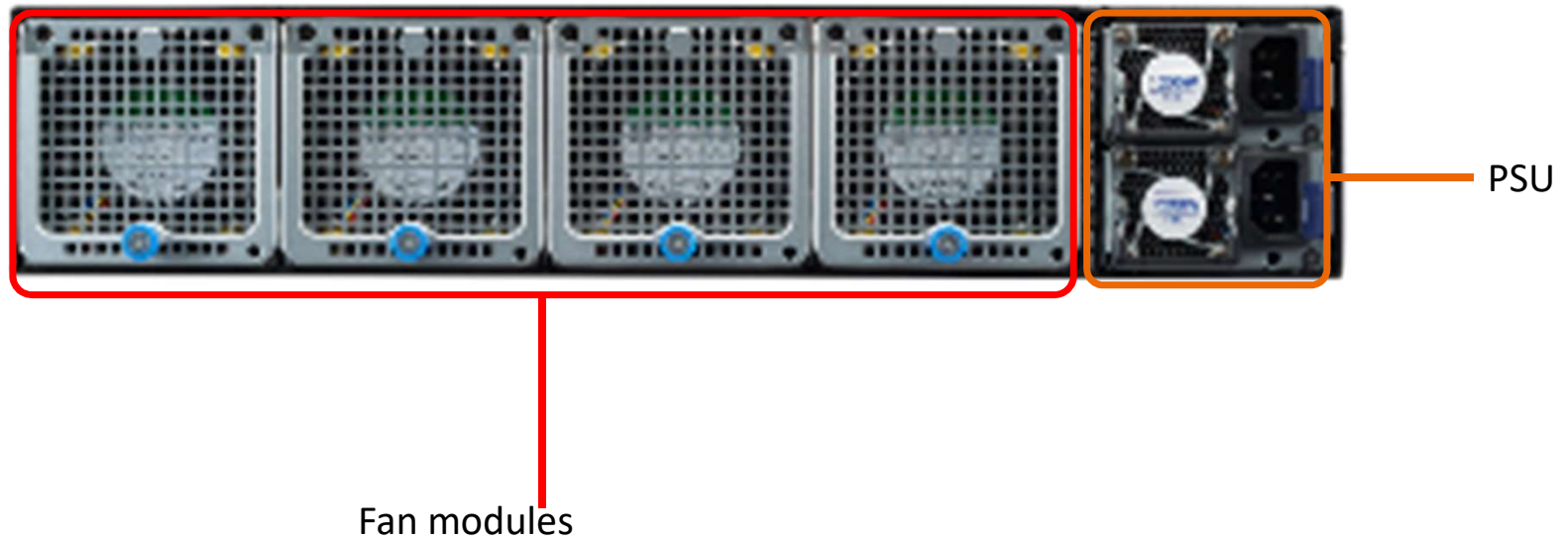


Server Front Side [6/7]- Insert NMC card

- ❑ Step #2- Gently evenly push it into the slot and tighten the screws

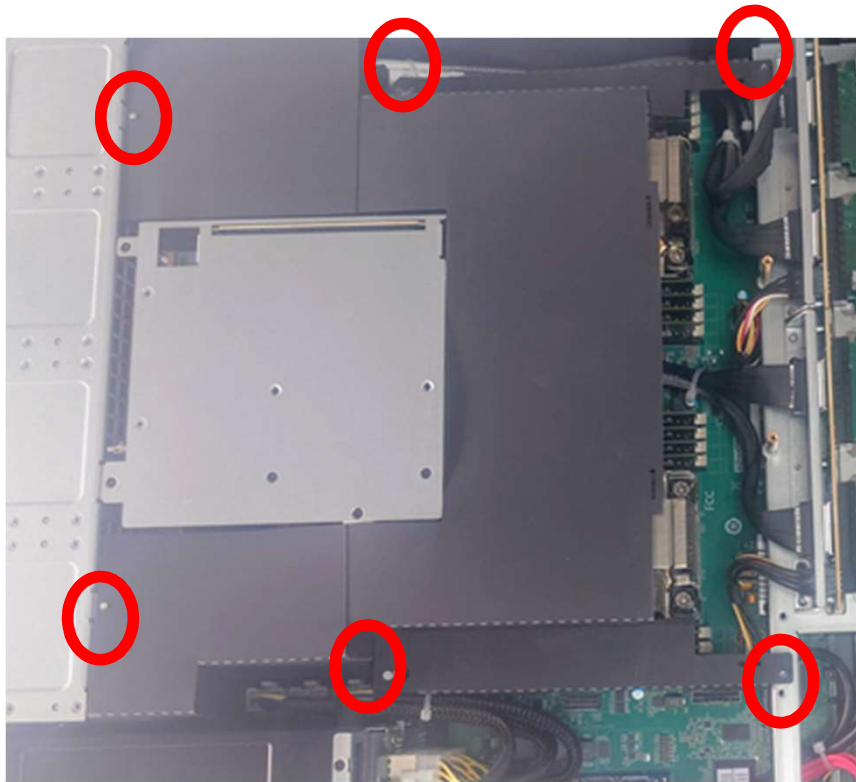


Server Rear Side



CPU & DIMMs Population - remove Heatsink cover

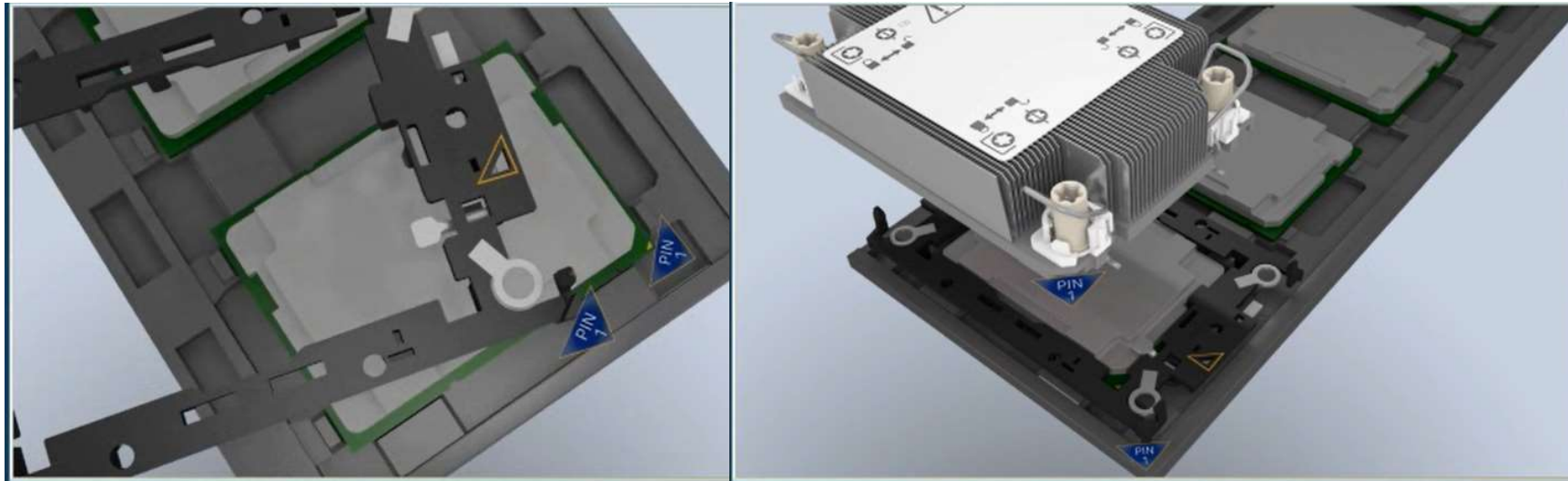
□ Step#1 – please remove Heatsink Cover



CPUs Population - Notes

- Please refer following link to install third Xeon® Scalable CPU on M/B's LGA7529 Socket , and check a Triangle tag of CPU, Narrow processor clip and heat-sink

CPU, Narrow processor clip & heat-sink installation



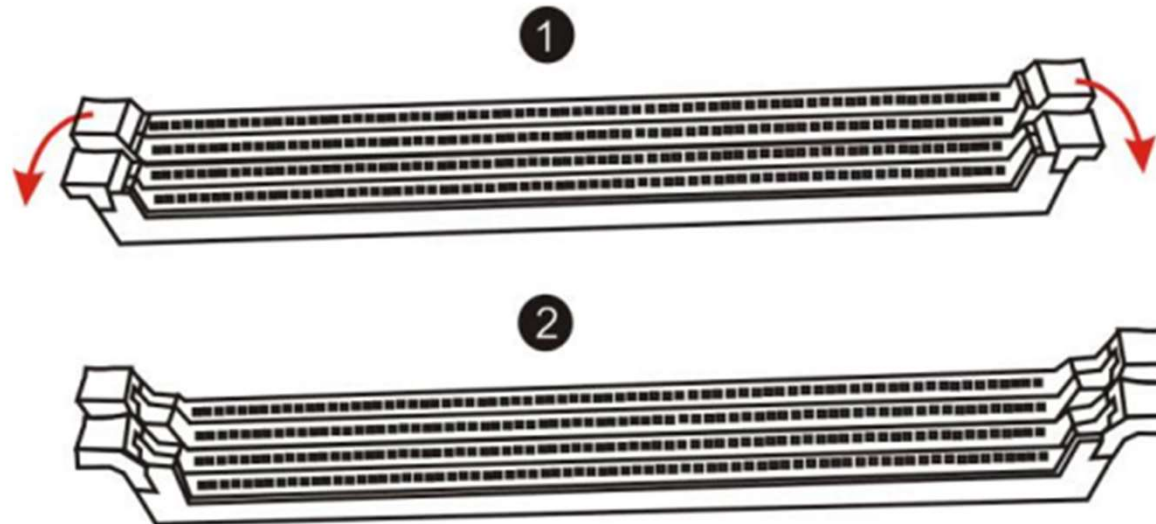
DIMMs Population [1/4]- Notes

- Blue memory slots is prioritized than the black for DIMM population, and please refer following link to install DIMM module in FWA-6173
- <https://advantech-ncg.zendesk.com/hc/en-us/articles/48046461979673-FWA-6173-DIMM-Population-Suggestion>

DIMM Qty	iMC7	iMC6	iMC5	iMC4	CPU0	iMC0	iMC1	iMC2	iMC3	iMC7	iMC6	iMC5	iMC4	CPU1	iMC0	iMC1	iMC2	iMC3
	Ch7	Ch6	Ch5	Ch4		Ch0	Ch1	Ch2	Ch3	Ch7	Ch6	Ch5	Ch4		Ch0	Ch1	Ch2	Ch3
	D1	C1	B1	A1		E1	F1	G1	H1	E1	F1	G1	H1		M1	N1	Q1	P1
2						DIMM									DIMM			
8		DIMM		DIMM		DIMM		DIMM			DIMM		DIMM		DIMM		DIMM	
	DIMM		DIMM				DIMM		DIMM	DIMM		DIMM				DIMM		DIMM
16	DIMM	DIMM	DIMM	DIMM		DIMM	DIMM	DIMM	DIMM	DIMM	DIMM	DIMM	DIMM		DIMM	DIMM	DIMM	DIMM

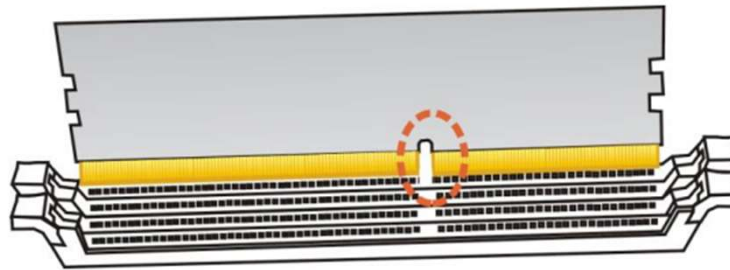
DIMMs Population [2/4]- Opening DIMM latches

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

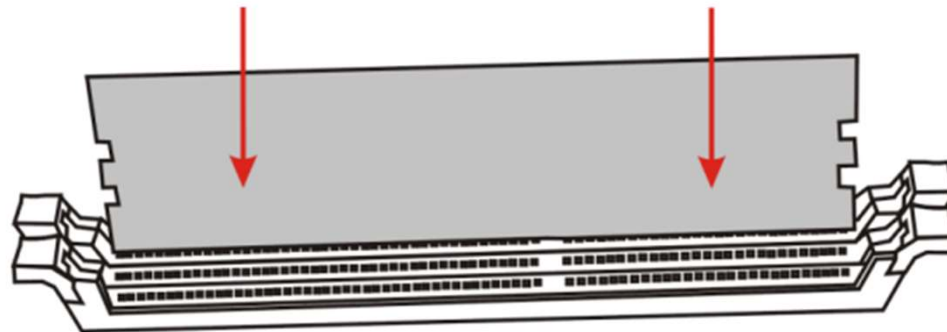


DIMMs Population [3/4]- DIMM Key Alignment

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

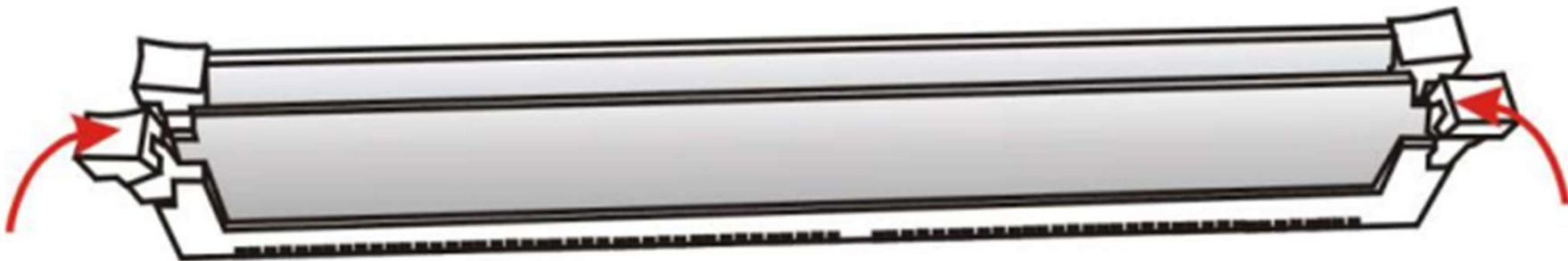


- Step#3 – Insert the DIMM from the top using the guide rails on the left and right of the DIMM sockets



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.
- ❑ Step#5 – Please install windshield cover & riser module in system after CPU & DIMM module Installation finish, and closes cover.



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



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

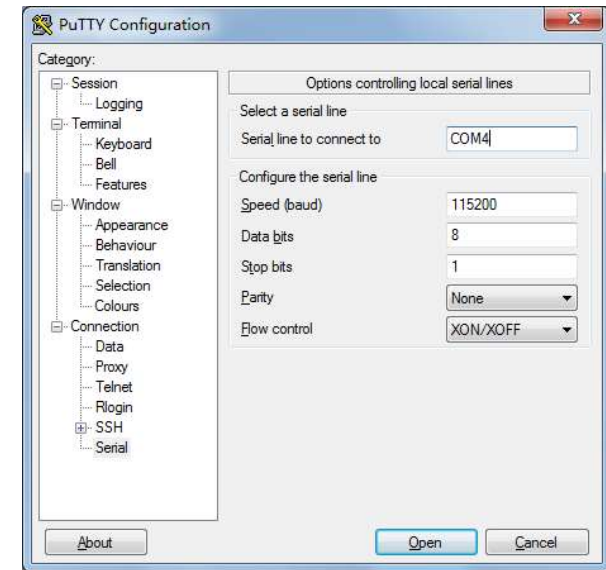


RJ-45

DB9 Connector



Terminal settings



Default BIOS baud-rate Setting:

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

Access the device via Console

```
UEFI Interactive Shell v2.2
EDK II
UEFI v2.80 (American Megatrends, 0x00050016)
map: No mapping found.
Press ESC in 5 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

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

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

```
Aptio Setup - AMI
Main Platform Hardware Server Mgmt Post & Boot Security Save & Exit
-----
| BMC Self Test Status      PASSED      | Configure BMC network |
| OS Watchdog Timer        [Disabled]  | parameters            |
| OS Wtd Timer Timeout     10              |                       |
| OS Wtd Timer Policy      [Reset]           |                       |
|> BMC network configuration |                       |
|> Bmc self test log       |                       |
|> System Event Log        |                       |
|                           |                       |
|                           |                       |
|                           |                       |
|                           |                       |
|><: 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) 2021 AMI
```

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

- ❑ Step#2- login "--BMC network configuration--" page

```
Aptio Setup - AMI
Server Mgmt
-----
--BMC network configuration--
*****
Configure IPv4 support
*****
Lan channel 1
Configuration Address [Unspecified]
Current Configuration StaticAddress
Station IP address 0.0.0.0
Subnet mask 0.0.0.0
Station MAC address C4-00-AD-AF-2C-C5
Router IP address 0.0.0.0
Router MAC address 00-00-00-00-00-00

Lan channel 2
Current Configuration StaticAddress
Station IP address 0.0.0.0
Subnet mask 0.0.0.0

^|Select to configure LAN ^|
*|channel parameters *|
*|statically or *|
*|dynamically(by BIOS or *|
*|BMC). Unspecified *|
*|option will not modify *|
*|any BMC network +|
*|parameters during BIOS v|
*|
*|-----
*|><: Select Screen
*|^v: Select Item
*|Enter: Select
*|+/-: Change Opt.
*|F1: General Help
+|F2: Previous Values
+|F3: Optimized Defaults
v|F4: Save & Exit
|ESC: Exit█
-----
Version 2.21.1280 Copyright (C) 2021 AMI
```

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.

```
Aptio Setup - AMI
Server Mgmt

--BMC network configuration--
*****
Configure IPv4 support
*****
Lan channel 1
Configuration Address source ---
Current Configuration: Unspecified
Station IP address:
Subnet mask:
Station MAC address:
Router IP address:
Router MAC address: 00-00-00-00-00-00

Lan channel 2
Current Configuration: StaticAddress
Station IP address: 0.0.0.0
Subnet mask: 0.0.0.0

^|Select to configure LAN ^|
*|channel parameters *|
*|statically or *|
*|dynamically(by BIOS or *|
*|BMC). Unspecified *|
*|option will not modify *|
+|MC network +|
+|ers during BIOS v|
+|ect Screen +|
+|ect Item +|
*|Enter: Select +|
*|+/-: Change Opt. +|
+|F1: General Help +|
+|F2: Previous Values +|
+|F3: Optimized Defaults +|
v|F4: Save & Exit +|
|ESC: Exit +|

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```

❑ Step#4- Save and Exit

WebUI access from browser

After completing the steps above (webui ip configured via either Bios or iptool), open your favorite browser the 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>

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->

Method #2- Via VGA & USB KB

Debian <https://www.debian.org/releases/stable/i386/index.en.html>

Rocky Linux : <https://docs.rockylinux.org/guides/installation/>

*Go Together,
We Go Far and Grow Big*

