IDOOH-215-IR

Outdoor All-in-One Panel PC

User's Manual

Version 1.0

iBASE

Compliance

CE

This product has passed CE tests for environmental specifications and limits. This product is in accordance with the directives of the European Union (EU). If users modify and/or install other devices in this equipment, the CE conformity declaration may no longer apply.

FC

This product has been tested and found to comply with the limits for a Class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer's instructions, may cause harmful interference to radio communications.

WEEE

This product must not be disposed of as normal household waste, in accordance with the EU directive for waste electrical and electronic equipment (WEEE - 2012/19/EU). Instead, it should be disposed of by returning it to a municipal recycling collection point. Check local regulations for disposal of electronic products.

Green IBASE

This product complies with RoHS 2 restrictions, which prohibit the use of certain hazardous substances in electrical and electronic equipment. The following substances must not exceed the specified concentrations:

- Hexavalent chromium: 1,000 ppm
- Poly-brominated biphenyls (PBBs): 1,000 ppm
- Poly-brominated diphenyl ethers (PBDEs): 1,000 ppm
- Cadmium: 100 ppm
- Mercury: 1,000 ppm
- Lead: 1,000 ppm
- Bis(2-ethylhexyl) phthalate (DEHP): 1,000 ppm
- Butyl benzyl phthalate (BBP): 1,000 ppm
- Dibutyl phthalate (DBP): 1,000 ppm
- Diisobutyl phthalate (DIBP): 1,000 ppm

Important Safety Information

Carefully read the precautions before using the device.

Environmental conditions:

- Lay the device horizontally on a stable and solid surface in case the device may fall, causing serious damage.
- Make sure you leave plenty of space around the device for ventilation.

Care for your IBASE products:

- Before cleaning the device, turn it off and unplug all cables such as power in case a small amount of electrical current may still flow.
- Use neutral cleaning agents or diluted alcohol to clean the device chassis with a cloth. Then wipe the chassis with a dry cloth.
- Vacuum the dust with a computer vacuum cleaner to prevent the air vent or slots from being clogged.

WARNING

Attention during use:

- Do not use this product near water.
- Do not spill water or any other liquids on your device.
- Do not place heavy objects on the top of the device.
- Operate this device from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your distributor or local power company.
- Do not walk on the power cord or allow anything to rest on it.
- If you use an extension cord, make sure that the total ampere rating of the product plugged into the extension cord does not exceed its limits.

Avoid Disassembly

Do not disassemble, repair or make any modification to the device. Disassembly, modification, or any attempt at repair could generate hazards and cause damage to the device, even bodily injury or property damage, and will void any warranty.

CAUTION

Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Warranty Policy

- **IBASE standard products:**

  24-month (2-year) warranty from the date of shipment. If the date of shipment cannot be ascertained, the product serial numbers can be used to determine the approximate shipping date.

- **3rd-party parts:**

  12-month (1-year) warranty from delivery for the 3rd-party parts that are not manufactured by IBASE, such as CPU, memory, HDD, power adapter, panel and touchscreen.

* PRODUCTS, HOWEVER, THAT FAIL DUE TO MISUSE, ACCIDENT, IMPROPER INSTALLATION OR UNAUTHORIZED REPAIR SHALL BE TREATED AS OUT OF WARRANTY AND CUSTOMERS SHALL BE BILLED FOR REPAIR AND SHIPPING CHARGES.

Technical Support & Services

1. Visit the IBASE website at www.ibase.com.tw to find the latest information about the product.
2. If you need any further assistance from your distributor or sales representative, prepare the following information of your product and elaborate upon the problem.
   - Product model name
   - Product serial number
   - Detailed description of the problem
   - The error messages in text or in screenshots if there is any
   - The arrangement of the peripherals
   - Software in use (such as OS and application software, including the version numbers)
3. If repair service is required, please go to the IBASE website and apply for an RMA number to fill out the RMA application form.

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Table of Contents

Chapter 1
General Information

The information provided in this chapter includes:

- Features
- Packing List
- Specifications
- Product View
- Dimensions

1.1 Introduction

The IDOOH-215-IR is a 21.5” all-in-one panel PC that utilizes the Intel® Elkhart Lake series processor to deliver high computing performance with low power consumption. Designed for silent and reliable operation in harsh environments, it features two SODIMM slots supporting up to 8GB of DDR4 3200MHz memory and a 2.5” SATA SSD for data storage. The unit includes two Gigabit Ethernet ports and one RS-232/422/485 port, and it is equipped with an IP65-rated front bezel with an IR touchscreen for added durability. Additionally, the IDOOH-215-IR supports a wide AC power range of 90~240VAC and has an automatic temperature control system, making it ideal for KIOSK, digital signage, and other industrial applications worldwide.

1.2 Features

- IP65-rated front panel with waterproof protection
- 21.5" TFT-LCD display with 1920 x 1080 resolution and IR touch screen
- High brightness up to 1200 nits with adjustable luminance for various environments
- Wide AC power input range of 90~240VAC with automatic temperature control
- Durable aluminum front bezel construction for industrial use
- Supports multiple I/O options, including USB 3.1, HDMI, and Gigabit Ethernet

1.3 Packing List

Your product package should include the items listed below. If any of the items below is missing, contact the distributor or the dealer from whom you purchased the product.

- IDOOH-215-IR x 1

1.4 Accessory List

- Wi-Fi/BT Antenna x 2
- Power cord x 1

1.5 Specifications

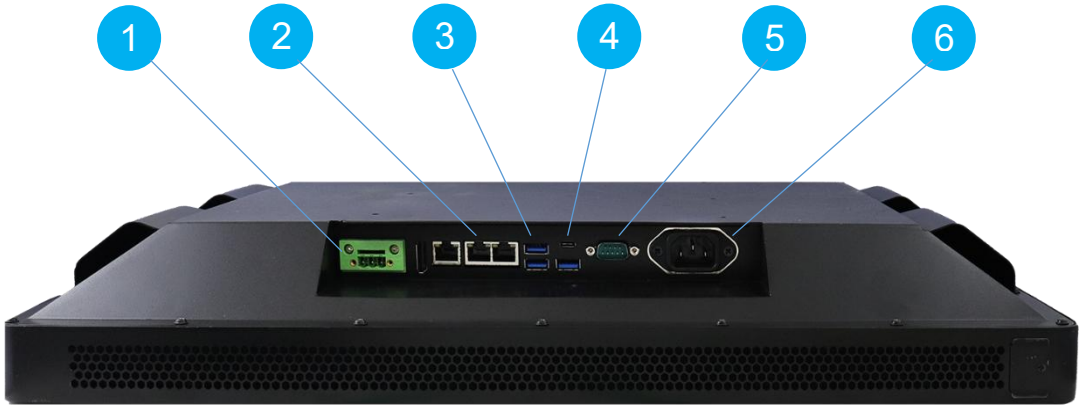
LCD Panel	
Mainboard	IB836F-6413E
CPU	
Model	Intel® Atom® x6413E
Speed	1.5GHz~3.0GHz
Cache	1.5MB
Memory	
Configuration	2x SO DIMM DDR4-3200 Default 8G
Display & Touch Screen	
Display Size	21.5” TFT-LCD
Max. Resolution	1920 x 1080
Luminance (cd/m2)	Up to 1200nits, default @75%
Contrast	1000:1
Max. Color	16.7M
View Angle (H°/V°)	140/120
Backlight Lifetime(hrs)	50000
Touch Type	IR touch
Touch Interface	USB
Light Transmission (%)	88
Point of touch	1

Expansion slot	
Expansion Slot	1x Mini PCI-E (full-size)
Wireless	Wi-Fi/BT Module: M.2 2230 2X2 WIFI 6E BT5.2[ENLI ENL-R8852CE]
Edge I/O	
Display	1x DisplayPort 1x Type-C
USB	3x USB 3.1 Type-A 1x USB Type-C
RS-232/422/485	1x (Selectable in BIOS)
LAN	3x RJ45 GbE LAN
Audio	None
External FAN	1x 3Pin
Power Connector	AC inlet
Power Button	None
Storage	
Storage	1x SSD MSATA SATA3 256G
Construction	
Chassis Material	Aluminum front bezel, black Black SGCC + Aluminum chassis
Color (Front/Back)	Black/Black
IP Rating	IP65 front-panel waterproof protection
Mounting	Open-frame rack mounting VESA 200x200 and 200x100 mm
Environmental	
Operating Temperature	-40°C~50°C (disable internal heater 0°C~50°C) Passed sunlight energy test: 44°C with 1120 W/m² Built-in smart heater: When IDOOH-215-IR is turned on, it will heat to above 5°C, then booting and stop heating. If the IDOOH-215-IR operating is too cold it will automatically heat up again.
Storage Temperature	-20°C~60°C
Storage Humidity	5%~90% @ 50°C, (non-condensing)
Operating System	
OS	Windows 10 Linux Ubuntu
Certification	
Certification	CE/FCC Class B

Based on internal temperature controlling system.
All specifications are subject to change without prior notice.

1.6 Product View

I/O View



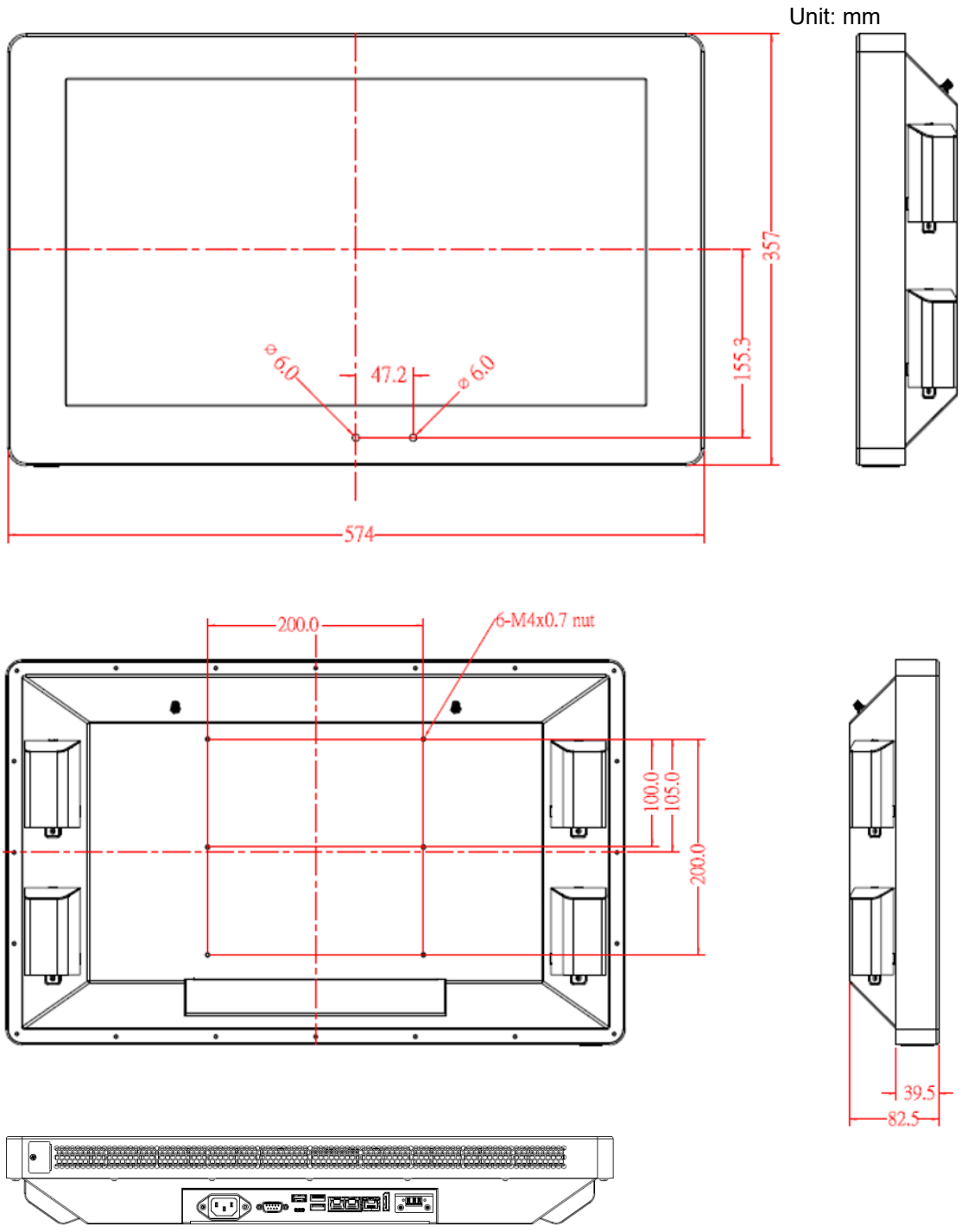
No.	Name
1	External FAN Connector
2	Giga LAN x3
3	USB 3.1 x3
4	USB Type-C x1
5	RS-232/422/485
6	AC Inlet 100~240V

No.1 External FAN Connector Pin definition

Pin #	Signal Name
1	Ground
2	+12V(500mA)
3	Rotation detection

1.7 Dimensions

Unit: mm



Chapter 2
Hardware Configuration

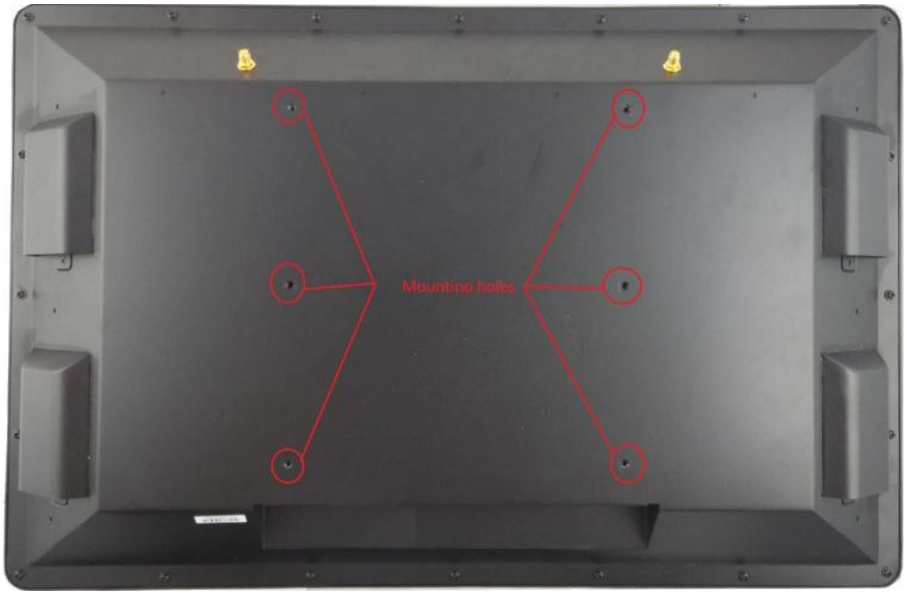
The information provided in this chapter includes:

- VESA Mounting
- Power On
- Additional Antenna

2.1 Installations

2.1.1 VESA Mounting

IDOOH-215-IR supports standard VESA 200x200 or 200x100 mm VESA mounting. Please use 4 x M4 screws to fix your mounting accessories.



2.1.2 Power On

Simply connect your power cord to power inlet.

IDOOH-215-IR supports auto-power on, Please don't change the setting under BIOS menu: Advance-iSmart controller.

Power-On after shut down PC

Please unplug and reconnect the AC inlet.

Note : The BIOS default setting is enable on "Power-On after Power failure" item. Please don't change to Disable.

2.1.3 Additional Antenna

The IDOOH-215-IR is equipped with two IP65-rated waterproof wireless antennas, which can be easily attached to the connectors on the back-top side of the system.

Please Note:

- The included waterproof antennas are fixed and non-adjustable. To ensure optimal performance, maintain at least 5 cm of space between the back cover and any wall.
- Alternatively, you may order an adjustable antenna from the market or use our iBASE reference part No. A055RFA02C2M20800P.

Chapter 3
Drivers Installation

This chapter introduces installation of the following drivers:

- Intel® Chipset Software Installation Utility
- VGA Driver
- HD Audio Driver
- LAN Driver
- Intel® Management Engine Drivers Installation

3.1 Intel® Chipset Software Installation Utility

This section describes the installation procedures for software drivers. The software drivers are available on the IBASE website. Go to the product's download page. Copy the compressed drivers file to your computer. Double-click the file to extract it. Run "CDGuide" to access the main drivers page.

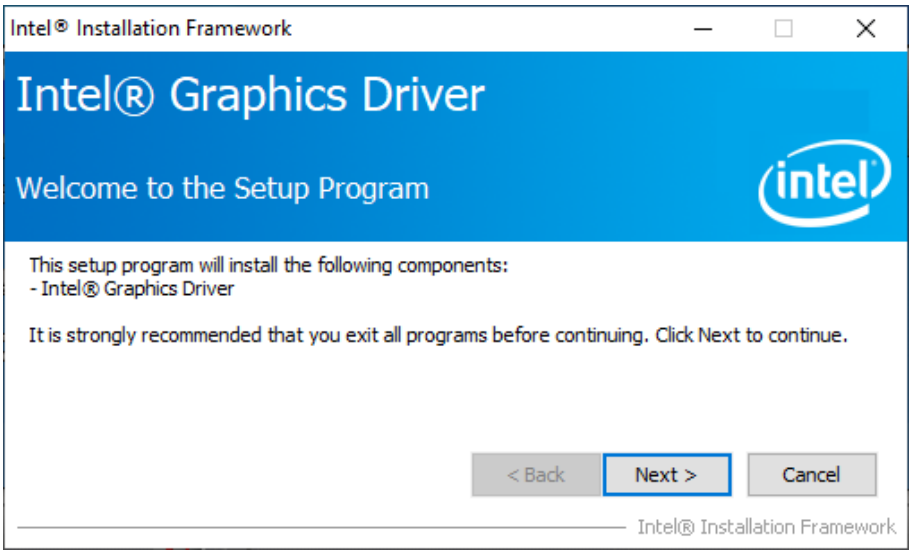
> **Note:** After installing the Windows operating system, install the Intel® Chipset Software Installation Utility first before proceeding with the driver installation.

The Intel® Chipset drivers should be installed first before the software drivers to install INF files for Plug & Play function for Intel chipset components.

1. Click **Intel** on the left pane and then **Intel(R) Elkhartlake Chipset Drivers** on the right pane.

2. Click **Intel(R) Chipset Software Installation Utility**.

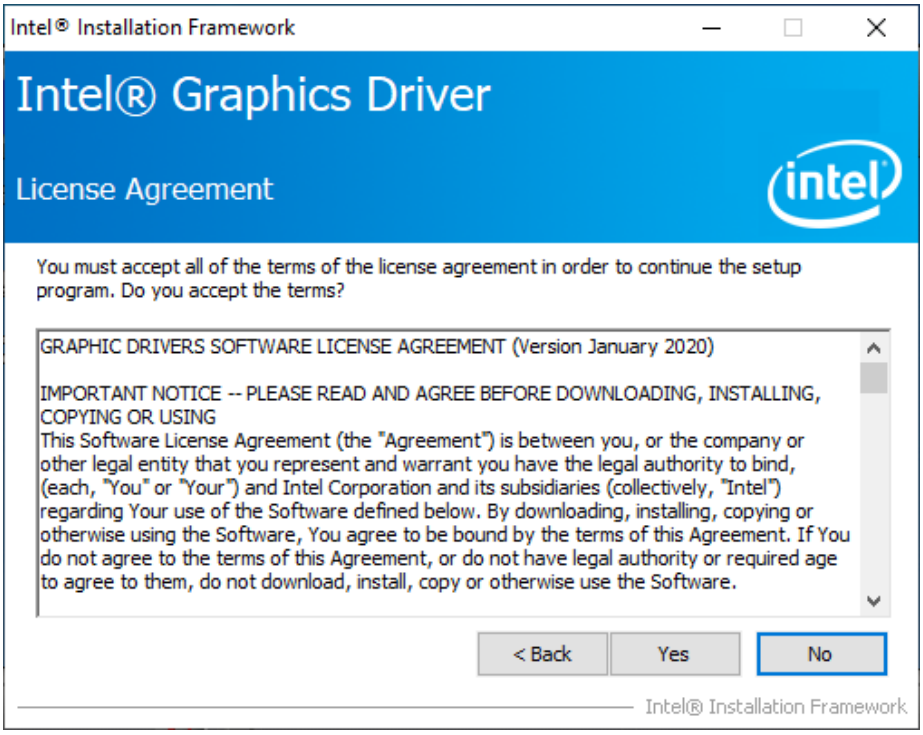
3. When the *Welcome* screen for the Intel® Chipset Device Software appears, click **Next** to proceed.
4. Accept the software license agreement and proceed with the installation process.
5. On the *Readme File Information* screen, click **Install** for installation.
6. After the installation, press **Finish** to complete the setup process.



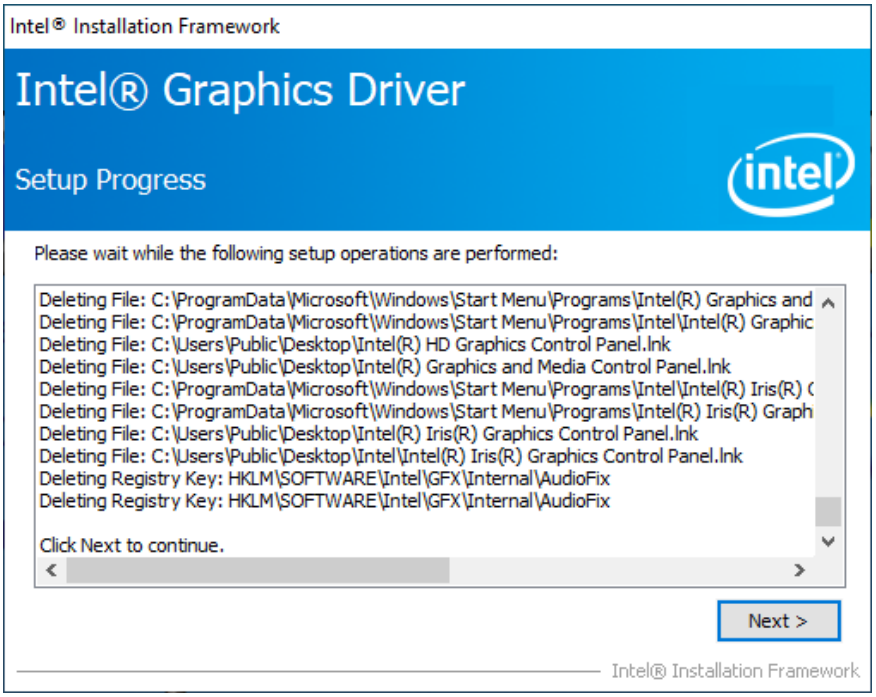
3.2 VGA Driver Installation

1. Click **Intel** on the left pane and then **Intel(R) Elkhartlake Chipset Drivers** on the right pane.
2. Click **Intel(R) Elkhartlake Graphics Driver**.

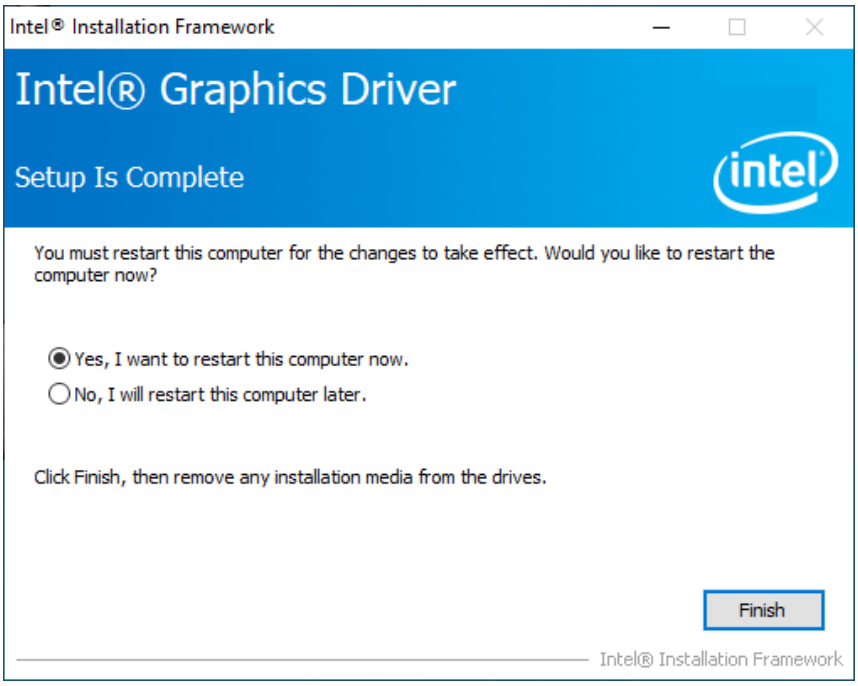
3. When the *Welcome* screen appears, click **Next** to proceed.



4. Click **Yes** to accept the license agreement and click **Next** on the Readme File Information screen. Click **Next** in the Setup Progress screen.



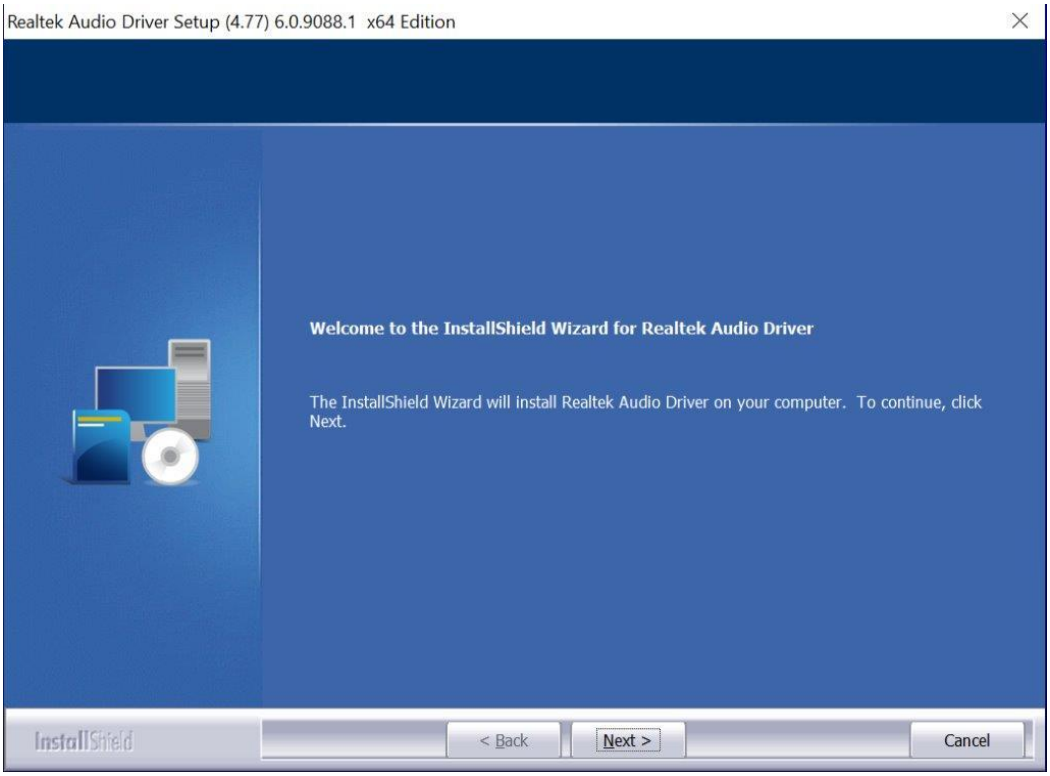
5. Restart the computer when prompted. Click **Finish**, then remove any installation media from the drives.



3.3 HD Audio Driver Installation

1. Click Intel on the left pane and then **Intel(R) Elkhartlake Chipset Drivers** on the right pane.
2. Click **Realtek High Definition Audio Driver**.

3. On the Welcome screen, click **Next** to proceed.

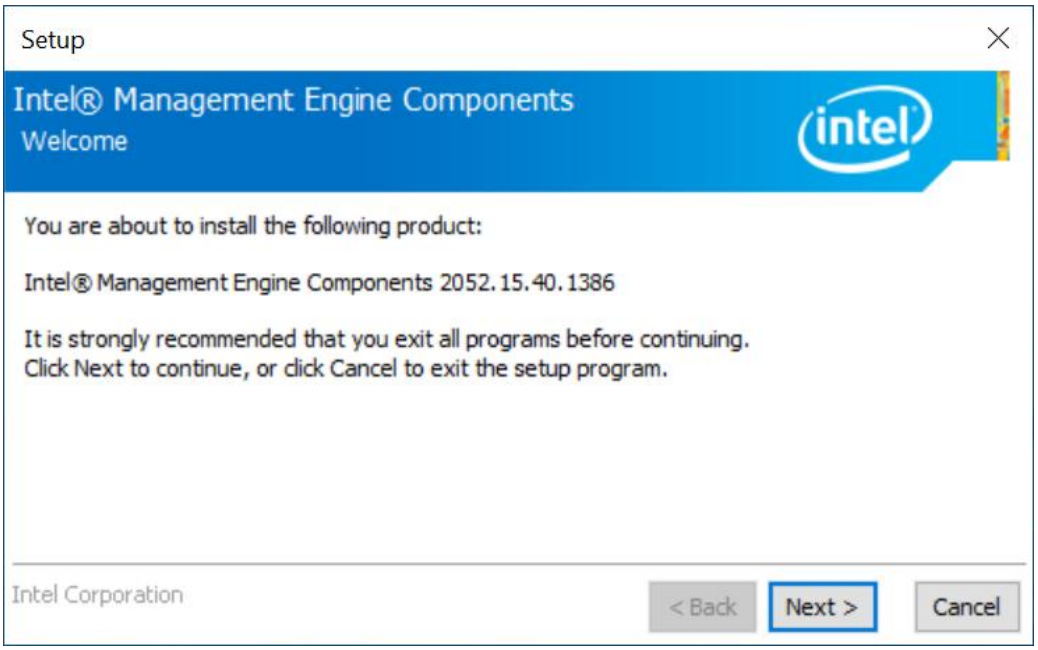


4. When the InstallShield Wizard has successfully installed the Realtek Audio Driver, restart the computer. Click **Finish** to complete the setup.

3.4 Intel® ME Drivers Installation

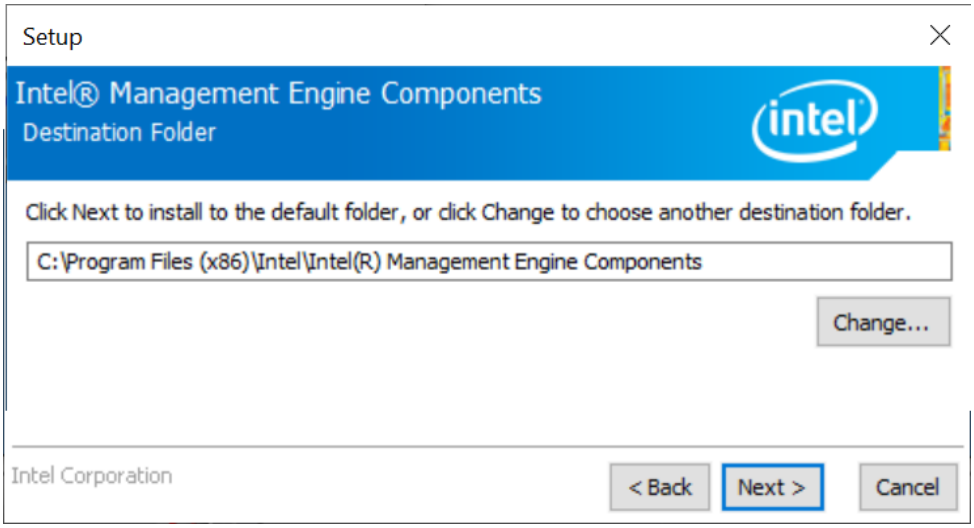
1. Click Intel on the left pane and then **Intel(R) ME Drivers**.

2. The Welcome screen for the Intel® Management Engine Components appears. Click **Next** to proceed.



3. Accept the license agreement and click **Next**.

4. On the *Setup's Destination Folder* screen, click **Next** to proceed.



5. After the Intel® components have been completely installed, click **Finish** to complete the setup.

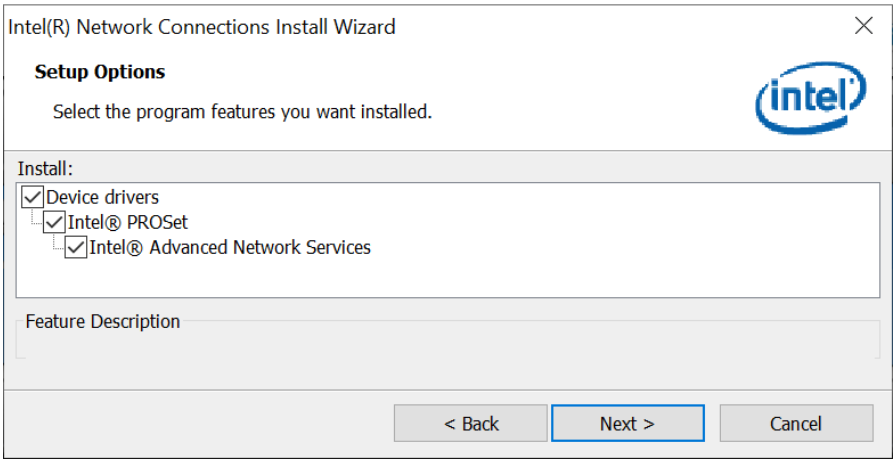
3.5 LAN Driver Installation

1. Select **LAN Card** on the left pane and then **Intel LAN Controller Drivers** on the right pane.

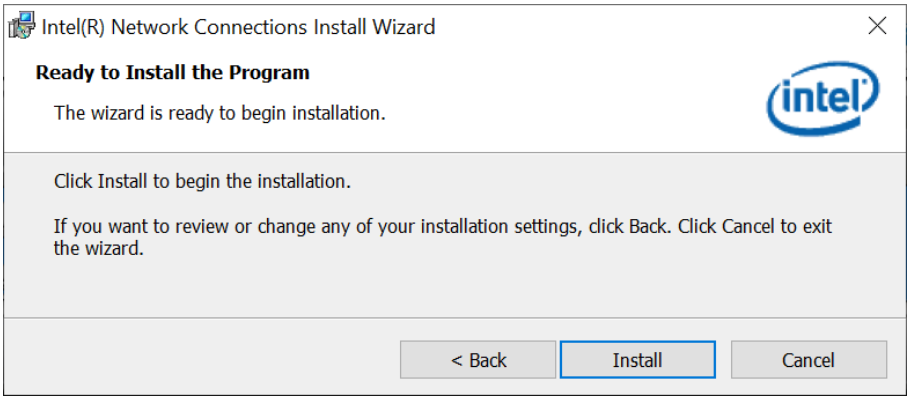
2. Select **Intel(R) I21x Gigabit Network Drivers**.

3. In the Welcome screen for the install wizard for Intel(R) Network Connections, click **Next**.
4. On the next screen, accept the terms in the license agreement and click **Next**.

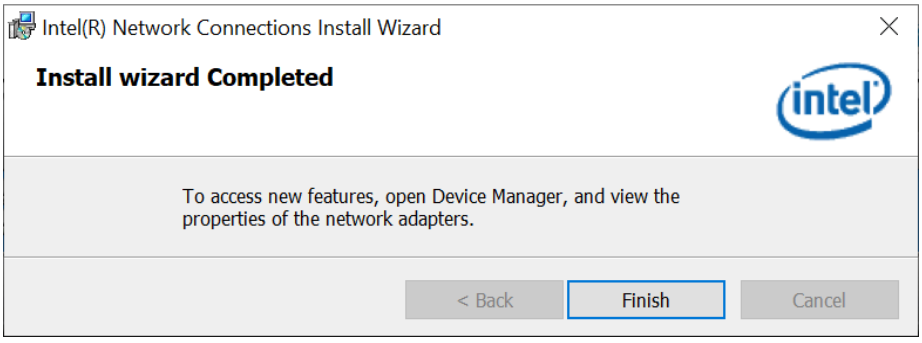
5. In the *Setup Options* screen, click **Next**.



6. Click **Install** to begin the installation.



7. Click **Finish** when Install wizard has completed.



Chapter 4
BIOS Setup

This chapter describes the different settings available in the AMI BIOS that comes with the board. The topics covered in this chapter are as follows:

- Main Settings
- Advanced Settings
- Chipset Settings
- Security Settings
- Boot Settings
- Save & Exit

4.1 Introduction

The BIOS (Basic Input/Output System) installed in the ROM of your computer system supports Intel® processors. The BIOS provides critical low-level support for standard devices such as disk drives, serial ports and parallel ports. It also provides password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

4.2 BIOS Setup

The BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the BIOS is immediately activated. Pressing the <Del> key immediately allows you to enter the Setup utility. If you are a little bit late pressing the <Del> key, POST (Power On Self Test) will continue with its test routines, thus preventing you from invoking the Setup.

If you still need to enter Setup, restart the system by pressing the ”Reset” button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again.

The following message will appear on the screen:

```
Press <DEL> to Enter Setup
```

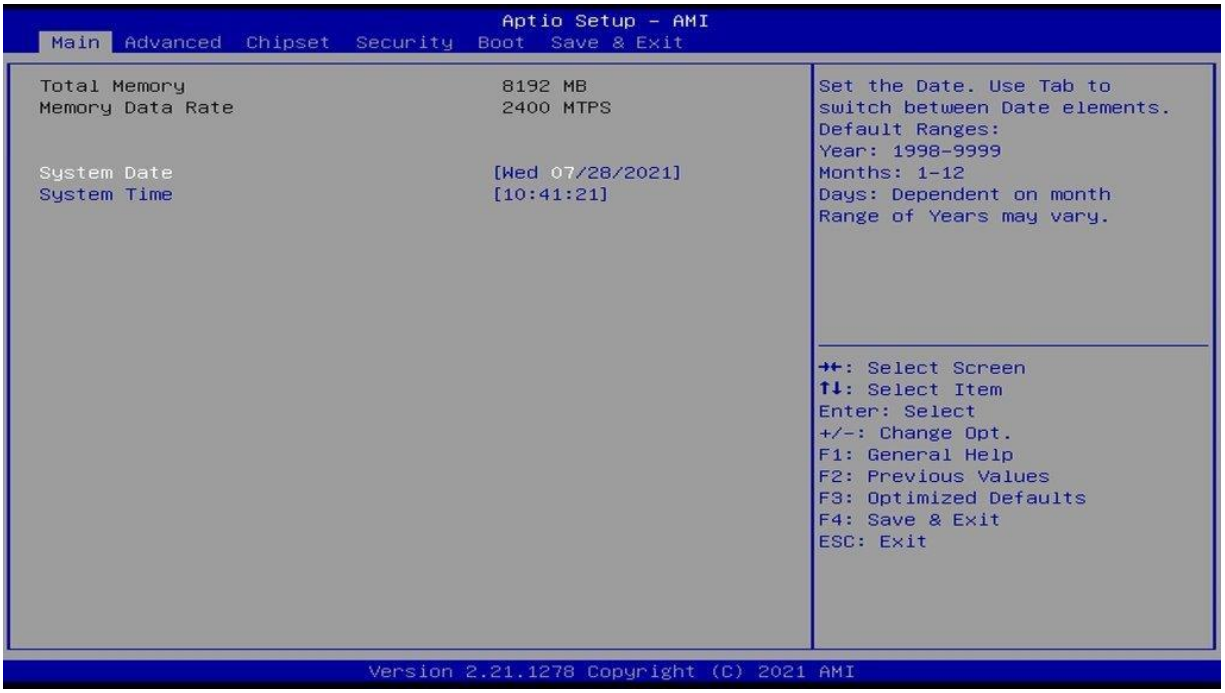
In general, press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help, and <Esc> to quit.

When you enter the BIOS Setup utility, the *Main Menu* screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

Warning: It is strongly recommended that you avoid making any changes to the chipset defaults.

These defaults have been carefully chosen by both AMI and your system manufacturer to provide the absolute maximum performance and reliability. Changing the defaults could make the system unstable and crash in some cases.

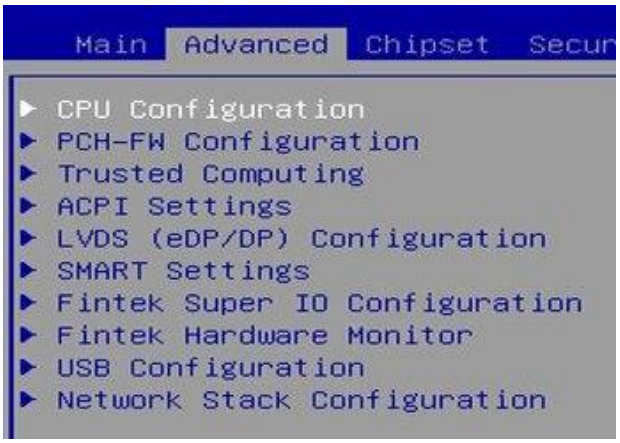
4.3 Main Settings



BIOS Setting	Description
System Date	Sets the date. Use the <Tab> key to switch between the date elements.
System Time	Set the time. Use the <Tab> key to switch between the time elements.

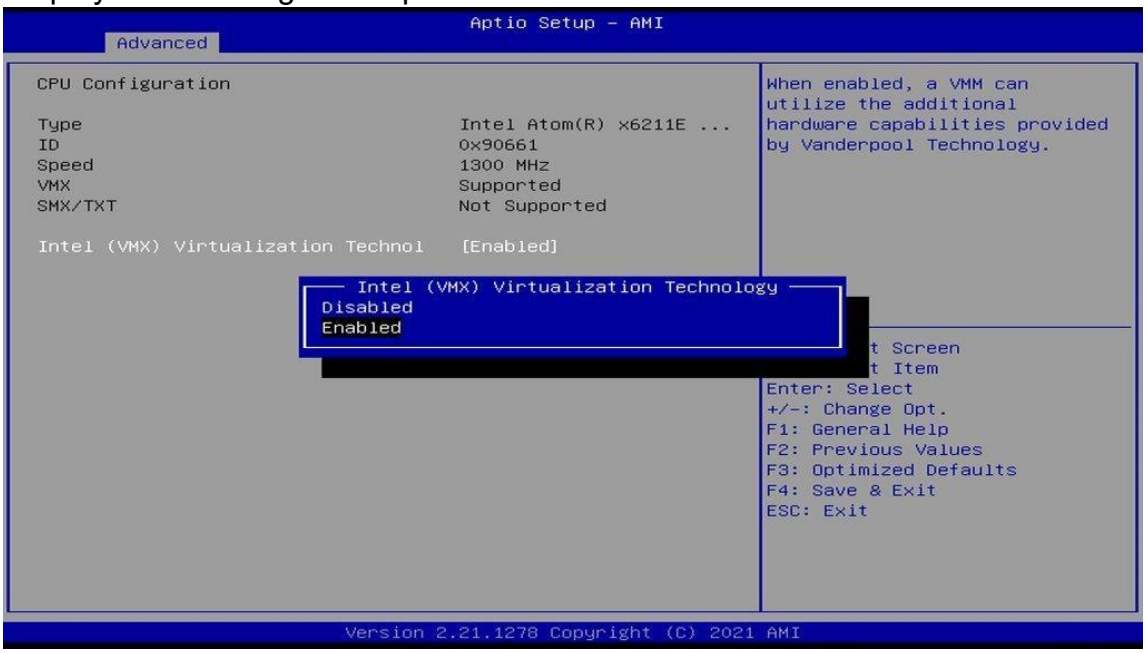
4.4 Advanced Settings

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

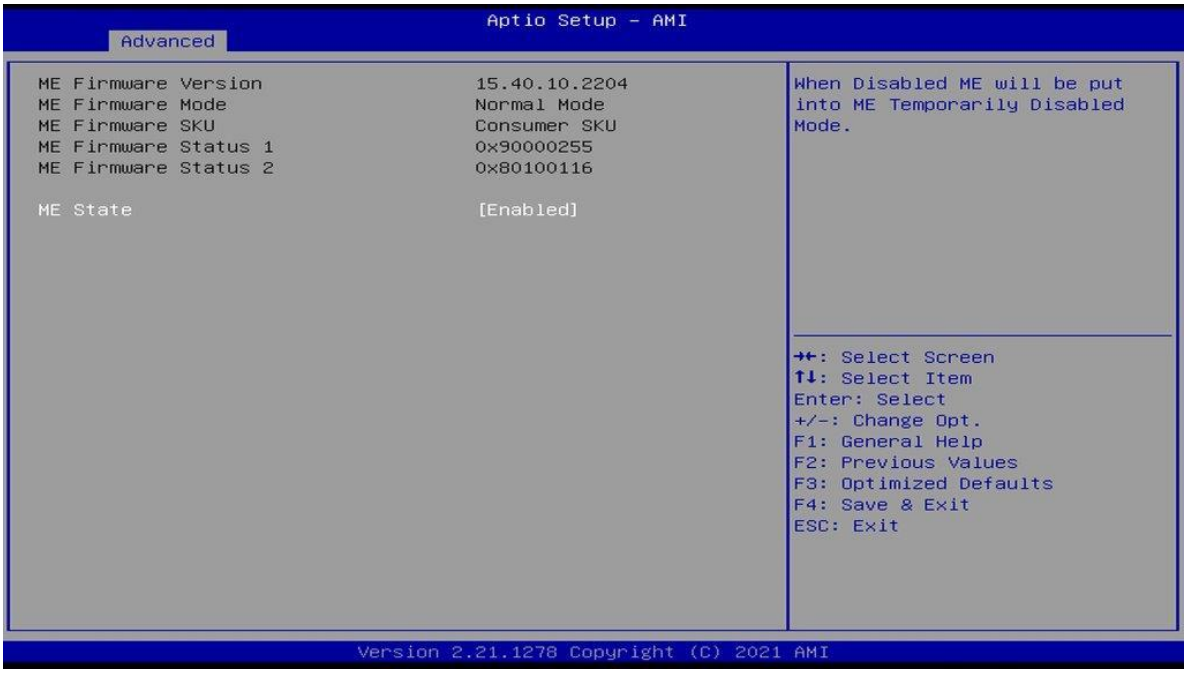


4.4.1 CPU Configuration

Displays CPU configuration parameters.

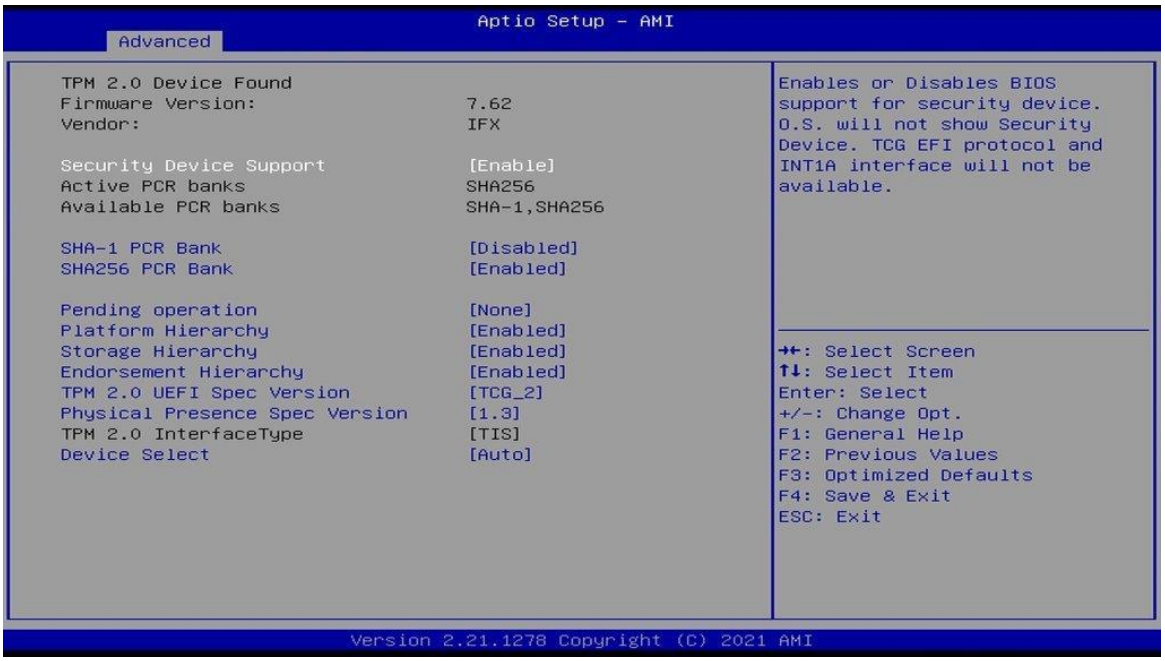


4.4.2 PCH-FW Configuration



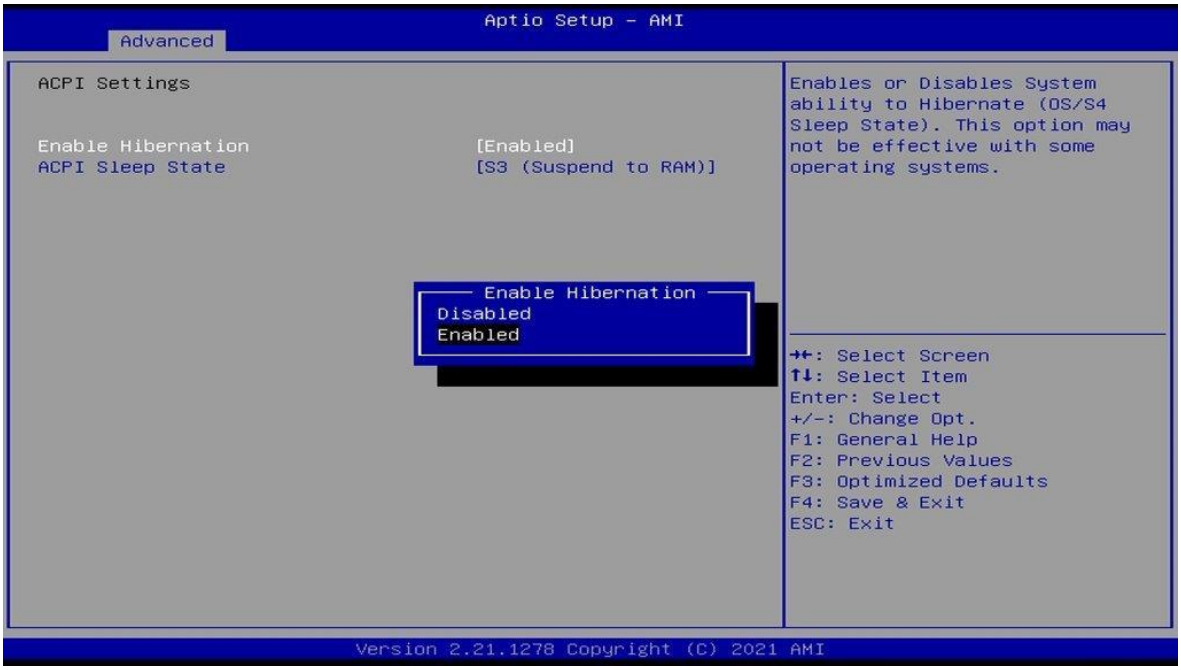
BIOS Setting	Description
ME State	When disabled ME will be put into ME Temporarily Disabled Mode.

4.4.3 Trusted Computing



BIOS Setting	Description
Security Device Support	Enables / Disables BIOS support for security device. OS will not show security device. TCG EFI protocol and INTIA interface will not be available.
SHA-1 PCR Bank	Enables / Disables SHA-1 PCR Bank.
SHA256 PCR Bank	Enables / Disables SHA256 PCR Bank.
Pending operation	Schedule an operation for the security device. Note: Your computer will reboot during restart in order to change state of security device.
Platform Hierarchy	Enables / Disables platform hierarchy.
Storage Hierarchy	Enables / Disables storage hierarchy.
Endorsement Hierarchy	Enables / Disables endorsement hierarchy.
TPM2.0 UEFI Spec Version	Selects the supported TCG version based on your OS. • **TCG_1_2:** supports Windows 8 /10. • **TCG_2:** supports new TCG2 protocol and event format for Windows 10 or later.
Physical Presence Spec Version	Selects to show the PPI Spec Version (1.2 or 1.3) that the OS supports. **Note:** Some HCK tests might not support 1.3.
Device Select	• **TPM 1.2** will restrict support to TPM 1.2 devices only. • **TPM 2.0** will restrict support to TPM 2.0 devices only. • **Auto** will support both with the default being set to TPM 2.0 devices if not found, and TPM 1.2 device will be enumerated.

4.4.4 ACPI Settings



BIOS Setting	Description
Enable Hibernation	Enables / Disables the system ability to hibernate (OS/S4 Sleep State). This option may be not effective with some OS.
ACPI Sleep State	Selects an ACPI sleep state (Suspend Disabled or S3) where the system will enter when the Suspend button is pressed.

4.4.5 LVDS (eDP/DP) Configuration

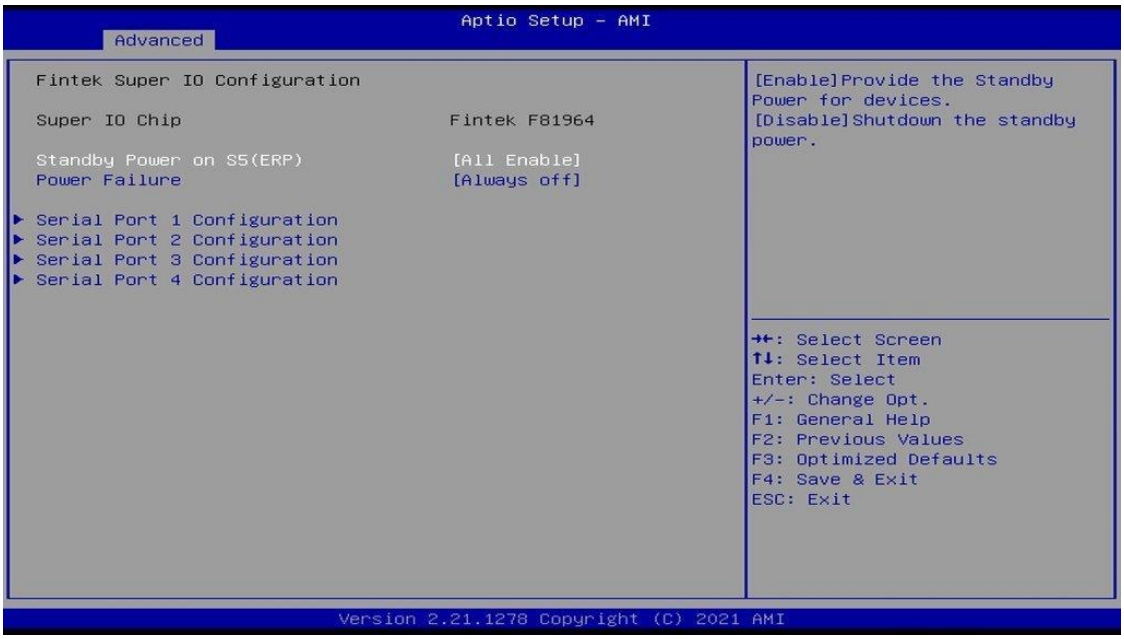
The IDOOH-215-IR is default “Enable” and set panel type to 1920x1080.

BIOS Setting	Description
LVDS (eDP/DP) Support	Enables / Disables LVDS (eDP/DP).
Panel Color Depth	Selects the panel color depth. Options: 18 bit, 24 Bit (VESA), 24 bit (JEIDA)
LVDS Channel Type	Chooses the LVDS as single or dual channel.
LCD Panel Type	Selects LCD panel used by Intel Graphics Device by selecting the appropriate setup item. Resolution Options: VBIOS Default, 800 x 480, 800 x 600, 1024 x 768, 1280 x 800, 1280 x 1024, 1366 x 768, 1440 x 900, 1600 x 900, 1680 x 1050, 1920 x 1080, 1920 x 1200
LVDS Brightness Level Control	Options: Level-1 to Level-8

Note: Do not change the BIOS LVDS settings, otherwise the display will be abnormal. If the display is abnormal, please try to load default in BIOS setting.

4.4.6 SMART Settings

4.4.7 F81846 Super IO Configuration



BIOS Setting	Description
Standby Power on S5(ERP)	This setting enables or shutdown the standby power for devices.
Power Failure	Options: Always on, Always off
Serial Ports Configuration	Sets parameters of serial ports. Enables / Disables the serial port and select an optimal setting for the Super IO device.

Serial Port 1 Configuration

BIOS Setting	Description
Serial Port	Enables / Disables the serial port.
Change Settings	Selects an optimal setting for Super I/O device. Options: • Auto • IO = 3F8h; 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
Device Mode	Change the serial port mode. Options: RS232 RS485 TX Low Active RS485 with Termination TX Low Active RS422 RS422 with Termination

Serial Port 2 Configuration

BIOS Setting	Description
Serial Port	Enables / Disables the serial port.
Change Settings	Selects an optimal settings for Super I/O device. Options: • Auto • 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

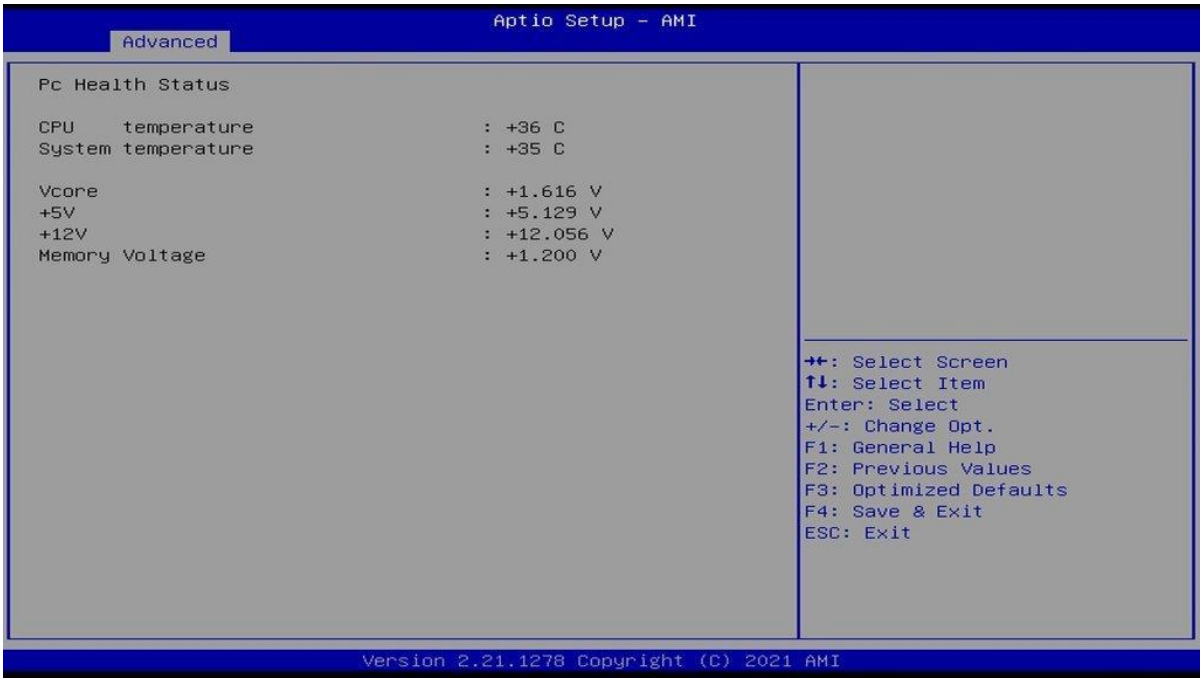
Serial Port 3 Configuration

BIOS Setting	Description
Serial Port	Enables / Disables the serial port.
Change Settings	Selects an optimal settings for Super I/O device. Options: • Auto • 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

Serial Port 4 Configuration

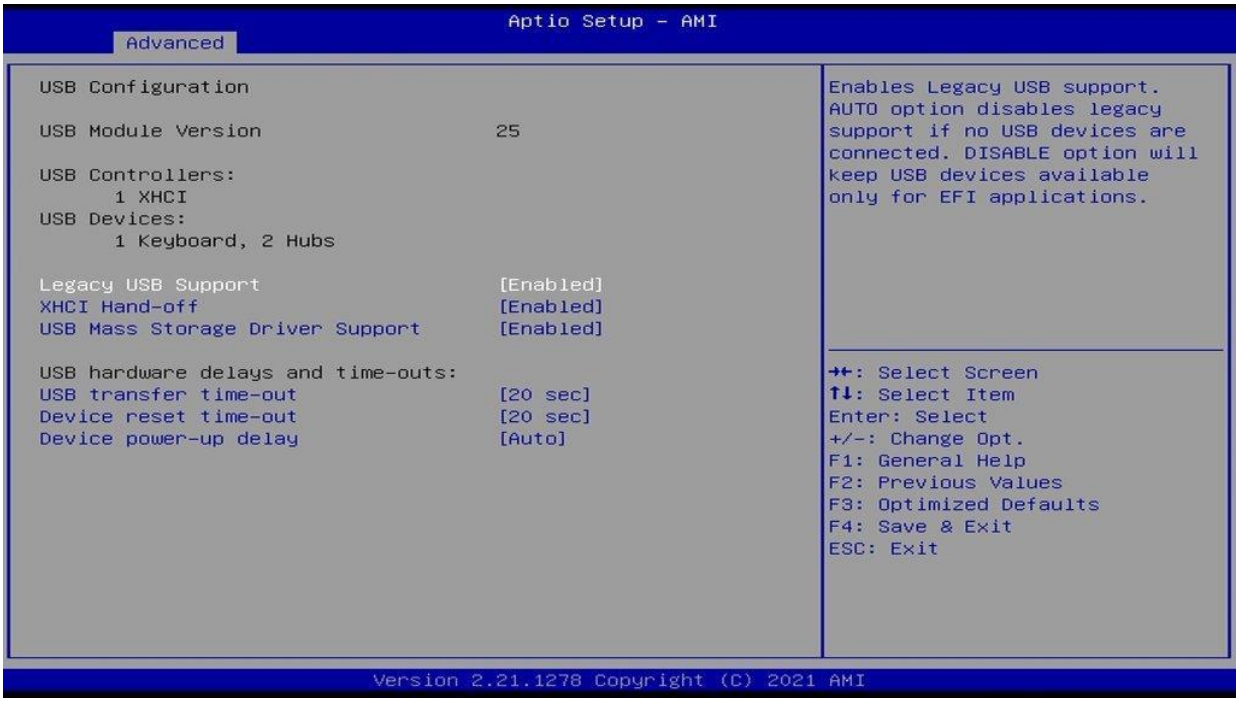
BIOS Setting	Description
Serial Port	Enables / Disables the serial port.
Change Settings	Selects an optimal settings for Super I/O device. Options: • Auto • IO = 2E8h; IRQ = 7 • IO = 3E8h; IRQ = 3, 4, 5, 6, 7, 9, 10, 11, 12 • IO = 2E8h; IRQ = 3, 4, 5, 6, 7, 9, 10, 11, 12 • IO = 2F0h; IRQ = 3, 4, 5, 6, 7, 9, 10, 11, 12 • IO = 2E0h; IRQ = 3, 4, 5, 6, 7, 9, 10, 11, 12

4.4.8 Fintek Hardware Monitor



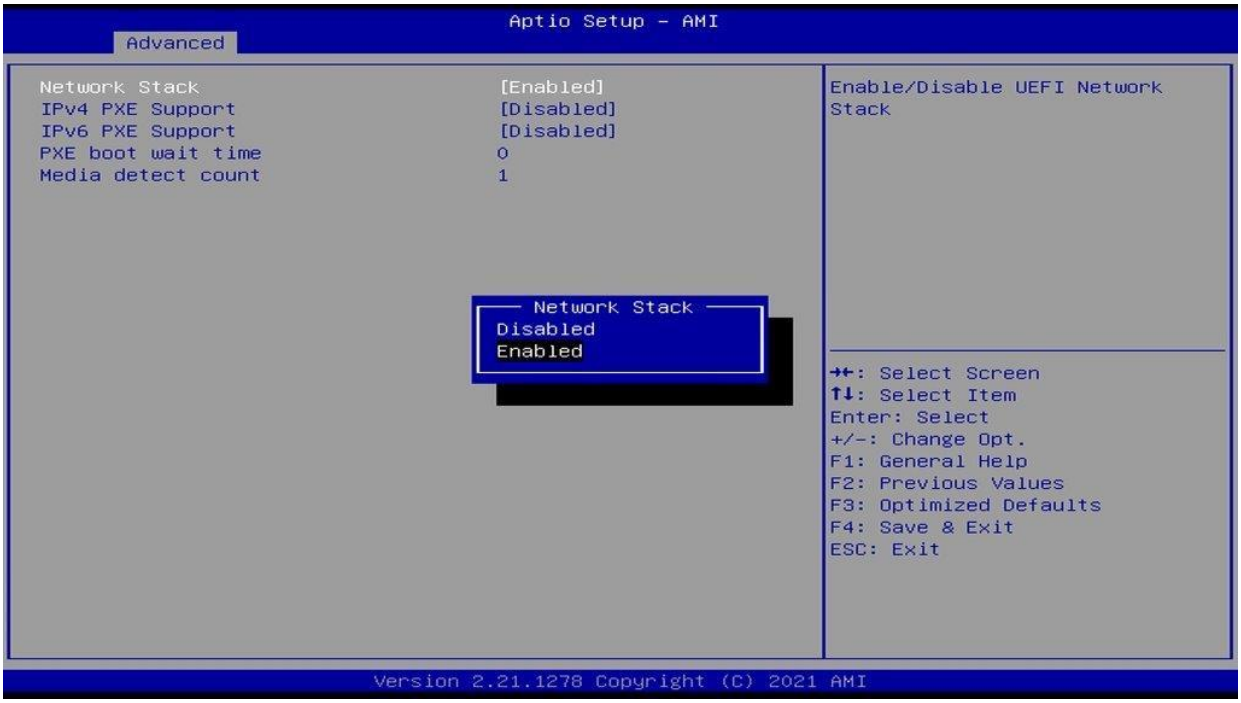
BIOS Setting	Description
Temperatures / Voltages	These fields are the parameters of the hardware monitoring function feature of the motherboard. The values are read-only values as monitored by the system and show the PC health status.

4.4.9 USB Configuration



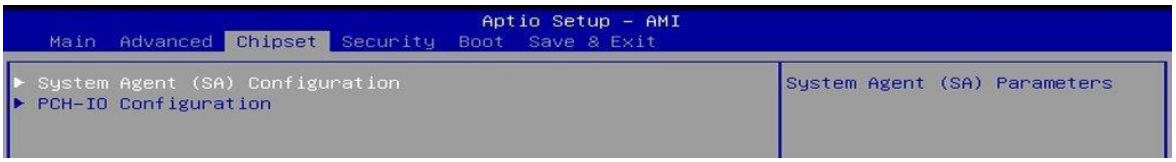
BIOS Setting	Description
Legacy USB Support	• **Enabled** enables Legacy USB support. • **Auto** disables legacy support if there is no USB device connected. • **Disabled** keeps USB devices available only for EFI applications.
XHCI Hand-off	This is a workaround for OSes without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.
USB Mass Storage Driver Support	Enables / Disables the support for USB mass storage driver.
USB Transfer time-out	The time-out value (1 / 5 10 / 20 secs) for Control, Bulk, and Interrupt transfers.
Device reset time-out	Gives seconds (10 / 20 / 30 / 40 secs) to delay execution of Start Unit command to USB mass storage device.
Device power-up delay	The 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. But for a Hub port, the delay is taken from Hub descriptor.

4.4.10 Network Stack Configuration

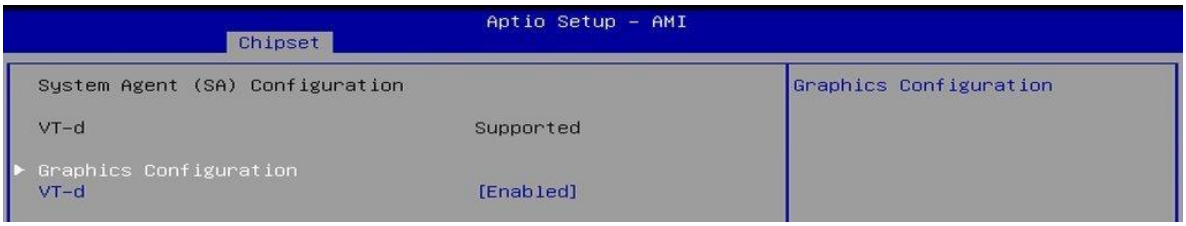


BIOS Setting	Description
Network Stack	Enable/Disable UEFI Network Stack
IPv4 PXE Support	Enable/Disable IPv4 PXE boot support. If disabled, IPv4 PXE boot support will not be available.
IPv6 PXE Support	Enable/Disable IPv6 PXE boot support. If disabled, IPv6 PXE boot support will not be available.
PXE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

4.5 Chipset Settings

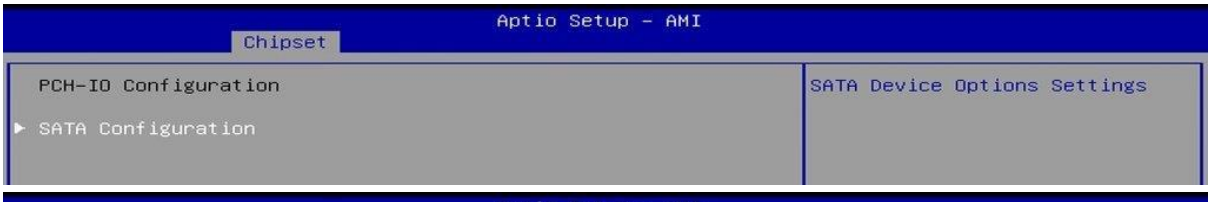


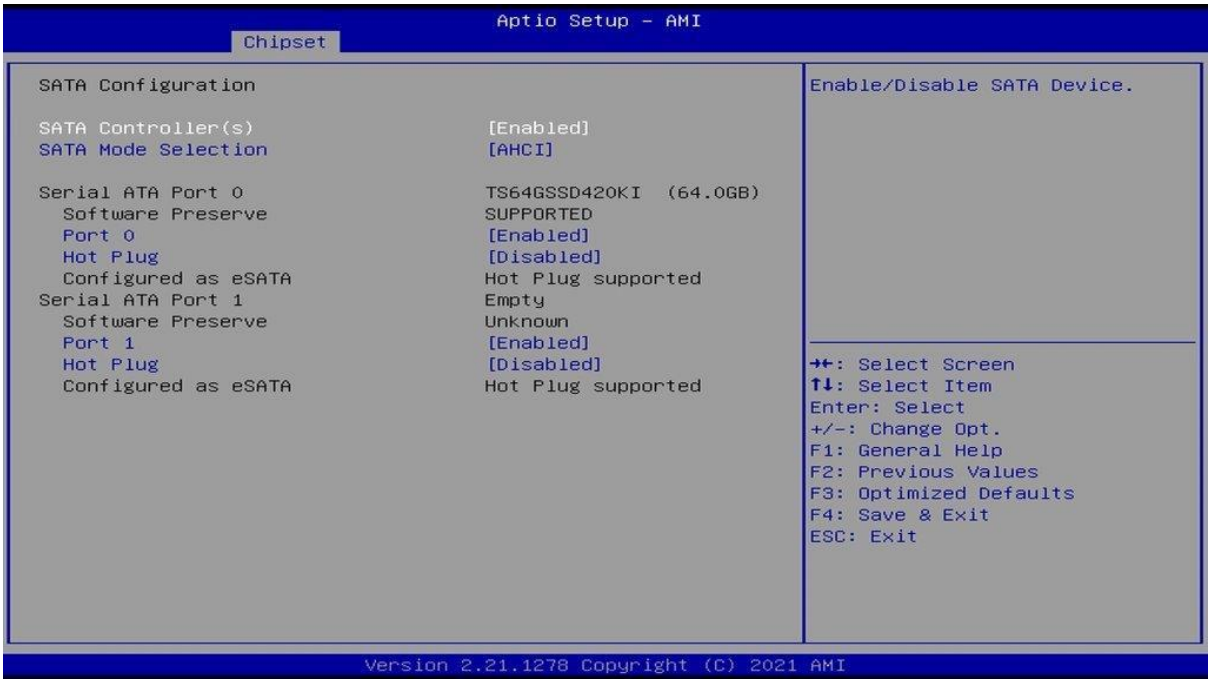
4.5.1 System Agent (SA) Configuration



BIOS Setting	Description
Primary display	Select which of IGFX/PEG/PCI Graphics device should be Primary Display or select HG for Hybrid Gfx
Internal Graphics	Keep IGFX enabled based on the setup options
GTT Size	Options: 2MB, 4MB, 8MB
Aperture Size	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
VT-d	Enable/Disable VT-d capability

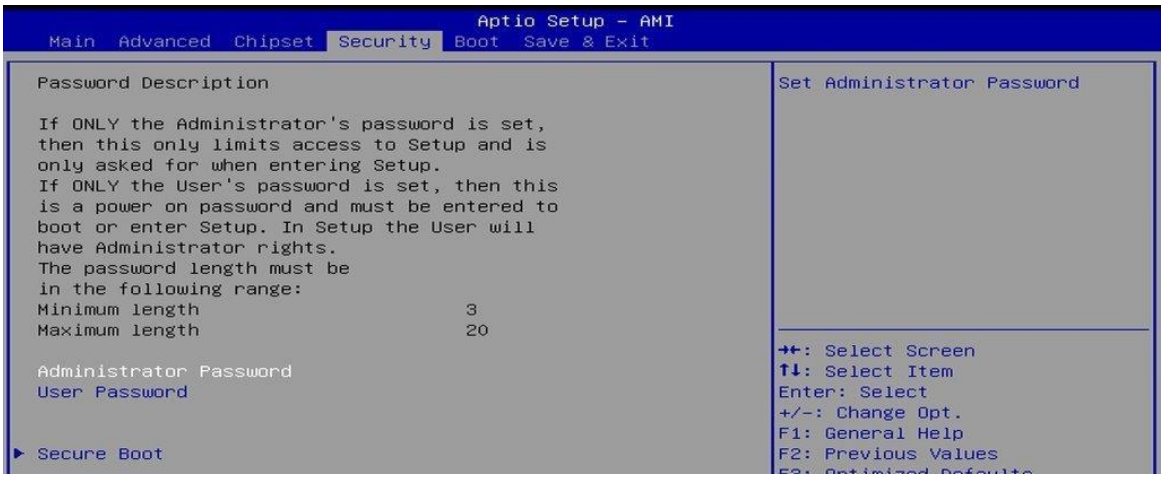
4.5.2 PCH-IO Configuration



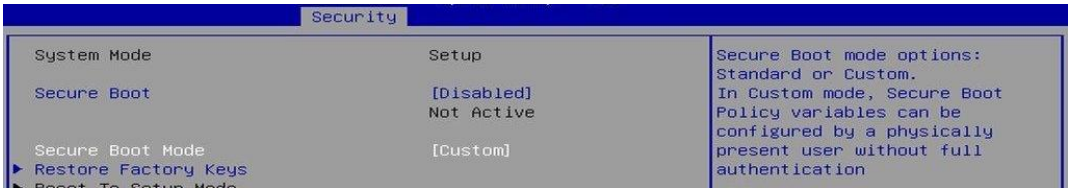


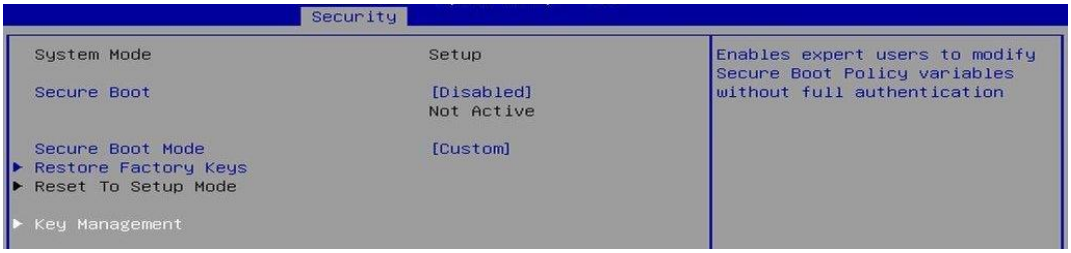
BIOS Setting	Description
SATA Controller(s)	Enables / Disables the Serial ATA.
SATA Mode Selection	Selects IDE or AHCI Mode.
Serial ATA Port 0~1	Enables / Disables Serial Port 0~1.
SATA Ports Hot Plug	Enables / Disables SATA Ports HotPlug.

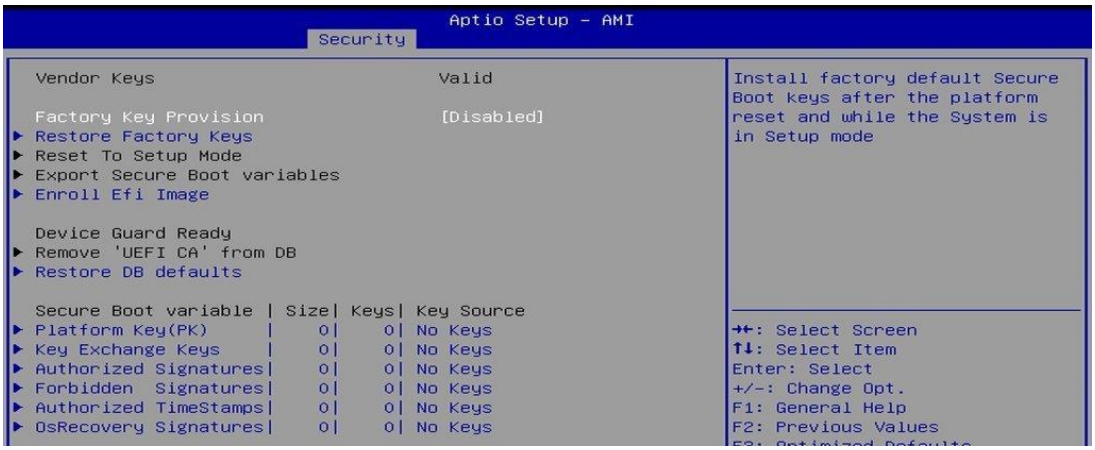
4.6 Security Settings

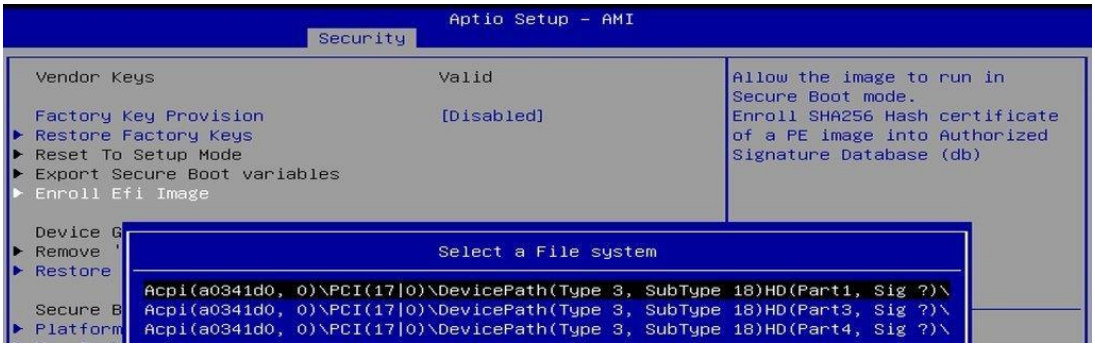


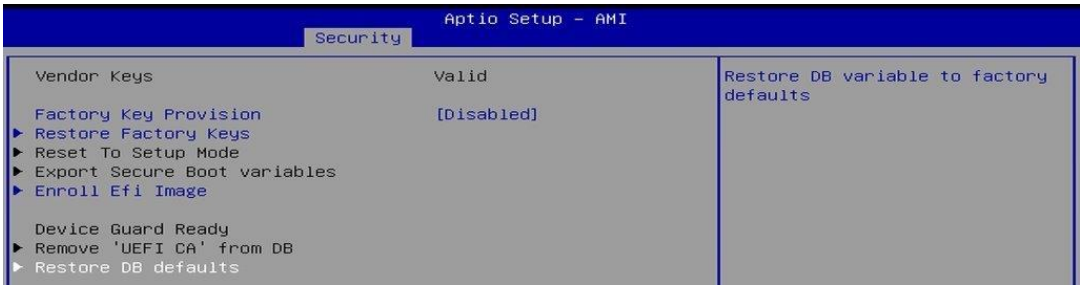
BIOS Setting	Description
Setup Administrator Password	Sets an administrator password for the setup utility.
User Password	Sets a user password.
Secure Boot	Secure Boot configuration

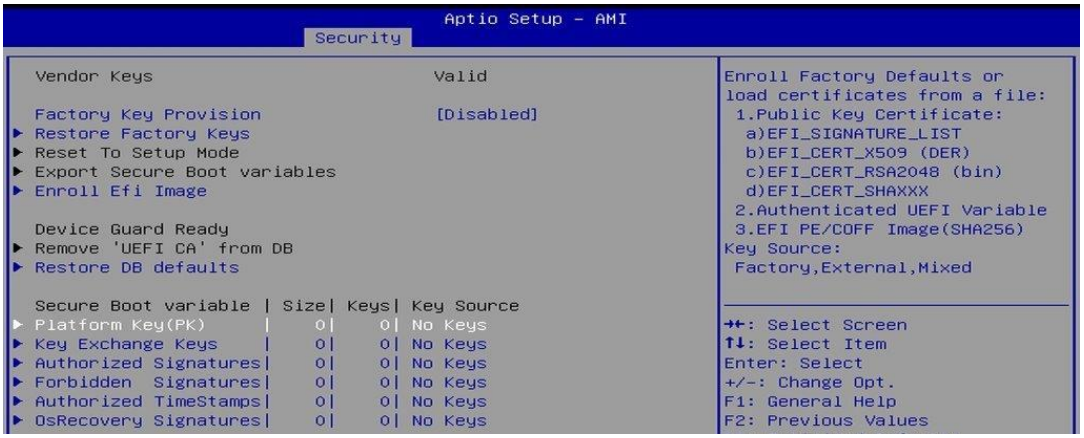




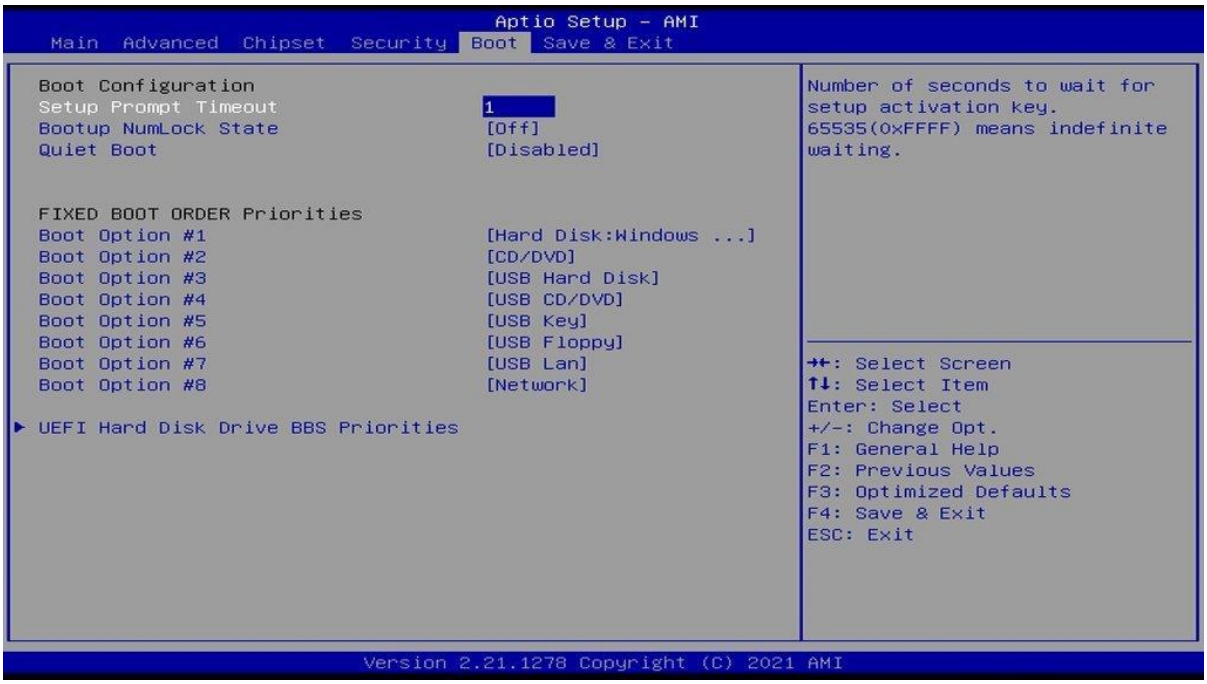

Aptio Setup – AMI
Security
Vendor Keys Valid
Factory Key Provision [Disabled]
Restore Factory Keys
Reset To Setup Mode
Export Secure Boot variables
Enroll Efi Image
Device Guard Ready
Remove 'UEFI CA' from DB
Restore DB defaults
Secure Boot variable | Size| Keys| Key Source
Platform Key(PK) | 0| 0| No Keys
Key Exchange Keys | 0| 0| No Keys
Authorized Signatures| 0| 0| No Keys
Forbidden Signatures| 0| 0| No Keys
Authorized TimeStamps| 0| 0| No Keys
OsRecovery Signatures| 0| 0| No Keys
Install factory default Secure Boot keys after the platform reset and while the System is in Setup mode
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values


Aptio Setup – AMI
Security
Vendor Keys Valid
Factory Key Provision [Disabled]
Restore Factory Keys
Reset To Setup Mode
Export Secure Boot variables
Enroll Efi Image
Select a File system
Acpi(a0341d0, 0)\PCI(17|0)\DevicePath(Type 3, SubType 18)HD(Part1, Sig ?)\
Acpi(a0341d0, 0)\PCI(17|0)\DevicePath(Type 3, SubType 18)HD(Part3, Sig ?)\
Acpi(a0341d0, 0)\PCI(17|0)\DevicePath(Type 3, SubType 18)HD(Part4, Sig ?)\
Allow the image to run in Secure Boot mode.
Enroll SHA256 Hash certificate of a PE image into Authorized Signature Database (db)


Aptio Setup – AMI
Security
Vendor Keys Valid
Factory Key Provision [Disabled]
Restore Factory Keys
Reset To Setup Mode
Export Secure Boot variables
Enroll Efi Image
Device Guard Ready
Remove 'UEFI CA' from DB
Restore DB defaults
Restore DB variable to factory defaults

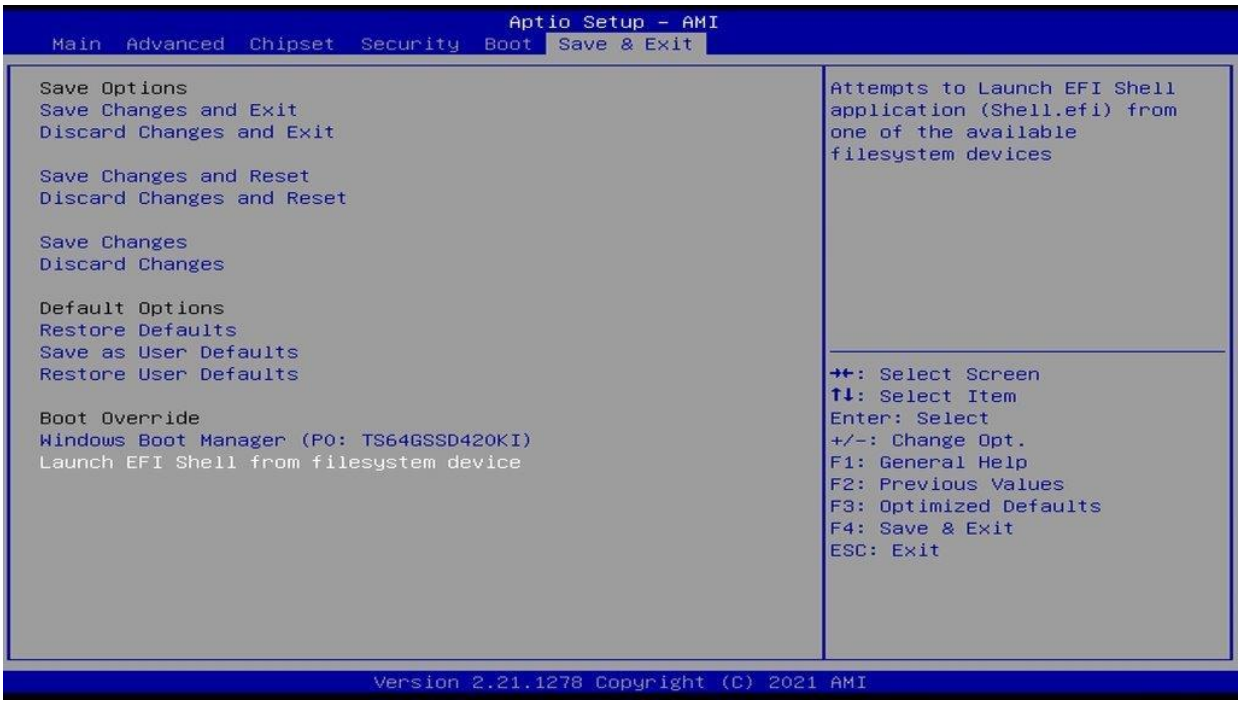

Aptio Setup – AMI
Security
Vendor Keys Valid
Factory Key Provision [Disabled]
Restore Factory Keys
Reset To Setup Mode
Export Secure Boot variables
Enroll Efi Image
Device Guard Ready
Remove 'UEFI CA' from DB
Restore DB defaults
Secure Boot variable | Size| Keys| Key Source
Platform Key(PK) | 0| 0| No Keys
Key Exchange Keys | 0| 0| No Keys
Authorized Signatures| 0| 0| No Keys
Forbidden Signatures| 0| 0| No Keys
Authorized TimeStamps| 0| 0| No Keys
OsRecovery Signatures| 0| 0| No Keys
Enroll Factory Defaults or load certificates from a file:
1.Public Key Certificate:
a)EFI_SIGNATURE_LIST
b)EFI_CERT_X509 (DER)
c)EFI_CERT_RSA2048 (bin)
d)EFI_CERT_SHAXXX
2.Authenticated UEFI Variable
3.EFI PE/COFF Image(SHA256)
Key Source:
Factory,External,Mixed
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values

4.7 Boot Settings



BIOS Setting	Description
Setup Prompt Timeout	Number of seconds to wait for setup activation key. 65535 (0xFFFF) means indefinite waiting.
Bootup NumLock State	Selects the keyboard NumLock state.
Quiet Boot	Enables / Disables Quiet Boot option.
Fast Boot	Enables / Disables boot with initialization of a minimal set of devices required to launch the active boot option. Has no effect for BBS boot options.
Boot mode select	Selects a Boot mode, Legacy / UEFI / Dual.
Boot Option Priorities	Sets the system boot order priorities for hard disk, CD/DVD, USB, Network.
UEFI Hard Disk Drives BBS Priorities	Specifies the Boot Device Priority sequence from available UEFI Hard Disk Drives.

4.8 Save & Exit Settings



BIOS Setting	Description
Save Changes and Exit	Exits system setup after saving the changes.
Discard Changes and Exit	Exits system setup without saving any changes.
Save Changes and Reset	Resets the system after saving the changes.
Discard Changes and Reset	Resets system setup without saving any changes.
Save Changes	Saves changes done so far to any of the setup options.
Discard Changes	Discards changes done to any of the setup options.
Restore Defaults	Restores / Loads defaults values for all the setup options.
Save as User Defaults	Saves the changes done so far as User Defaults.
Restore User Defaults	Restores the user defaults to all the setup options.
Launch EFI Shell from filesystem device	Attempts to launch EFI shell application (shell.efi) from one of the available filesystem devices.

Chapter 5
Motherboard

Warning: The IDOOH-215-IR is a finished product. We strongly advise against changing any motherboard settings yourself, as this may lead to unexpected issues. If you require adjustments, please contact our FAE team for support in advance.

Motherboard Introduction

The IB836F-6413E is a 3.5-inch single-board computer, powered by Elkhart Lake series processors, used within the IDOOH-215-IR. It supports two DDR4-3200 SODIMM sockets, providing a maximum memory capacity of 32GB. The IB836F-6413E features Intel® graphics engines and supports multiple display interfaces, including CRT, DisplayPort, and a 24-bit dual-channel LVDS interface. Onboard connections include two SATA II ports, two COM ports, one USB 3.0 port, four USB 2.0 ports, audio, two Mini PCI-e (x1) slots, and a Micro SD slot. Power input is provided through a +9~+30V DC interface.

For more details, please refer to the following links:

IB836 Product Page

https://www.ibase.com.tw/en/product/category/Embedded_Computing/Single_Board_Computer/x86_based_3_5_Single_Board_Computer/IB836

IB836 User Manual

https://drive.google.com/drive/folders/1UuT5YudDXrBb9qkeEDDJ2T0q4yLRQN8g

Note: Do not change the BIOS LVDS settings, otherwise the display will be abnormal. If the display is abnormal, please try to load default in BIOS setting.