USER'S MANUAL

GOT515-RPL-WCD

All-in-One
15.6" FHD TFT Fanless
PCT Multi-Touch Panel PC

User's Manual

AXIOMTEK

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WARNING

- ***Replacing the battery with an incorrect model may cause an explosion. Only use the same or equivalent type of battery as recommended by the manufacturer.***
- ***Properly dispose of used batteries according to the instructions.***

November 2024, Version A1

Printed in Taiwan

Safety Precautions

Before getting started, please read the following important safety precautions.

1. Be sure to ground yourself to prevent static charge when installing any internal components. Use a grounding wrist strap and place all electronic components in any static-shielded devices. Most electronic components are sensitive to static electrical charge.

2. Disconnect the power cord from the GOT515-RPL-WCD prior to any installation. Be sure both the system and all external devices are turned off. Sudden surge of power could ruin sensitive components. Make sure the GOT515-RPL-WCD series is properly grounded.

3. Make sure the voltage of the power source is correct before connecting the GOT515-RPL-WCD to any power outlet.

4. Turn off system power before cleaning. Clean the system using a cloth only. Do not spray any liquid cleaner directly onto the screen.

5. Do not leave the GOT515-RPL-WCD in an uncontrolled environment where the storage temperature is below -10°C or above 50°C as it may damage the equipment.

6. Do not open the system's back cover. If opening the cover for maintenance is a must, only a trained technician is allowed to do so. Integrated circuits on computer boards are sensitive to static electricity. To avoid damaging chips from electrostatic discharge, observe the following precautions:

    - Before handling a board or integrated circuit, touch an unpainted portion of the system unit chassis for a few seconds. This will help to discharge any static electricity on human body.

    - When handling boards and components, wear a grounding wrist strap available from most electronic component stores.

Trademark Acknowledgments

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SECTION 1
INTRODUCTION

This section contains general information and detailed specifications of the GOT515-RPL-WCD, including the following subsections:

Figure 1-1 Front panel of the GOT515-RPL-WCD

- General Descriptions
- Specifications
- Dimensions and Outlines
- I/O Outlets
- Packing List

1.1 General Descriptions

The GOT515-RPL-WCD multi-touch panel PC adopts a 15.6-inch FHD TFT LCD with 450-nits brightness and supports Intel® Core™ processor i5-1335UE/U300E (Raptor Lake) up to 15W, providing excellent computing performance and thermal resistance. This fanless platform is particularly designed for operation under harsh environments including steel refineries, oil pipes, ships, machine makers, and many more. Having the abilities described below surely makes GOT515-RPL-WCD the most robust and cost-effective solution.

Designed for extended operating temperature range and ingress protection

The GOT515-RPL-WCD's compact industrial design and fanless cooling system allow the panel PC to sustain an extended operating temperature range between -20°C and +50°C, making the system a power-efficient solution. It also features an ultra-thin, modular design and Full IP66-rated with lockable M12 I/Os from liquids and dust

Reliable and stable design

The GOT515-RPL-WCD is specifically designed for vibration-prone environments, best for the transportation (vehicle, railway, marine) and industrial machinery markets. With a patented anti-vibration design, the GOT515-RPL-WCD is able to work in operation mode under 1G (5 ~ 500Hz), which has significantly improved system reliability and sustainability.

【Note】 ***Heavy-vibration may sometimes cause the LCD screen to flash in white color; however, it won't affect the function of the product.***

Features

- 15.6" FHD (1920x1080) LCD 450 nits with LED backlight, PCAP
- Fanless design with Intel® Core™ i5-1335UE or processor U300E
- Full IP66-rated with lockable M12 I/Os
- Full stainless-steel enclosure made of SUS 304
- Supports M.2 2280 SSD (NVMe/SATA), mSATA, Wi-Fi (6/6E/7) **or** 4G LTE
- Supports VESA mount (100 mm x100 mm)
- Supports both proximity and light sensors (optional)
- EC control (backlight on/off, brightness, light sensor, touch on/off, and Super I/O)
- Intelligent power management solution (Smart Ignition)
- Programmable OSD function key
- Operating temperature: -20°C to +50°C

1.2 Specifications

CPU

- **CPU**
  - Intel® Core™ i5-1335UE (1.3 GHz, 15W)
  - Intel® U series U300E (1.1 GHz, 15W)

- **Chipset**
  - SoC integrated

- **System Memory**
  - 1 x DDR5 4800MHz SO-DIMM socket (Max. up to 32GB)

- **BIOS**
  - American Megatrends Inc. UEFI (Unified Extensible Firmware Interface) BIOS.

I/O System

- **Standard I/O**
  - 1 x COM for RS-232/422/485 (default RS-232, A-coded)
  - 1 x USB 2.0 dual-Ports (A-Code, Support power on/off management)
  - 1 x DC power input (M12, A-coded)
  - 1 x 2.5GBase-T Ethernet with Intel® I226 (X-coded), supporting Wake-on-LAN and PXE Boot ROM
  - 1 x 1GBase-T Ethernet with Intel® I210 (X-coded)
  - 1 x M12 I/O Blank Via Cable (2x USB2.0 / 1x COM RS232 / 1x CAN Bus, by option)

- **Ethernet**
  - 1 x 2.5GBASE-T Ethernet with Intel® I226LM (TSN) in support of Wake-on-LAN and PXE Boot ROM (M12, X-coded)
  - 1 x 1GBASE-T Ethernet with Intel® I210 (M12, X-coded)

- **Expansion and Storage**
  - 1 x Full-size mini card slot (USB + PCIe/SATA) with nano-SIM socket, supports mini card or mSATA auto detection.
  - 1 x M.2 Key E 2230 slot for Wi-Fi + Bluetooth module
  - 1 x M.2 Key M 2280 slot (PCIe Gen.4 x4/SATA) for SSD (NVMe/SATA) or PCIe device auto detection.

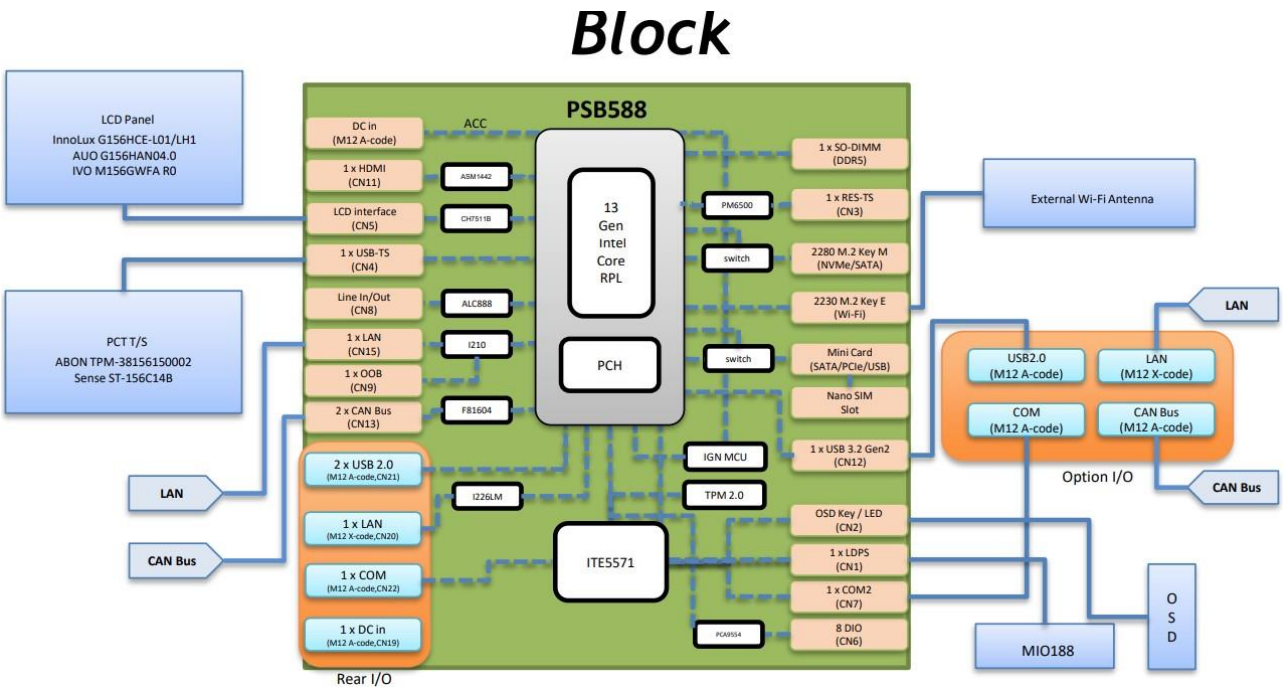
- **OSD 3+1key keypad with Green/Red LED**
  - Programable 3-key (backlight on/off; touch on/off), Power Switch
  - Status LED (green) for system power, LED (red) for Storage active
  - Statue: Power ON=Always bright; S3=Slow Flicker; Backlight OFF=Fast Flicker

System Specification

- **15.6" FHD TFT LCD**
  - 15.6" FHD TFT LCD 450nits, PCAP, resolution:1920x1080

- **Weight(Net/Gross)**
  - 5.2kg(11.46lb)/ 8.5kg(18.74lb)
- **Dimensions**
  - System: 397.6mm(15.65")(W)x60.5mm(2.4")(D)x245mm(9.65")(H)
  - Packing: 533mm(20.98")(W)x463mm(18.23")(D)x222mm(8.74")(H)

- **Operating temperatures**
  - -20˚C to 50˚C (-4°F to +122°F)
- **Storage temperatures**
  - -10°C to 50˚C (+14°F to +122°F)
- **Relative humidity**
  - 10% to 95% @ 40˚C, Non-condensing
- **System power input**
  - DC power input: +9 to 36VDC with ACC
- **System Block diagram**



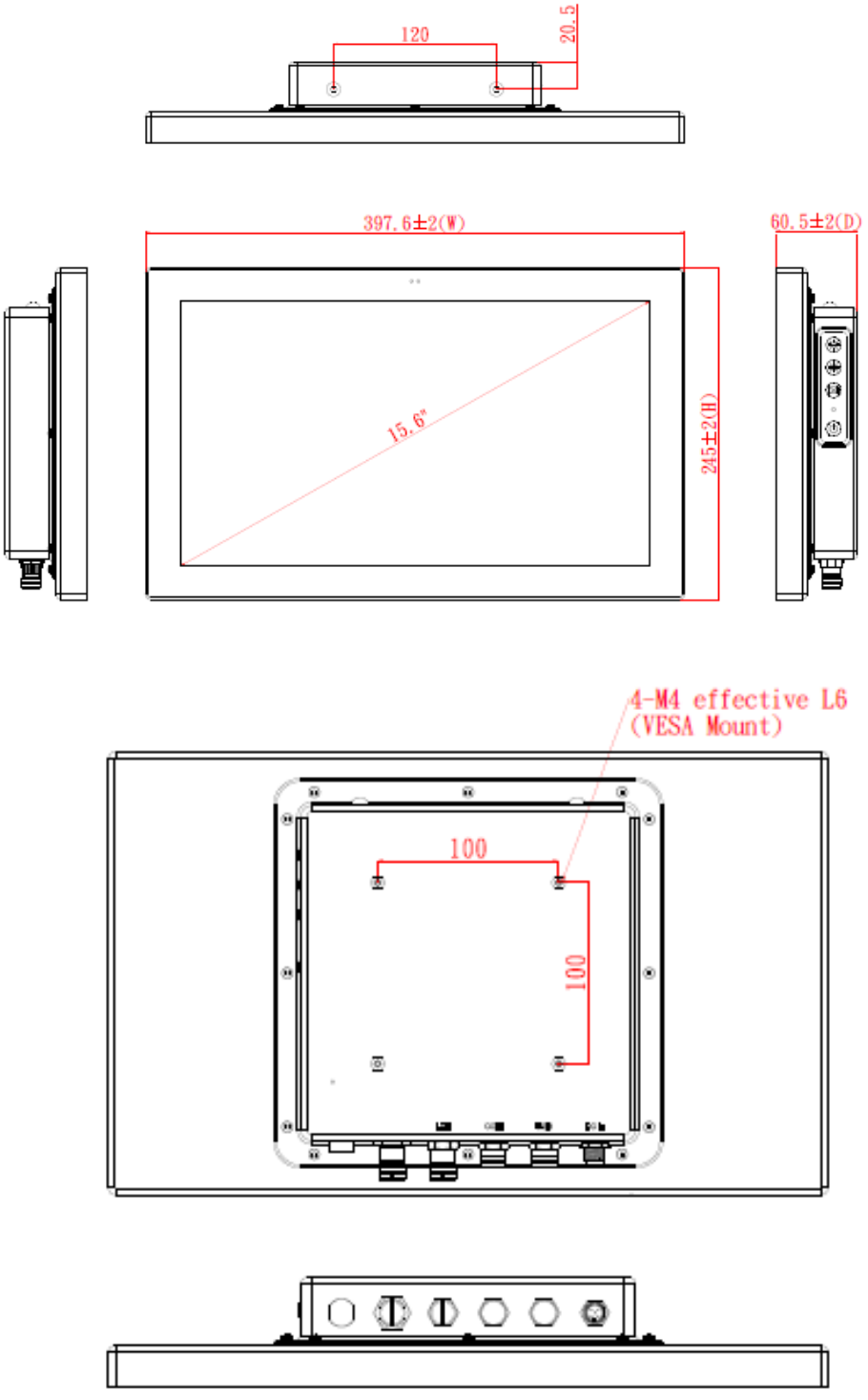
【Note】 1. ***All specifications and images are subject to change without notice.***

2. ***The performance of the system might be adversely affected at an operating temperature above 40°C.***

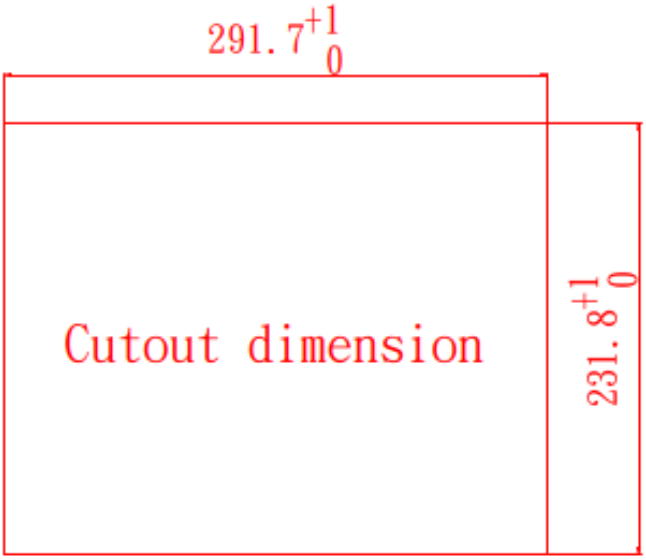
1.3 Dimensions and Outlines

The figures below show the dimensions and outlines of the GOT515-RPL-WCD panel PC.

Front dimensions: 3397.6mm(15.65")(W)x60.5mm(2.4")(D)x245mm(9.65")(H)



Cut-out dimensions of the GOT515-RPL-WCD



Cut-out dimensions: 291.7 x 231.8 mm

1.4 I/O Outlets

Please refer to figure 1-4 for the I/O locations of the GOT515-RPL-WCD.

Figure 1-4: Front and bottom views of the GOT515-RPL-WCD.

No.	Note.	No.	Note.
1	1 x Optional M12 I/O blank via cable: 2 x USB 2.0, 1 x COM (RS-232) 2 x CAN Bus	6	DC power input
2	1 GbE LAN	7	Brightness settings +/-
3	2.5GbE LAN	8	Display on/off (backlight and touch configurable)
4	COM (RS-232/422/485)	9	LED light (green LED: power status; red LED: storage)
5	1 x USB 2.0 dual-ports (the connection of two USB 2.0 devices using a single port)	10	Power on/off
11	Proximity(left) & light sensor(right) (optional)		

1.5 Packing List

A complete bundled package should contain the following items:

- GOT515-RPL-WCD unit x 1
- M12 DC Power cable x 1

Please contact an Axiomtek distributor immediately if any of the above-mentioned items is missing.

SECTION 2
SYSTEM CONFIGURATIONS

The GOT515-RPL-WCD provides rich I/O ports and flexible expansion features for users to perform various tasks. This section provides detailed information on the hardware components of the panel PC as well as installation instructions, including the following subsections:

- Board Layout
- I/O Pin Assignment
- M12 I/O blank Cables (Optional)
- DC Power Jack w/ M12 connector
- Hardware Installation (Optional)
- VESA mounting (Optional)

2.1 I/O Pin Assignment

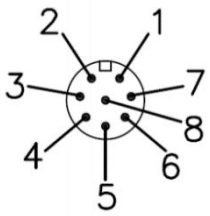
The GOT515-RPL-WCD has one serial ports, M12-8P for COM (RS-232/422/485, default RS-232), M12-8P for USB ports(2x M12 dual port), has two M12-8P Ethernet for 2.5GBE LAN, 1Gbe LAN, M12 customize I/O port for optional and DC-in 9V~36V connecter.

2.1.1 Serial Port Interface

The following table 1 shows you the pin assignments of this connector.

able 1: Pin Assignment

Pin	RS-232	RS-422	RS-485
1	DCD	TX-	Data-
2	RXD	TX+	Data+
3	TXD	RX+	No use
4	DTR	RX-	No use
5	GND	GND	GND
6	DSR	No use	No use
7	RTS	No use	No use
8	CTS	No use	No use
9	RI	No use	No use



2.1.2 Ethernet

The GOT515-RPL-WCD is equipped with a high-performance Plug and Play Ethernet interface, full compliant with IEEE 802.3 standard, and can be connected with a M12 LAN connector.

Please refer to detailed pin assignment list below:

2.5GBE LAN

Pin	Signal
1	MDI0+
2	MDI0-
3	MDI1+
4	MDI1-
5	MDI3+
6	MDI3-
7	MDI2-
8	MDI2+

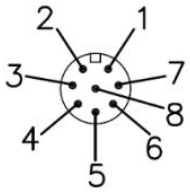
1GBE LAN

Pin	Signal
1	MDI0+
2	MDI0-
3	MDI1+
4	MDI1-
5	MDI3+
6	MDI3-
7	MDI2-
8	MDI2+

2.1.3 USB Port

The USB is a Universal Serial Bus (compliant with USB 2.0 (480Mbps)) connector on the rear I/O. It is commonly used for installing USB peripherals such as keyboard, mouse, scanner, etc.

Pin	Signal	Pin	Signal
1	USB VCC (+5V level)	5	USB VCC (+5V level)
2	USB #0_D-	6	USB #1_D-
3	USB #0_D+	7	USB #1_D+
4	GND	8	GND



2.1.4 DC Power Jack w/M12

Please follow pin assignment for the power input.

Pin	Signal
1	+12 ~ 24V
2	+12 ~ 24V
3	GND
4	GND
5	ACC ignition

2.1.5 Full-Size PCI Express Mini Card Slot (CN16)

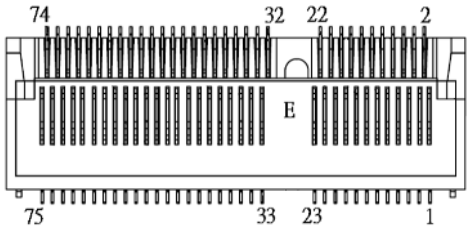
The GOT515-RPL-WCD supports one full-size PCI-Express Mini Card slots. CN16 is applying for PCI-Express or SATA (mSATA) via BIOS selection and USB signals; PCI-Express complies with PCI-Express Mini Card Spec. V1.2. Thus, users can install mSATA or WLAN/WWAN cards into this slot. Please refer to the SATA of BIOS setting to enable or disable mSATA supported.

Pin	Signal	Pin	Signal
1	WAKE#	2	+3.3VSB
3	No use	4	GND
5	No use	6	+1.5V
7	CLKREQ# 8 No use	8	UIM_PWR
9	GND	10	UIM_DATA
11	REFCLK-	12	UIM_CLK
13	REFCLK+	14	UIM_RESET
15	GND	16	UIM_VPP
17	No use	18	GND
19	No use	20	W_DISABLE#
21	GND	22	PERST#
23	PE_RXN3/	24	+3.3VSB
25	PE_RXP3/	26	GND
27	GND	28	+1.5V
29	GND	30	SMB_CLK
31	PE_TXN3/	32	SMB_DATA
33	SATA_TXN	34	GND
35	GND	36	USB_D8-
37	GND	38	USB_D8+
39	+3.3VSB	40	GND
41	+3.3VSB	42	No use
43	GND	44	No use
45	No use	46	No use
47	No use	48	+1.5V
49	No use	50	GND
51	mSATA detect	52	+3.3VSB

2.1.6 M.2 Key E (CN21)

The M.2 Key E for Wireless Module.

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	2	+3.3V	3	USB_D+	4	+3.3V
5	USB_D-	6	NC	7	GND	8	NC
9	NC	10	NC	11	NC	12	NC
13	NC	14	NC	15	NC	16	NC
17	NC	18	GND	19	NC	20	NC
21	NC	22	NC	23	NC	24	CONNECTOR KEY E
25	CONNECTOR KEY E	26	CONNECTOR KEY E	27	CONNECTOR KEY E	28	CONNECTOR KEY E
29	CONNECTOR KEY E	30	CONNECTOR KEY E	31	CONNECTOR KEY E	32	NC
33	GND	34	NC	35	PETp0	36	NC
37	PETn0	38	NC	39	GND	40	NC
41	PERp0	42	NC	43	PERn0	44	NC
45	GND	46	NC	47	REFCLKp0	48	NC
49	REFCLKn0	50	SUSCLK	51	GND	52	PERST0#
53	CLKREQ0#	54	W_DISABLE2#	55	PEWAKE0#	56	W_DISABLE1#
57	GND	58	NC	59	NC	60	NC
61	NC	62	NC	63	GND	64	NC
65	NC	66	NC	67	NC	68	NC
69	GND	70	NC	71	NC	72	+3.3V
73	NC	74	+3.3V	75	GND		



2.1.7 SIM Slot (CN16)

The GOT515-RPL-WCD has one SIM slots: CN16 on top side that support mini PCIe slot (for CN16). It is mainly used in wireless network application.

Pin	Signal
1	PWR
2	RST
3	CLK
4	NC
5	GND
6	VPP
7	I/O
8	NC

2.2 M12 I/O blank Cables (Optional)

GOT500 series uses specific M12 connector for water-proof. Therefore, you will order each cable base on application.

There are four kind cables of GOT500 series, by the optional, if you will apply the USB, COM or Ethernet then you can select a cable for the package.

The Power cable is included in the accessory box, when you will need the power adapter, also it can be selected by optional.

2.2.1 COM port cable

There are two COM port cables which are combined M12 connector. Also, you can refer 2.1.1 for the Series port pin assignment.

2.2.2 USB cables

The USB cable is combined M12 connector for water-proof. It is extended two USB ports for application.

2.2.3 LAN cables

The LAN cable is combined M12 connector for water-proof. It is extended one LAN ports for use. Choose one of the cable options shown below.

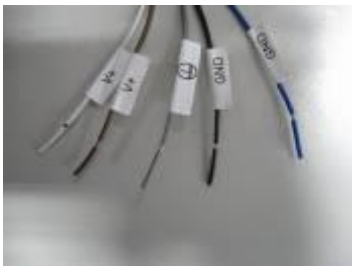
2.2.4 CANbus cables

2.2.5 Power cables

The power cable includes a combined M12 connector for water-proofing, and it features a DC input with an ACC function. It extends to one additional port for use.

DC input with ACC functionality

Pin	Signal
V+	DC power input
ACC	Toggle ignition
GND	GND
GND	GND



2.2.6 Power adapter

If you order the power adapter, you should choose the power cord type for your location. The power adapter is 110-240V which is combined M12 connector.

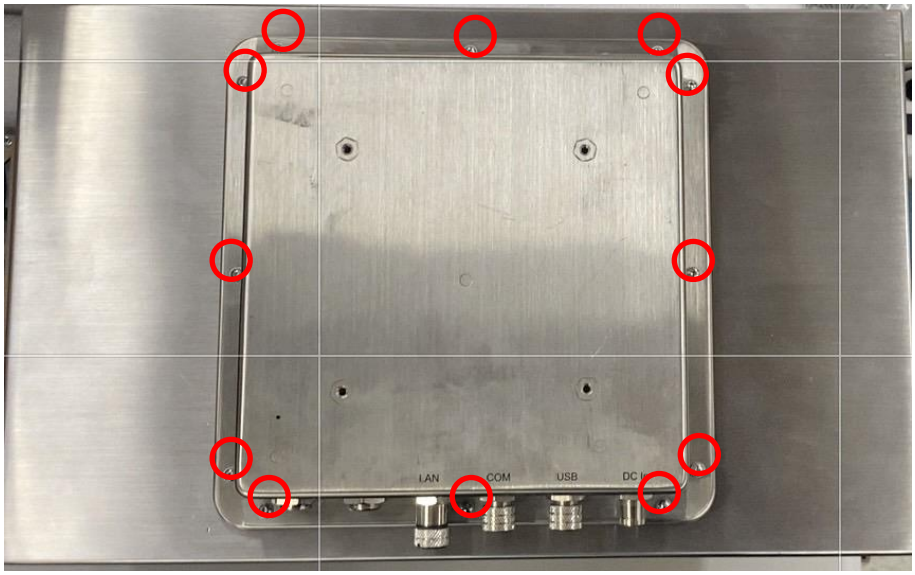
2.4 Hardware Installation (Optional)

2.4.1 Installing DRAM

The GOT515-RPL-WCD provides one 262-pin DDR5 SO-DIMM socket that supports system memory up to 32GB. Please follow the steps below to install a memory module:

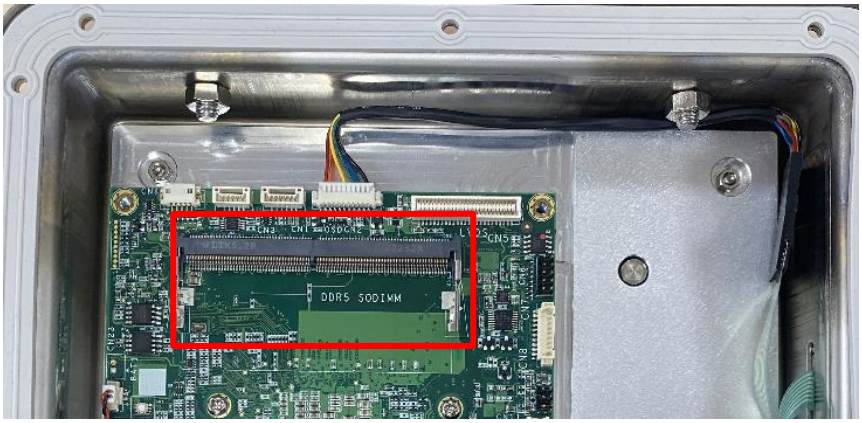
Step 1 Remove the twelve screws (see red circles in Figure 2-1) on the back cover.

Figure 2-1: Back cover



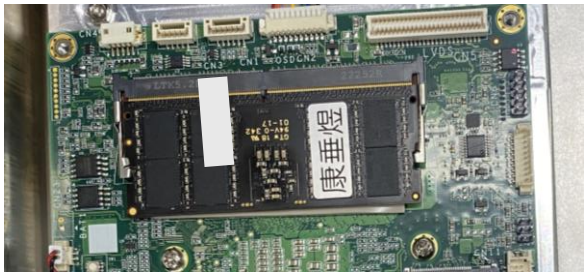
Step 2 Remove the back cover.

Step 3 **Locate the DIMM socket on the mainboard, as shown below.**



Step 4 **Prepare thermal pad, the system will come with 1pcs thermal pad in accessory pack. The thermal pads will come with plastic liner on one side, so make sure it is removed before use. And then stick the thermal pad on the DRAM socket.**

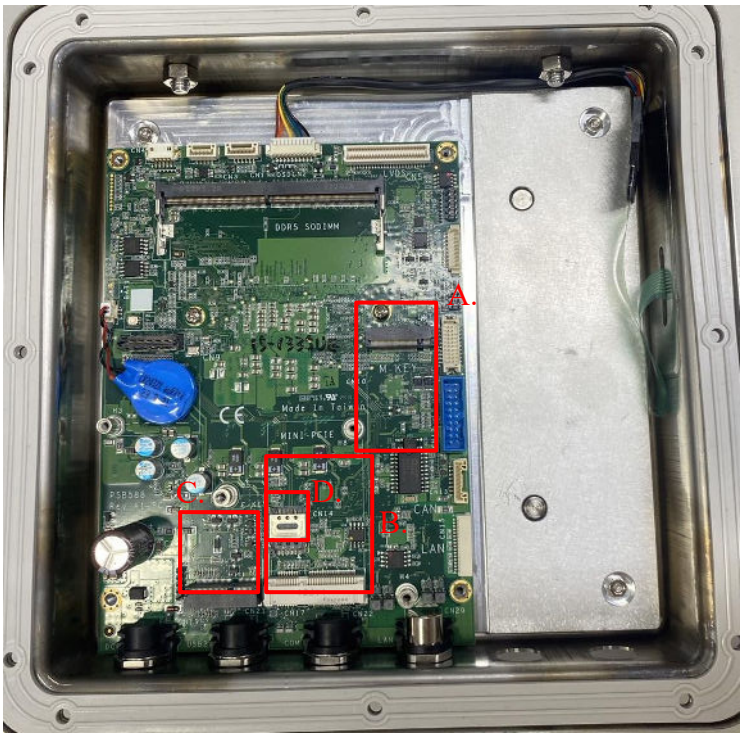
Step 5 **To ensure correct installation, align the memory module with the socket so that the notches of the memory module can match the socket keys.**



Step 6 Put the bottom cover and fasten all the screws onto the system.

2.4.2 Installing the NVMe SSD, Mini Card & M.2 key E Module

The GOT515-RPL-WCD comes equipped with a mini card slot, an optional M.2 key E slot and a M.2 key M slot for users to install wireless LAN cards and SSD. Please refer to the following instructions and illustrations for the installation of the wireless LAN and SSD.



A. 1 x M.2 key M 2280, NVMe (Gen4x4) or auto-detect SATA

B. 1 x mSATA full-size mini card slot for Wi-Fi/LTE module

C. 1 x M.2 Key E 2230 slot (for Wi-Fi)

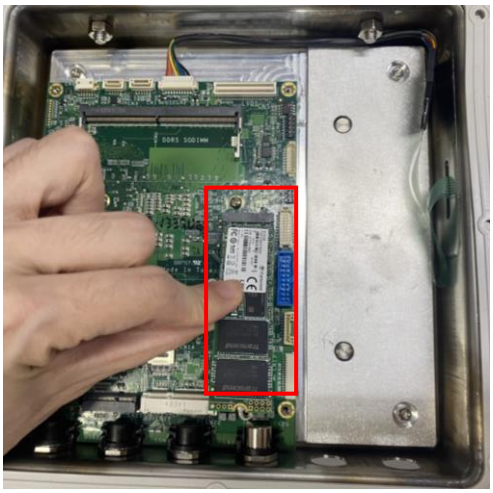
D. 1 x SIM socket for mini PCIe

Step 1 Refer to Section 2.1 to open the back cover.

Step 2 Locate the Mini card socket on the mainboard, as shown below.

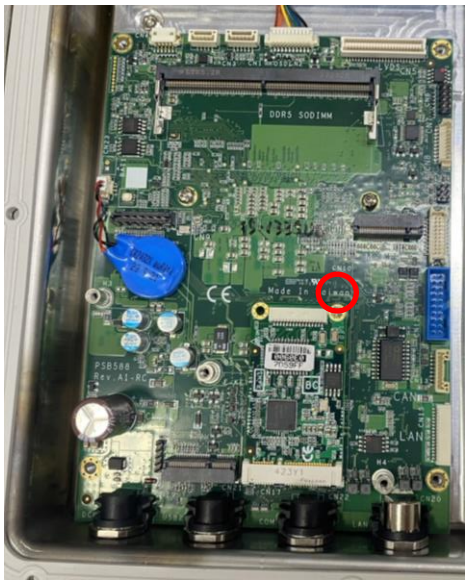
1.Installing the NVMe SSD:

Insert the NVMe SSD into the designated M.2 slot. Ensure it is aligned properly with the connector, then gently push down and secure it with a screw.



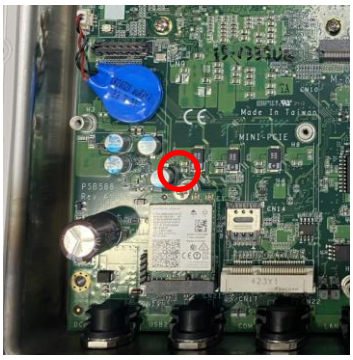
2. Installing the Mini Card:

Align the Mini Card with the Mini PCIe slot. Insert it carefully into the slot, ensuring the pins match up. Once in place, use a screw to fasten the card.



3. Installing the M.2 key E 2230 Module:

Position the M.2 key E module in its corresponding slot. Align it correctly and push it into place, then fasten it with a screw to secure.



Remove the screw from the top of the system's back cover.

Install the antenna onto the antenna connector.

2.5 Mounting the Panel PC

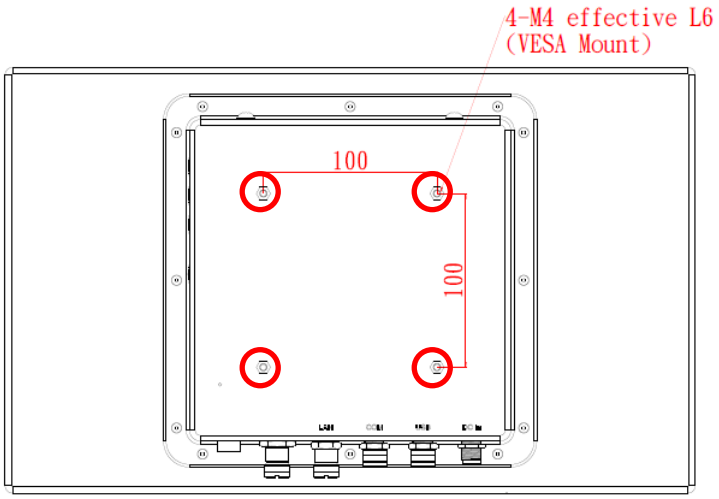
WARNING

Only trained and qualified technicians are permitted to mount the product. To prevent accidental damage to the product or human injury when mounting the product, at least two people are required to perform the installation.

2.5.1 VESA Mount (Support VESA standard 100x100)

Alternatively, the GOT515-RPL-WCD supports VESA arm mount by using a VESA arm kit attached to the back, allowing users to tilt or rotate the panel PC for best visibility. Refer to the following steps when adopting VESA arm mount for the panel PC.

Step 1 Locate the four screwing holes on the back side of the panel PC.



Step 2 **As shown in the image, attach the VESA mount kit to the back cover of the tablet. Tighten the four screws to securely fasten the VESA arm kit to the back cover.**

【Note】 ***This display supports vertical installation. To rotate the I/O ports by 90 degrees, simply adjust the mount to the desired orientation. If you encounter any installation issues, please contact your distributor.***

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SECTION 3
AMI BIOS SETUP UTILITY

This section provides users with detailed descriptions about how to set up basic system configurations through the AMI BIOS setup utility.

3.1 Starting

To enter the setup screens, follow the steps below:

1. Turn on the computer and press the <Del> key immediately.
2. After pressing the <Del> key, the main BIOS setup menu displays. Users can access to other setup screens, such as the Advanced and Chipset menus, from the main BIOS setup menu.

3.2 Navigation Keys

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include <F1>, <F2>, <Enter>, <ESC>, <Arrow> keys, and so on.

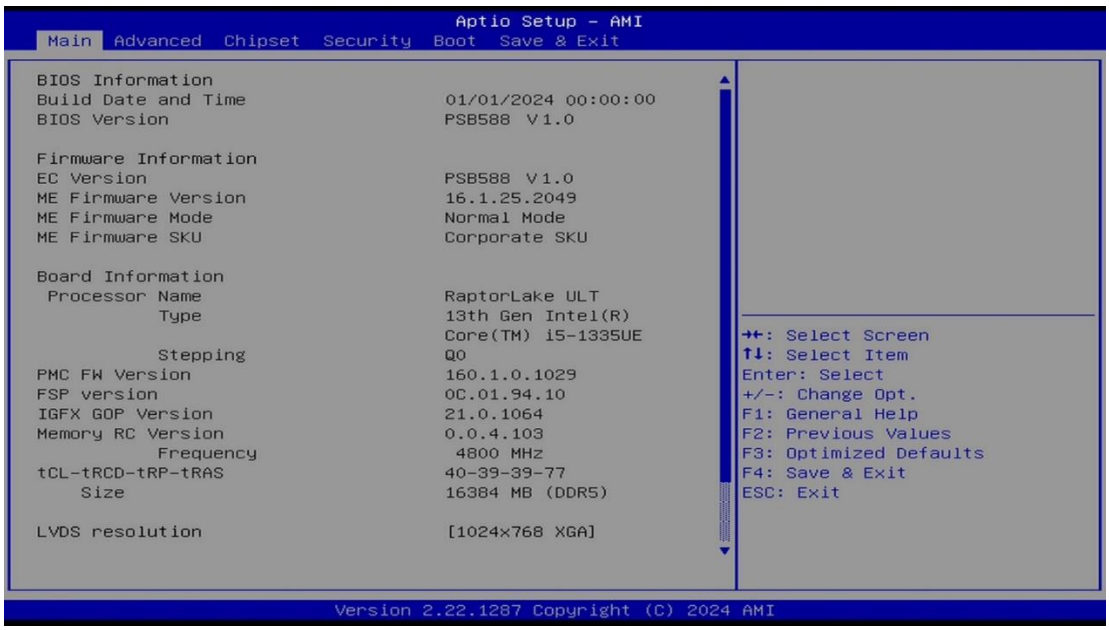
【Note】 ***Some of the navigation keys differ from one screen to another.***

Table 3-1 Descriptions of hot keys

Hot Keys	Description
→← **Left/Right**	The Left and Right <Arrow> keys allow you to select a setup screen.
↑↓ **Up/Down**	The Up and Down <Arrow> keys allow you to select a setup screen or sub screen.
Enter	The <Enter> key allows you to display or change the setup option listed for a particular setup item. The <Enter> key can also allow you to display the setup sub screens.
+– Plus/Minus	The Plus and Minus <Arrow> keys allow you to change the field value of a particular setup item.
F1	The <F1> key allows you to display the General Help screen.
F2	The <F2> key allows you to Load Previous Values.
F3	The <F3> key allows you to Load Optimized Defaults.
F4	The <F4> key allows you to save any changes you have made and exit Setup. Press the <F4> key to save your changes.
Esc	The <Esc> key allows you to discard any changes you have made and exit the Setup. Press the <Esc> key to exit the setup without saving your changes.

3.3 Main Menu

When you first enter the setup utility, you will enter the Main setup screen. You can always return to the Main setup screen by selecting the Main tab. System Time/Date can be set up as described below. The Main BIOS setup screen is shown below



BIOS Information
Display the BIOS information.

System Date/Time

Use this option to change the system time and date. Highlight System Time or System Date using the keys. Enter new values through the keyboard. Press the key or the keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.

Access Level

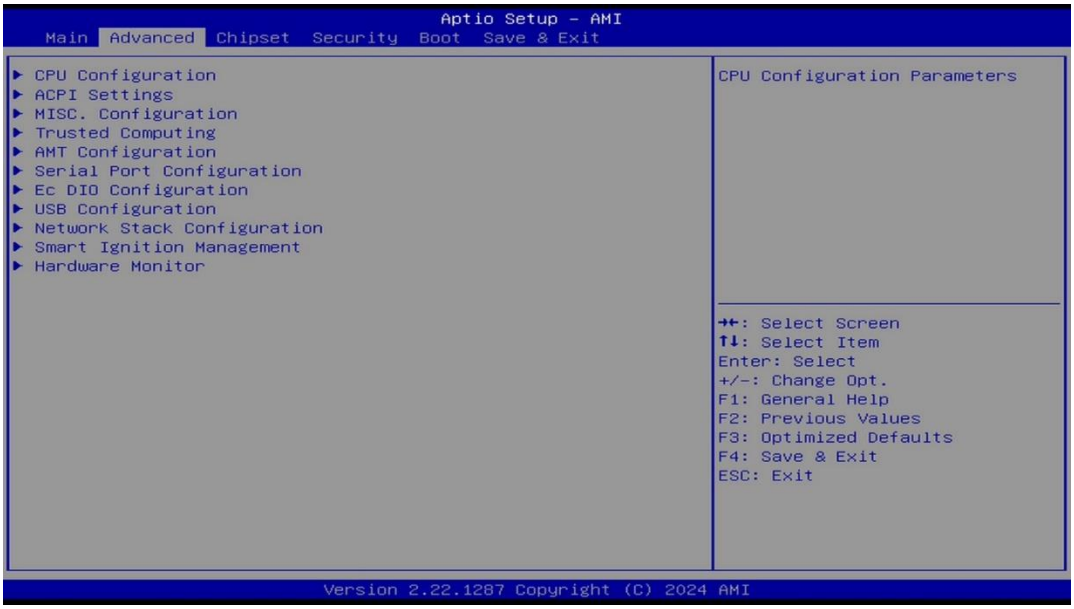
Display the access level of current user.

3.4 Advanced Menu

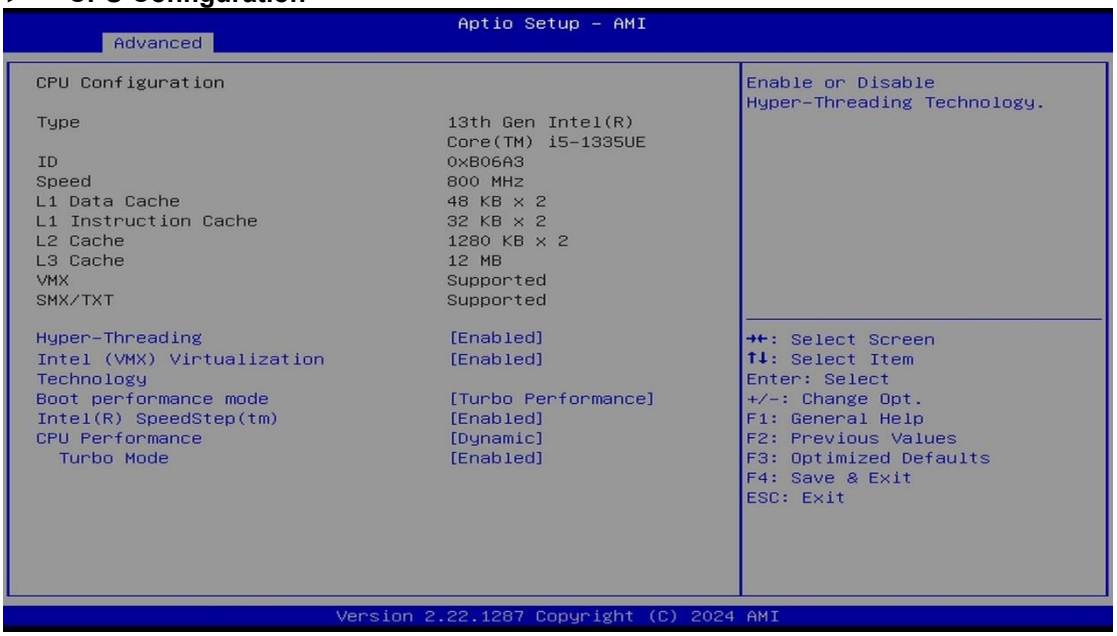
The Advanced menu allows users to configure the CPU and other system devices. You can select any of the items in the left frame of the screen to go to the sub menus

- ► CPU Configuration
- ► ACPI Setting
- ► MISC. Configuration
- ► Trusted Computing
- ► AMT Configuration
- ► Serial Port Configuration
- ► EC DIO Configuration
- ► USB Configuration
- ► Network Stack Configuration
- ► Smart Ignition Management
- ► Hardware Monitor

For items marked with "►", please press <Enter> for more options.



► CPU Configuration



Hyper-Threading

Enable or disable Hyper-Threading Technology. When enabled, it allows a single physical processor to multitask as multiple logical processors. When disabled, only one thread per enabled core is enabled.

Intel (VMX) Virtualization Technology

Enable or disable Intel Virtualization Technology. When enabled, a VMM (Virtual Machine Mode) can utilize the additional hardware capabilities. It allows a platform to run multiple operating systems and applications independently, hence enabling a single computer system to work as several virtual systems.

Below shows a page of CPU configuration with item *Intel Virtualization Technology [enable/disable]* highlighted.

Boot performance mode

In this BIOS screen under CPU Configuration, the Boot Performance Mode setting is set to Turbo Performance. This option is typically used to configure the system's performance during the boot process.

- Turbo Performance: Boosts CPU performance during startup by running at higher frequencies, which can lead to faster boot times but may consume more power.

Intel(R) Speedstep(tm)

Enable or disable Intel(R) Speedstep(tm). When enabled, it allows a single physical processor to multitask as multiple logical processors. When disabled, only one thread per enabled core is enabled.

CPU performance

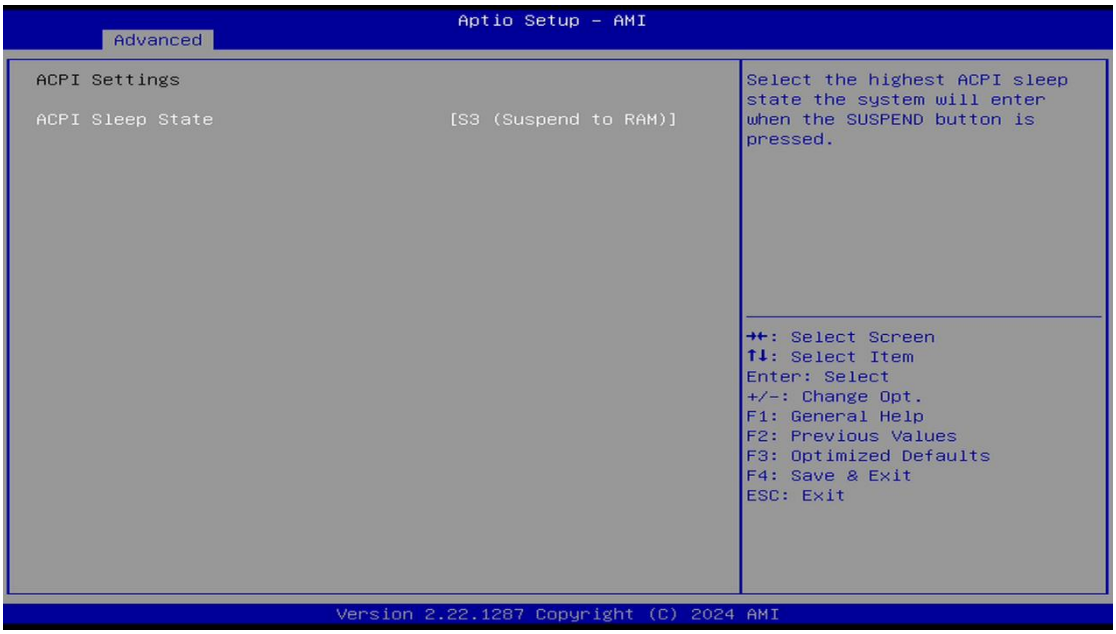
-Turbo Mode

Dynamic: Typical power consumption is 13W, with Turbo power consumption at 21W; recommended airflow is 0.4 CFM.

Maximum: Typical power consumption is 15W, with Turbo power consumption at 28W; recommended airflow is 0.7 CFM.

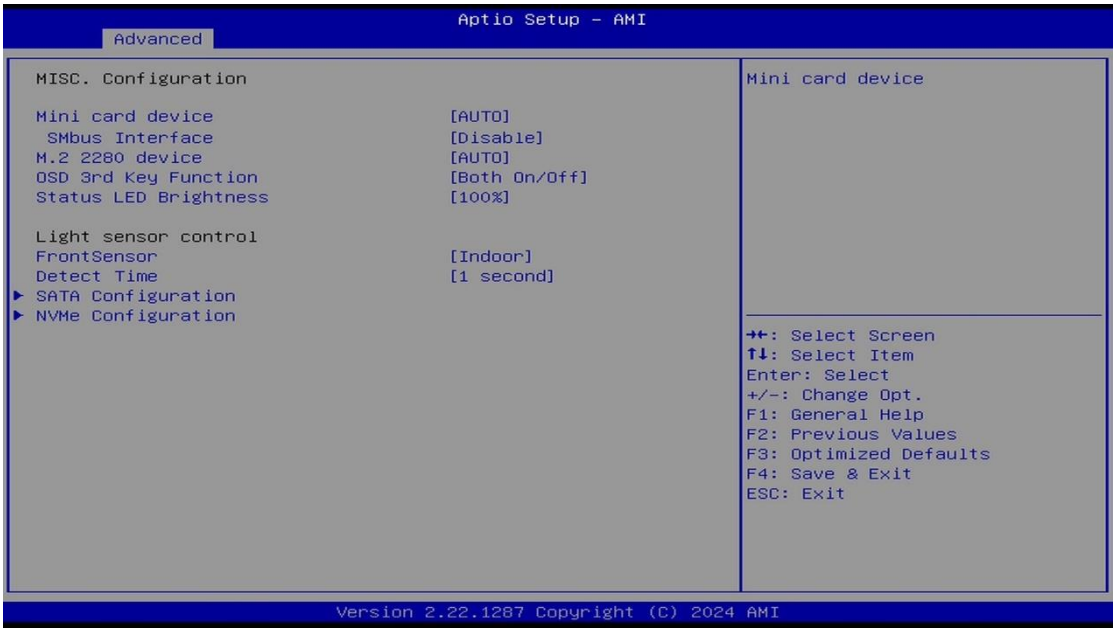
► ACPI Setting

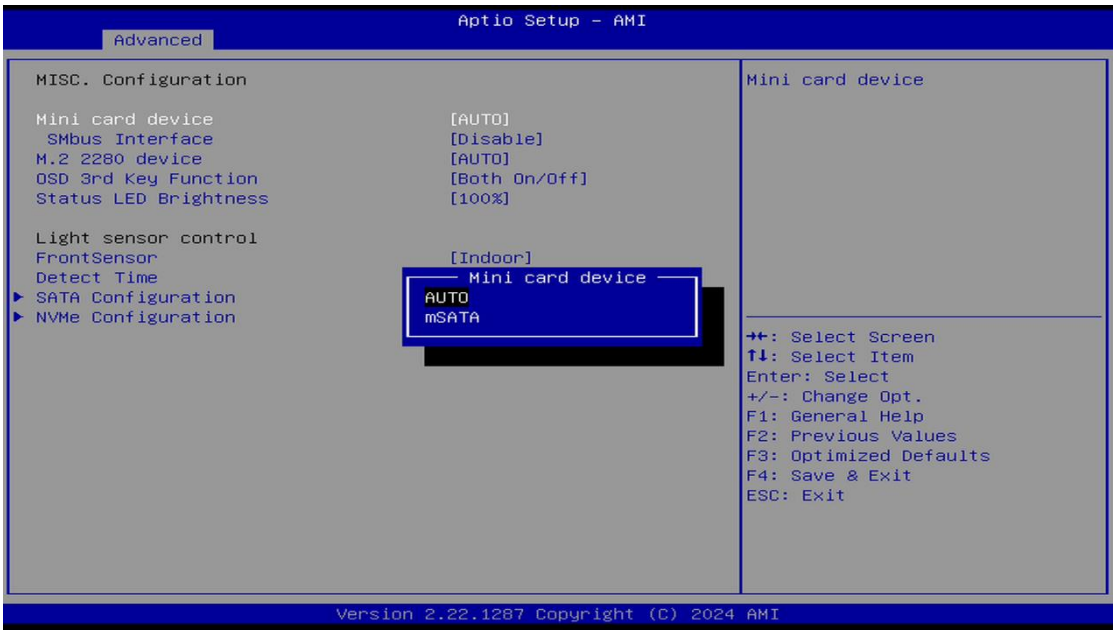
Use this screen to select options for the ACPI configuration and change the value of the selected option. A description of the selected item appears on the right side of the screen.



► MISC. Configuration

Use this screen to select options for the MISC configuration and change the value of the selected option. A description of the selected item appears on the right side of the screen.

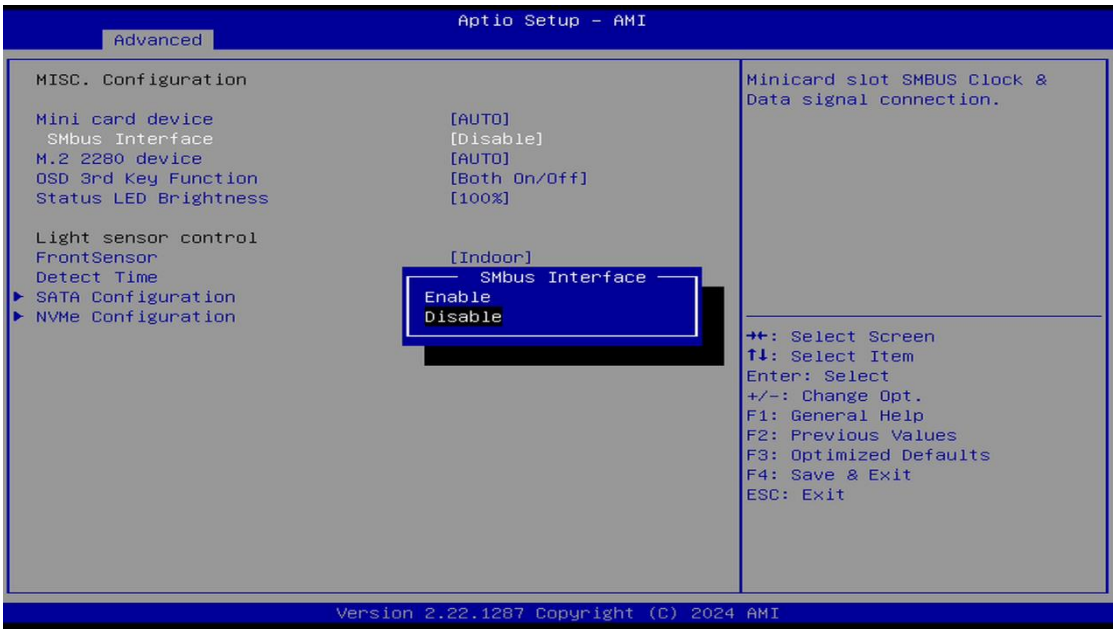




Mini card device

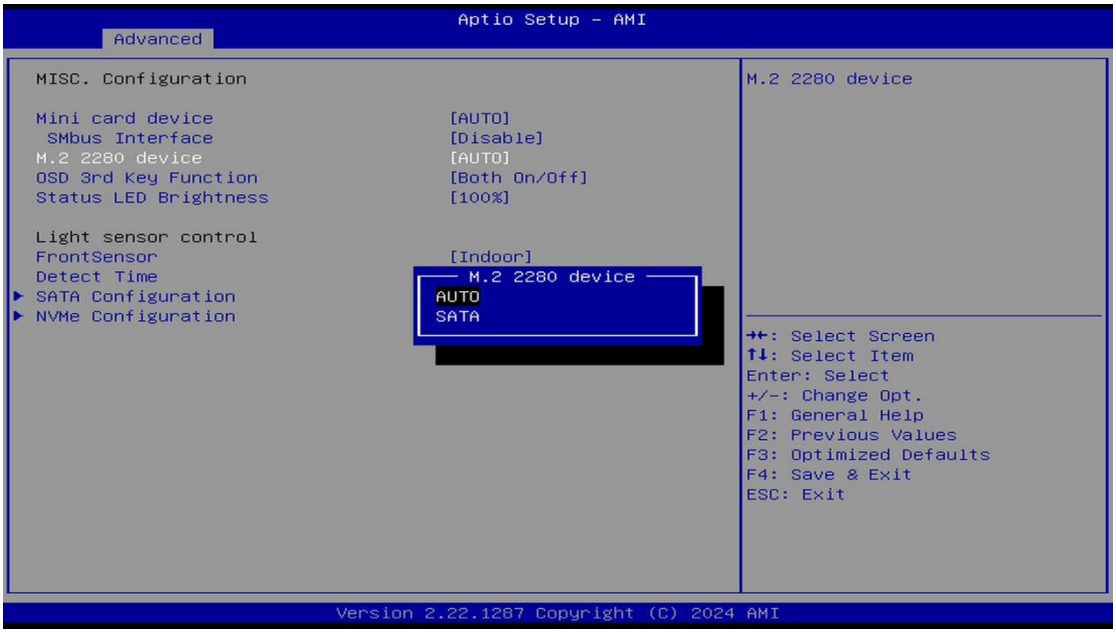
AUTO: System will detect device (PCIe/mSATA) automatically.

mSATA: Force to mSATA.



SMbus Interface

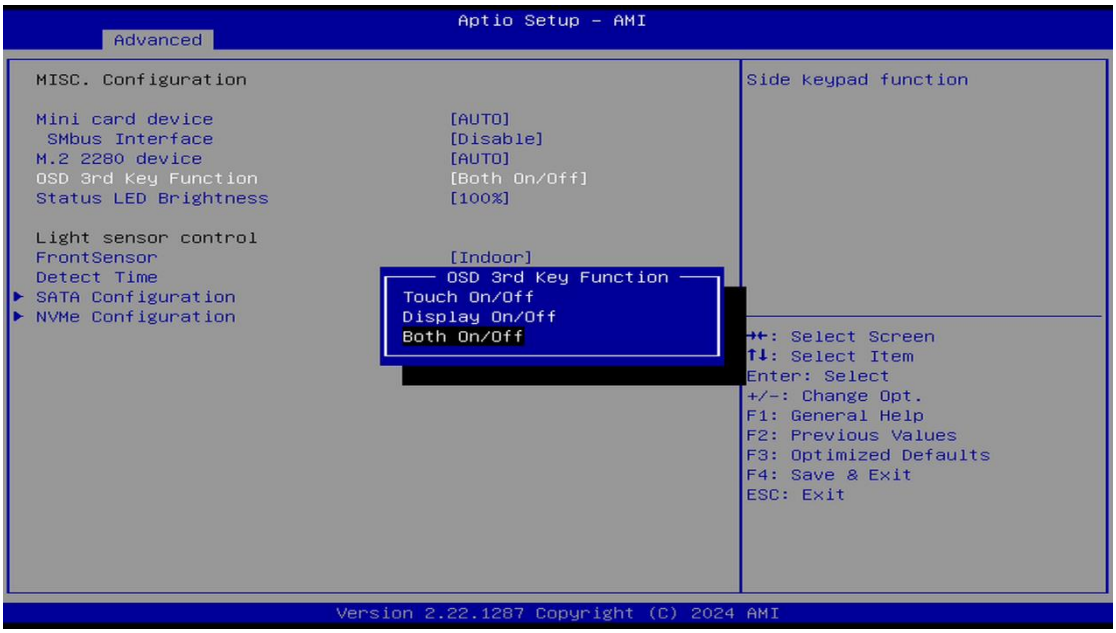
If your mini card device has SM bus or I2C interface, please select "Enable".



M.2 2280 device

AUTO: System will detect M.2 SSD type (NVMe/SATA) automatically.

SATA: Force to SATA SSD

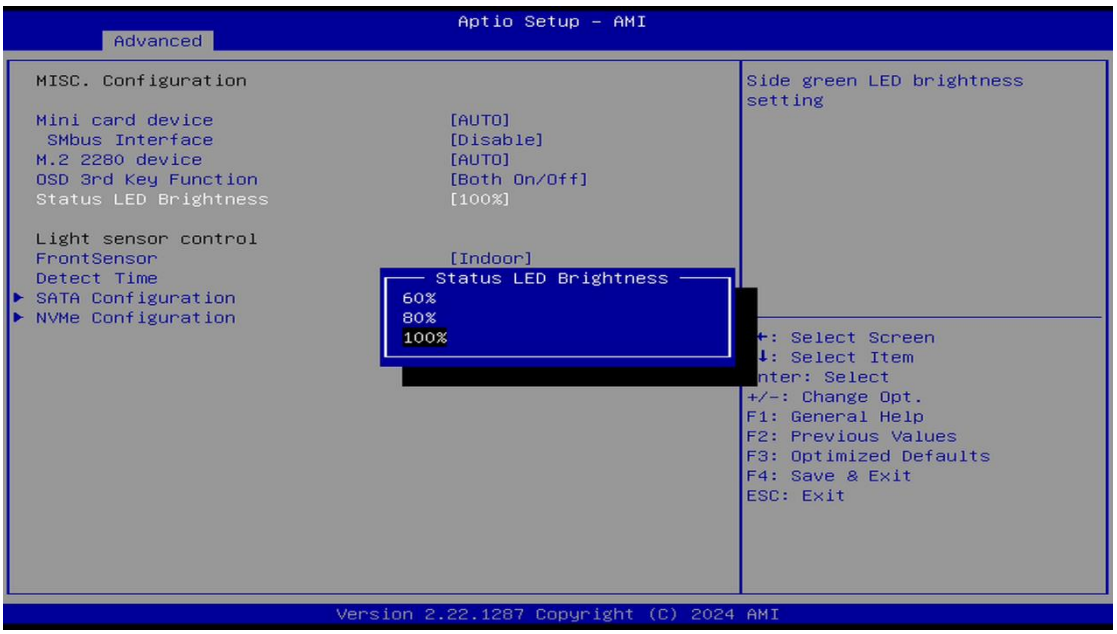


OSD 3rd Key Function

The "OSD 3rd Key Function" setting in this BIOS screen allows you to configure the function of the OSD (On-Screen Display) third key. The available options are:

- **Touch On/Off**: Toggles the touch functionality on or off.
- **Display On/Off**: Toggles the display on or off.
- **Both On/Off**: Toggles both the touch and display functionalities on or off simultaneously.

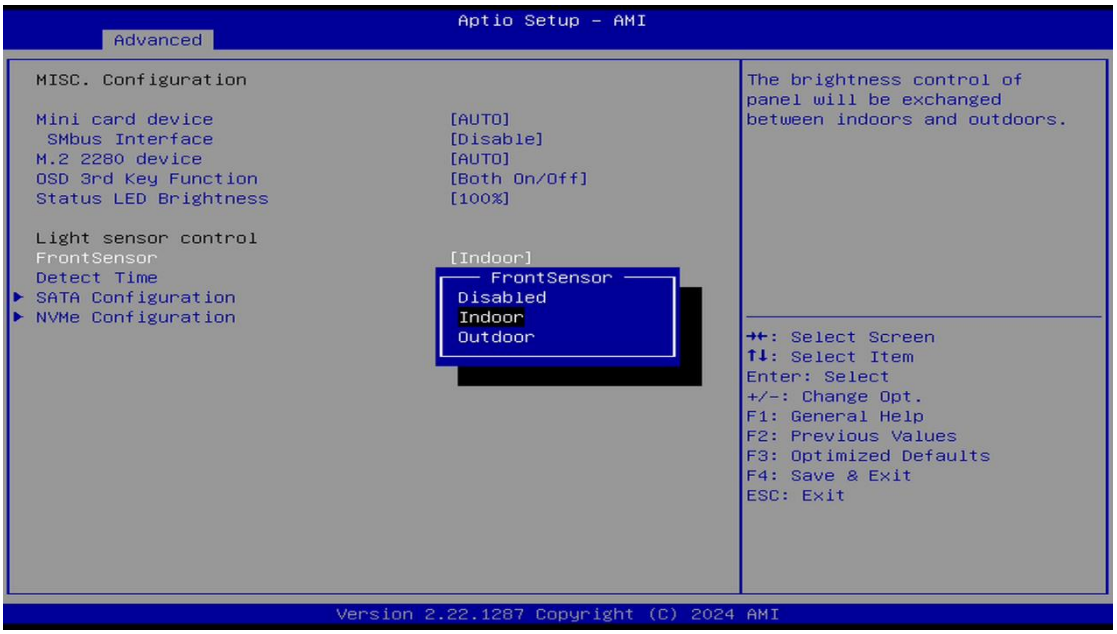
This setting provides flexibility for controlling touch and display features directly from the OSD.



Status LED Brightness

This BIOS screen shows the **Status LED Brightness** setting under **MISC. Configuration**. It allows you to adjust the brightness level of the status LED on the device. The available options are:

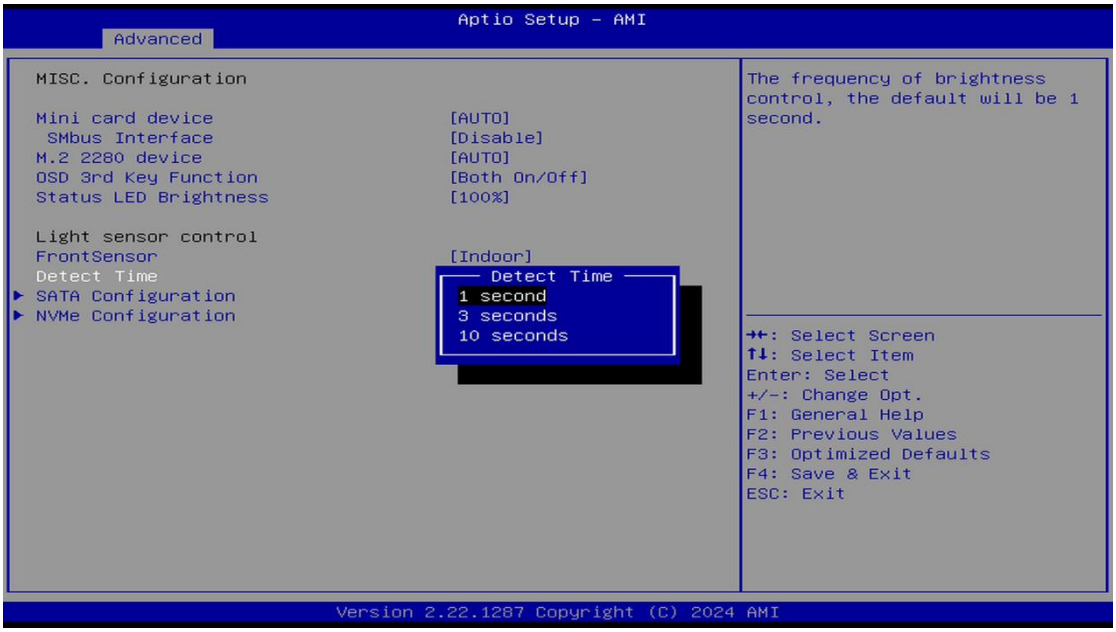
- **60%**
- **80%**
- **100%**



Light Sensor Control FrontSensor

Light sensor (optional, default: Indoor), set indoor/outdoor & detection time according to user environment, light sensor is divided into ten levels, indoor maximum brightness 1000nits, outdoor maximum brightness 1500nits

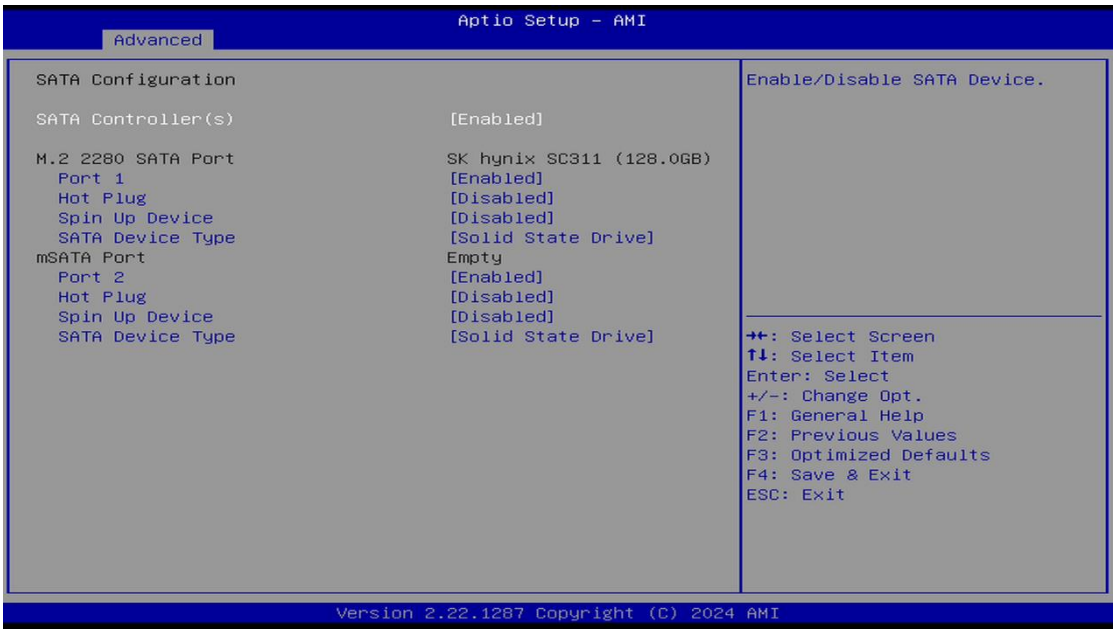
After installing the operating system graphics card driver, the backlight adjustment function can be turned on. No functionality in other environments.



Detect time

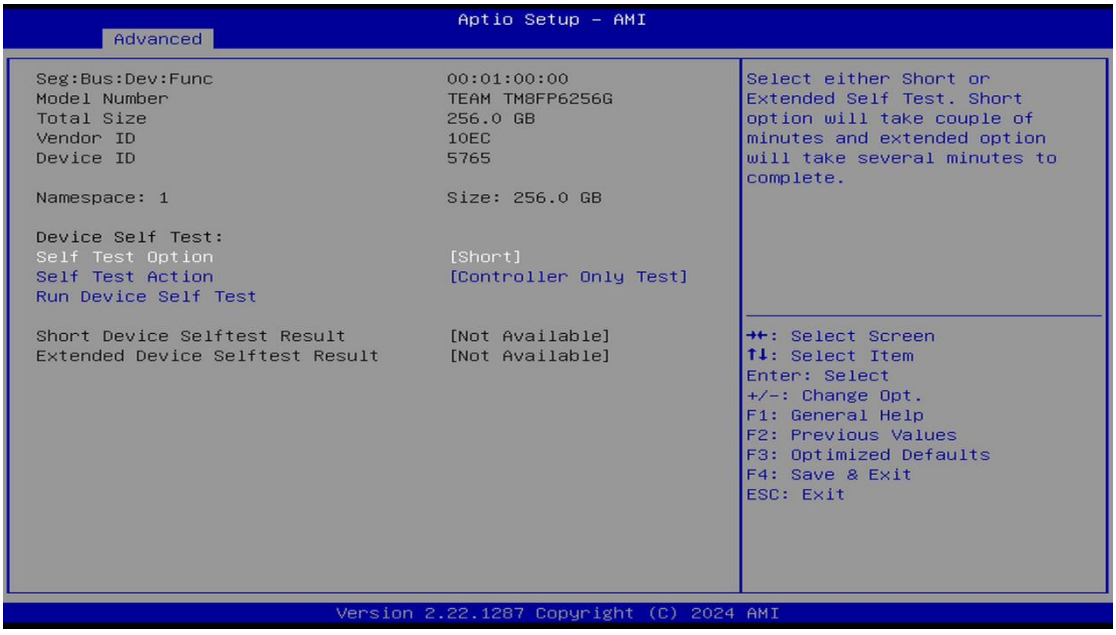
The chosen value determines how frequently the system will adjust the brightness based on ambient light conditions. For instance, setting it to 1 second will make the brightness adjust more frequently, while 10 seconds will make adjustments less frequent. The default setting is 1 second. The available options are:

- **1 second**
- **3 seconds**
- **10 seconds**



SATA Configuration

During system boot up, BIOS automatically detects the presence of SATA devices. In the SATA Configuration menu, you can see hardware currently installed in the SATA port.

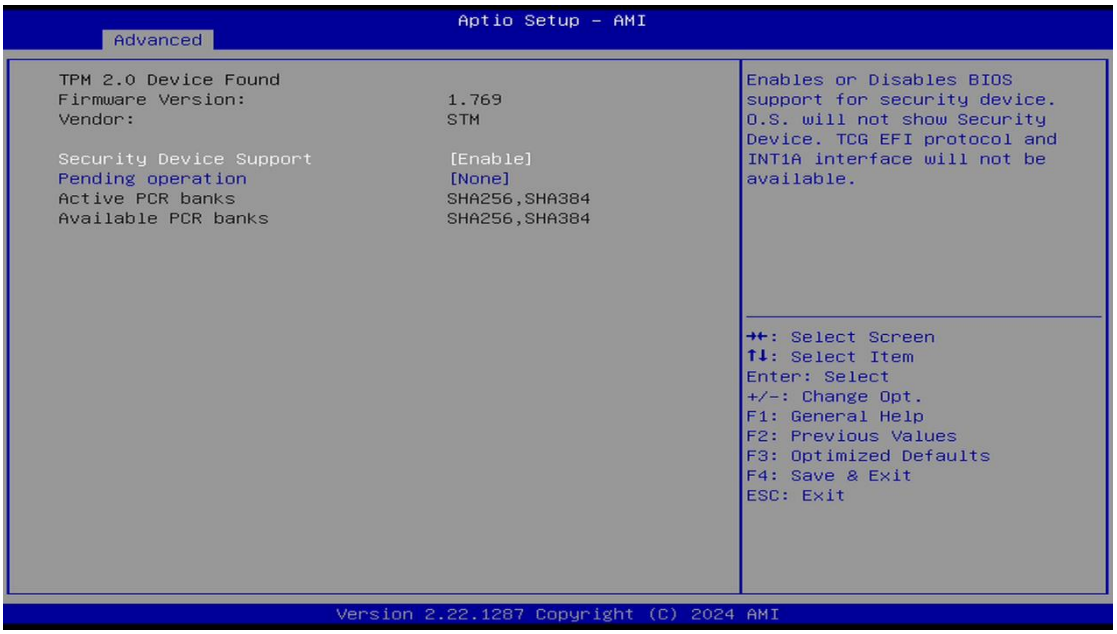


NVMe Configuration

This screen shows NVMe device information.

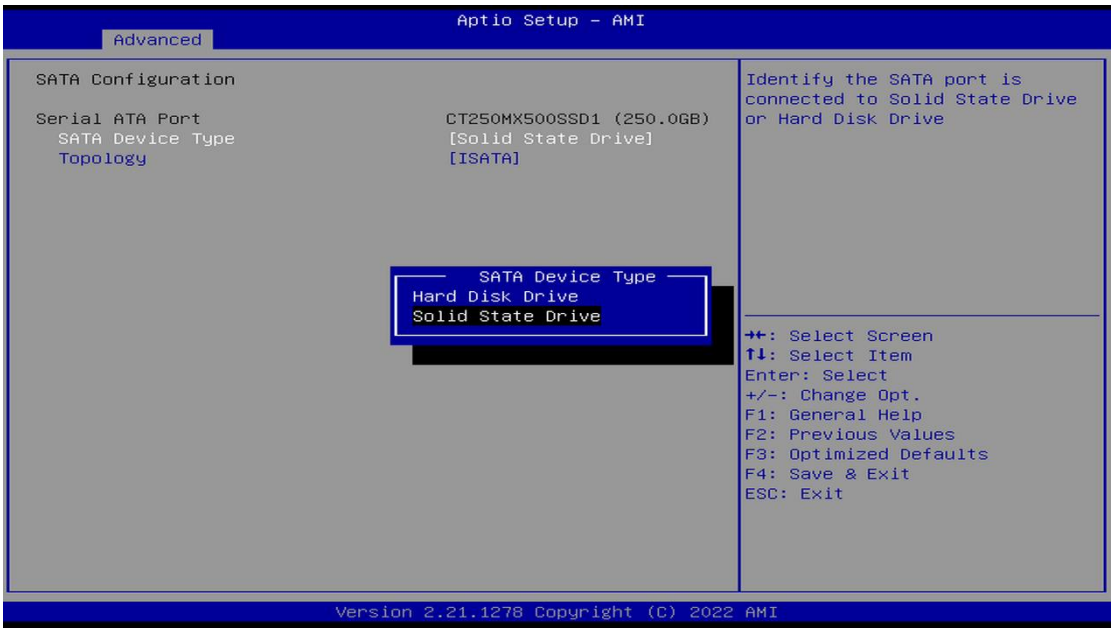
► Trusted Computing

You can use this screen for TPM (Trusted Platform Module) configuration. It also shows current TPM status information.



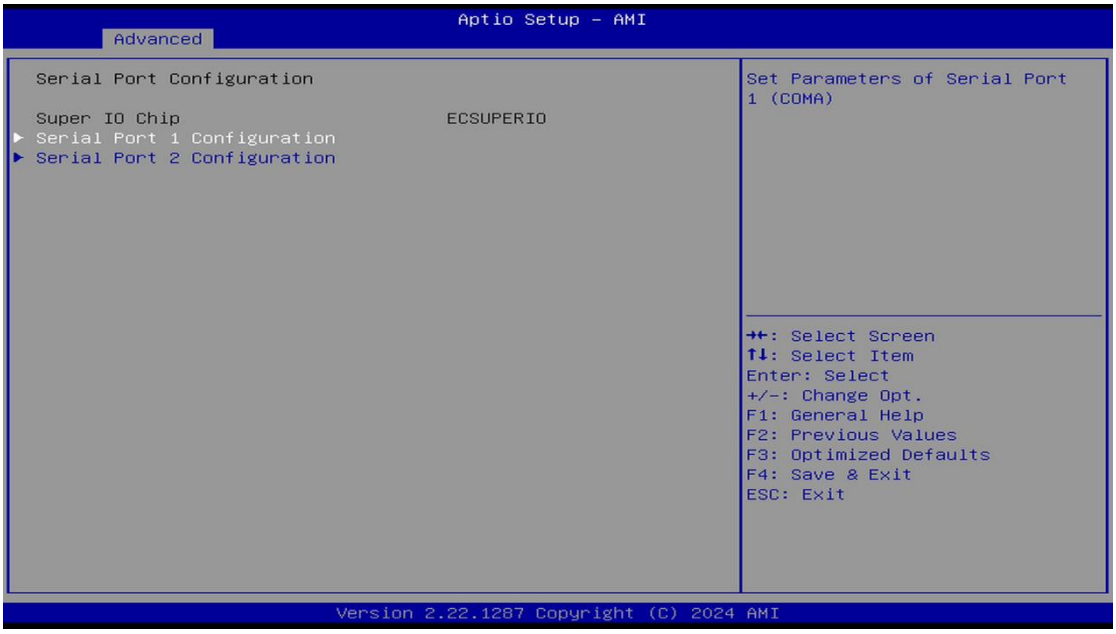
► AMT Configuration

Use this screen to configure AMT parameters

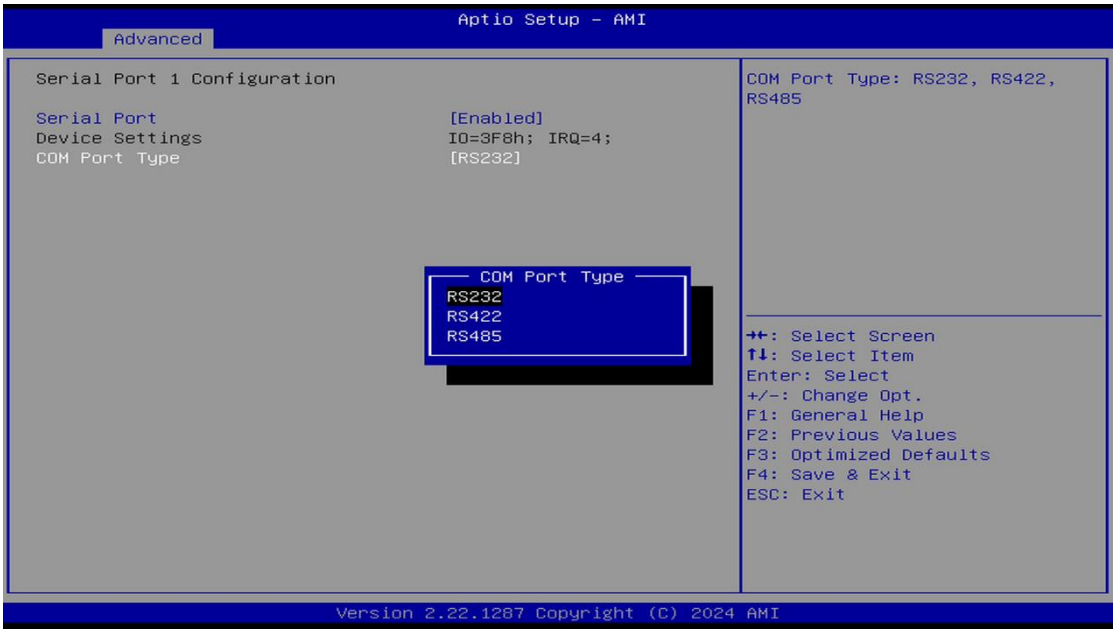


► Serial Port Configuration

You can use this screen to select options for serial port configuration and change the value of the selected option. A description of the selected item appears on the right side of the screen. For items marked with. "►" , please press for more options.



Serial Port 1 Configuration



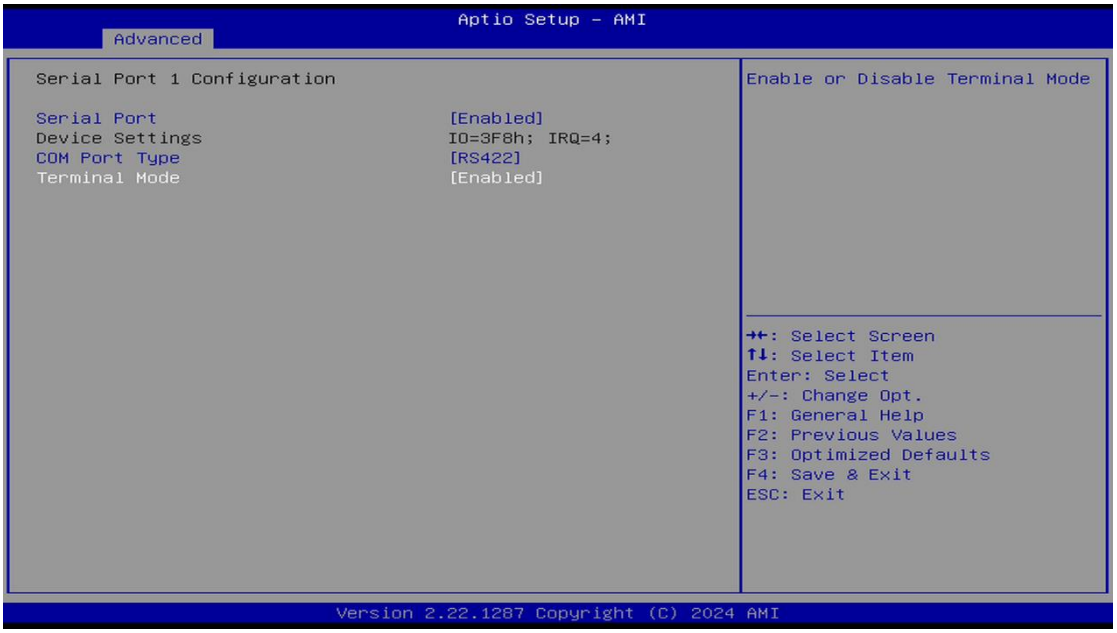
Serial Port 1

Enable or disable serial port 1. The optimal setting for base I/O address is 248h and for interrupt request address is IRQ7.

COM Port Type

Use this item to set RS-232/422/485 communication mode and default set is RS-232.

Serial Port 2 Configuration



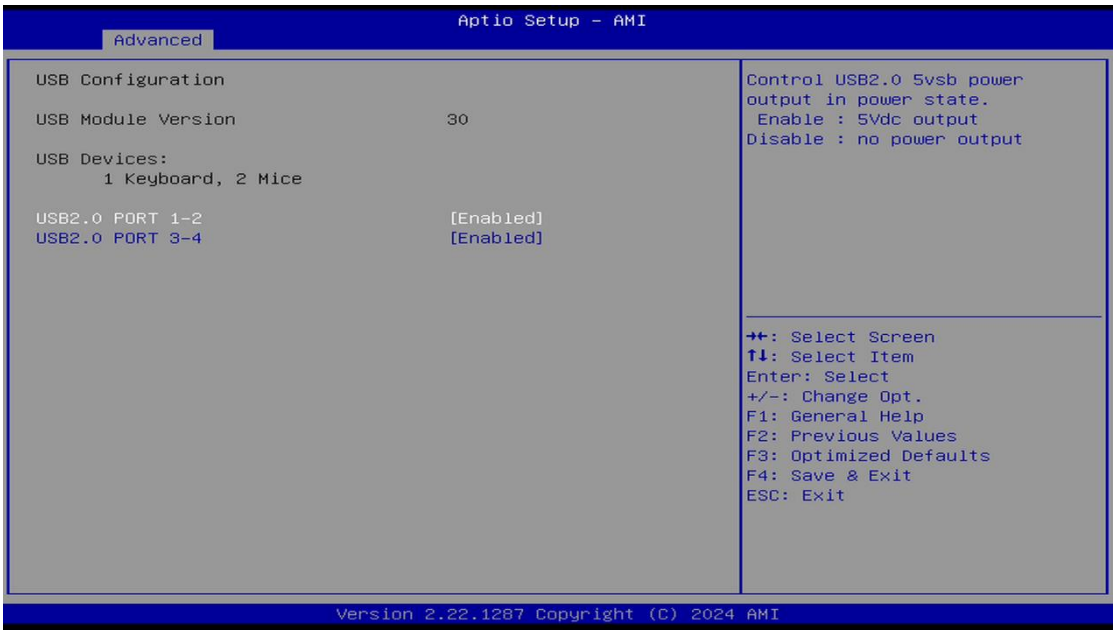
Serial Port 2

Enable or disable serial port 2. The optimal setting for base I/O address is 258h and for interrupt request address is IRQ6.

COM Port Type

Use this item to set RS-232/422/485 communication mode and default set is RS-232.

► USB Configuration

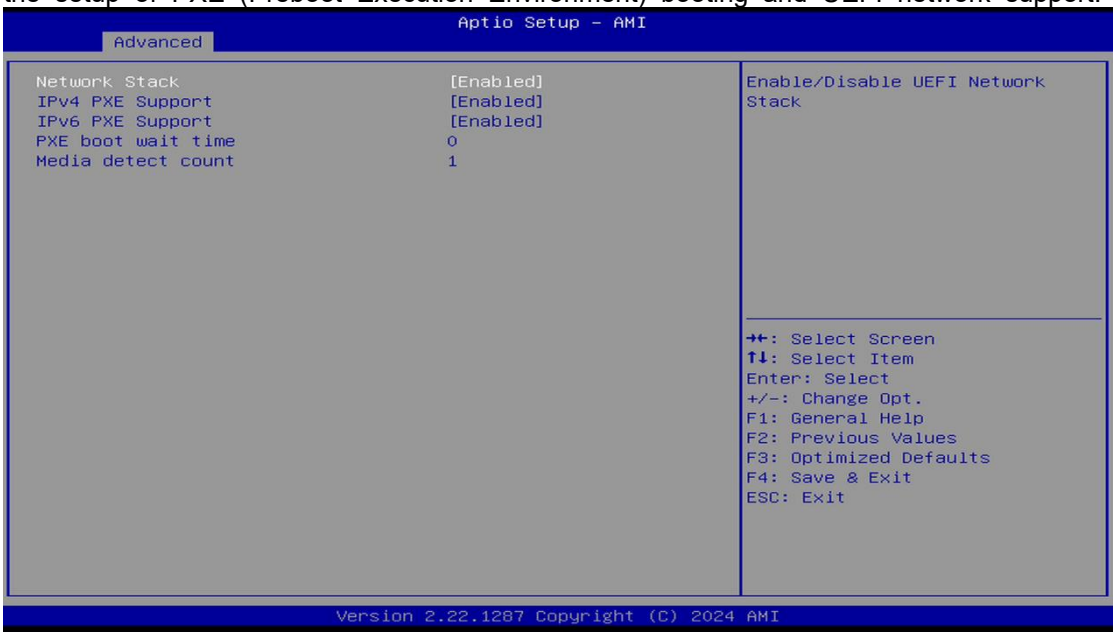


USB Devices

Display all detected USB devices

► Network Stack Configuration

The Network Stack configuration in the BIOS enables network-related boot options, allowing the setup of PXE (Preboot Execution Environment) booting and UEFI network support."



Network Stack

Enabled: The UEFI Network Stack is turned on, allowing network booting via PXE.

IPv4 PXE Support

Enabled: Allows booting from the network using the IPv4 protocol. This is typically used in PXE environments where the system can boot from an IPv4 network connection.

IPv6 PXE Support

Enabled: Allows booting from the network using the IPv6 protocol. This is useful in modern networks that rely on IPv6 addressing.

PXE Boot Wait Time

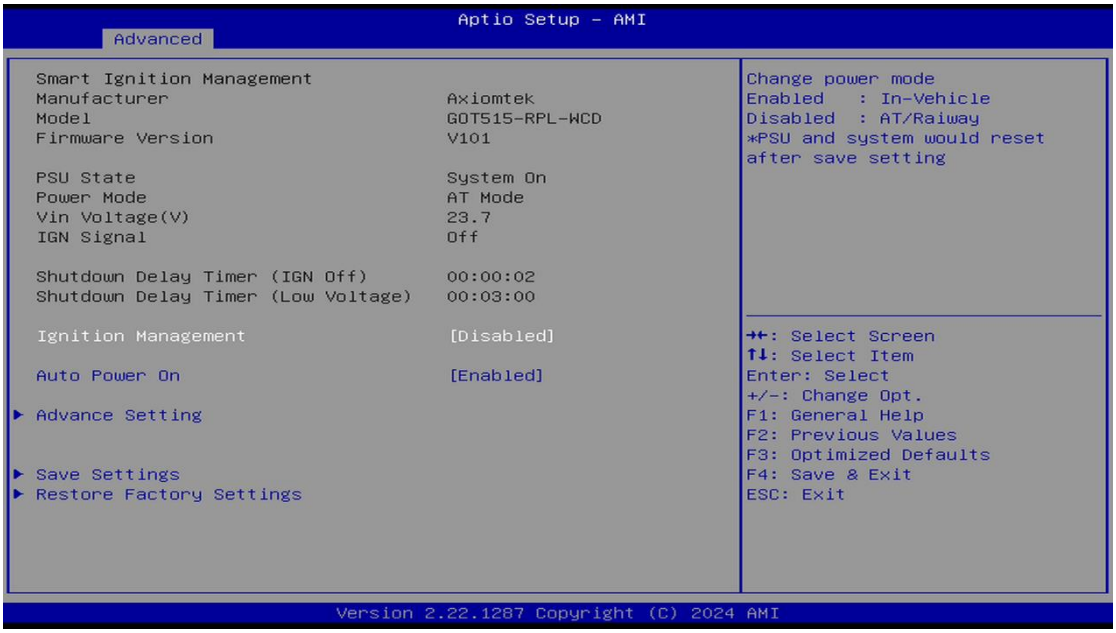
0: The system does not wait before attempting PXE boot. This setting defines how long the system waits for a PXE boot server response.

Media Detect Count

1: The system attempts to detect the boot media once before moving to the next

► Smart Ignition Management

The Smart Ignition Management settings in the BIOS allow for configurations tailored to automotive or industrial environments where power management is critical.

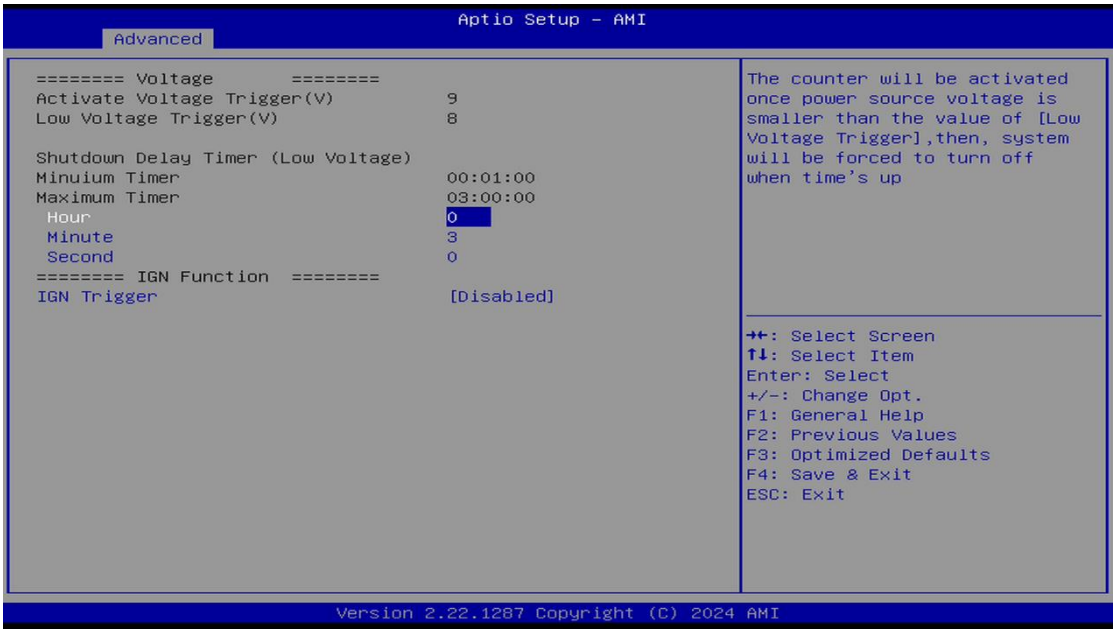


Ignition Management: Currently Disabled. Enabling this would allow for additional power control based on ignition signals, useful for in-vehicle scenarios.

If system doesn't detect IGN signal, Ignition Management cannot set to enabled.

Please connect ACC signal before setting this item.

Auto Power On: Enabled to automatically power on the system after a power loss.



This screen shows advanced settings under **Smart Ignition Management**, specifically focused on voltage triggers and shutdown delay timers. Here's a summary:

Voltage Triggers:

- **Activate Voltage Trigger (V)**: Set to **9V**. When the input voltage rises to or above this level, certain power functions may be activated.
- **Low Voltage Trigger (V)**: Set to **8V**. When the voltage drops below this threshold, it triggers a sequence that could lead to a shutdown.

Shutdown Delay Timer (Low Voltage):

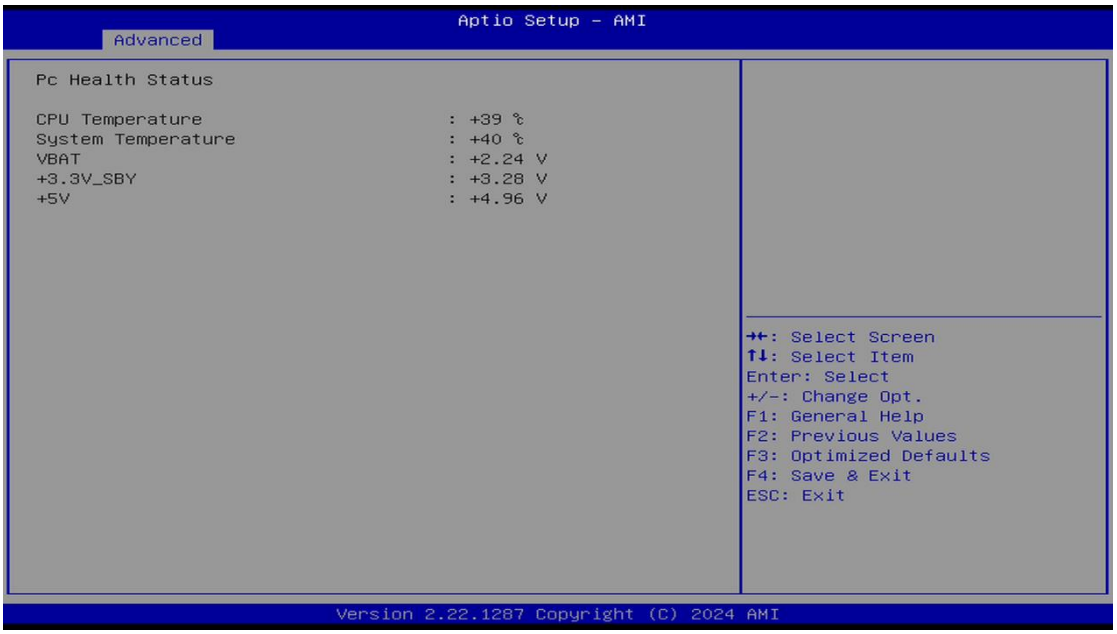
- **Minimum Timer**: Set to **1 minute**. This is the shortest delay allowed before shutdown due to low voltage.
- **Maximum Timer**: Set to **3 hours** (03:00:00), allowing up to a 3-hour delay before shutdown.
- **Current Timer Setting**: Configured to **3 minutes** (0 hours, 3 minutes, 0 seconds), meaning the system will wait 3 minutes after detecting low voltage before shutting down.

IGN Function:

- **IGN Trigger**: Currently **Disabled**. If enabled, this would allow the system to react to an ignition signal, such as powering up or shutting down based on vehicle ignition status.

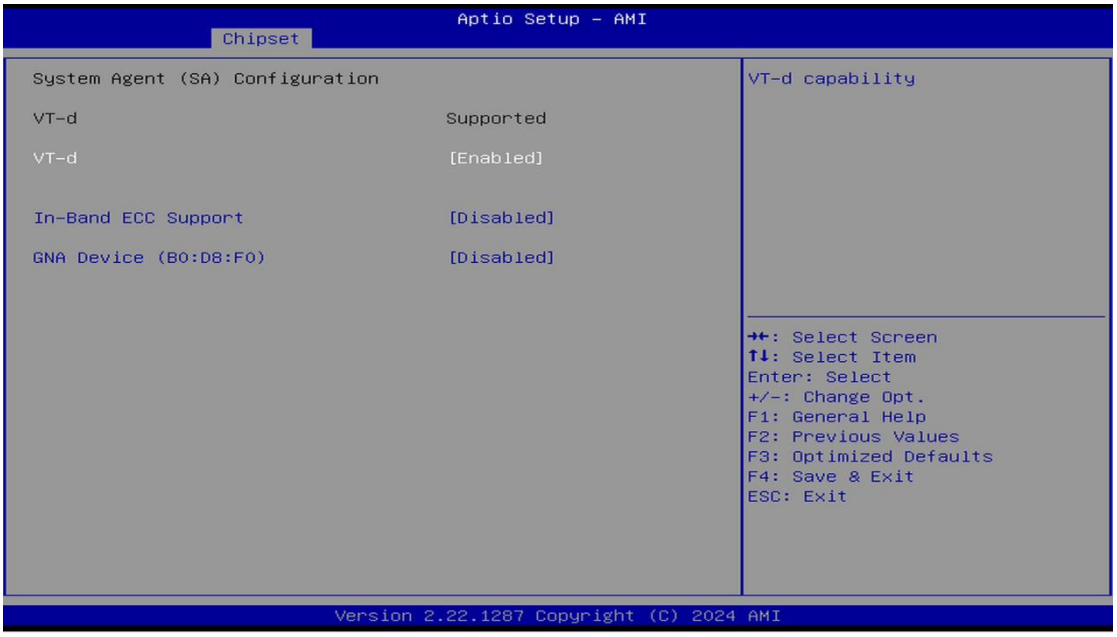
► Hardware Monitor

This screen monitors and displays the hardware health status of the system in real time, including system and CPU temperatures, and system voltages (VBAT, +3.3V_SBY, +5V).



3.5 Chipset Menu

The Chipset menu allows users to change the advanced chipset settings.
The Chipset menu here shows the System Agent (SA) Configuration options, which allow you to control various advanced chipset settings. Here are the main options available in this section:



VT-d:

Intel's Virtualization Technology for Directed I/O, which helps manage and isolate I/O devices for virtual machines. This setting is Enabled, meaning VT-d is active, allowing better resource control for virtualized environments.

In-Band ECC Support:

ECC (Error-Correcting Code) memory can detect and correct memory corruption. This option is Disabled, meaning ECC support is not active for this configuration.

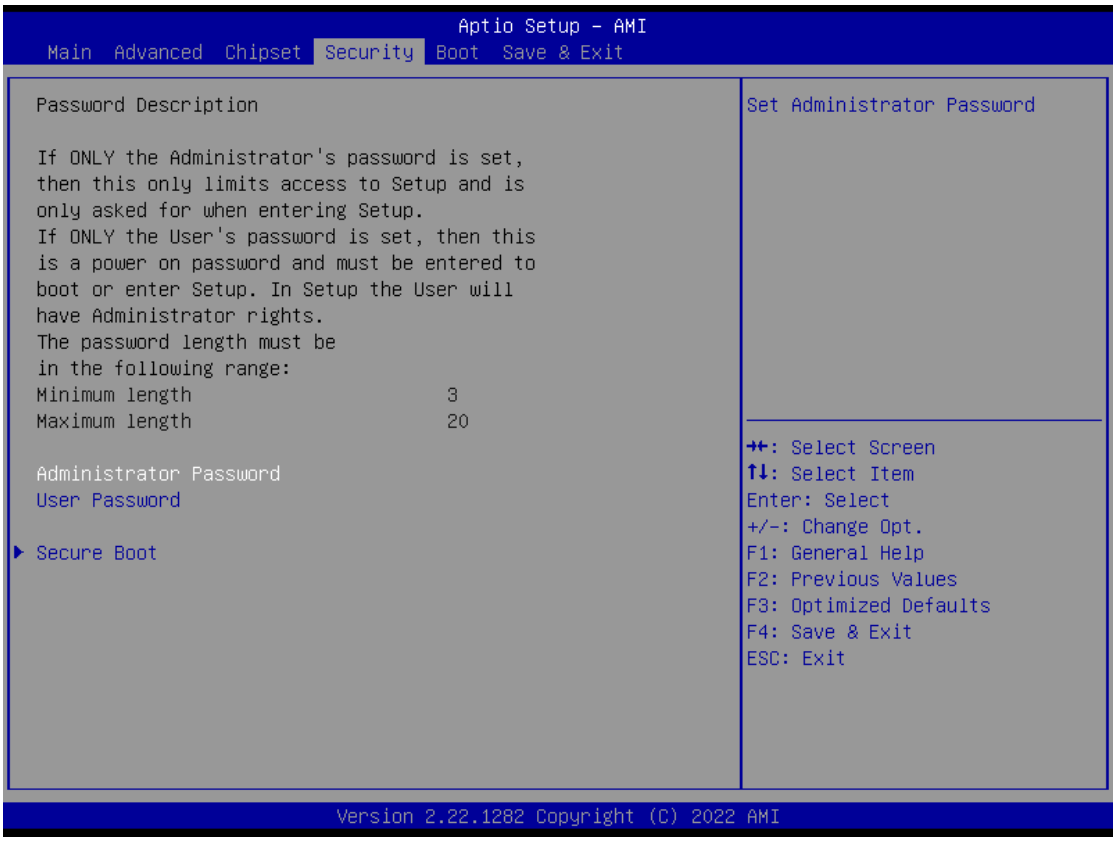
GNA Device (B0:D8):

This likely refers to Intel's GNA (Gaussian & Neural Accelerator) for low-power AI workloads, such as voice or noise suppression. It is currently Disabled.

3.6 Security Menu

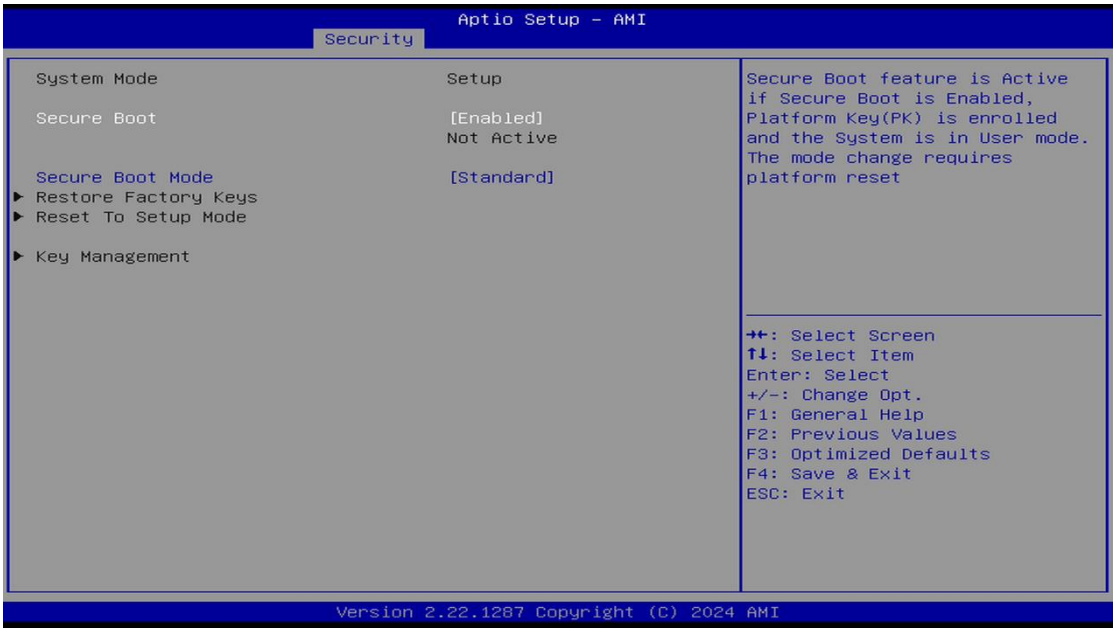
The Security menu allows users to change the security settings for the system.

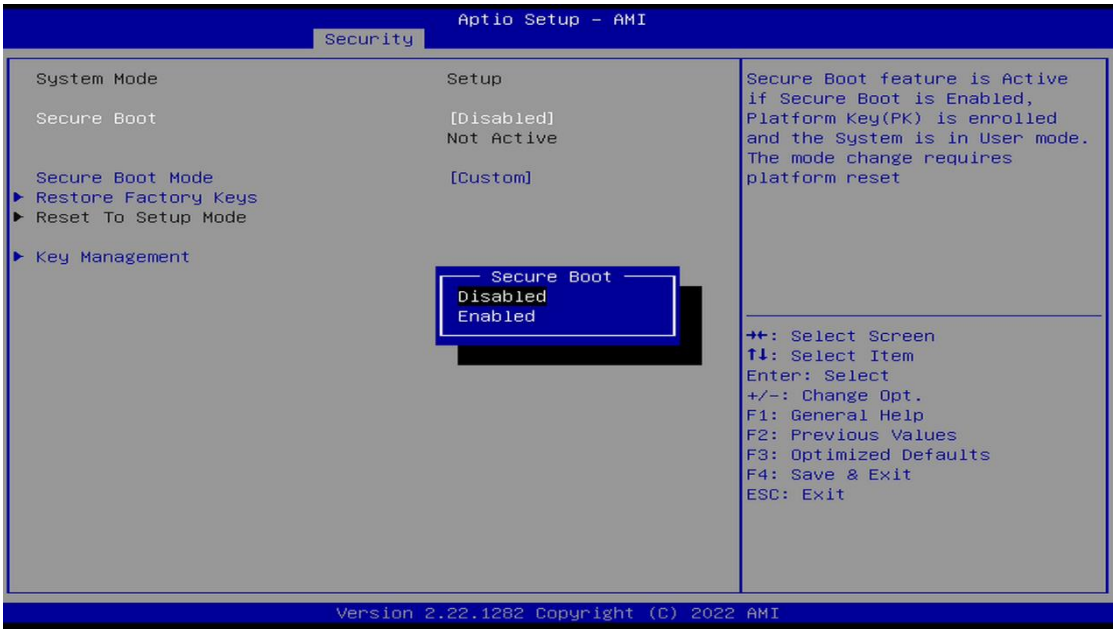
- **Administrator Password**
  Set administrator password.
- **User Password**
  Set user password.
- **Secure Boot**
  Setting Secure boot



Secure Boot

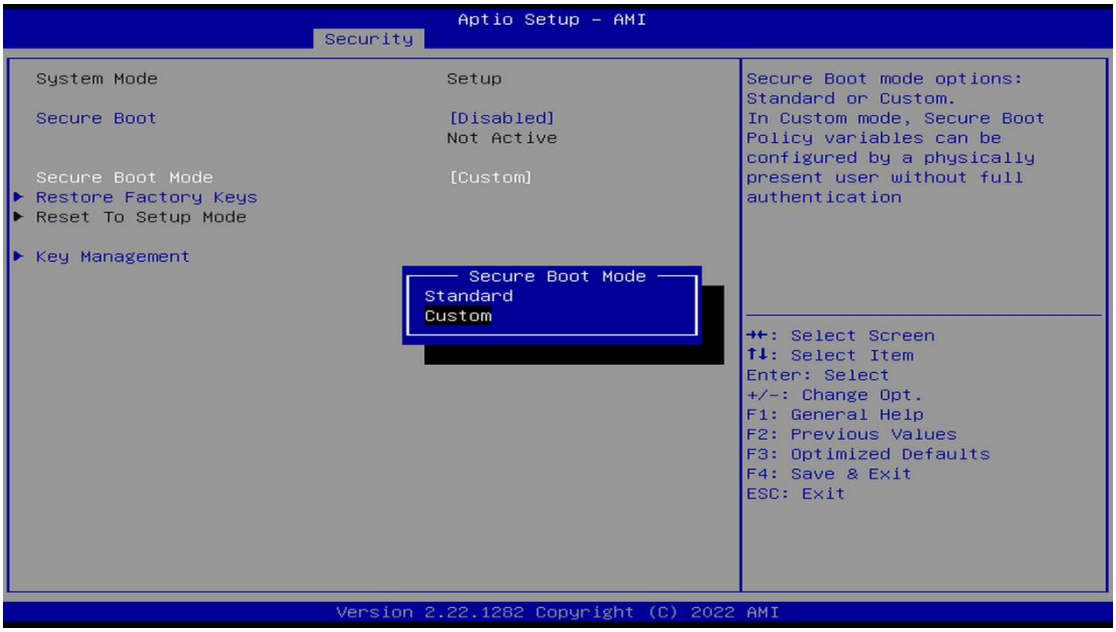
Secure Boot feature is Active if Secure Boot is Enabled or Disable





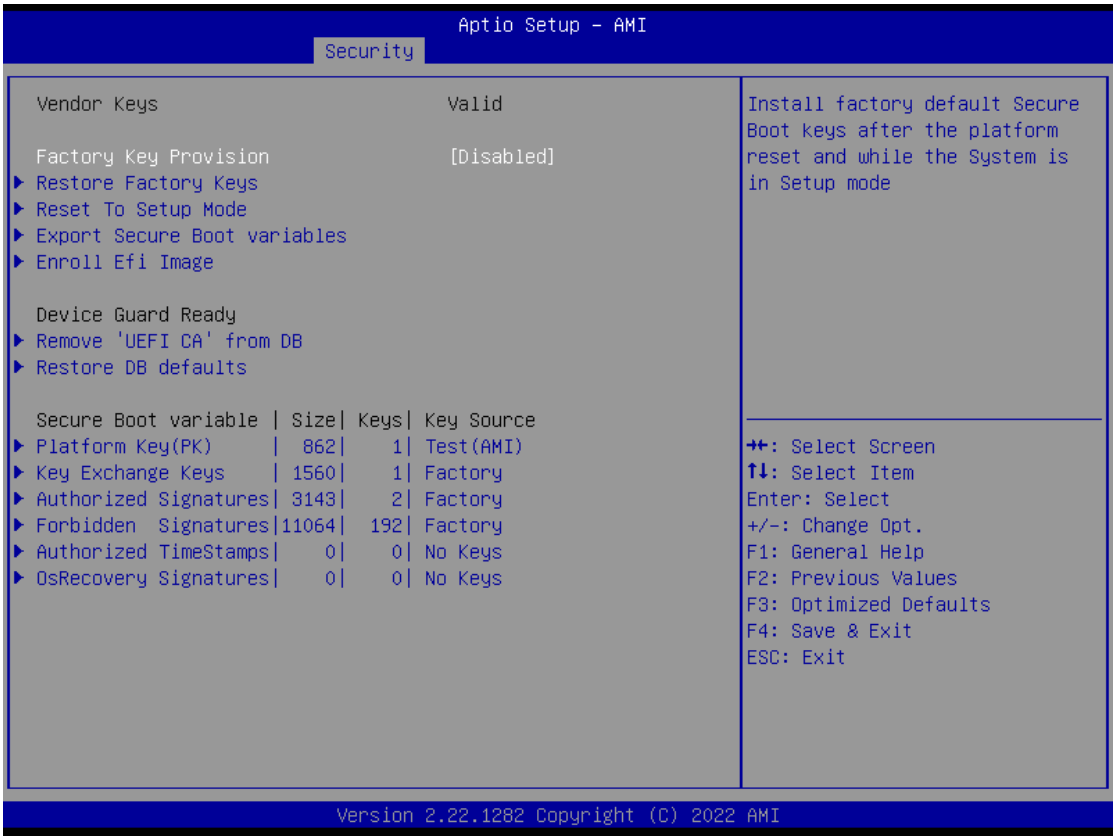
Secure Boot Mode

Secure Boot mode options Standard or Custom



Key management

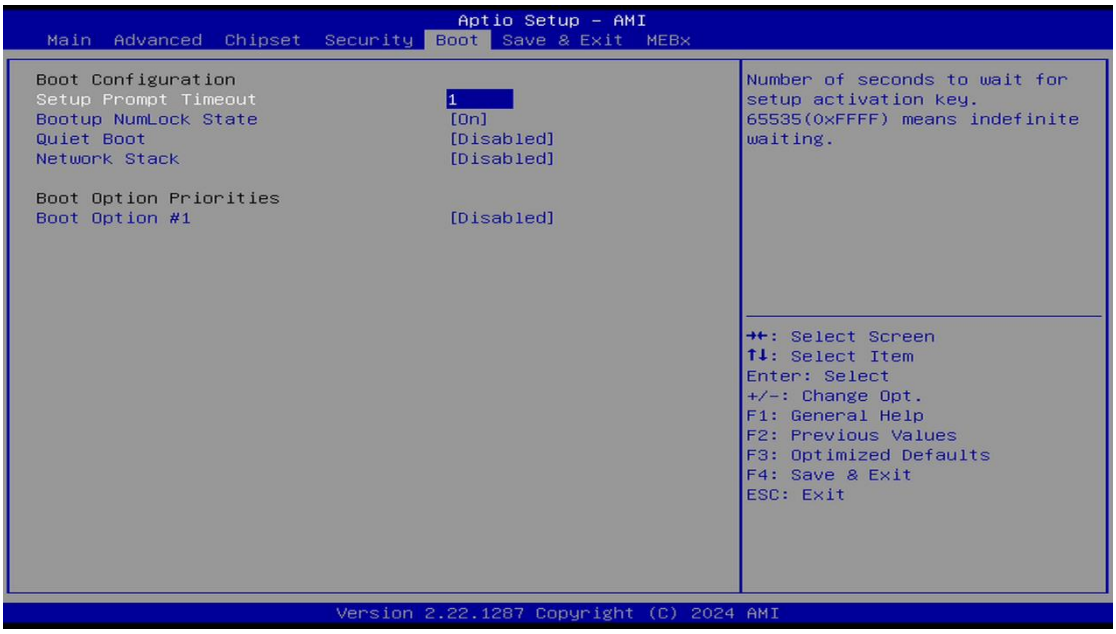
Install factory default Secure Boot key the platform rest and while the System is in Setup mode.

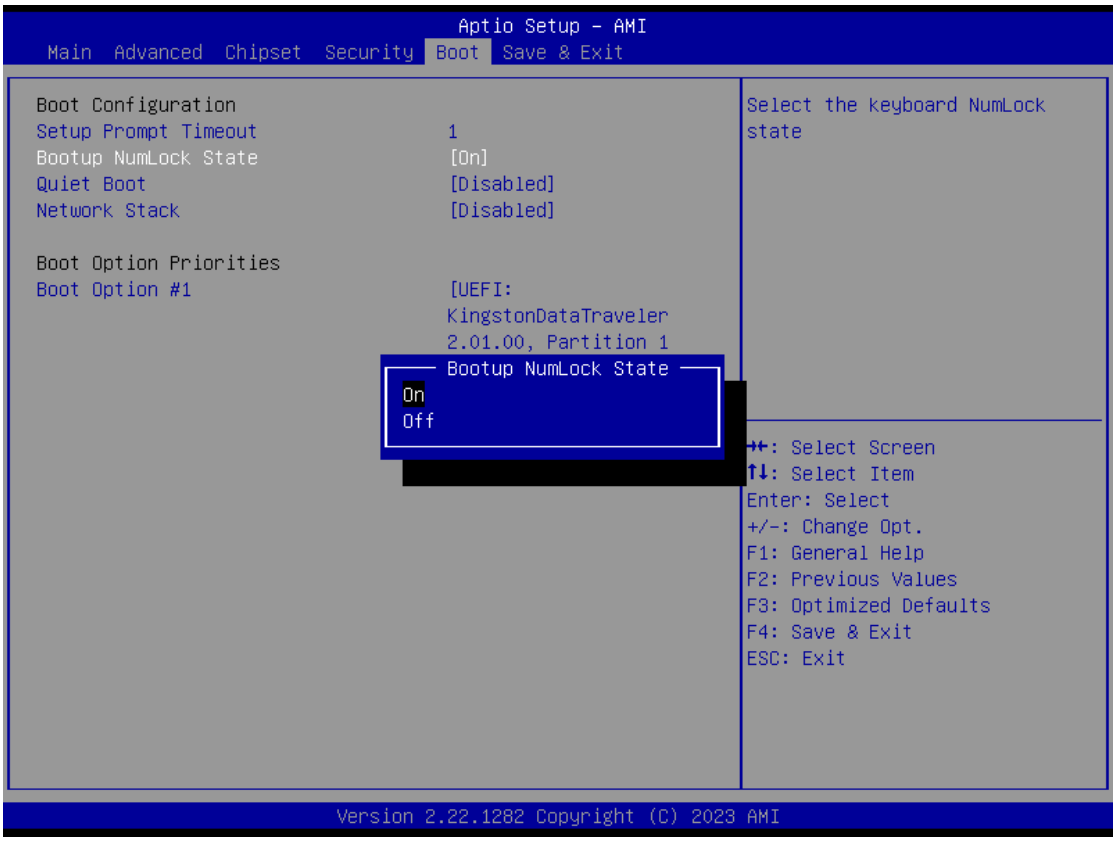


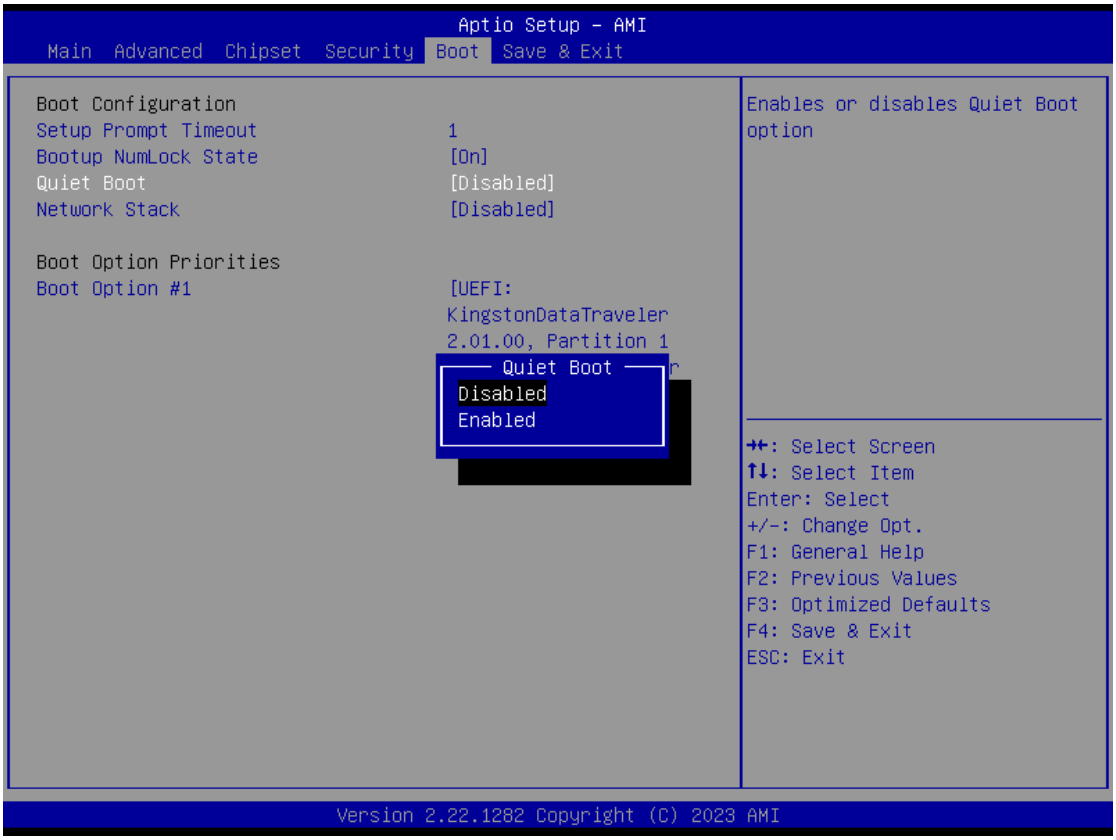
3.7 Boot Menu

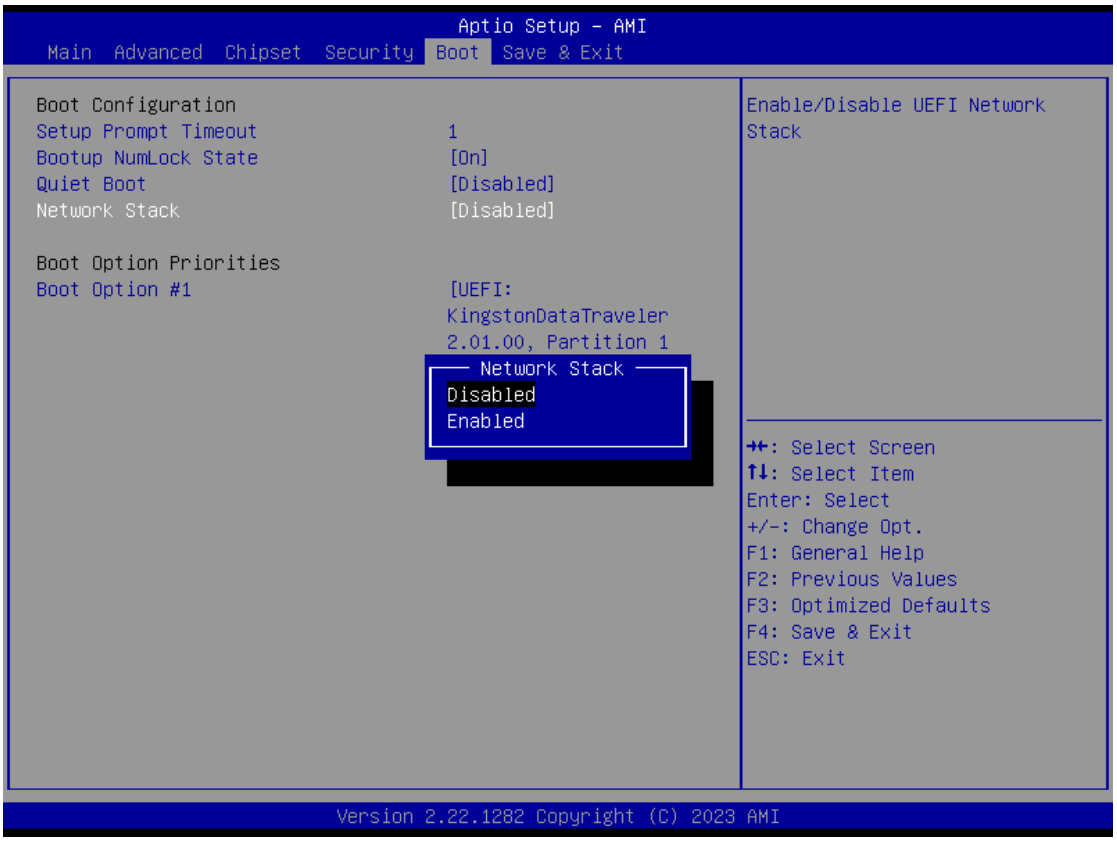
- **Setup Prompt Timeout**
  Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
- **Bootup NumLock State**
  Use this item to select the power-on state for the keyboard NumLock.
- **Quiet Boot**
  Select to display either POST output messages or a splash screen during boot-up.
- **Network Stack**
  Enable or Disable UEFI Network Stack.

The Boot menu allows users to change boot options of the system.



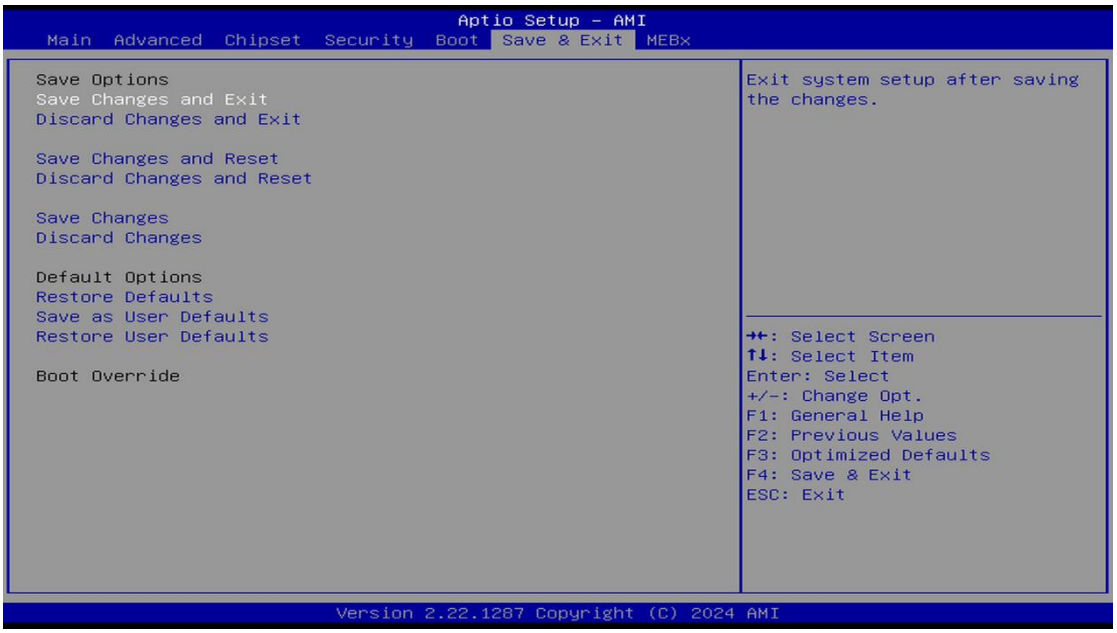

Aptio Setup – AMI
Main Advanced Chipset Security Boot Save & Exit
Boot Configuration
Setup Prompt Timeout 1
Bootup NumLock State [On]
Quiet Boot [Disabled]
Network Stack [Disabled]
Boot Option Priorities
Boot Option #1 [UEFI: KingstonDataTraveler 2.01.00, Partition 1
Bootup NumLock State
On
Off
Select the keyboard NumLock state
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.22.1282 Copyright (C) 2023 AMI


Aptio Setup – AMI
Main Advanced Chipset Security Boot Save & Exit
Boot Configuration
Setup Prompt Timeout 1
Bootup NumLock State [On]
Quiet Boot [Disabled]
Network Stack [Disabled]
Boot Option Priorities
Boot Option #1 [UEFI: KingstonDataTraveler 2.01.00, Partition 1
Quiet Boot
Disabled
Enabled
Enables or disables Quiet Boot option
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.22.1282 Copyright (C) 2023 AMI


Aptio Setup – AMI
Main Advanced Chipset Security Boot Save & Exit
Boot Configuration
Setup Prompt Timeout 1
Bootup NumLock State [On]
Quiet Boot [Disabled]
Network Stack [Disabled]
Boot Option Priorities
Boot Option #1 [UEFI: KingstonDataTraveler 2.01.00, Partition 1
Network Stack
Disabled
Enabled
Enable/Disable UEFI Network Stack
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.22.1282 Copyright (C) 2023 AMI

3.8 Save & Exit Menu

The Save & Exit menu allows users to load your system configuration with optimal or fail-safe default values.



Save Changes and Exit
When you have completed the system configuration changes, select this option to leave Setup and return to Main Menu. Select Save Changes and Exit from the Save & Exit menu and press <Enter>. Select Yes to save changes and exit.

Discard Changes and Exit
Select this option to quit Setup without making any permanent changes to the system configuration and return to Main Menu. Select Discard Changes and Exit from the Save & Exit menu and press <Enter>. Select Yes to discard changes and exit.

Save Changes and Reset
When you have completed the system configuration changes, select this option to leave Setup and reboot the computer so the new system configuration parameters can take effect. Select Save Changes and Reset from the Save & Exit menu and press <Enter>. Select Yes to save changes and reset.

Discard Changes and Reset
Select this option to quit Setup without making any permanent changes to the system configuration and reboot the computer. Select Discard Changes and Reset from the Save & Exit menu and press <Enter>. Select Yes to discard changes and reset.

Save Changes
When you have completed the system configuration changes, select this option to save changes. Select Save Changes from the Save & Exit menu and press <Enter>. Select Yes to save changes.

Restore Defaults
Restore or Load Default values for all the setup options.

Discard Changes
Select this option to quit Setup without making any permanent changes to the system configuration. Select Discard Changes from the Save & Exit menu and press <Enter>. Select Yes to discard changes.

Restore Defaults
It automatically sets all Setup options to a complete set of default settings when you select this option. Select Restore Defaults from the Save & Exit menu and press <Enter>.

Save as User Defaults
Select this option to save system configuration changes done so far as User Defaults. Select Save as User Defaults from the Save & Exit menu and press <Enter>.

Restore User Defaults
It automatically sets all Setup options to a complete set of User Defaults when you select this option. Select Restore User Defaults from the Save & Exit menu and press <Enter>.

Boot Override
Select a drive to immediately boot that device regardless of the current boot order.

SECTION 4
DRIVER AND INSTALLATION

4.1 Operating System

The GOT515-RPL-WCD is compatible with operating systems Windows 10/11 and Windows 10/11 IoT Enterprise. To facilitate the installation of system drivers, please carefully read the instructions in this section before any of such installation.

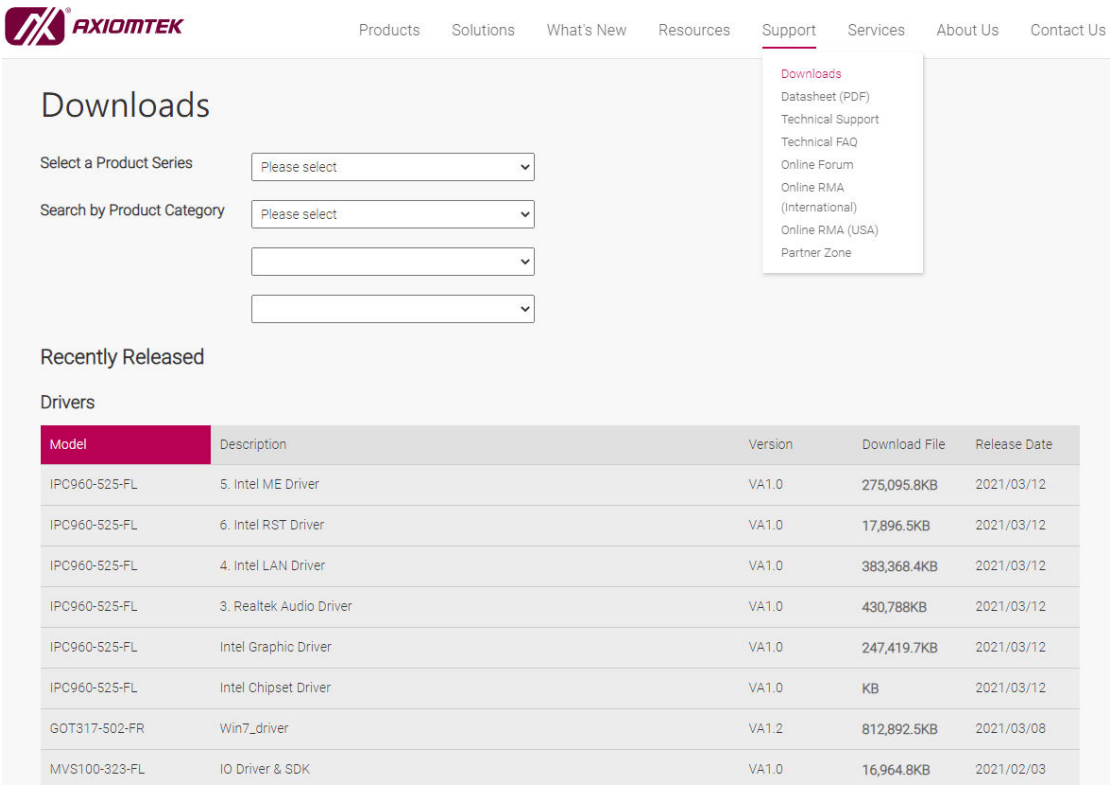
4.1.1 Driver download

1. Please download the following GOT515-RPL-WCD driver from Axiomtek official website

Support->Downloads->select a product series->Search by Product Category

2. Please follow below Steps to install driver in GOT515-RPL-WCD.

- Step 1. Chipset
- Step 2. LAN
- Step 3. ME
- Step 4. Serial IO
- Step 5. Graphics



Model	Description	Version	Download File	Release Date
IPC960-525-FL	5. Intel ME Driver	VA1.0	275,095.8KB	2021/03/12
IPC960-525-FL	6. Intel RST Driver	VA1.0	17,896.5KB	2021/03/12
IPC960-525-FL	4. Intel LAN Driver	VA1.0	383,368.4KB	2021/03/12
IPC960-525-FL	3. Realtek Audio Driver	VA1.0	430,788KB	2021/03/12
IPC960-525-FL	Intel Graphic Driver	VA1.0	247,419.7KB	2021/03/12
IPC960-525-FL	Intel Chipset Driver	VA1.0	KB	2021/03/12
GOT317-502-FR	Win7_driver	VA1.2	812,892.5KB	2021/03/08
MVS100-323-FL	IO Driver & SDK	VA1.0	16,964.8KB	2021/02/03

4.2 Touch Screen

The GOT515-RPL-WCD is designed based on the technology of projected capacitive multi-touch screen of which specifications are listed below

4.2.1 Specification

Touch Screen	**10-point Projected capacitive multi-touch**
Communications	**USB interface**
Transparency	**> 85%**
Input Method	**Finger or Cap.Stylus**

4.3 Embedded O.S.

The GOT515-RPL-WCD provides the Windows® 10 Embedded. The O.S. is supported devices which are listed below.

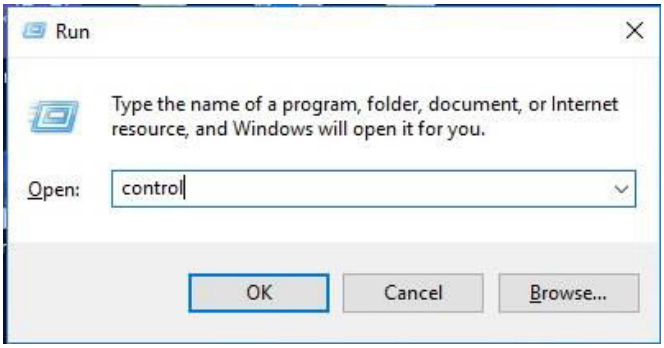
WES 10

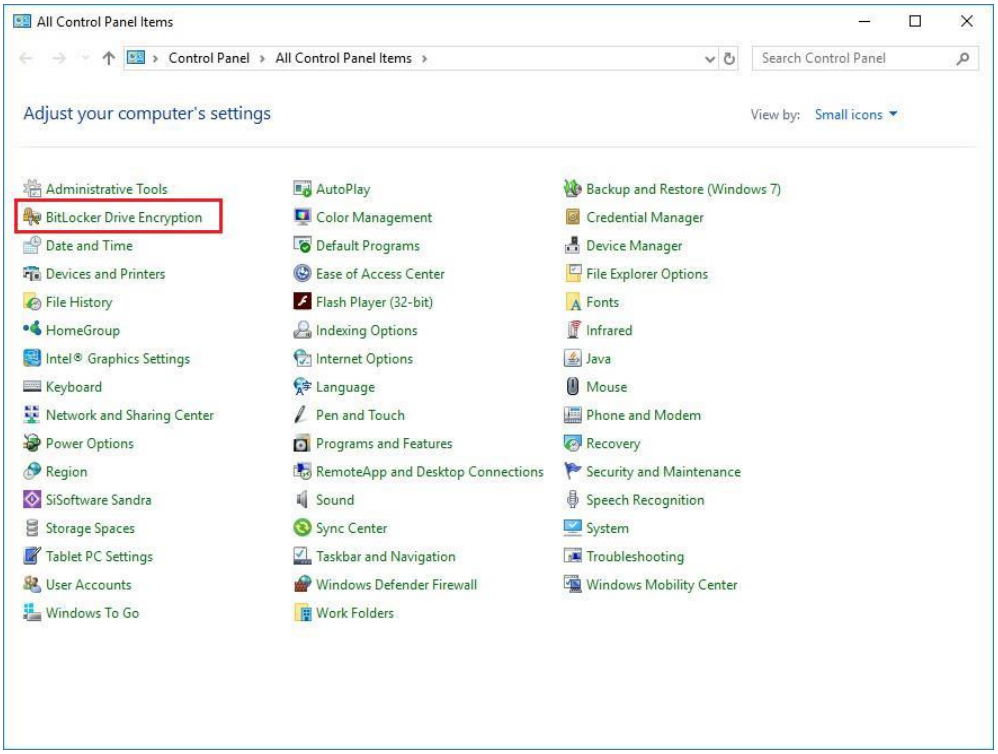
Here are supported onboard devices:

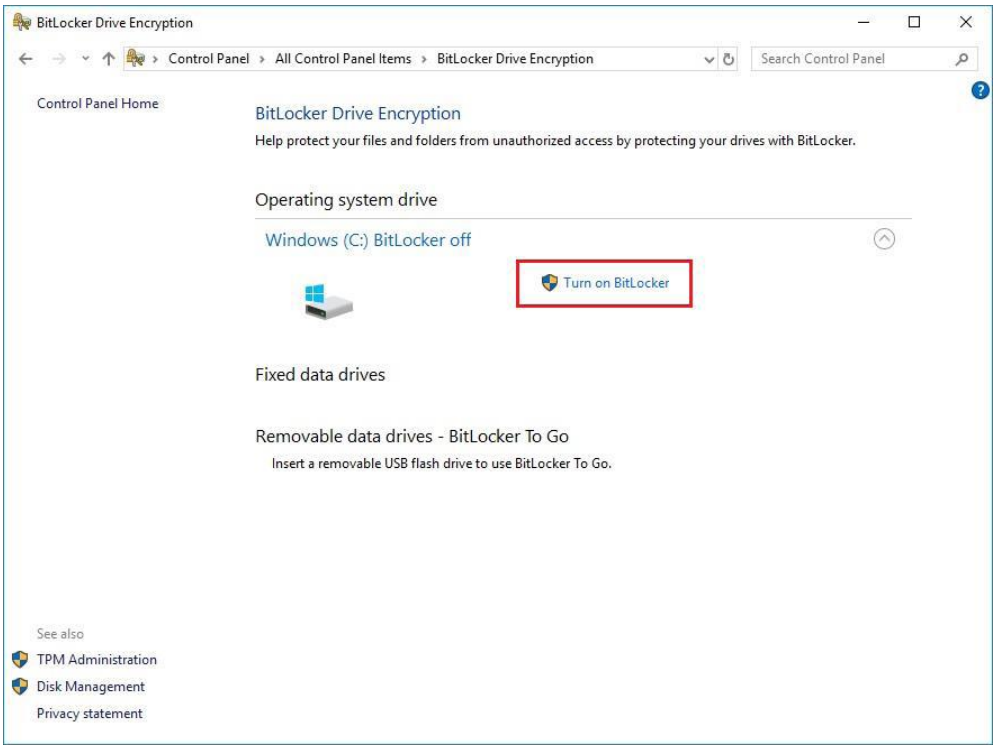
- Onboard Multi I/O
- SATA HDD
- USB
- LCD display
- 10/100/1000 base-T Ethernet
- mSATA
- Touch Screen

APPENDIX A
TPM BITLOCKER SETTINGS

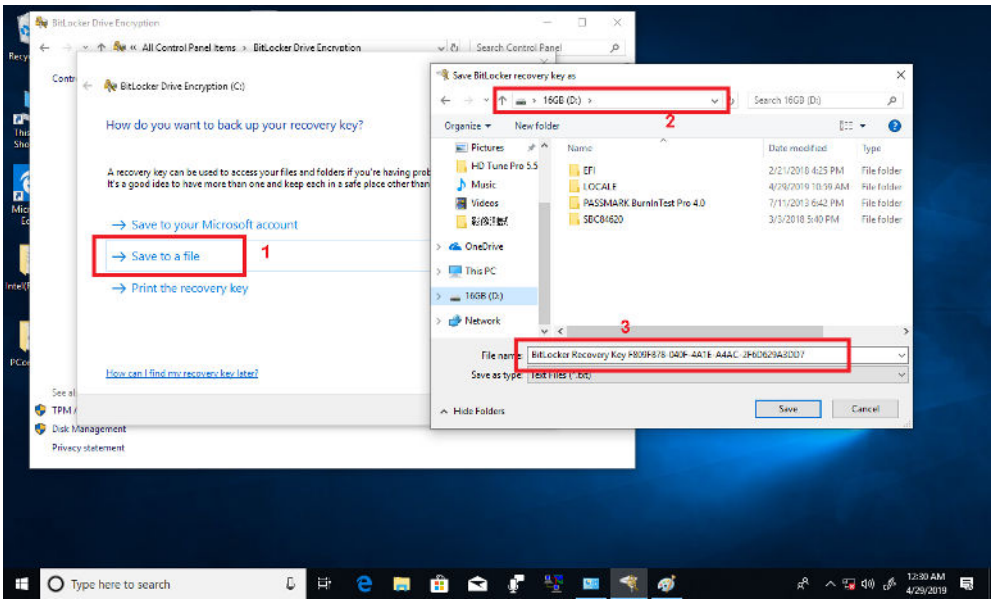
1. Set up BitLocker Drive Encryption main storage. Press <Win + R> and type "Control Panel", and then select BitLocker Drive Encryption.



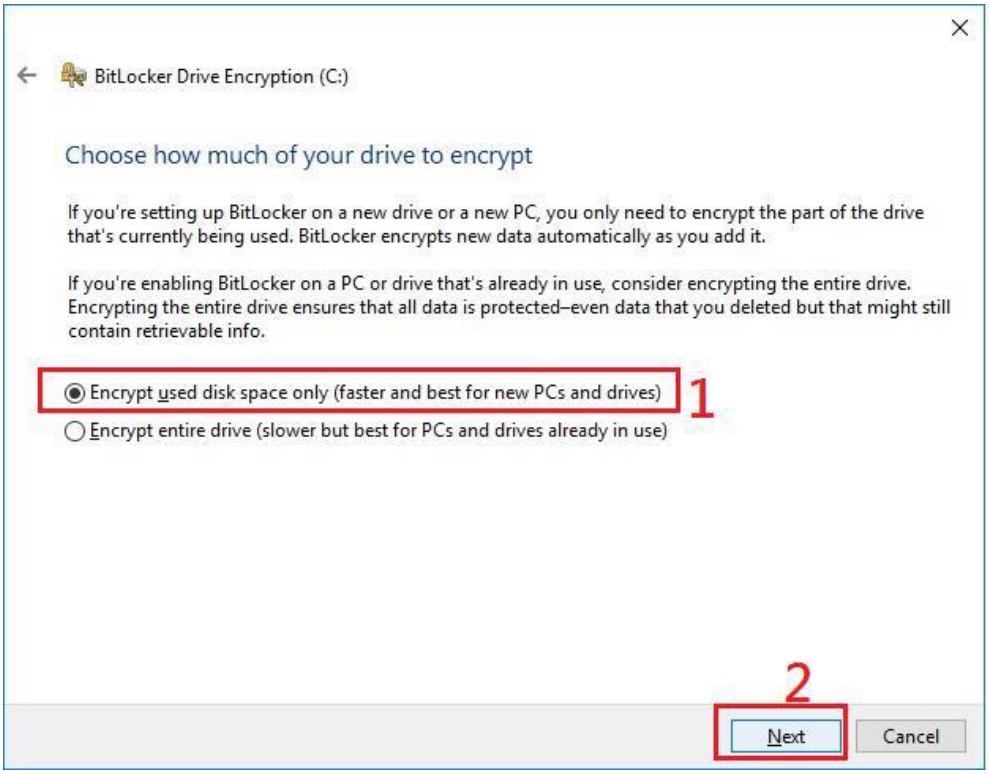


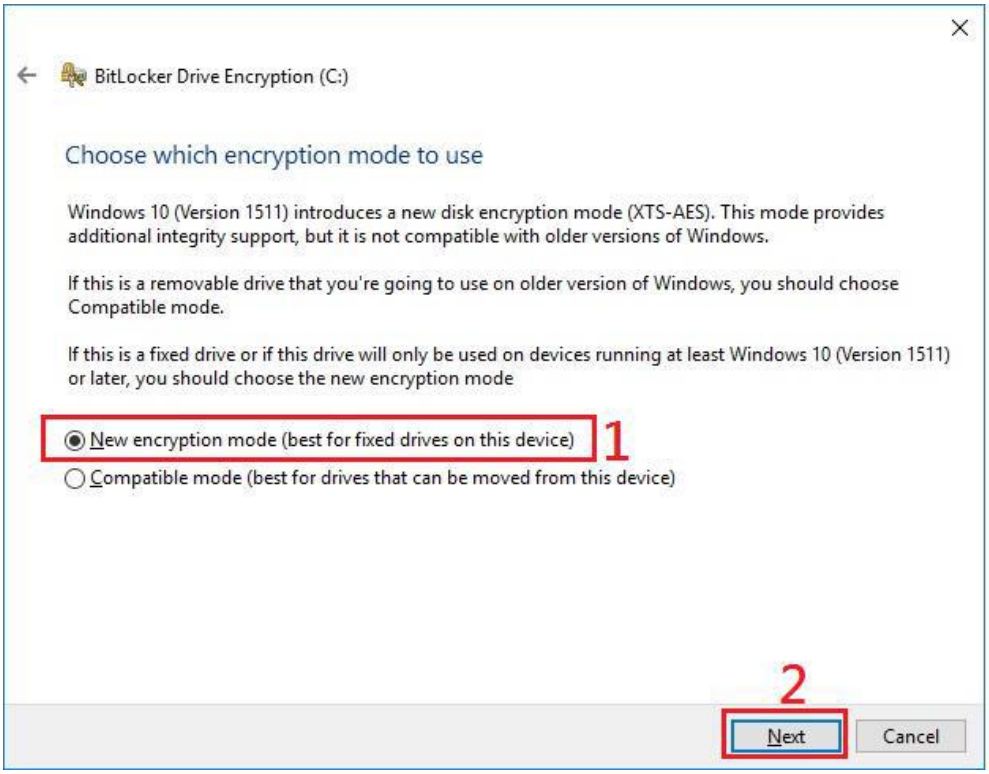


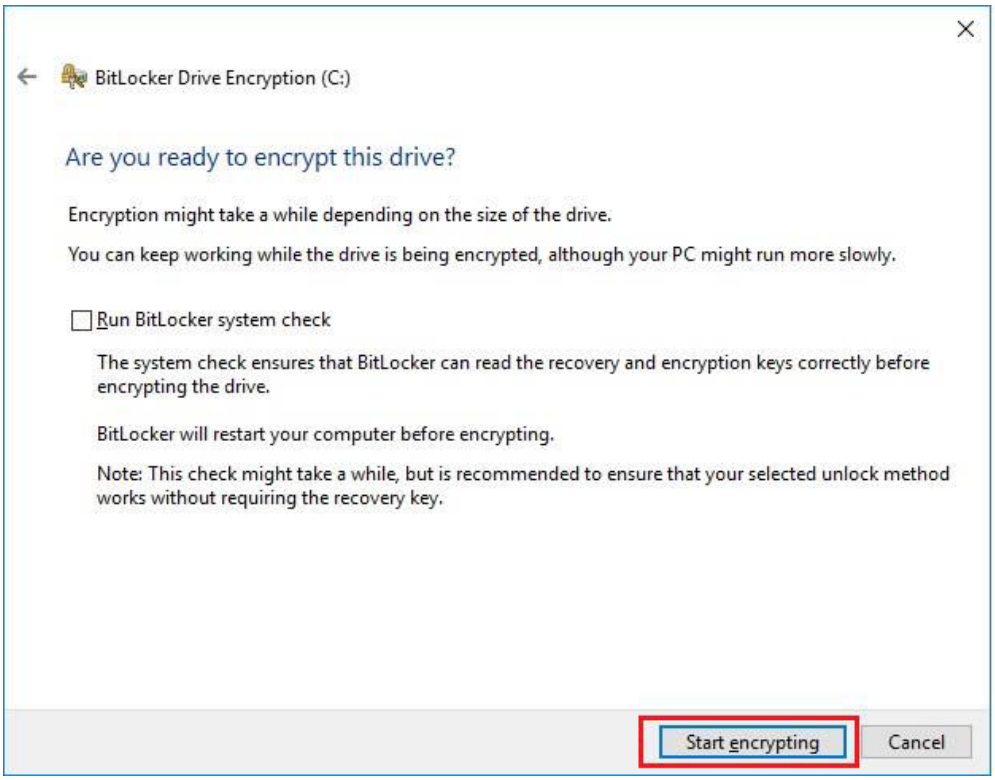
2. Insert an external storage device, for example USB Storage. Back up BitLocker Recovery Key in a new file and save it to the USB Storage.



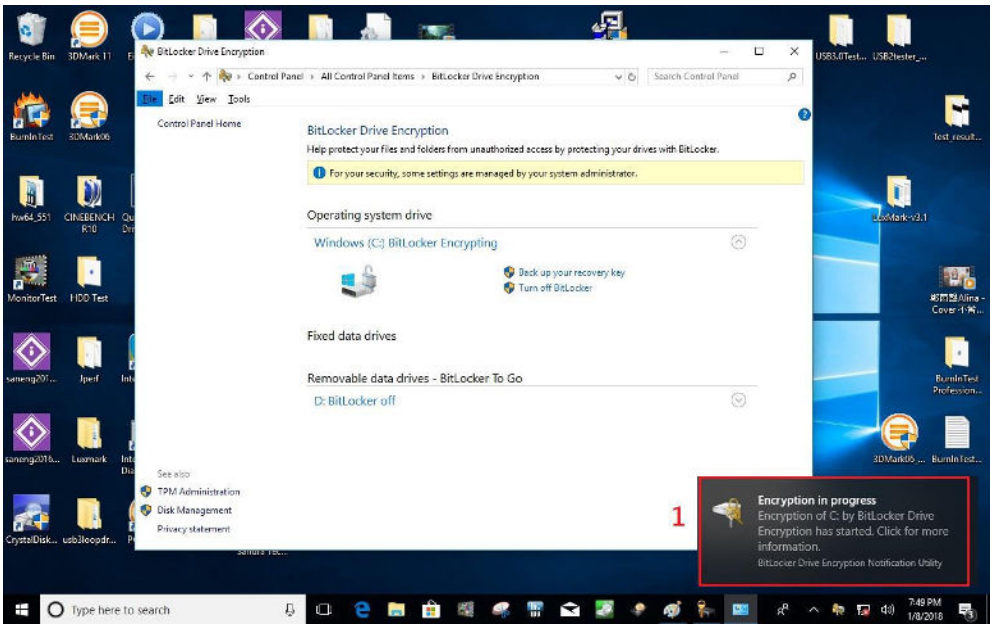
3. Please follow the steps below to encrypt your storage device:



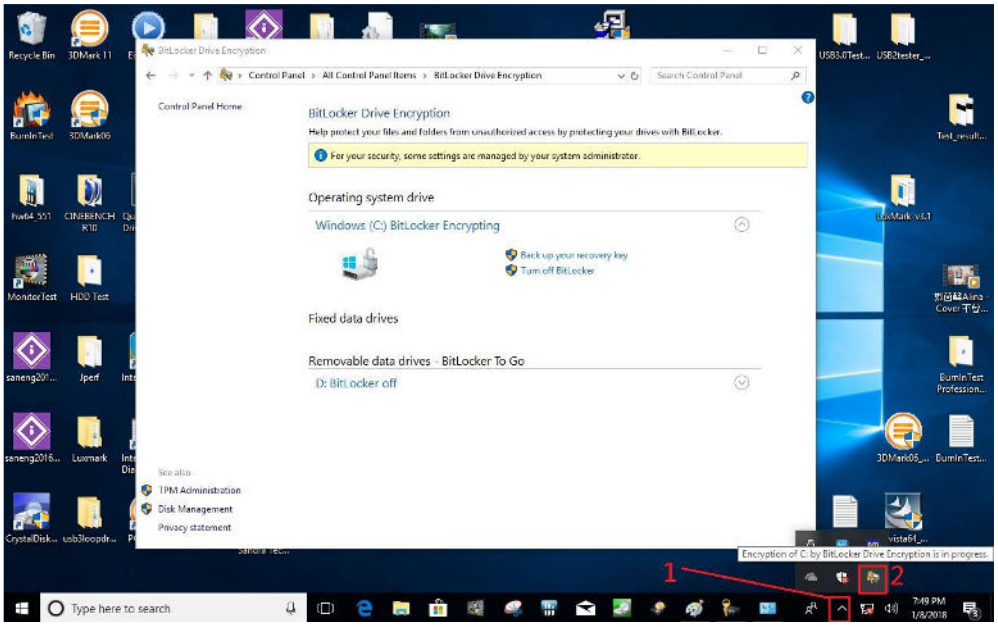


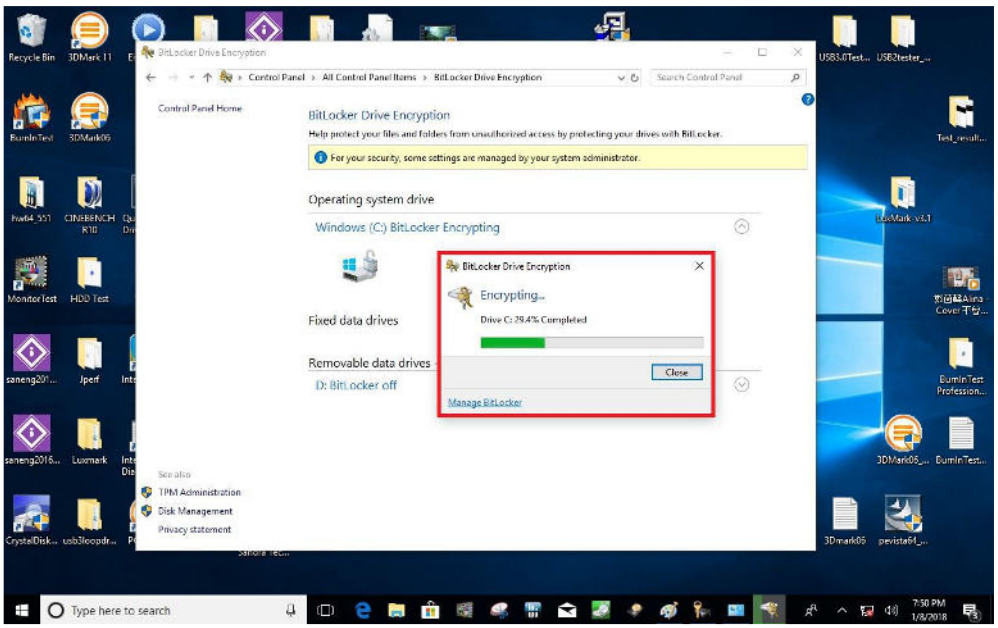


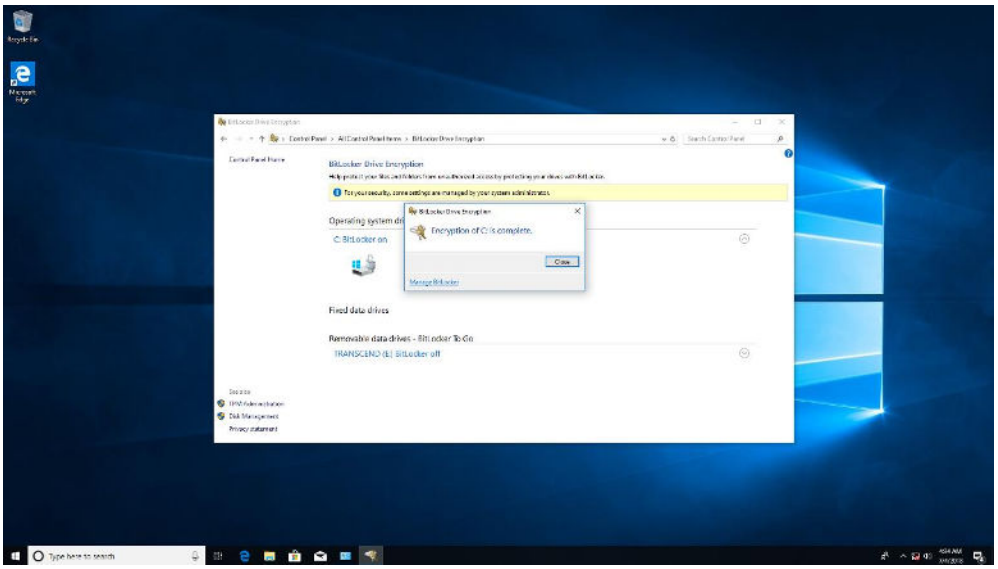
Now, the system prompts that the operating system drive encryption is in progress, and the encryption progress is checked.



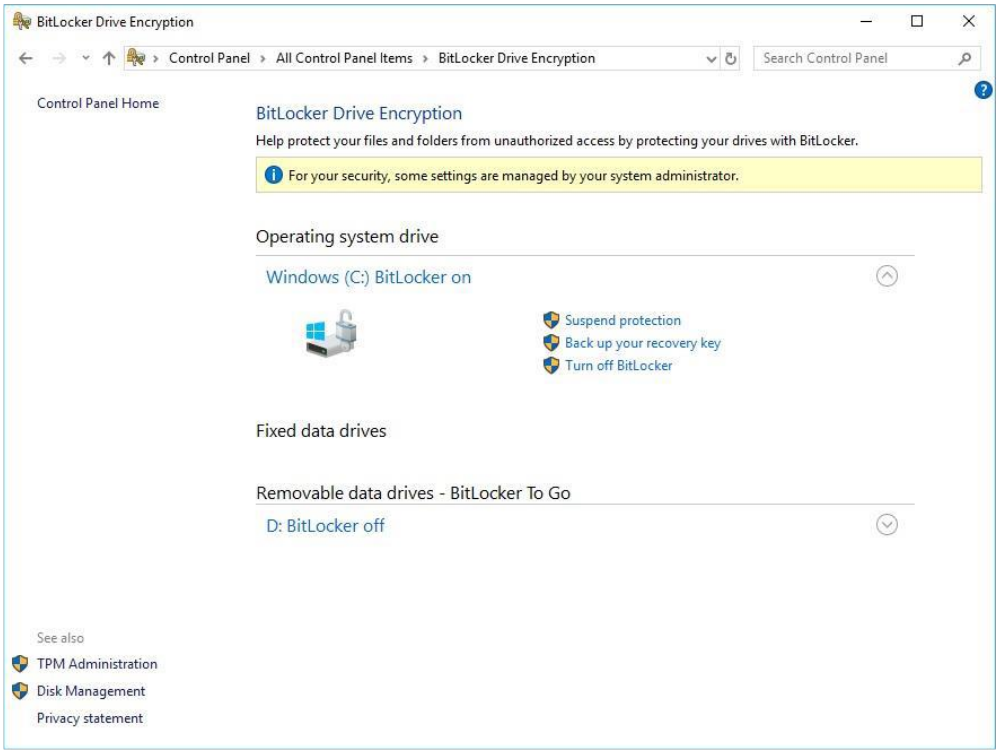
Select and click the icon in the lower right corner to complete the encryption.



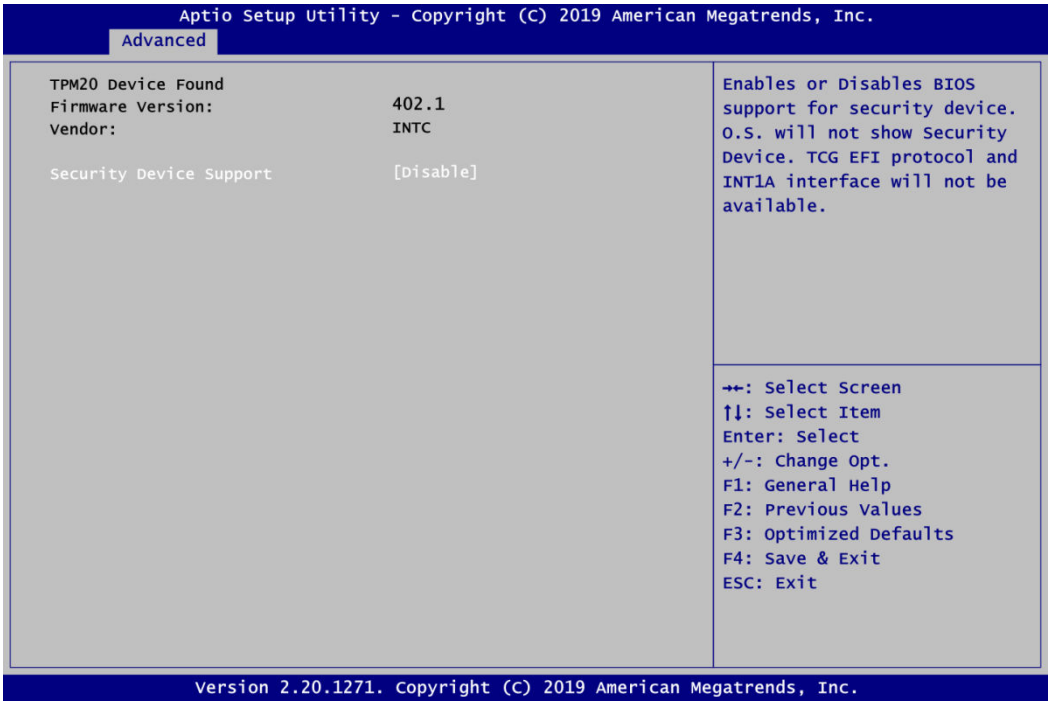




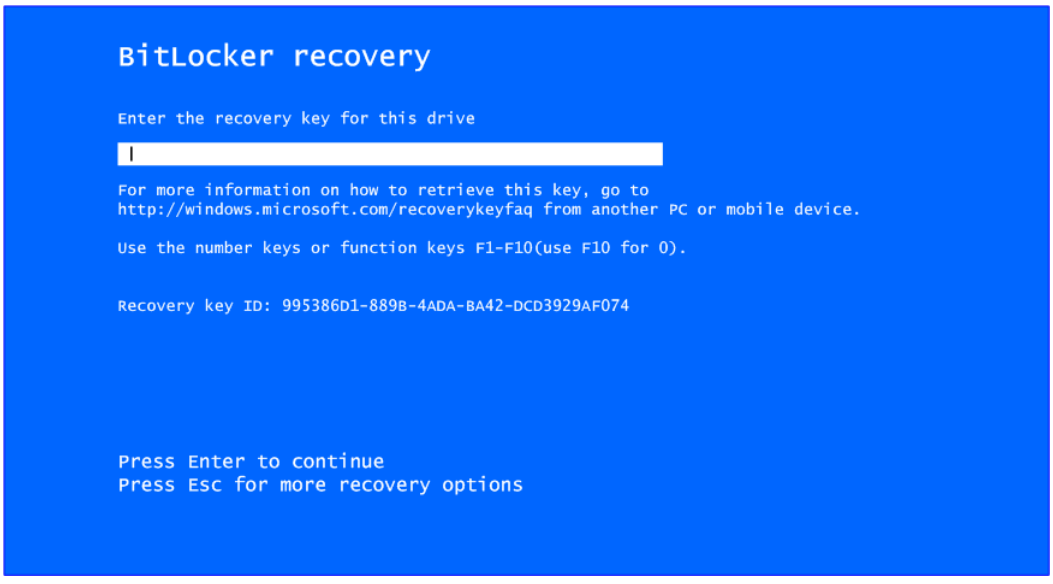
4. Confirm the completion of encryption.



5. Disable the TPM function in BIOS Setup Utility.

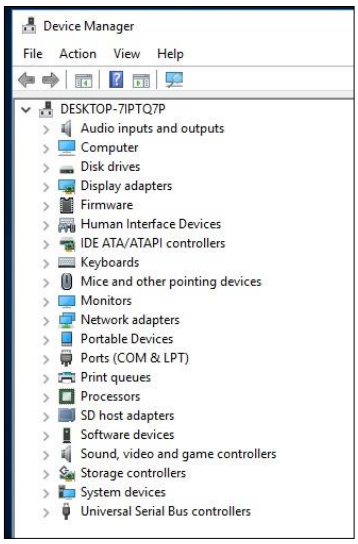


6. If you see the following screen when the system is powered on, it means that the TPM module function is working fine. Note that BitLocker cannot be executed if your system does not support the TPM function.

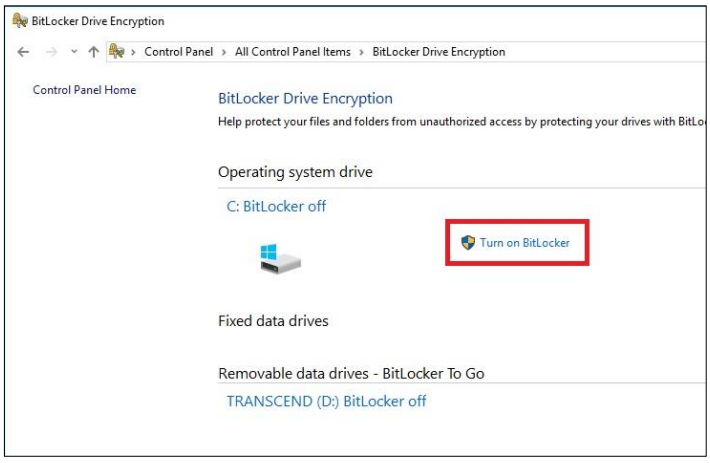


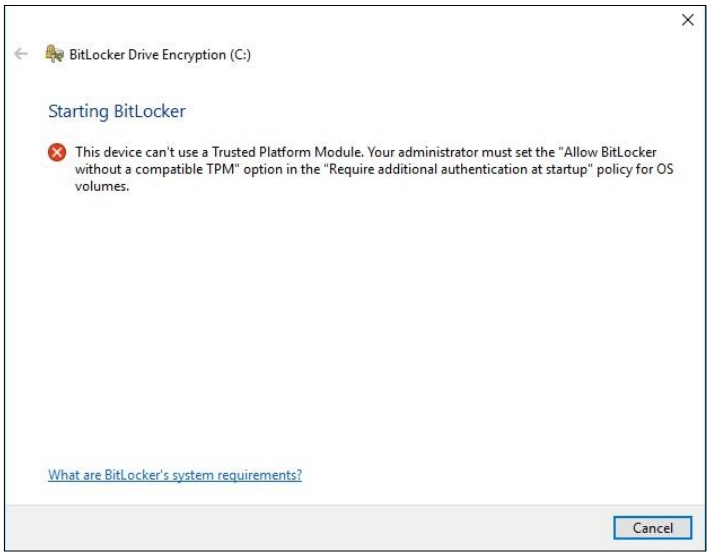
【Note】 ***The user will experience the following situation when using a system not supporting TPM.***

1. ***TPM information is not found in Device Manager.***



2. ***When trying to turn on Bitlocker, the following error message shows up.***




BitLocker Drive Encryption (C:)
Starting BitLocker
This device can't use a Trusted Platform Module. Your administrator must set the "Allow BitLocker without a compatible TPM" option in the "Require additional authentication at startup" policy for OS volumes.
What are BitLocker's system requirements?
Cancel