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TRX 3000

MAINTENANCE MANUAL

Precaution Segment

Changes to the TRX3000 user manual are listed below.

Rev No.	Revision History	Date /author
1.0	Manual creation	Mirko Conca
TRX3000 user manual - EN Rev002		2023.01.03
TRX3000 user manual - EN Rev003		2023.04.18
TRX3000 user manual - EN Rev004	Final version	Mirko Conca 2023.07.31
TRX3000 user manual - EN Rev005	Removed i3 CPU	Mirko Conca 2023.09.04

TRX3000 Specification

Parts		Specification
CPU		Intel® Elkhart Lake J6412 (2.0 GHz)
Super I/O Chip		ITE IT8786E-I
Storage		128GB M.2 2242 Nvme SSD X2 & SATA
Memory		One 260-pin SO-DIMM 8GB DDR4L 3733 SDRAM
Graphic		Intel HD Graphics
Display		15" TFT LCD 1024x768 resolution
		15,6" TFTLCD 1366X768 resolution
Touch		Projective Capacitive Touch
TPM		TPM 2.0
External I/O	USB-A	6 Port (USB3.0*2 / USB2.0*4)
	RS-232	COM1, COM2, COM3 with DTR/12V Power output on the RJ-45 Pin 8. DB9 adpaters in option.
	LAN	Gigabit LAN (10/100/1000M BASET LAN)
	Audio	HD Audio
	C-type	Support ALT DP/USB3.0
	Mini DP	MINI-DP(DP+COM5)
	CASH DRAWER	Self Define RJ12 Connector
Power Supply		12V/5A Adaptor
OS Support		Windows 10 64bit
Operating Temperature		0 ℃ ~ 40 ℃ at 10% ~ 80% humidity
Storage Temperature		-20 ℃ ~ 60 ℃ at 10% ~ 80% humidity

*Specification may differ according to product model or options.

Preface

This User's Guide gives information about main unit/IO port layout, basic setup, component installation, and board layout for point of sale system.

Intended Audience

The User's Guide is intended for technically qualified personnel.
It is not intended for general audiences.

Document Organization

The chapters in this Product User’s manual are arranged as follows:

1. Product overview
2. TRX3000 installation
3. Motherboard
4. BIOS Setup Utility
5. Troubleshooting
6. Maintenance

SYMBOL; MARK

CE	**CE MARK** This device complies with the requirements of the EEC directive 2004/108/EC with regard to “Electromagnetic compatibility” and 2006/95/EC “Low Voltage Directive”.
FC	**FCC** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.
c UL us LISTED	**~~UL~~** Enhanced clarity and acceptance Greater transparency into a product's compliance Bundling of current and future Certifications Faster deployment Easier access to product information by end user
	WEEE **Recycling and disposal of electric and electronic devices and their components** This product should not be mixed with other commercial wastes for disposal.

Copyright

Safety Instructions

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket.
2. The wall socket must be easily accessible and in close proximity to the machine.
3. Read these instructions carefully. Save these instructions for future reference.
4. Follow all warnings and instructions marked on the product.
5. Do not use this product near water.
6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered.
8. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
9. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Notice

1. Always ensure that the correct power voltage is used as a precaution against fire and electrical shock.
2. Avoid exposing product to direct sunlight. Do not use product in areas of high humidity.
   Doing so may cause low reliability and/or operational malfunction.
3. Be careful of static electricity on PCB of system with anti-static appliances. Doing so may cause inferior reliability and shorted product life.
4. Keep product away from highly static areas. This may lead to inferior performance and reduced life cycle.
5. Do not interfere with, or obstruct metal components inside product. Doing so may cause the risk of fire or electric shock.
6. Do not pull on power cable or peripheral devices' connector cable. Doing so may cause fire, electric shock or electronic system malfunction.
7. Use caution when around other electronic devices with possible high frequency or electro-magnetic effects e.g. Audio, Electronic-range etc. Doing so will lead to the serious risk of product malfunctioning or a system error occurring.
8. Ensure that batteries are replaced correctly. Failure to do this may result in sudden explosions.
9. Dispose of used batteries properly according to the instructions.

Liability Limitation

● Installation and maintenance

We recommend that you inquire about product installation, maintenance and repair USER from the official USER center and agent office.
AURES takes no responsibility for malfunctions or system errors occurring after USER and/or system check carried out by unofficial USER providers.

● High frequency appliances

This product is qualified by FCC, CE and UL compliances, and is thus governed by these qualifications' safety regulations. However, the product can affect and be affected by other high frequencies generated around it. As such, AURES does not consider liability for any system error or disorder due to this issue.

● Electronic noise emitting equipment

We recommend using the product away from electronic noise emitting equipment such as heaters, motors, fluorescent lights, TVs etc. as it may cause interruption or interference with normal operation.

● Installation location

For optimal performance, the product should be kept in an environment of lower than 65% humidity and in a temperature of 10 ~ 30℃. Please also keep away from direct sun-light.

● Cleaning procedure

Cleaning with chemical based products (in particular those containing benzyl or chemical thinning agents) can damage the exterior surfaces of the product. We recommend using a soft damp cloth and wiping gently, taking particular care when dealing with the LCD display screen.

● Product limitations

1. The use of this product for anything other than POS tasks is strictly prohibited.
   The product is not supported for regular PC and interface operation.
2. This product is for business use only, and not for usage in the home.
3. Both hardware and software are both fully configured.
4. Normal operating is guaranteed on a steady power connection.

Installation Recommendations

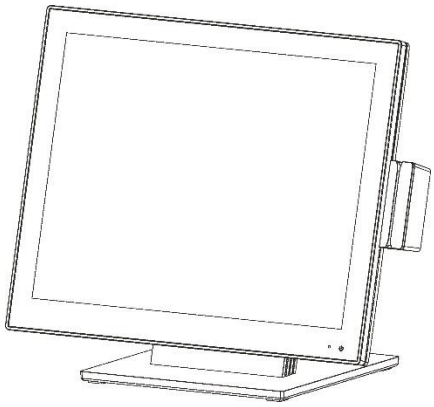
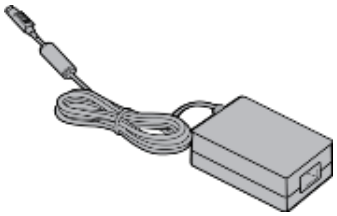
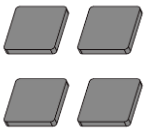
1. Avoid installing during thunderstorms. (Possibility of dangerous exposure to electricity.)
2. Install away from damp spaces or water-leaks.
3. Beware of static occurrence during installation.
4. Use only ground connected and quality certified power cords and cables.
5. Keep out of direct sun-light, extremely high or low temperatures, or high humidity areas.
6. Install product away from areas prone to shocks or vibration.
7. Install product away from sewing machines, welding equipment, electric stoves, audio equipment and other high frequency generating equipment.
8. Installation and use in close proximity to an air-conditioning unit is not recommended.
9. Do not connect cables underneath carpets or floorboards.
10. Only use power cables supplied by pre-approved and certified venders.
11. Never use power cords from high power source appliances.
    e.g. Electronic heaters, Electric stoves, Audio equipment, Air-conditioners, Refrigerators etc.
12. The use of multiple connections in a shared power outlet/socket is not recommended.

1. Product Overview

Inside Your Package

1. Please check your package and confirm its contents.
2. The POS terminal main unit, power adapter and power cable are included in the package. If any items are missing or damaged, please contact your dealer for assistance.

» All user manuals and drivers are available for download on our website: www.aures-support.com

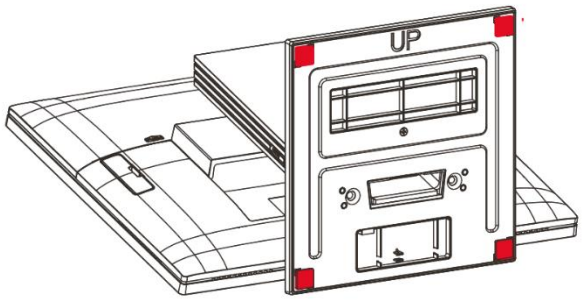
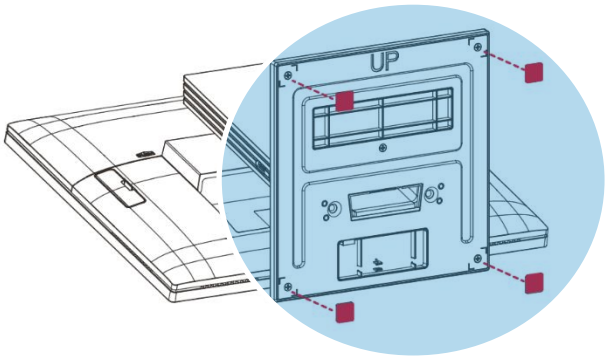
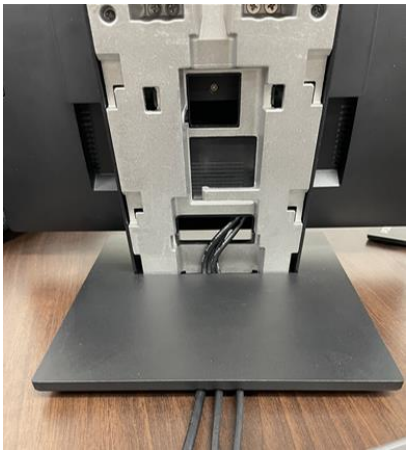
TRX3000	
Adapter / Power cord	   Rubber Foot Higt 6.5mm

2. TRX3000 Installation

(1) Attaching Rubber Feet

Caution 1) Check if the power connected to POS terminal is turned off.

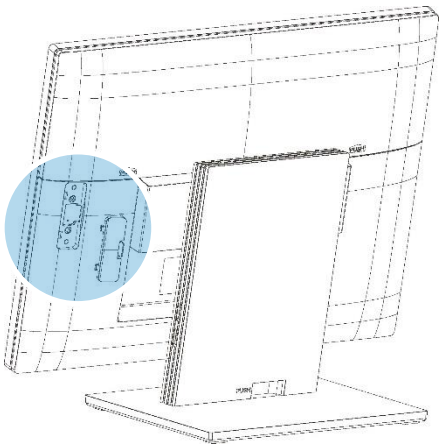
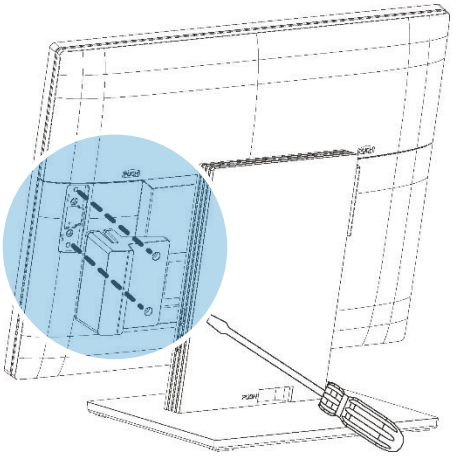
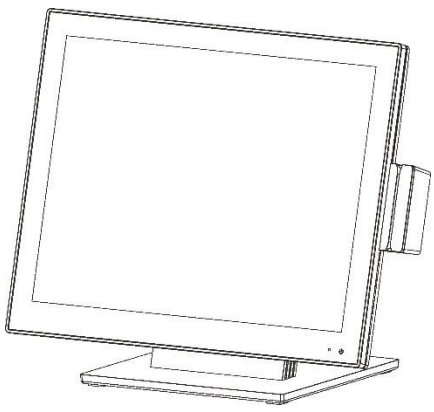
Caution 2) Separate all cables connected to system box.

Installation module	
	
	Step 1. Remove the Rubber Feet. * Remove them from the product Step 2. Please put the Rubber Feet in the same place. * Rubber Feet High 6.5mm
	Step 3. Clean up the Cable with reference to the picture.

(2) Module installation (Dallas, I-Button)

Caution 1) Check if the power connected to POS terminal is turned off.

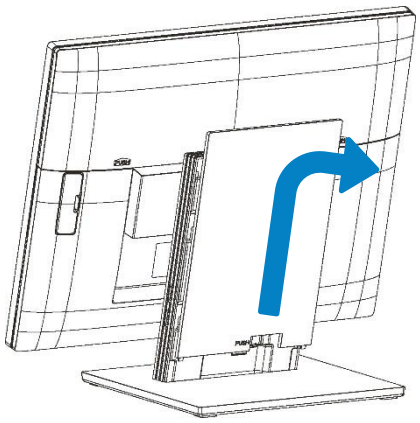
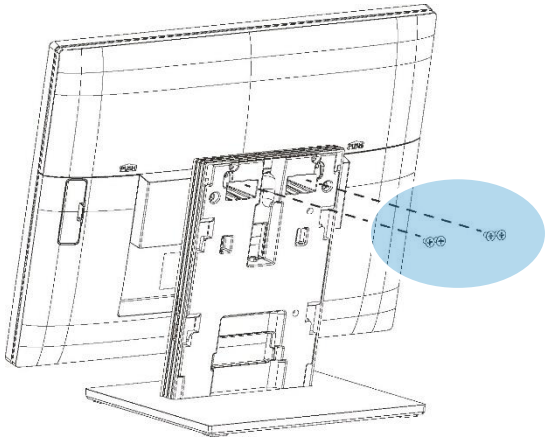
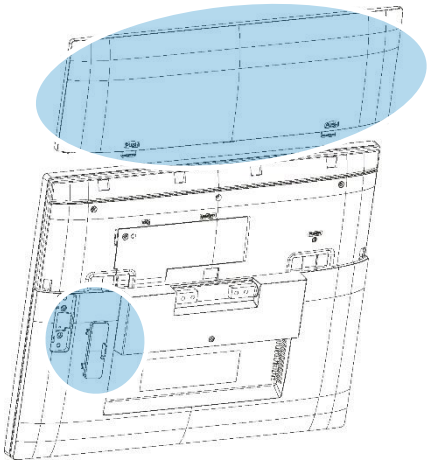
Caution 2) Separate all cables connected to system box.

Installation module	
	Step 1. Remove the module Cover.
	Step 2. Assemble the Module with 2 bolts. (M3 x 8L)
	Step 3. Download Mapper from the website and use it after installation.

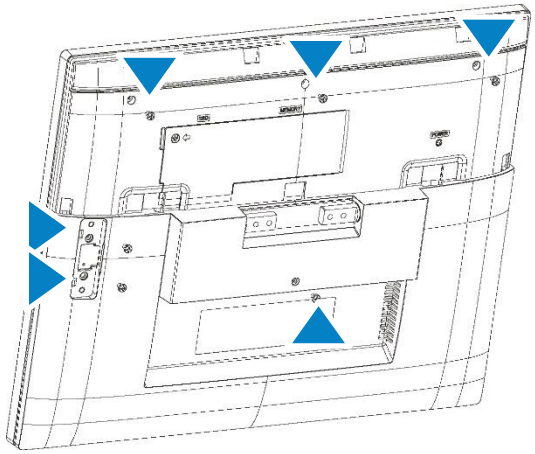
(3) Disassemble RAM

Caution 1) Check if the power connected to POS terminal is turned off.

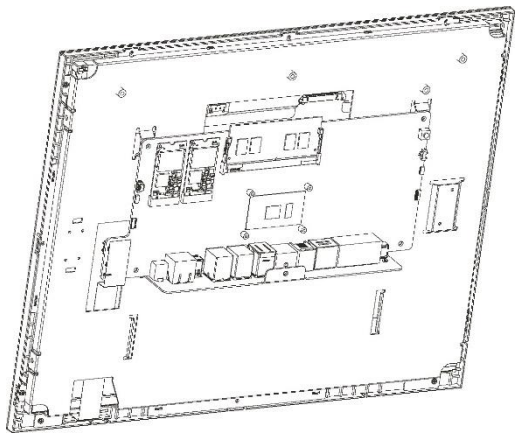
Caution 2) Separate all cables connected to system box.

Disassemble RAM	
	Step 1. Slide Stand Rear in upwards direction and pull it out in the direction of the arrow.
	Step 2. Remove the 4x screws to separate the stand and monitor. (M4 x 8L)
	Step 3. Remove Deco Cover. Step 4. Remove module Cover.

Disassemble RAM

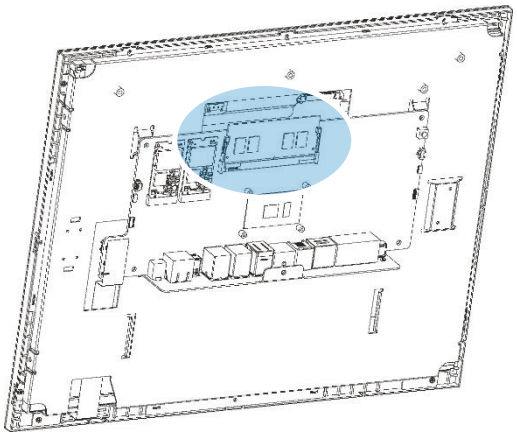


Step 5. Disassemble the Rear-Case by removing 6x screws.
(M3 x 4L)



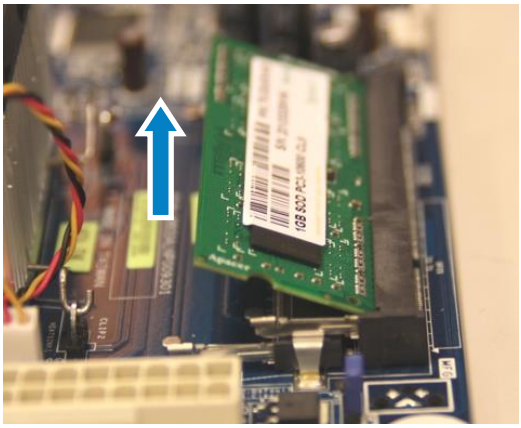
Step 6. Major parts such as Mainboard, RAM, SSD can be replaced.

※ AURES is not responsible for damages caused during replacement.



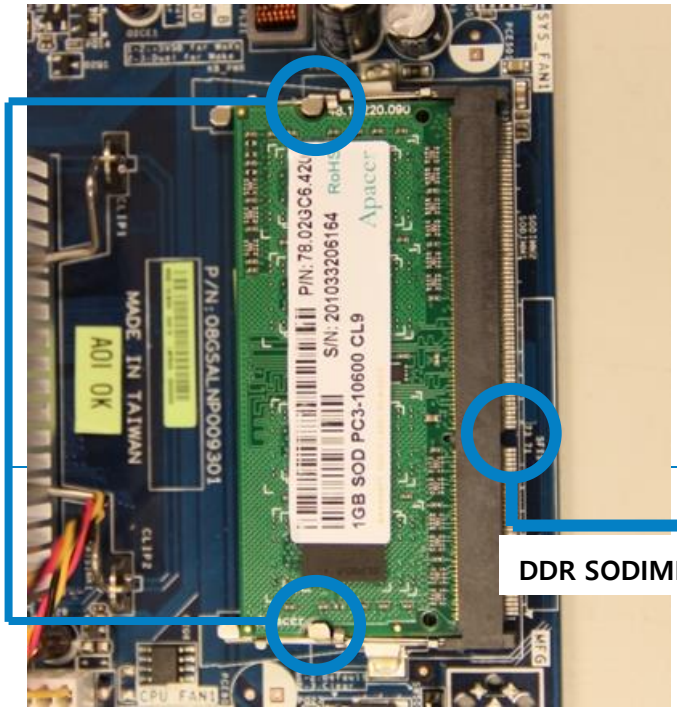
Step 7. RAM can be replaced.

Disassemble RAM



Step 8. Disassemble the SODIMM from the socket.

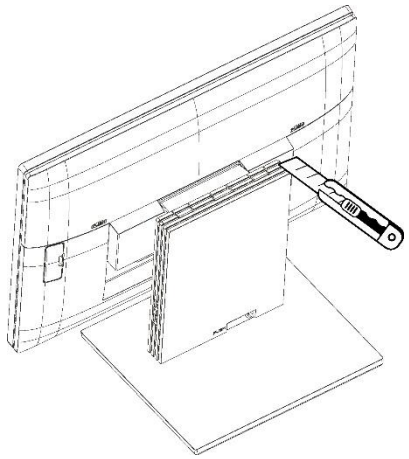
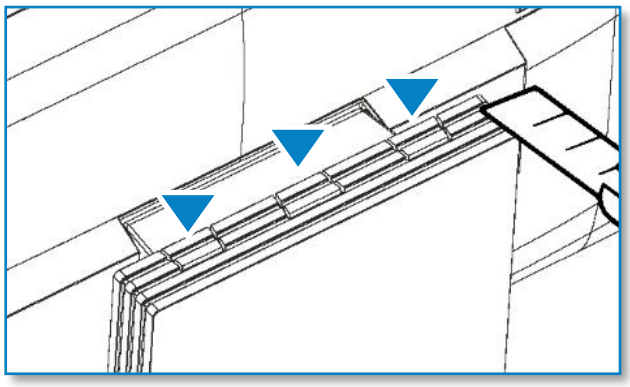
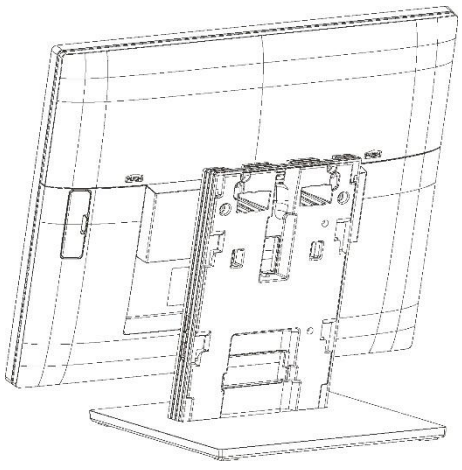
※ AURES is not responsible for damages caused during replacement.



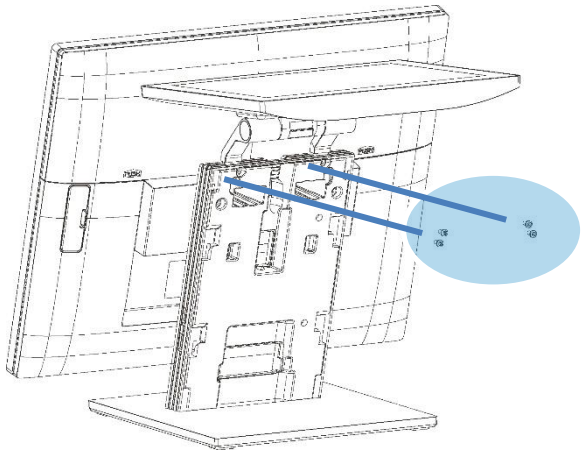
(3) Installation 2nd Display or 2nd Touch Display

Caution 1) Check if the power connected to POS terminal is turned off.

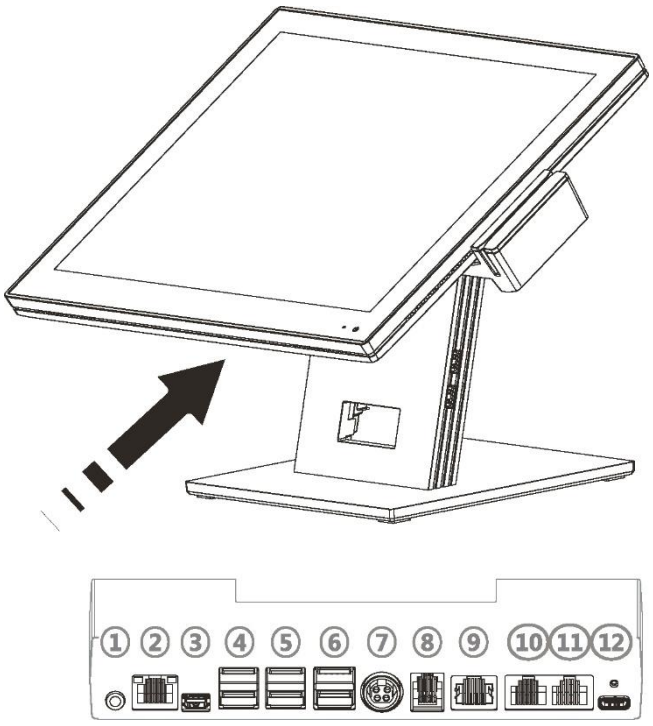
Caution 2) Separate all cables connected to system box.

Installation 2nd Display or 2nd Touch Display	
	Step 1. Cut out 3 parts of the top of the stand using a cutter knife.
	[ZOOM]
	Step 2. Remove Stand Rear.

Installation 2nd Display or 2nd Touch Display



Step 3. Assemble the 2nd Display to the Stand with 4x screws.
(T3 x 6L)



Step 4. 2nd Display can be used by connecting to Port 3.

3. Motherboard

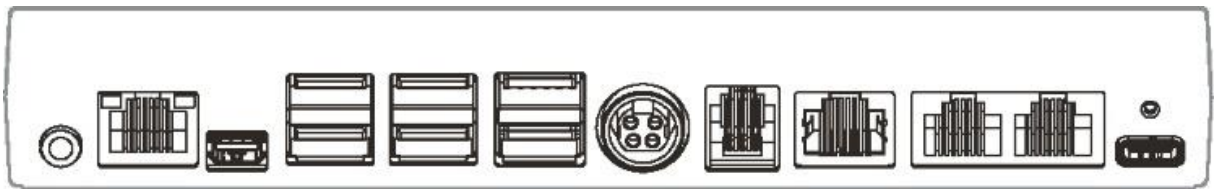
Warning

Take note of the following precautions before you install motherboard components or change any motherboard settings.

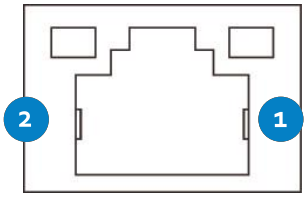
1. Unplug the power cord from the wall socket before touching any component.
2. Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
3. Hold components by the edges to avoid touching the ICs on them.
4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.
5. Before you install or remove any component, ensure that the ATX power
6. Supply is switched off or the power cord is detached from the power supply. Failure to do so may cause

Mother board Pin Assignment

This includes description of the jumpers and connectors on the motherboard.

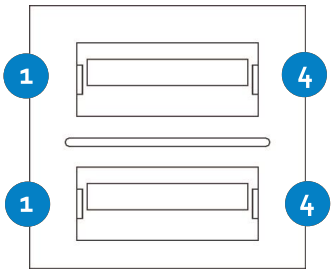


LAN port (RJ45)



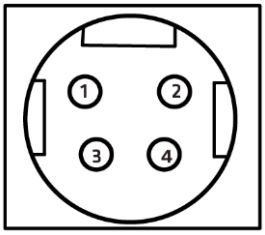
Pin Num	Description	Pin Num	Description
1	Transmit +	5	Reserved
2	Transmit -	6	Receive -
3	Receive +	7	Reserved
4	Reserved	8	Reserved

USB port



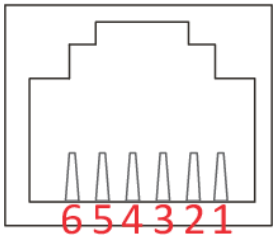
Pin Num	Description
1	VSUB(+5V) +
2	D-
3	D+
4	GND

DC IN 12V



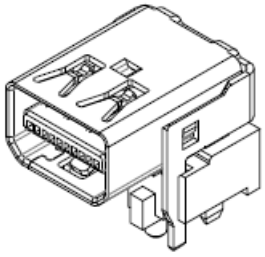
Pin Num	Description
1-2	GND
3-4	+12V

RJ12 Cash Drawer



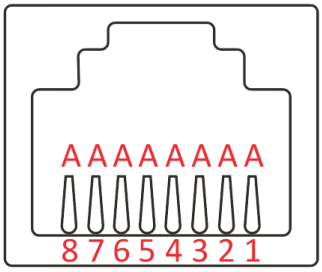
Pin Num	Description
1	Sensor Input 2
2	CashDrawer Open 1
3	Sensor Input1
4	Cash power
5	CashDrawer Open 2
6	GND

Mini Display Port



Pin Num	Description	Pin Num	Description
1	GND	11	DP1 TX1 DN
2	DP1 HPD	12	RS232 TXD5
3	DP1 TXO DP	13	GND
4	CONFIG1	14	GND
5	DP1 TXO DN	15	+DATA14
6	CONFIG2	16	DP1 AUXP
7	GND	17	-DATA14
8	GND	18	DP1 AUXN
9	DP1 TX1 DP	19	GND
10	RS232 TXD5	20	DC 12V

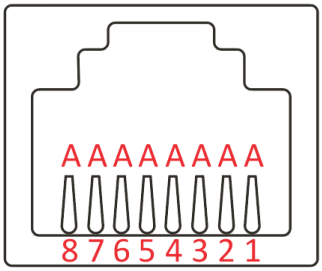
COM1/2



Pin Num	Description
A1	DCD1
A2	TXD1
A3	RXX1
A4	DSR1
A5	GND
A6	DTR1/12V
A7	CTS1
A8	RTS1

Standard 1*2 Rj45 Connector Without LED

COM3



	COM3
A1	RST3
A2	CTS3
A3	DTR3(+12V)
A4	GND
A5	DSR3
A6	RXD3
A7	TXD3
A8	DCD3

Standard 1*2 Rj45 Connector Without LED

t

4. BIOS Setup Utility

* This chapter tells how to change the system settings through the BIOS Setup menus.
Detailed descriptions of the BIOS parameters are also provided.

(1) BIOS setup program

This motherboard supports a programmable firmware chip that you can update using the provided utility. Use the BIOS Setup program when you are installing a motherboard, reconfiguring your system, or prompted to “Run Setup.” This section explains how to configure your system using this utility.

Even if you are not prompted to use the Setup program, you can change the configuration of your computer in the future. For example, you can enable the security password feature or change the power management settings. This requires you to reconfigure your system using the BIOS Setup program so that the computer can recognize these changes and record them in the CMOS RAM of the firmware hub.

The firmware hub on the motherboard stores the Setup utility. When you start up the computer, the system provides you with the opportunity to run this program. Press <Del> during the Power-On-Self-Test (POST) to enter the Setup utility; otherwise, POST continues with its test routines.

If you wish to enter Setup after POST, restart the system by pressing <Ctrl+Alt+Delete>, or by pressing the reset button on the system cashsis. You can also restart by turning the system off and then back on. Do this last option only if the first two failed.

The Setup program is designed to make it as easy to use as possible. Being a menu-driven program, it lets you scroll through the various sub-menus and make your selections from the available options using the navigation keys.

- The default BIOS settings for this motherboard apply for most conditions to ensure optimum performance. If the system becomes unstable after changing any BIOS settings, load the default settings to ensure system compatibility and stability. Select the Load Optimized Defaults from the BIOS menu screen.
- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.

1.1 Legend Box

The keys in the legend bar allow you to navigate through the various setup menus.

Key(s)	Function Description
←,→	Select Screen
↑,↓	Select Item
Enter	Select
+,-	Change Option / Field
F1	General Help
F2	Previous Value
F3	Optimized Defaults
F4	Save and Exit
ESC	Exit

1.2 List Box

This box appears only in the opening screen. The box displays an initial list of configurable items in the menu you selected.

1.3 Sub-menu

Note that a right pointer symbol (▶) appears to the left of certain fields. This pointer indicates that you can display a sub-menu from this field. A sub-menu contains additional options for a field parameter. To display a sub-menu, move the highlight to the field and press <Enter>. The sub-menu appears. Use the legend keys to enter values and move from field to field within a sub-menu as you would within a menu. Use the <Esc> key to return to the main menu.

Take some time to familiarize yourself with the legend keys and their corresponding functions. Practice navigating through the various menus and submenus. If you accidentally make unwanted changes to any of the fields, press <F6> to load the fail-safe default values. While moving around through the Setup program, note that explanations appear in the Item Specific Help window located to the right of each menu. This window displays the help text for the currently highlighted field.

BIOS Menu Screen

The arrow key (←→↑↓) is used to change the main page and selected menu.

Enter key to enter a second-level menu or change a menu setting.

F1 key to show the General Help window

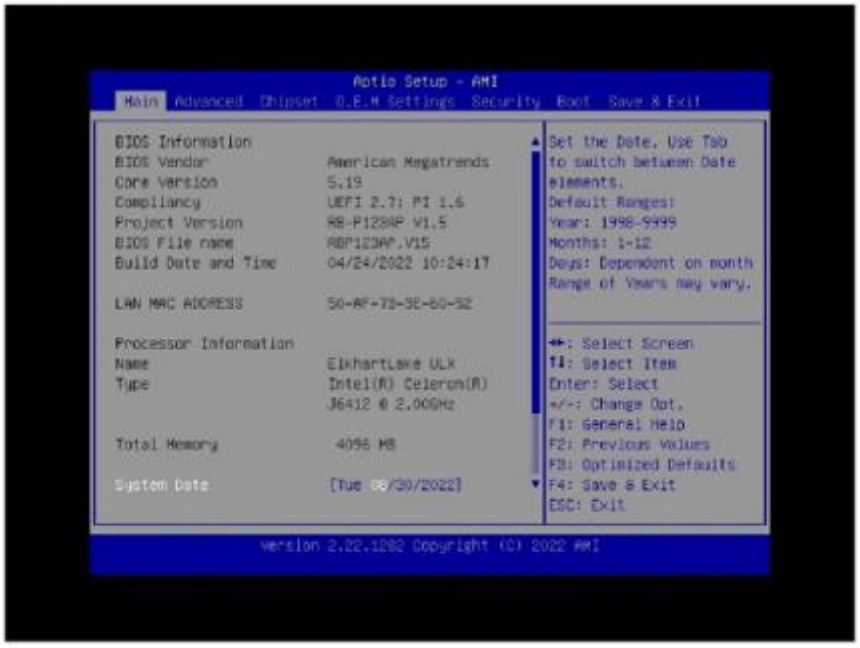
F2 key to load Previous Values

F3 key to load the Optimized Default Values

F4 key to Save the BIOS settings

ESC key to Exit the BIOS setup

►Main



Set the Date. Use Tab to switch between Date elements.

1. **System Date**

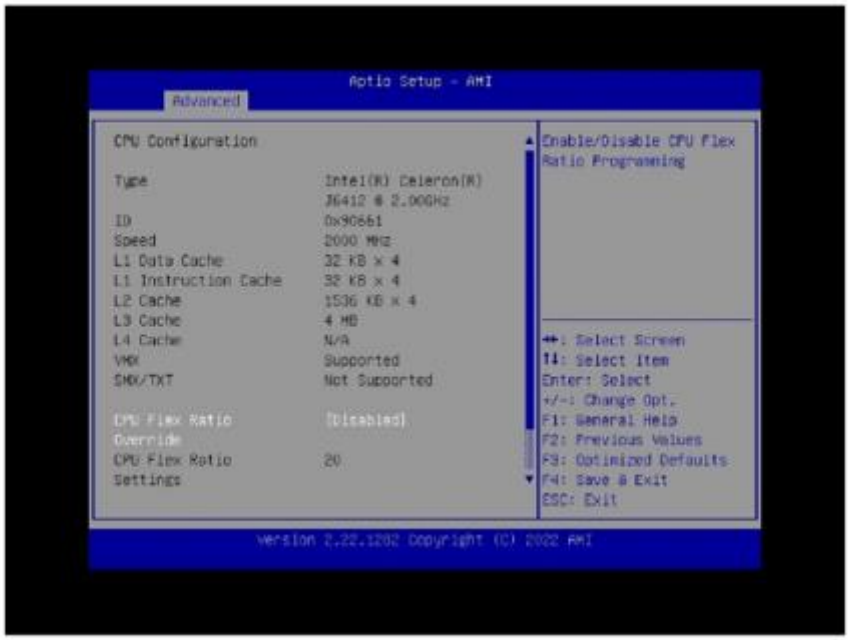
Input the Date information, and press <Enter> to move to the next Date setting.
Notice: Not use the arrow key <←→> to move between the Date settings.

2. **System Time**

The setting way is the same to the System Date.

► **Advanced**

Include some configuration item.


Aptio Setup - AMI
Advanced
CPU Configuration
Type
Intel(R) Celeron(R) J6412 @ 2.00GHz
ID
0x90661
Speed
2000 MHz
L1 Data Cache
32 KB x 4
L1 Instruction Cache
32 KB x 4
L2 Cache
1536 KB x 4
L3 Cache
4 MB
L4 Cache
N/A
VMX
Supported
SMX/TXT
Not Supported
CPU Flex Ratio Override
[Disabled]
CPU Flex Ratio Settings
20
Enable/Disable CPU Flex Ratio Programming
→←: 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) 2022 AMI


Aptio Setup - AMI
Advanced
ID
0x90661
Speed
2000 MHz
L1 Data Cache
32 KB x 4
L1 Instruction Cache
32 KB x 4
L2 Cache
1536 KB x 4
L3 Cache
4 MB
L4 Cache
N/A
VMX
Supported
SMX/TXT
Not Supported
CPU Flex Ratio Override
[Disabled]
CPU Flex Ratio Settings
20
Intel (VMX) Virtualization Technology
[Enabled]
When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.
→←: 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) 2022 AMI

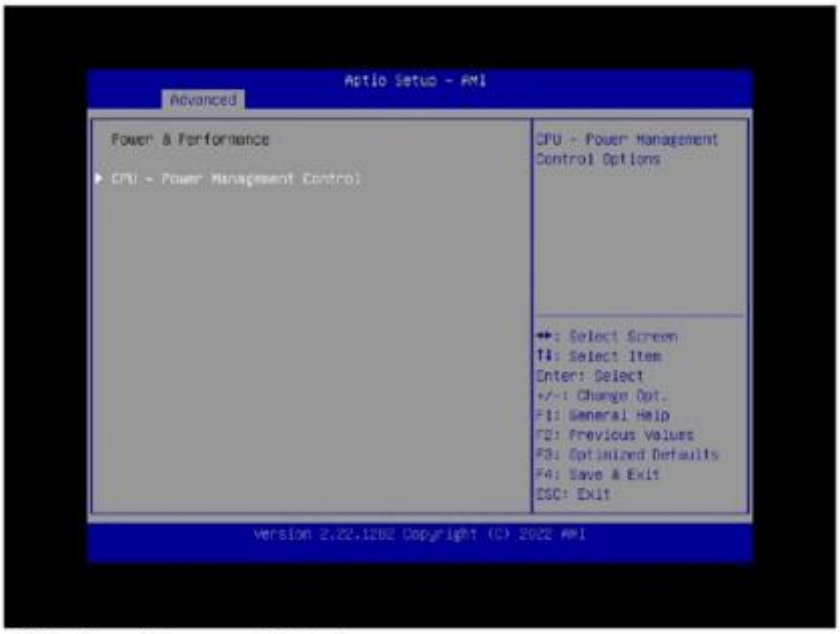
•CPU Flex Ratio Override:

Enable/Disable CPU Flex Ratio Programming.

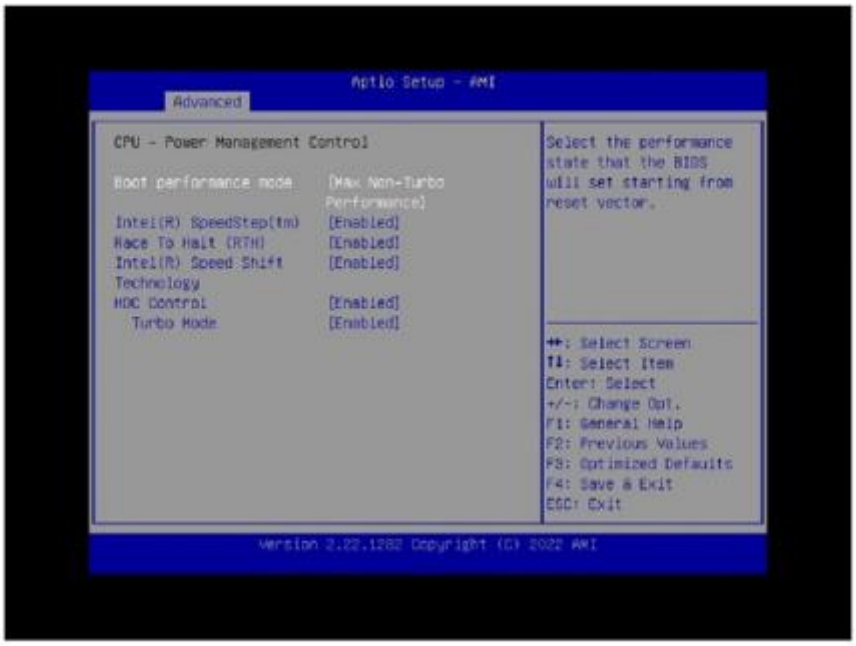
•Intel (VMX) Virtualization Technology:

When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

►Power & Performance



•CPU - Power Management Control



Boot performance mode:

Select the performance state that the BIOS will set starting from reset vector.

Intel(R) SpeedStep(tm):

Allows more than two frequency ranges to be supported.

Race To Halt (RTH):

Enable/Disable Race To Halt feature. RTH will dynamically increase CPU frequency in order to enter pkg C-State faster to reduce overall power. (RTH is controlled through MSR 1FC bit 20).

Intel(R) Speed Shift Technology:

Enable/Disable Intel(R) Speed Shift Technology support. Enabling will expose the CPPC v2 interface to allow for hardware controlled P-states.

HDC Control:

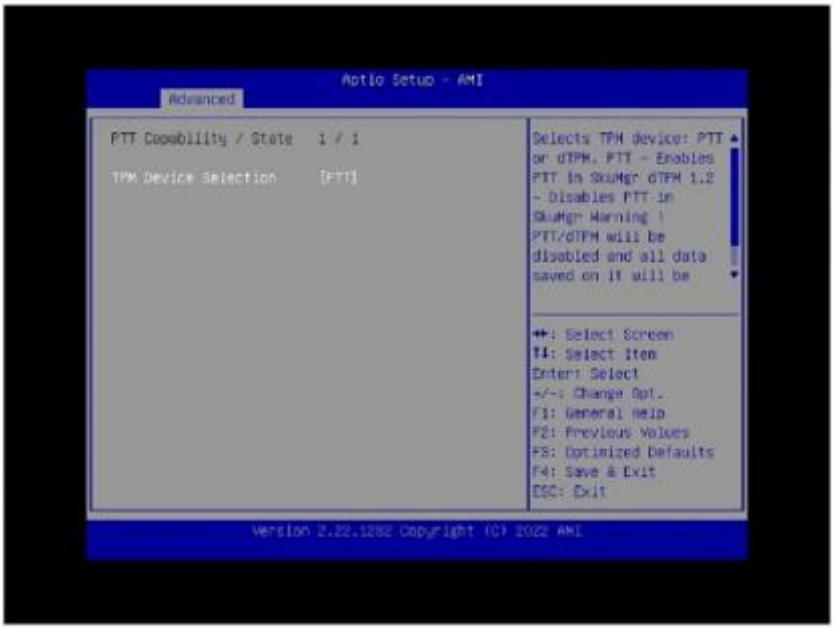
This option allows HDC configuration. Disabled: Disable HDC, Enabled: Can be enabled by OS if OS native support is available.

Turbo Mode:

Enable/Disable processor Turbo Mode (requires EMTTM enabled too). AUTO means enabled.

►PCH-FW Configuration

•PTT Configuration

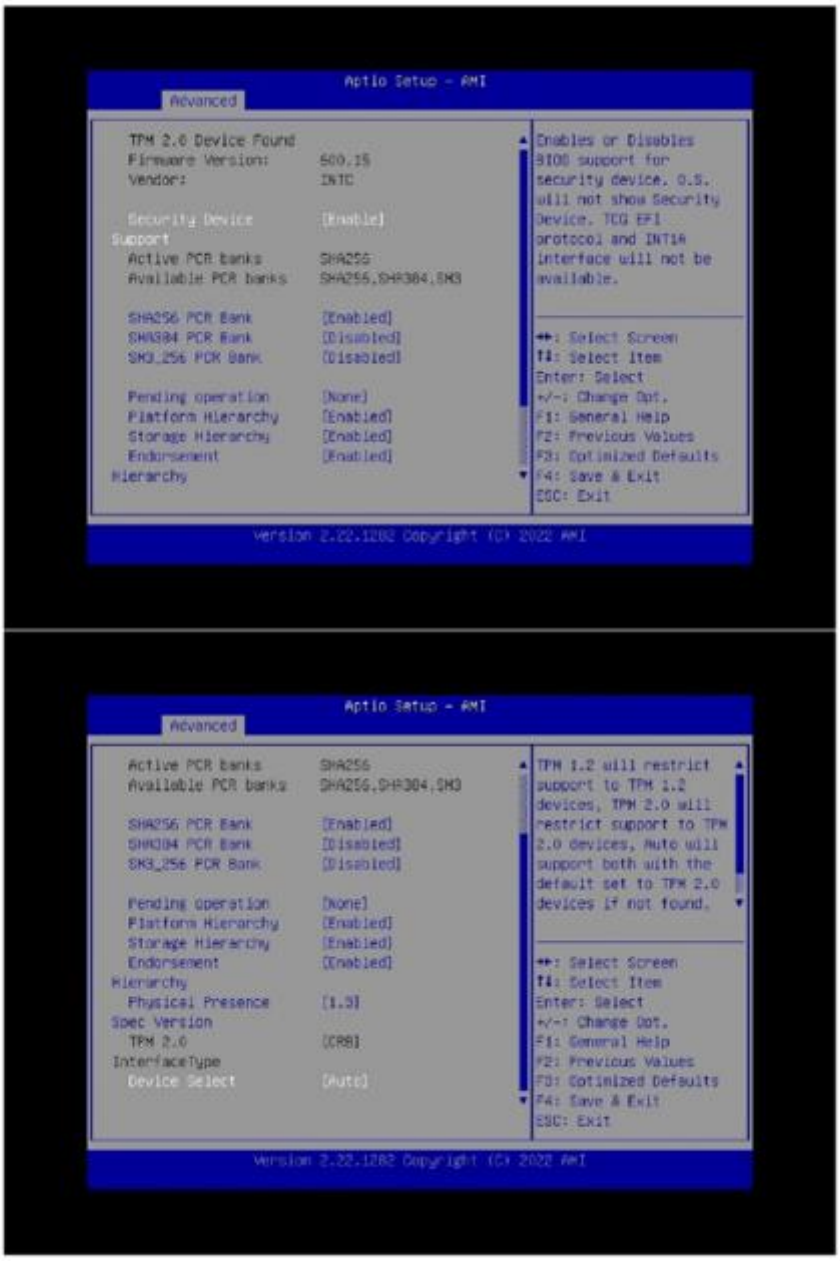


▶ **Thermal Configuration**

•CPU Thermal Configuration

Min:20, Mid:15, MAX:0 offset from factory set Tcc activation temprature at which the Thermal Control Circuit must be activated. Tcc will be activated at: TCC Activation Temp - Tcc Activation offset. Tcc Activation Offset range is 0 to 63.

►Trusted Computing


Aptio Setup – AMI
Advanced
TPM 2.0 Device Found
Firmware Version: 600.15
Vendor: INTC
Security Device Support [Enable]
Active PCR banks SHA256
Available PCR banks SHA256,SHA384,SM3
SHA256 PCR Bank [Enabled]
SHA384 PCR Bank [Disabled]
SM3_256 PCR Bank [Disabled]
Pending operation [None]
Platform Hierarchy [Enabled]
Storage Hierarchy [Enabled]
Endorsement Hierarchy [Enabled]
Enables or Disables BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.
↔: 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) 2022 AMI
Aptio Setup – AMI
Advanced
Active PCR banks SHA256
Available PCR banks SHA256,SHA384,SM3
SHA256 PCR Bank [Enabled]
SHA384 PCR Bank [Disabled]
SM3_256 PCR Bank [Disabled]
Pending operation [None]
Platform Hierarchy [Enabled]
Storage Hierarchy [Enabled]
Endorsement Hierarchy [Enabled]
Physical Presence Spec Version [1.3]
TPM 2.0 InterfaceType [CRB]
Device Select [Auto]
TPM 1.2 will restrict support to TPM 1.2 devices. TPM 2.0 will restrict support to TPM 2.0 devices. Auto will support both with the default set to TPM 2.0 devices if not found.
↔: 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) 2022 AMI

•Security Device Support:

Enables or Disables BIOS support for security device.o.s. wil1 not show Security Device. TCG EFI protocol and INT1A interface wil1 not be available.

•SHA256 PCR Bank: Enable or Disable SHA256 PCR Bank.

•SHA384 PCR Bank: Enable or Disable SHA384 PCR Bank.

•SM3_256 PCR Bank: Enable or Disable SM3_256 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: Enable or Disable Platform Hierarchy.

•Storage Hierarchy: Enable or Disable Storage Hierarchy.

•Endorsement Hierarchy: Enable or Disable Endorsement Hierarchy.

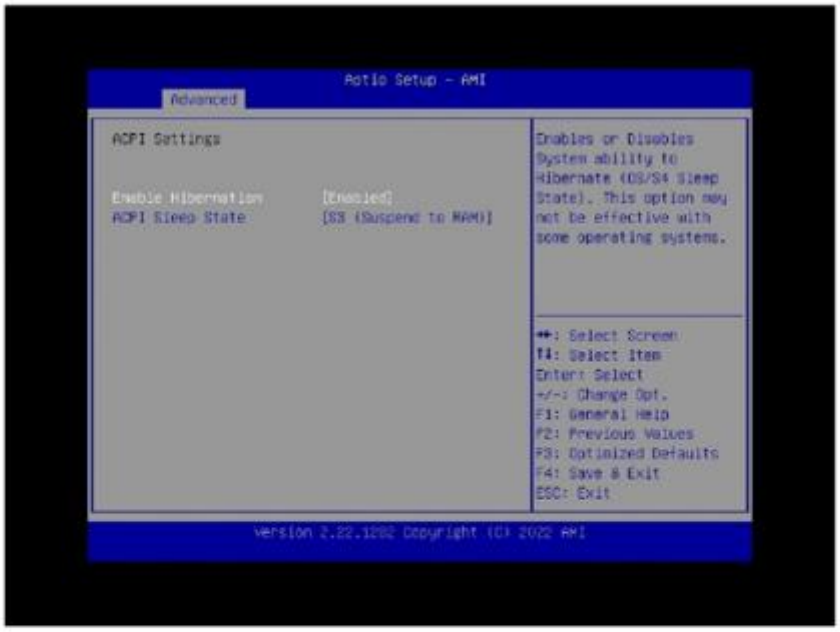
•Physical Presence Spec Version:

Select to Tell O.S. to support PPI Spec Version 1.2 or 1.3. Note some HCK tests might not support 1.3.

•Devices Select:

TPM 1.2 will restrict support to TPM 1.2 devices, TPM 2.0 will restrict support to TPM 2.0 devices, Auto will support both with the default set to TPM 2.0 devices if not found, TPM 1.2 devices will be enumerated.

►ACPI Settings



•Enable Hibernation:

Enables or Disables System ability to Hibernate (OS/S4 Sleep State). This option may not be effective with some operating systems.

•ACPI Sleep State:

Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.

► IT8786 Super IO Configuration

•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

Set Parameters of serial port 3(COMC).

•Serial Port 4 Configuration

Set Parameters of serial port 4(COMD).

•Serial Port 5 Configuration

Set Parameters of serial port 5(COME).

► Serial Port 1 Configuration

•Serial Port : Enable or Disable Serial Port（COM）.

► Serial Port 2 Configuration

•Serial Port : Enable or Disable Serial Port（COM）.

► Serial Port 3 Configuration

●Serial Port : Enable or Disable Serial Port（COM）

► Serial Port 4Configuration

●Serial Port : Enable or Disable Serial Port（COM）.

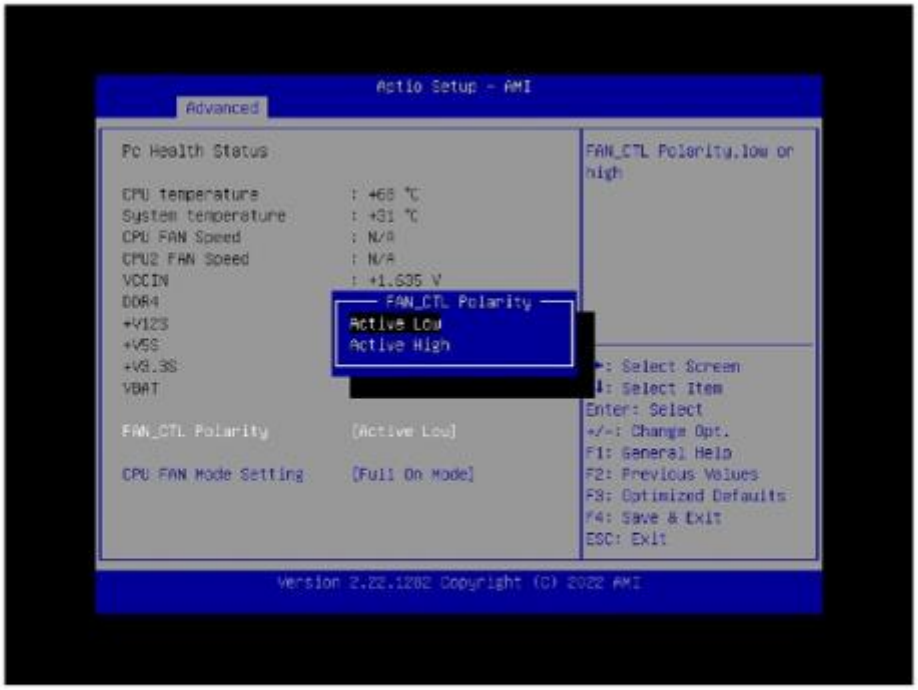
► Serial Port 5 Configuration

•Serial Port : Enable or Disable Serial Port（COM）.

► Hardware Monitor

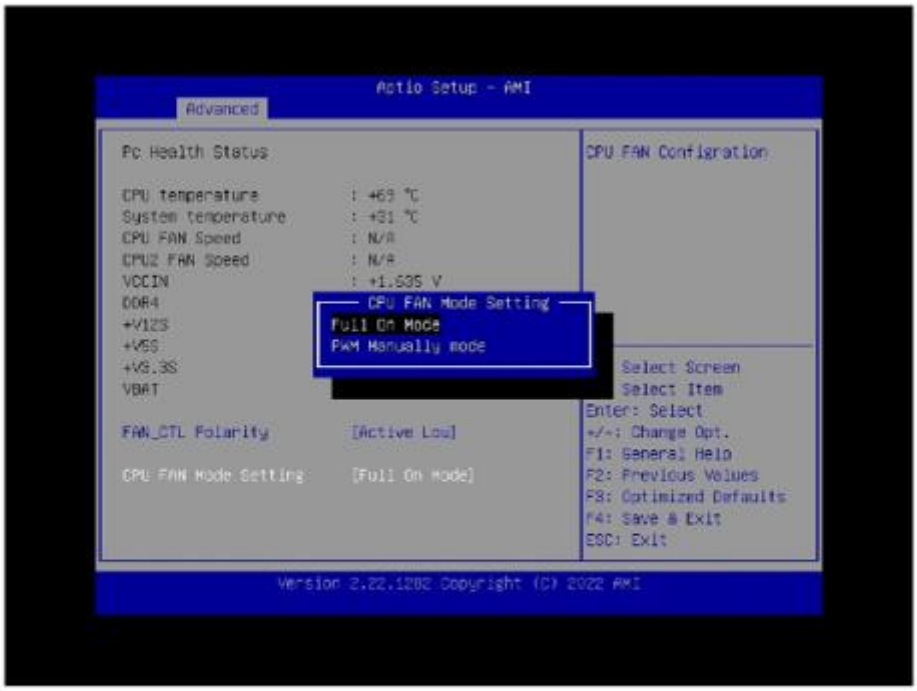
Hardware Monitor status

•FAN_CTL Polarity:



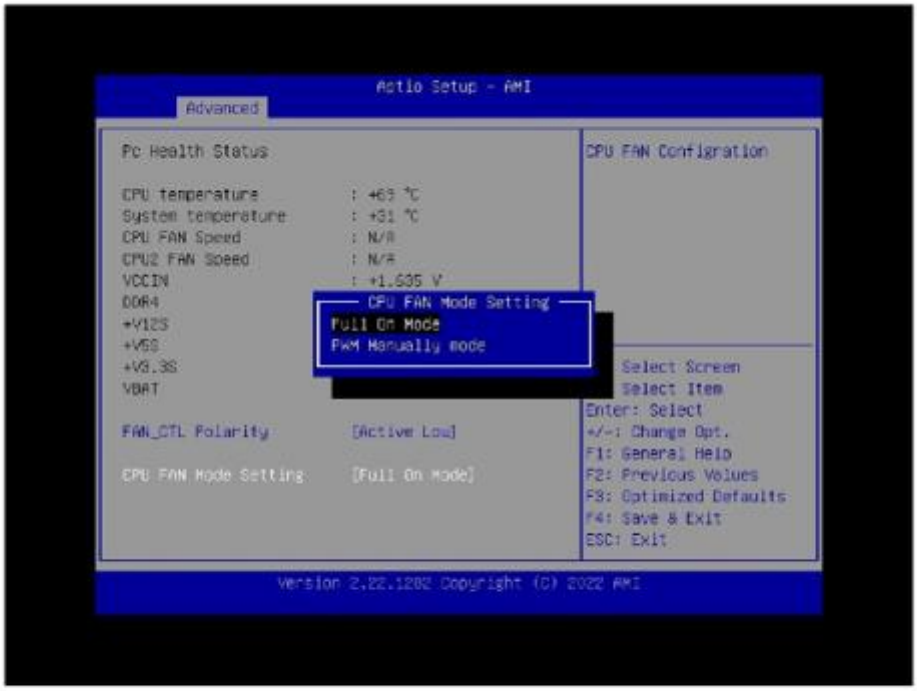
FAN_CTL Polarity, low or high.

•CPU FAN Mode Setting:



CPU FAN Configuration. If choose PWM Manually mode, you can set the value of PWM.

•Fan PWM Control:



CPU FAN Configuration. If choose PWM Manually mode, you can set the value of PWM.

•Fan PWM Control:

•Output Select: Output Interface.

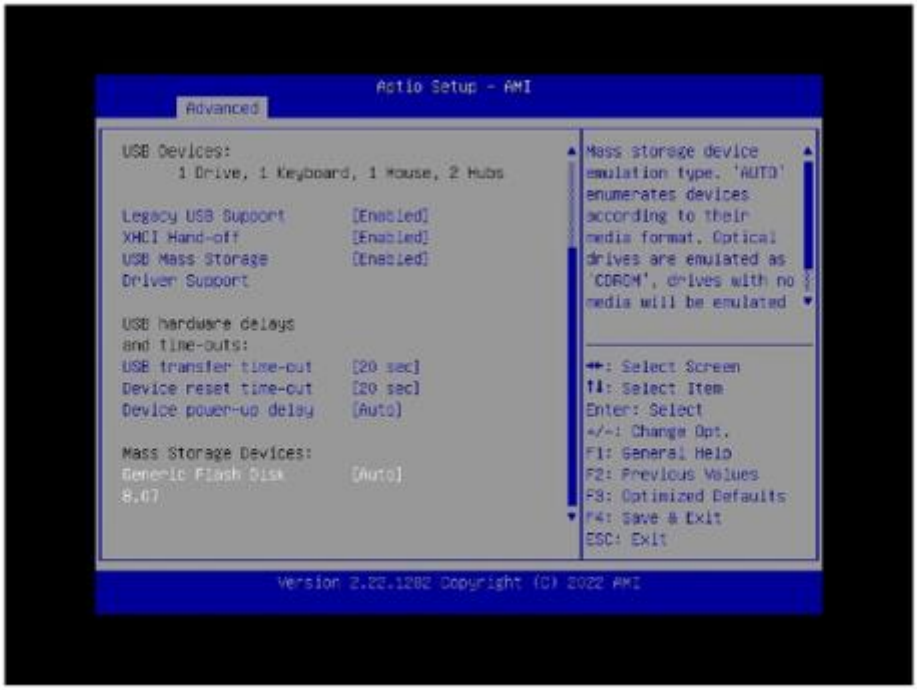
•LVDS/eDP Backlight Brightness Control: Set Gop Brightness value.

•BIST Enable: Starts or stops the BIST on the integrated display panel.

► USB Configuration

► AMI Graphic Output Protocol Policy


Aptio Setup - AMI
Advanced
USB Configuration
USB Module Version 25
USB Controllers:
1 XHCI
USB Devices:
1 Drive, 1 Keyboard, 1 Mouse, 2 Hubs
Legacy USB Support [Enabled]
XHCI Hand-off [Enabled]
USB Mass Storage Driver Support [Enabled]
USB hardware delays and time-outs:
USB transfer time-out [20 sec]
Device reset time-out [20 sec]
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.
→←: 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) 2022 AMI


Aptio Setup - AMI
Advanced
USB Devices:
1 Drive, 1 Keyboard, 1 Mouse, 2 Hubs
Legacy USB Support [Enabled]
XHCI Hand-off [Enabled]
USB Mass Storage Driver Support [Enabled]
USB hardware delays and time-outs:
USB transfer time-out [20 sec]
Device reset time-out [20 sec]
Device power-up delay [Auto]
Mass Storage Devices:
Generic Flash Disk 8.07 [Auto]
Mass storage device emulation type. 'AUTO' enumerates devices according to their media format. Optical drives are emulated as 'CDROM', drives with no media will be emulated
→←: 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) 2022 AMI

●Legacy USB Support:

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:

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:

Enable/Disable USB Mass Storage Driver Support.

●USB transfer time-out:

The time-out value for Control, Bulk, and Interrupt transfers.

●Device reset time-out:

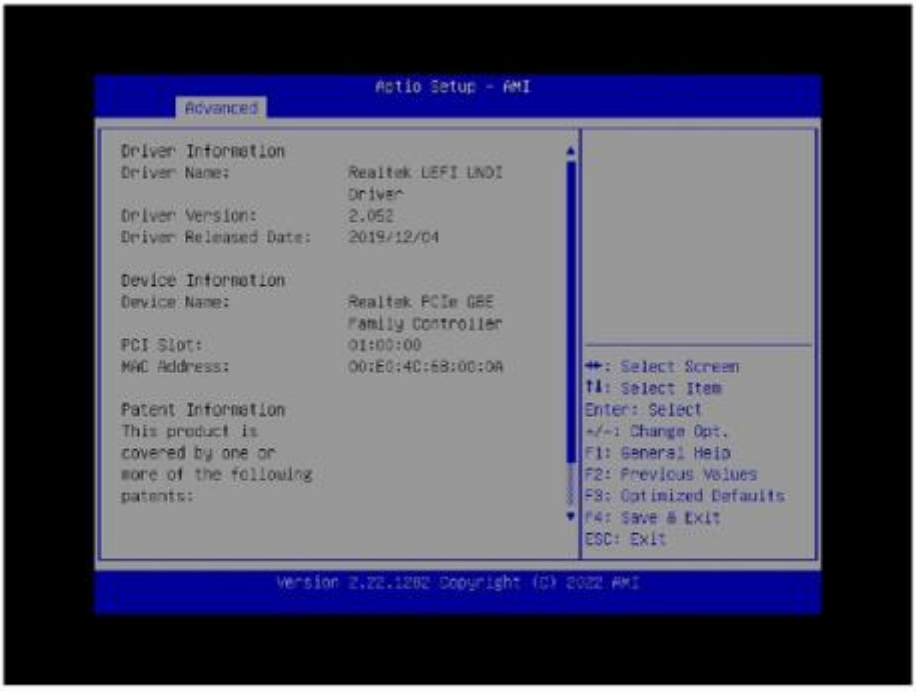
USB mass storage device Start Unit command time-out.

●Device power-up delay:

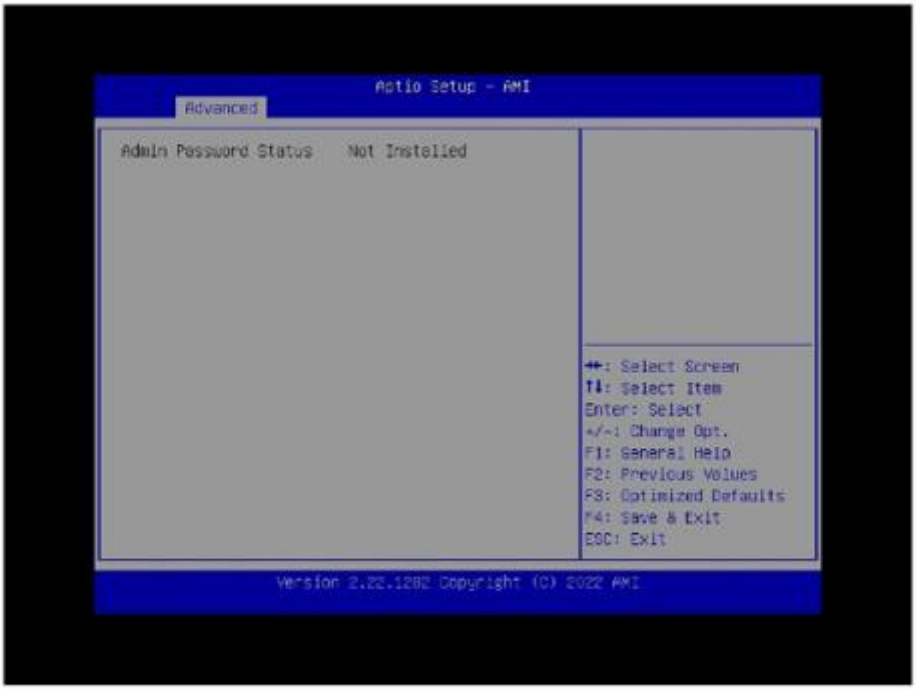
Maximum time the device will take before it properly reports itself to the Host Controller. 'Auto' uses default value: for a Root port it is 100 ms, for a Hub port the delay is taken from Hub descriptor.

► NVMe Configuration

► Realtek PCIe GBE Family Controller



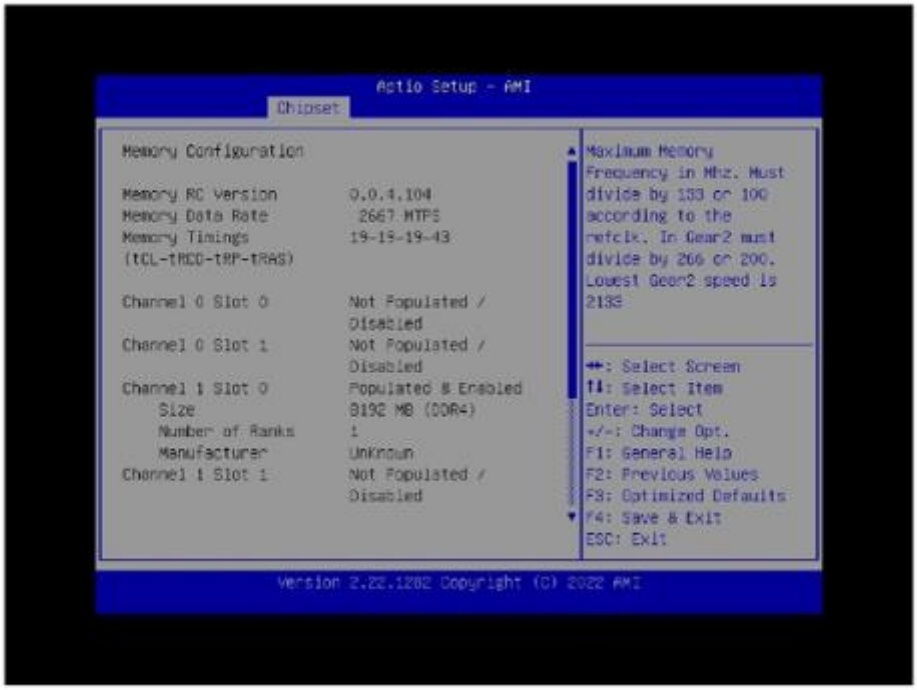
► User Password Management



►3. Chipset Configuration

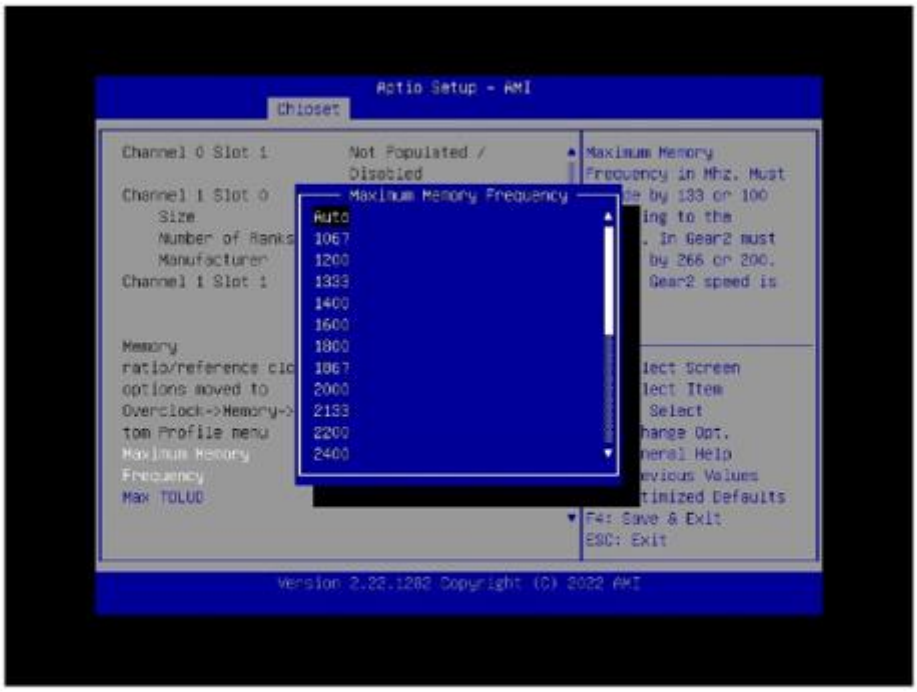
► System Agent (SA) Configuration

•Memory Configuration


Aptio Setup - AMI
Chipset
Memory Configuration
Memory RC Version 0.0.4.104
Memory Data Rate 2667 MTPS
Memory Timings (tCL-tRCD-tRP-tRAS) 19-19-19-43
Channel 0 Slot 0 Not Populated / Disabled
Channel 0 Slot 1 Not Populated / Disabled
Channel 1 Slot 0 Populated & Enabled
Size 8192 MB (DDR4)
Number of Ranks 1
Manufacturer Unknown
Channel 1 Slot 1 Not Populated / Disabled
Maximum Memory Frequency in Mhz. Must divide by 133 or 100 according to the refclk. In Gear2 must divide by 266 or 200. Lowest Gear2 speed is 2133
→←: 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) 2022 AMI


Aptio Setup - AMI
Chipset
Channel 0 Slot 1 Not Populated / Disabled
Channel 1 Slot 0 Populated & Enabled
Size 8192 MB (DDR4)
Number of Ranks 1
Manufacturer Unknown
Channel 1 Slot 1 Not Populated / Disabled
Memory ratio/reference clock options moved to Overclock->Memory->Custom Profile menu
Maximum Memory Frequency [Auto]
Max TOLUD [Dynamic]
Maximum Value of TOLUD. Dynamic assignment would adjust TOLUD automatically based on largest MMIO length of installed graphic controller
→←: 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) 2022 AMI

Maximum Memory Frequency:



Maximum Memory Frequency in Mhz. Must divide by 133 or 100 according to the refclk. In Gear2 must divide by 266 or 200. Lowest Gear2 speed is 2133.

Max TOLUD:

Maximum Value of TOLUD. Dynamic assignment would adjust TOLUD automatically based on largest MMIO length of installed graphic controller.

•Graphics Configuration

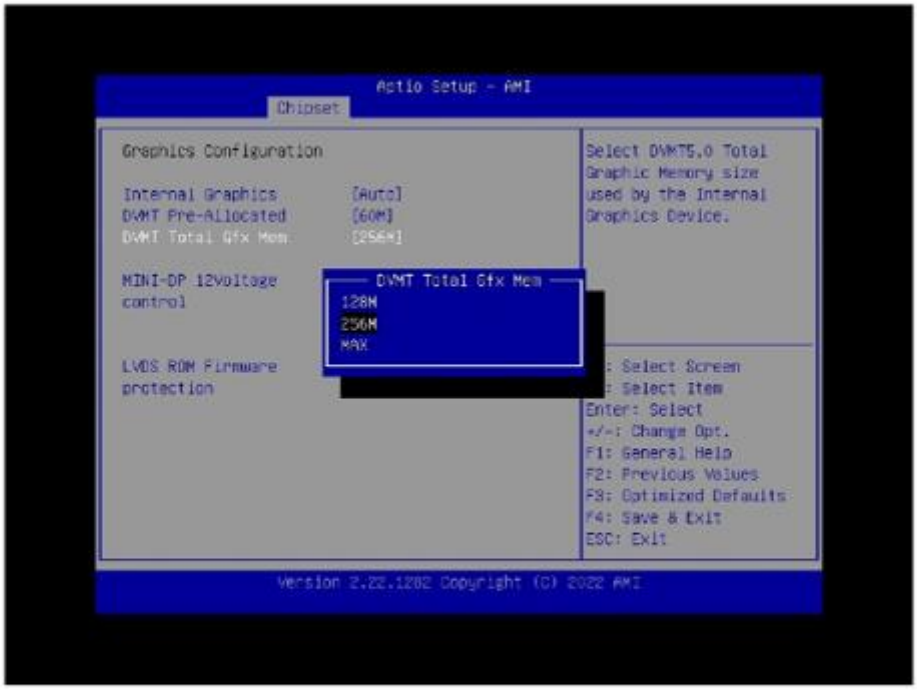
Internal Graphics:

Keep IGFX enabled based on the setup options.

DVMT Pre-Allocated:

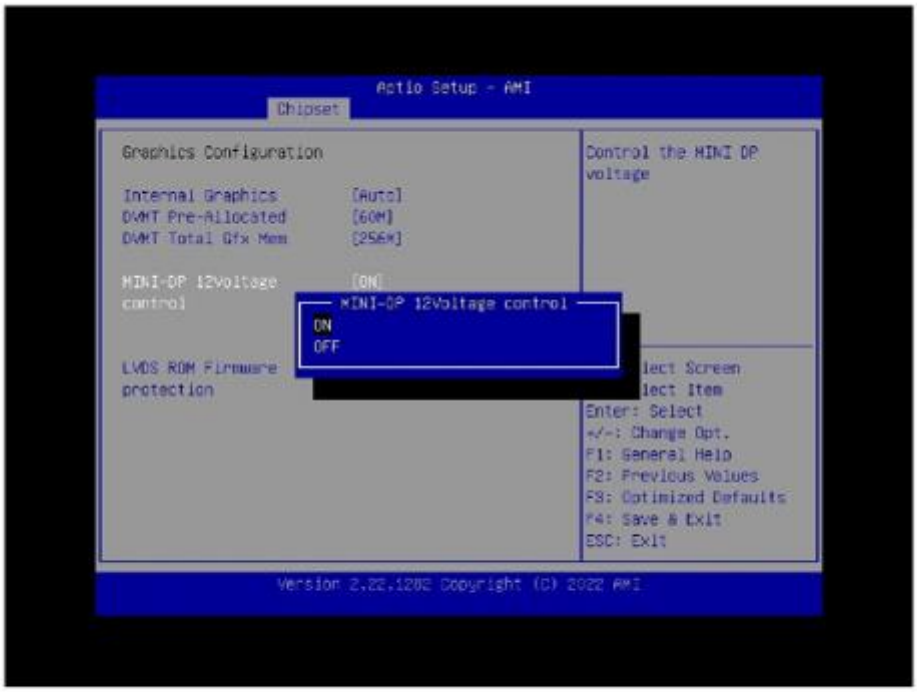
Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.

DVMT Total Gfx Mem:



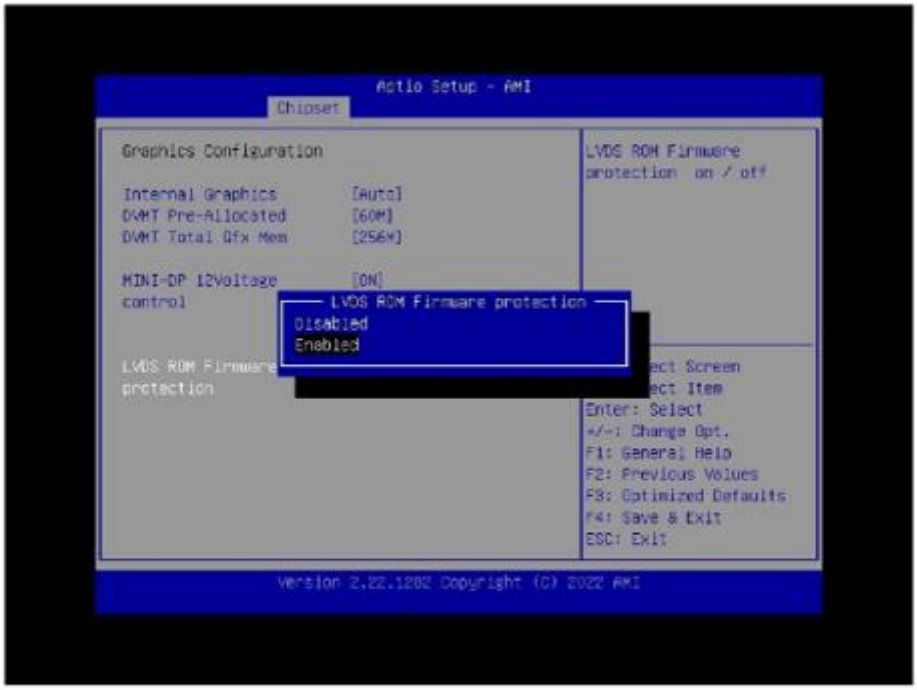
Select DVMT5.0 Total Graphic Memory size used bu the Internal Graphics Device.

MINI-DP 12Voltage control:



Control the MINI DP voltage.

LVDS ROM Firmware protection:



LVDS ROM Firmware protection on / off.

► PCH-IO Configuration

●SATA Configuration

SATA Controller(s):

Enable/Disable SATA Device.

SATA Mode Selection:

Determines how SATA controller(s) operate.

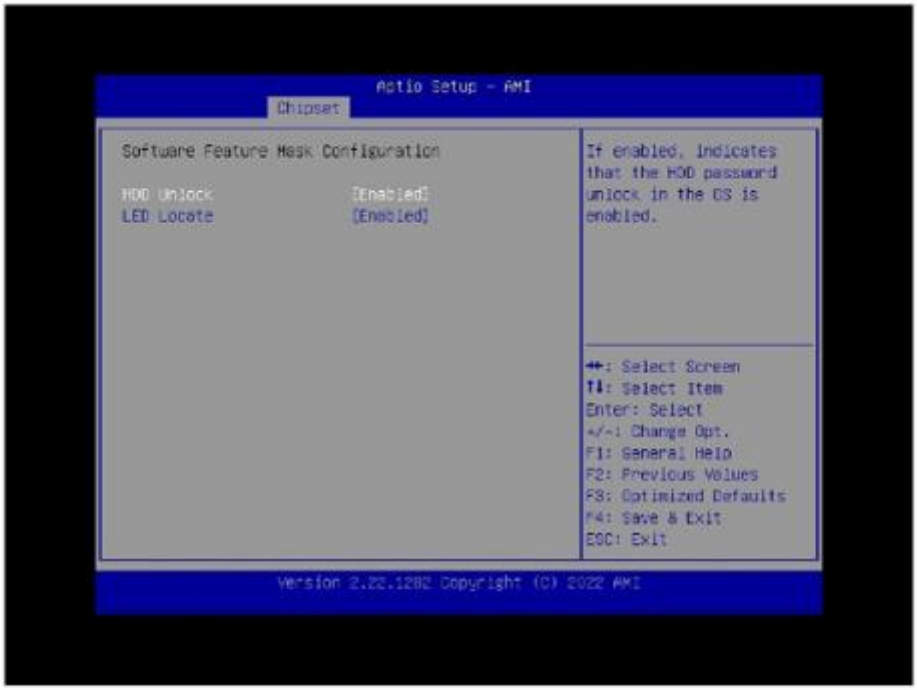
SATA Ports Multiplier:

Ports Multiplier Enable/Disable.

SATA Test Mode:

Test Mode Enable/Disable (Loop Back).

Software Feature Mask Configuration:



HDD Unlock:

If enabled, indicates that the HDD password unlock in the OS is enabled.LED Locate:

LED Locate:

If enabled, indicates that the LED/SGPIO hardware is attached and ping to locate feature is enabled on the OS.

Aggressive LPM Support:

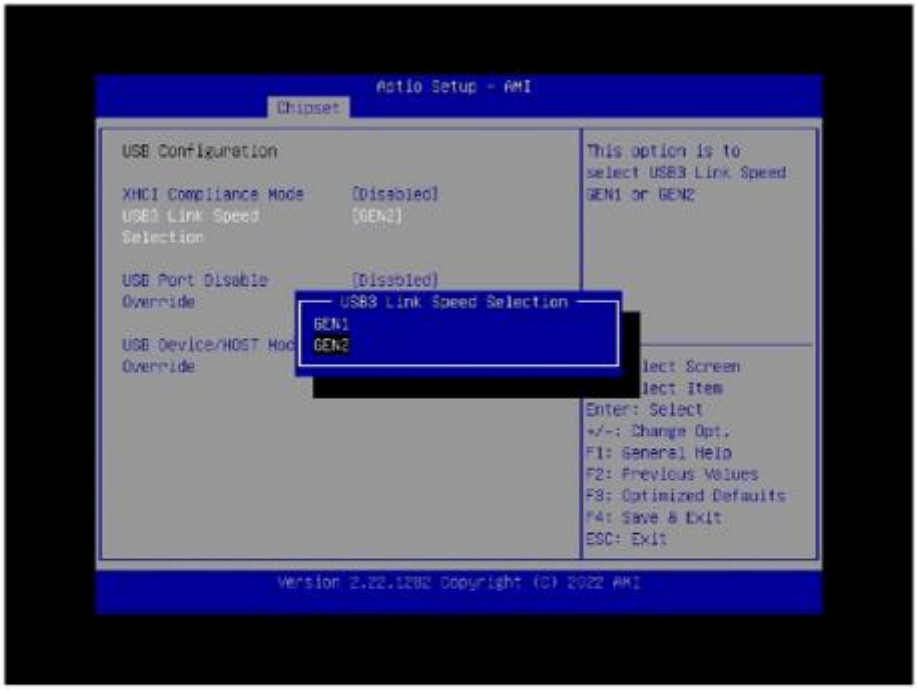
Enable PCH to aggressively enter link power state.

•USB Configuration

XHCI Compliance Mode:

Option to enable Compliance Mode. Default is to disable Compliance Mode. Change to enabled for Compliance Mode testing.

USB3 Link Speed Selection:

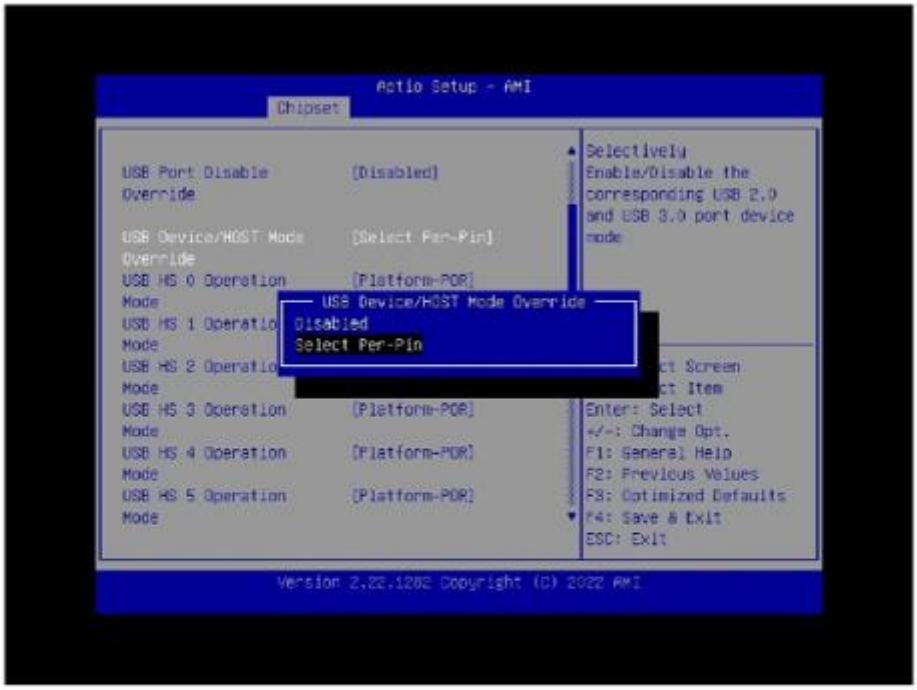


This option is to select USB3 Link Speed GEN1 or GEN2.

USB Port Disable Override:

Selectively Enable/Disable the corresponding USB port from reporting a Device Connection to the controller.

USB Device/HOST Mode Override:



Selectively Enable/Disable the corresponding USB 2.0 and USB 3.0 port device mode.

•HD Audio Configuration

HD Audio:

Control Detection of the HD-Audio device. Disabled = HDA will be unconditionally disabled Enabled = HDA will be unconditionally enabled.

► O.E.M Settings Configuration


Actio Setup - AMI
Main Advanced Chipset O.E.M Settings Security Boot Save & Exit
Feature Settings
Power delivery option
COM1 Port-DTR(6)PIN [DTR]
COM2 Port-DTR(6)PIN [DTR]
COM3 Port-DTR(6)PIN [DTR]
Show Logo [Disabled]
Onboard LAN Control [Enabled]
LAN UEFI PXE Boot Prompt [Disabled]
Restore AC Power Loss [Power Off]
Resume On RTC Alarm [Disabled]
WatchDog Timer Control [Enabled]
Select Serial Port 2 voltage
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
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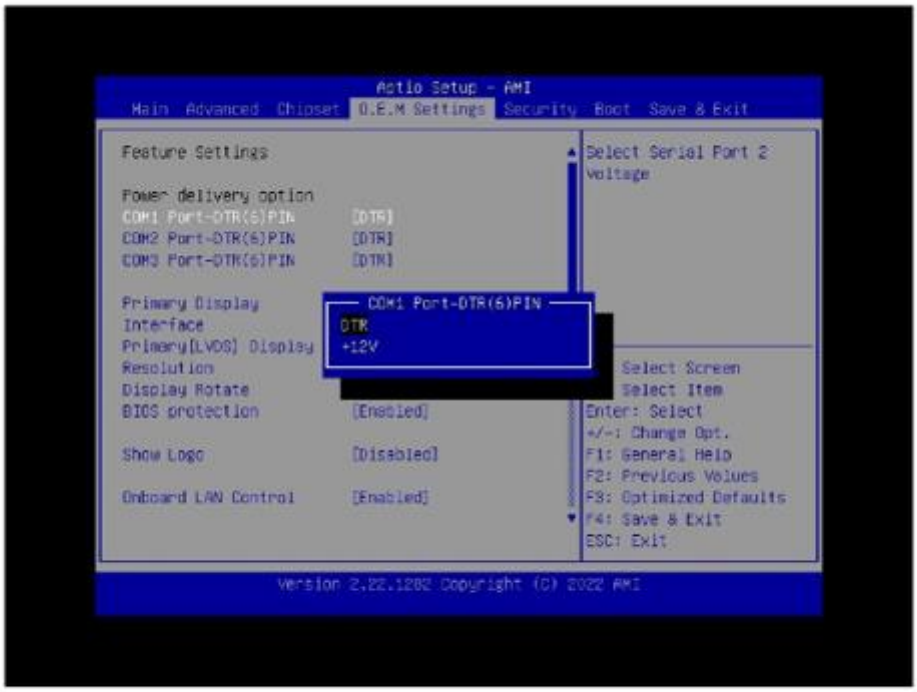
Actio Setup - AMI
Main Advanced Chipset O.E.M Settings Security Boot Save & Exit
Show Logo [Disabled]
Onboard LAN Control [Enabled]
LAN UEFI PXE Boot Prompt [Disabled]
Restore AC Power Loss [Power Off]
Resume On RTC Alarm [Disabled]
WatchDog Timer Control [Enabled]
WatchDog Timer Second Setting 120
Wake up by USB Device [Enabled]
Wake up by PCIE LAN [Disabled]
M.2_SSD1 [Enabled]
M.2_SSD2 [Enabled]
Control the PCI Express Root Port.
→←: 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) 2022 AMI

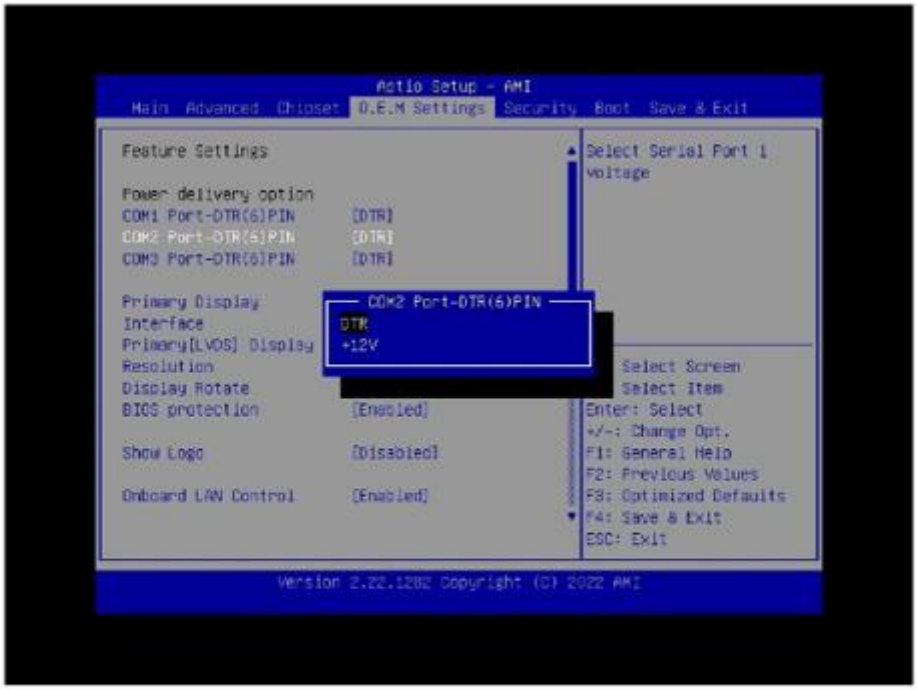
• "Ctrl + Shift + F1" show/hidden Display options:

•COM1 Port-DTR(6)PIN:



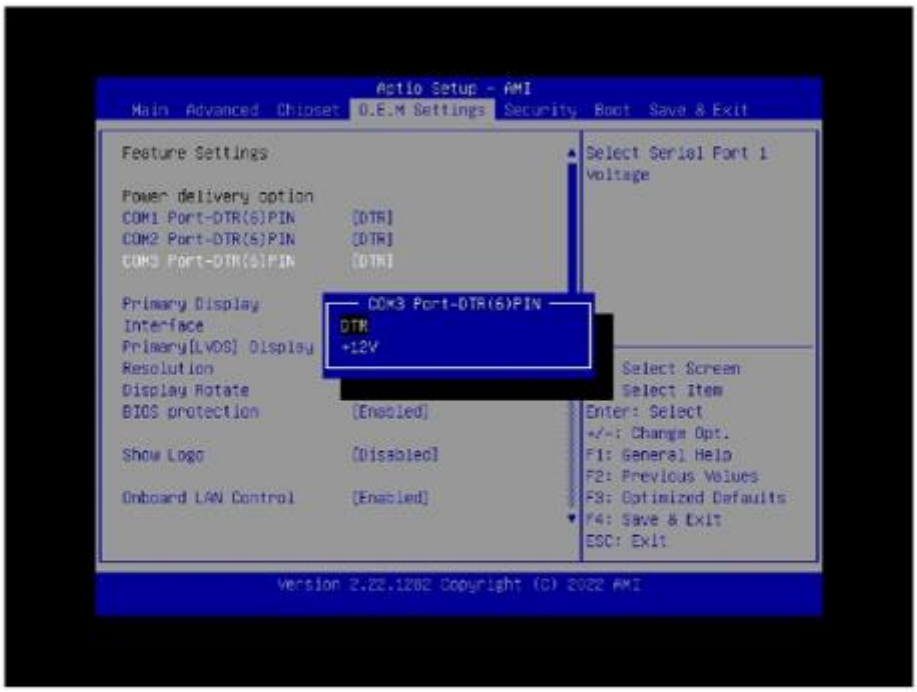
Select Serial Port 1 Voltage.

•COM2 Port-DTR(6)PIN:



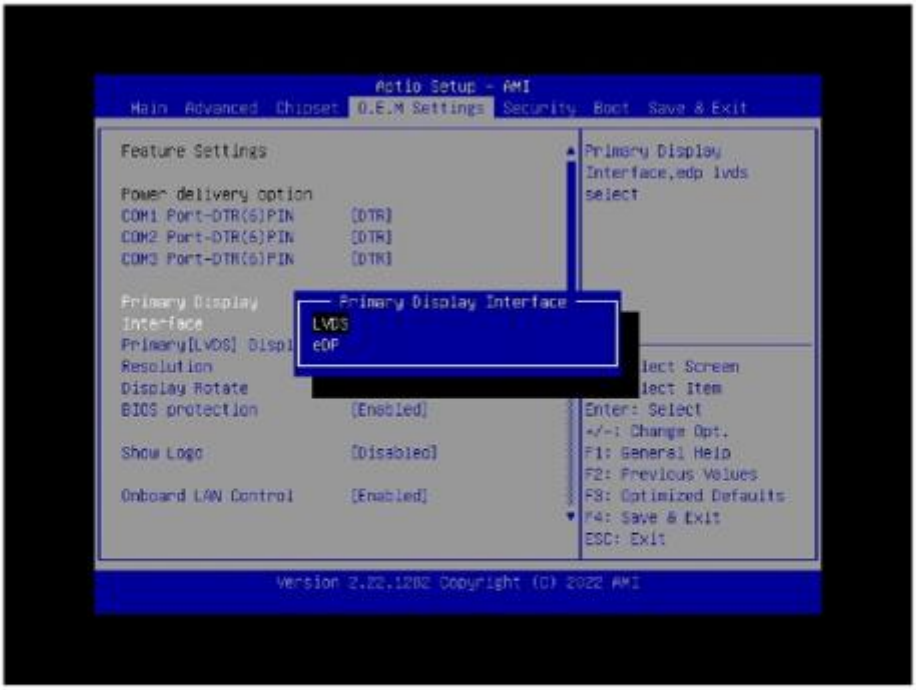
Select Serial Port 2 Voltage.

•COM3 Port-DTR(6)PIN:



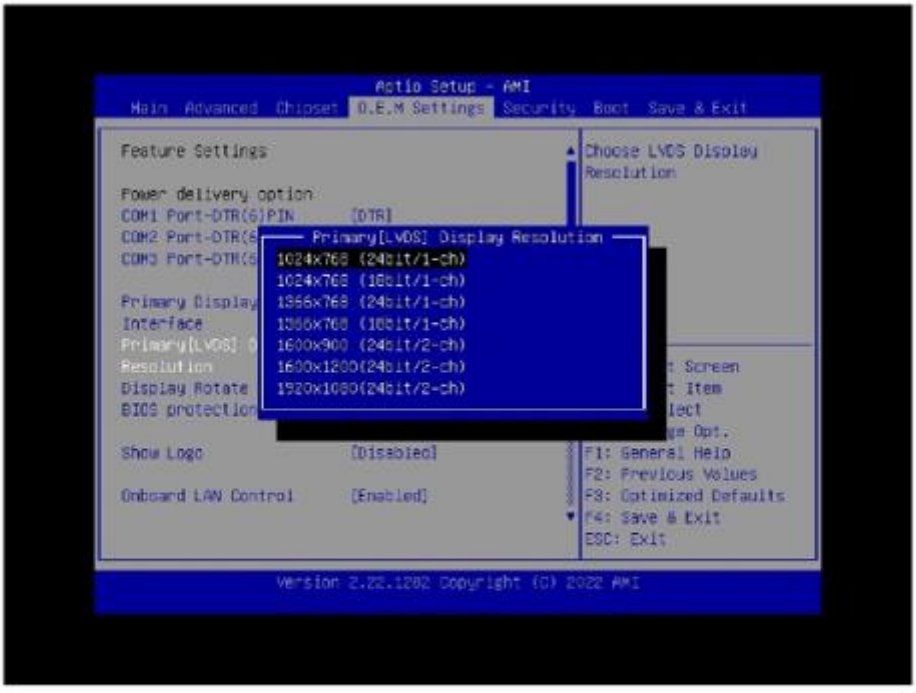
Select Serial Port 1 Voltage.

•Primary Display Interface:



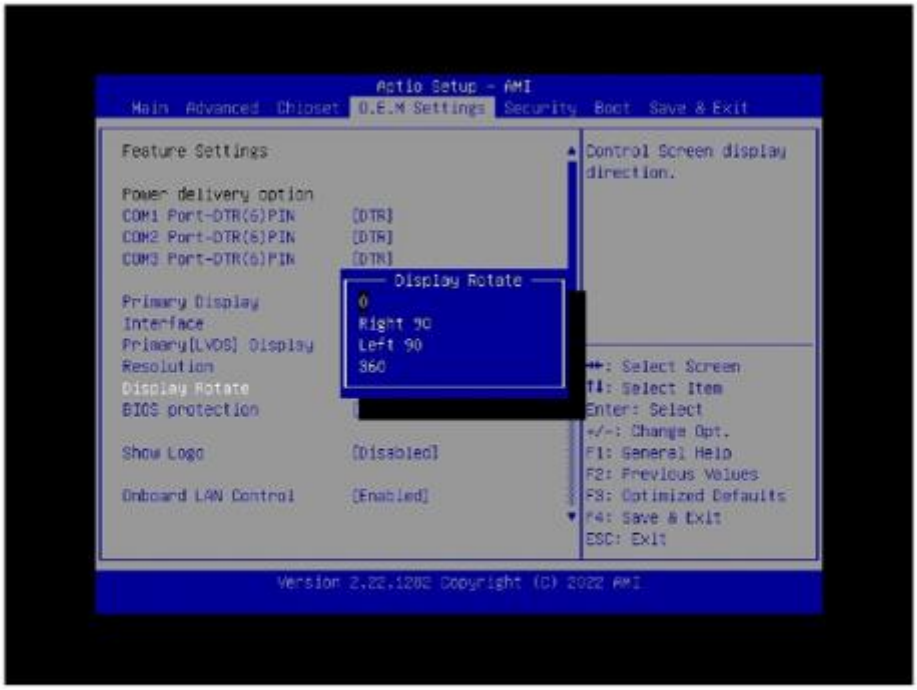
Primary Display Interface,edp lvds select.

•Primary[LVDS] Display Resolution:



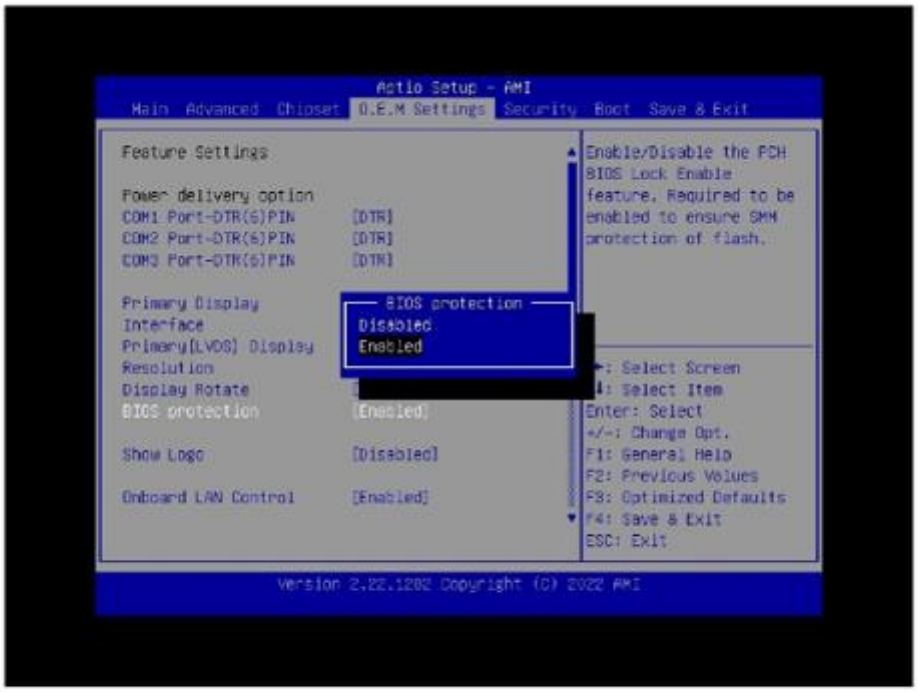
Choose LVDS Display Resolution.

•Display Rotate



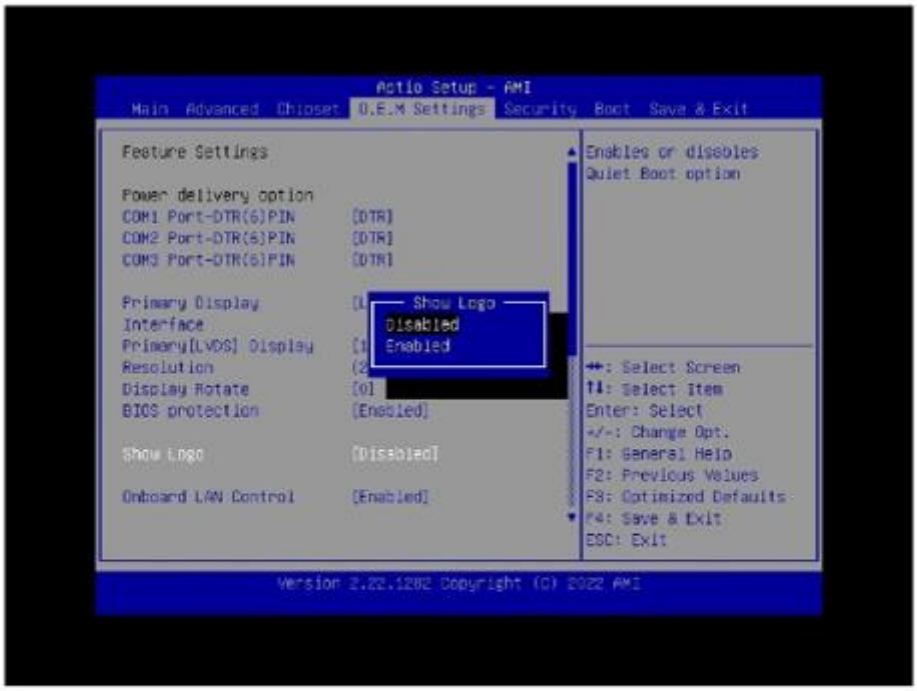
Control Screen Display direction.

•BIOS protection:



Enable/Disable the PCH BIOS Lock Enable feature. Required to be enabled to ensure SMM protection of flash.

•Show Logo:

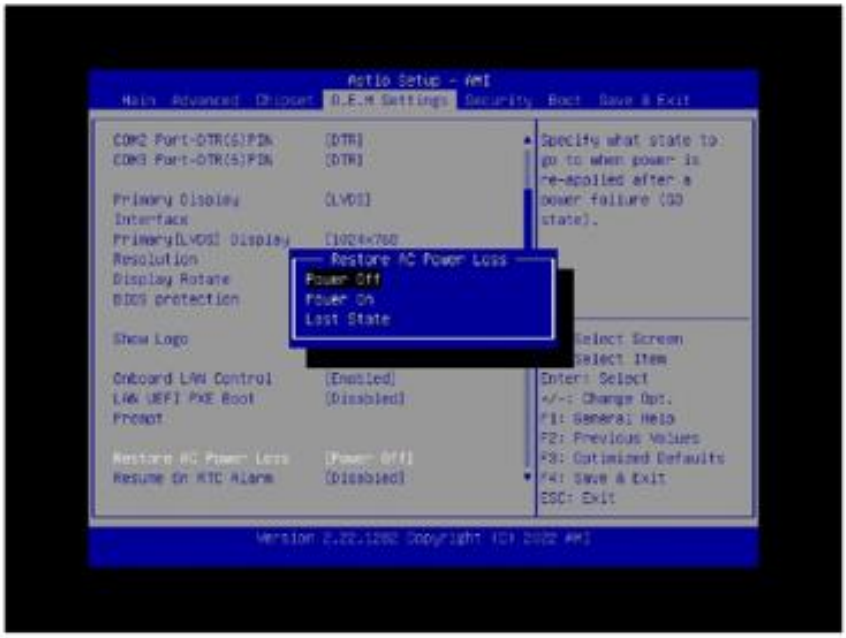


Enable or disable show logo.

•Onboard LAN Control:

Control the PCI Express Root Port.

•Restore AC Power Loss:



Specify what state to go to when power is re-applied after a power failure (G3 state).

•Resume On RTC Alarm: RTC Alarm setting.

•WatchDog Timer Control: Enable/Disable WatchDog Timer.

•WatchDog Timer Second Setting: WatchDog Timer Setting, from 5 sec to 60 sec.

•Wake up by USB Device: Enable or Disable Wake up S3/S4 by USB Device.

•Wake up by PCIE LAN: Enabled Or Disabled Wake On LAN From S5.

•M.2_SSD1: Control the PCI Express Root Port.

•M.2_SSD2: Control the PCI Express Root Port.

► 5.Security

Config the Admin and User password in this page, if you forget your password, you can clear it by using the jump pin on the mainboard.

Administrator Password

Set new password steps:

1、Select Administrator Password.

2、Input the new password in the Create New Password window.

3、Input the new password again in the Confirm New Password window to confirm it.

Change password steps:

1、Select Administrator Password.

2、Input the old password in the Enter Current Password window.

3、Input the new password in the Create New Password window.

4、Input the new password again in the Confirm New Password window to confirm it.

Delete password: The 1,2 step is the same to the change password steps, but just press Enter key when the Create New Password window jump out, and confirm it.

User Password

The setting steps are the same to the Administrator Password.

●Secure Boot

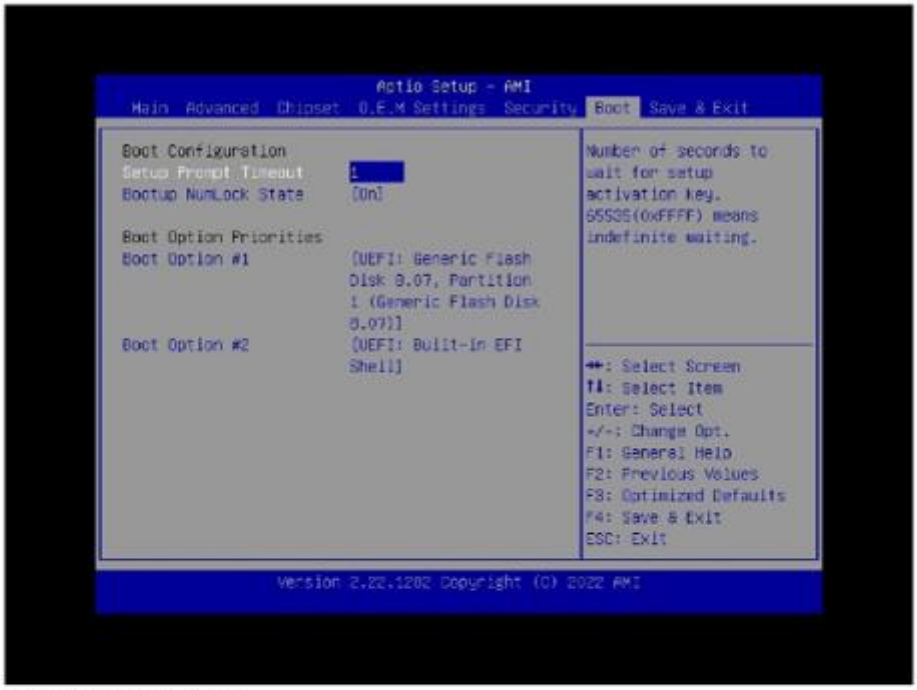
Secure Boot:

Secure Boot feature is Active if Secure Boot is Enabled, Platform Key(PK) is enrolled and the System is in User mode. The mode change requires platform reset.

Secure Boot Mode:

Secure Boot mode options: Standard or Custom. In Custom mode, Secure Boot Policy variables can be configured by a physically present user without full authentication.

► 6.Boot



Setup Prompt Timeout:

Number of seconds to wait for setup activation key 65535(0xFFFF) means indefinite waiting.

Bootup NumLock State:

Select the keyboard NumLock state when post.

Boot Option #1: Sets the system boot order.

Boot Option #2: Sets the system boot order.

► 7.Save&Exit

Save Changes and Reset:

Reset the system after saving the changes.

Discard changes and Reset:

Reset system setup without saving any changes.

Launch EFI Shell from filesystem device

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

5. Troubleshooting

(1) Network Issues

Symptom	Corrective Procedure
Cannot access LAN	▪ Check if hub or switch is working correctly ▪ Check RJ45 cable connection ▪ Check if LAN LEDs are on/off ▪ Reinstall LAN card ▪ Replace motherboard

(2) MSR Issues

Symptom	Corrective Procedure
MSR does not respond	▪ Check MSR reader cable connection ▪ Check motherboard and LCD cable connection ▪ Check MSR board cable connection

(3) USB Issues

Symptom	Corrective Procedure
USB port doesn’t work	▪ Check Windows device manager for device recognition ▪ Check USB device status and connection ▪ Erase and re-install USB driver ▪ Change USB device

(4) LCD Issues

Symptom	Corrective Procedure
LCD backlight doesn’t work	▪ Check LCD cable connection ▪ Check inverter cable connection ▪ Replace inverter cable ▪ Change LCD panel

(5) Touch-screen Issues

Symptom	Corrective Procedure

Touch-screen doesn't detect touch operations	▪ Check touch-screen cable connection ▪ Check motherboard and LCD cable connection ▪ Check BIOS set-up

(6) Power Issues

Symptom	Corrective Procedure
System switches off abruptly and system does not load	▪ Check A/C cable connection ▪ Check motherboard power connection ▪ Check CPU settings/status ▪ Check DRAM settings ▪ Check power button cable connection ▪ Change power adaptor unit

(7) PS/2 Keyboard Issues

Symptom	Corrective Procedure
PS/2 Keyboard Issues	▪ Check card-reader cable ▪ Check CN6 jumper

(8) Booting Issues

Symptom	Corrective Procedure
Re-booting during system operation	▪ Check SATA cable connection ▪ Check memory status

6. Maintenance

Safety Warning

AURES will not be held responsible for repairs conducted via USER providers other than those officially specified by the seller.

General Guidelines

1. Always disconnect the unit from the power outlet.
2. Disconnect all cables from the POS main unit before attempting reparation.
3. Keep all components in the static-proof packaging provided until ready for installation.
4. If the device still is not functioning after repair, please turn off the POS unit and contact the customer USER center for a follow-up inspection.
5. We recommend that power supply unit (PSU) checks and monitor repairs only be performed at a certified USER center.