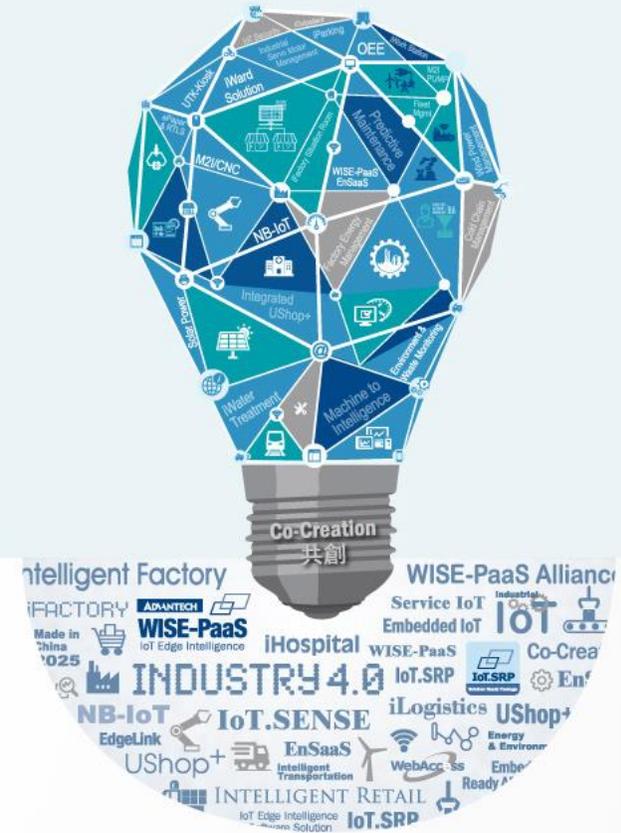


FWA-3051 QSG



ICVG , Alan.Ku
08/24th , 2023

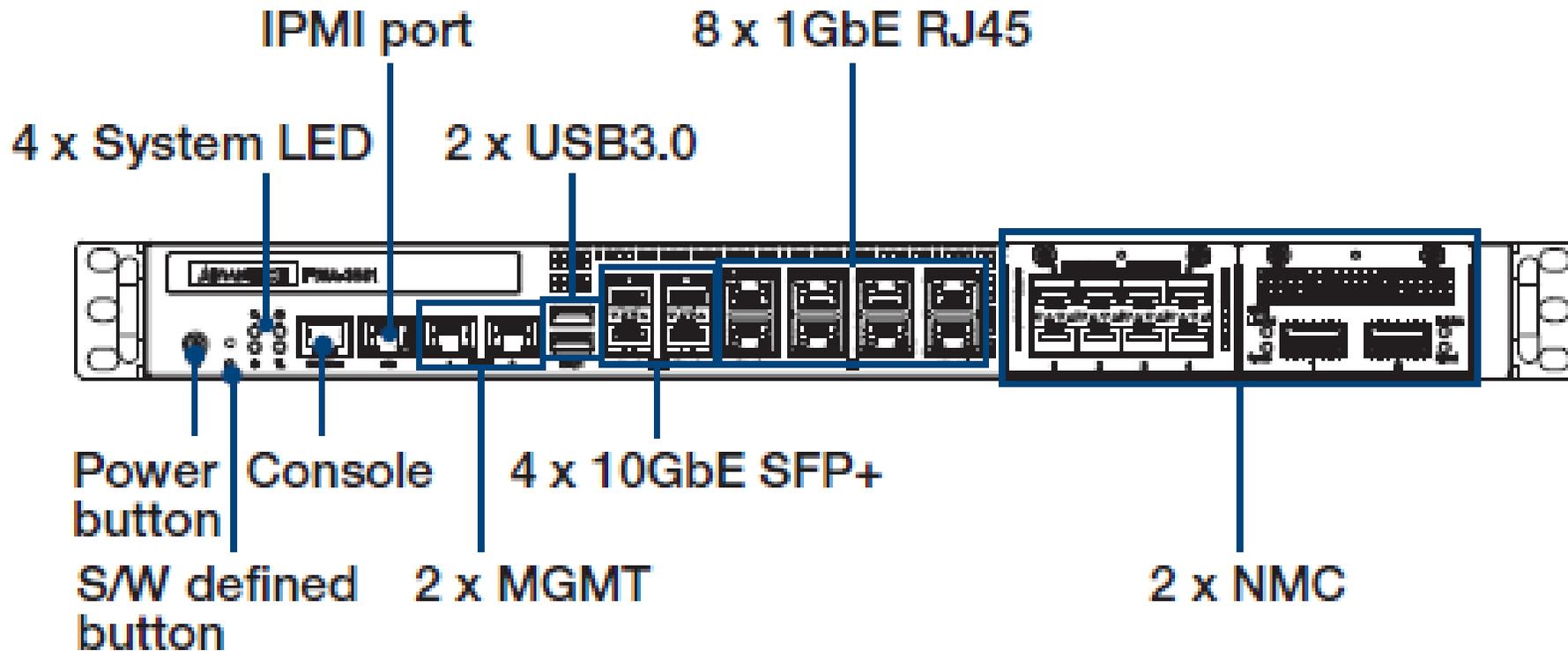
History

Version	Date	Handled by	Note
V01	2023/08/24	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



No.	LED Name	Software Controllable	PCA9554 GPIO Pin (to LED signal map)
④	SW_DEF led	Yes	P2/P3 (Green/Amber)
③	Alert led	Yes	P1 (Amber)
②	Locate led	Yes	P0 (Blue)
①	Power led	No	Green

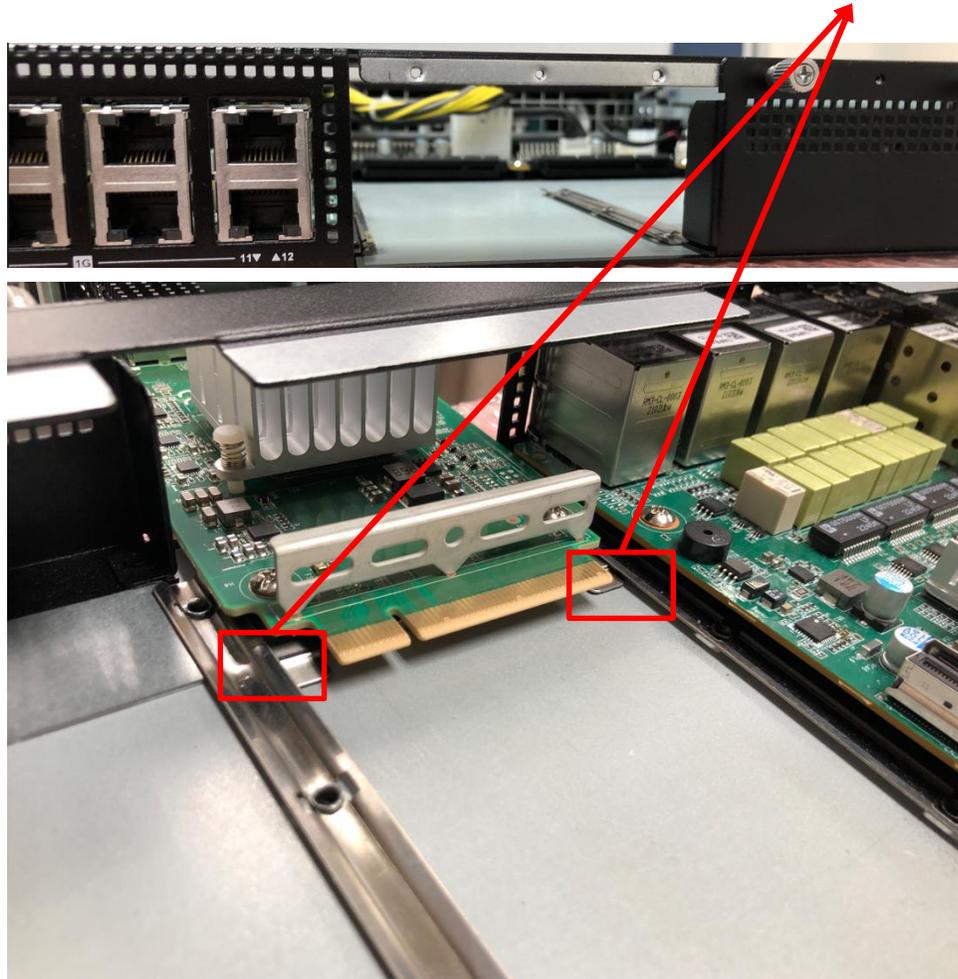
Server Front Side [3/4]- NMC slots

Lose screws

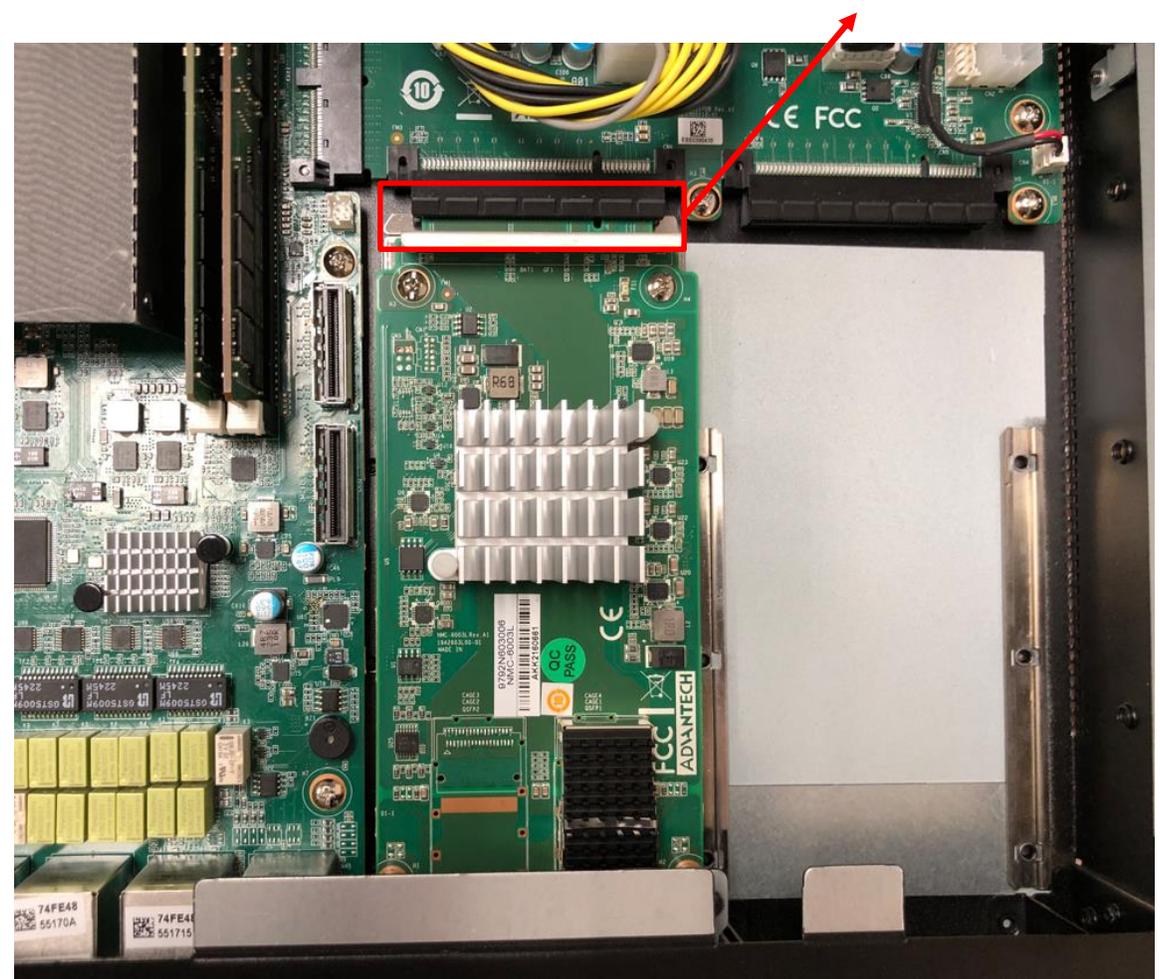


Server Front Side [4/4]- NMC modules

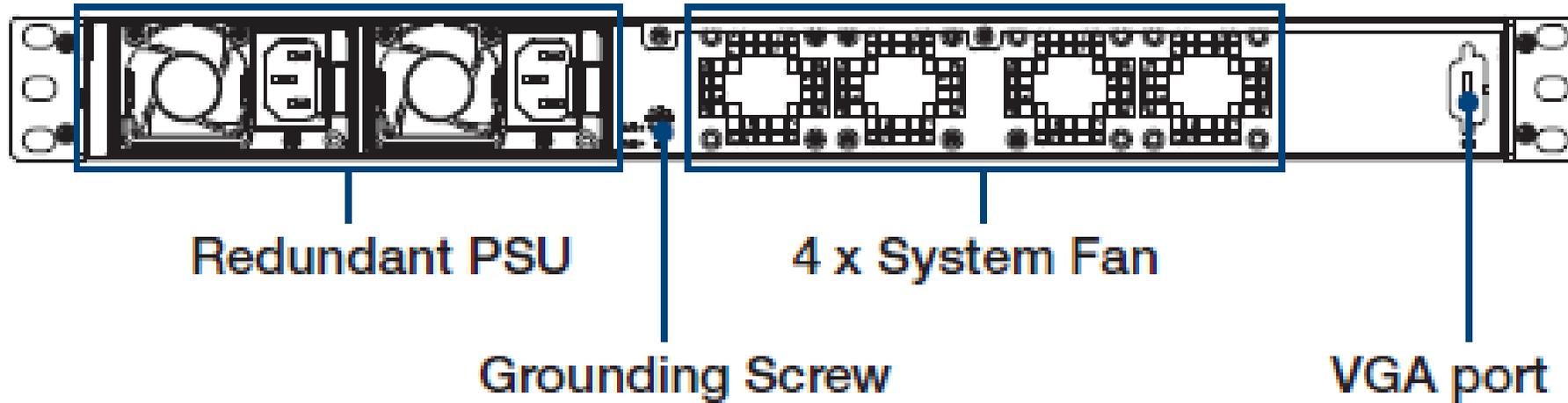
1. Align NMC module to slide trails



2. Push to the end



Server Rear Side [1/5]- Overview

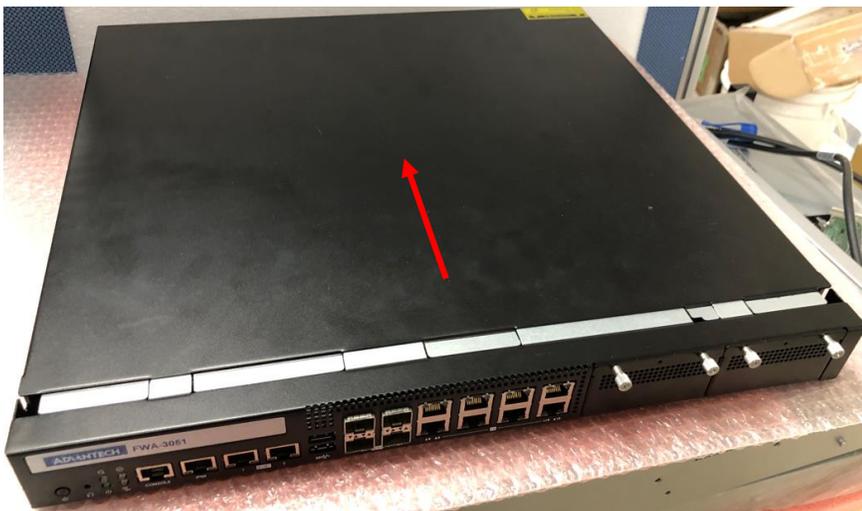


Server Rear Side [2/5]- Remove top cover

1. Remove all screw

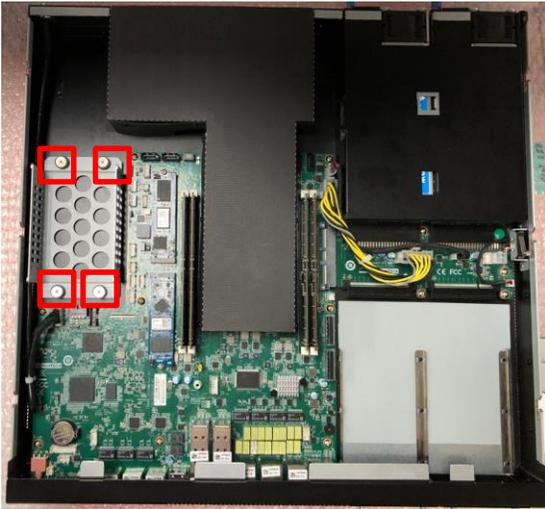


2. Push top cover backward



Server Rear Side [3/5]- Install 2.5' HDD/SSD

1. Remove all screw



2. Take out 2.5' HDD/SSD holder

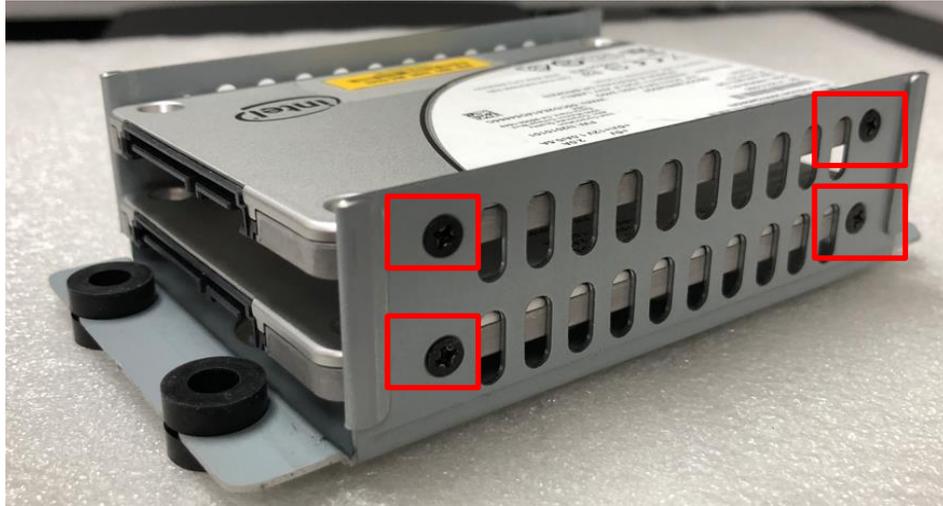


3. Take SATA cables and HDD/SSD screws

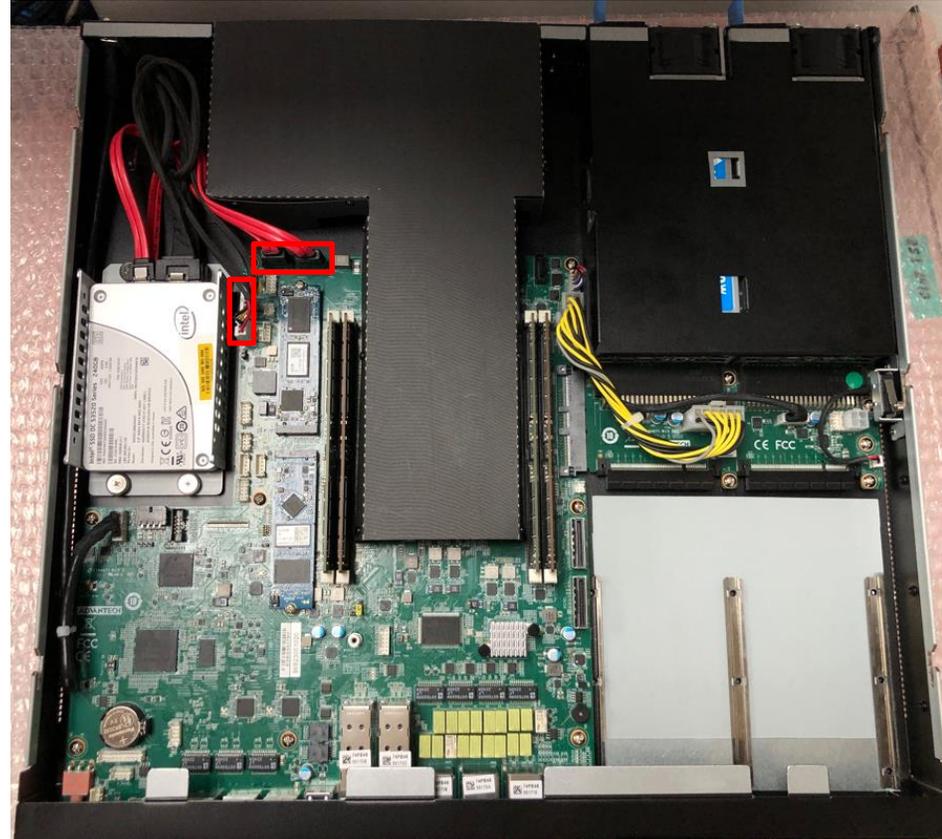


Server Rear Side [4/5]- Install 2.5' HDD/SSD

3. Tight screws



4. Plug cables to following connectors

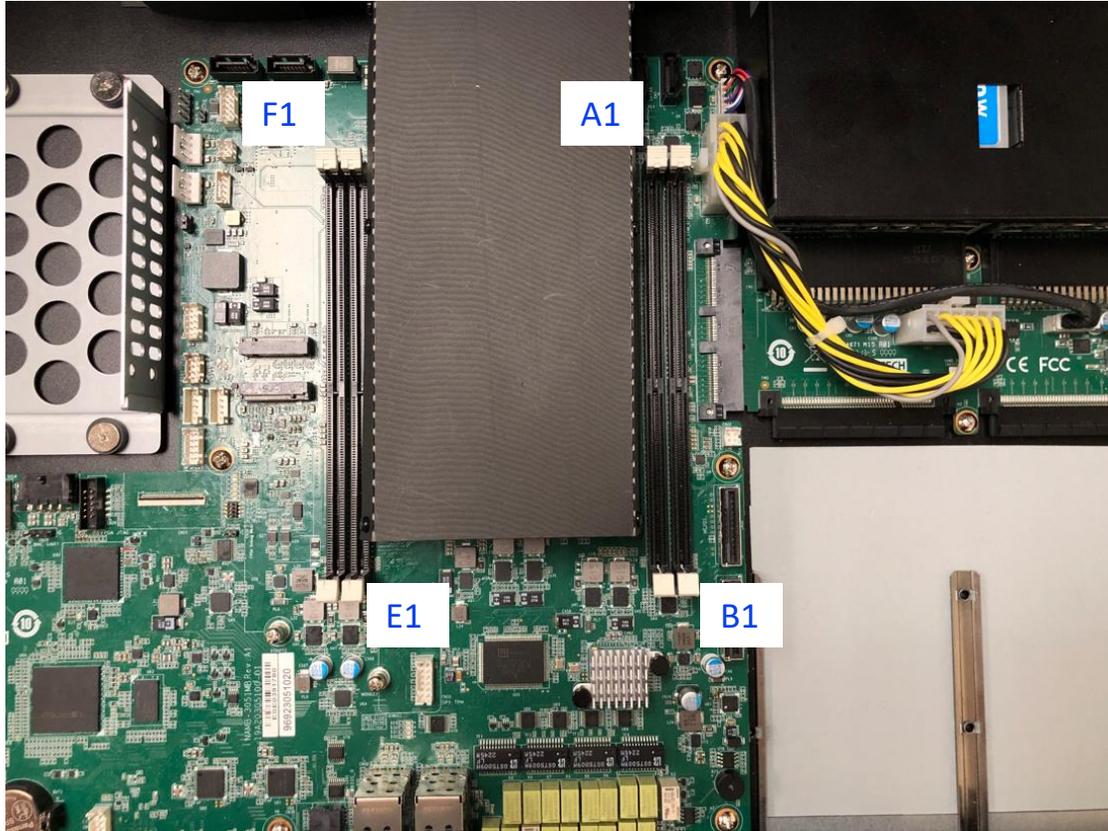


Server Rear Side [5/5]- Install M.2 disks

Insert 2280 M.2 disk, slightly push down, tight the screw.



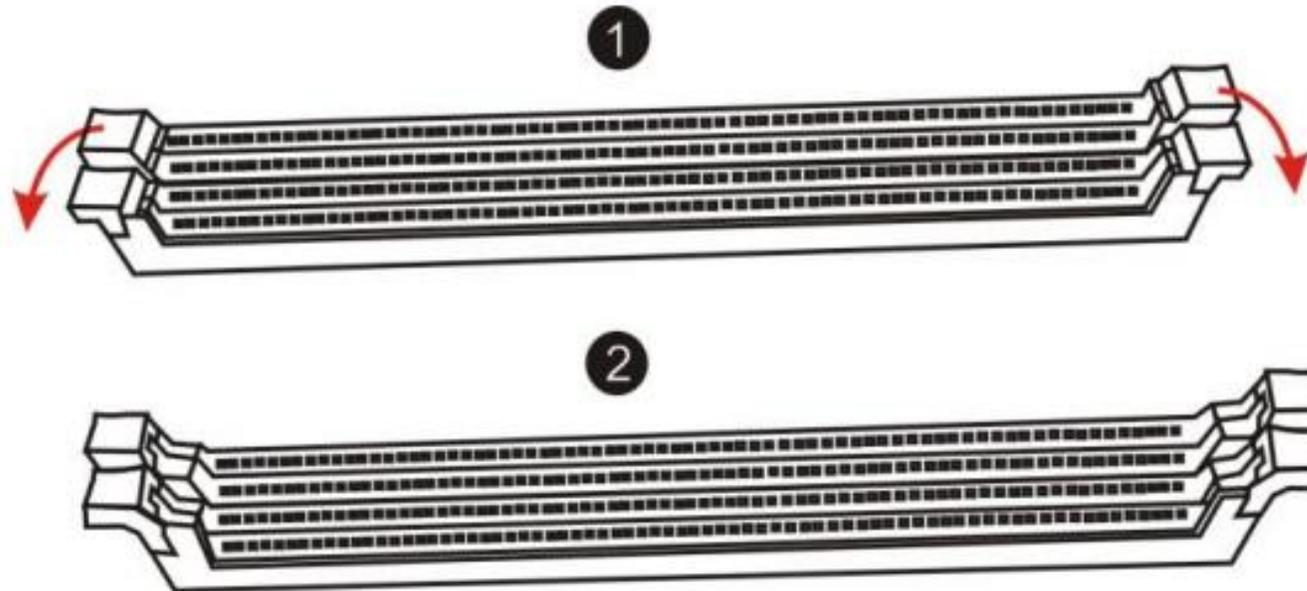
DIMMs Population [1/4]- Notes



Insert memories A1 > B1 > E1 > F1

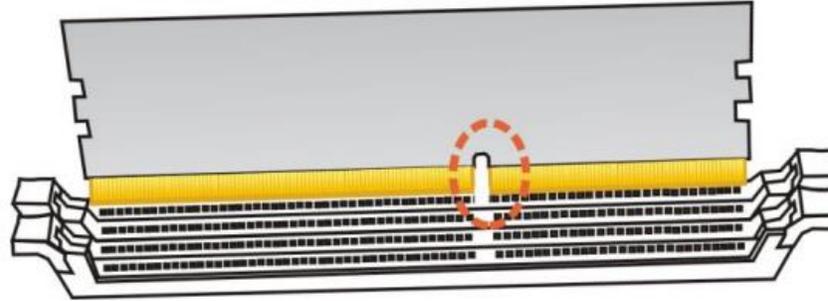
DIMMs Population [2/4]- Opening DIMM latches

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

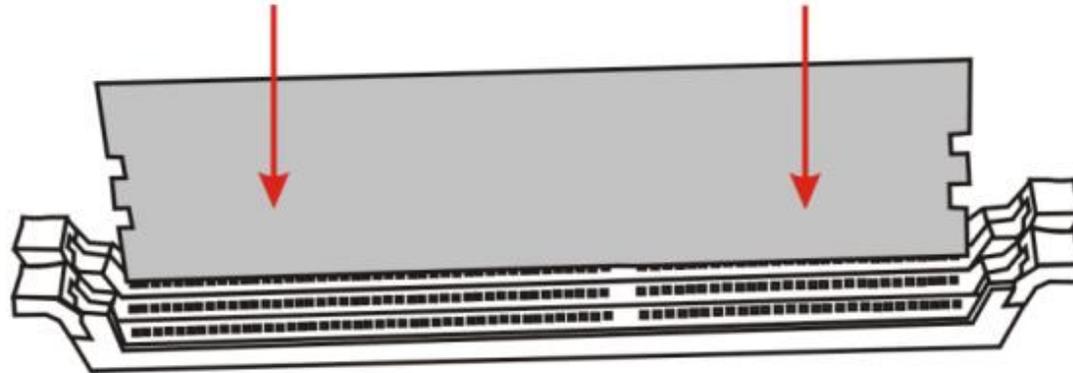


DIMMs Population [3/4]- DIMM Key Alignment

- 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, 50-60Hz/ DC: -48VDC, 800W

○ 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

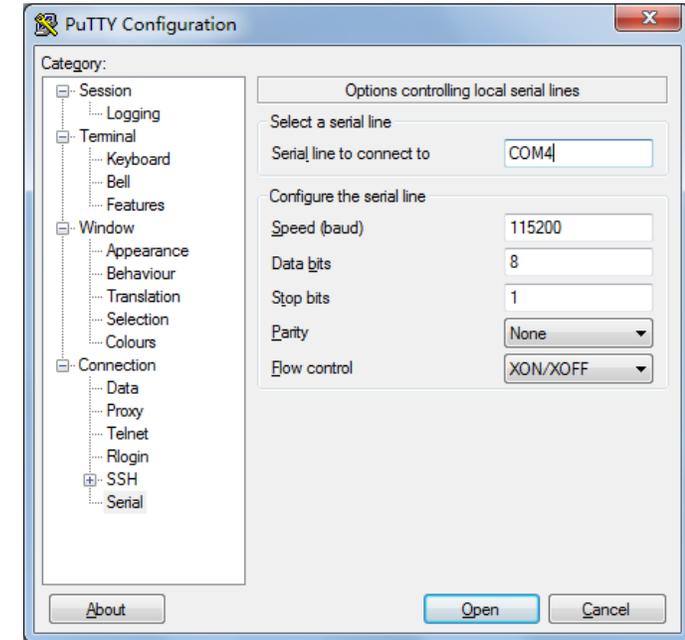


RJ-45

DB9 Connector



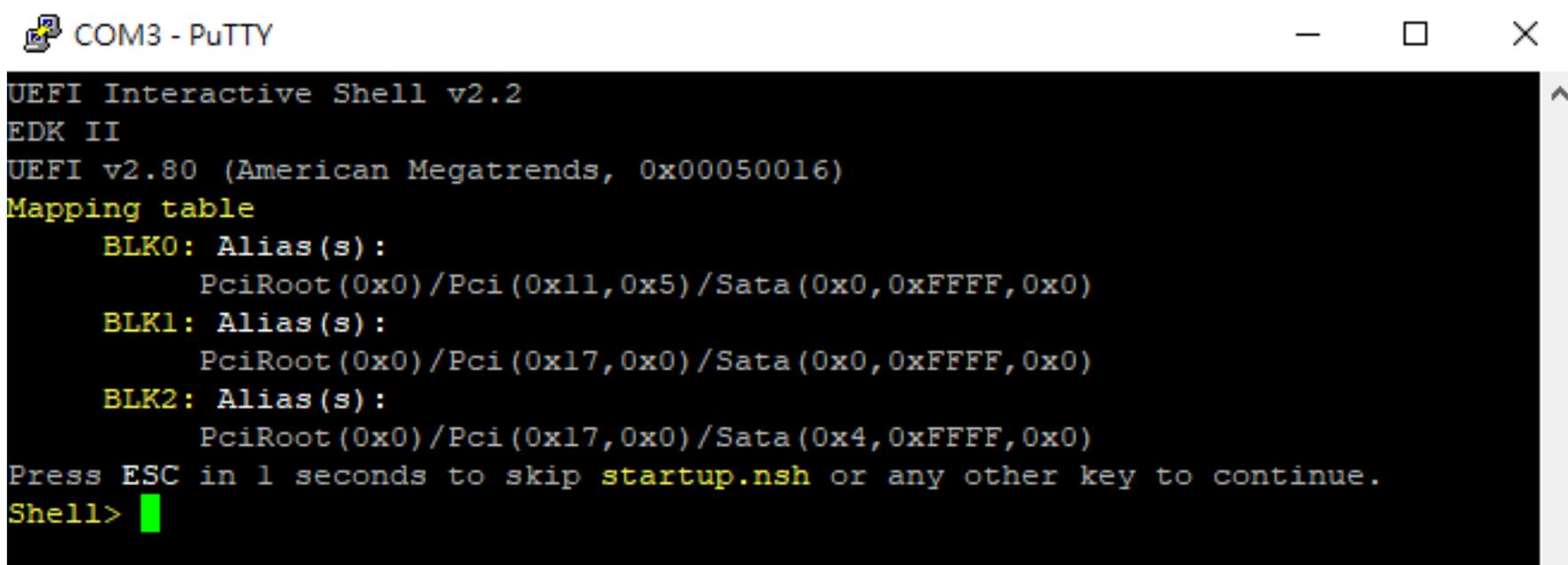
Terminal settings



Terminal Setting:

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

Access the device via Console

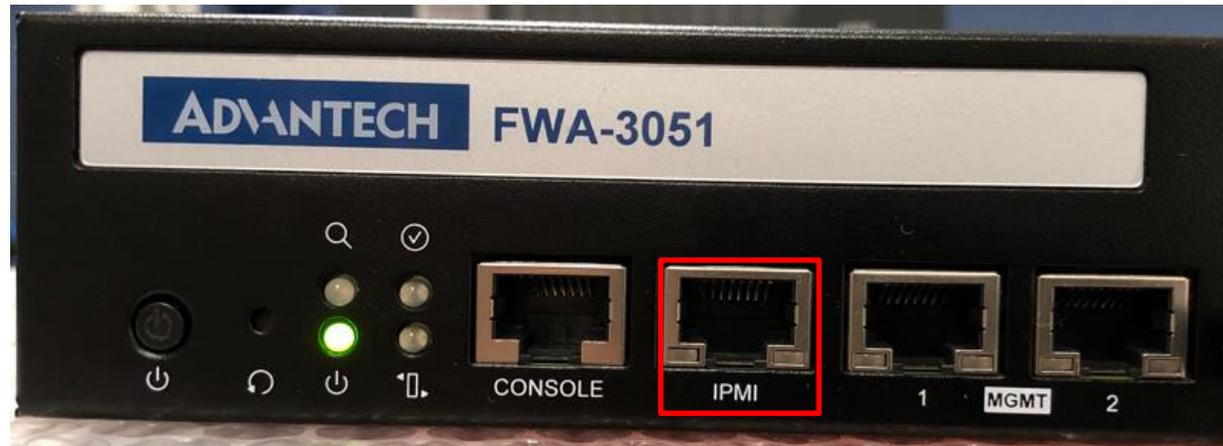
A screenshot of a PuTTY terminal window titled "COM3 - PuTTY". The terminal displays the output of a UEFI Interactive Shell v2.2. The text shown is: "UEFI Interactive Shell v2.2", "EDK II", "UEFI v2.80 (American Megatrends, 0x00050016)", "Mapping table", "BLK0: Alias(s):", "PciRoot(0x0)/Pci(0x11,0x5)/Sata(0x0,0xFFFF,0x0)", "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.", and "Shell>". A green cursor is visible after the "Shell>" prompt.

```
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

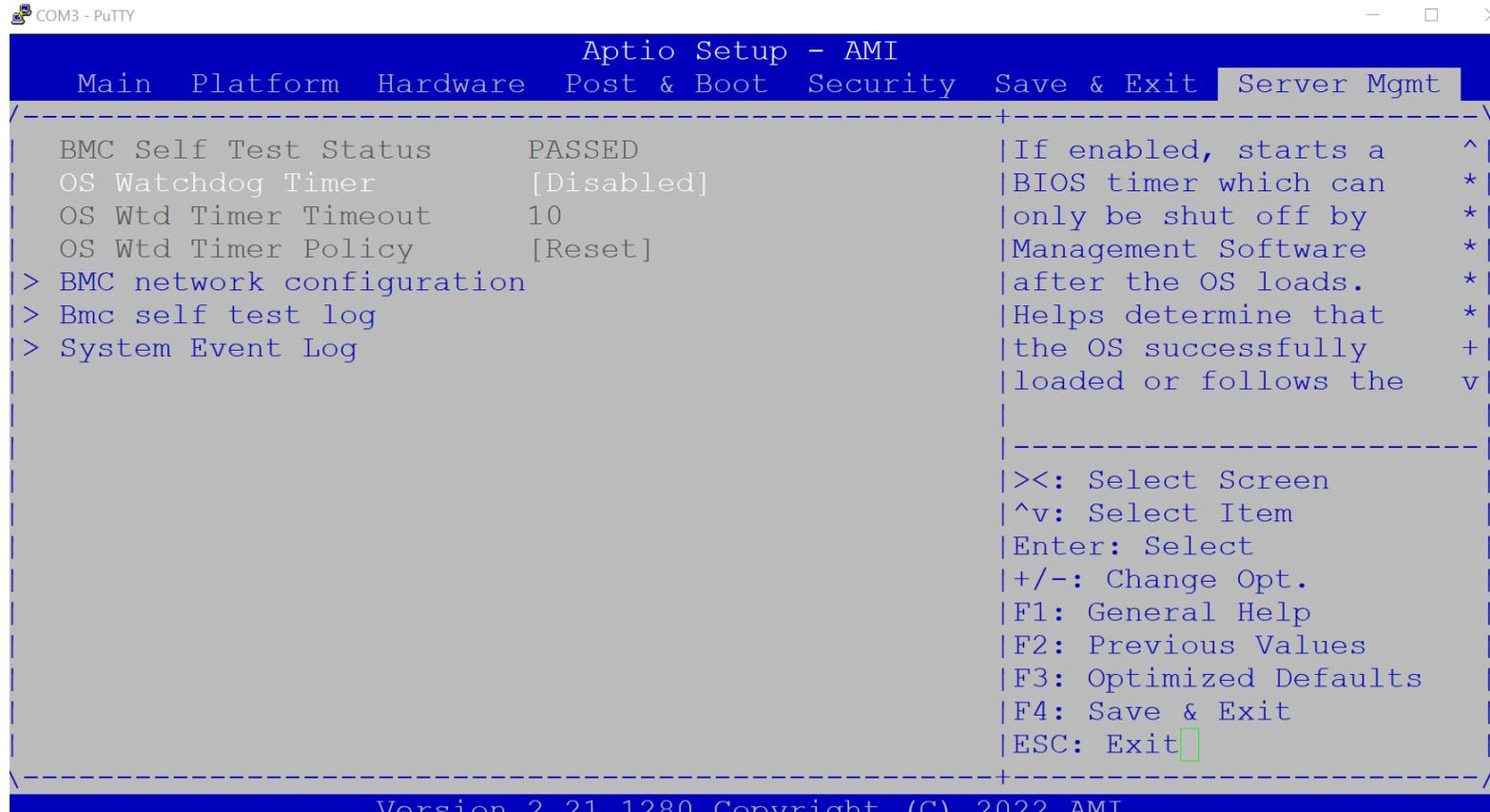
- ❑ In order to access the WebUI, we need to configure the IP address. In this part, we will describe how to set up WebUI IP address via BIOS



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. The menu items are:

- BMC Self Test Status: PASSED
- OS Watchdog Timer: [Disabled]
- OS Wtd Timer Timeout: 10
- OS Wtd Timer Policy: [Reset]
- > BMC network configuration
- > Bmc self test log
- > System Event Log

Help text on the right side of the screen:

- |If enabled, starts a
- |BIOS timer which can
- |only be shut off by
- |Management Software
- |after the OS loads.
- |Helps determine that
- |the OS successfully
- |loaded or follows the

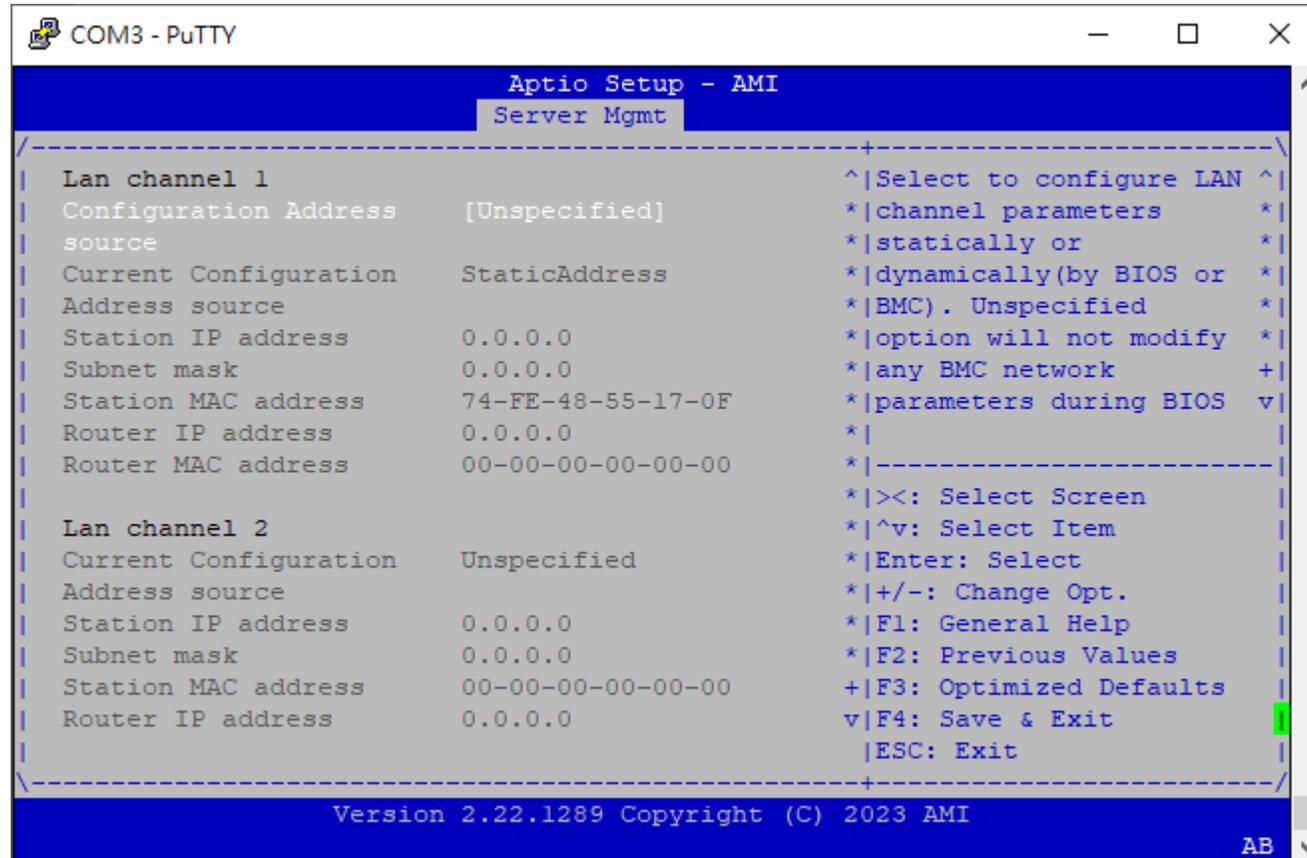
Navigation instructions:

- |><: 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

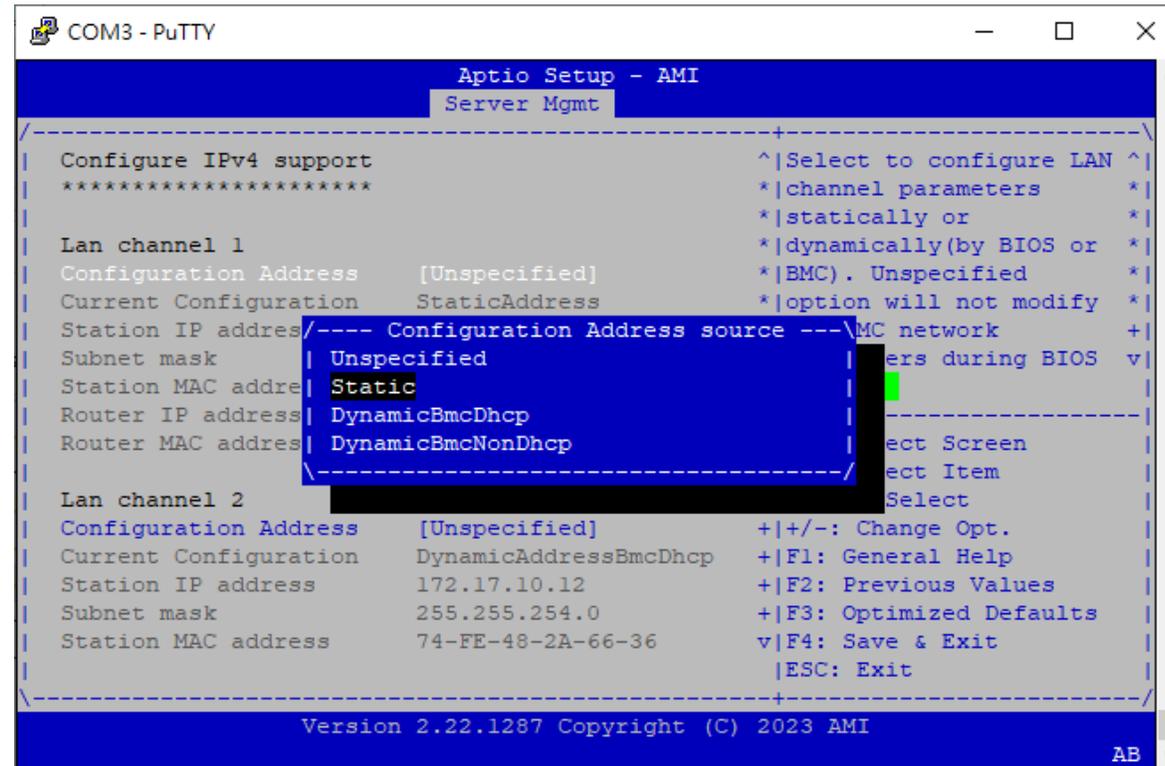
- ❑ Step#2- Choose "BMC network configuration"



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 for device FWA-3051. The browser address bar shows the URL <https://172.17.10.111/nodeexp/ne/overview>. The interface includes a navigation menu on the left with categories like Overview, Configuration, Alerts, Network, Extra Configurations, Maintenance, BMC Interface Control, RAID Management, Remote Control, System Power Control, Front Panel, iKVM Redirection, and Remote Serial Console. The main content area is divided into four panels: General Information (BMC Up Time, BMC Booted on, Hostname), Firmware Versions (BL, BMC, BMCONF, FPGA, BIOS, NVRAM), Software Versions (Advantech Node Explorer, Advantech iKVM), and Network Information (LAN Channel #1, MAC Address, IPv4 mode). The top right of the interface features status indicators (OK, Power Control, BIOS Post) and utility buttons (Refresh, English, Logout).

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*

