

USER'S MANUAL

AIO-200-MTL Series

All In One Touchscreen Computer



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Prefaces

Revision

Revision	Description	Date
1.0	Manual Released	2025/10/22

Disclaimer

All specifications and information in this User's Manual are believed to be accurate and up to date. Premio Inc. does not guarantee that the contents herein are complete, true, accurate or non-misleading. The information in this document is subject to change without notice and does not represent a commitment on the part of Premio Inc.

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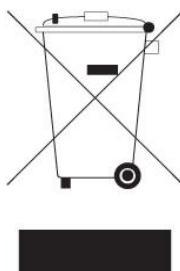
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Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. Please recycle to minimize pollution and ensure environment protection.



Safety Precautions

Before installing and using the equipment, please read the following precautions:

- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The power outlet shall be installed near the equipment and shall be easily accessible.
- Turn off the system power and disconnect the power cord from its source before making any installation. Be sure both the system and the external devices are turned OFF. Sudden surge of power could ruin sensitive components. Make sure the equipment is properly grounded.
- When the power is connected, never open the equipment. The equipment should be opened only by qualified service personnel.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- Disconnect this equipment from the power before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
- Avoid the dusty, humidity and temperature extremes.
- Do not place heavy objects on the equipment.
- If the equipment is not used for long time, disconnect it from the power to avoid being damaged by transient over-voltage.
- The storage temperature shall be above -20°C and below 60°C.
- The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
- If one of the following situation arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well or it cannot work according to the user's manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.

Technical Support and Assistance

1. Visit the Premio Inc website at <https://premioinc.com/> where you can find the latest information about the product.
2. Contact your distributor, our technical support team or sales representative for technical support if you need additional assistance. Please have following information ready before you call:
 - Model name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages

Conventions Used in this Manual



WARNING

This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.



CAUTION

This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.



NOTE

This indication provides additional information to complete a task easily.

Package Contents

Before installation, please ensure all the items listed in the following table are included in the package.

Item	Description	Q'ty
1	AIO-200-MTL Series Touchscreen Computer	1
2	Adapter Output 20V 7.5A 150W	1
3	128G M.2 M Key NVMe SSD	1
4	8GB DDR5 5600 MT/s	1

Ordering Information

Model No.	Description
1-E09A15001	Adapter Output With Lock 20VDC 7.5A 150W / Input 100~240V
3-WIFI0801S10	WIFI 6E Module KIT, Intel, 2T2R & BT 5.3
3-AI101040S10	AIO-W210 Panel Mount Bracket Kit
3-AI156040S10	AIO-W215 Panel Mount Bracket Kit
3-AI215040S10	AIO-W221 Panel Mount Bracket Kit
1-TPWR00118	3P Terminal Block(Female) To DC Plug
1-TPCD00008	AC Power Cord 3Pin 1830mm IEC-320-C5 To US Type

Available Models

AIO-W210-MTL

Model No.	Description
AIO-W210-125U	10.1" Full WXGA Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 5 125U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP
AIO-W210-155U	10.1" Full WXGA Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 7 155U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP

AIO-W215-MTL

Model No.	Description
AIO-W215-125U	15.6" Full HD Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 5 125U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP
AIO-W215-155U	15.6" Full HD Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 7 155U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP

AIO-W221-MTL

Model No.	Description
AIO-W221-125U	21.5" Full HD Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 5 125U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP
AIO-W221-155U	21.5" Full HD Capacitive IP65 All In One Touchscreen Computer with Intel® Core™ Ultra 7 155U Processors, 3x LAN, 3x USB, 1x Type C, 2x COM, 2x DP

Chapter 1

Product Introductions

1.1 Overview



Key Features

- 10.1" / 15.6" / 21.5" All-in-One Touchscreen Computer
- World Class Certifications for Safety and Reliability: CE/FCC/CB/UL/UKCA/IC
- Front IP65 Rating for protection against water and dust
- Scratch Resistant 7H Glass Hardness
- Versatile Display Outputs, 2x DP++ and LVDS/eDP
- MTBF 30,000 Hours (AIO-W210-MTL, AIO-W215-MTL)
- MTBF 50,000 Hours (AIO-W221-MTL)



1.2 Hardware Specification

Display	AIO-W210-MTL	AIO-W215-MTL	AIO-W221-MTL
LCD Size	10.1" (16:10)	15.6" (16:9)	21.5" (16:9)
Max. Resolution	1280 x 800	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Brightness (cd/m2)	400	400	500
Contrast Ratio	800:1	800:1	1,000:1
LCD Color	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.169(H) x 0.1695 (V)	0.17925 (H) x 0.17925 (V)	0.248 (H) x 0.248 (V)
Viewing Angle (H-V)	89/89/89/89 (Typ.) (CR>=10)	85 /85 /85 /85 (Typ.) (CR>=10)	89/89/89/89 (Typ.) (CR>=10)
Backlight MTBF	30,000 Hours	30,000 Hours	50,000 Hours

System

Processor	- Intel® Core™ Ultra 5 Processor 125U 12M Cache, up to 4.30 GHz (2+8+2 core) - Intel® Core™ Ultra 7 Processor 155U 12M Cache, up to 4.80 GHz (2+8+2 core)
System Chipset	SoC integrated
LAN Chipset	GbE1: Intel i226-LM 2.5GbE LAN PXE iAMT Support GbE2: Intel i226-V 2.5GbE LAN PXE iAMT Support GbE3: Intel i226-V 2.5GbE LAN PXE iAMT Support
Audio Codec	Realtek® ALC897 CODEC
System Memory	1x 262-Pin DDR5 5600MHz SO-DIMM. Max. up to 32GB (Non-ECC)
BIOS	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	dTPM2.0, fTPM2.0

Touch

Multi-touch	10 point (Support Glove Mode)
Anti-noise	CS 10V rms
Touch Type	Projected Capacitive Touch
Surface Hardness	7H / IK07

Storage

M.2 M Key	1x M.2 M Key (2280, PCIe x4 Gen 4/SATA) support for NVMe/SATA SSD, Auto Detect
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Expansion

M.2	1x M.2 B Key (3042/3052, PCIe x2+USB 3.0+USB 2.0) support for 4G/5G 1x M.2 E Key (2230, PCIe+USB 2.0) for Wifi/Bluetooth
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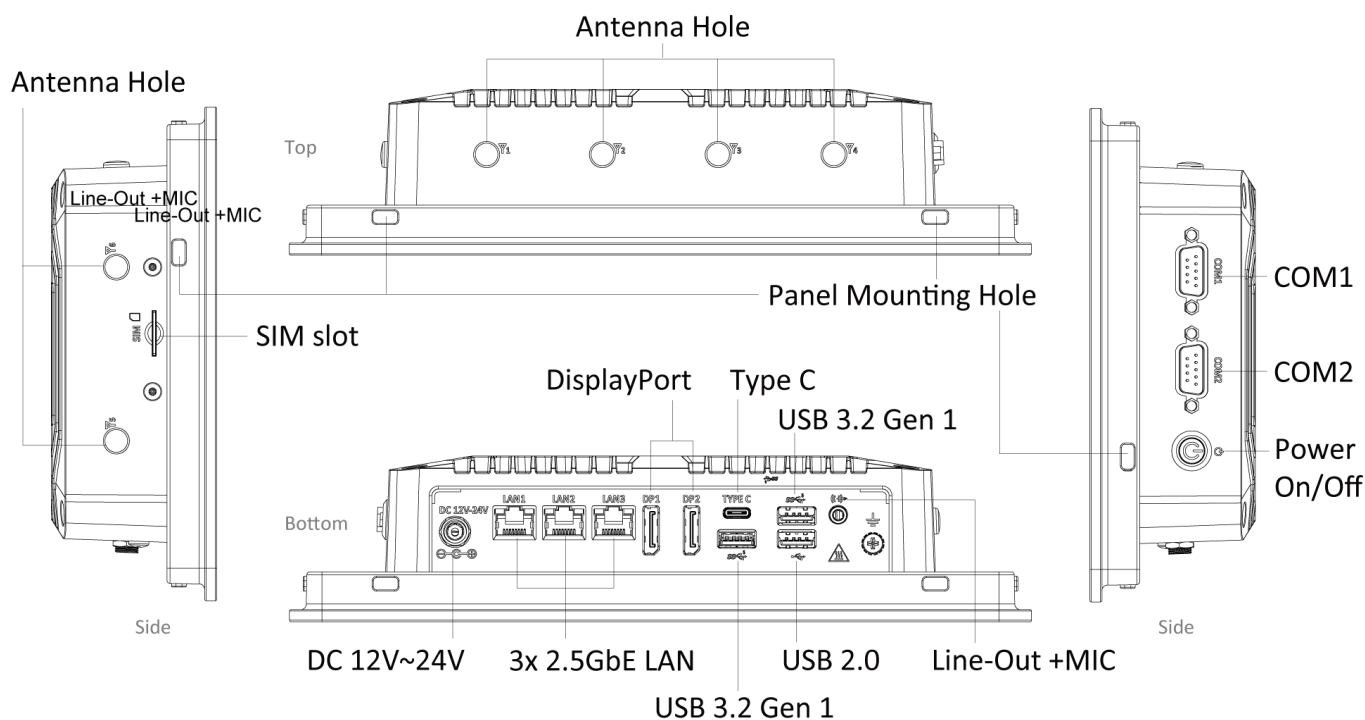
I/O		Operating System	
DisplayPort	2x DisplayPort	Windows	Windows 11
COM	- COM 1: RS-232/422/485 - COM 2: RS-232	Linux	Ubuntu 22.04
USB	1x USB 3.2 Type-C (5 Gbps) 2x USB 3.2 Gen 1 (5 Gbps) 1x USB 2.0	Power	
LAN	3x 2.5GbE LAN	Power Adapter	150W (20V/7.5A, Default)
Audio	1x Line-Out +MIC	Power Supply Voltage	DC 12~24V
SIM	1x SIM Socket	Power Connector	DC Jack 5.5mm/2.5mm
Others	Support up to 6x Antenna (optional)		

Environment	
Operating Temp	-10°C to 50°C
Storage Temp	-20°C to 60°C
Relative Humidity	10% to 80% (non-condensing)
Certification	UL 62368 Ed. 3, CE, FCC Class A, CB, UKCA, IC
Vibration	With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis)
Shock	With SSD: 20G half-sin 11ms

Physical	
Dimension	- AIO-W210-MTL : 256 (W) x 170 (H) x 57 (D) mm - AIO-W215-MTL: 400 (W) x 249 (H) x 57 (D) mm - AIO-W221-MTL : 538 (W) x 329 (H) x 69 (D) mm
Weight	- AIO-W210-ASL-3L : 1.4 Kg - AIO-W215-ASL-3L : 2.3 Kg - AIO-W221-ASL-3L : 5.2 Kg
Mounting	VESA Mount (75mm x 75mm/100mm x 100mm) Panel Mount (optional)

1.3 System I/O

1.3.1 AIO-W210-MTL



Power On/Off

Press to power-on or power-off the system

USB 3.2 Gen 1 port

Used to connect USB 3.2 device

DC IN

Used to plug a DC power input with DC Jack 5.5/2.5mm

COM port

COM 1: RS-232/422/485 (Via BIOS adjust)
COM 2: RS-232

SIM

Used to insert Dual Nano SIM card

LAN port

Used to connect the system to a local area network

DisplayPort

Used to connect a DisplayPort monitor

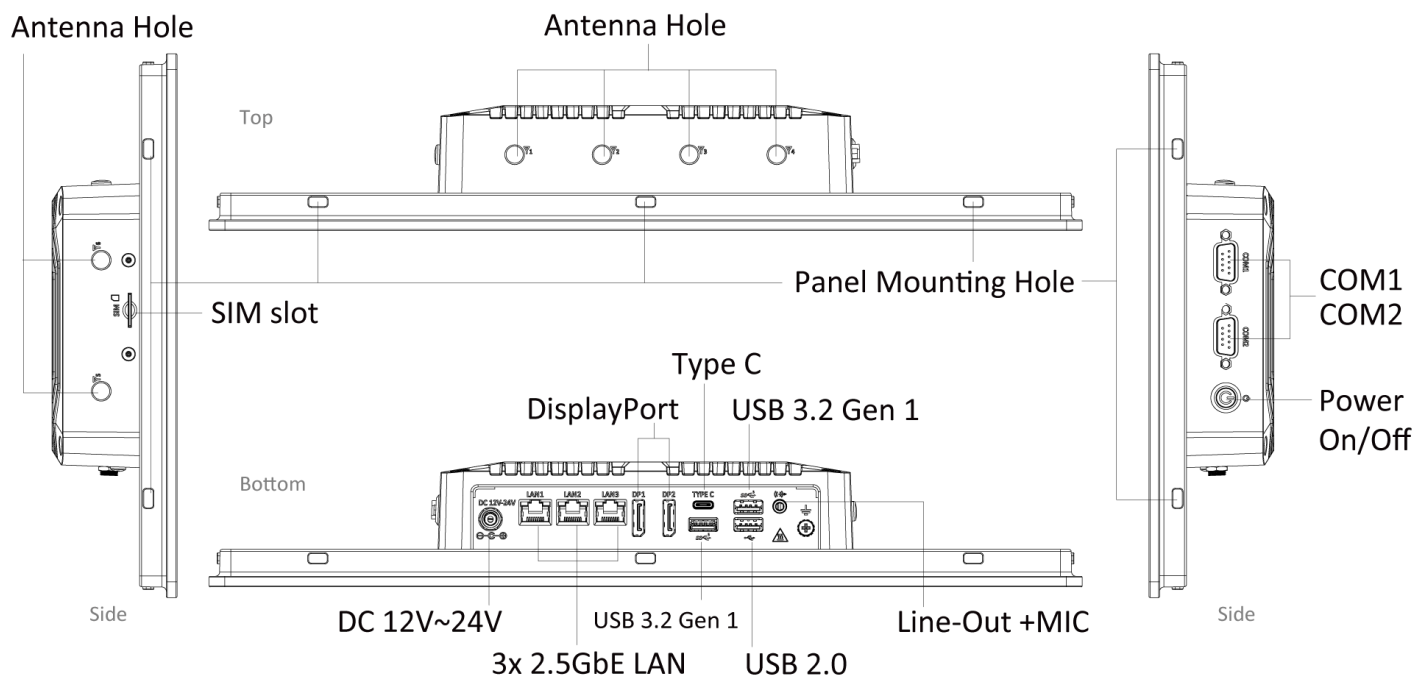
HDMI

Used to connect a HDMI monitor

Antenna hole

Used to connect an antenna for optional WiFi or 4G/5G module

1.3.2 AIO-W215-MTL



Power On/Off

Press to power-on or power-off the system

USB 3.2 Gen 1 port

Used to connect USB 3.2 device

DC IN

Used to plug a DC power input with DC Jack 5.5/2.5mm

COM port

COM 1: RS-232/422/485 (Via BIOS adjust)
COM 2: RS-232

SIM

Used to insert Dual Nano SIM card

LAN port

Used to connect the system to a local area network

DisplayPort

Used to connect a DisplayPort monitor

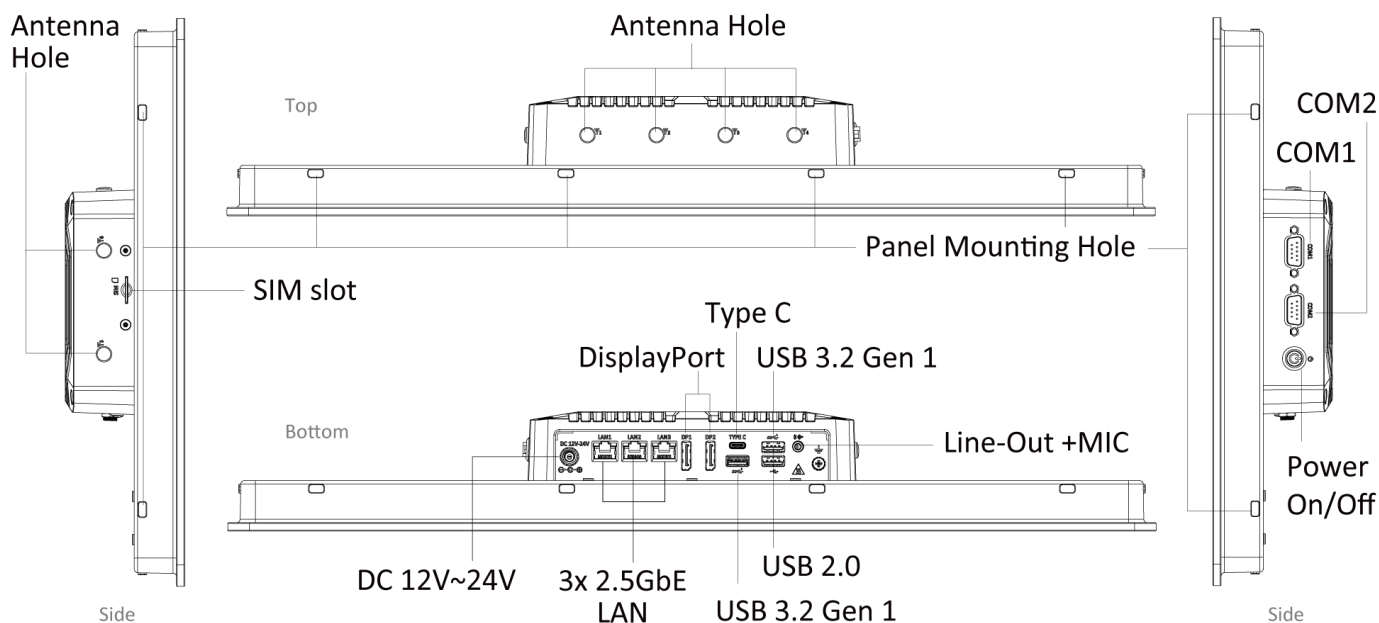
HDMI

Used to connect a HDMI monitor

Antenna hole

Used to connect an antenna for optional WiFi or 4G/5G module

1.3.3 AIO-W221-MTL



Power On/Off

Press to power-on or power-off the system

USB 3.2 Gen 1 port

Used to connect USB 3.2 device

DC IN

Used to plug a DC power input with DC Jack 5.5/2.5mm

COM port

COM 1: RS-232/422/485 (Via BIOS adjust)
COM 2: RS-232

SIM

Used to insert Dual Nano SIM card

LAN port

Used to connect the system to a local area network

DisplayPort

Used to connect a DisplayPort monitor

HDMI

Used to connect a HDMI monitor

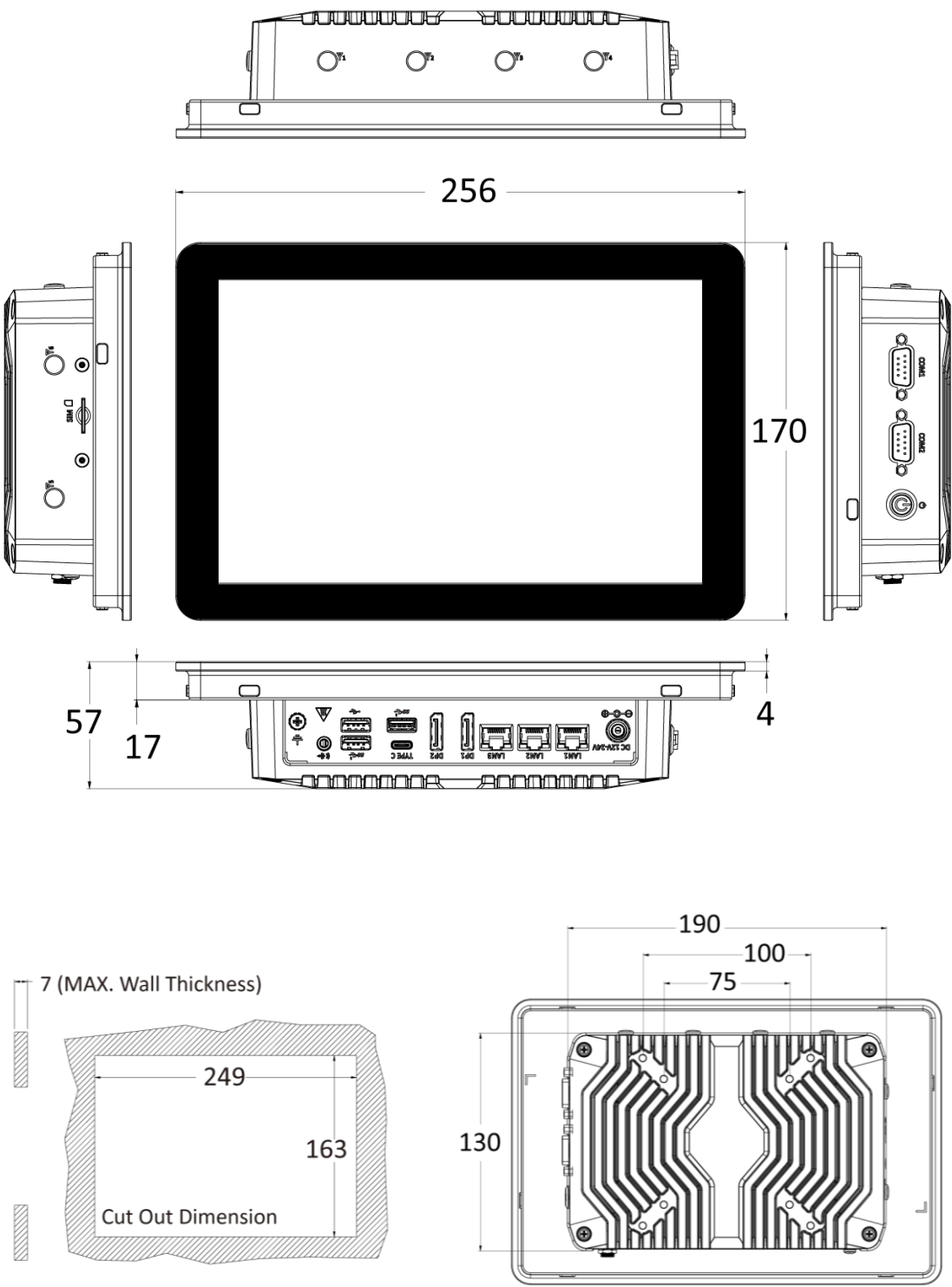
Antenna hole

Used to connect an antenna for optional WiFi or 4G/5G module

1.4 Mechanical Dimensions

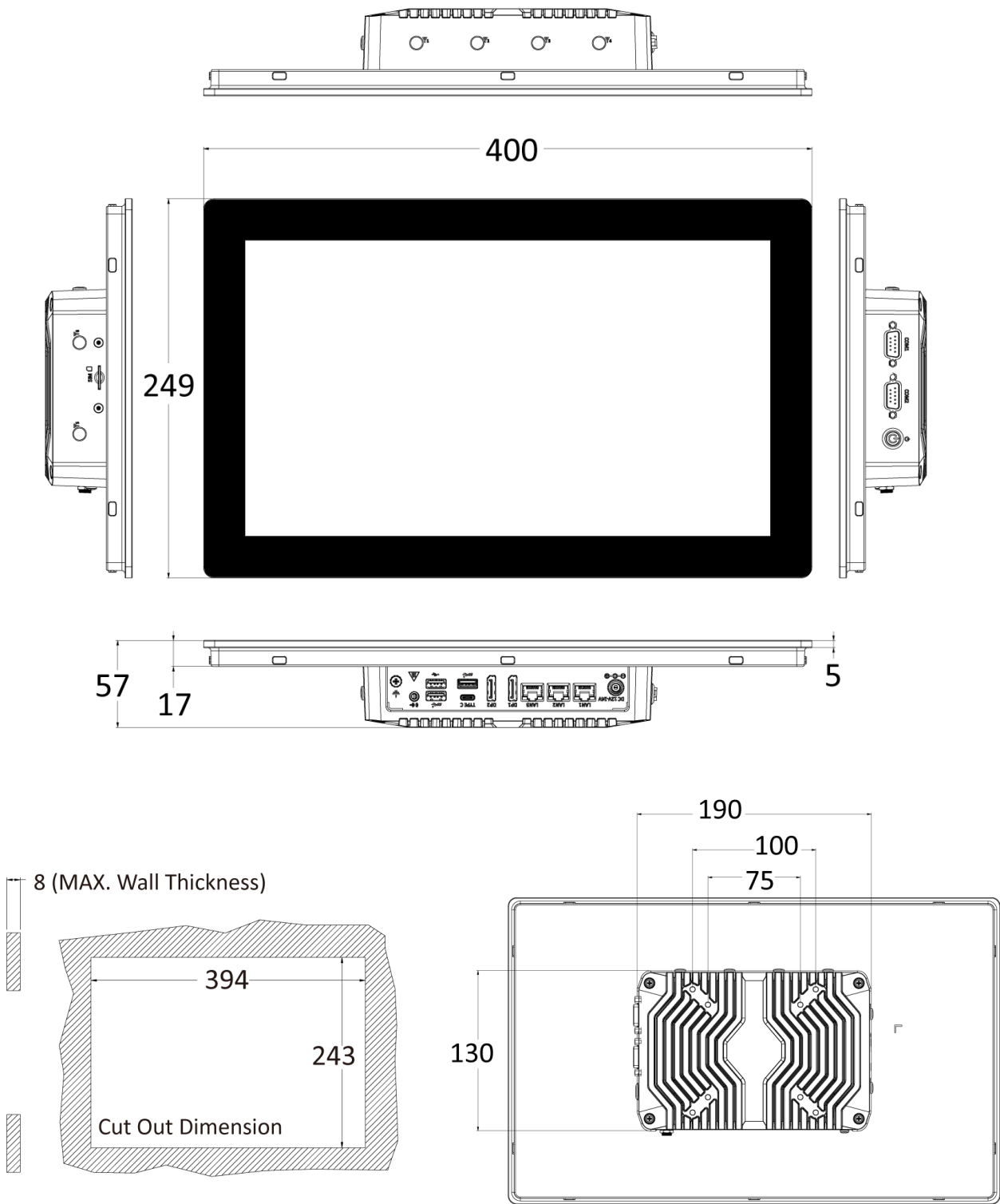
1.4.1 AIO-W210-MTL

Unit: mm



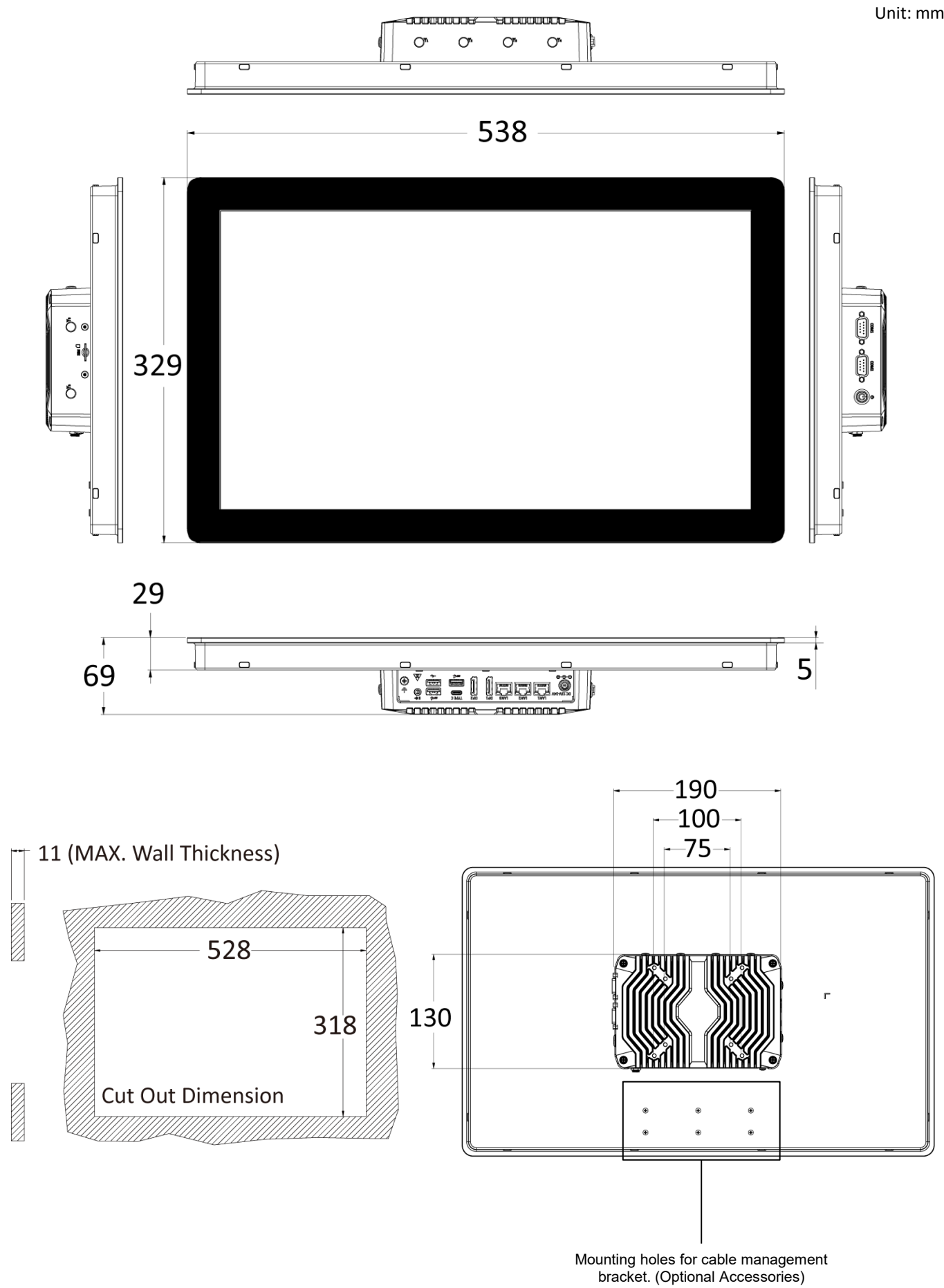
1.4.2 AIO-W215-MTL

Unit: mm



1.4.3 AIO-W221-MTL

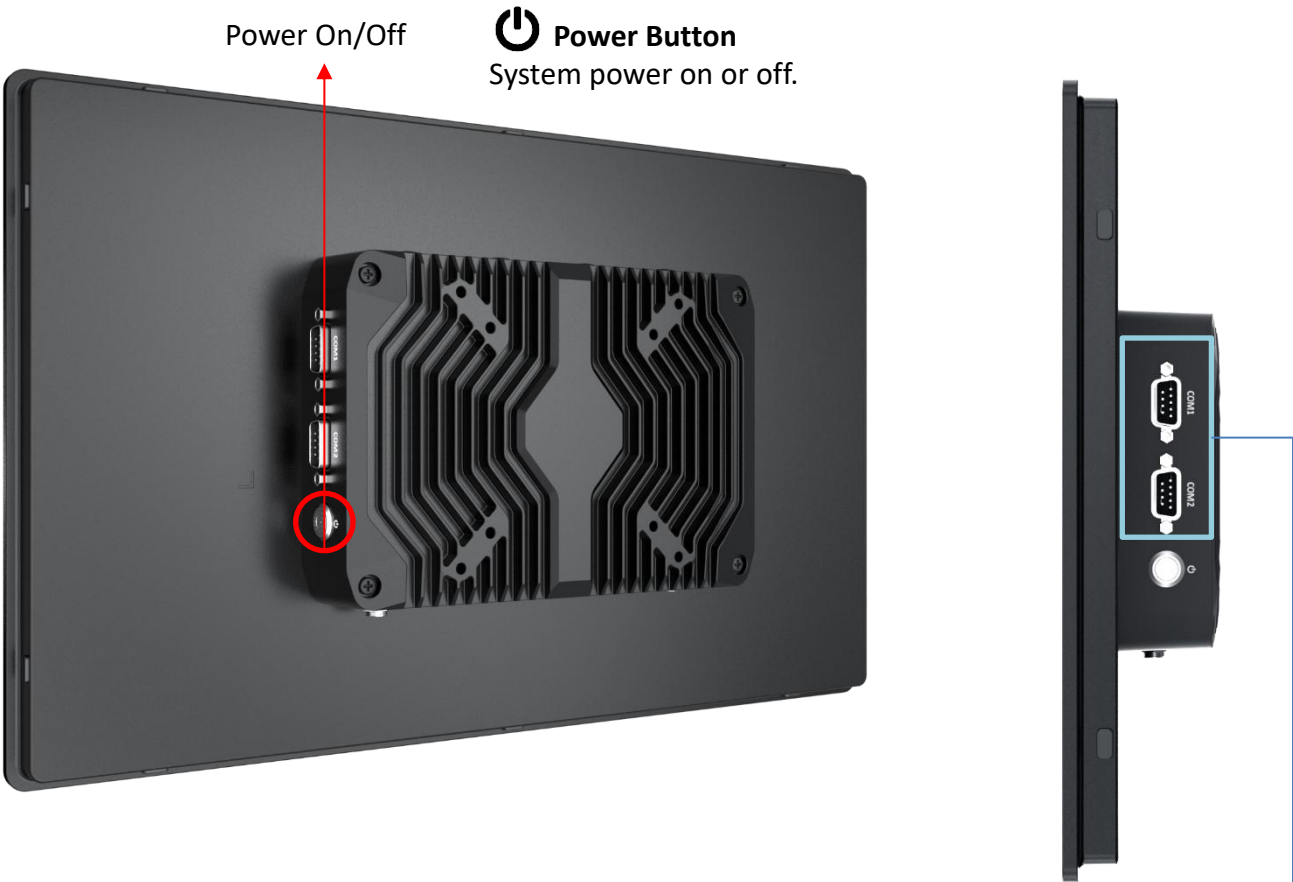
Unit: mm



Chapter 2

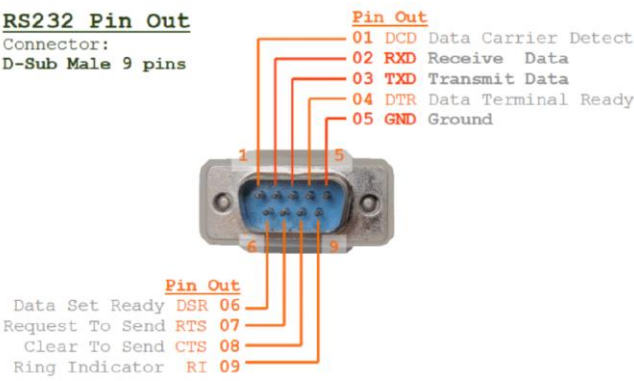
Panel Controls

2.1 Users Controls



COM2

RS232		
PIN	SIGNAL	DESCRIPTION
1	NDCD	Data Carrier Detect
2	NSIN	Signal In
3	NSOUT	Signal Out
4	NDTR	Data Terminal Ready
5	GND	Signal Ground
6	NDSR	Data Set Ready
7	NRTS	Request To Send
8	NCTS	Clear To Send
9	VCC_COM	VCC_COM



COM1

RS232			RS422			RS485		
PIN	SIGNAL	DESCRIPTION	PIN	SIGNAL	DESCRIPTION	PIN	SIGNAL	DESCRIPTION
1	NDCD	Data Carrier Detect	1	422 TXD-	Transmit Data, Negative	1	TXD-	Transmit Data, Negative
2	NSIN	Signal In	2	422 TXD+	Receive Data, Positive	2	TXD+	Transmit Data, Positive
3	NSOUT	Signal Out	3	422 RXD+	Transmit Data, Positive	3	NC	No Connection
4	NDTR	Data Terminal Ready	4	422 RXD-	Receive Data, Negative	4	NC	No Connection
5	GND	Signal Ground	5	GND	Signal Ground	5	GND	Signal Ground
6	NDSR	Data Set Ready	6	NC	No Connection	6	NC	No Connection
7	NRTS	Request To Send	7	NC	No Connection	7	NC	No Connection
8	NCTS	Clear To Send	8	NC	No Connection	8	NC	No Connection
9	VCC_COM	VCC_COM	9	NC	No Connection	9	NC	No Connection

Chapter 3

System Setup

Set torque force to 3.5 kgf-cm to execute all the screwing and unscrewing.

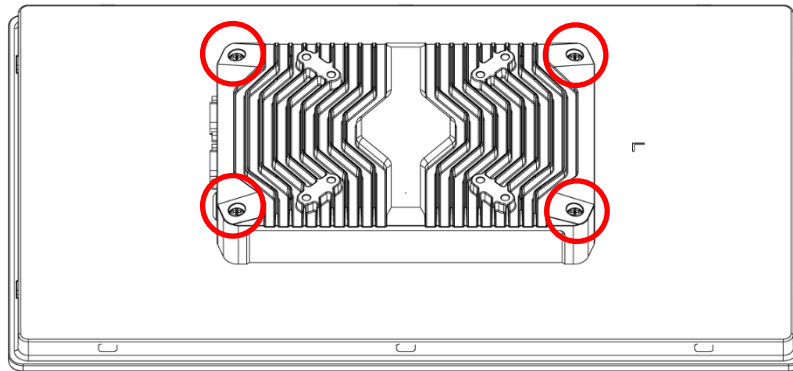
3.1 Replacement of Internal Modules



WARNING

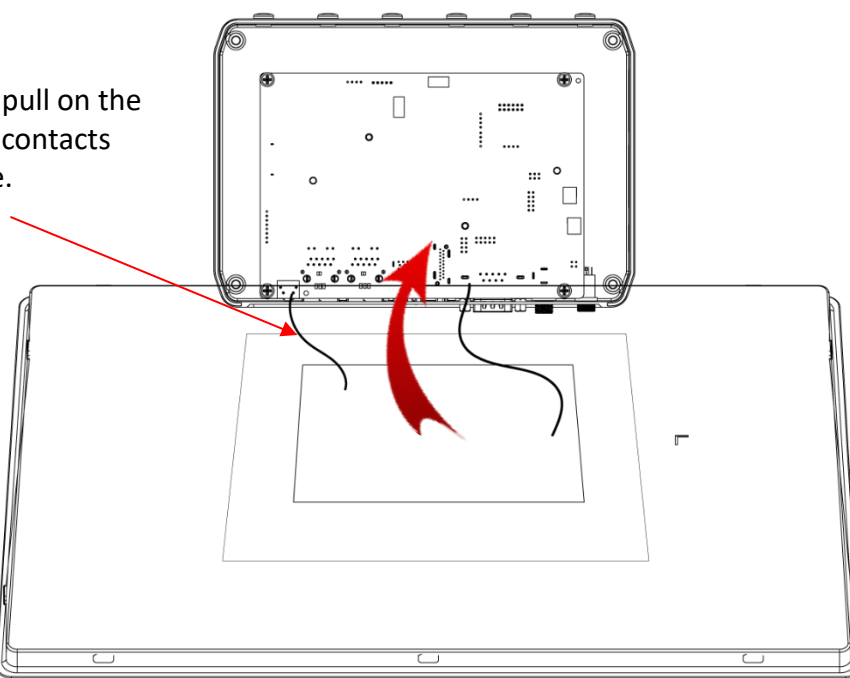
In order to prevent electric shock or system damage, before removing the chassis cover, must turn off power and disconnect the unit from power source.

1. Use a screwdriver to remove the four screws securing the back cover.



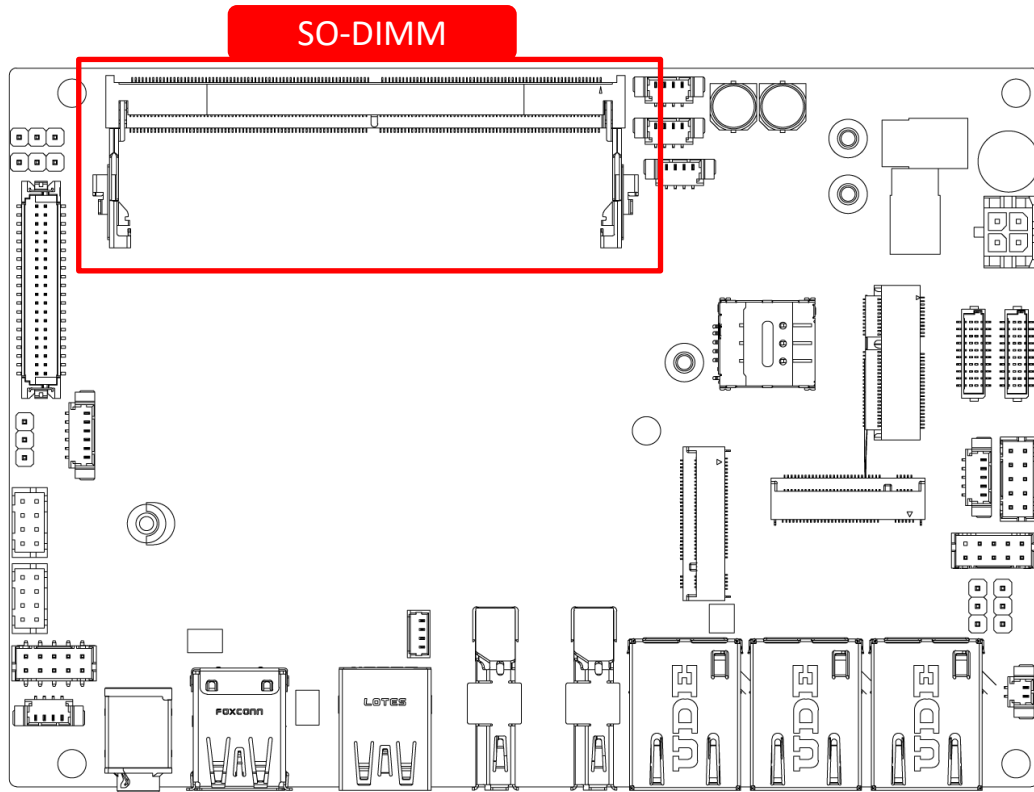
2. After removing the screws, detach the main unit from the screen.

*Be careful not to pull on the cable to avoid the contacts from coming loose.



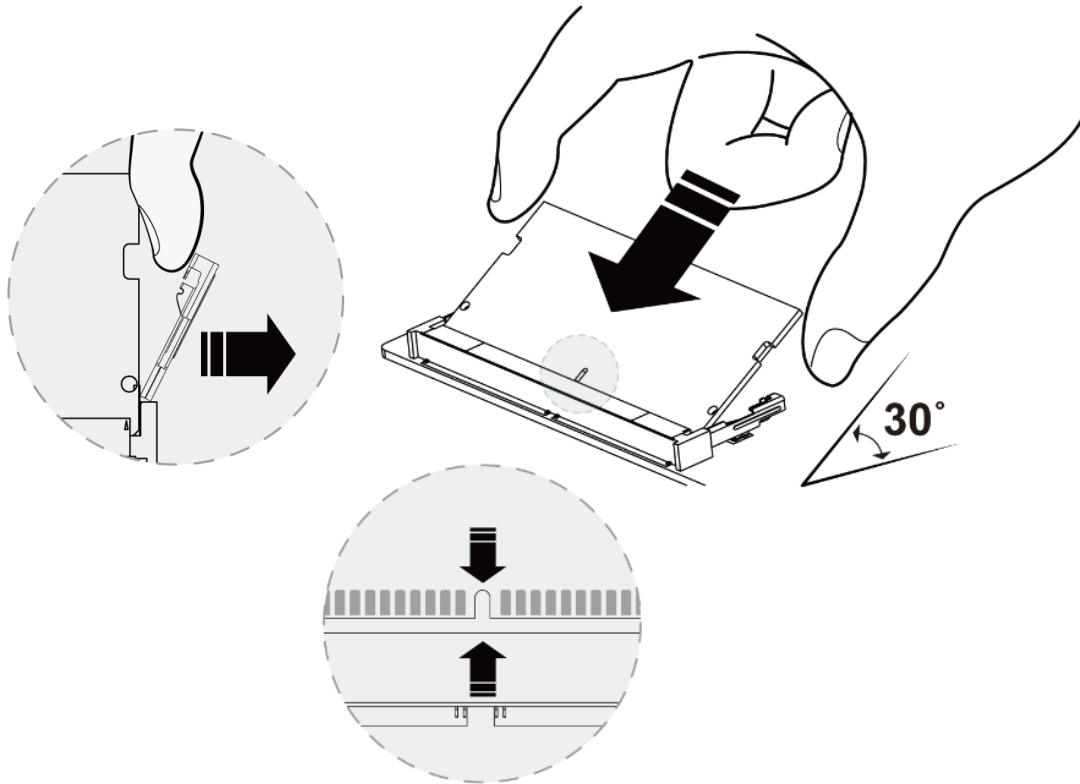
3.2 Install SO-DIMM

The SO-DIMM slot supports DDR5 RAM, as highlighted in the picture below.

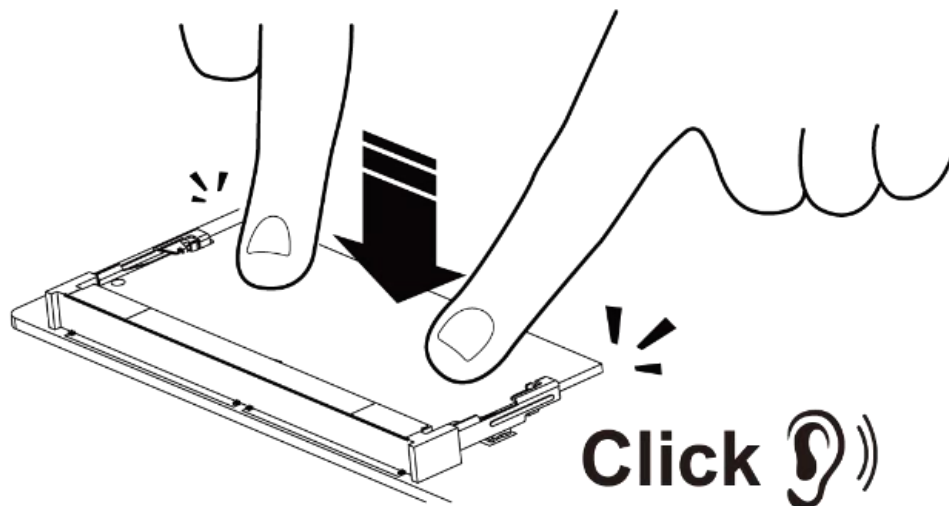


Install SO-DIMM- Step by Step

1. Gently pull the locking tabs on either side of the SO-DIMM slot. Insert the SO-DIMM module at a 30-degree angle.

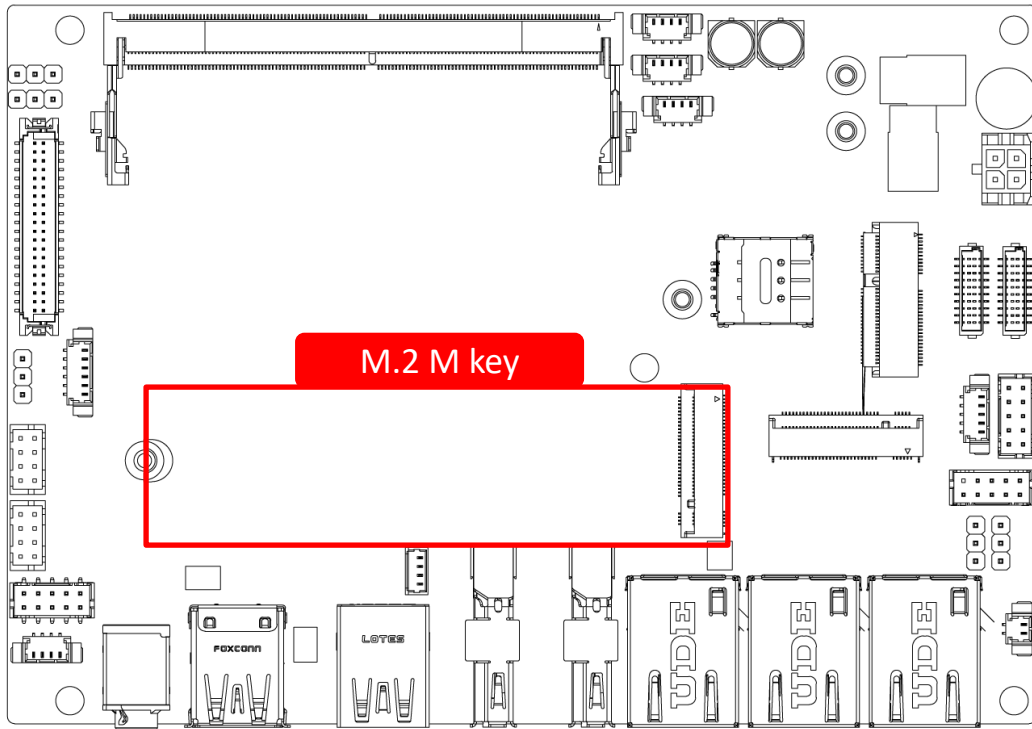


2. Press down gently until you hear a "click" sound and the tabs lock it into place.



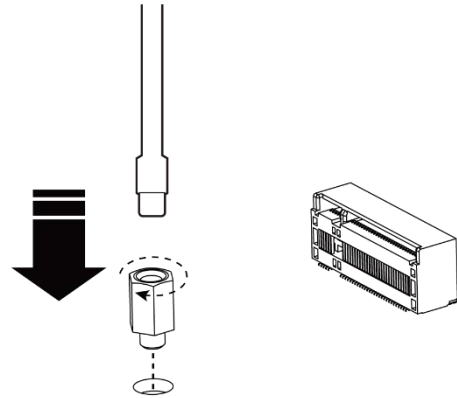
3.3 Install M.2 M Key Socket

The M.2 M Key slot supports NVMe SSD, as highlighted in the picture below.

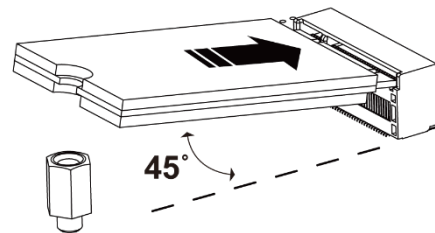


Install M.2 M Key NVMe SSD Step by Step

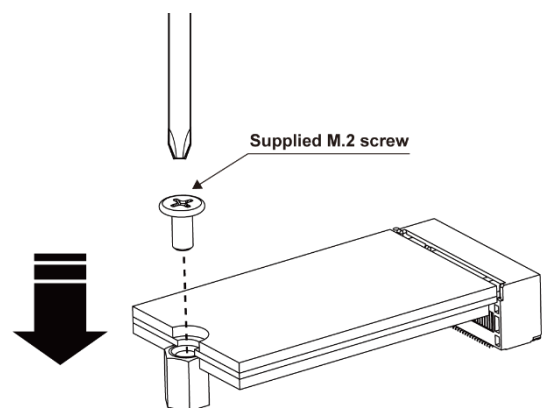
1. Assemble the copper stud



2. Insert the NVMe SSD at a 45-degree angle into the M.2 B-Key slot.

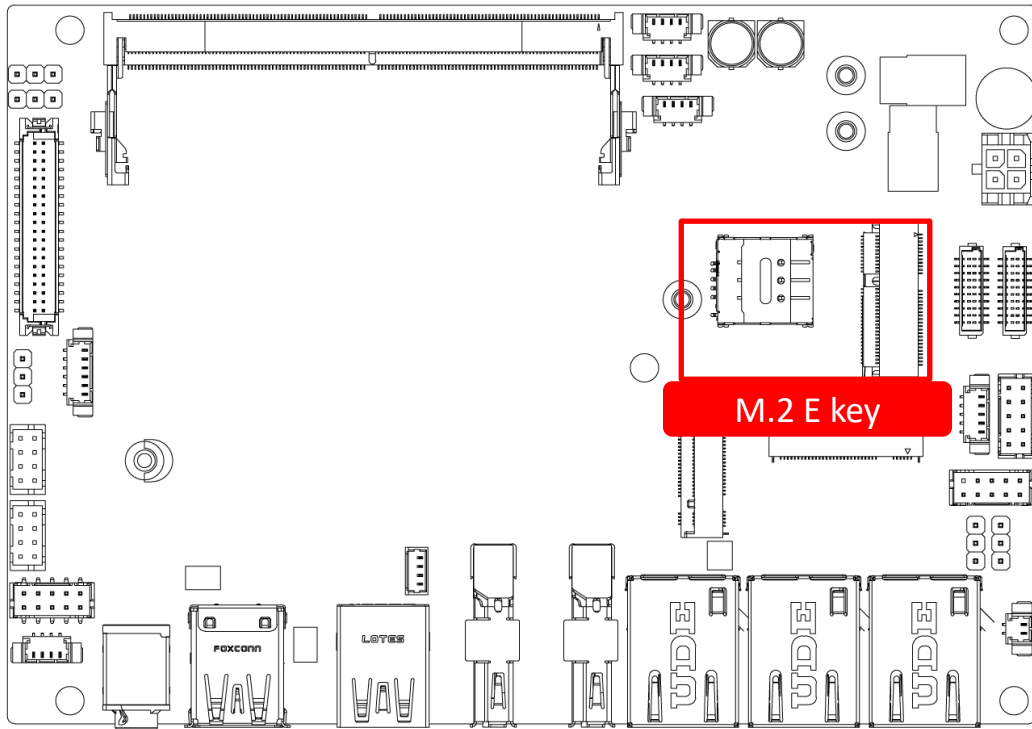


3. Press the NVMe SSD down and secure it with one screw.

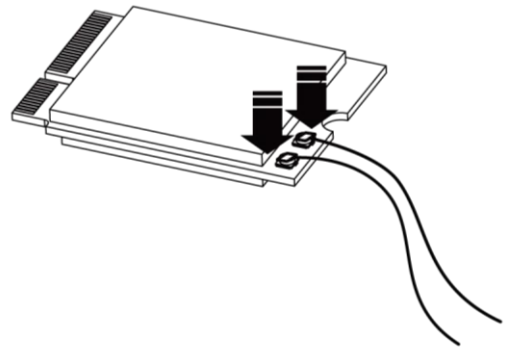


3.4 Install wireless network card and antenna

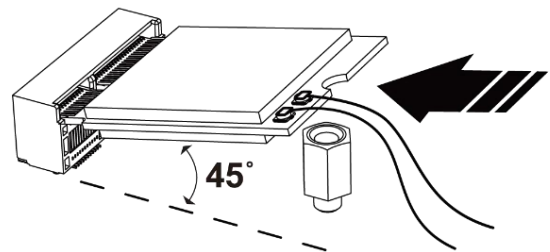
1. The M.2 E-Key supports Wi-Fi module, as highlighted in the picture below.



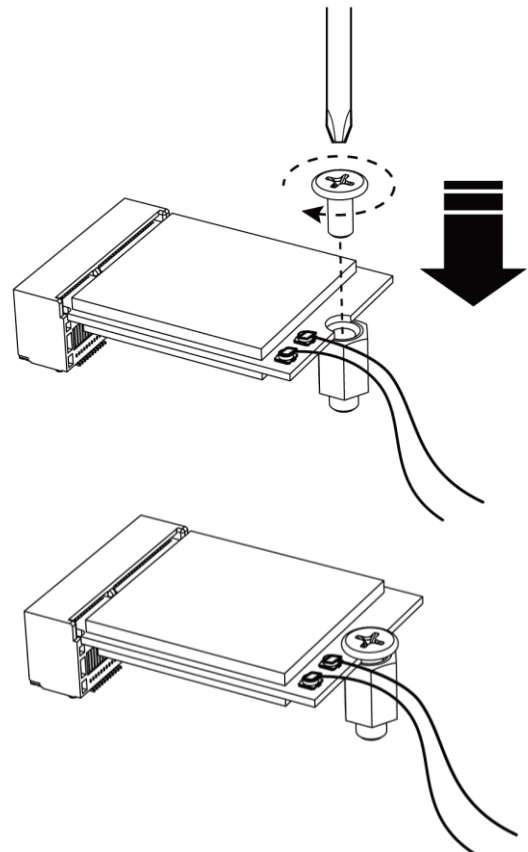
2. Connect the SMA cables to the Wi-Fi module.



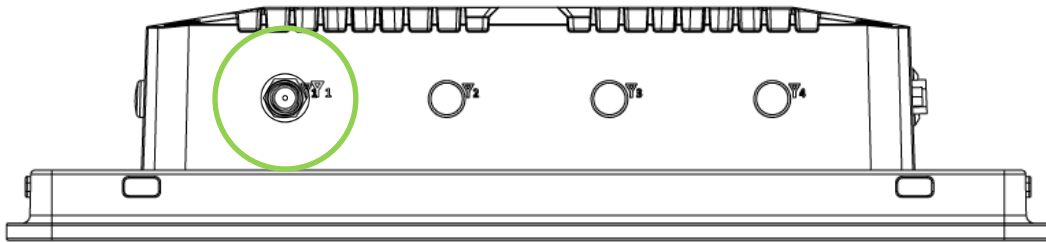
3. Insert the Wi-Fi module at a 45-degree angle.



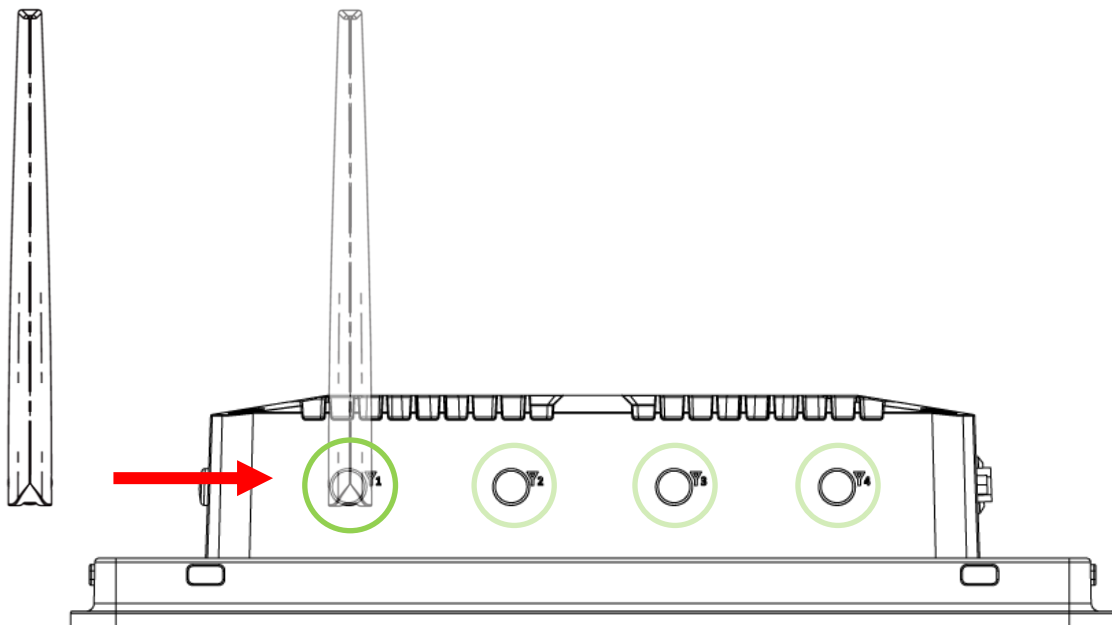
4. Press the Wi-Fi module down and secure it with one screw.



5. Ensure the internal antenna is securely connected to the network card, and the antenna interface is properly installed in the designated opening on the chassis cover.

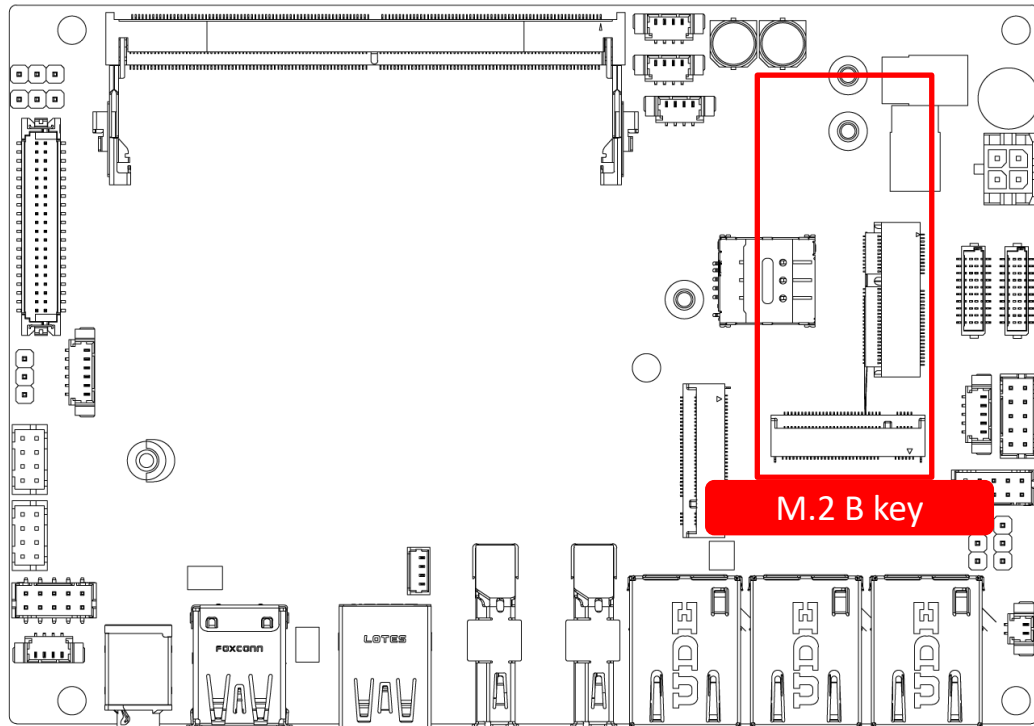


6. Attach the external antenna to the SMA jack by securely threading them together.

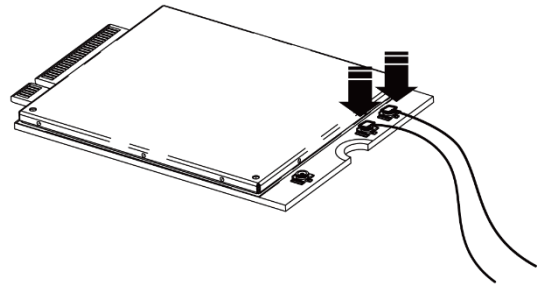


3.5 Install Communication Module and Antenna

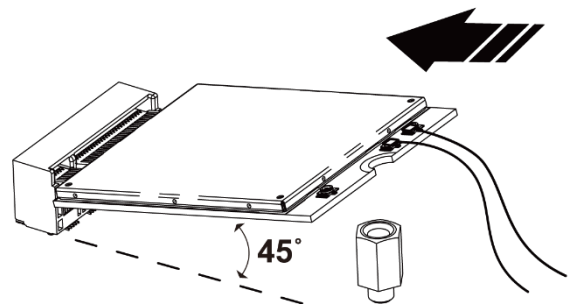
1. The M.2 B-Key supports communication (4G/5G) module, as highlighted in the picture below.



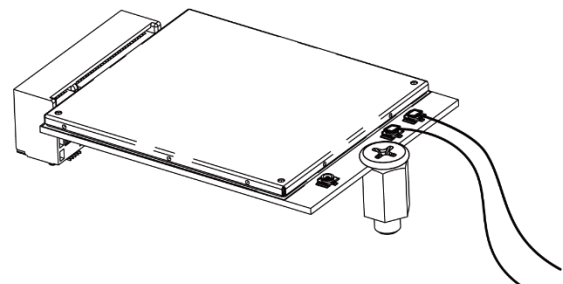
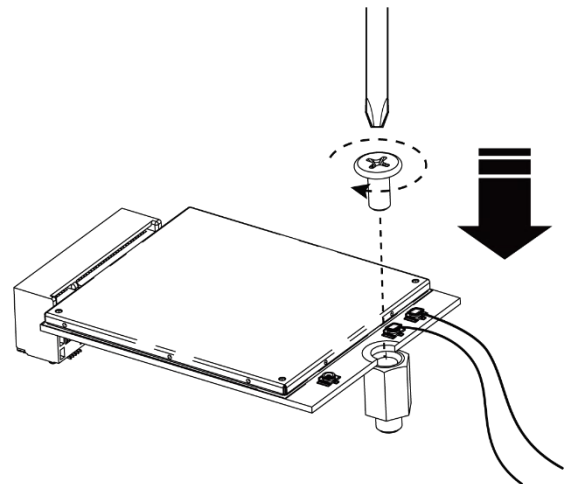
2. Connect the SMA cables to the communication (4G/LTE) module.



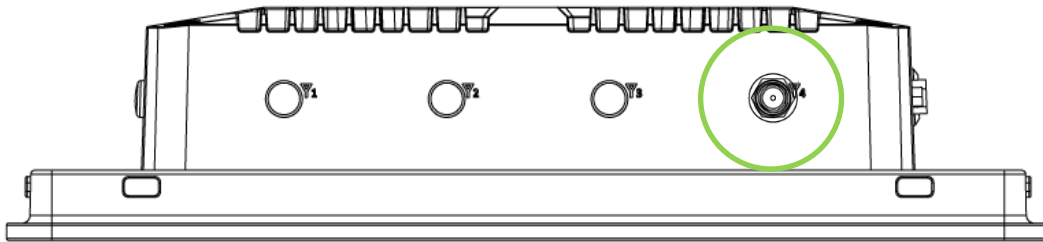
3. Insert the communication (4G/5G) module at a 45-degree angle.



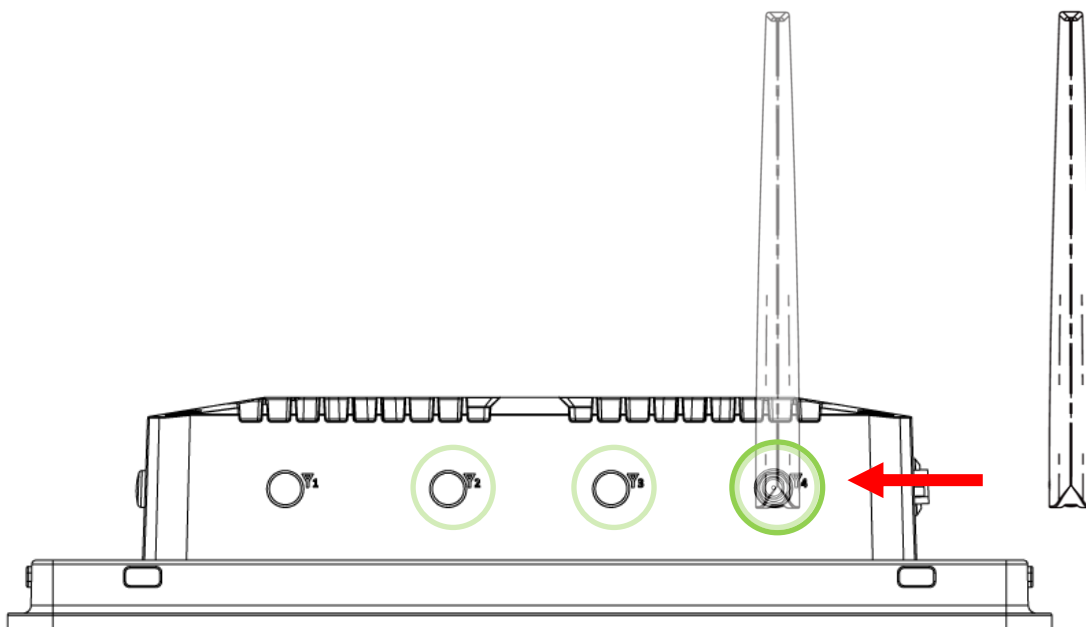
4. Press the communication module down and secure it with one screw.



5. Ensure the internal antenna is securely connected to the network card, and the antenna interface is properly installed in the designated opening on the chassis cover.

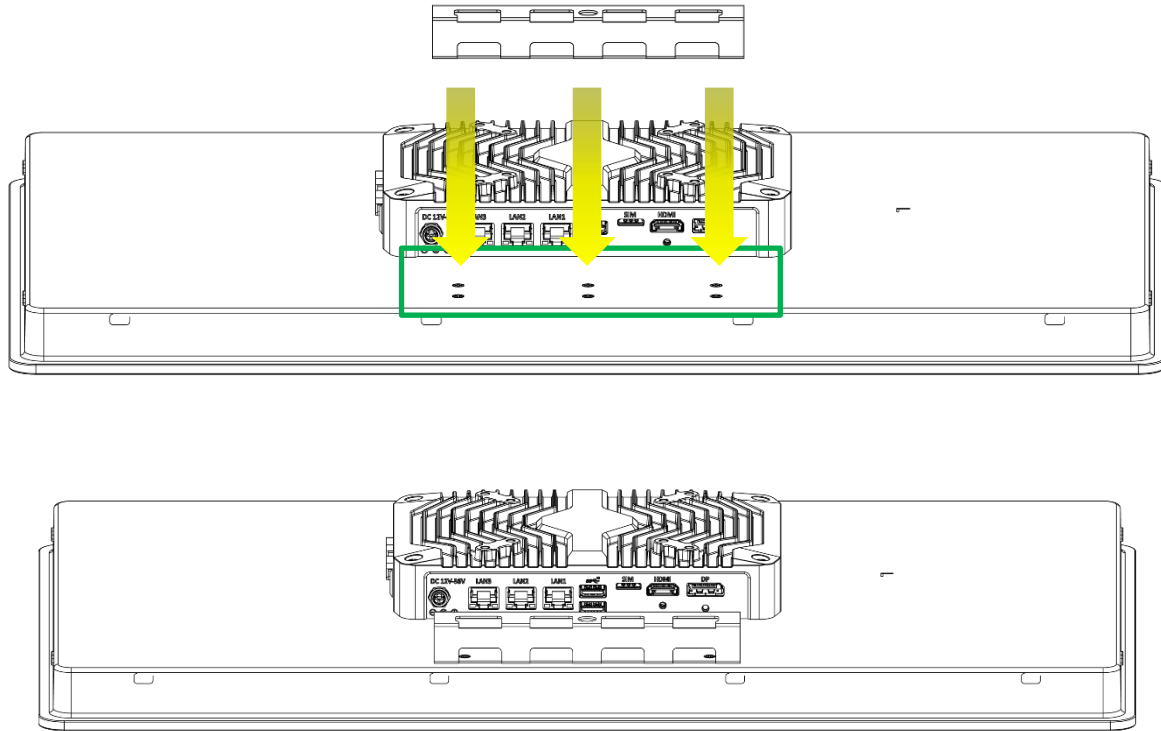


6. Attach the external antenna to the SMA jack by securely threading them together.



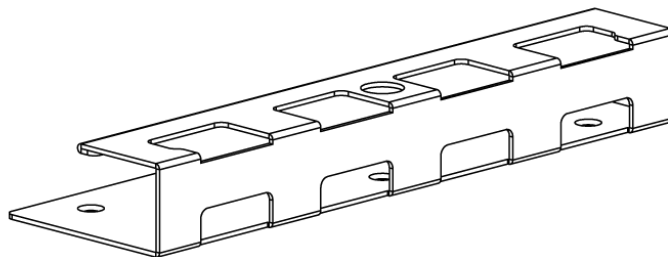
3.6 Cable Management Bracket Installation (21.5" only)

1. Use 3x screws to mount the cable management bracket below the system's I/O ports



*The bracket provides additional layer to organize and securely locks all cables connected to the AIO.

**You can use zipties or other similar alternatives to securely lock the cables in place



Chapter 4

System BIOS

4.1 Description of the BIOS Options

 Due to the differences in the specific model of the motherboard and the update of the BIOS version, there may be a few menus that do not match this manual, please take the actual basis.

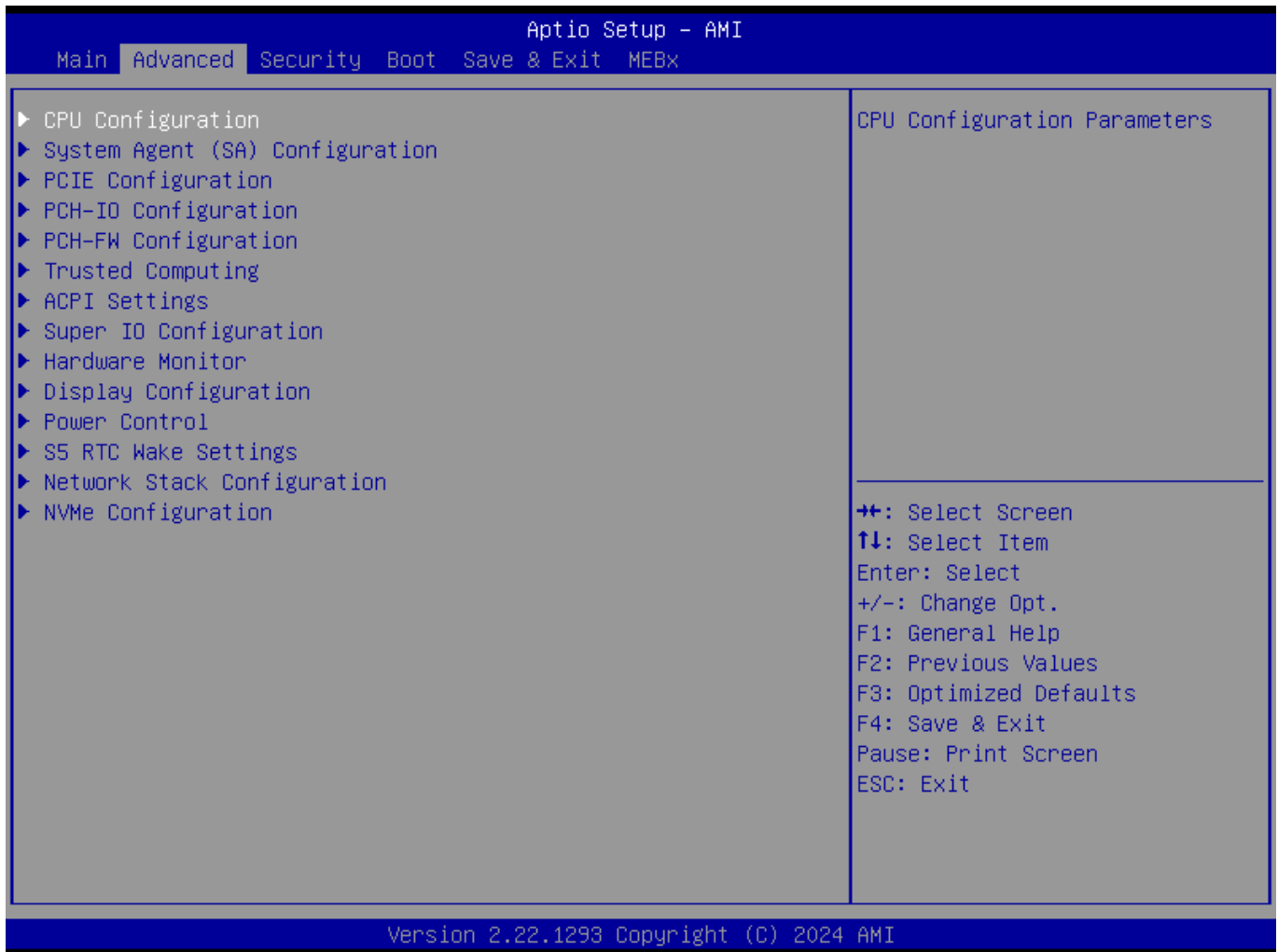
4.1.1 Main



This menu contains the following information:

- BIOS Version
Display the BIOS version information.
- Build Date and Time
Display the BIOS Build date and time.
- System Date
Set the date. Use Tab to switch between date elements. Default ranges: Year: 1998-9999
Months: 1-12
Days: Dependent on month
Range of Years may vary.
- System Time
Set the time. Use Tab to switch between time elements.
- Access Level
Display the current access level to BIOS Setup Utility.

4.2 Advanced



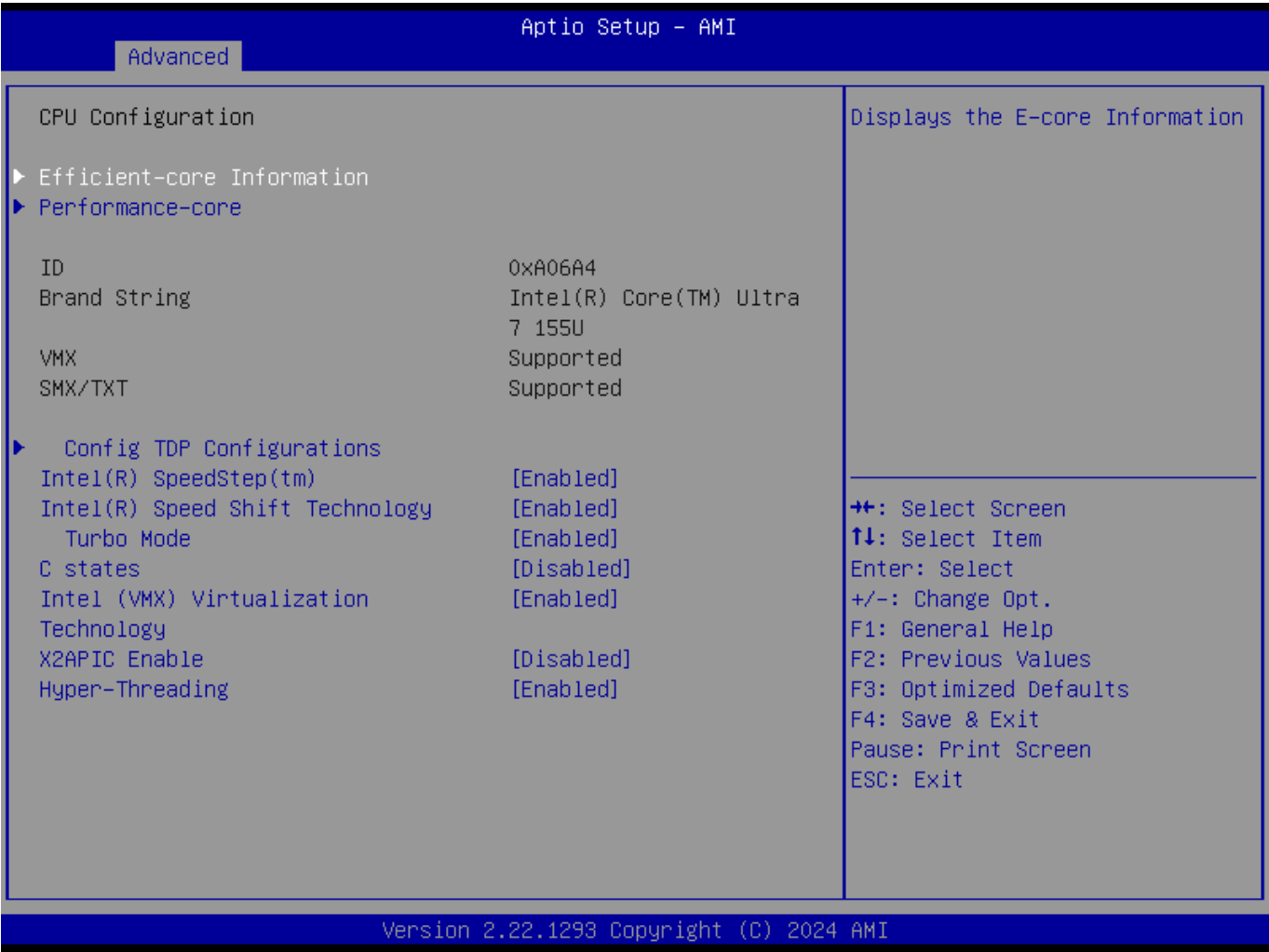
This menu contains the following information:

- CPU Configuration
CPU Configuration Parameters.
- System Agent (SA) Configuration
System Agent (SA) Parameters.
- PCIE Configuration
PCIE Parameters.
- PCH-IO Configuration
PCH Parameters.
- PCH-FW Configuration
Configure Management Engine Technology Parameters.
- Trusted Computing
Trusted Computing Settings.
- ACPI Settings
System ACPI Parameters.
- Super IO Configuration
System Super IO Chip Parameters.
- Hardware Monitor Monitor
hardware status.
- Display Configuration
Display Configuration Parameters.
- Power Control
- S5 RTC Wake Settings

Enable system to wake from S5 using RTC alarm.

- Network Stack Configuration
Network Stack Settings.
- NVMe Configuration
NVMe Device Options Settings.

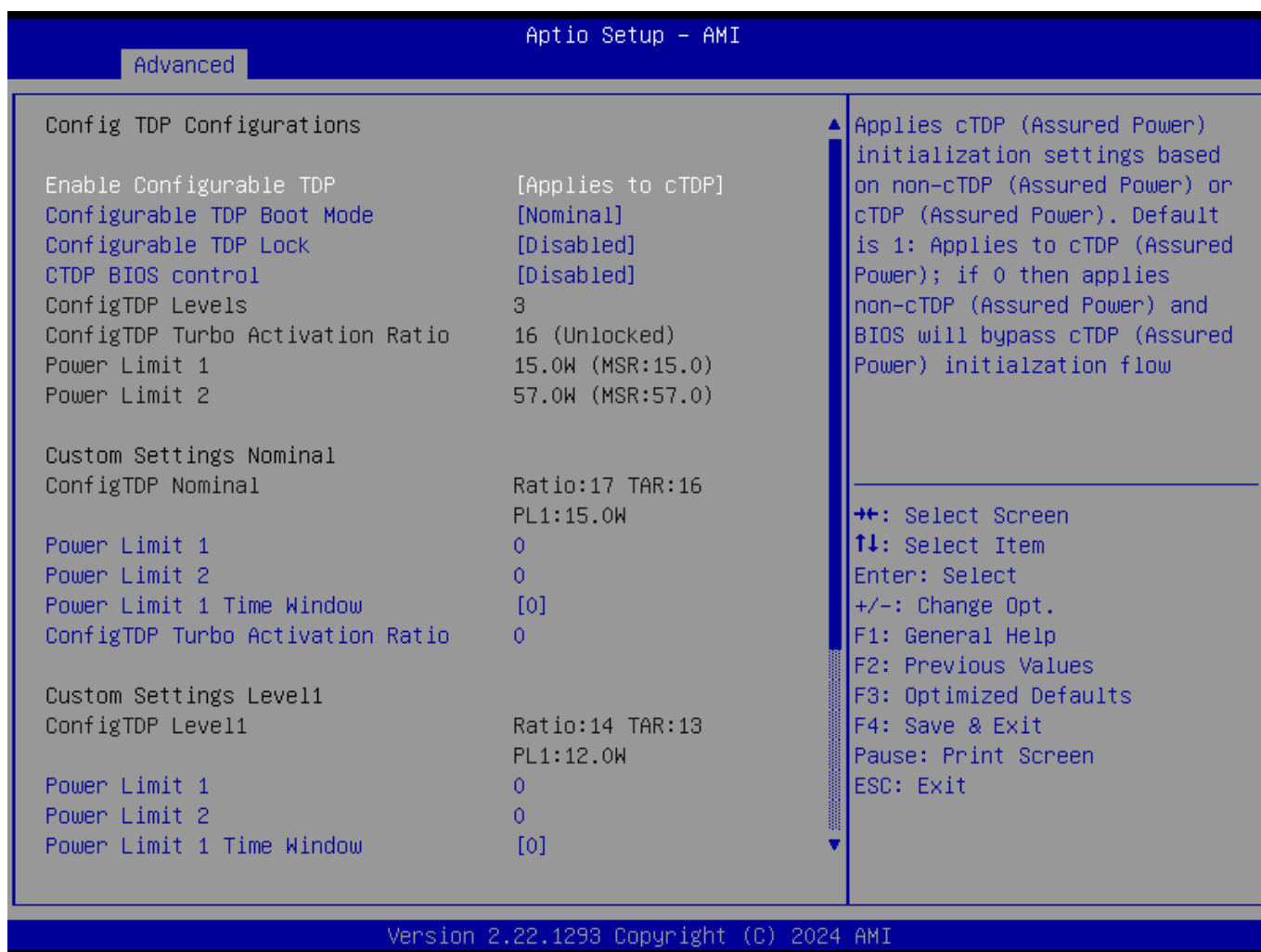
4.2.1 CPU Configuration



- This menu contains the following information:
- Efficient-core Information Displays the E-core Information.
 - Performance-core Displays the P-core Information.
 - ID Display the Processor ID.
 - Brand String Display the Brand String.
 - VMX VMX (Virtual-Machine Extensions) supported or not.
 - SMX/TXT SMX (Safer Mode Extensions) /TXT (Trusted Execution Technology) Supported or not.
 - Config TDP Configurations cTDP (Assured Power) Configurations.
 - Intel(R) Speed Step(tm) Allows more than two frequency ranges to be supported.
 - Intel(R) Speed Shift Technology Enable or Disable Intel(R) Speed Shift Technology support. Enabling will expose the CPPC v2 interface to allow for hardware controlled P-states.

- Turbo Mode
Enable or Disable processor Turbo Mode.
- C states
Enable or Disable CPU Power Management. Allows CPU to go to C states when it's not 100% utilized.
- Intel (VMX) Virtualization Technology
When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.
- X2APIC Enable
Enable or Disable X2APIC Operating Mode.
When this option is configured as 'Enabled', 'VT-d' option must be 'Enabled' and 'X2APIC Opt Out' option must be 'Disabled' as well.
This option will be grayed out when 'VT-d' option is configured as 'Disabled'.
- Hyper-Threading
Enable or Disable Hyper-Threading Technology.

4.2.1.1 Config TDP Configurations



This menu contains the following information:

- **Enable Configurable TDP**
Applies cTDP (Assured Power) initialization settings based on non-cTDP (Assured Power) or cTDP (Assured Power). Default is 1: Applies to cTDP (Assured Power); if 0 then applies non-cTDP (Assured Power) and BIOS will bypass cTDP (Assured Power) initialization flow.
- **Configurable TDP Boot Mode**
cTDP (Assured Power) Mode as Nominal/Level1/Level2/Deactivate TDP (Base Power) selection. Deactivate option will set MSR to Nominal and MMIO to Zero.
- **Configurable TDP Lock**
cTDP (Assured Power) Mode Lock sets the Lock bits on TURBO_ACTIVATION_RATIO and CONFIG_TDP_CONTROL.
Note: When CTD P (Assured Power) Lock is enabled Custom ConfigTDP Count will be forced to 1 and Custom ConfigTDP Boot Index will be forced to 0.
- **CTDP BIOS control**
Enables cTDP (Assured Power) control via runtime ACPI BIOS methods. This 'BIOS only' feature does not require EC or driver support.

Custom Settings Nominal/Level1/Level2

- **ConfigTDP Nominal/Level1/Level2**

The options are as follows:

Power Limit 1: Power Limit 1 in Milli Watts. BIOS will round to the nearest 1/8W when programming. 0 = no custom override. For 12.50W, enter 12500. Overclocking SKU: Value must be between Max

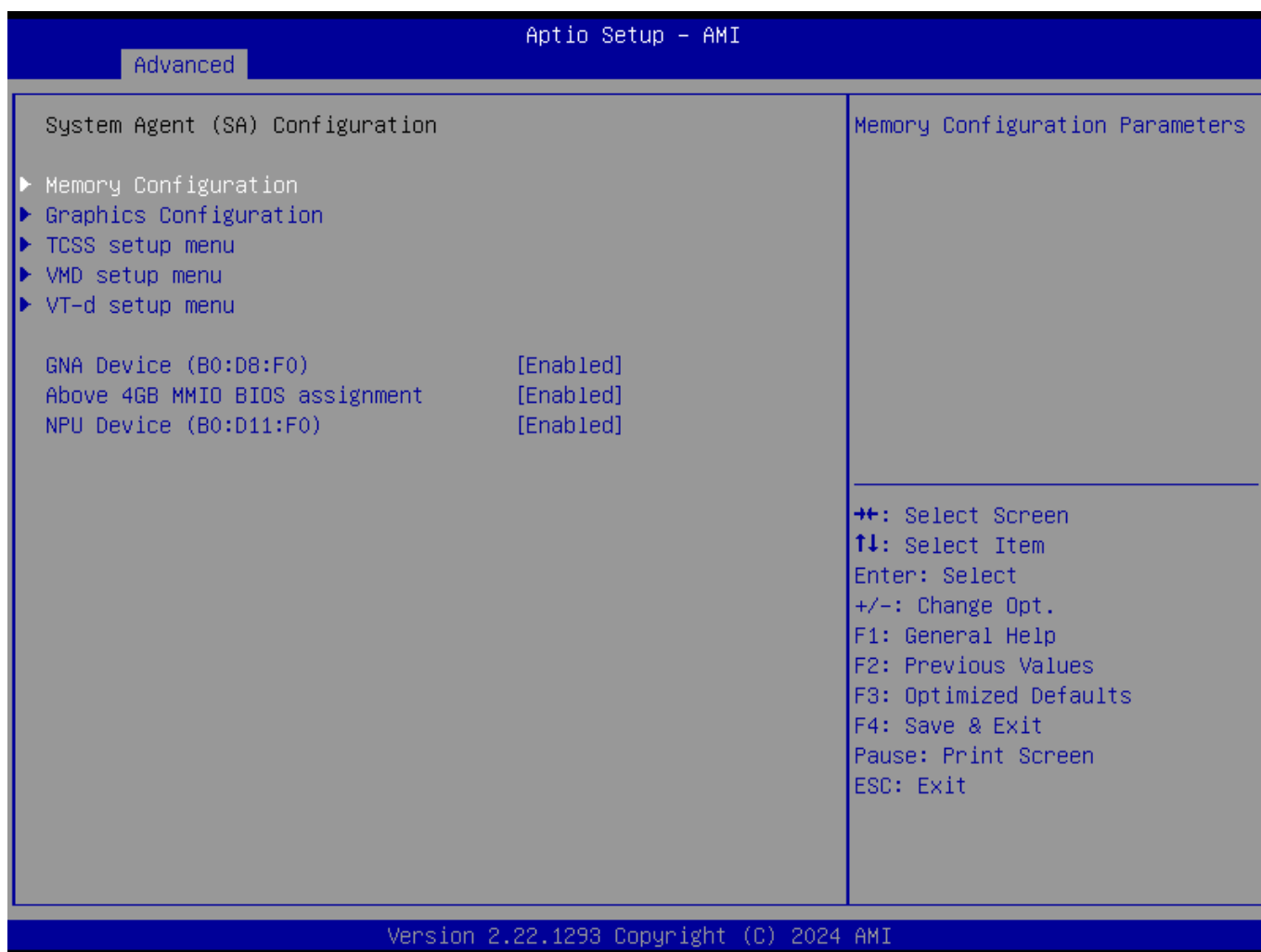
and Min Power Limit and Processor Base Power (TDP) Limit.

Power Limit 2: Power Limit 2 value in Milli Watts. BIOS will round to the nearest 1/8W when programming. 0 = no custom override. For 12.50W, enter 12500. Processor applies control policies such that the package power does not exceed this limit.

Power Limit 1 Time Window: Power Limit 1 Time Window value in seconds. The value may vary from 0 to 128. 0 = default value (28 sec for Mobile and 8 sec for Desktop). Defines time window which Processor Base Power (TDP) value should be maintained.

ConfigTDP Turbo Activation Ratio: Custom value for Turbo Activation Ratio. Needs to be configured with valid values from LFM to Max Turbo. 0 means don't use custom value.

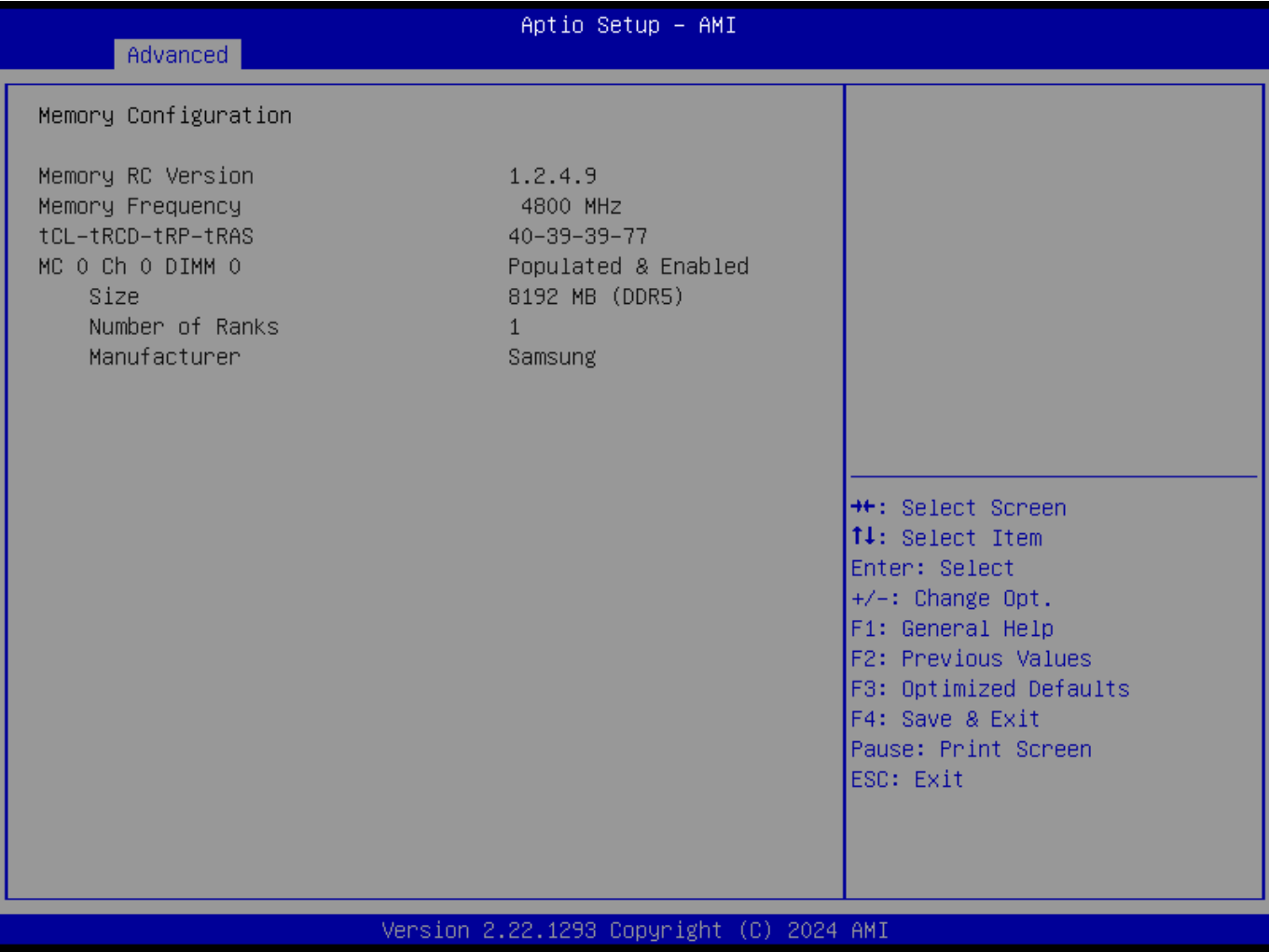
4.2.2 System Agent (SA) Configuration



This menu contains the following information:

- Memory Configuration
Memory Configuration Parameters.
- Graphics Configuration
Graphics Configuration.
- TCSS setup menu
TCSS Configuration settings.
- VMD setup menu
VMD Configuration settings.
- VT-d setup menu
VT-d Configuration settings.
- GNA Device (B0:D8:F0)
Enable or Disable SA GNA Device.
- Above 4GB MMIO BIOS assignment
Enable or Disable above 4GB Memory Mapped IO BIOS assignment. This is enabled automatically when Aperture Size is set to 2048MB.
- NPU Device (B0:D11:F0)
Enable or Disable NPU (Neural Processing Unit) Device.

4.2.2.1 Memory Configuration



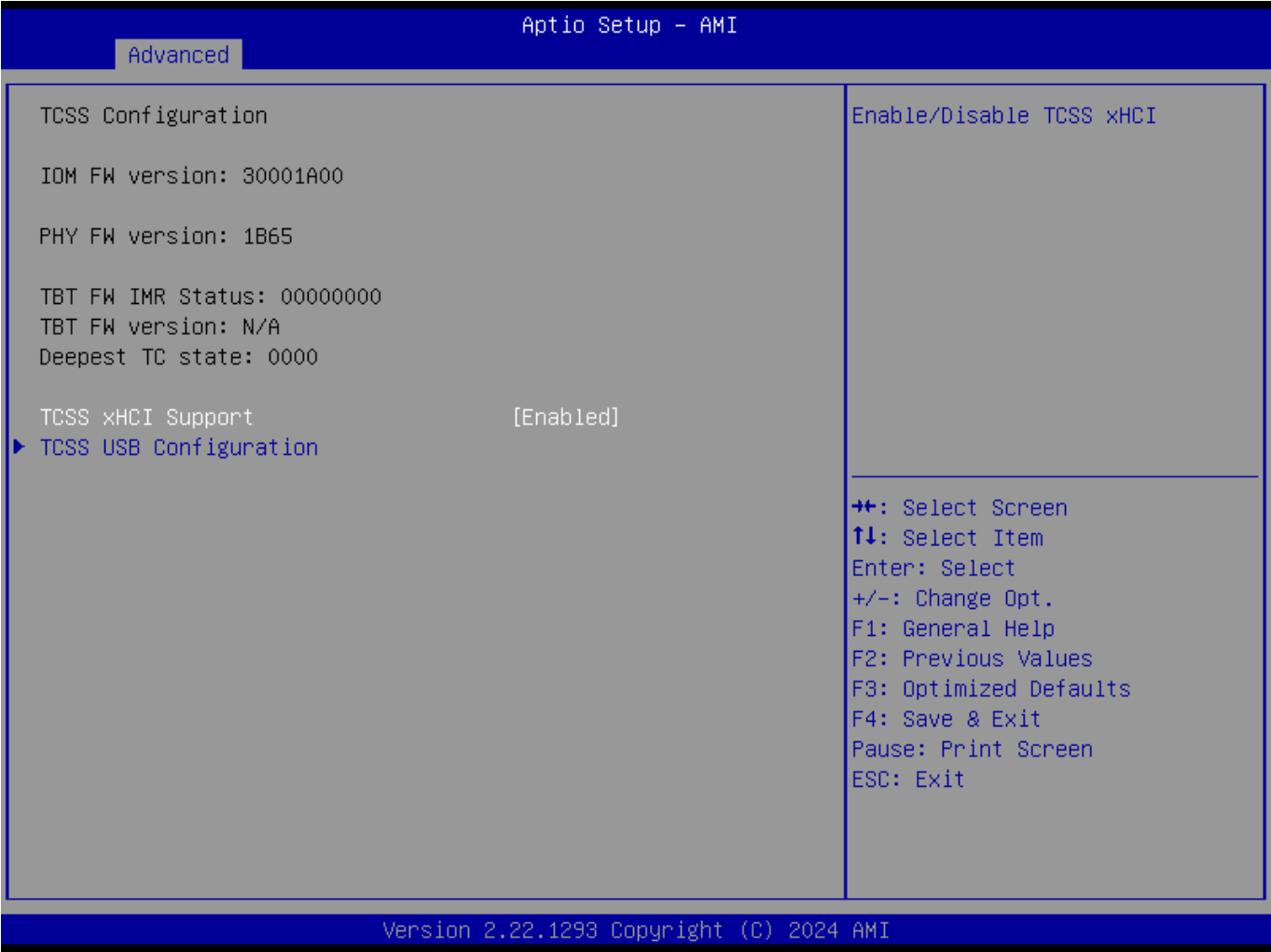
- This menu contains the following information:
- Memory Configuration
Display the Memory RC Version, Data Rate, Timings, etc.

4.2.2.2 Graphics Configuration



- This menu contains the following information:
- Primary Display
Select AUTO set IGD to be Primary Display if no external Graphics Device connected otherwise external Graphics Device detected on first PCIE port will be Primary Display or Select IGFX for IGD to be Primary Display Or select HG for Hybrid Gfx.
 - Internal Graphics
Keep IGFX enabled based on the setup options.

4.2.2.3 TCSS setup menu

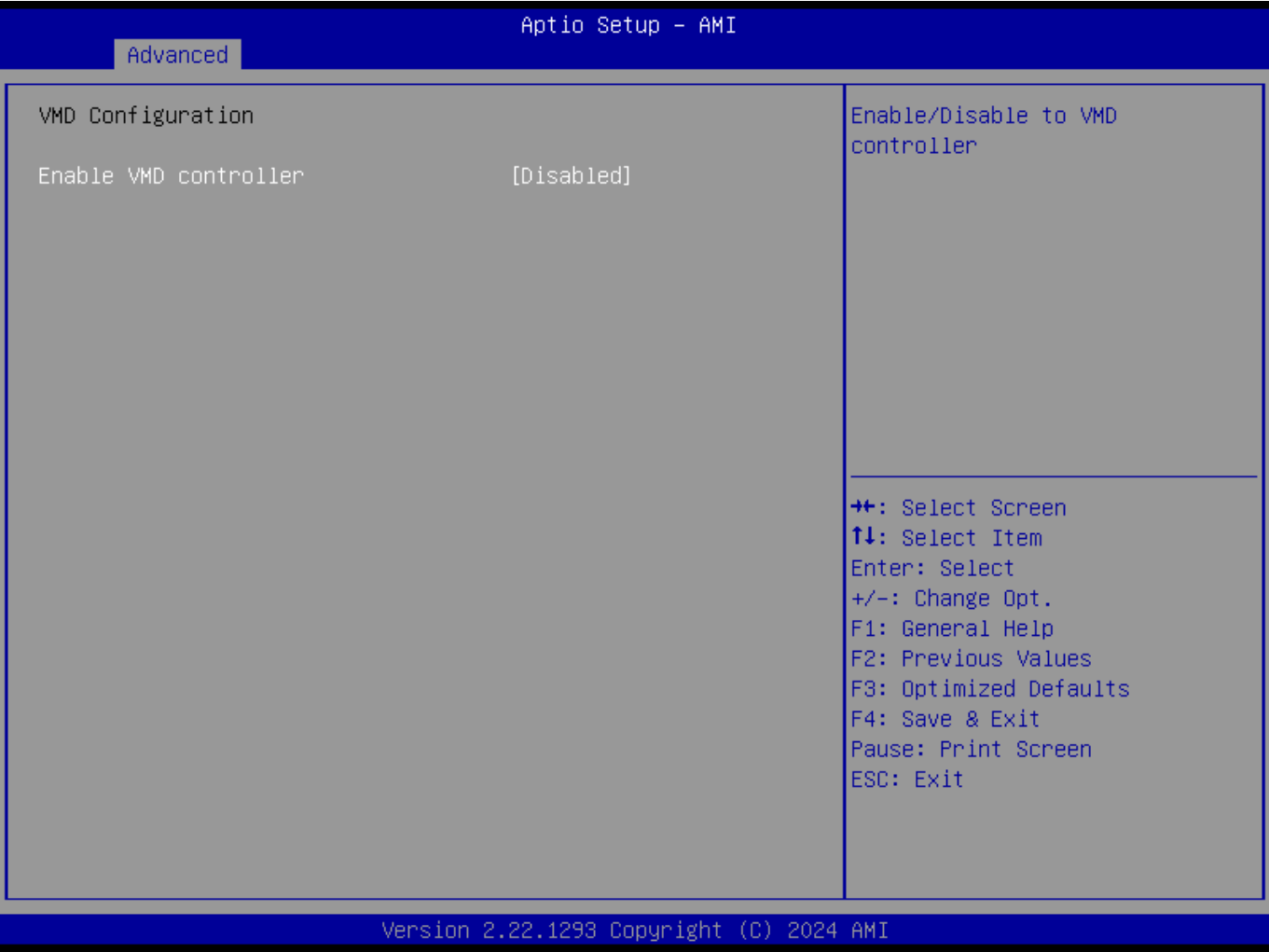


This menu contains the following information:

- TCSS xHCI Support
Enable or Disable TCSS xHCI.
- TCSS USB Configuration
SA TCSS USB Configuration settings.

The option after entering the interface settings above is as follows:
TCSS CPU USB Port Disable Override: Selectively Enable or Disable the corresponding USB port from reporting a Device Connection to the controller.

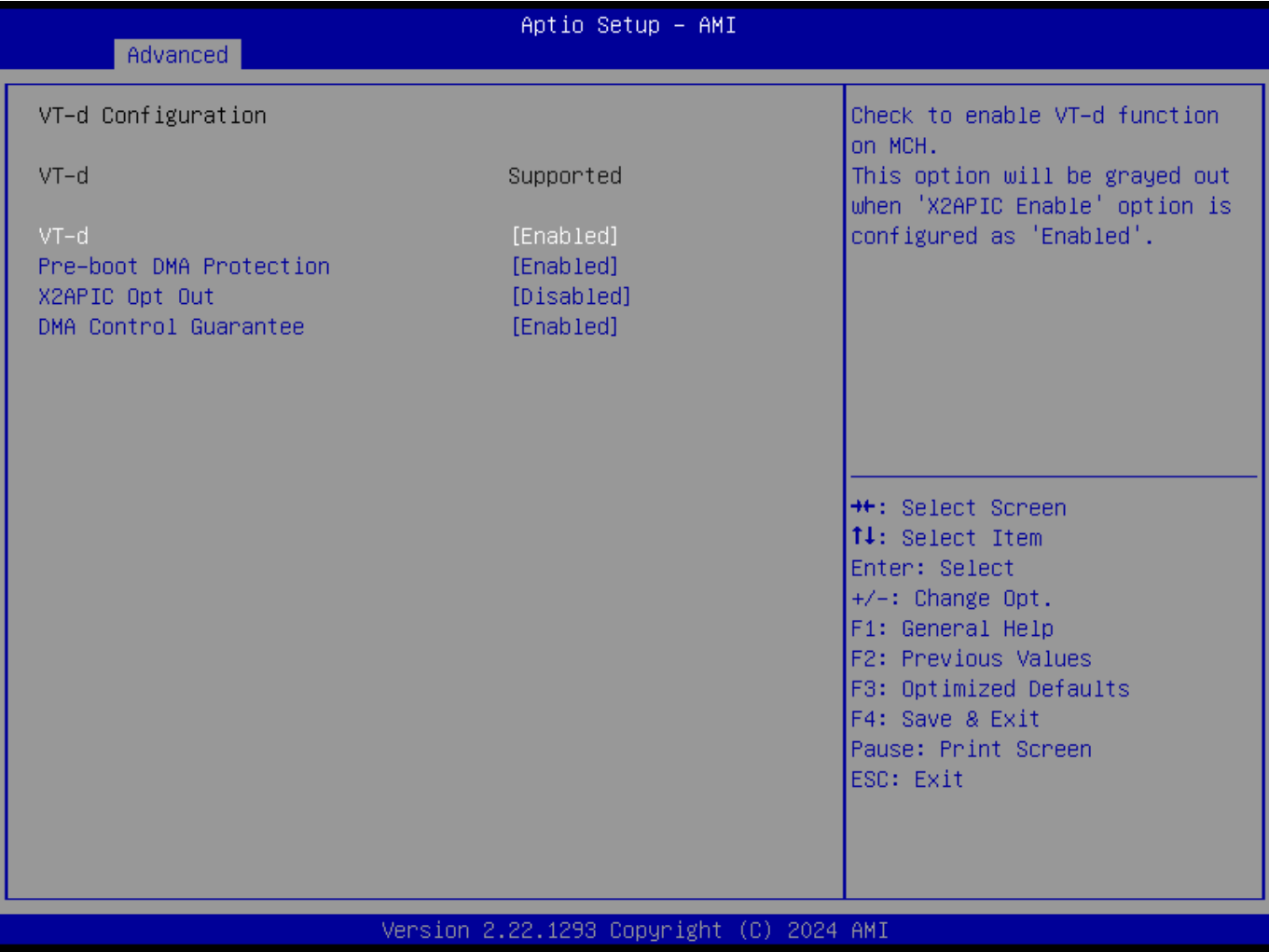
4.2.2.4 VMD setup menu



This menu contains the following information:

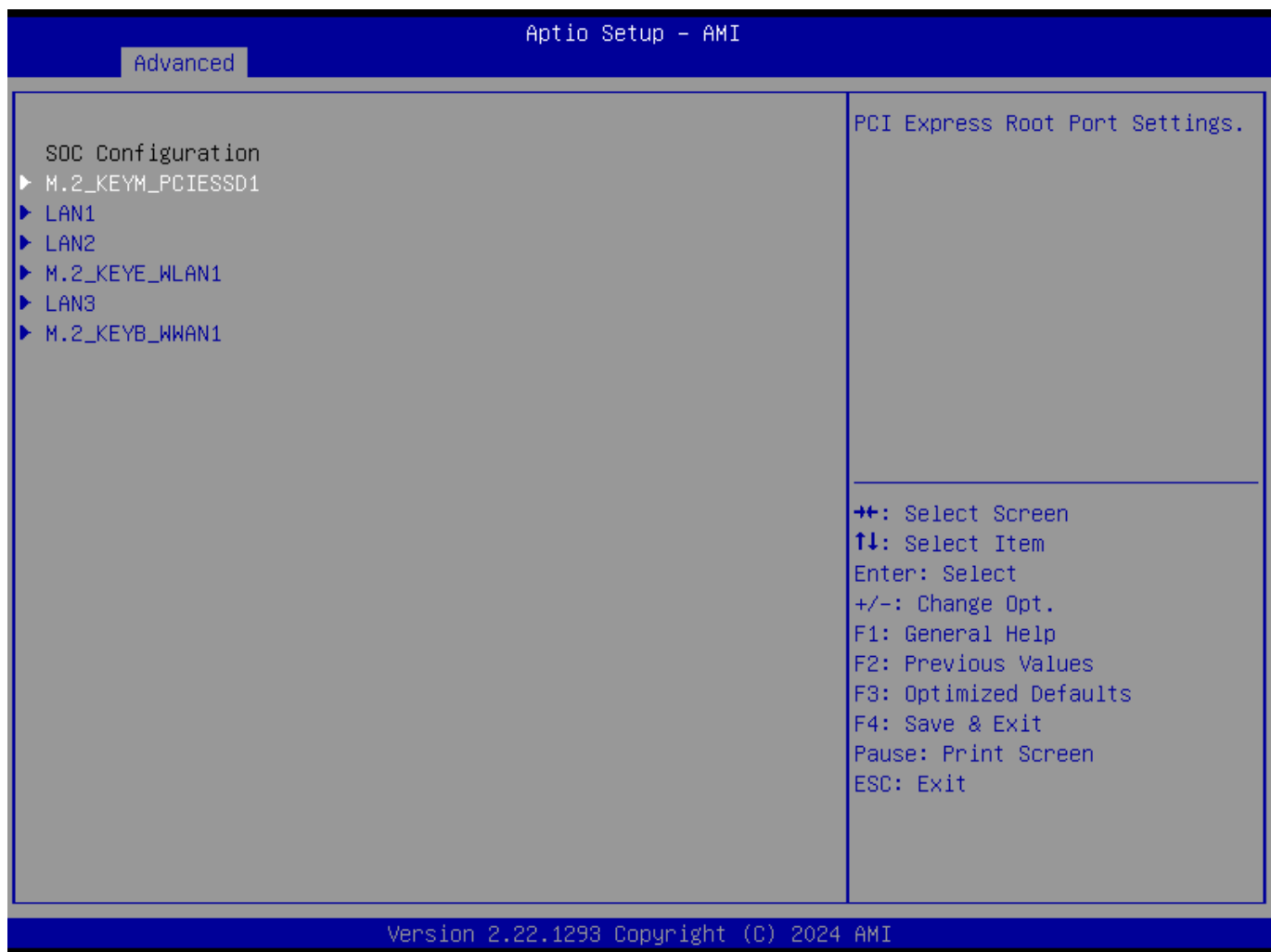
- Enable VMD controller
Enable or Disable to VMD controller.

4.2.2.5 VT-d setup menu



- This menu contains the following information:
- VT-d
Check to enable VT-d function on MCH.
This option will be grayed out when 'X2APIC Enable' option is configured as 'Enabled'.
 - Pre-boot DMA Protection
Enable DMA Protection in Pre-boot environment (If DMAR table is installed in DXE and If VTD_INFO_PPI Is installed in PEI).
 - X2APIC OPT OUT
Enable or Disable X2APIC_OPT_OUT bit.
This option will be grayed out when 'X2APIC Enable' option is configured as 'Enabled'.
 - DMA Control Guarantee
Enable or Disable DMA_CONTROL_GUARANTEE bit.

4.2.3 PCIE Configuration



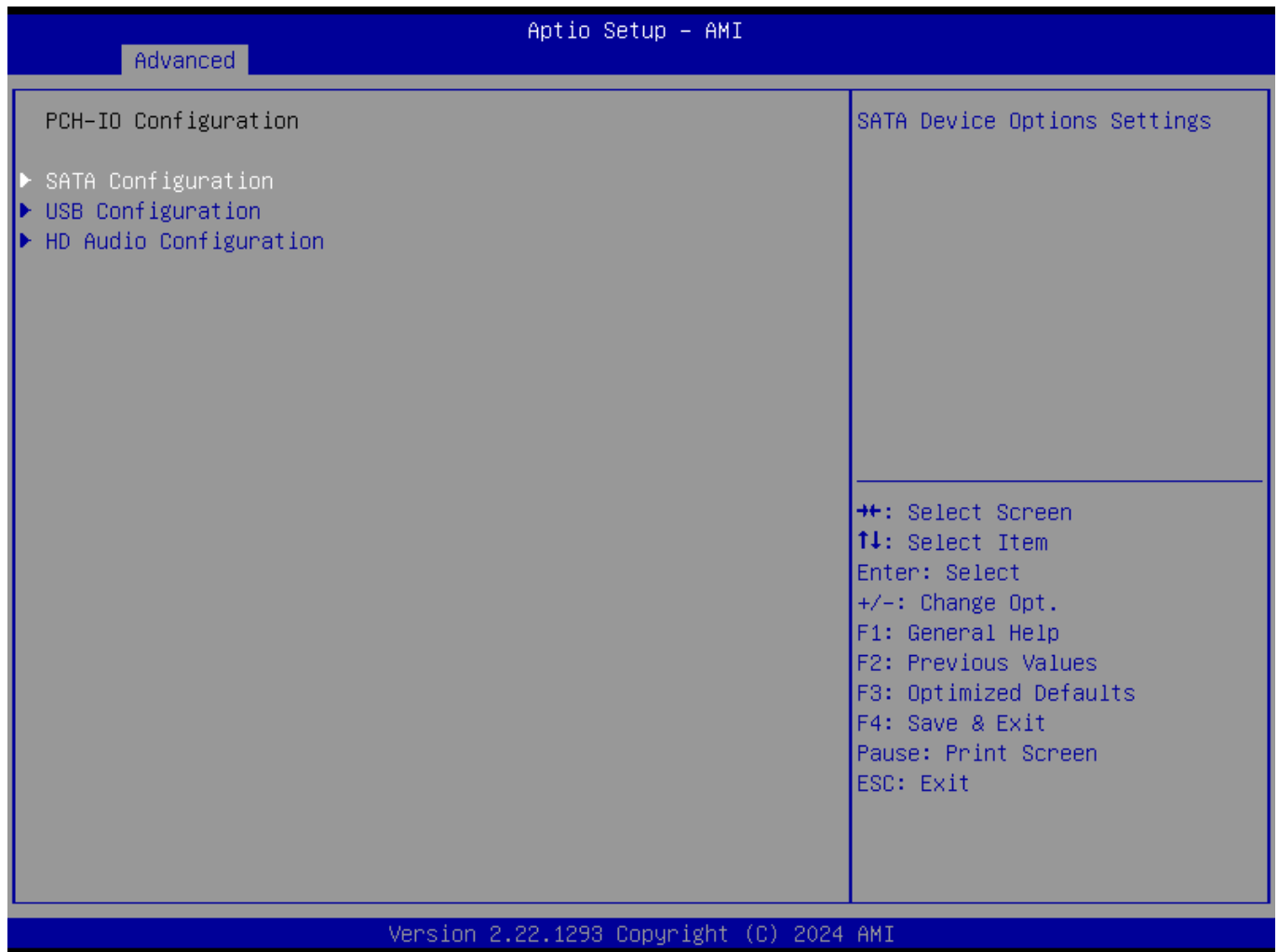
This menu contains the following information:

- M.2_KEYM_PCIESSD1/LAN1/LAN2/M.2_KEYE_WLAN1/LAN3/M.2_KEYB_WWAN1:
PCI Express Root Port Settings.

The options after entering the interface settings above are as follows.

PCI Express Root Port PXPA1/PXPB1/PXPB2/PXPB3/PXPB4/PXPC: Control the PCI Express Root Port. PCIe Speed:
Configure PCIe Speed.

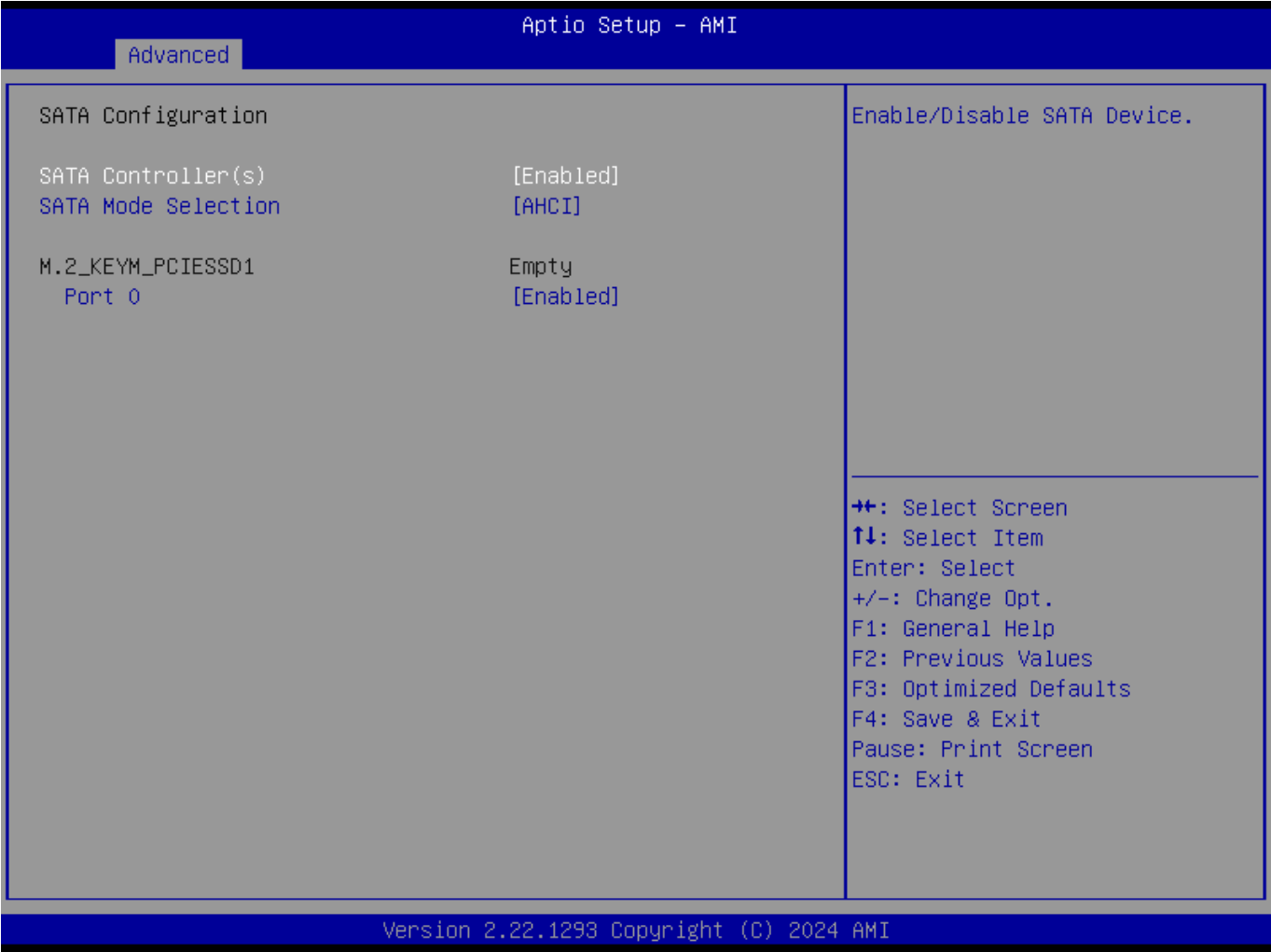
4.2.4 PCH-IO Configuration



This menu contains the following information:

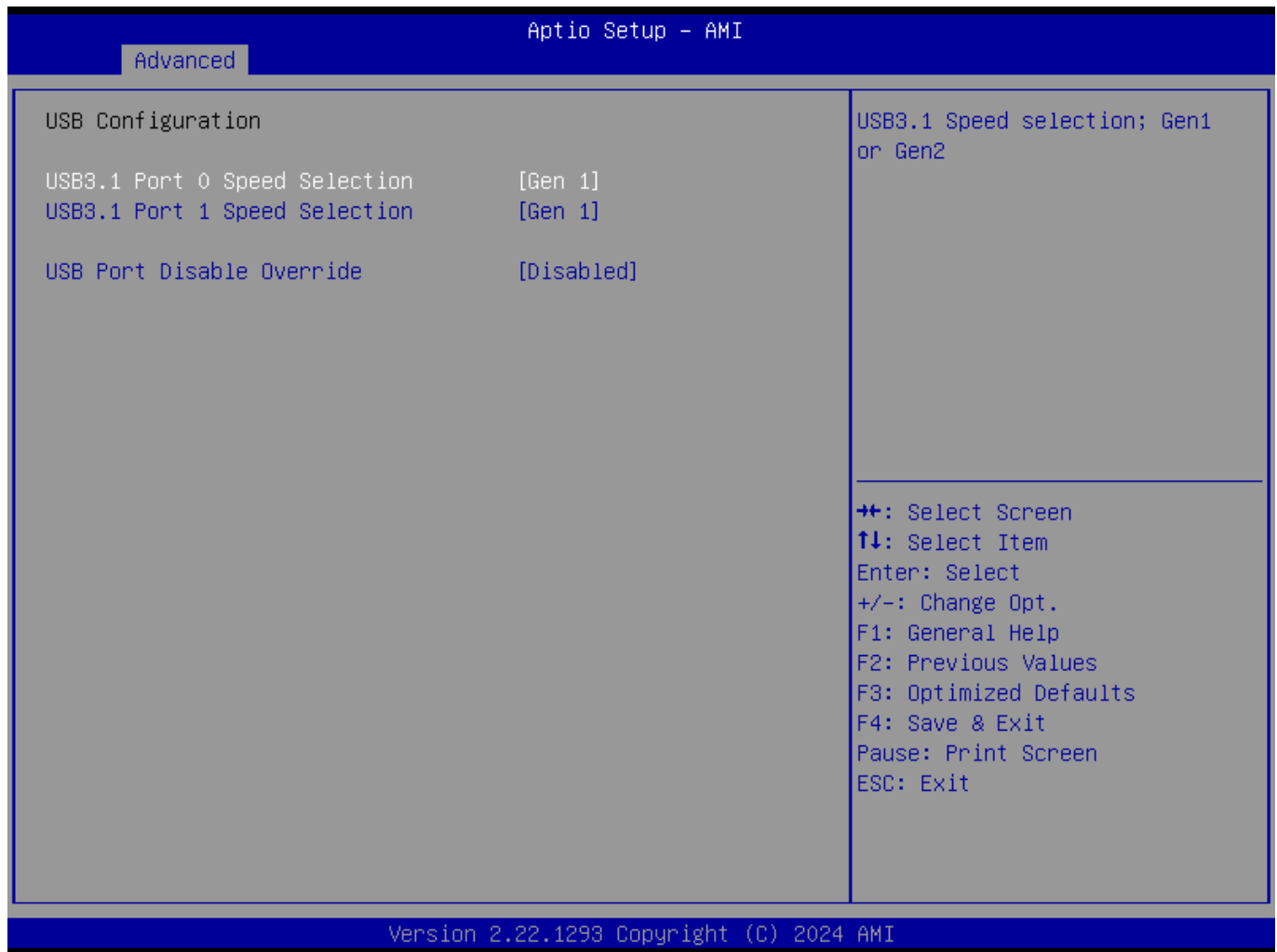
- SATA Configuration
SATA Device Options Settings.
- USB Configuration
USB Configuration Settings.
- HD Audio Configuration
HD Audio Subsystem Configuration Settings.

4.2.4.1 SATA Configuration



- This menu contains the following information:
- SATA Controller(s)
Enable or Disable SATA Device.
 - SATA Mode Selection
Determines how SATA controller(s) operate.
 - M.2_KEYM_PCIESSD1
Display M.2_KEYM_PCIESSD1 Information.
 - Port X
Enable or Disable SATA Port X.

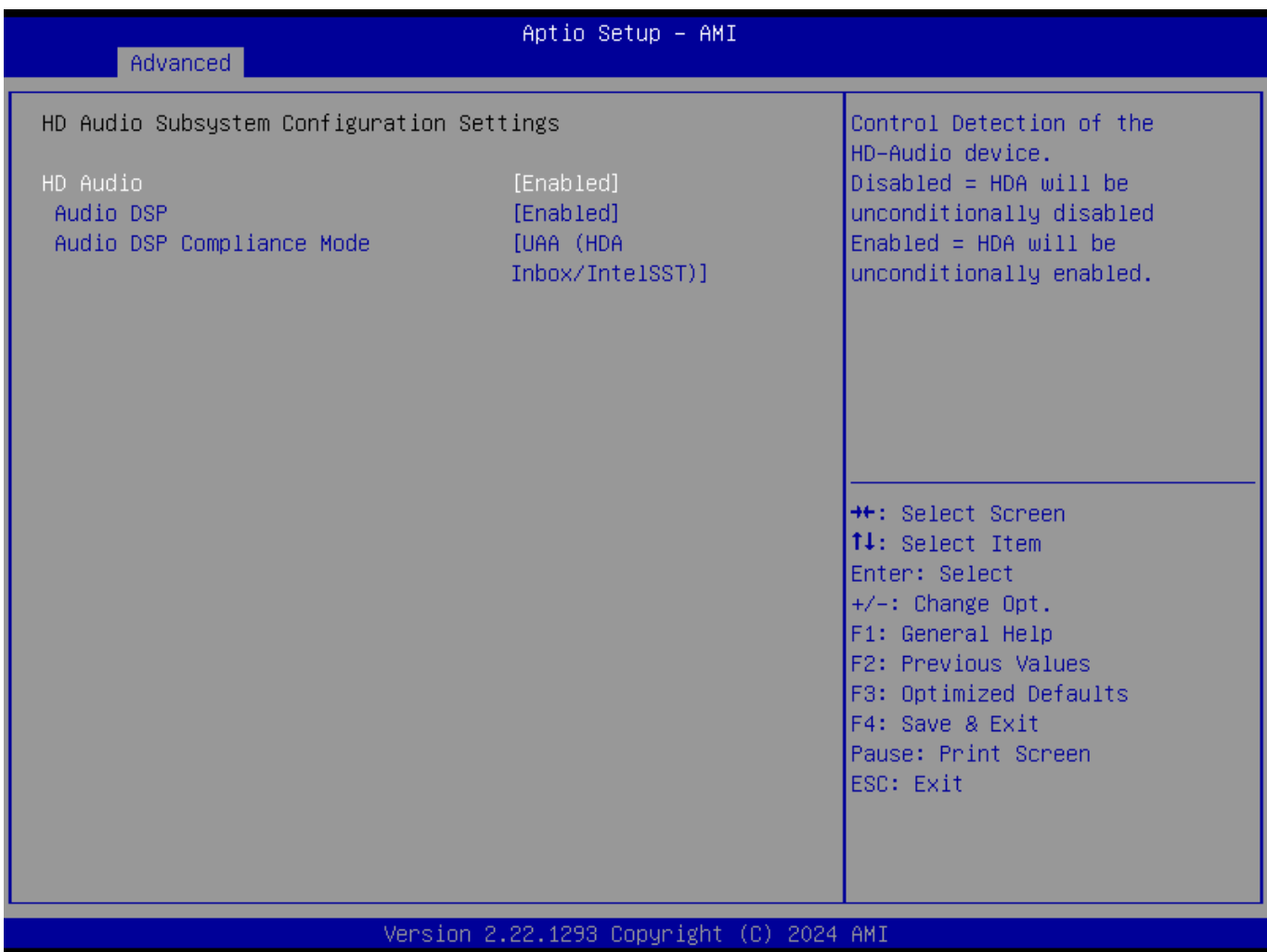
4.2.4.2 USB Configuration



This menu contains the following information:

- USB3.1 Port 0 Speed Selection
USB3.1 Speed selection; Gen1 or Gen2.
- USB3.1 Port 1 Speed Selection
USB3.1 Speed selection; Gen1 or Gen2.
- USB Port Disable Override
Selectively Enable or Disable the corresponding USB port from reporting a Device Connection to the controller.

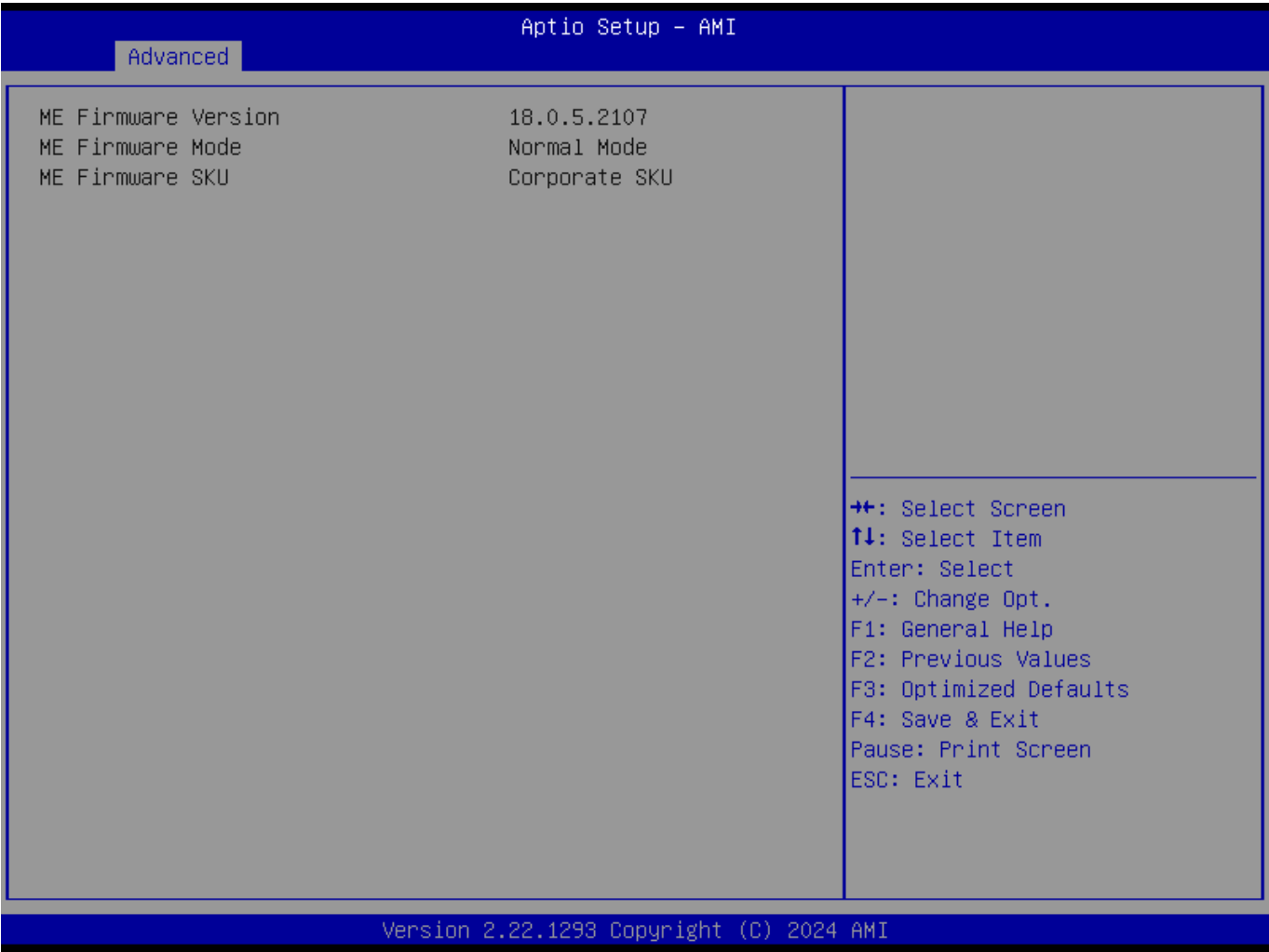
4.2.4.3 HD Audio Configuration



This menu contains the following information:

- HD Audio
 - Control Detection of the HD-Audio device. Disabled = HAD will be unconditionally disabled. Enabled = HAD will be unconditionally enabled.
- Audio DSP
 - Enable or Disable Audio DSP.
- Audio DSP Compliance Mode
 - Specifies DSP enabled system compliance:
 1. Non-UAA (Intel SST driver support only – CC_040100).
 2. UAA (HD Audio Inbox or Intel SST driver support – CC_040380). Note: NHLT (DMIC/BT/I2S configuration) is published for non-UAA only.

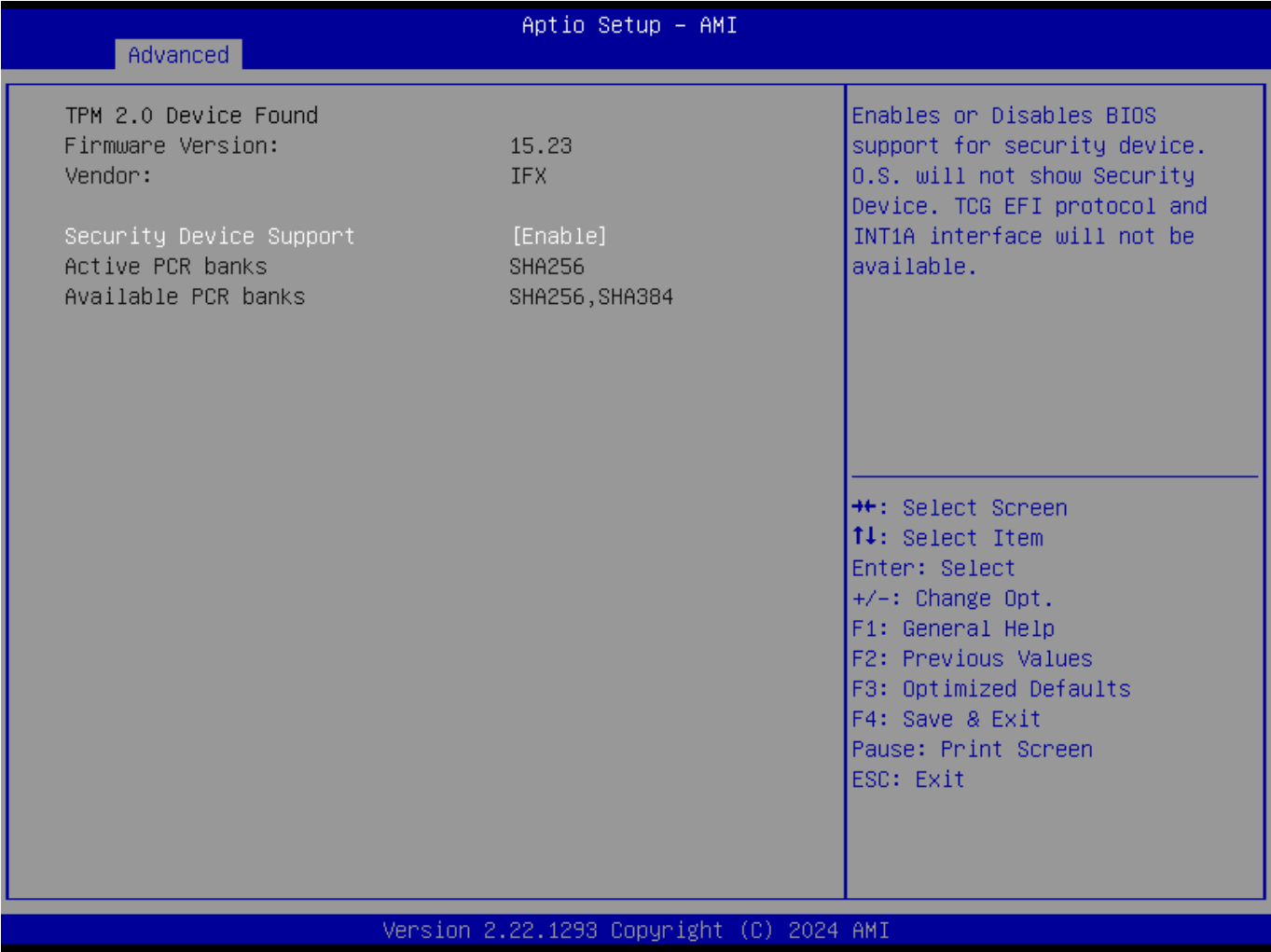
4.2.5 PCH-FW Configuration



This menu contains the following information:

- ME Firmware Version
Display the ME Firmware information.
- Me Firmware Mode
Display the Me Firmware Mode.
- Me Firmware SKU
Display the Me Firmware SKU.

4.2.6 Trusted Computing



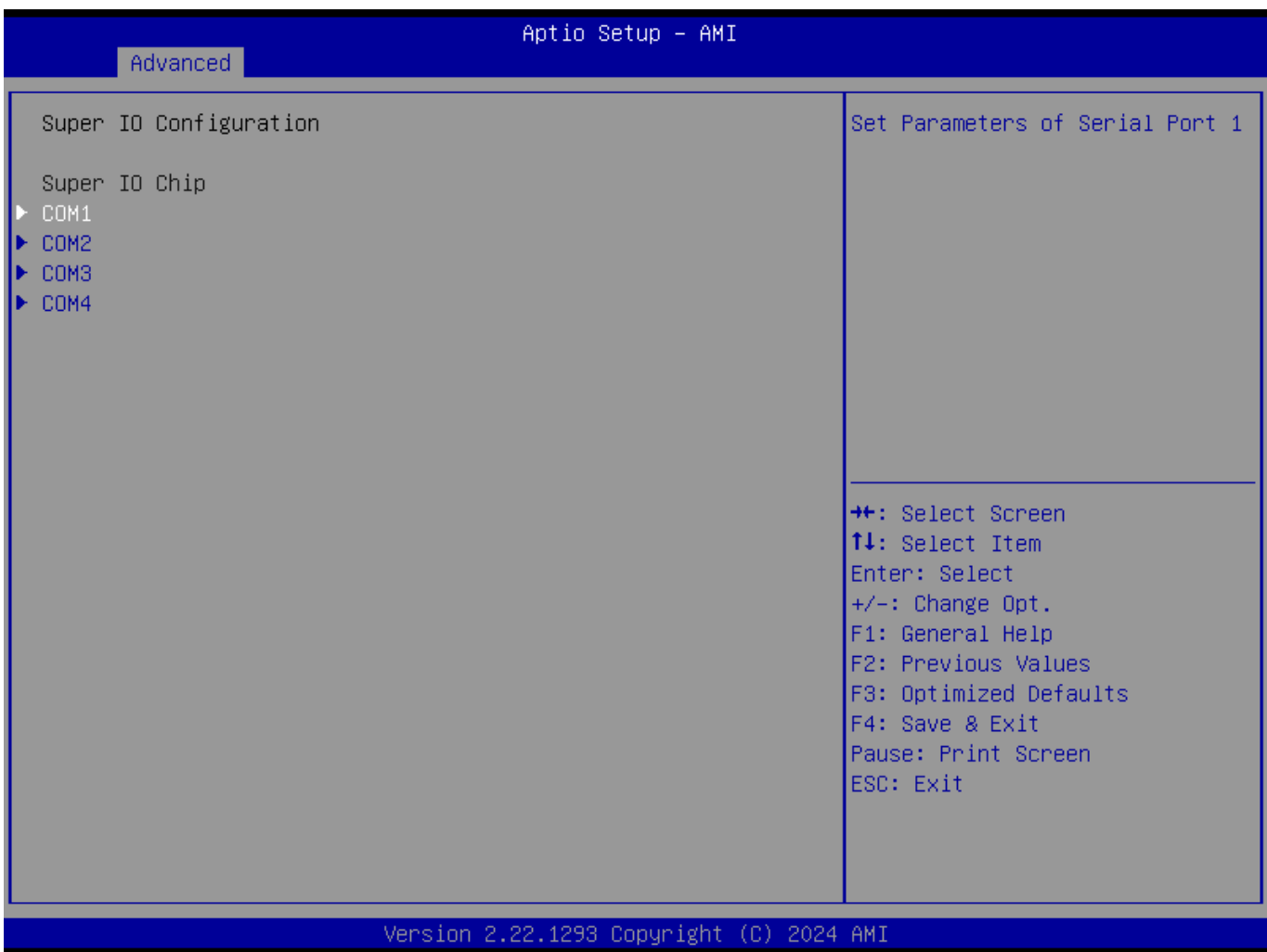
- This menu contains the following information:
- TPM 2.0 Device Found
Display the information of the TPM 2.0 Device: Firmware Version, Vendor.
 - Security Device Support
Enable or Disable BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.

4.2.7 ACPI Settings



- This menu contains the following information:
- **Enable Hibernation**
Enable or Disable System ability to Hibernate (OS/S4 Sleep State). This option may not be effective with some operating systems.

4.2.8 Super IO Configuration



This menu contains the following information:

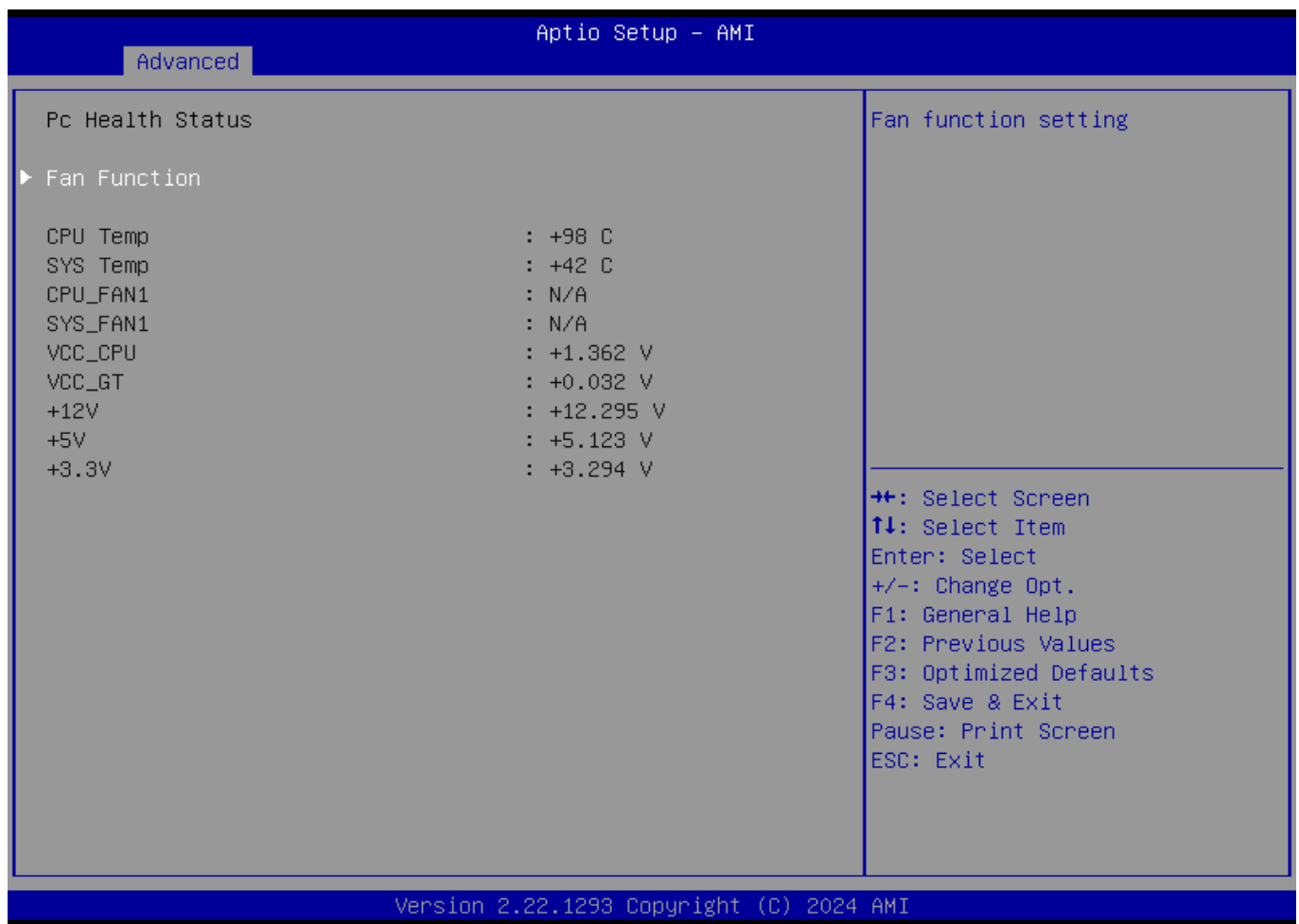
- COM X
Set Parameters of Serial Port x:

The options after entering the interface settings above are as follows. Serial Port: Enable or Disable Serial Port (COM).

Device Settings: Display the Current Device Settings.

Change Settings: If the board supported, this menu shows. Select an optimal setting for Super IO Device.

4.2.9 Hardware Monitor



This menu contains the following information:

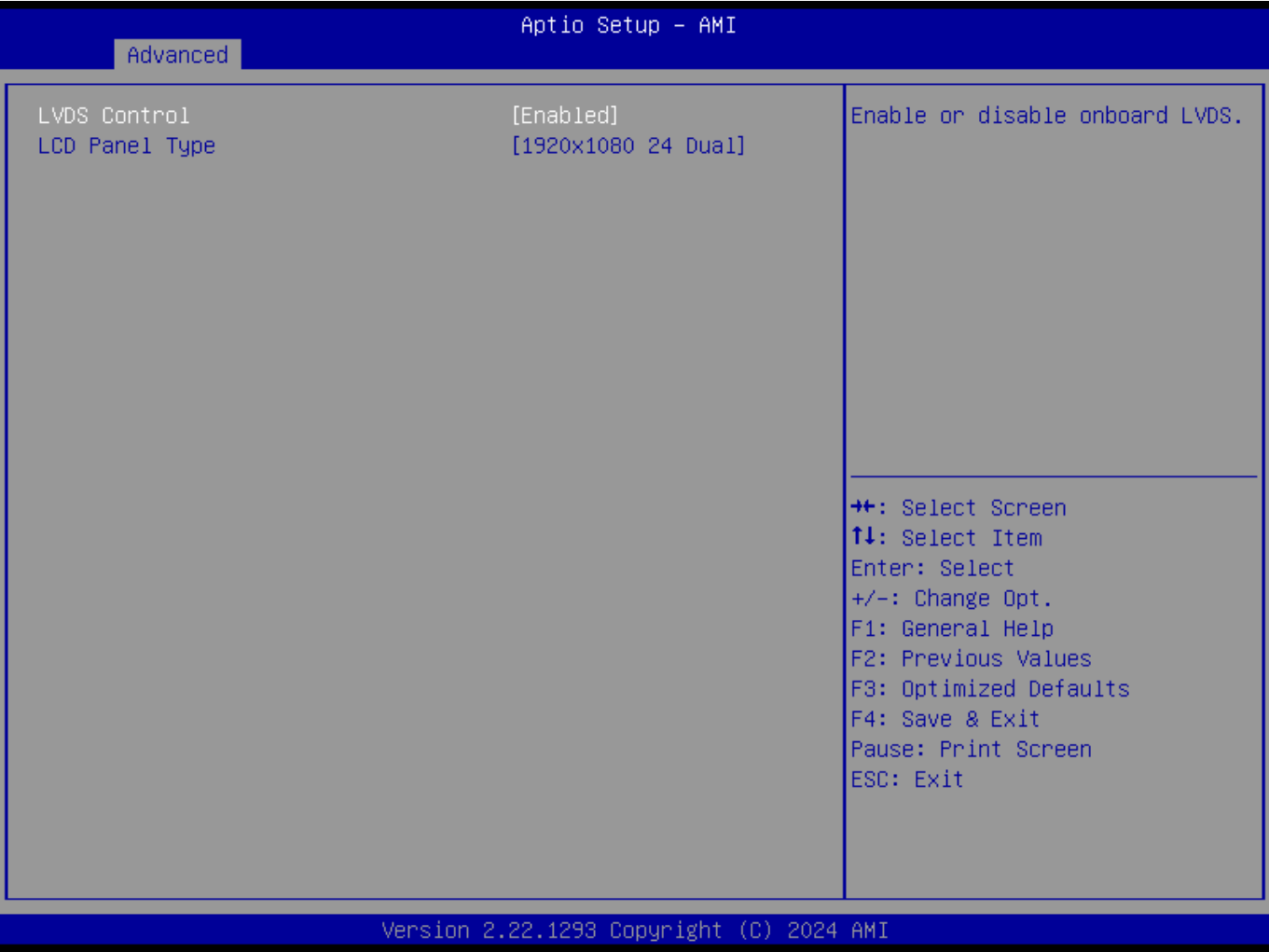
- Fan Function (If the board supported, this menu shows.) Fan Function setting.

CPU_FAN1/SYS_FAN1 Mode: FAN Mode Select.

Full on Mode; Automatic Mode; Manual Mode. Refer to section 2.7 of this manual for setting up.

- CPU Temp
Display CPU Temperature.
- SYS Temp
Display System Temperature.
- CPU_FAN1
Display CPU_FAN1 Speed.
- SYS_FAN1
Display SYS_FAN1 Speed.
- VCC_CPU
Display CPU Core Voltage Value.
- VCC_GT
Display Memory Voltage Value.
- +12V
Display +12 Voltage Value.
- +5V
Display +5 Voltage Value.
- +3.3V
Display +3.3 Voltage Value.

4.2.10 Display Configuration



This menu contains the following information:

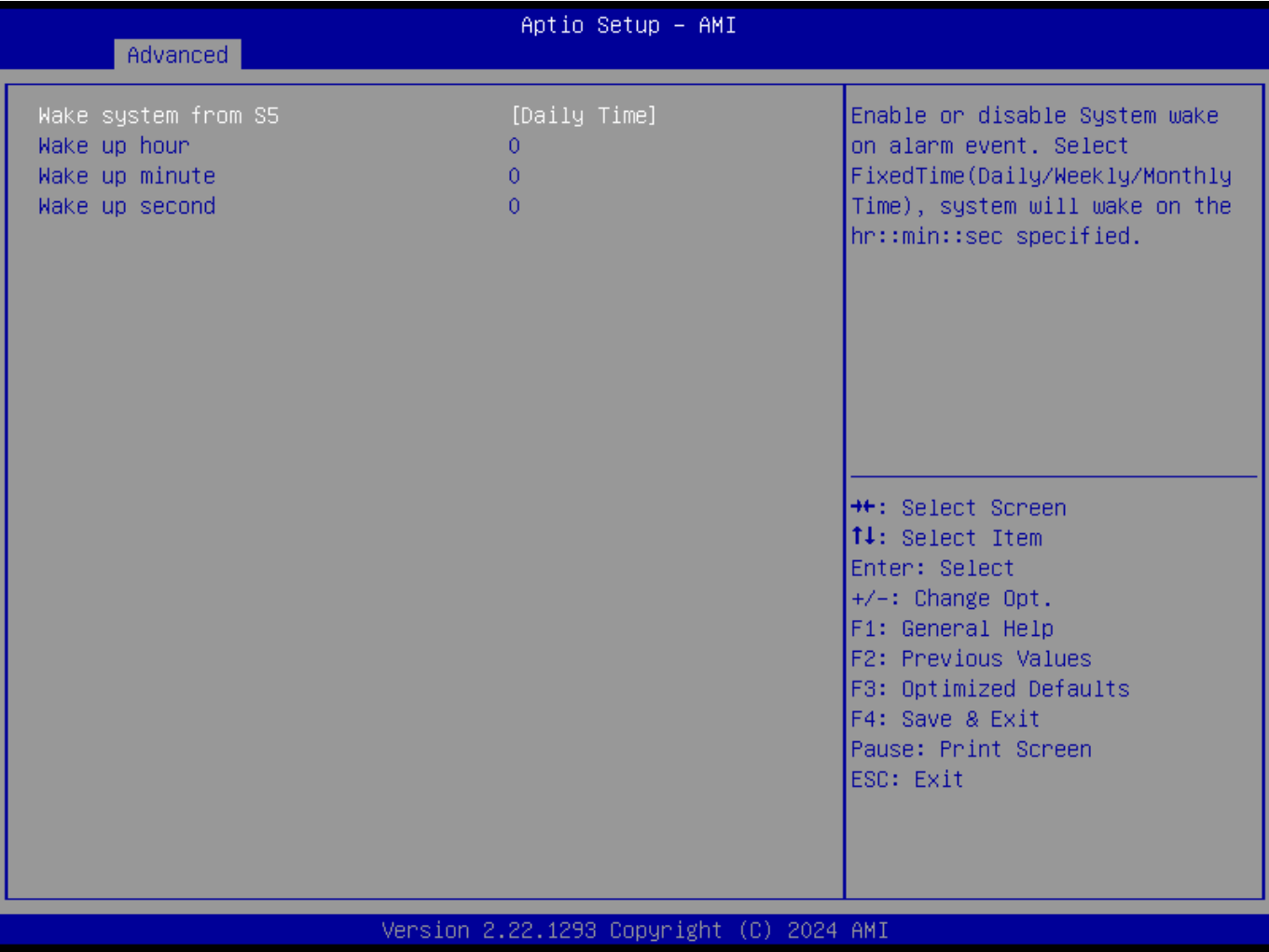
- LVDS Control
Enable or Disable onboard LVDS.
- LCD Panel Type
Select LCD Panel Type.

4.2.11 Power Control



- This menu contains the following information:
- Power On after Power Fail
Specify what state to go to when power is re-applied after a power failure (G3 state).
 - M.2_KEYB_WWAN1 HSIO Select Select
M.2_KEYB_WWAN1 HSIO Type.

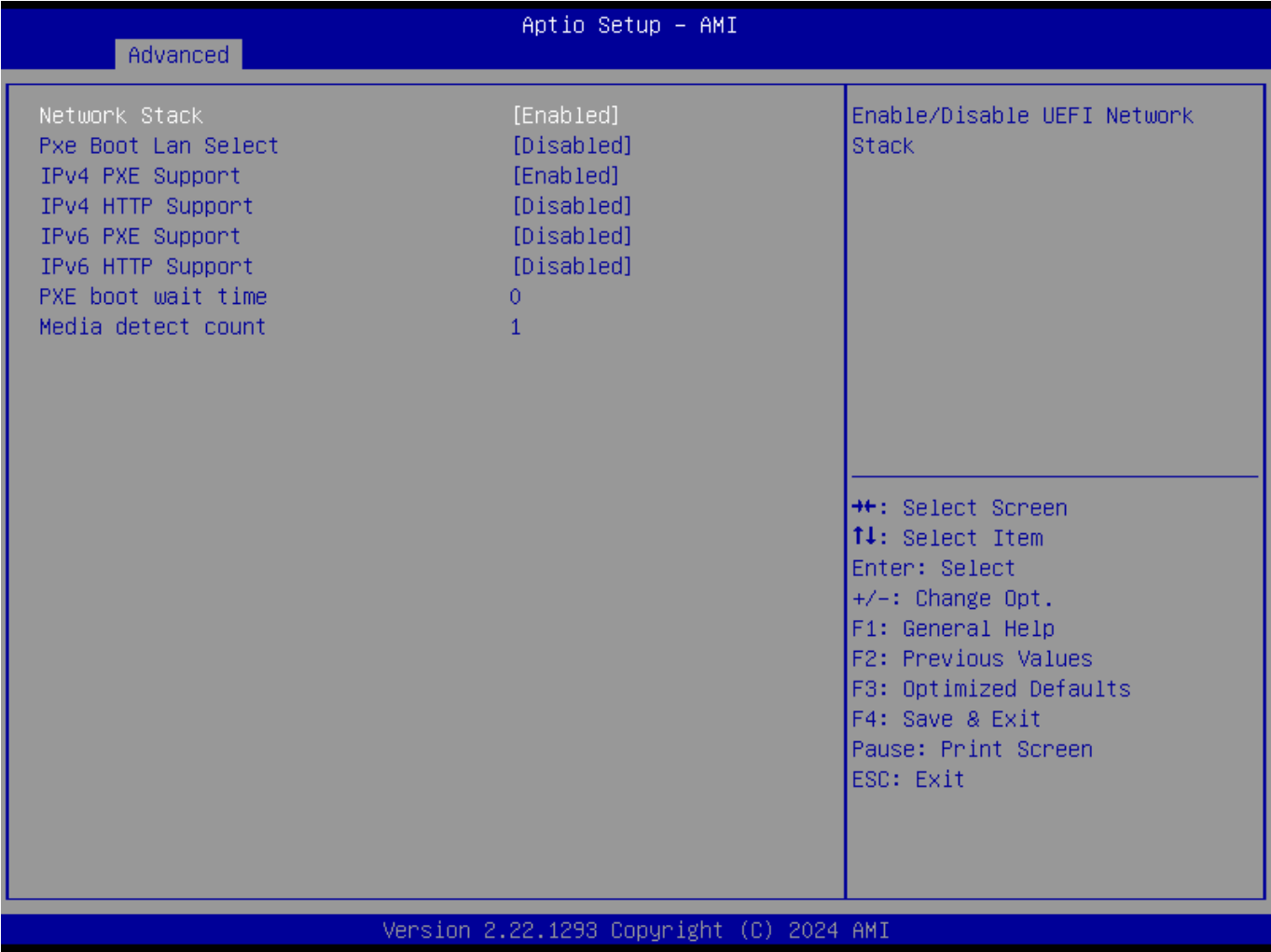
4.2.12 S5 RTC Wake Settings



This menu contains the following information:

- Wake system from S5
Enable or Disable System wake on alarm event. Select FixedTime (Daily/Weekly/Monthly Time), system will wake on the hr::min::sec specified.
Refer to section 2.6 of this manual for setting up.

4.2.13 Network Stack Configuration



This menu contains the following information:

- Network Stack
Enable or Disable UEFI Network Stack.
- PXE Boot Lan Select
Select the LAN port to Support PXE Boot.
- IPv4 PXE Support
Enable or Disable IPv4 PXE boot support. If disabled, IPv4 PXE boot support will not be available.
- IPv4 HTTP Support
Enable or Disable IPv4 HTTP boot support. If disabled, IPv4 HTTP boot support will not be available.
- IPv6 PXE Support
Enable or Disable IPv6 PXE boot support. If disabled, IPv6 PXE boot support will not be available.
- IPv6 HTTP Support
Enable or Disable IPv6 HTTP boot support. If disabled, IPv6 HTTP boot support will not be available.
- PXE boot wait time
Wait time in seconds to press ESC key to abort the PXE boot. Use either +/- or numeric keys to set the value.
- Media detect count
Number of times the presence of media will be checked. Use either +/- or numeric keys to set the value.

4.2.14 NVMe Configuration



This menu contains the following information:

- NVMe Configuration
NVMe Device Options Settings. (When no device is connected, the Option display 'No NVMe Device Found').

4.2.14.1 NVMe Device Options Settings



This menu contains the following information:

- Display the NVME device information
- Device Self Test

Self Test Option: Select either Short or Extended Self Test. Short option will take couple of minutes and extended option will take several minutes to complete.

Self Test Action: Select either to test Controller alone or Controller and Name Space. Selecting Controller and Name Space option will take lot longer to complete the test.

Run Device Self Test: Perform device self test for the corresponding Option and Action selected by user. Pressing 'Esc' key will abort the test. Result shown below is the recent result logged in the device.

4.3 Security



This menu contains the following information:

- Administrator Password
Set Setup Administrator Password.
- User Password
Set User Password.
- Secure Boot
Secure Boot configuration.

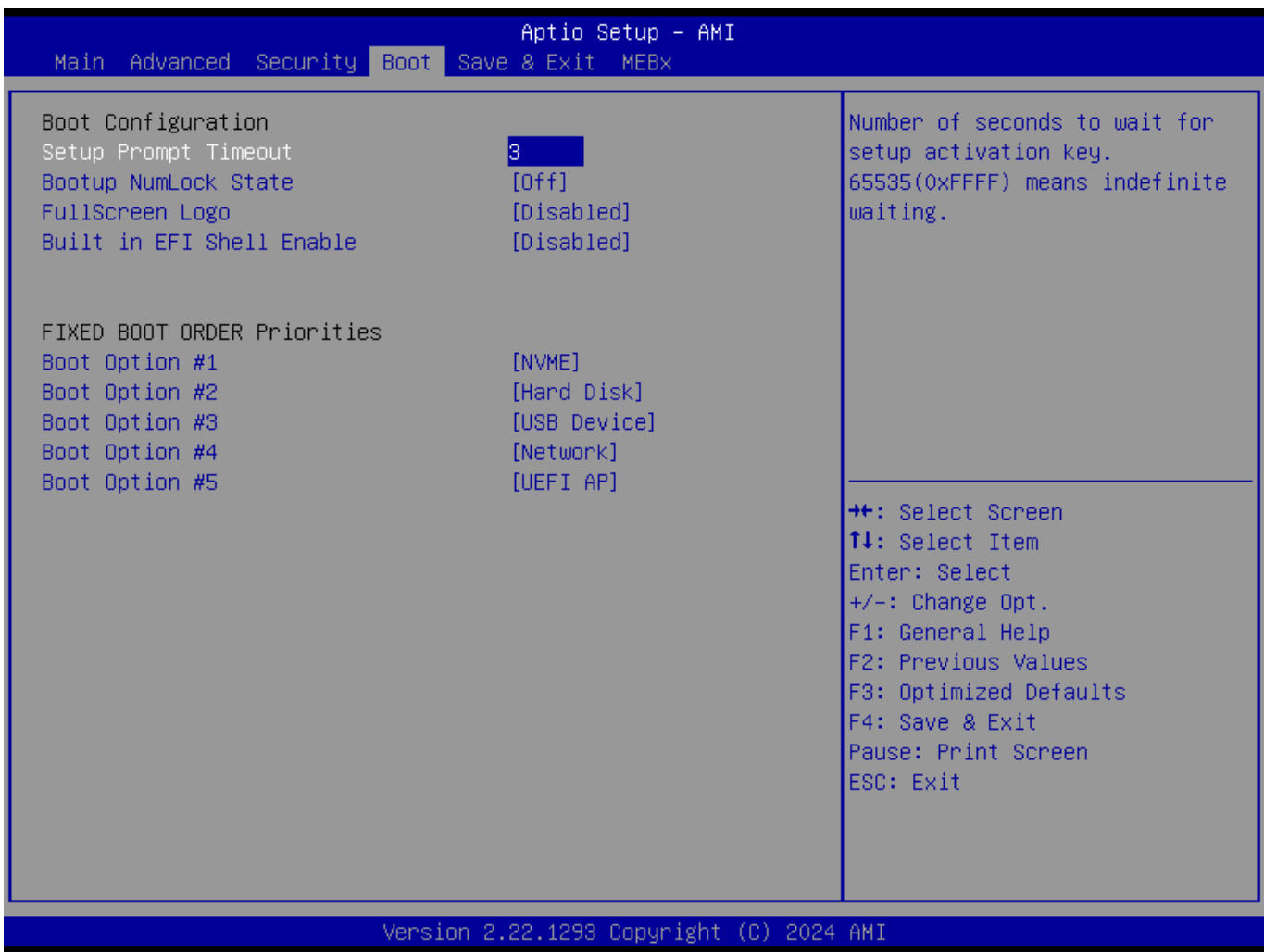
4.3.1 Secure Boot



This menu contains the following information:

- System Mode
Display the System Mode.
- Secure Boot
Secure Boot feature is Active if Secure Boot is Enabled, Platform Key (PK) is enrolled and the System is in User mode. The mode change requires platform reset.
- Secure Boot Mode
Secure Boot mode options: Standard or Custom.
In Custom mode, Secure Boot Policy variables can be configured by a physically present user without full authentication.
- Restore Factory Keys
Force System to User Mode. Install factory default Secure Boot key databases.
- Reset To Setup Mode
Delete all Secure Boot key databases from NVRAM.
- Expert Key Management
Enables expert users to modify Secure Boot Policy variables without full authentication.

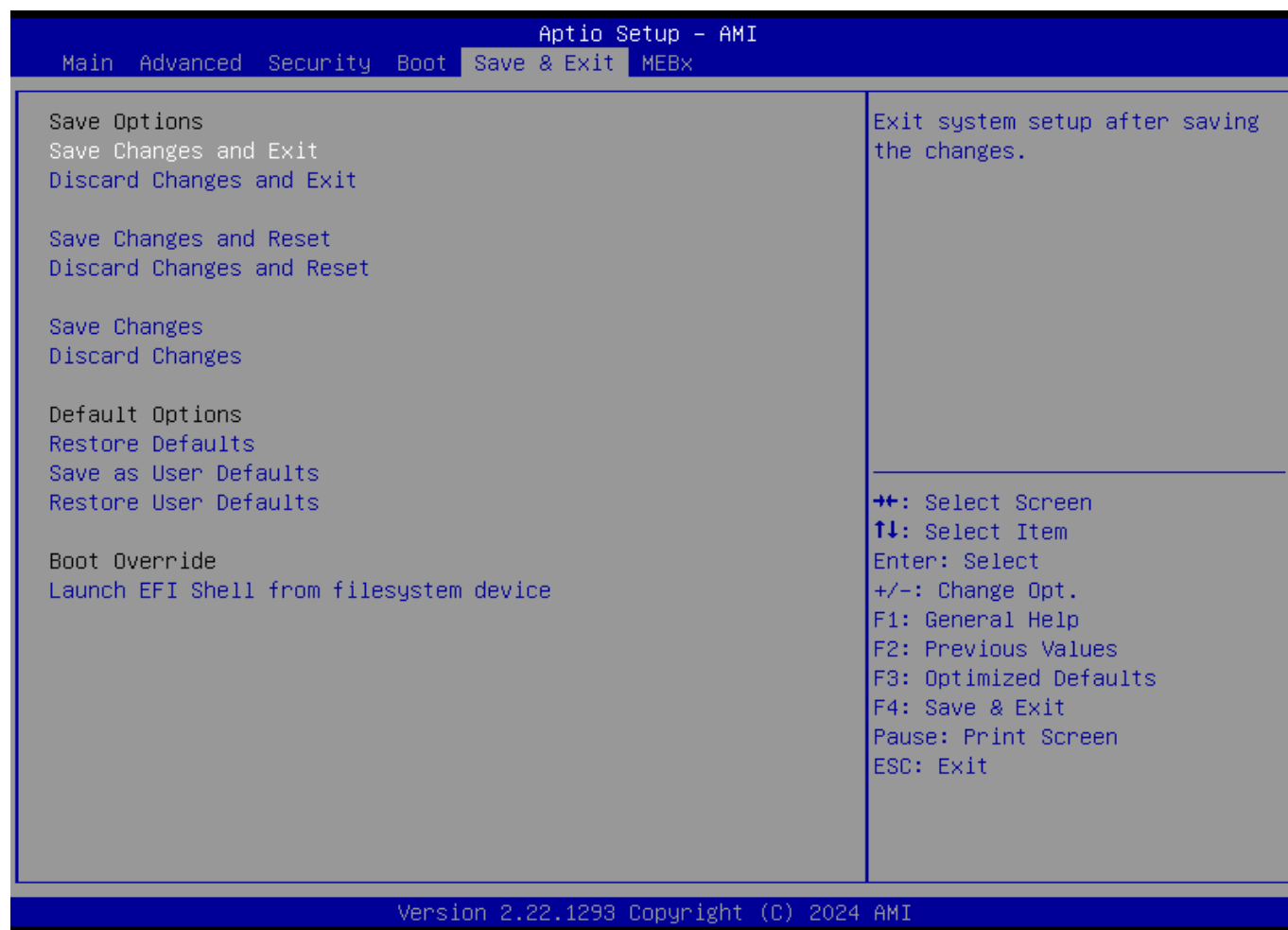
4.4 Boot



This menu contains the following information:

- Setup Prompt Timeout
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
- Bootup Num Lock State
Select the keyboard Num Lock state.
- Full Screen Logo
Enable or Disable Full Screen Logo option.
- Built in EFI Shell Enable
Enable or Disable Built in EFI Shell.
- FIXED BOOT ORDER Priorities
Display Boot order, and allow to set NVME/Hard Drive/USB/XXX boot order in this group.

4.5 Save & Exit



This menu contains the following information:

Save Options:

- Save Changes and Exit
Exit the system after saving the changes.
- Discard Changes and Exit
Exit system setup without saving any changes.
- Save Changes and Reset
Reset the system after saving the changes.
- Discard Changes and Reset
Reset system setup without saving any changes.
- Save Changes
Save Changes done so far to any of the setup options.
- Discard Changes:
Discard Changes done so far to any of the setup options.

Default Options

- **Restore Defaults**
Restore or Load Default values for all the setup options.
- **Save as User Defaults**
Save the changes done so far as User Defaults.
- **Restore User Defaults**
Restore the User Defaults to all the setup options.

Boot Override

- Launch EFI Shell from filesystem device
Attempts to launch EFI Shell application (Shell.efi) from one of the available filesystem devices.

4.6 MEBx



This menu contains the following information:

- Intel(R) ME Password
MEBx Login.

