

USER'S MANUAL

AIO-200-ASL-2L Series All IN One Touch Panel PC



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Prefaces

Revision

Revision	Description	Date
1.0	Manual Released	2026/06/30

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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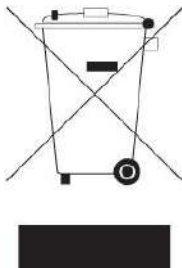
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Environmental Protection Announcement

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 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-ASL-2L Series All In One Touchscreen Computer	1
2	Adapter 60W 12V 5A	1
3	128G M.2 B key SSD	1
4	8GB DDR5 4800 MT/s	1

Ordering Information

Model No.	Description
1-E09A06012	Adapter Output 12V 5A 60W / Input 100-240V
1-TCOM00046	COM Cable (ST-2403064/SHININ TECH)
1-TPWR00118	3P Terminal Block(Female) To DC Plug 5.5x2.5 With Lock_100 mm_For AIO Series
1-TPWR00180	3P Terminal Block(Female) To DC Plug 5.5x2.5 With Lock_90 degree 100mm_For AIO Series
1-TADO00029	External Audio Speaker Cable 2W L=1000mm
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-AI215041S10	AIO-W221 Panel Mount Bracket Kit
3-AI101011S10	AIO Series 2.5" SSD, Cable, Bracket

Available Models

Model No.	Description
AIO-W210-ASL-2L	10.1" WXGA Capacitive IP65 All In One Touchscreen Computer With Intel® N Processor, 2x LAN, 3x USB, 1x TYPE C, 2x COM, 1x DP, 1x HDMI
AIO-W215-ASL-2L	15.6" Full HD Capacitive IP65 All In One Touchscreen Computer With Intel® N Processor, 2x LAN, 3x USB, 1x TYPE C, 2x COM, 1x DP, 1x HDMI
AIO-W221-ASL-2L	21.5" Full HD Capacitive IP65 All In One Touchscreen Computer With Intel® N Processor, 2x LAN, 3x USB, 1x TYPE C, 2x COM, 1x DP, 1x HDMI

Chapter 1

Product Introductions

1.1 Overview



AIO-W210-ASL-2L



AIO-W215-ASL-2L



AIO-W221-ASL-2L

Key Features

- 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; HDMI and DP
- Backlight lifetime Up to 50,000 Hours
- 10 Point Multi Touch, AG/AF Coating



1.2 Hardware Specification

Display	AIO-W210-ASL-2L	AIO-W215-ASL-2L	AIO-W221-ASL-2L
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	450	500
Contrast Ratio	800:1	1000:1	1000:1
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)	89/89/89/89 (Typ.) (CR>=10)	89/89/89/89 (Typ.) (CR>=10)
Backlight lifetime	30,000 Hours	50,000 Hours	50,000 Hours

System

Processor	- Standard- Intel® Processor N97 6M Cache, up to 3.60 GHz, 4 core 12W (Project Based) - Intel® Atom® x7433RE Processor 6M Cache, up to 3.40 GHz, 4 core 9W
System Chipset	SoC integrated
LAN Chipset	GbE1: Intel I225-V (Support Wake-on-LAN and PXE) GbE1: Intel I225-V (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888
System Memory	DDR5 4800 MT/s SODIMM. Max up to 16GB (Default: 8GB)
BIOS	AMI uEFI 8Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset

Touch

Touch Type	Projected Capacitive Touch
Surface Hardness	7H / IK07
Multi-touch	10 point
Anti-noise	CS 10V rms
Coating	AG/AF

Storage

M.2	1x M Key 2280, 128G NVMe SSD (Default)
SATA	2.5" SATA SSD (Option)

Expansion

M.2	1x E Key 2230 PCIe+USB2.0 1x B Key 2242/3052 PCIe/USB3.0 Support LTE/5G (Share with SATA connector)
------------	--

I/O

COM	1x RS232/422/485, 1x RS232 2x USB2.0 (Side panel, Optional)
USB	2x USB 3.2 Gen 2 Type A 1x USB 3.2 Gen 1 Type A 1x USB 3.2 Gen 1 Type C
LAN	2x 2.5GbE LAN
SIM	1x Dual Nano SIM
Audio	1x Audio out (Default) 1x Speaker out (Option)
Others	Support 6x Dipole Antenna (optional)

Operating System

Windows	Windows 10 / Windows 11
Linux	Ubuntu 22.04 / 24.04 LTS

Power

Power Adapter	60W (12V 5A, Default)
Power Supply Voltage	DC 9~36V
Power Connector	DC Jack 5.5mm/2.5mm

Environment

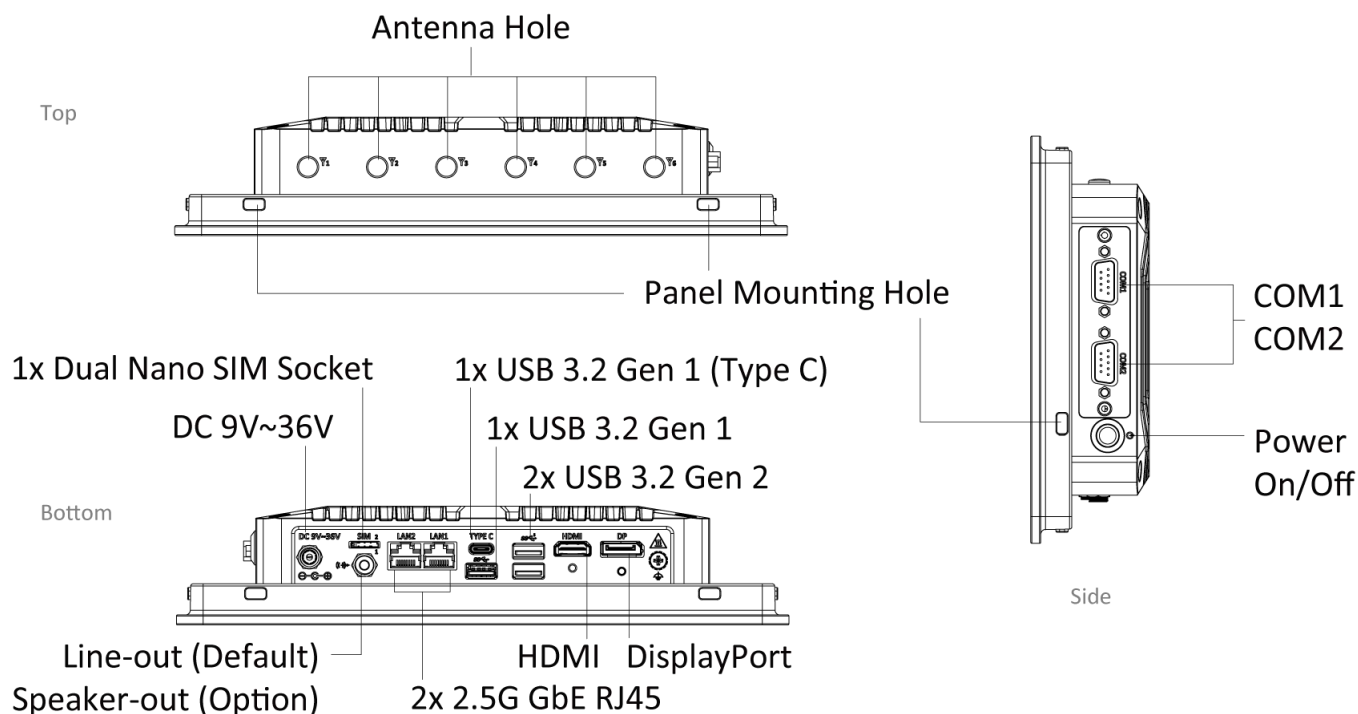
Operating Temp	-10°C to 50°C
Storage Temp	-20°C to 60°C
Relative Humidity	10% to 80% (non-condensing)
Certification	UL 62368 Ed. 3, CE, FCC Class B, CB, UKCA
Vibration	With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis)
Shock	With SSD: 20G half-sin 11ms

Physical

Dimension	- AIO-W210-ASL-2L : 256 (W) x 170 (H) x 50 (D) mm - AIO-W215-ASL-2L: 400 (W) x 249 (H) x 50 (D) mm - AIO-W221-ASL-2L : 538 (W) x 329 (H) x 62 (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-ASL-2L



Power On/Off

Press to power-on or power-off the system

USB port

Used to connect USB device

DC IN

Used to plug a DC power input with terminal Block

COM port

COM 1: RS-232/422/485

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

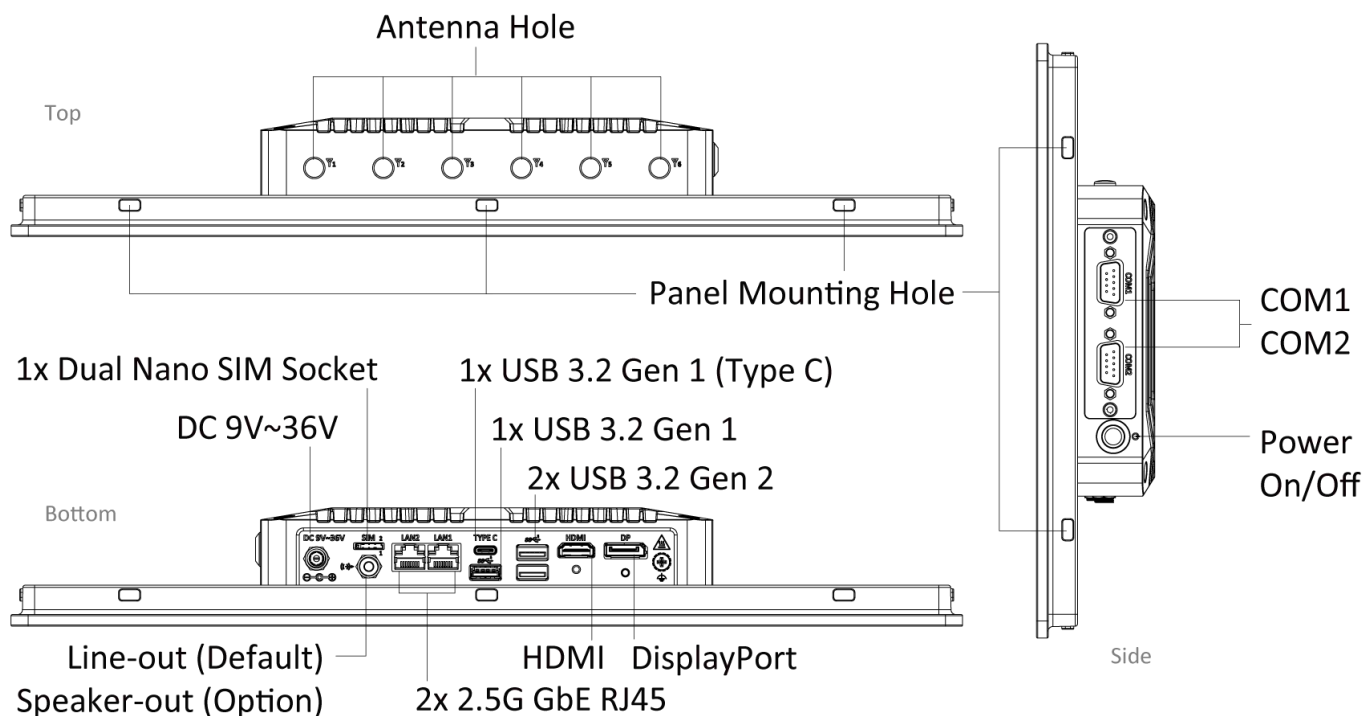
HDMI

Used to connect a HDMI monitor

Antenna hole

Used to connect an antenna for optional WiFi module

1.3.2 AIO-W215-ASL-2L



Power On/Off

Press to power-on or power-off the system

USB port

Used to connect USB device

DC IN

Used to plug a DC power input with terminal Block

COM port

COM 1: RS-232/422/485

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

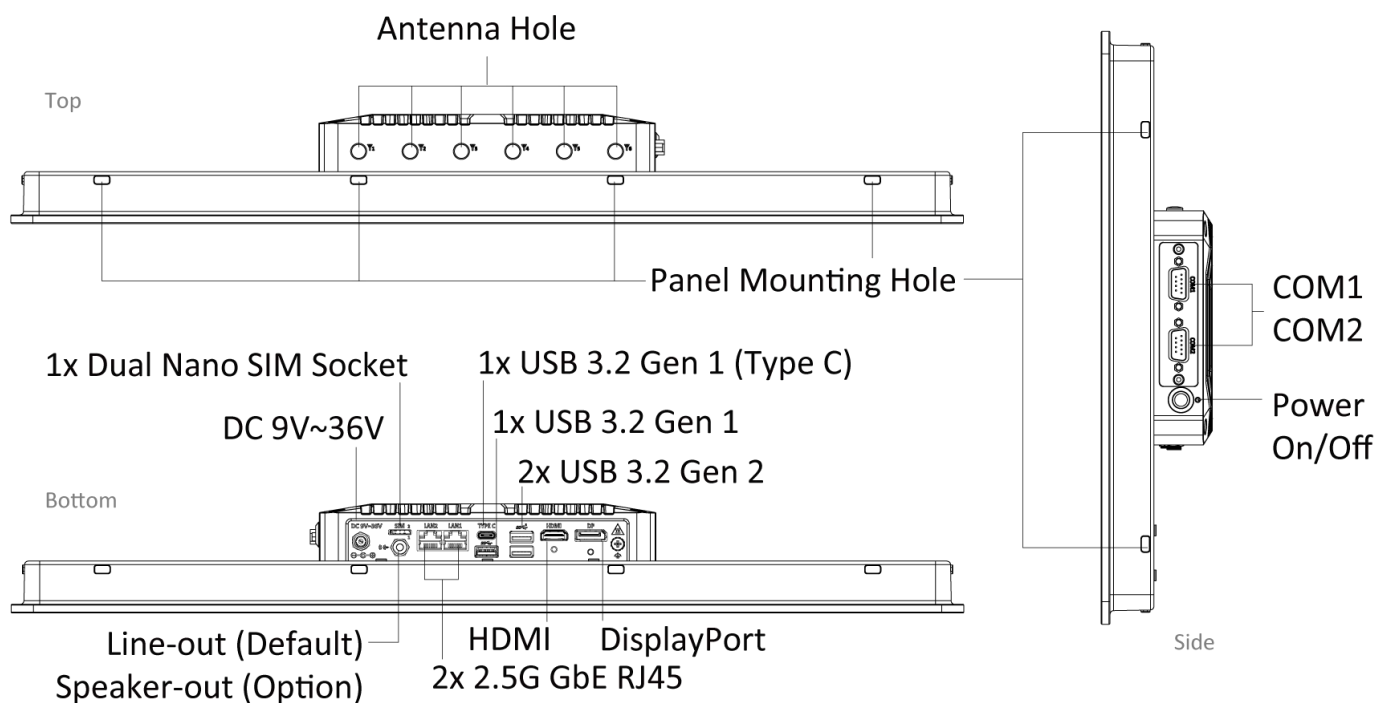
HDMI

Used to connect a HDMI monitor

Antenna hole

Used to connect an antenna for optional WiFi module

1.3.3 AIO-W221-ASL-2L



Power On/Off

Press to power-on or power-off the system

USB port

Used to connect USB device

DC IN

Used to plug a DC power input with terminal Block

COM port

COM 1: RS-232/422/485

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

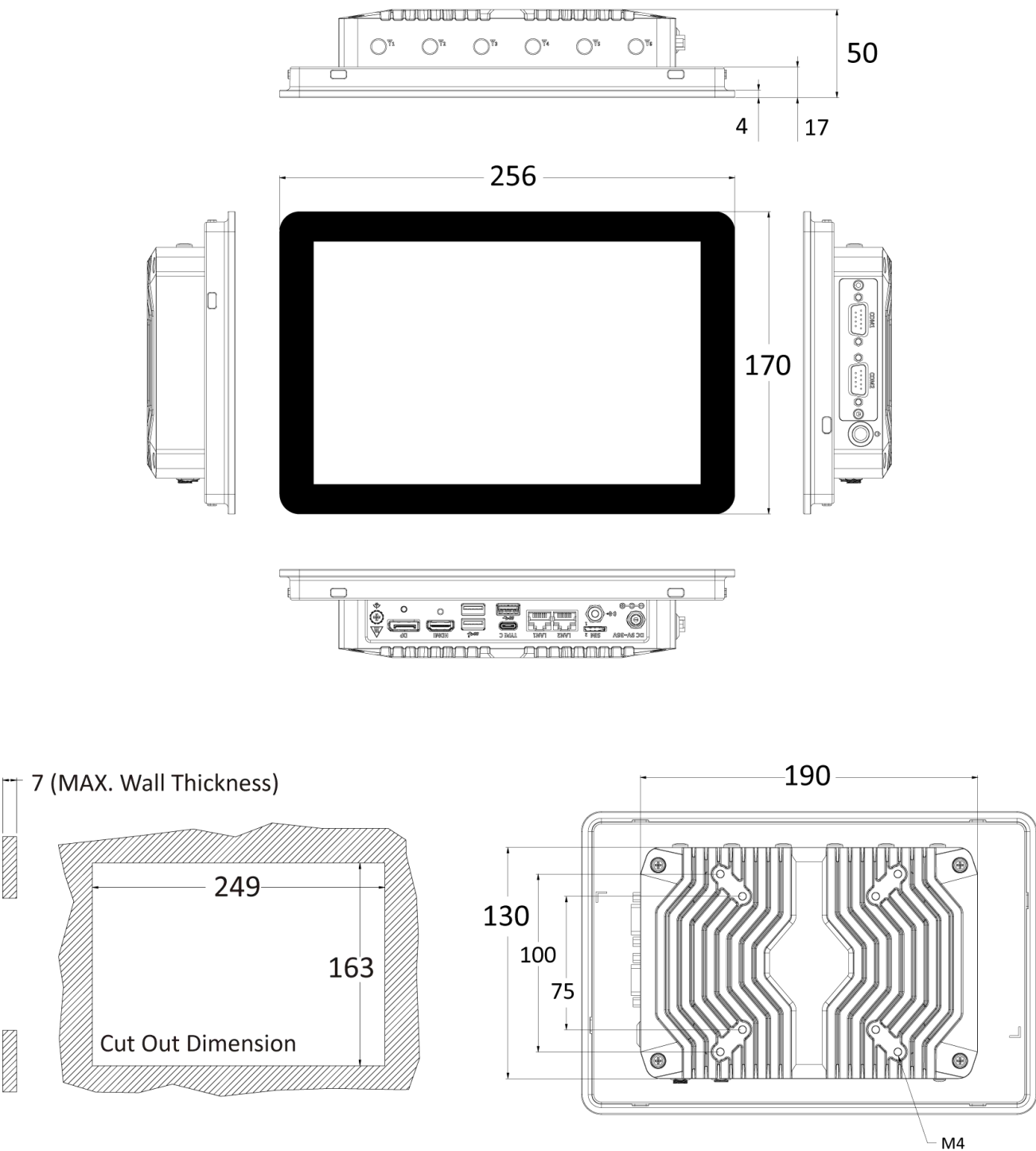
Antenna hole

Used to connect an antenna for optional WiFi module

1.4 Mechanical Dimensions

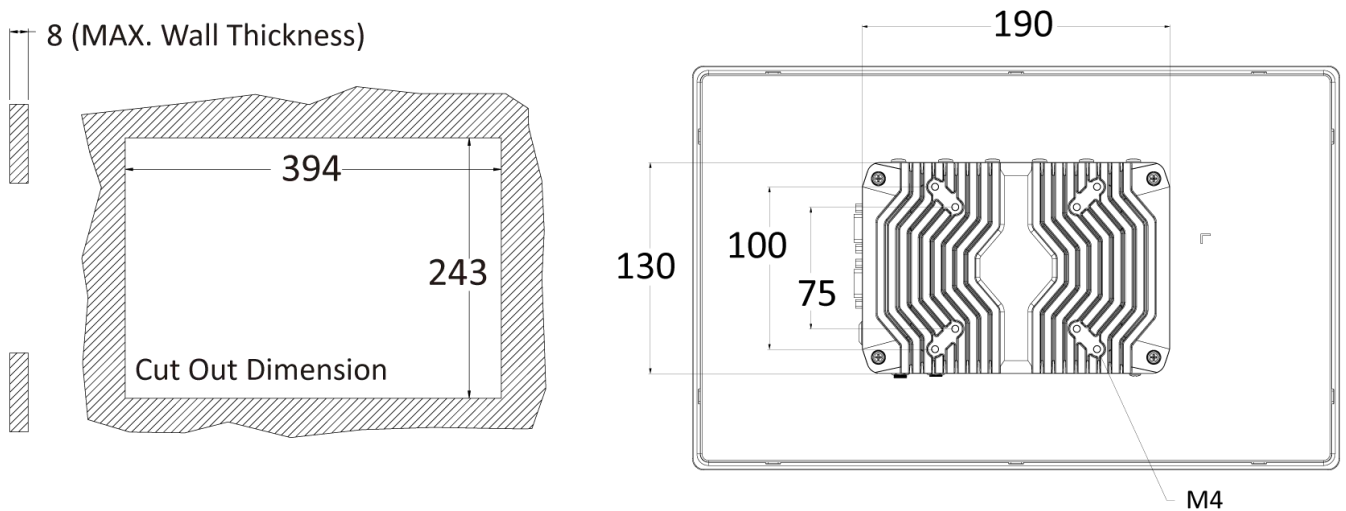
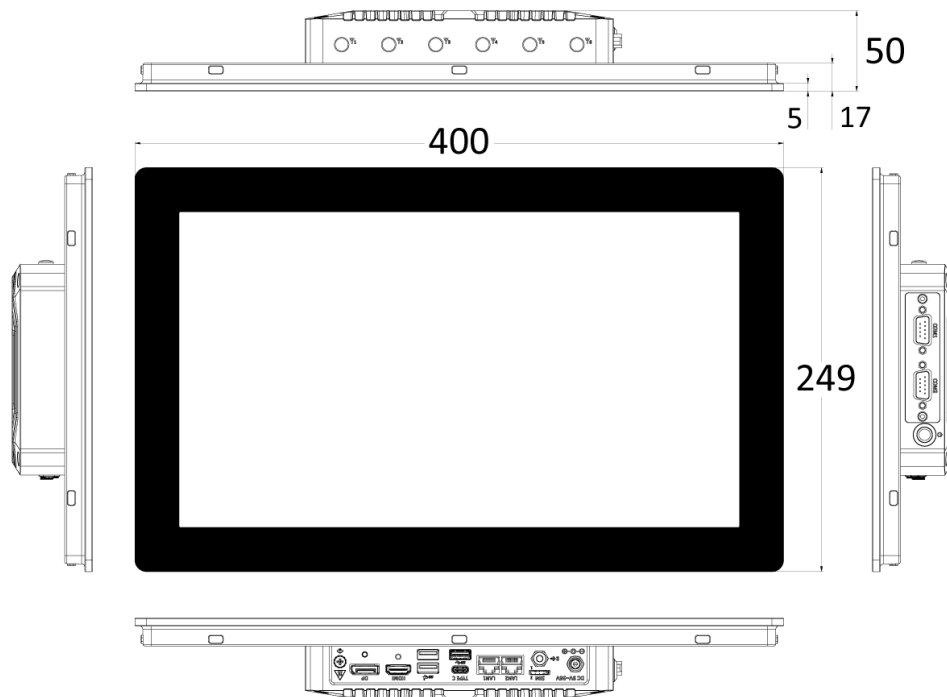
1.4.1 AIO-W210-ASL-2L

Unit: mm



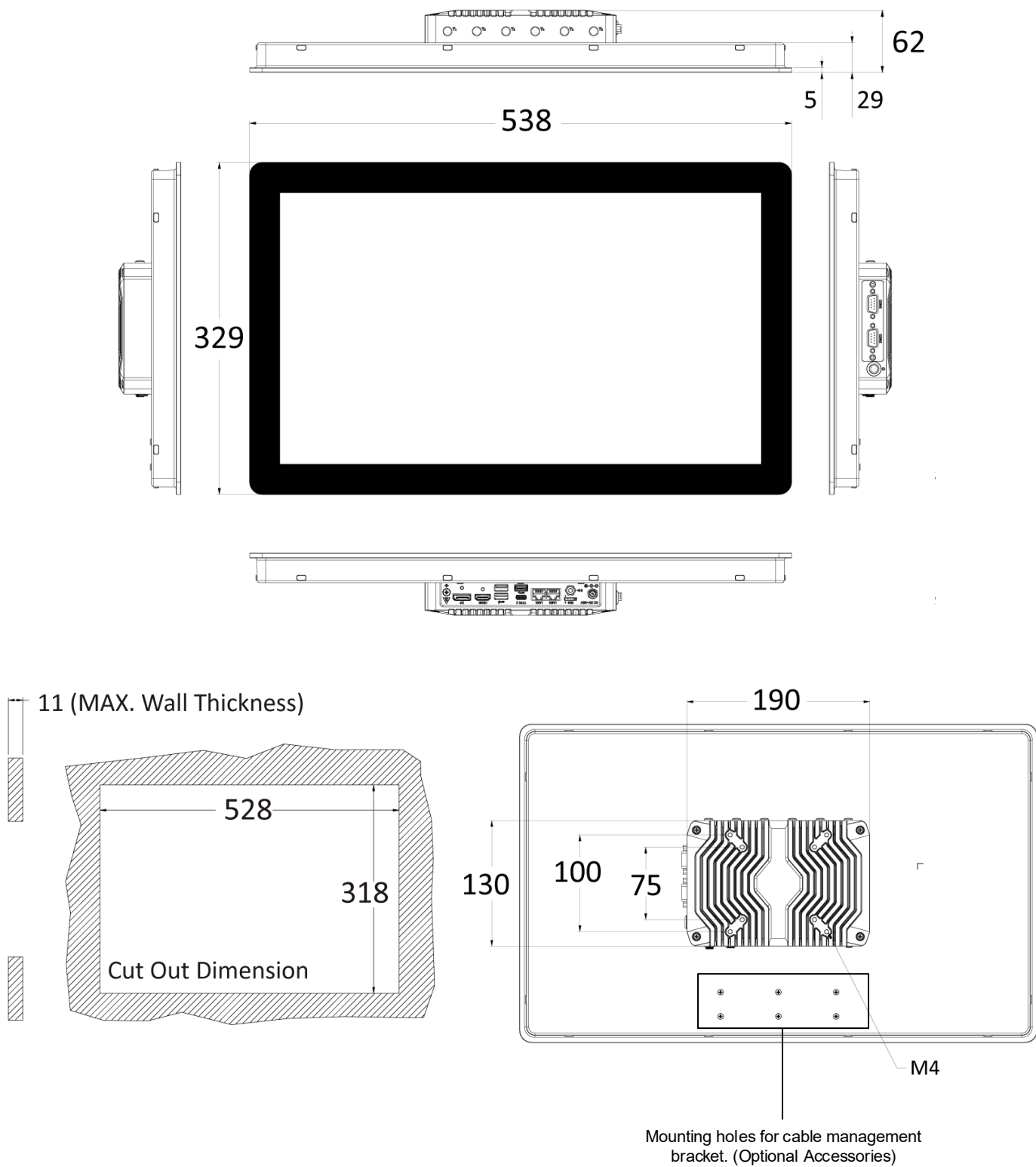
1.4.2 AIO-W215-ASL-2L

Unit: mm



1.4.3 AIO-W221-ASL-2L

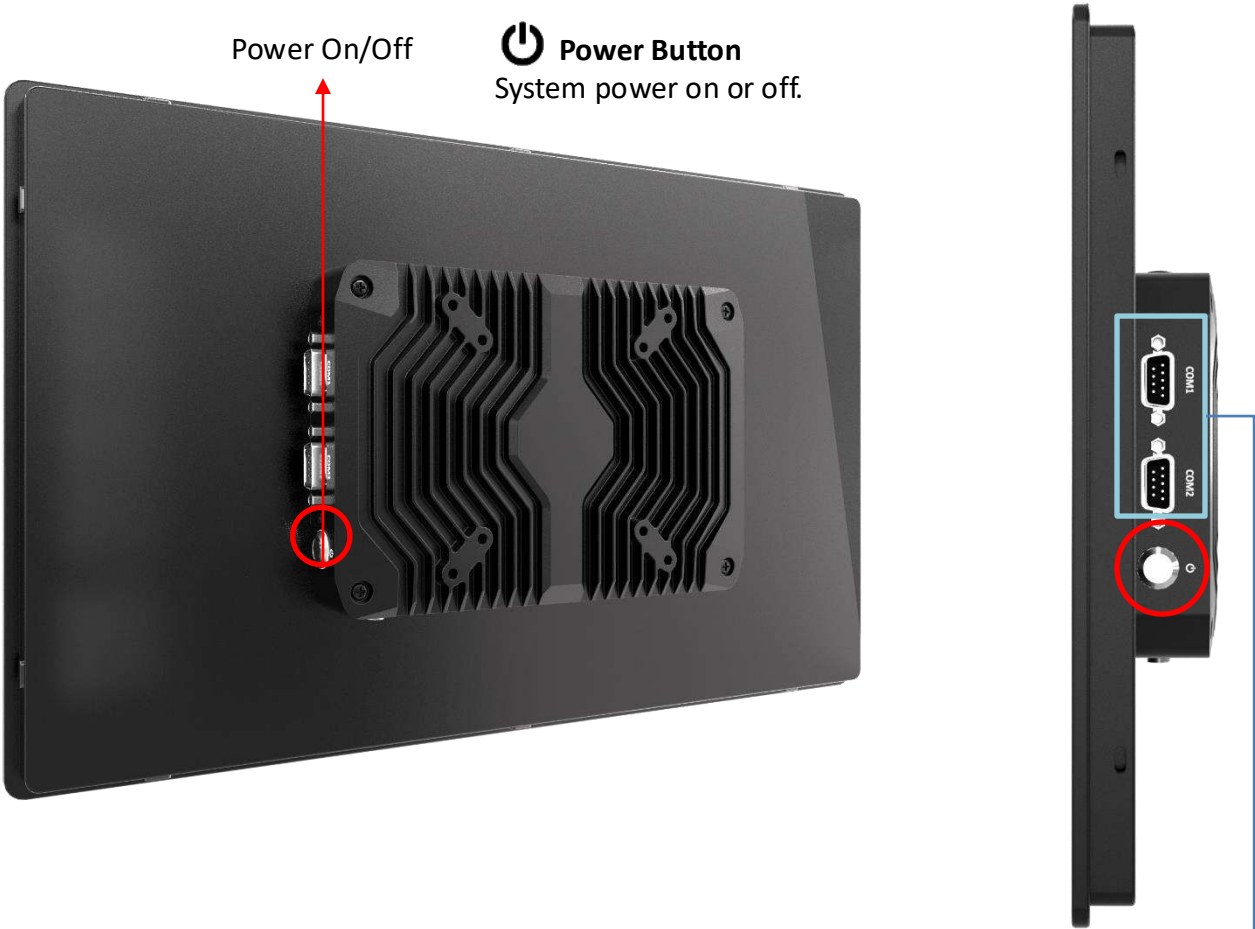
Unit: mm



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.

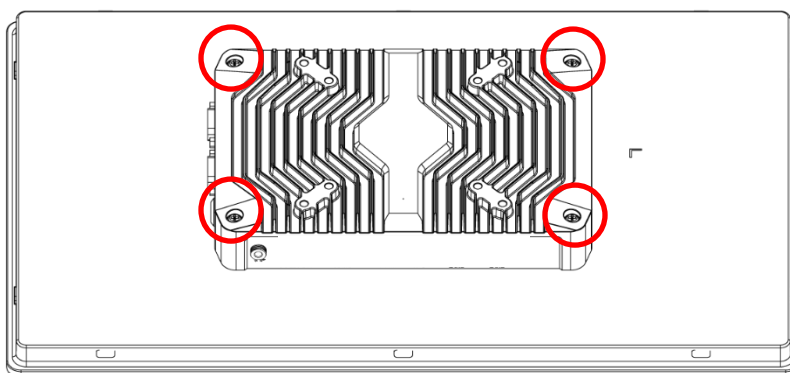
3.1 Replacement of Internal Modules



WARNING

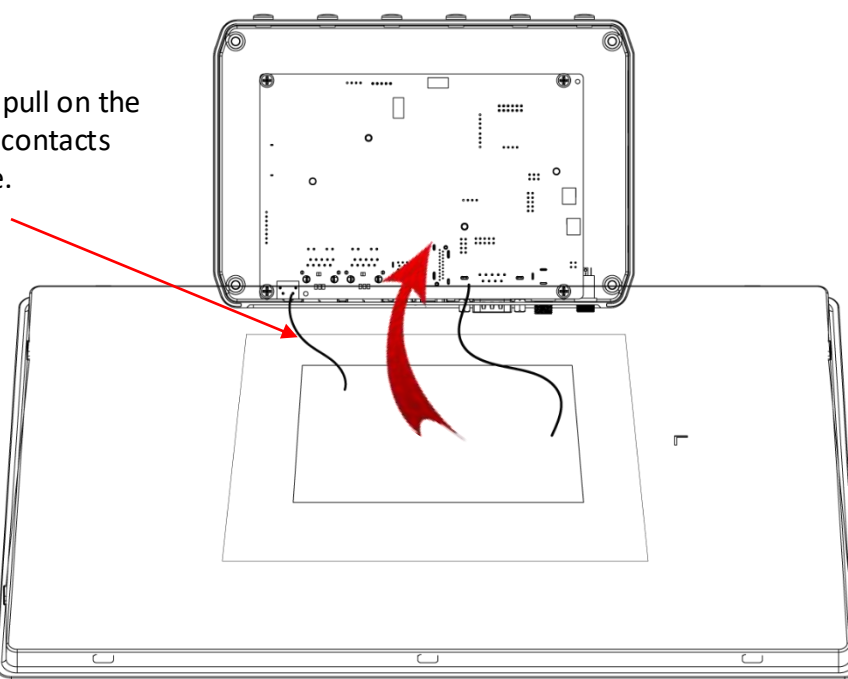
In order to prevent electric shock or system damage, before removing the chassis cover, must turn off power and disconnect the unit from power source.

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



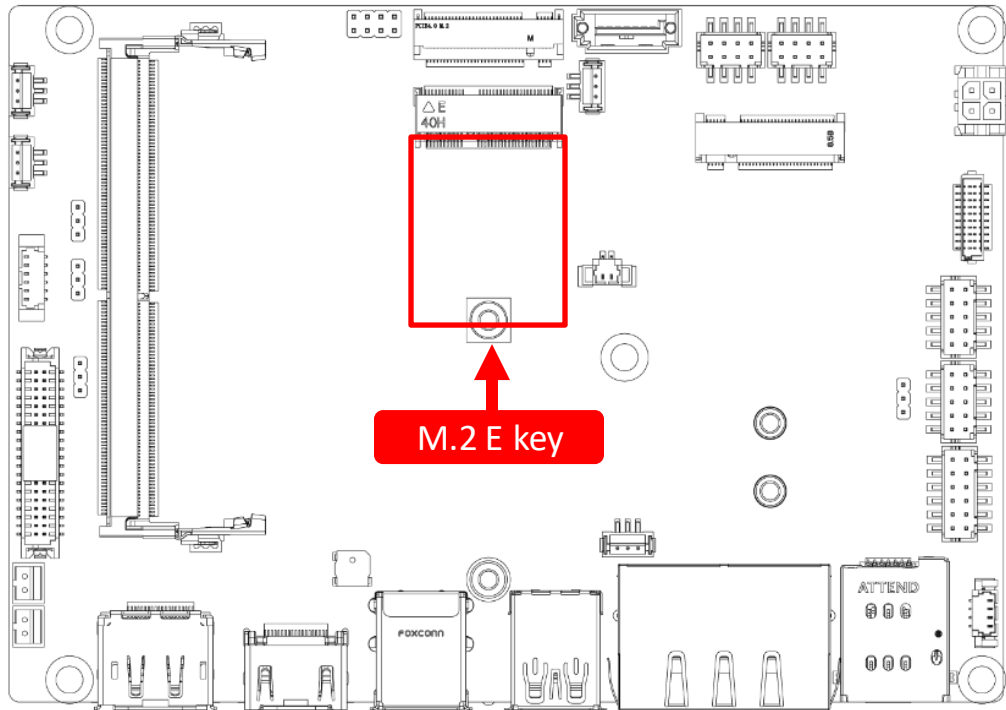
2. After removing the screws, detach the main unit from the screen.

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

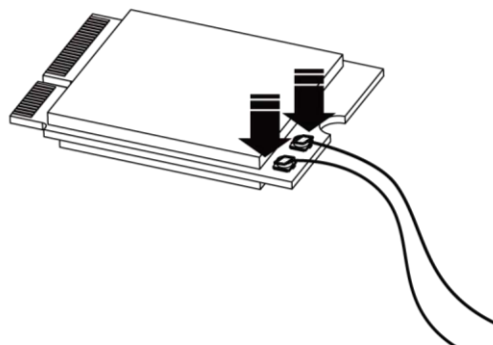


3.2 Install wireless network card and antenna

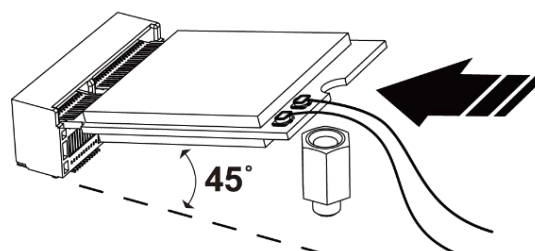
1. The M.2 E-Key supports Wi-Fi module, as highlighted in the picture below.



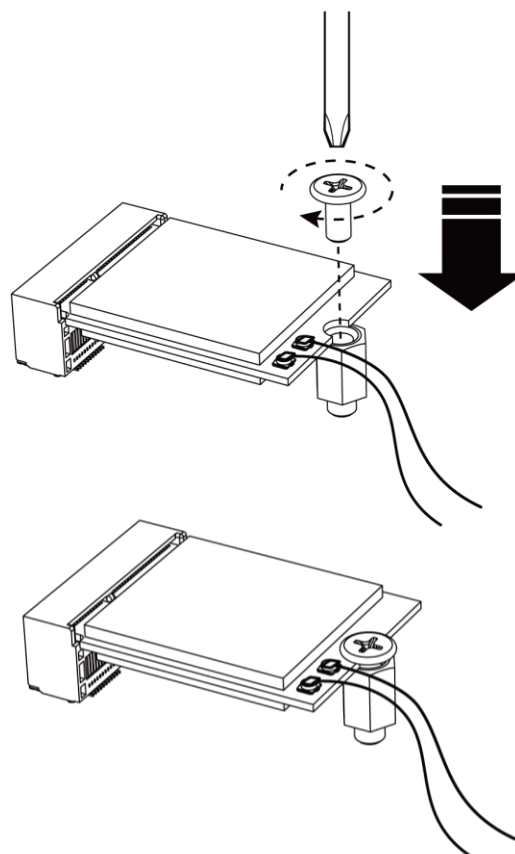
2. Connect the SMA cables to the Wi-Fi module.



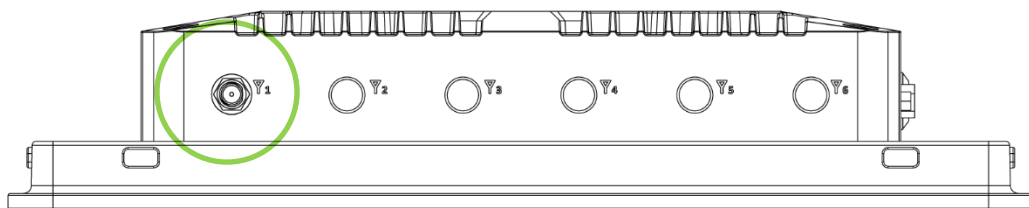
3. Insert the Wi-Fi module at a 45-degree angle.



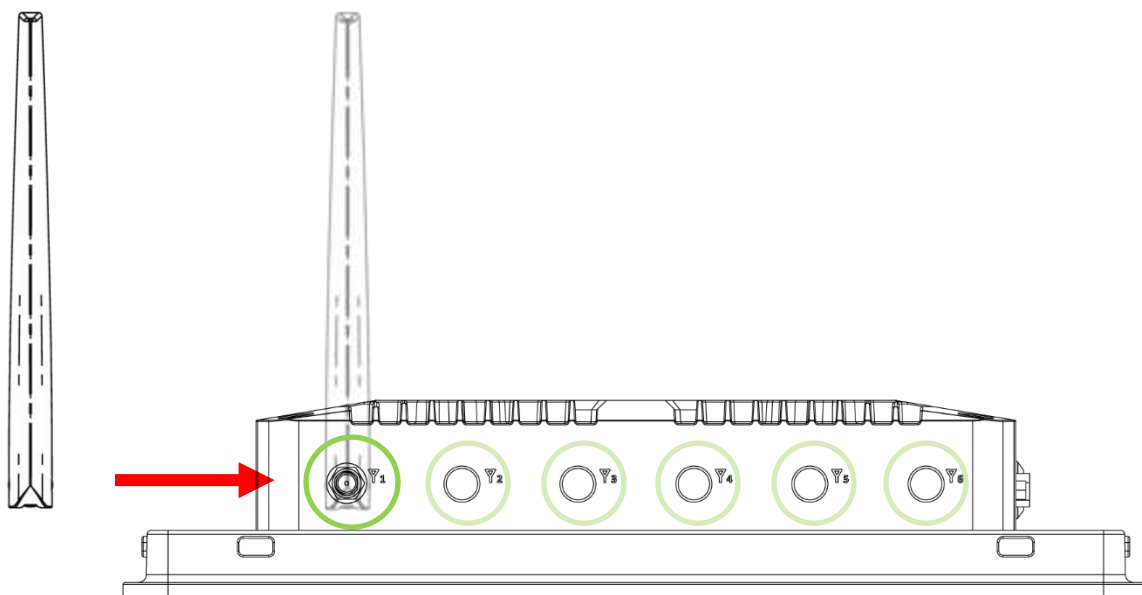
4. Press the Wi-Fi module down and secure it with one screw.



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.

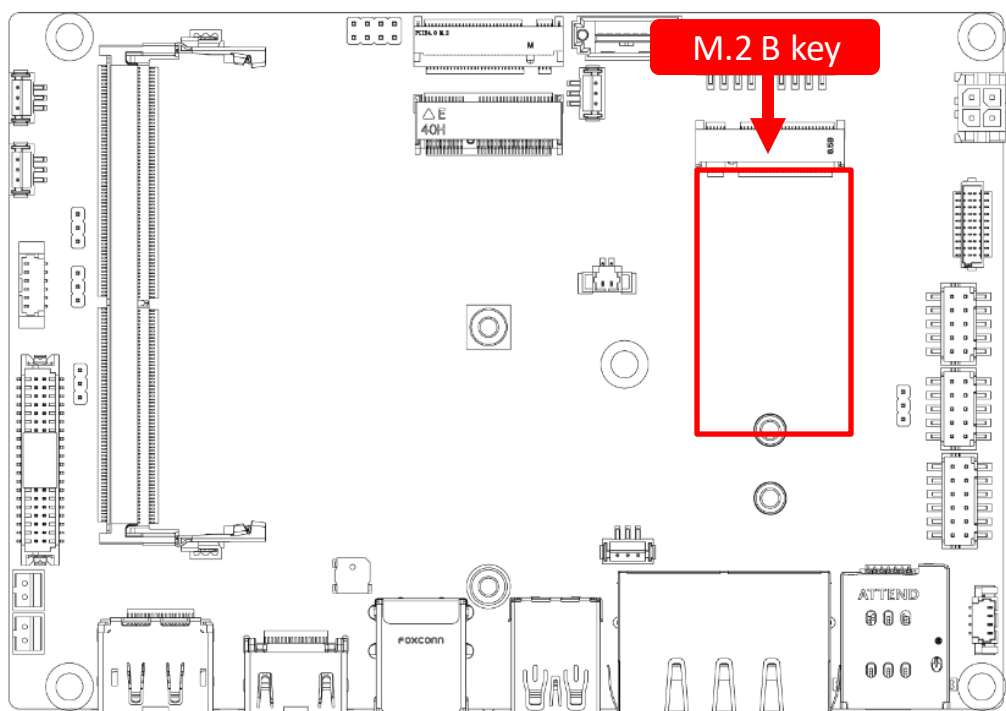


6. Attach the external antenna to the SMA jack by securely threading them together.

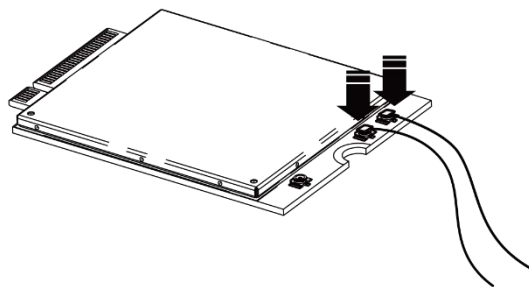


3.3 Install Communication Module and Antenna

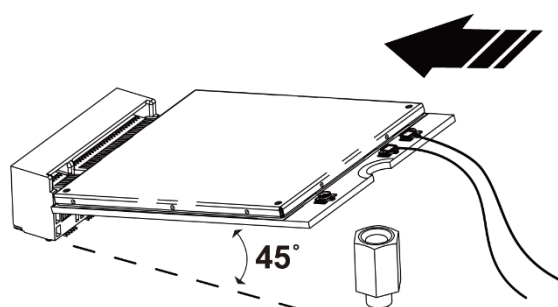
1. The M.2 B-Key supports communication (4G/LTE) module, as highlighted in the picture below.



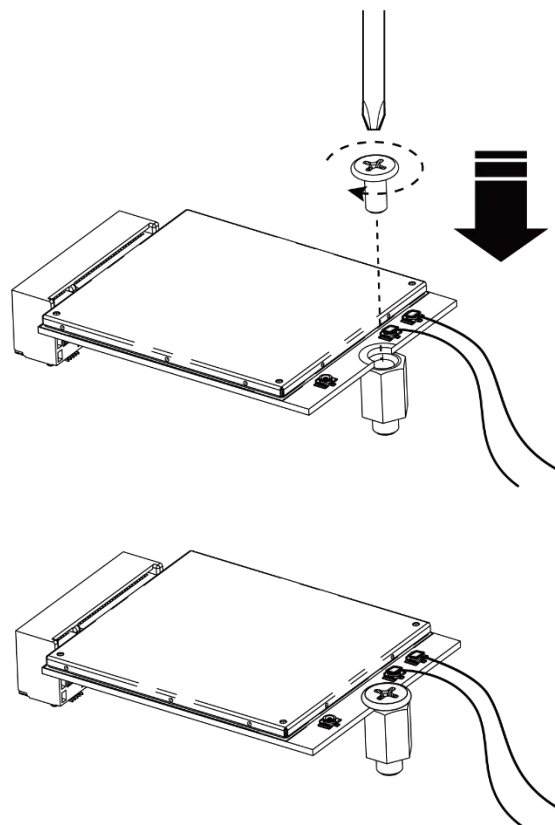
2. Connect the SMA cables to the communication (4G/LTE) module.



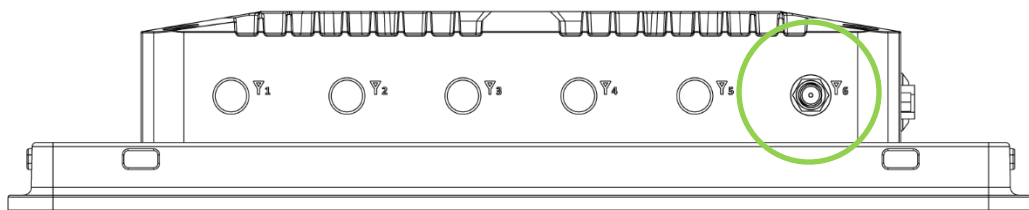
3. Insert the communication (4G/LTE) module at a 45-degree angle.



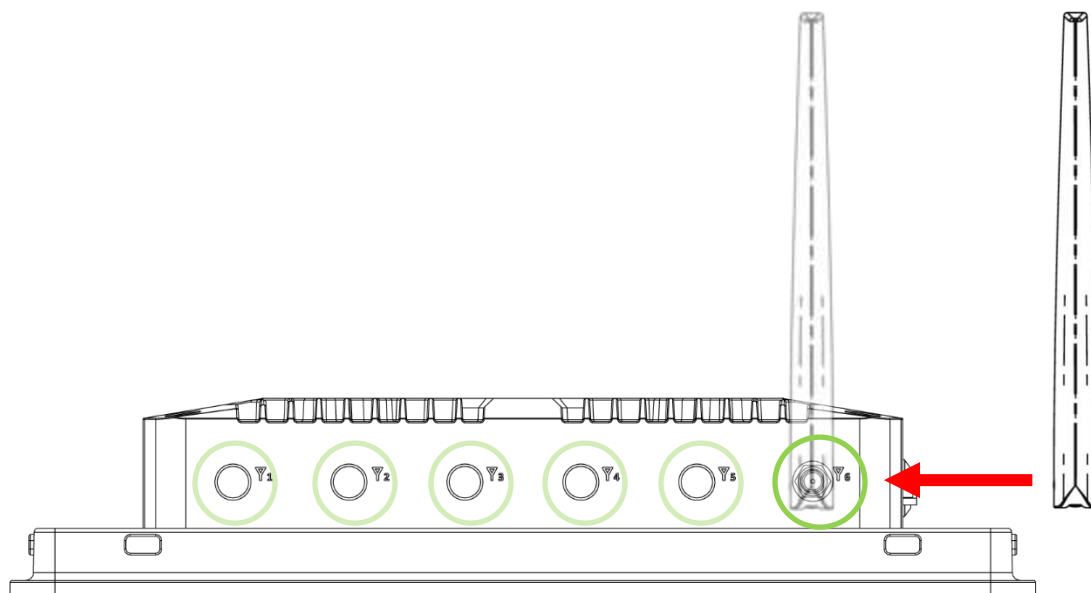
4. Press the communication module down and secure it with one screw.



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.

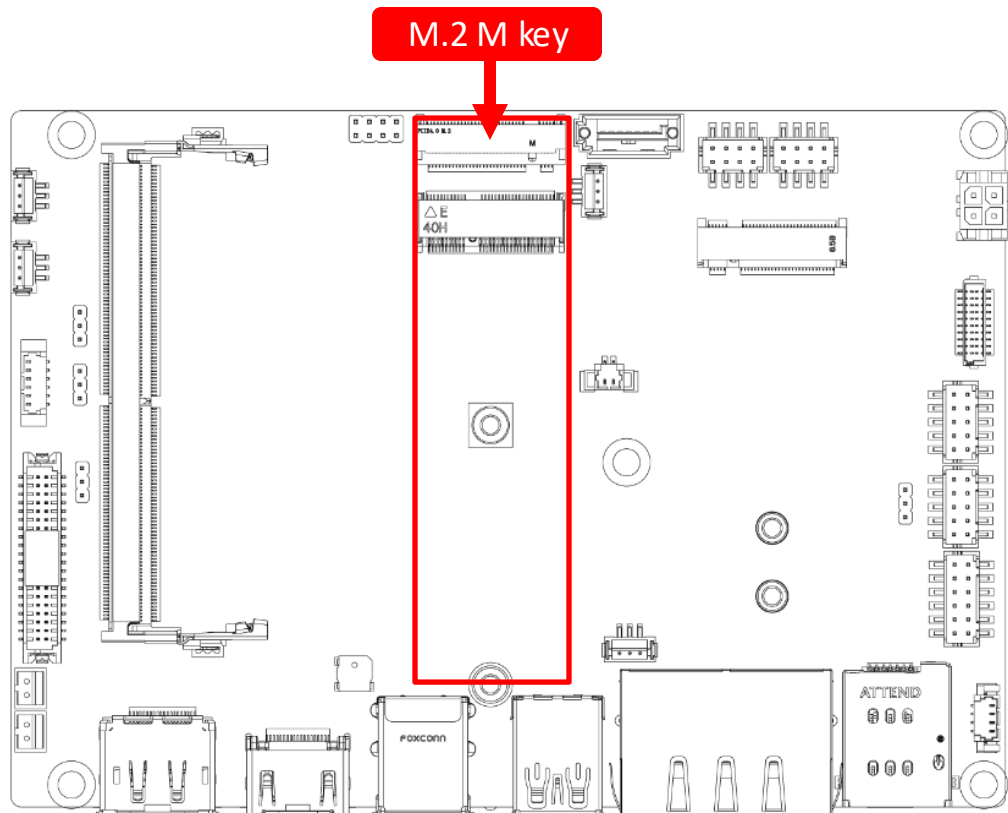


6. Attach the external antenna to the SMA jack by securely threading them together.



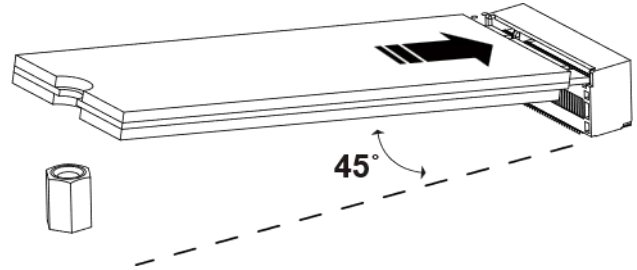
3.4 Install M.2 M Key Socket

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

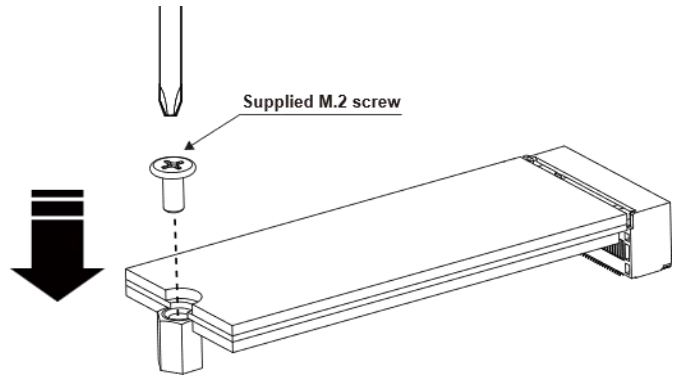


Install M.2 M Key NVMe SSD Step by Step

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

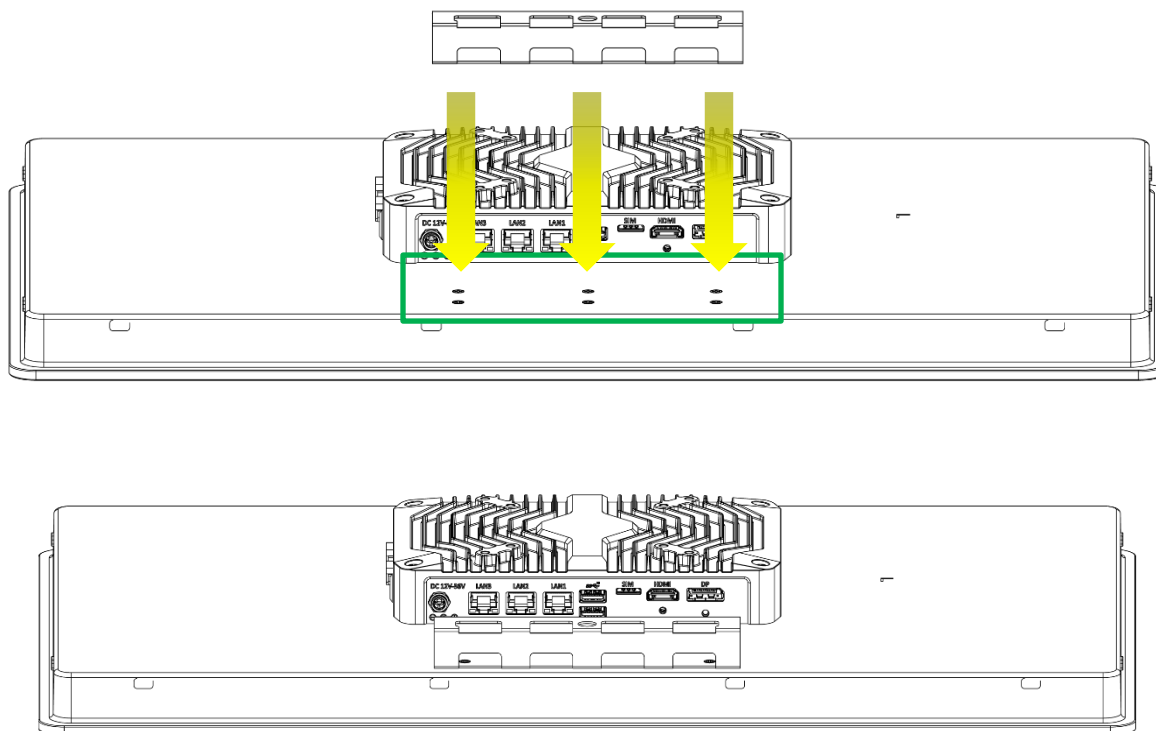


2. Press the NVMe SSD down and secure it with one screw.



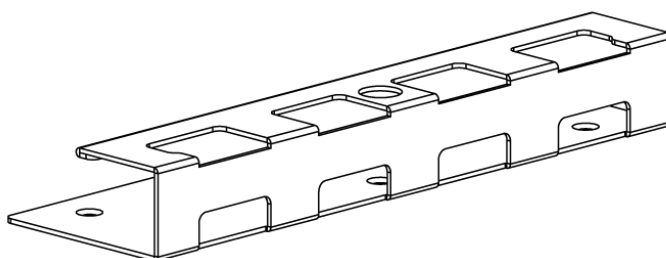
3.5 Cable Management Bracket Installation (21.5" only)

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

BIOS Setup

4.1 BIOS Introduction

The BIOS provides an interface to modify the configuration. When the battery is removed, all the parameters will be reset.

BIOS Setup

Power on the embedded system and by pressing immediately allows you to enter the setup screens. If the message disappears before you respond and you still wish to enter the Setup, restart the system by turning it OFF and ON or pressing the RESET button.

You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Control Keys	
<→> <←>	Select Screen
<↑> <↓>	Select Item
<Enter>	Select
<Page Up/+>	Increases the numeric value or makes changes
<Page Down/->	Decreases the numeric value or makes changes
<F1>	General Help
<F2>	Previous Value
<F3>	Load Optimized Defaults
<F4>	Save Configuration and Exit
<Tab>	Select Setup Fields
<Esc>	Exit BIOS Setup

Main Setup

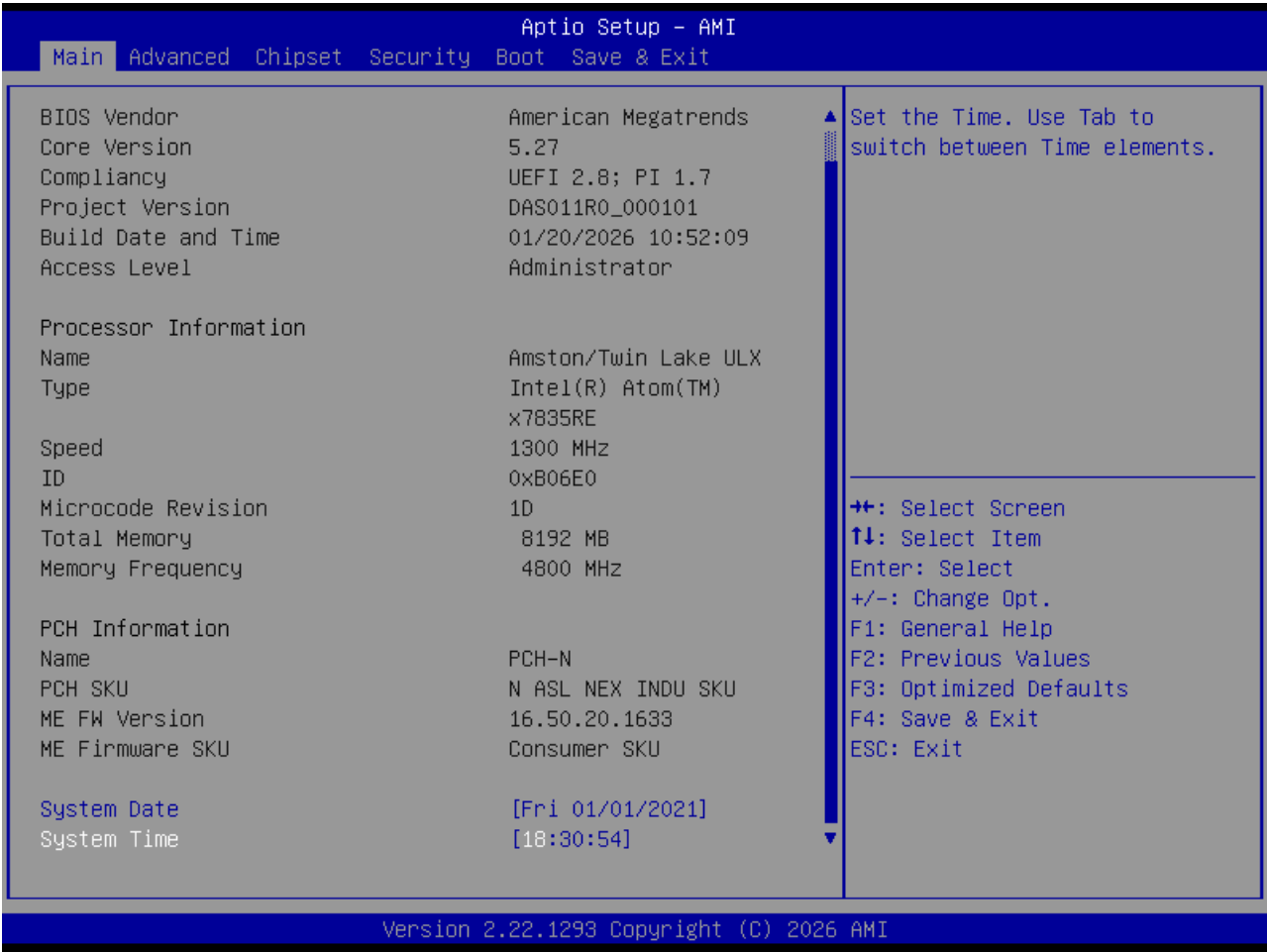
The main menu lists the setup functions you can make changes to. You can use the arrow keys (↑↓) to select the item. The on-line description of the highlighted setup function is displayed at the bottom of the screen.

General Help <F1>

The BIOS setup program provides a General Help screen. You can call up this screen from any menu by simply pressing <F1>. The Help screen lists the appropriate keys to use and the possible selections for the highlighted item. Press <Esc> to exit the Help screen.

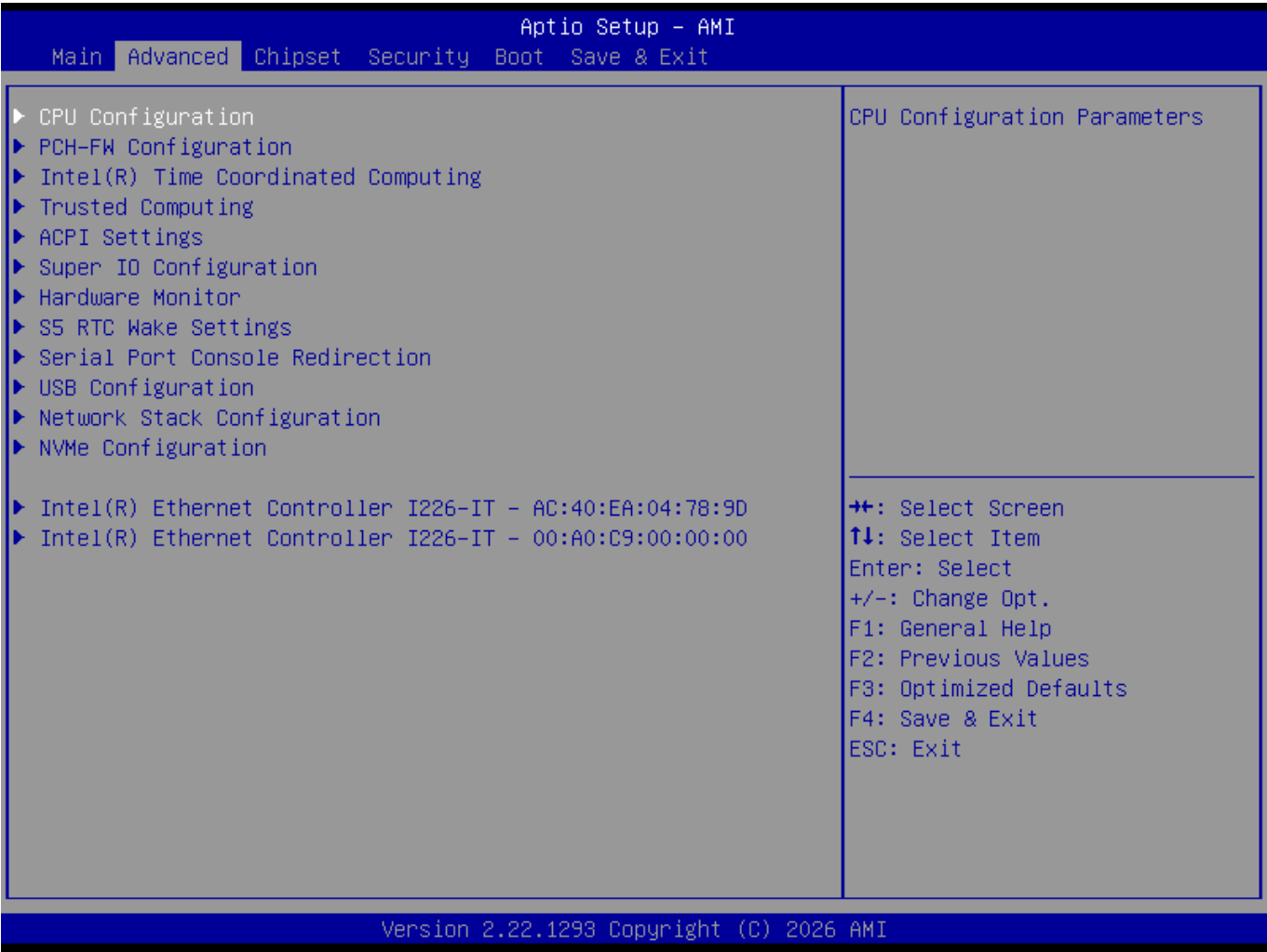
4.2 Main Setup

Press to enter BIOS CMOS Setup Utility. The Main setup screen is showed as following when the setup utility is entered. System Date/Time is set up in the Main Menu.

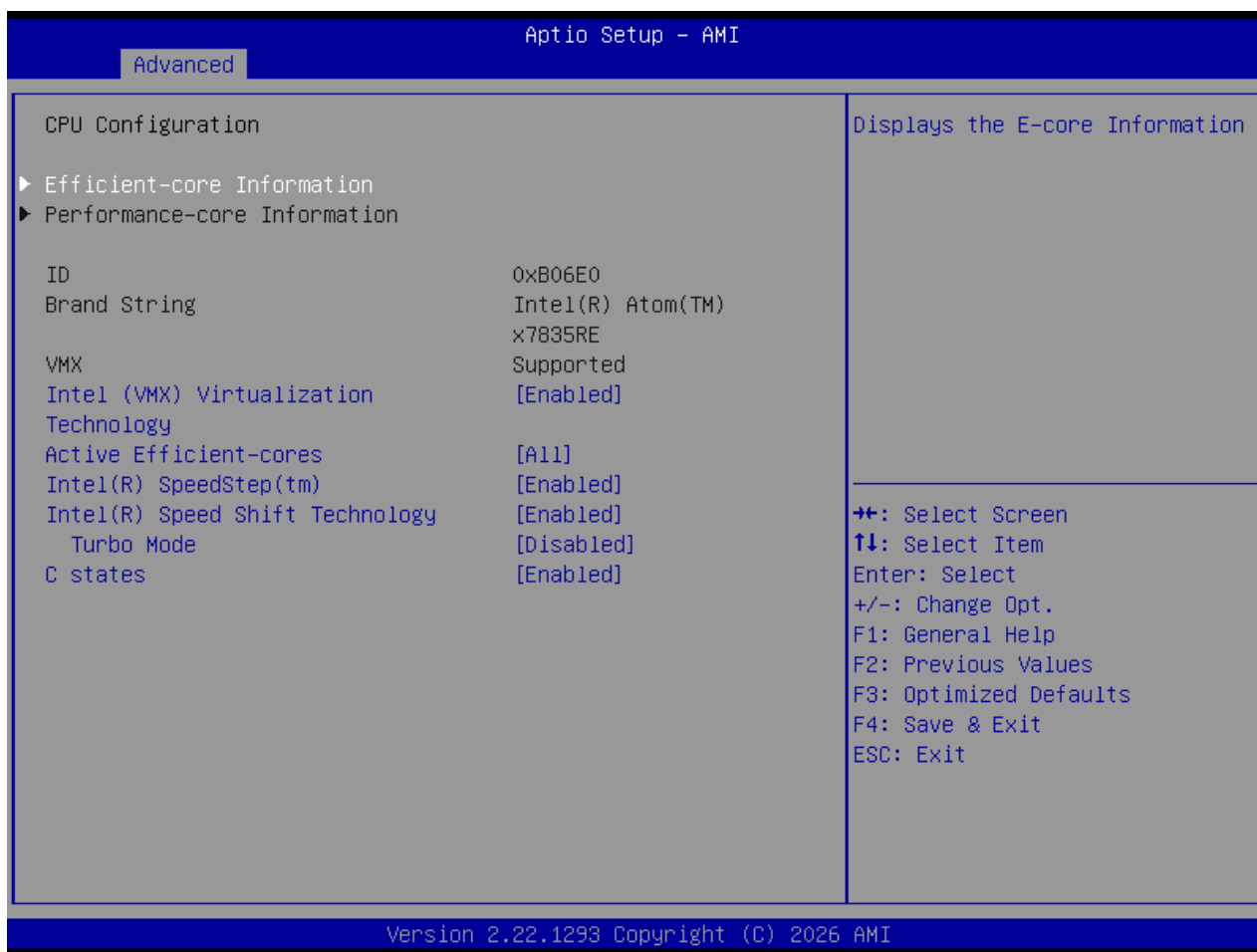


- **System Date**
Set the system date. Please use <Tab> to switch between data elements.
- **System Time**
Set the system time. Please use <Tab> to switch between time elements.

4.3 Advanced Setup

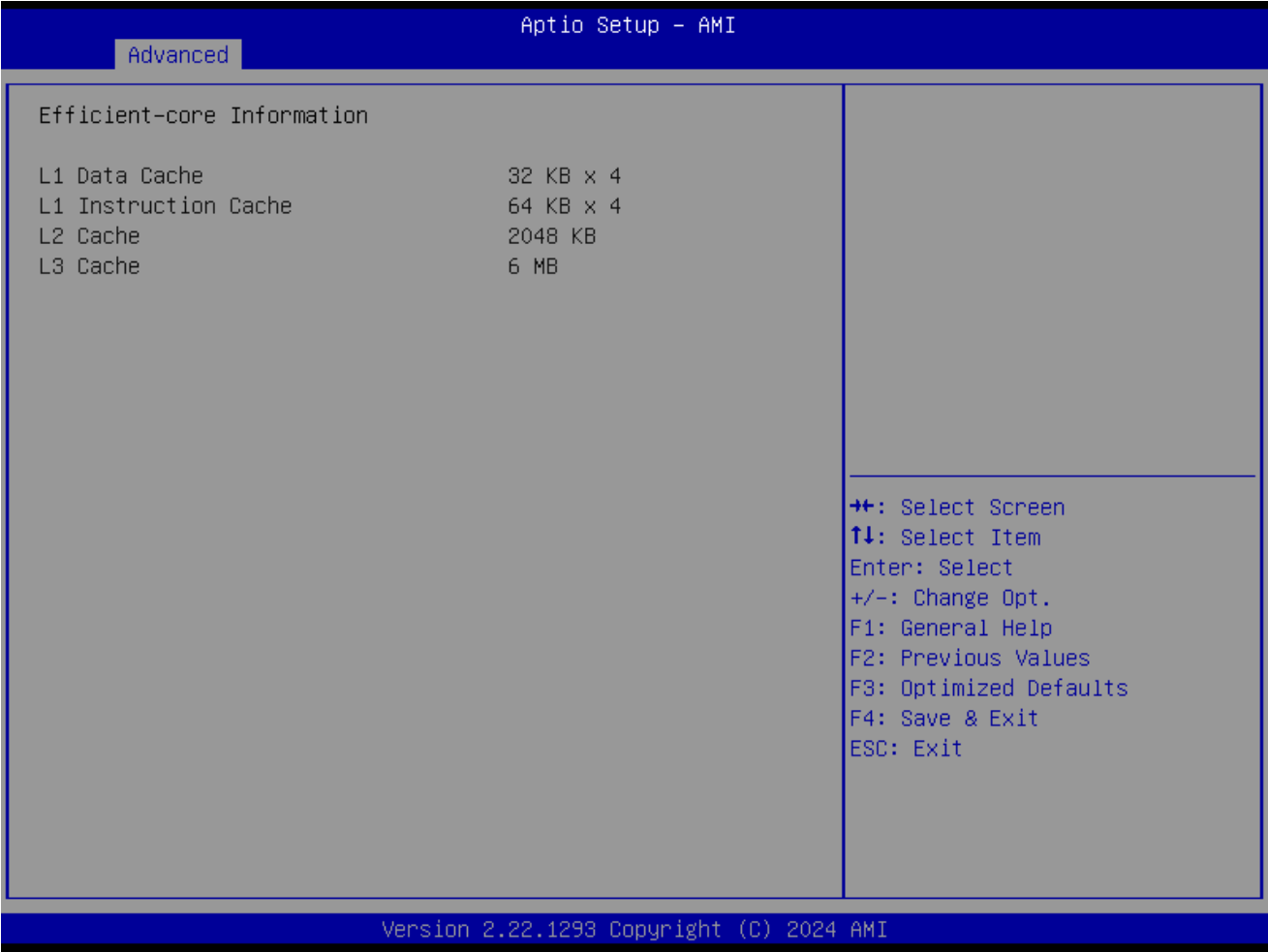


4.3.1 CPU Configuration

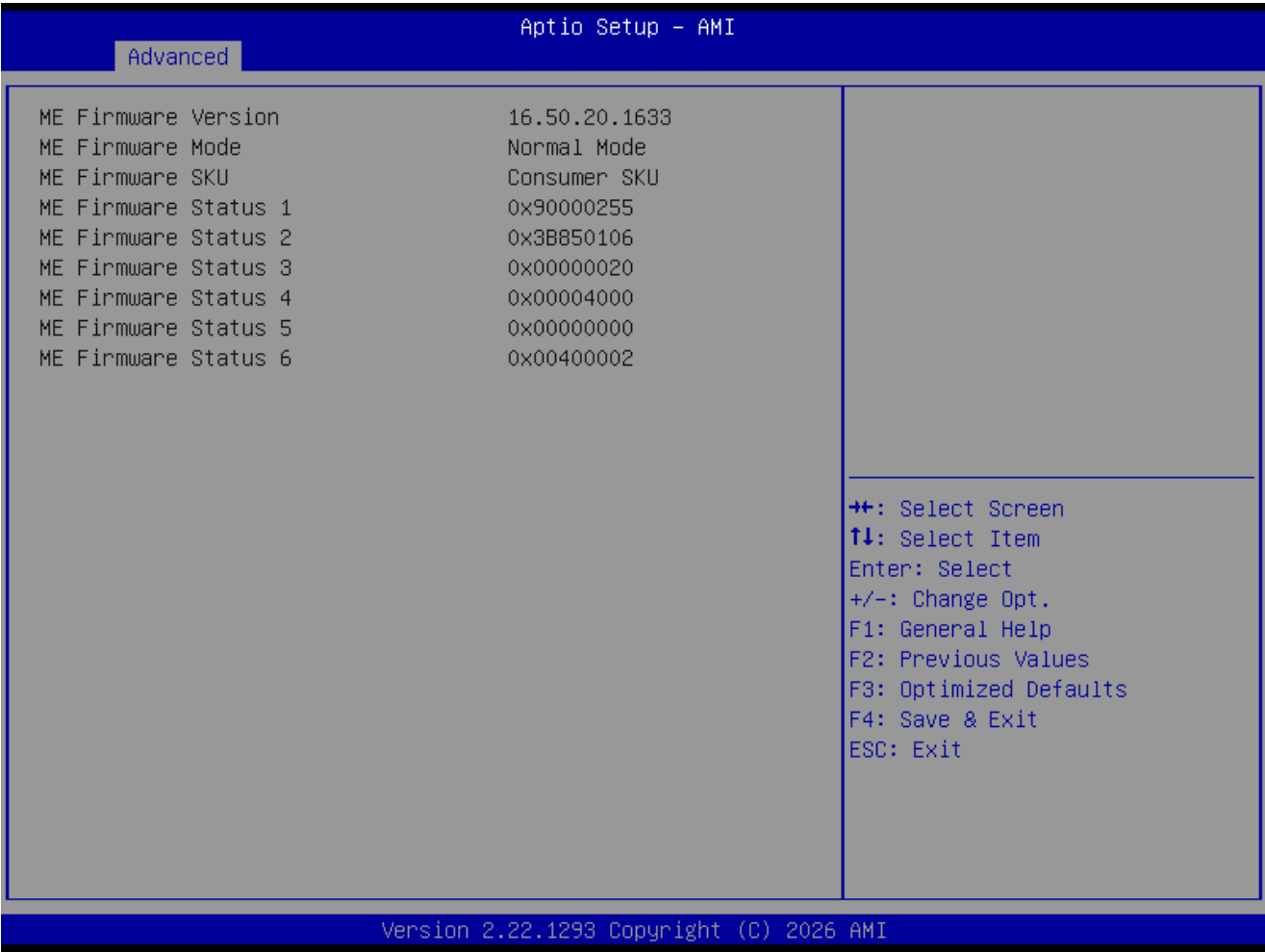


Item	Options	Description
Intel (VMX) Virtualization Technology	Disabled, Enabled [Default]	When enabled, a VMM can utilize the additional hardware capabilities provided by Virtualization Technology.
Active Processor Cores	All [Default] 0 1 2 3	Number of cores to enable in each processor package.
Intel® SpeedStep™	Disabled, Enabled [Default]	Allows more than two frequency ranges to be supported.
Intel® Speed Shift Technology	Disabled, Enabled [Default]	Enable/Disable Intel® Speed Shift Technology support. Enabling will expose the CPPC v2 interface to allow for hardware controlled P-states.
Turbo Mode	Disabled [Default] , Enabled	Enable/Disable processor Turbo Mode (requires EMTM enabled too). AUTO means enabled.
C states	Disabled, Enabled [Default]	Enable/Disable CPU Power Management. Allows CPU to go to C states when it's not 100% utilized.

■ Efficient-core Information



4.3.2 PCH-FW Configuration



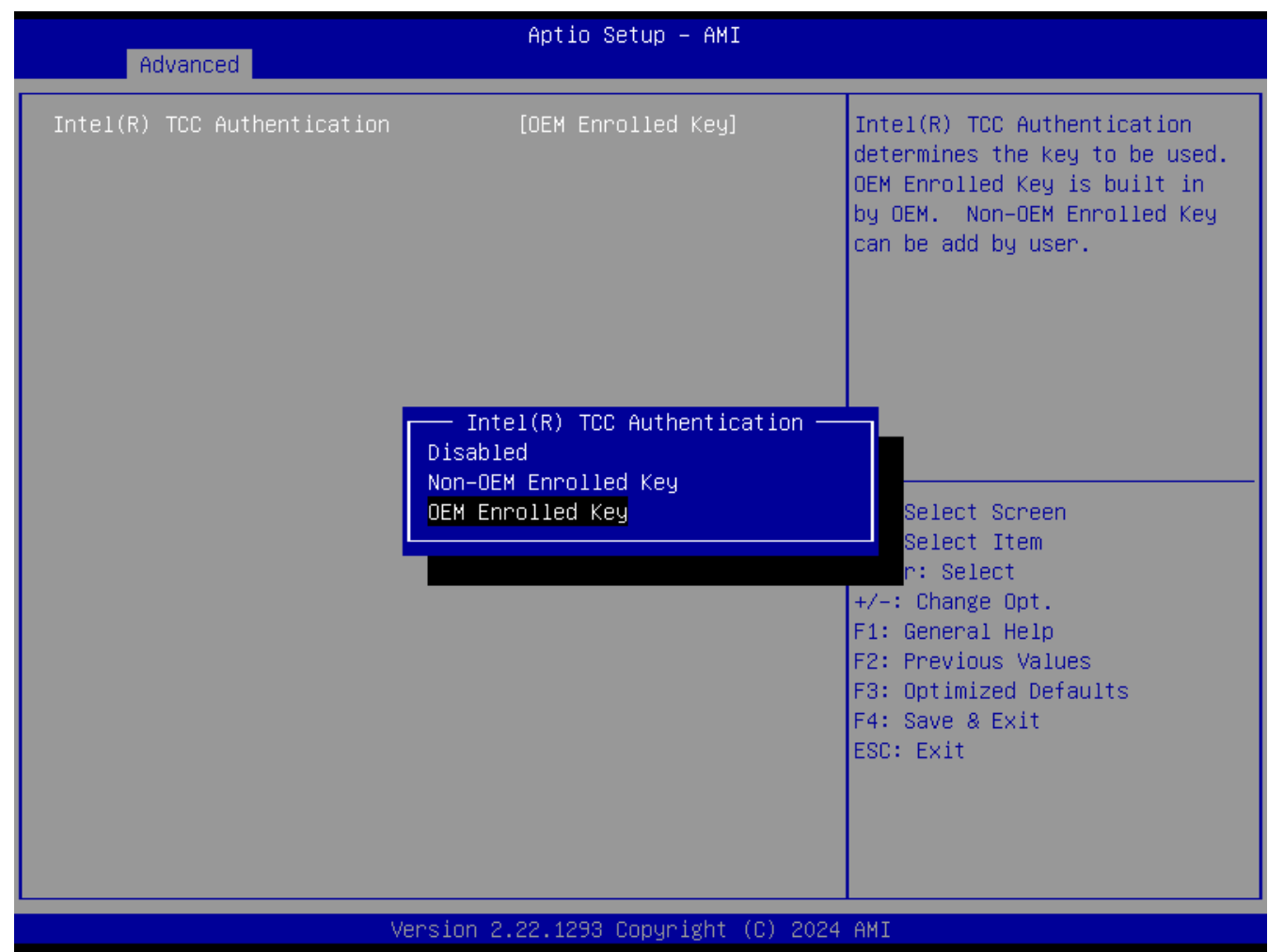
4.3.3 Intel® Time Coordinated Computing



Item	Description
Intel® TCC Authentication Menu	Intel® TCC Authentication Menu options

Item	Options	Description
Intel® TCC Mode	Disabled [Default] , Enabled	Enable or Disable Intel® TCC Mode. When enabled, this will modify system settings to improve real-time performance. The full list of settings and their current state are displayed below when Intel® TCC mode is enabled.
IO Fabric Low Latency	Disabled [Default] , Enabled	Enable or Disable IO Fabric Low Latency. This will turn off some power management in the PCH IO fabrics. This option provides the most aggressive IO Fabric performance setting. S3 state is NOT supported.
GT CLOS	Disabled [Default] , Enabled	Enable or Disable Graphics Technology(GT) Class of Service. Enable will reduce Gfx LLC allocation to minimize impact of Gfx workload on LLC

■ Intel® TCC Authentication Menu



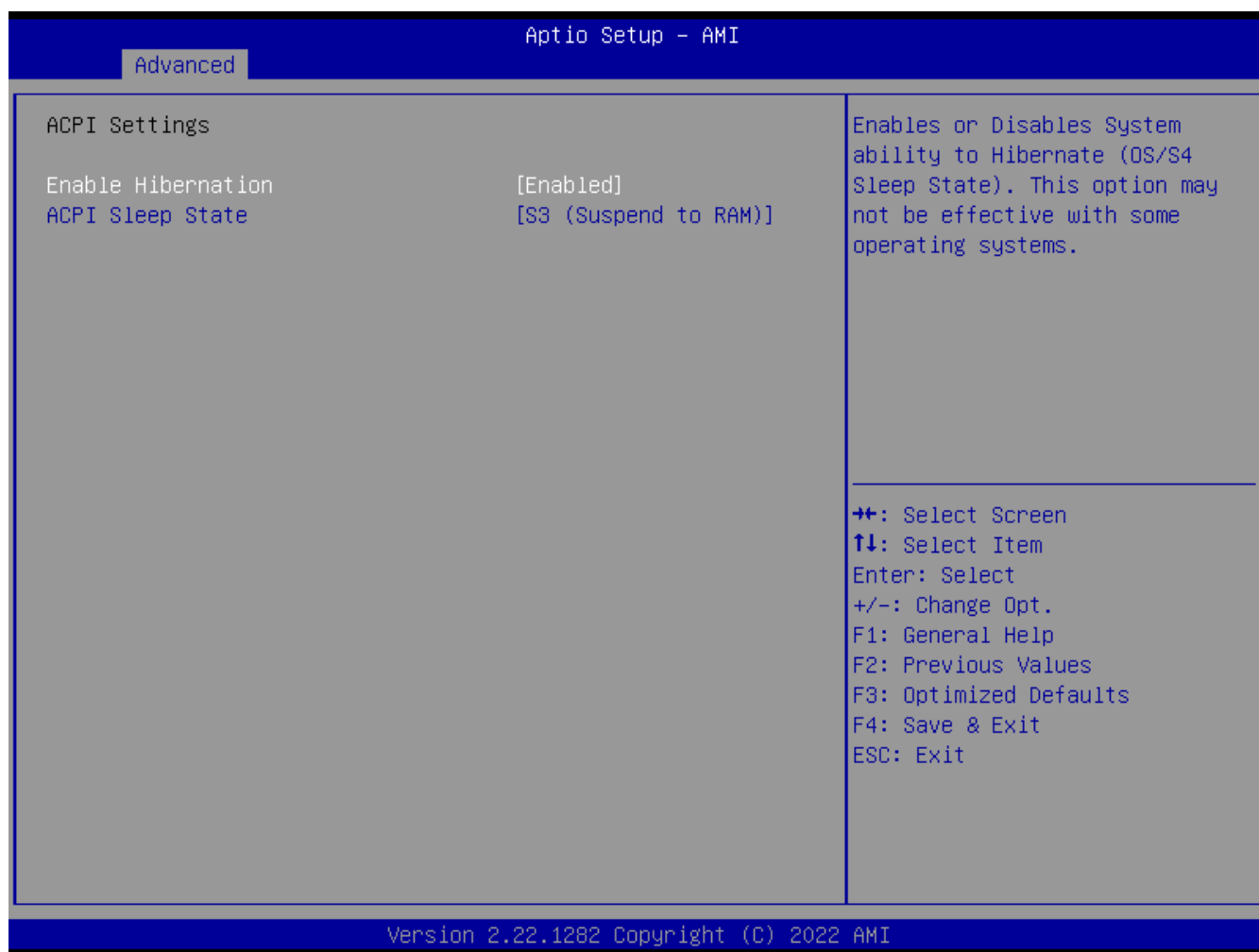
Item	Options	Description
Intel® TCC Authentication	Disabled, Non-OEM Enrolled Key, OEM Enrolled Key [Default]	Intel(R) TCC Authentication determines the key to be used. OEM Enrolled Key is built in by OEM. Non-OEM Enrolled Key can be add by user.

4.3.4 Trusted Computing



Item	Options	Description
Security Device Support	Enabled[Default] , Disabled,	Enable/Disable BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.
Pending operation	None[Default] , TPM Clear	Schedule an Operation for the Security Device. NOTE: Your Computer will reboot during restart in order to change State of Security Device.

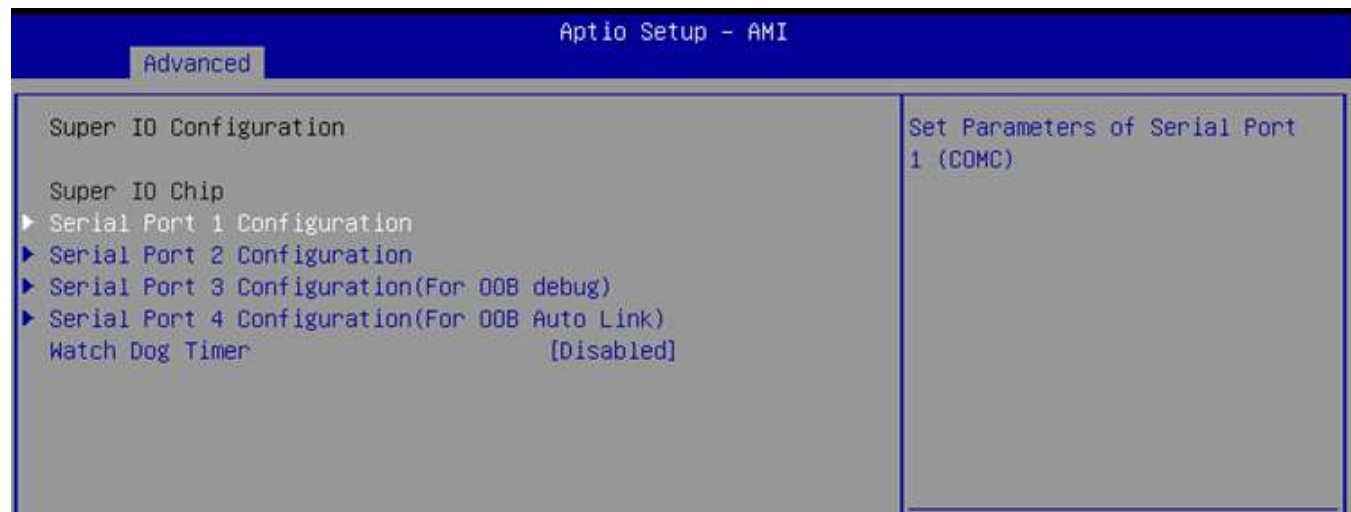
4.3.5 ACPI Settings



Item	Options	Description
Enable Hibernation	Disabled , Enabled [Default] ,	Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may not be effective with some operating systems.
ACPI Sleep State	Suspend Disabled, S3 (Suspend to RAM) [Default]	Select the highest ACPI sleep state the system will enter when the SUSPEDN button is pressed.

4.3.6 Super IO Configuration

This setting allows you to select options for the Super IO Configuration, and change the value of the selected option.

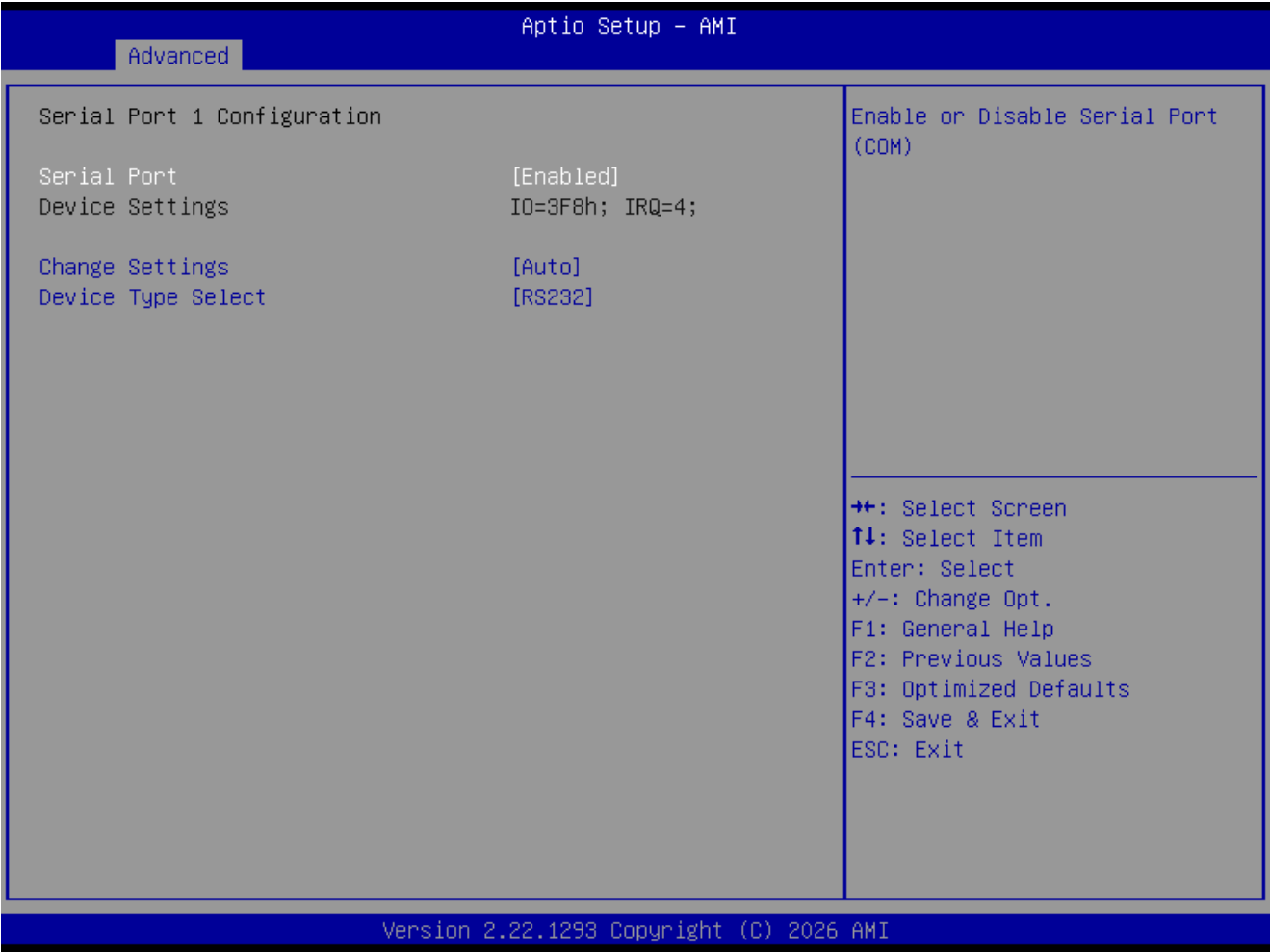


Item	Description
Serial Port 1 Configuration	Set Parameters of Serial Port 1 (COMA).
Serial Port 2 Configuration	Set Parameters of Serial Port 2 (COMB).
Serial Port 3 Configuration(For OOB debug)	Set Parameters of Serial Port 3 (COMC).
Serial Port 4 Configuration(For OOB Auto Link)	Set Parameters of Serial Port 4 (COMD).

Item	Options	Description
Watch Dog Timer	Disabled [Default] , Enabled	Enabled or Disabled Watch Dog Timer function.
Watch Dog Timer Count Mode	Second Mode [Default] , Minute Mode	Select Second Mode or Minute Mode.
Watch Dog Timer Time out Value	20~255(Second) [Default] , 1~255(Minute)	Watch Dog Timer Time out. Second 20-255 Minute 1-255

	BIOS	Super IO	Windows_11 & 10 Device Manager	Ubuntu_24.04 & 22.04 sudo dmesg grep tty
User Manual_COM1	I/O=3F8h	com A	COM1 03F8-03FF	ttyS0 I/O=0x3f8
User Manual_COM2	I/O=2F8h	com B	COM2 02F8-02FF	ttyS1 I/O=0x2f8
User Manual_COM3	I/O=3E8h (For OOB debug)	com C	COM3 03E8-03EF	ttyS2 I/O=0x3e8
User Manual_COM4	I/O=2E8h (For OOB Auto Link)	com D	COM4 02E8-02EF	ttyS3 I/O=0x2e8

■ Serial Port 1 Configuration



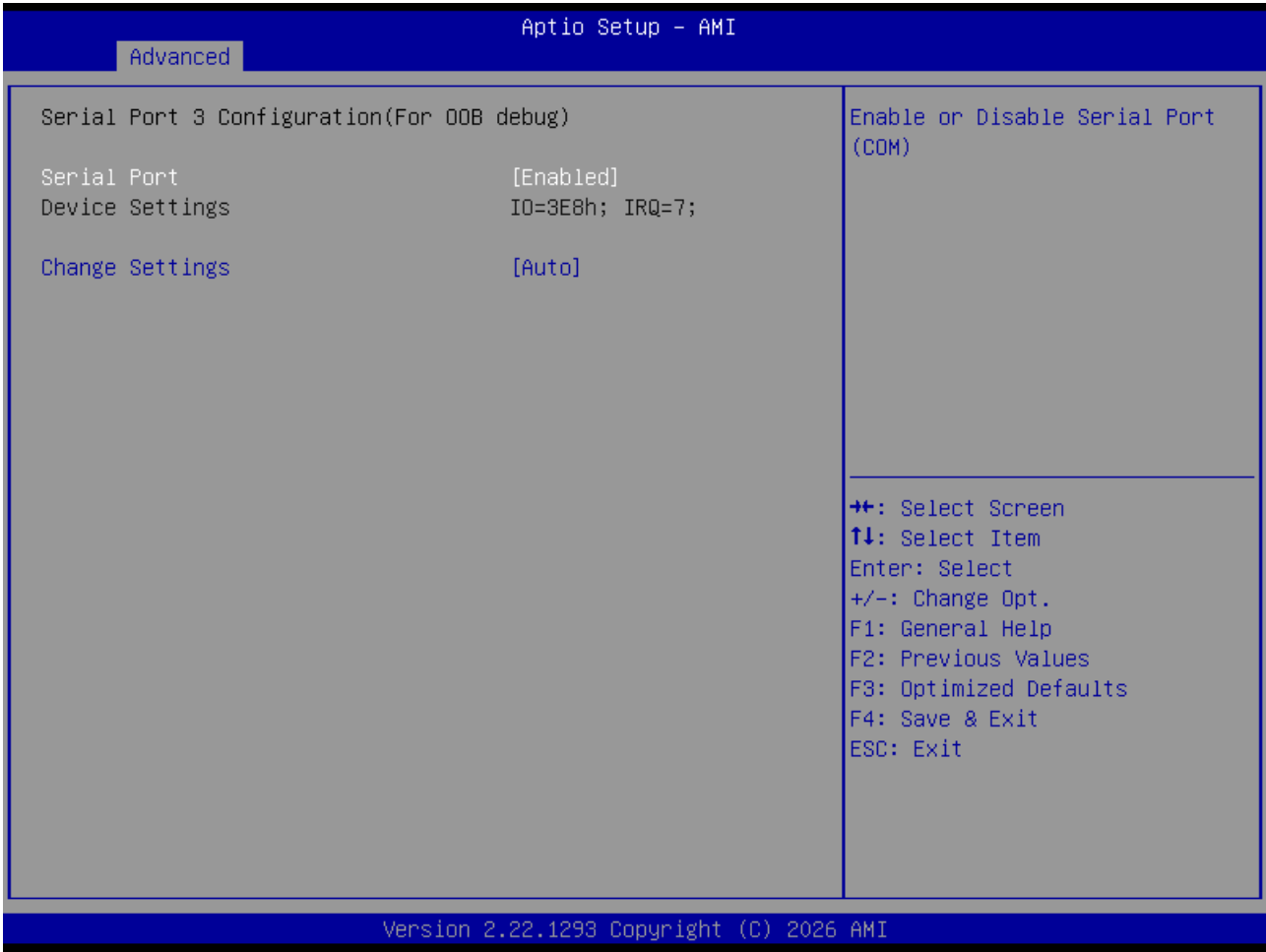
Item	Options	Description
Serial Port	Disabled, Enabled[Default]	Enable or Disable Serial Port (COM).
Change Settings	Auto[Default], IO=3Fh; IRQ=4; , IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12; , IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;; IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;; IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;	Select an optimal settings for Super IO Device.

■ Serial Port 2 Configuration



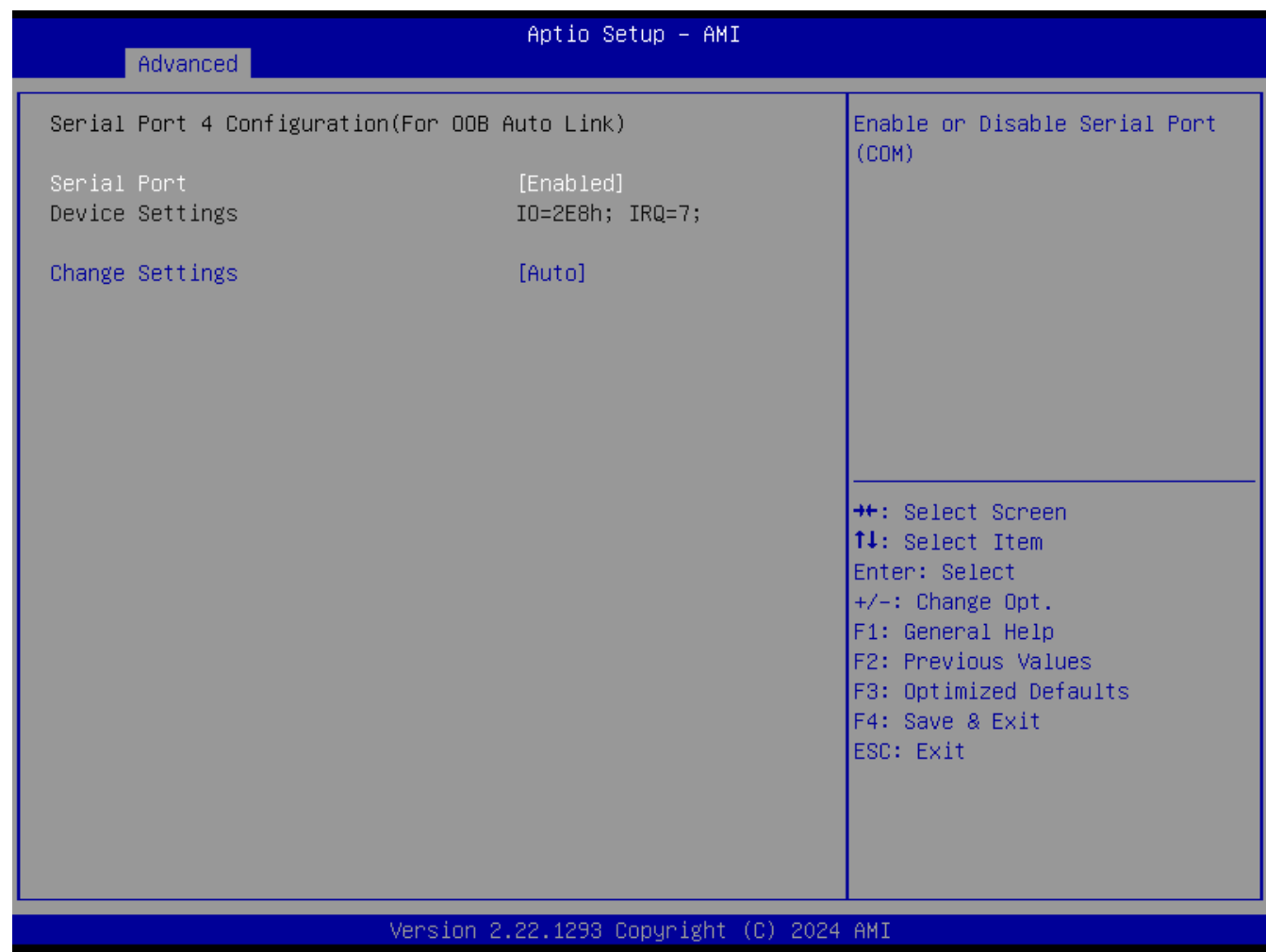
Item	Options	Description
Serial Port	Disabled, Enabled[Default]	Enable or Disable Serial Port (COM).
Change Settings	Auto[Default], IO=2F8h; IRQ=3; , IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12; , IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;; IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;; IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;	Select an optimal settings for Super IO Device.
Device Type Select	RS232[Default], RS422, RS485	Set the Serial Port to RS232 & RS422 & RS485
RS-485 Auto Flow Function	Disabled, Enabled[Default]	Enabled/Disabled RS485 Autoflow Function

■ Serial Port 3 Configuration(For OOB debug)



Item	Options	Description
Serial Port	Disabled, Enabled[Default]	Enable or Disable Serial Port (COM).
Change Settings	Auto[Default], IO=3E8h; IRQ=7; , IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12,, IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12,, IO=2F0h; IRQ=3,4,5,6,7,9,10,11,12,, IO=2E0h; IRQ=3,4,5,6,7,9,10,11,12;	Select an optimal settings for Super IO Device.

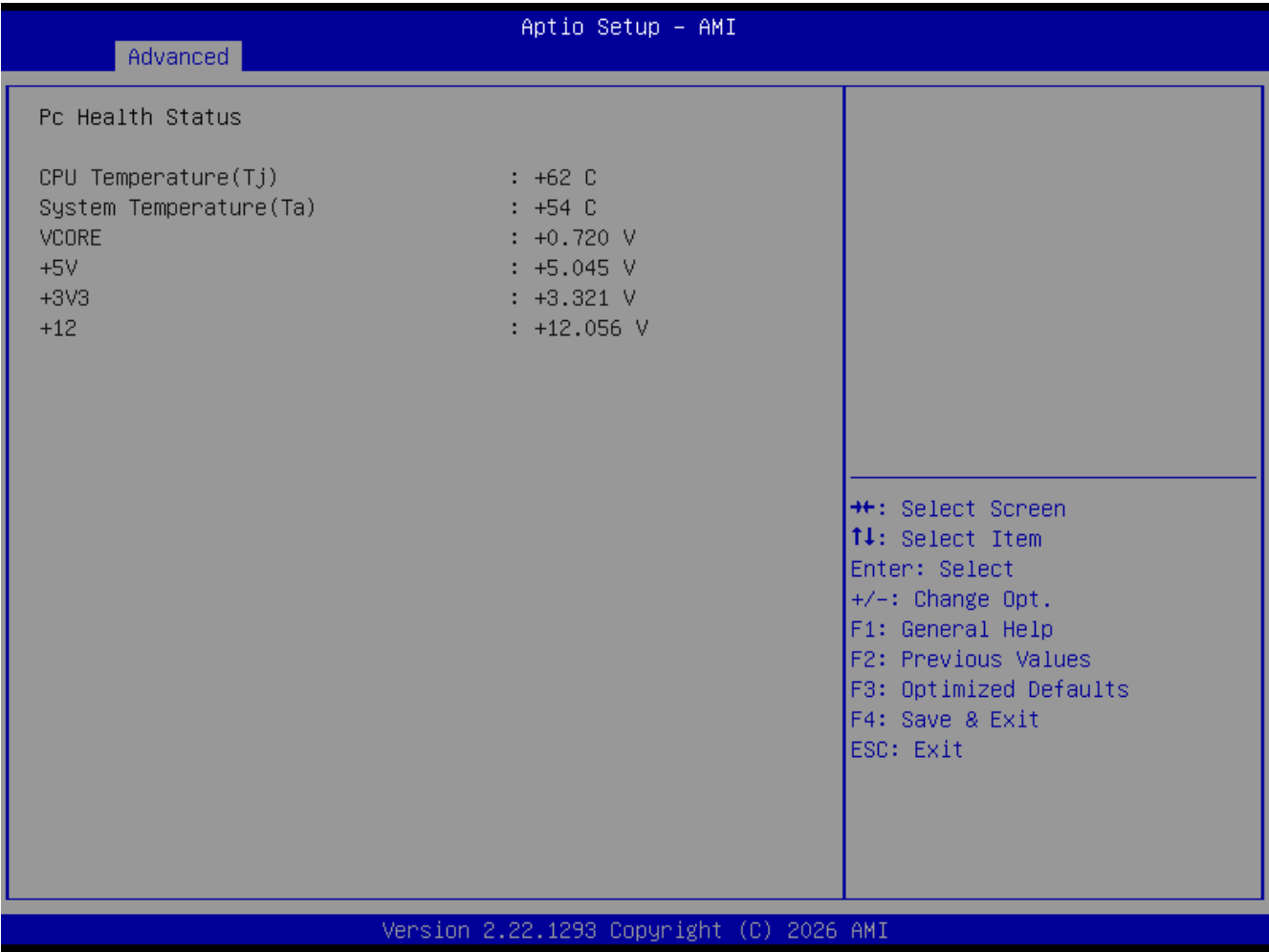
■ Serial Port 4 Configuration(For OOB Auto Link)



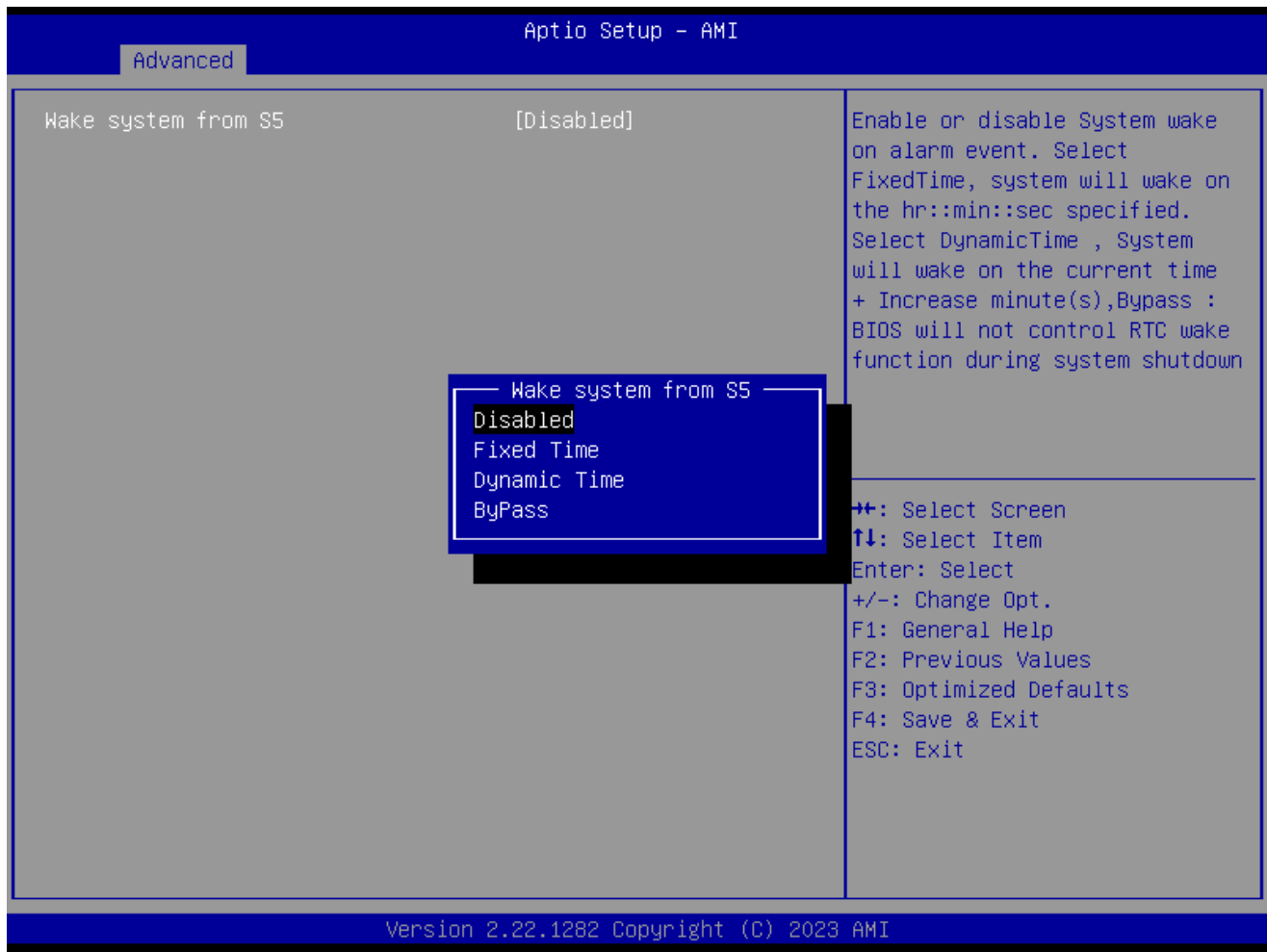
Item	Options	Description
Serial Port	Disabled, Enabled[Default]	Enable or Disable Serial Port (COM).
Change Settings	Auto[Default], IO=2E8h; IRQ=7; , IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12; , IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12; , IO=2F0h; IRQ=3,4,5,6,7,9,10,11,12; , IO=2E0h; IRQ=3,4,5,6,7,9,10,11,12;	Select an optimal settings for Super IO Device.

4.3.7 Hardware Monitor

These items display the current status of all monitored hardware devices/ components such as voltages and temperatures.

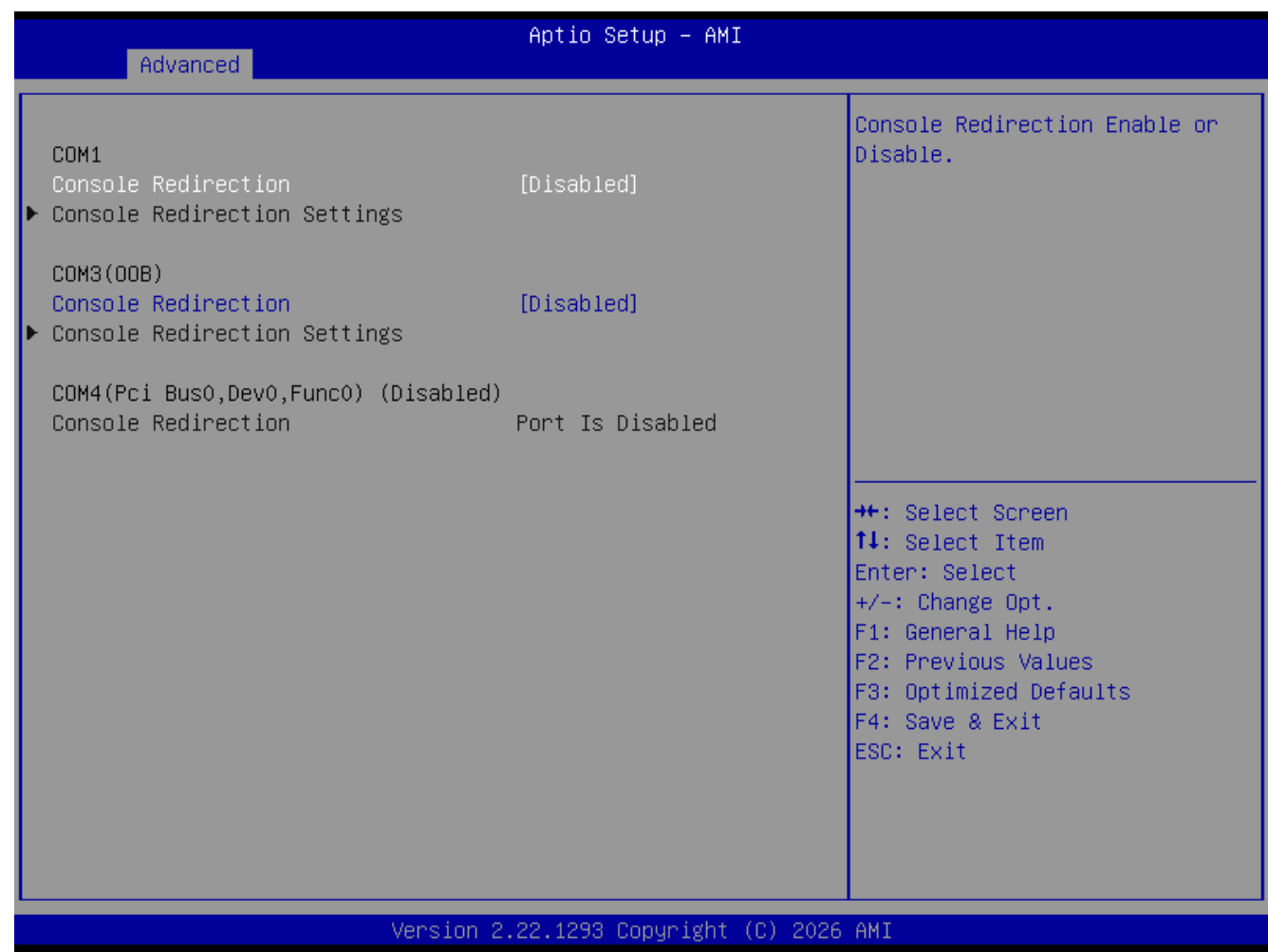


4.3.8 S5 RTC Wake Settings



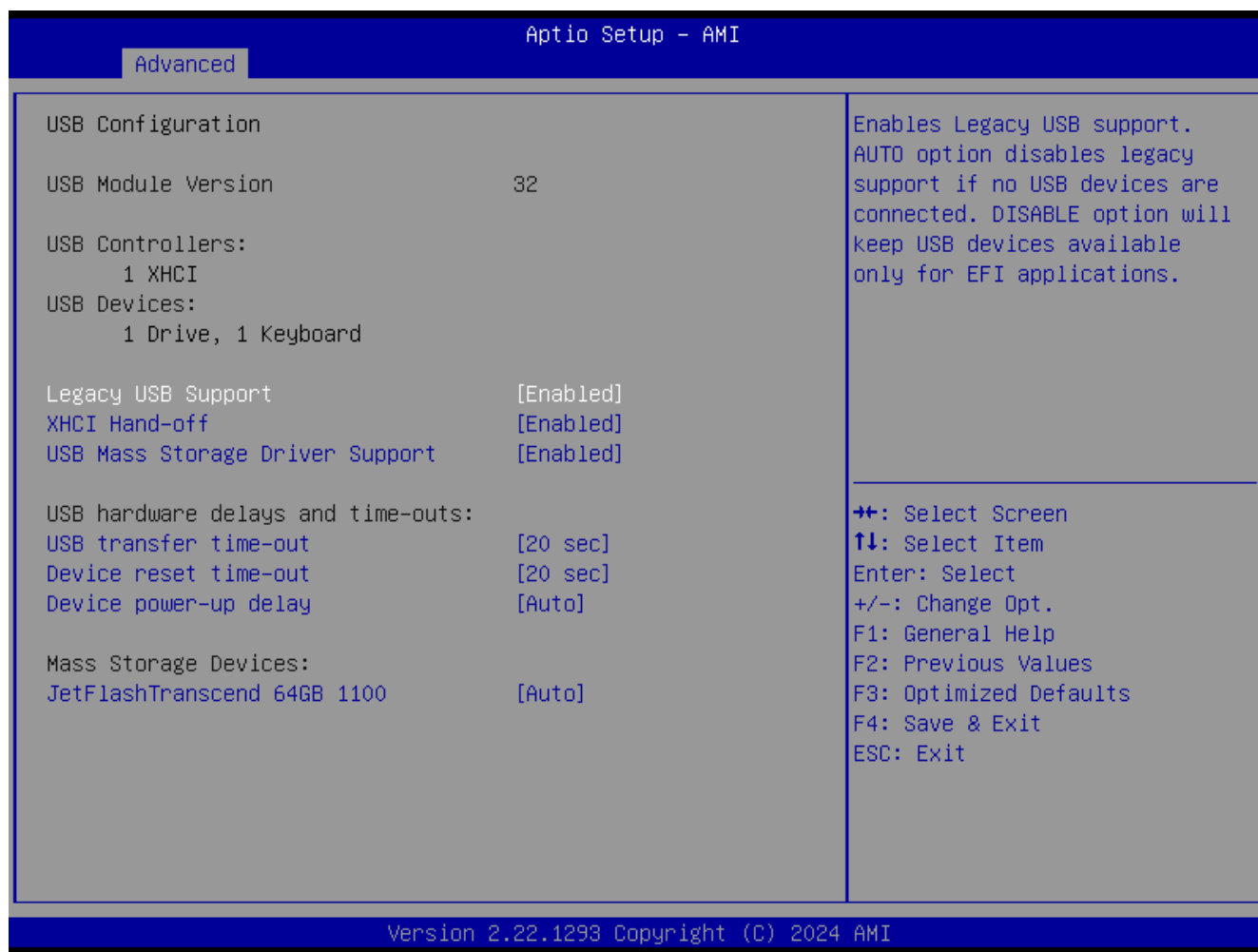
Item	Options	Description
Wake system from S5	Disabled[Default] Fixed Time Dynamic Time Bypass	Enable or disable System wake on alarm event. Select FixedTime, system will wake on the hr::min::sec specified. Select DynamicTime , System will wake on the current time + Increase minute(s), Select Bypass : BIOS will not control RTC wake function during system shutdown

4.3.9 Serial Port Console Redirection



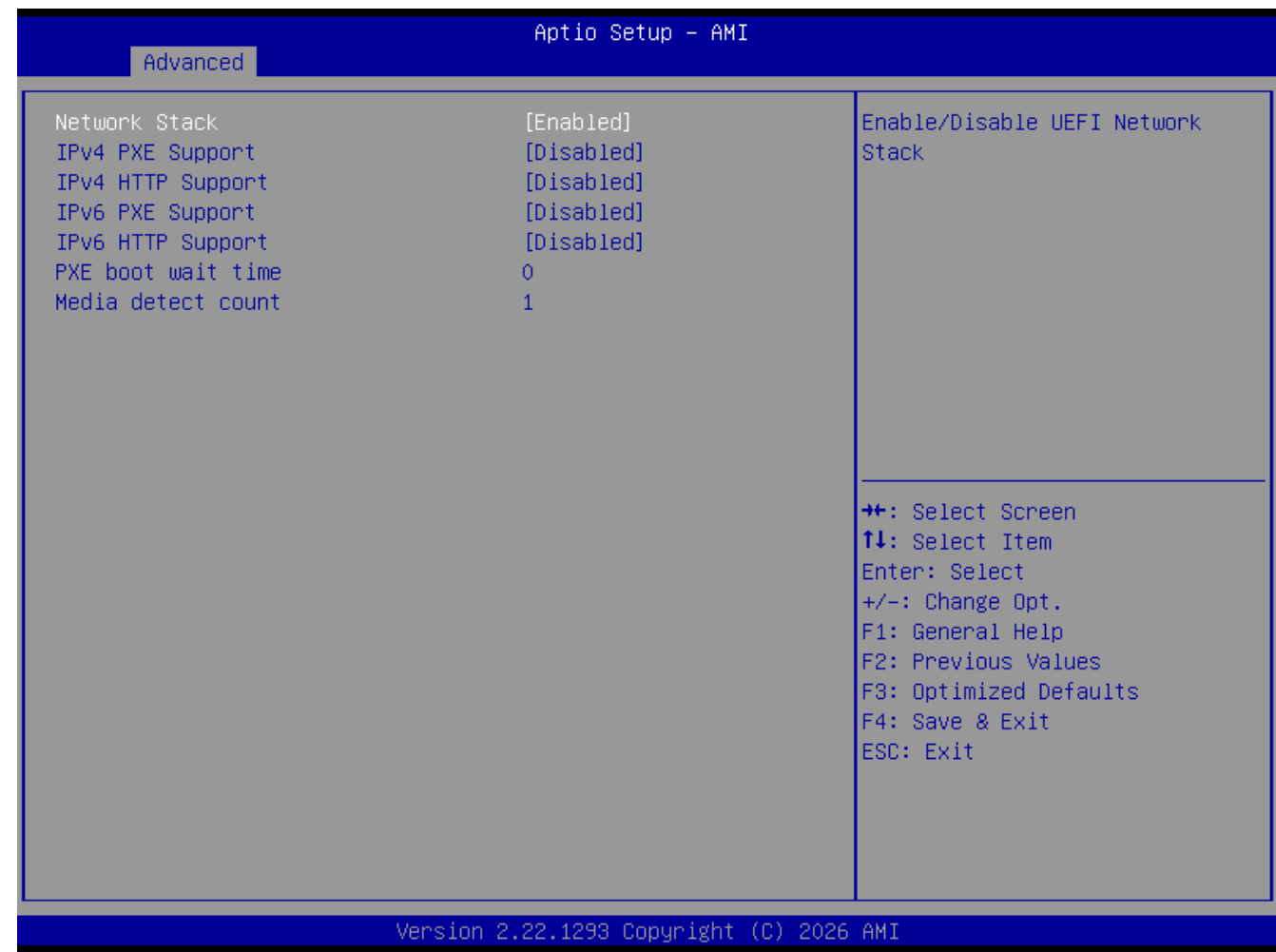
Item	Options	Description
Console Redirection	Disabled[Default], Enabled	Console Redirection Enable or Disable.

4.3.10 USB Configuration



Item	Options	Description
Legacy USB Support	Enabled[Default], Disabled Auto	Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.
XHCI Hand-off	Enabled[Default], Disabled	This is a workaround for OS without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.
USB Mass Storage Driver Support	Disabled, Enabled[Default]	Enable/Disable USB Mass Storage Driver Support.
USB transfer time-out	1 sec, 5 sec, 10 sec, 20 sec[Default]	The time-out value for Control, Bulk, and Interrupt transfers.
Device reset time-out	10 sec , 20 sec[Default], 30 sec, 40 sec	USB mass storage device Start Unit command time-out.
Device power-up delay	Auto[Default], Manual	Maximum time the device will take before it properly reports itself to the Host Controller. 'Auto' uses default value: for a Root port it is 100ms, for a Hub port the delay is taken from Hub descriptor.

4.3.11 Network Stack Configuration



Item	Options	Description
Network Stack	Disabled [Default] , Enabled	Enable/Disable UEFI Network Stack.
IPv4 PXE Support	Disabled [Default] , Enabled	Enable/Disable IPv4 PXE boot support. If disabled, IPv4 PXE boot support will not be available.
IPv4 HTTP Support	Disabled [Default] , Enabled	Enable/Disable IPv4 HTTP boot support. If disabled, IPv4 HTTP boot support will not be available.
IPv6 PXE Support	Disabled [Default] , Enabled	Enable/Disable IPv6 PXE boot support. If disabled, IPv6 PXE boot support will not be available.
IPv6 HTTP Support	Disabled [Default] , Enabled	Enable/Disable IPv6 HTTP boot support. If disabled, IPv6 HTTP boot support will not be available.
PXE boot wait time	0	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	1	Number of times the presence of media will be checked. Use either +/- or numeric keys to set the value.

4.3.12 NVMe Configuration

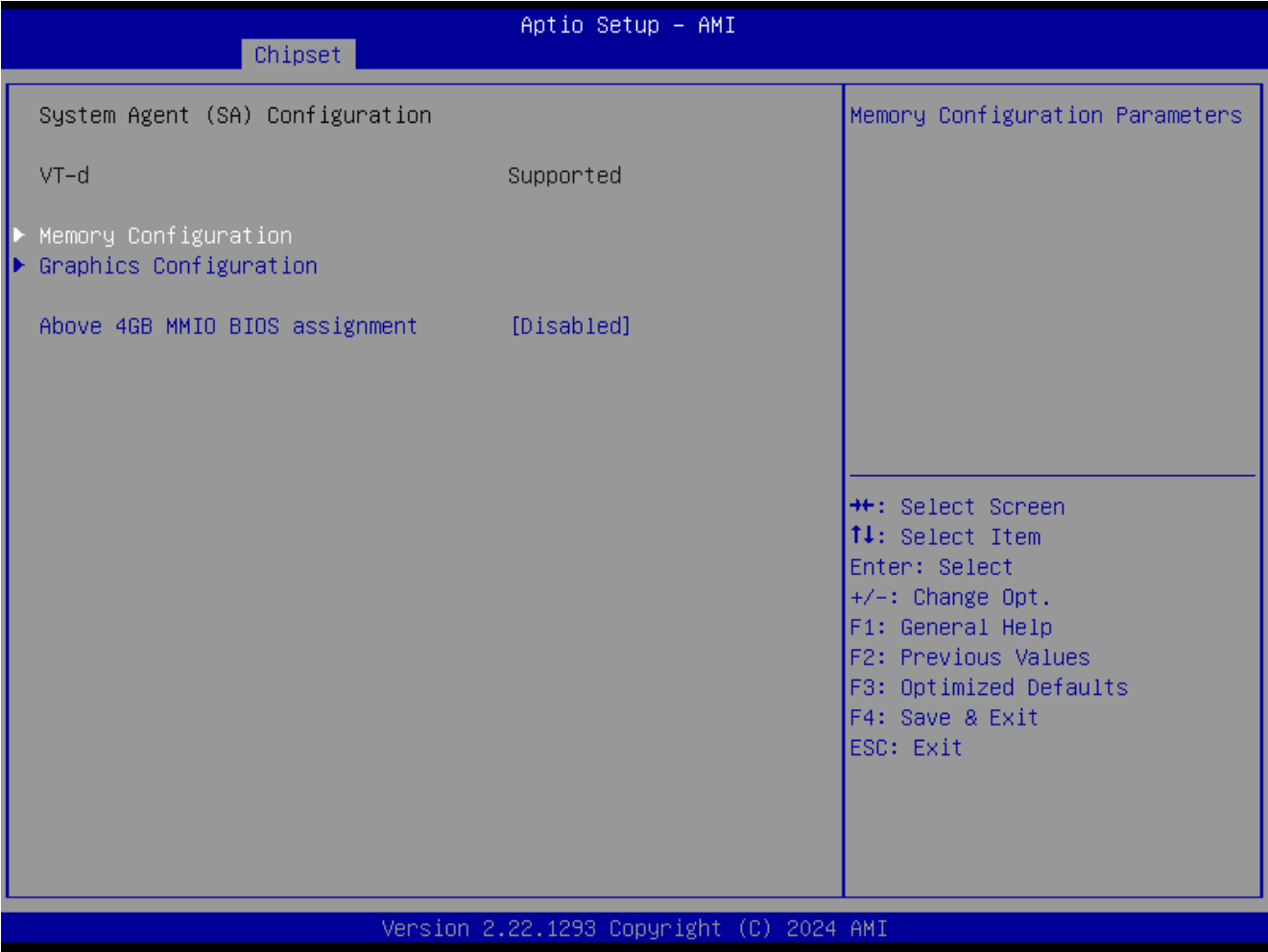


4.4 Chipset

This section allows you to configure and improve your system and allows you to set up some system features according to your preference.



4.4.1 System Agent (SA) Configuration



Item	Description
Memory Configuration	Memory Configuration Parameters
Graphics Configuration	Graphics Configuration

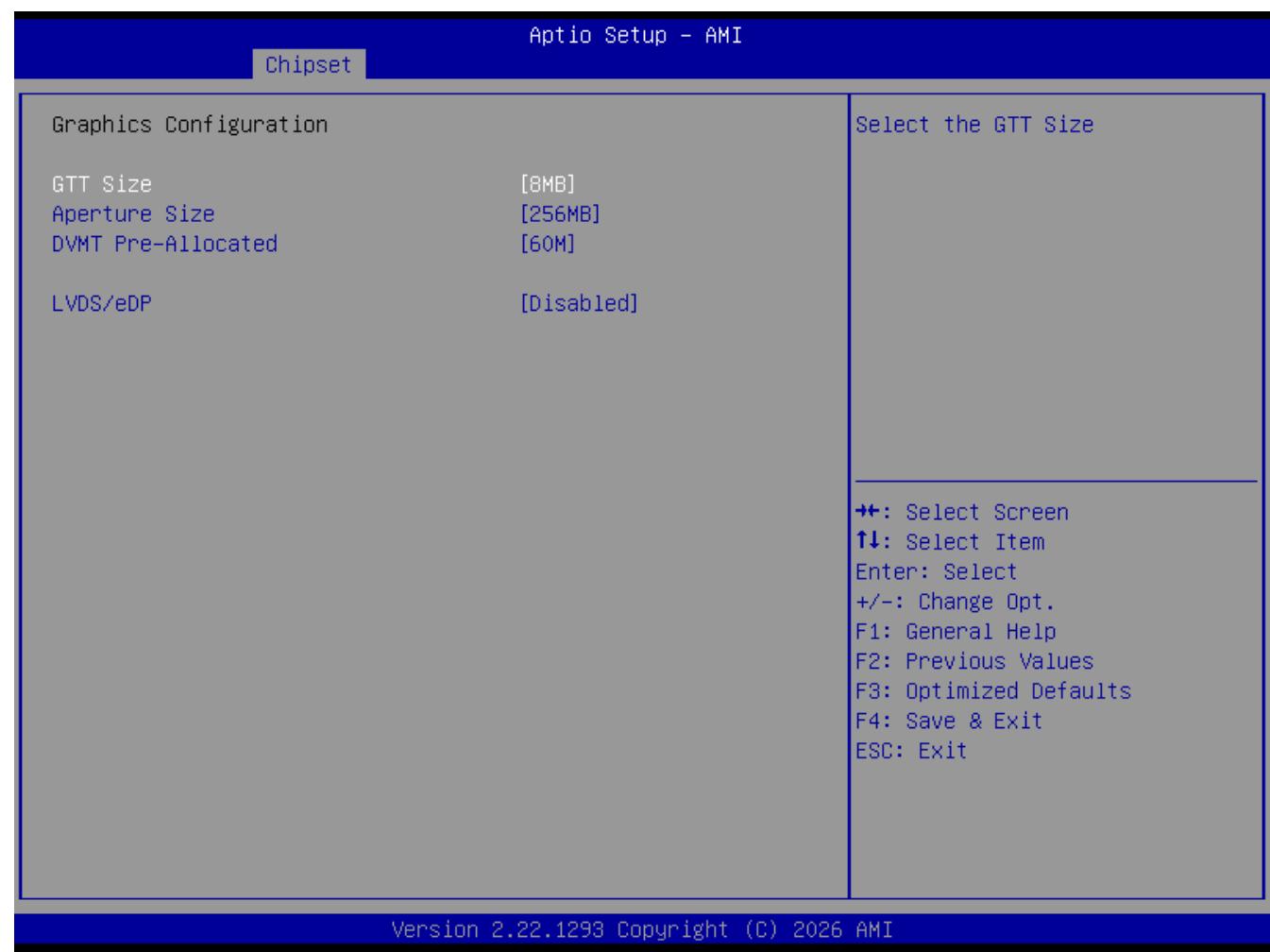
Item	Options	Description
Above 4GB MMIO BIOS assignment	Enabled[Default] , Disabled	Enable/Disable above 4GB MemoryMappedIO BIOS assignment\n\nThis is enabled automatically when Aperture Size is set to 2048MB.

■ Memory Configuration



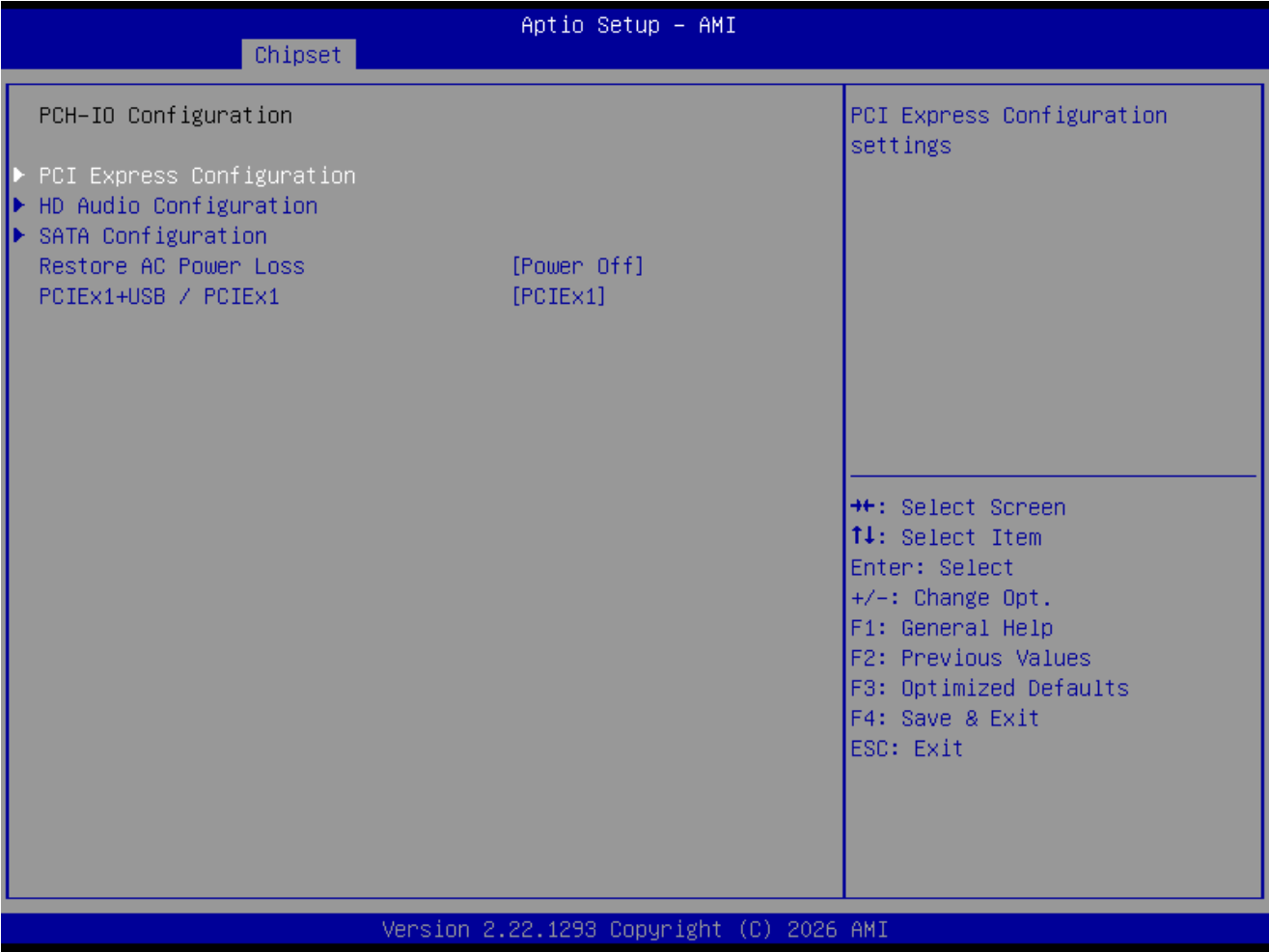
Item	Options	Description
In-Band ECC Support	Disabled[Default], Enabled	Enable/Disable In-Band ECC.

■ Graphic Configuration



Item	Options	Description
GTT Size	2MB, 4MB, 8MB[Default]	Select the GTT Size .
Aperture Size	128MB, 256MB[Default] , 512MB, 1024MB	Select the Aperture Size. Note : Above 4GB MMIO BIOS assignment is automatically enabled when selecting > 2048MB aperture. To use this feature, please disable CSM Support.
DVM T Pre-Allocated	32M,64M,96M,128M, 160M, 36M, 40M,44M, 48M,52M,56M, 60M[Default]	Select DVM T 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.
LVDS/eDP	Disabled[Default], LVDS, eDP	Please select one Panel type

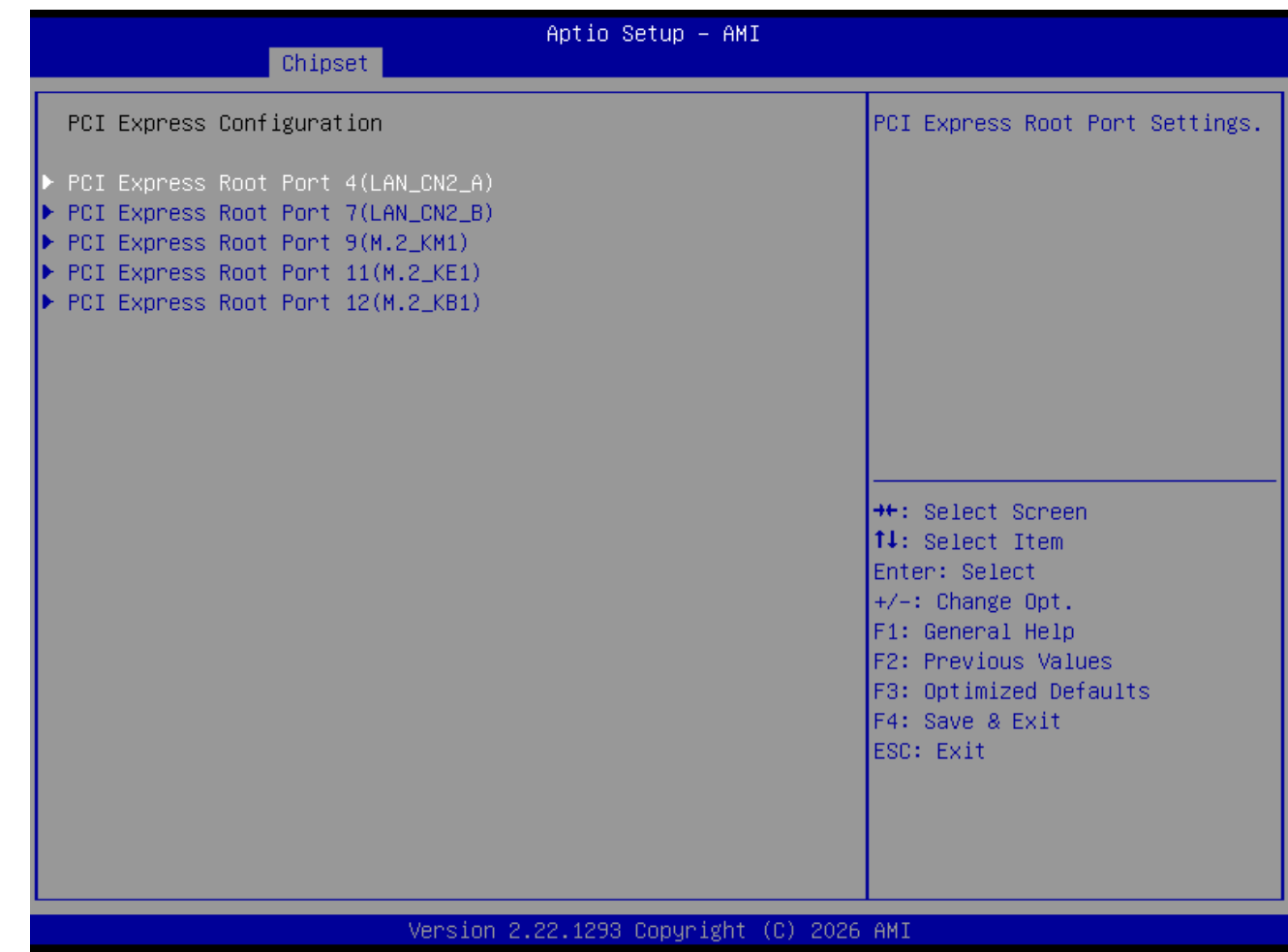
4.4.2 PCH-IO Configuration



Item	Description
PCI Express Configuration	PCI Express Configuration settings.
HD Audio Configuration	HD Audio Subsystem Configuration Settings

Item	Options	Description
Restore AC Power Loss	Power On, Power Off [Default] , Lase State	Specify what state to go to when power is re- applied after a power failure (G3 state).
PCIEx1+USB / PCIEx1	PCIEx1+USB, PCIEx1 [Default]	If the device is PCIEx2, please select PCIEx1, otherwise select PCIEx1+USB

PCI Express Configuration



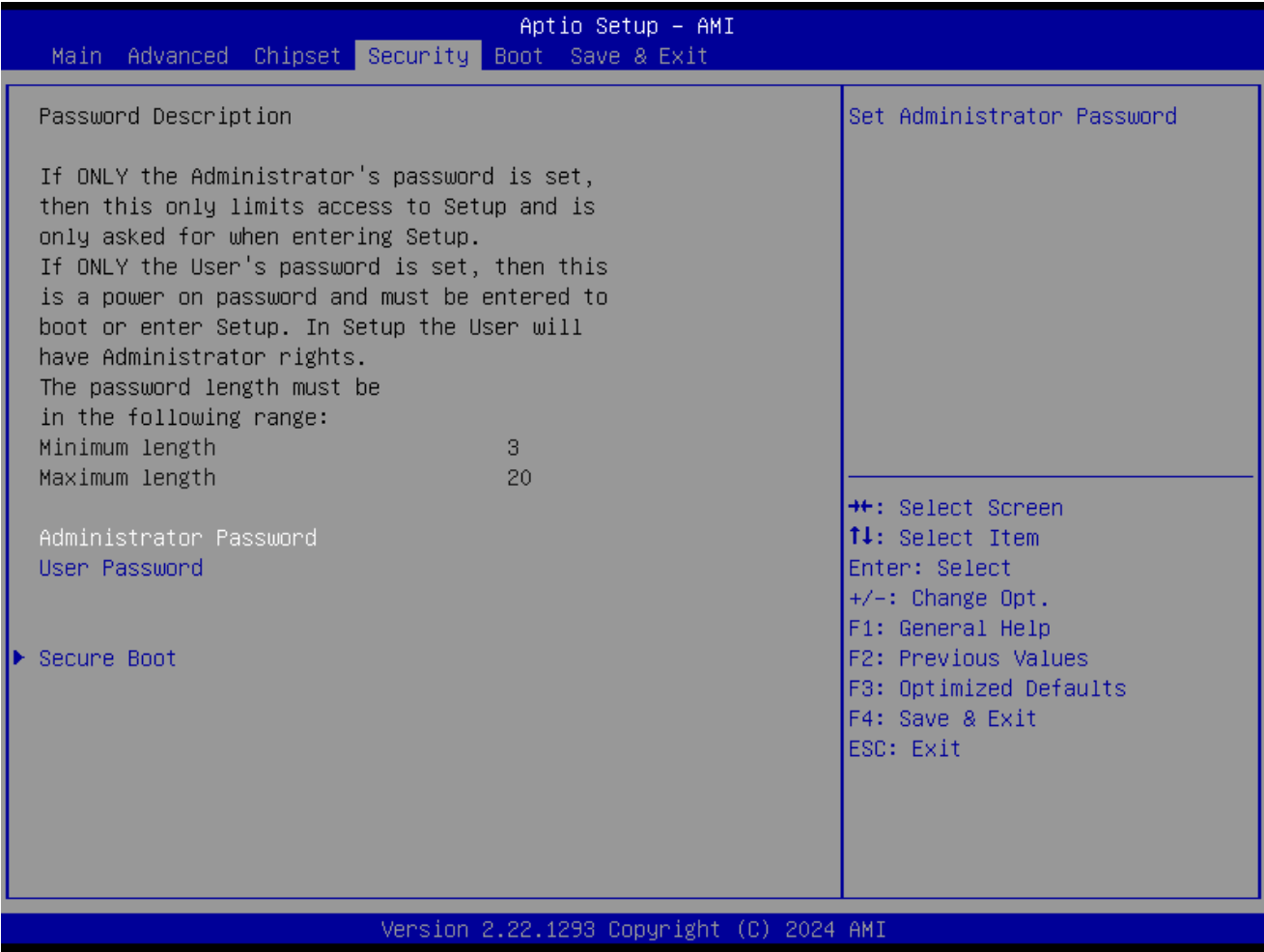
● PCI Express Root Port 4/7/9/11/12



Item	Options	Description
PCI Express Root Port 4/7/9/11/12	Disabled, Enabled [Default]	Control the PCI Express Root Port.
ASPM	Disabled [Default] , L1, Auto	Set the ASPM Level: Force L0s - Force all links to L0s State, AUTO - BIOS auto configure, DISABLE - Disables ASPM,
PCIe Speed	Auto [Default] , Gen1, Gen2, Gen3	Configure PCIe speed.

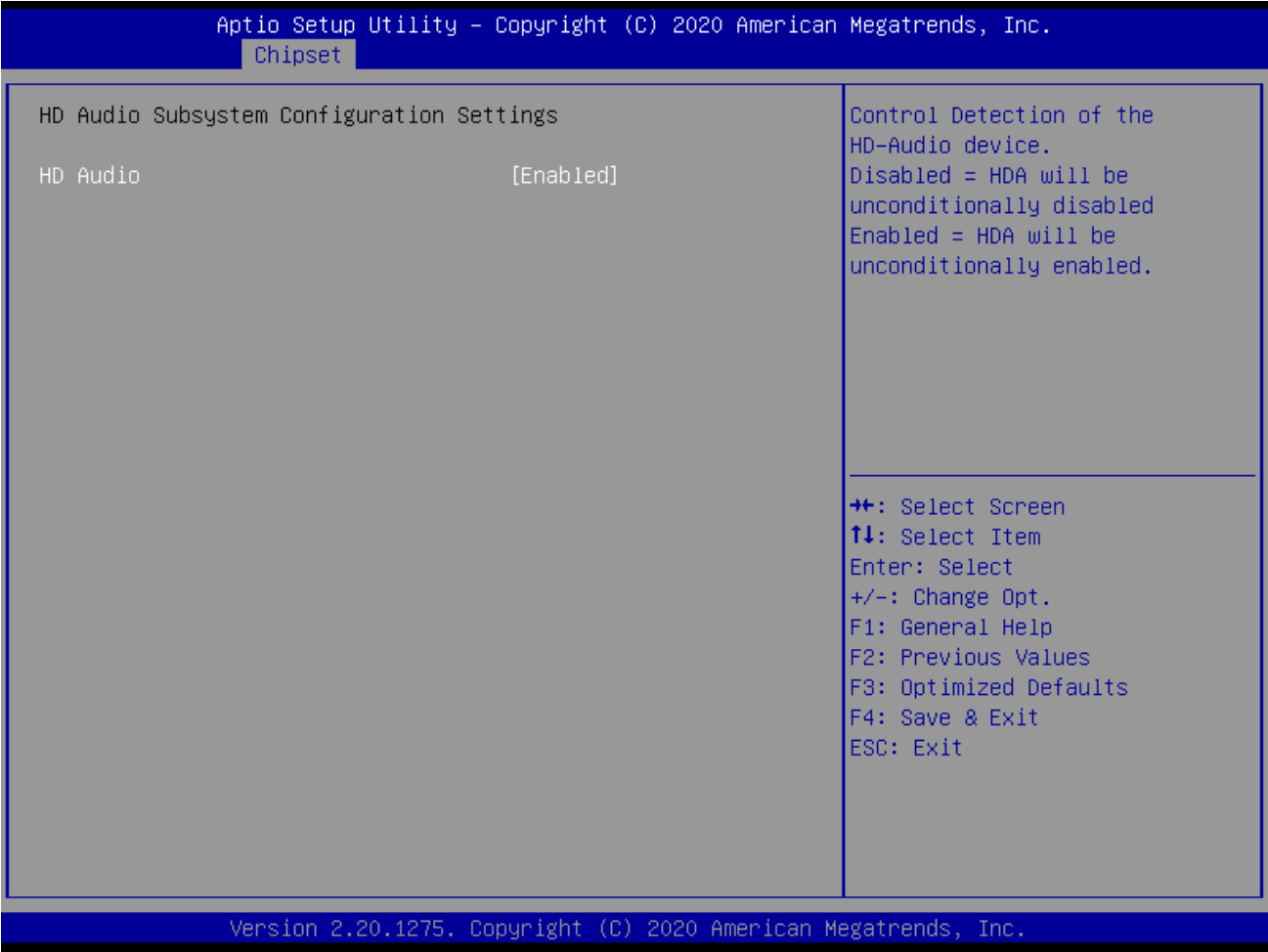
4.5 Security

Security menu allow users to change administrator password and user password settings.



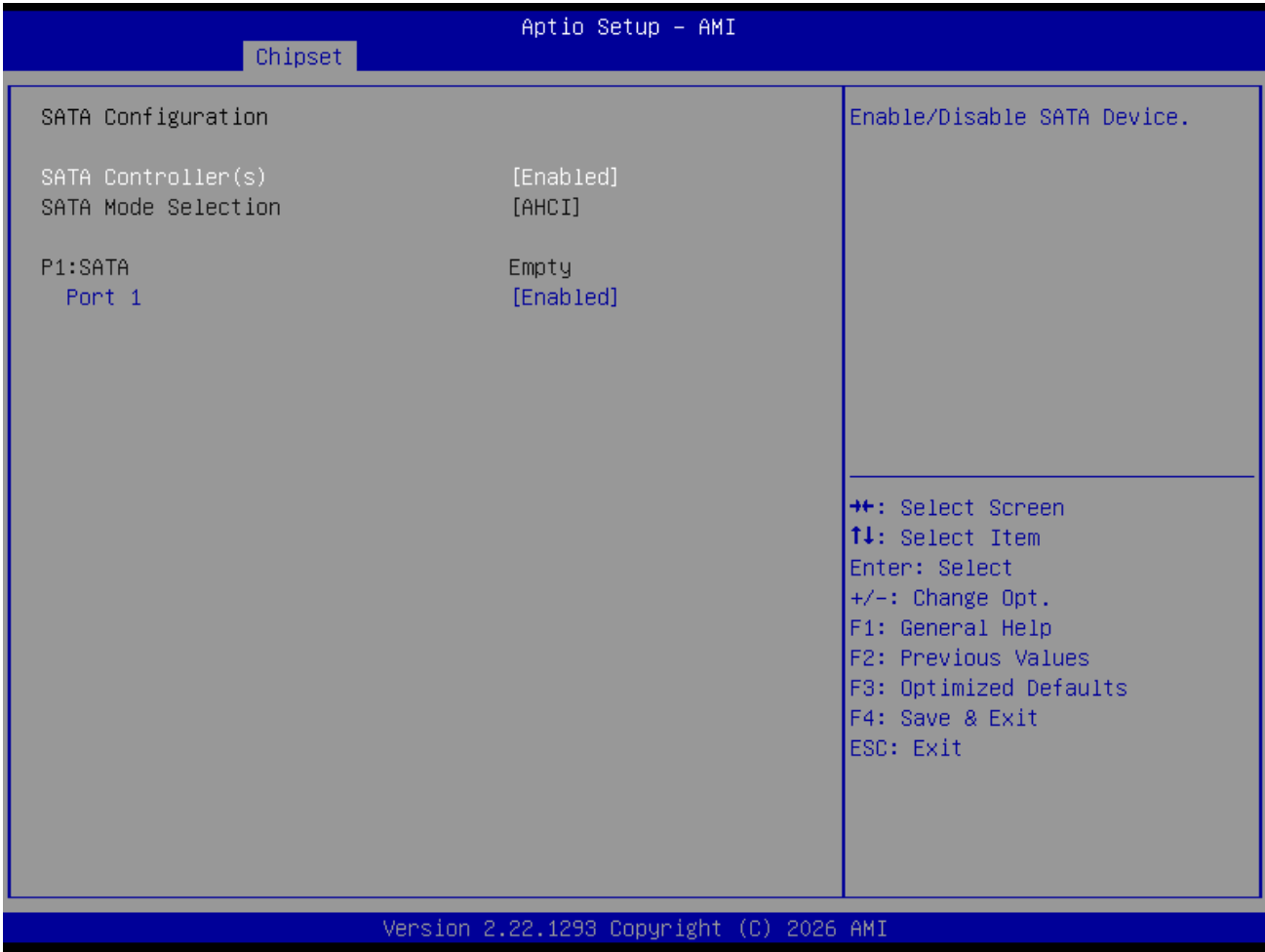
- **Administrator Password**
This item allows you to set Administrator Password.
- **User Password**
This item allows you to set User Password.

■ HD Audio Configuration



Item	Options	Description
HD Audio	Disabled, Enabled [Default]	Control Detection of the HD-Audio device. Disabled = HDA will be unconditionally disabled Enabled = HDA will be unconditionally enabled.

■ SATA Configuration



Item	Options	Description
SATA Controller(s)	Enabled[Default] Disabled	Enable/Disable SATA Device.
SATA Port	Disabled, Enabled[Default]	Enable/Disable SATA Port.

■ Security Boot



Item	Options	Description
Secure Boot	Disabled [Default] , Enabled	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	Standard, Custom [Default]	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

Item	Description
Restore Factory Keys	Force system to User Mode. Install factory default Secure Boot key databases
Key Management	Enables expert users to modify Secure Boot Policy variables without variable authentication

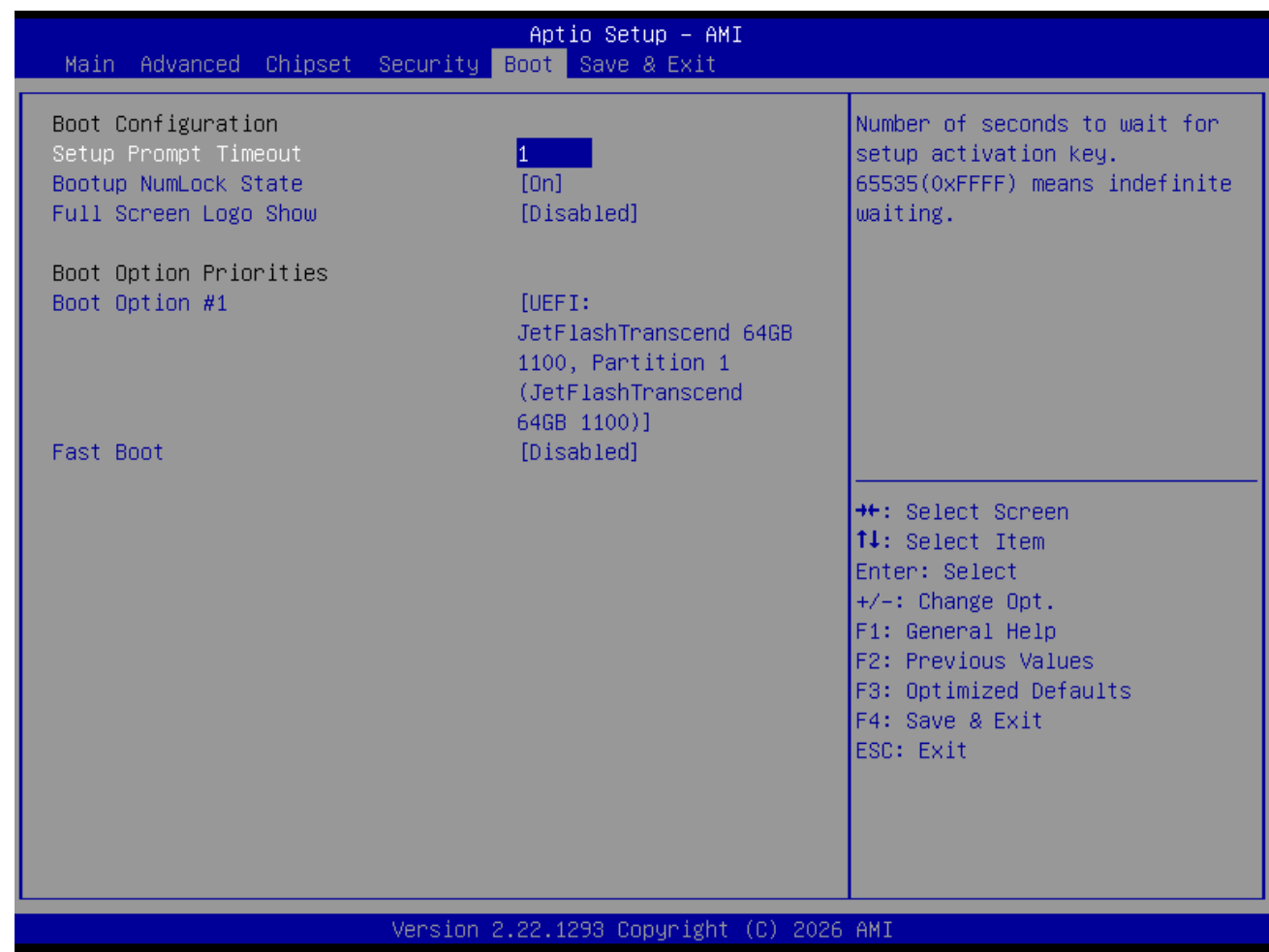


Item	Options	Description
Factory Key Provision	Disabled [Default] , Enabled	Install factory default Secure Boot keys after the platform reset and while the System is in Setup mode

Item	Description
Restore Factory Keys	Force System to User Mode. Install factory default Secure Boot key databases
Enroll Ffi Image	Allow Efi image to run in Secure Boot mode. Enroll SHA256 Hash certificate of a PE image into Authorized Signature Database (db)

4.6 Boot

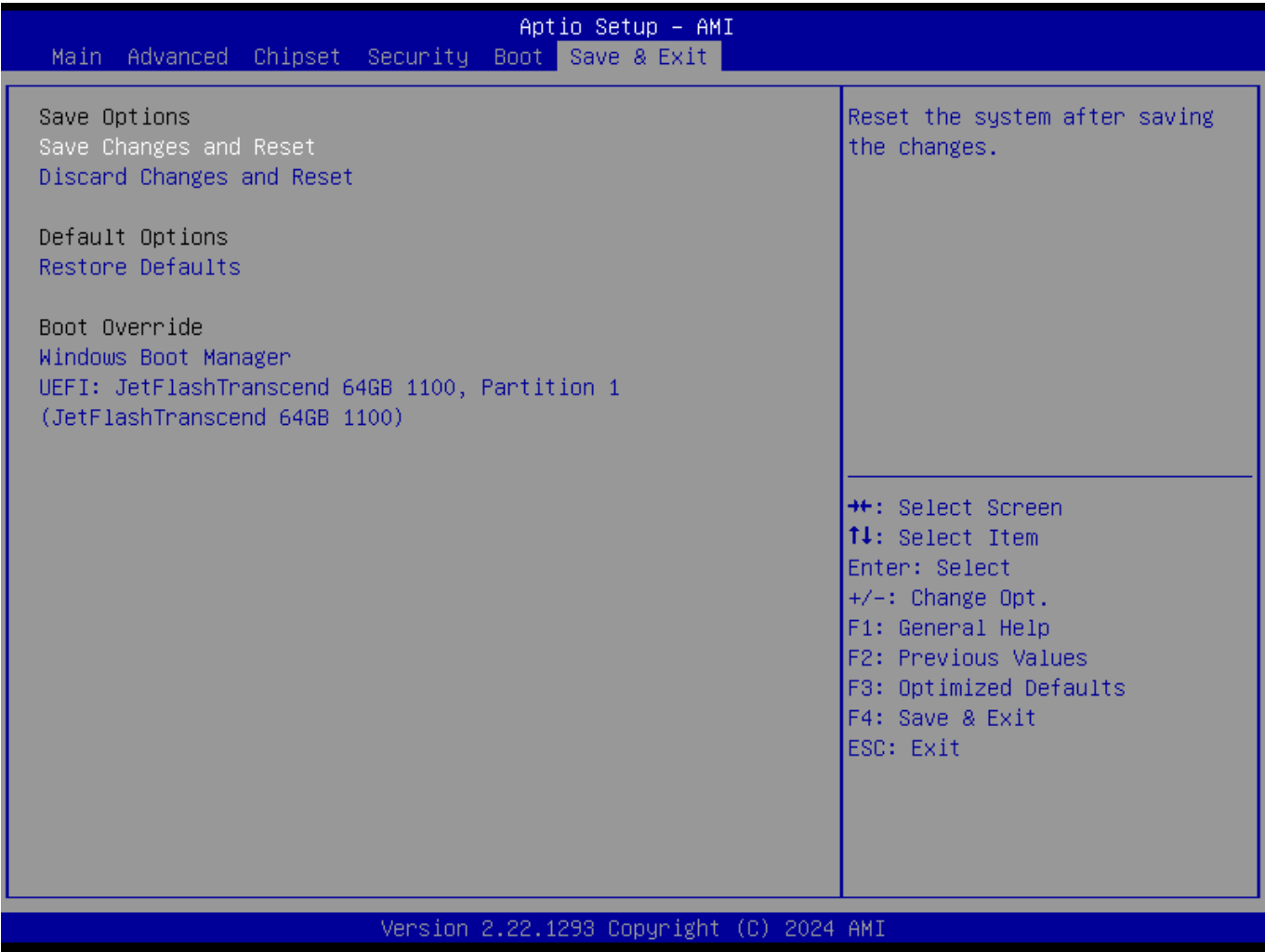
This menu allows you to setup the system boot options.



Item	Options	Description
Setup Prompt Timeout	1[Default]	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
Bootup NumLock State	On[Default] , Off	Select the Keyboard NumLock state.
Full Screen Logo Show	Disabled[Default] , Enabled	Enables or disables Full Screen Logo Show option.
Fast Boot	Disabled[Default] , Enabled	Enables or disables boot with initialization of a minimal set of devices required to launch active boot option. Has no effect for BBS boot options.
Boot Option #1		Set the system boot order.

4.7 Save & Exit

This setting allows users to configure the boot settings.



- **Save Changes and Reset**
This item allows user to reset the system after saving the changes. This item allows user to reset the system after saving the changes.
- **Discard Changes and Reset**
This item allows user to reset the system without saving any changes.
- **Restore Defaults**
Use this item to restore /load default values for all the setup options.

Appendix

WDT & GPIO

This appendix provides the sample codes of WDT (Watch Dog Timer) and GPIO (General Purpose Input/ Output).

WDT Sample Code

WDT Setting

Pseudo Code

// IO Address 0xA16 is time value(second)

// IO Address 0xA15 is WDT enable and configuration

Example, Set 0xA16=-0x02, 0xA15=0x31, it will reset after 2 seconds

```
#define TimePort          0xA16
```

```
#define TimeEnablePort    0xA15
```

//Set WDT Time Unit

```
buf1 = ReadByte(TimeEnablePort) & 0xf7; //Clear WDT mode.
```

```
// buf1 |= 0x08; //Bit3 :(1:Minute Mode/0:Second Mode)
```

```
WriteByte(TimeEnablePort, buf1);
```

//Set WDT Time Value

```
WriteByte (TimePort , 0x02); // Set 2 seconds
```

//Enable WDT

```
buf1 = ReadByte(TimeEnablePort);
```

```
buf1 |= 0x31;
```

```
    //Bit5 :WD_EN,If this bit is set to 1, the counting of watchdog time is enabled.
```

```
    //Bit4 :WD_PULSE ,Select output mode (0: level, 1: pulse) of WDTRST# by setting this bit.
```

```
    //Bit1~0: Select output pulse width of WDTRST#. 0: 1 ms, 1: 25 ms, 2: 125 ms, 3: 5 sec.
```

```
WriteByte(TimeEnablePort, buf1);
```

// Disable WDT

```
buf1 = ReadByte(TimeEnablePort); // Read current WDT setting
```

```
buf1 = buf1 & 0xDF; // Disable WDT by set WD_EN (bit 5) to 0.
```

```
WriteByte(TimeEnablePort, buf1); // Write back WDT setting.
```

GPIO Sample Code

GPIO Setting

IO_DO4	I/O 0xA02h Bit3
IO_DO3	I/O 0xA02h Bit2
IO_DO2	I/O 0xA02h Bit1
IO_DO1	I/O 0xA02h Bit0
IO_DI4	I/O 0xA03h Bit3
IO_DI3	I/O 0xA03h Bit2
IO_DI2	I/O 0xA03h Bit1
IO_DI1	I/O 0xA03h Bit0

The GPIO function is provided by SIO, and it can be accessed through its GPIO port. To access the GPIO register, write value to data port. The configuration on the CT-DAS01 is described as below.

Psuedo Code

```
#define GPI_ADDR 0xA03h
```

```
#define GPO_ADDR 0xA02h
```

```
// 0xA03h is Pin Status(default 0x5F )(at IO_DI1(Bit0) ~ IO_DI4(Bit3))
```

```
ByteData = ReadByte (GPI_ADDR) //Read current Pin Status
```

```
//Offset 0xA02h default setting is 0x5F (output pin set to output high) (at IO_DO1(Bit0) ~ IO_DO4(Bit3))
```

```
ByteData = 0x0F //set IO_DO1~ IO_DO4 to high
```

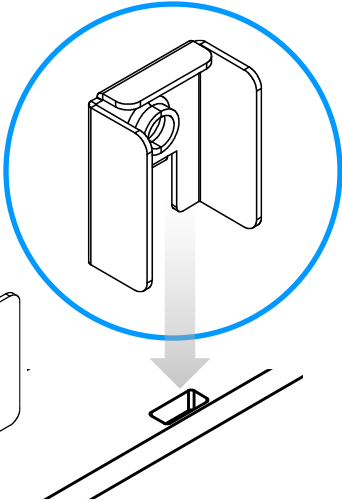
```
WriteByte (GPO_ADDR, ByteData)
```

Panel Mount

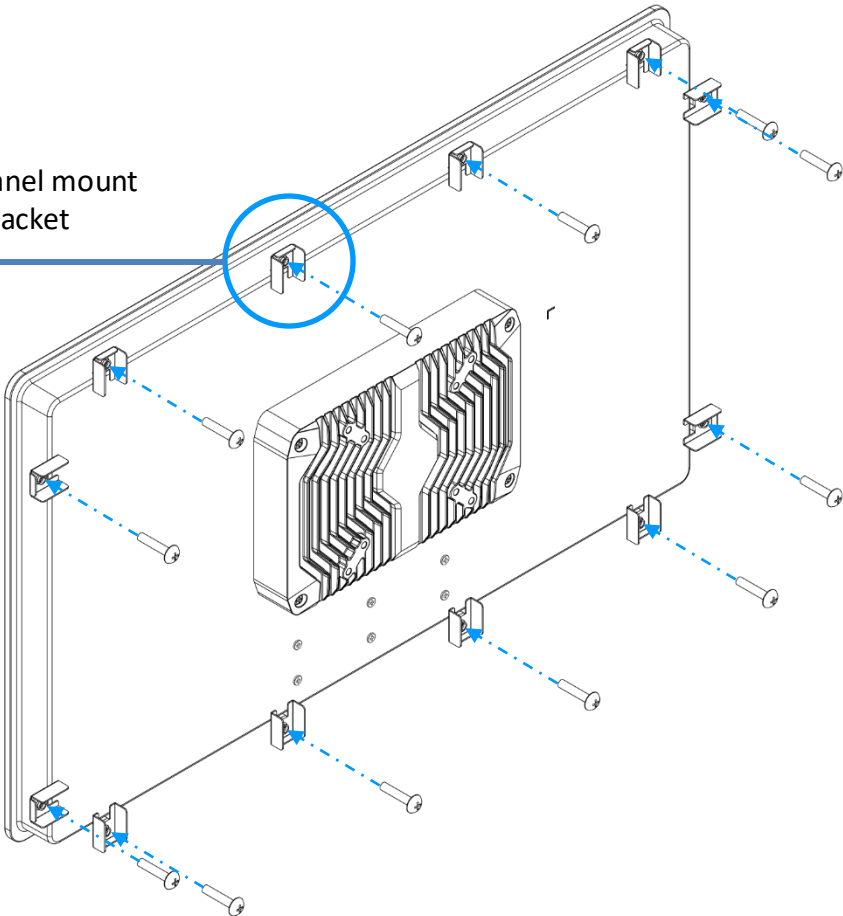
Front view 

Back view

Panel mount bracket

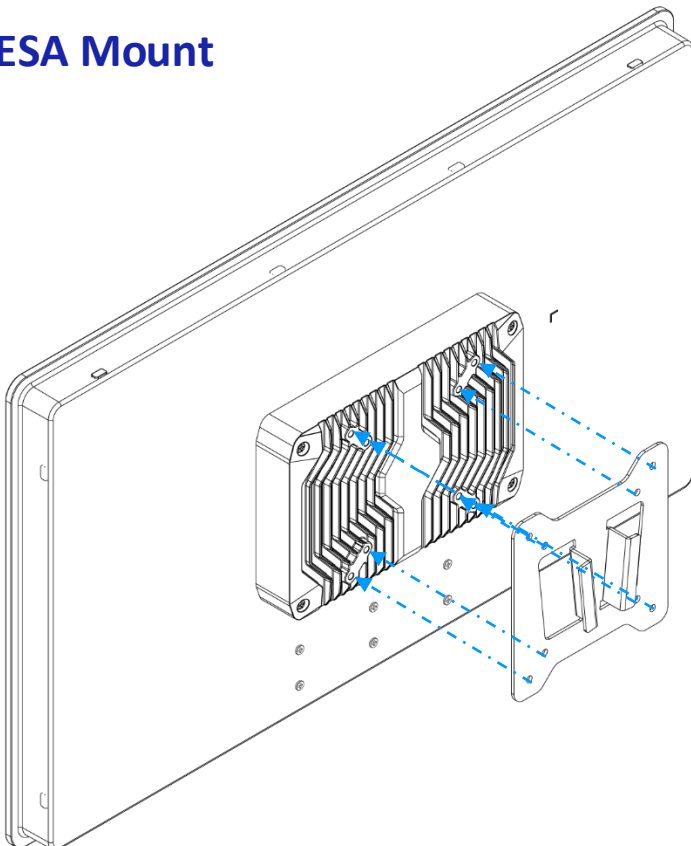


Panel mount bracket



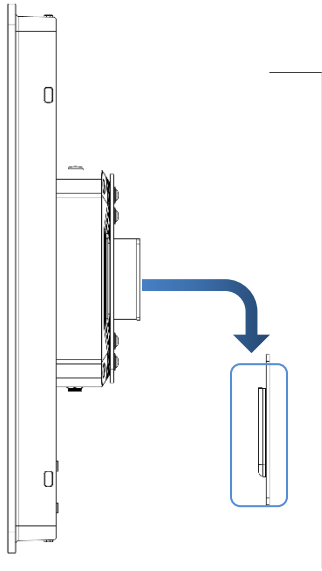
Model	Panel Mount Kit
AIO-W210-ASL-2L	6
AIO-W215-ASL-2L	10
AIO-W221-ASL-2L	12

VESA Mount



VESA mount bracket
(75mm x 75mm/100mm x 100mm)

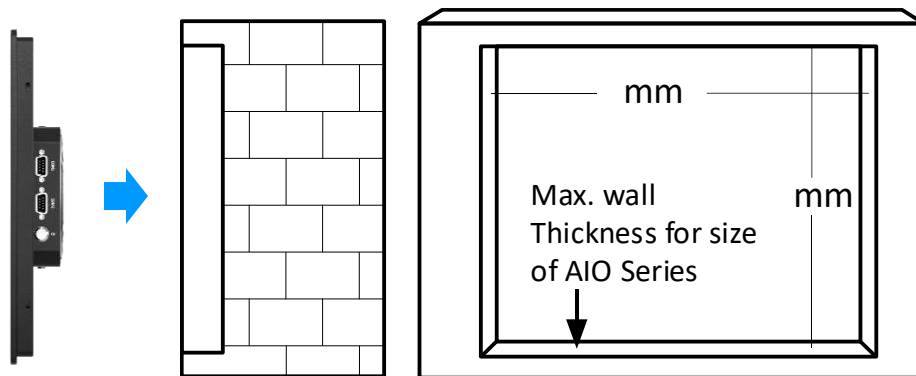
M4X6L x8 pcs



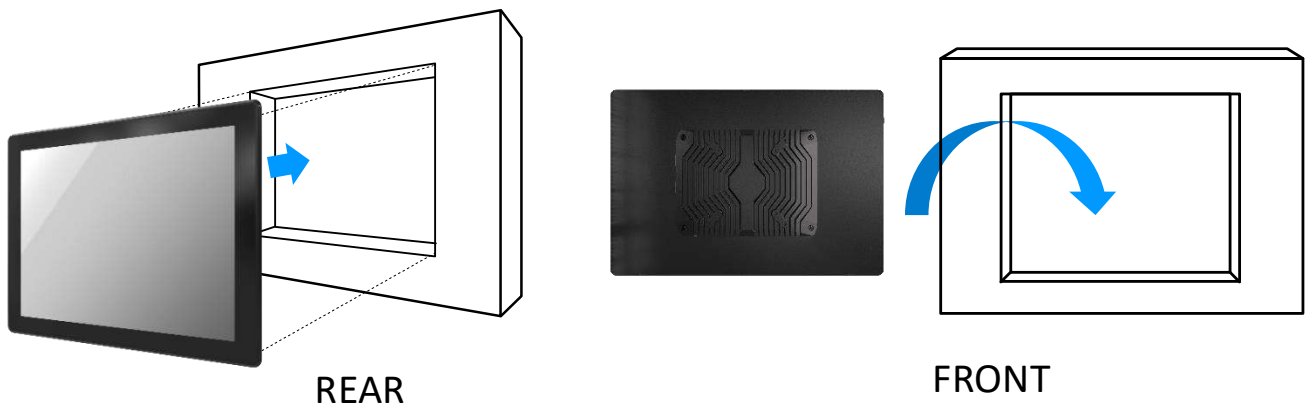
Mounting Guide

Flush Mount / Panel Mount:

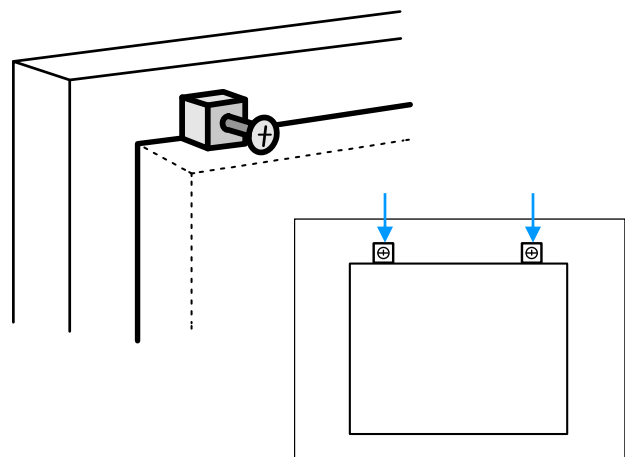
- Cut hole in the wall w/ dimensions according to the screen size you have purchased. Please refer to the next page for the list of cutout dimensions and max wall depths



- From the FRONT of the wall, place the AIO Panel PC with its rear (display screen forward) into the measured cutout hole.



- Install the mounting clips around the AIO and screw them in to secure against the wall. If the wall's thickness is greater than maximum wall thickness allowed, the clips will not fit. Please refer to the next page for the list of max wall depths



AIO Series

Model	Wall Cut-Out (W x H) Unit: mm	Max Wall Thickness (mm)
AIO-W210-ASL-2L	249 x 163	7
AIO-W215-ASL-2L	394 x 243	8
AIO-W221-ASL-2L	528 x 318	11

