
**SP-151C-TGLU
SP-211C-TGLU**

**Industrial Fanless 15.6" / 21.5" Panel PC,
w/Intel® 11th Gen. Tiger Lake-U i3/i5 Processors**

User's Manual

Version 1.0

Revision History

Version	Date	Description
1.0	2024.5	Initial release

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Copyright Notice

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Declaration of Conformity

CE

The CE symbol on your product indicates that it is in compliance with the directives of the Union European (EU). A Certificate of Compliance is available by contacting Technical Support.

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from ARBOR. Please contact your local supplier for ordering information.

Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Class A

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, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

RoHS

ARBOR Technology Corp. certifies that all components in its products are in compliance and conform to the European Union's Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2002/95/EC.

The above mentioned directive was published on 2/13/2003. The main purpose of the directive is to prohibit the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic products. Member states of the EU are to enforce by 7/1/2006.

ARBOR Technology Corp. hereby states that the listed products do not contain unintentional additions of lead, mercury, hex chrome, PBB or PBDB that exceed a maximum concentration value of 0.1% by weight or for cadmium exceed 0.01% by weight, per homogenous material. Homogenous material is defined as a substance or mixture of substances with uniform composition (such as solders, resins, plating, etc.). Lead-free solder is used for all terminations (Sn(96-96.5%), Ag(3.0-3.5%) and Cu(0.5%)).

SVHC / REACH

To minimize the environmental impact and take more responsibility to the earth we live, Arbor hereby confirms all products comply with the restriction of SVHC (Substances of Very High Concern) in (EC) 1907/2006 (REACH --Registration, Evaluation, Authorization, and Restriction of Chemicals) regulated by the European Union.

All substances listed in SVHC < 0.1 % by weight (1000 ppm)

Important Safety Instructions

Read these safety instructions carefully

1. Read all cautions and warnings on the equipment.
2. Place this equipment on a reliable surface when installing. Dropping it or letting it fall may cause damage
3. Make sure the correct voltage is connected to the equipment.
4. For pluggable equipment, the socket outlet should be near the equipment and should be easily accessible.
5. Keep this equipment away from humidity.
6. The openings on the enclosure are for air convection and protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
7. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
8. Never pour any liquid into opening. This may cause fire or electrical shock.
9. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
10. If one of the following situations arises, get the equipment checked by service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well, or you cannot get it to work according to the user's manual.
 - e. The equipment has been dropped or damaged.
 - f. The equipment has obvious signs of breakage.
11. Keep this User's Manual for later reference.

Warning

The Panel PC and its components contain very delicately Integrated Circuits (IC). To protect the Panel PC and its components against damage caused by static electricity, you should always follow the precautions below when handling it:

1. Disconnect your Panel PC from the power source when you want to work on the inside.
2. Use a grounded wrist strap when handling computer components.
3. Place components on a grounded antistatic pad or on the bag that came with the Panel PC, whenever components are separated from the system.

Lithium Battery Replacement

Incorrect replacement of the lithium battery may lead to a risk of explosion.

The lithium battery must be replaced with an identical battery or a battery type recommended by the manufacturer.

Do not throw lithium batteries into the trash can. It must be disposed of in accordance with local regulations concerning special waste.

Technical Support

If you have any technical difficulties, please consult the user's manual first at:
<http://www.arbor.com.tw>

Please do not hesitate to call or e-mail our customer service when you still cannot find out the answer.

<https://www.arbor-technology.com>

Warranty

This product is warranted to be in good working order for a period of two year from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster.

Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, or inability to use this product. Vendor will not be liable for any claim made by any other related party.

Vendors disclaim all other warranties, either expressed or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the hardware, the accompanying product's manual(s) and written materials, and any accompanying hardware. This limited warranty gives you specific legal rights.

Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.

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Chapter 1

Introduction

1.1. The Computer

Product Highlights

- Onboard Intel® 11th Gen. Core™ Tiger lake U i5/i3 Processors
- 21.5"/15.6" FHD LCD Panel with LED backlight, Front Panel support IP66
- Industrial-grade 10 points project capacitive touch screen
- Support Mini-PCIe/M.2 extension of multiple modules
- Support 1 x 2.5GbE and 2 x GbE LANs
- Support remote ON-OFF
- Grounding protection for product shell
- Support 1 x 2.5 inch HDD/SSD expansion
- Support standard VESA and panel mount



1.2. About this Manual

This manual is meant for the experienced users and integrators with hardware knowledge of personal computers. If you are not sure about the description in this manual, consult your vendor before further handling.

We recommend that you keep one copy of this manual for the quick reference for any necessary maintenance in the future. Thank you for choosing ARBOR products.



1.3. Specifications

System	
CPU	Intel® i3-1115G4 3.0G (2 Cores, 6M Cache, up to 4.1GHz) Intel® i5-1135G7 2.4G (4 Cores, 8M Cache, up to 4.2GHz)
Memory	1 x DDR4 3200 MHz SO-DIMM, up to 32 GB
Graphics	Intel® UHD Graphics for 11 th Gen, Intel® Processors & Intel® Iris® Xe Graphics
LAN Chipset	1 x Intel® I226-V 2.5GbE controller 2 x Intel® I210-AT GbE controllers
Watchdog Timer	Programmable 255 levels timer interval, from 1~255 sec/min
Storage	
Device	1 x M.2 2242 SSD slot 1 x 2.5" Drive Bay
Audio	
Type	1 x Audio(Line-out & Mic-in 2 in 1), ALC888S
Speaker	2 x 4Ω,3W speakers
LCD Display	
Size/Type	SP-151C-11115G4/11135G7 15.6" TFT LCD Panel SP-211C-11115G4/11135G7 21.5" TFT LCD Panel
Max. Resolution	1920(H) x 1080(V)
Ratio	16:9
Luminance	SP-151C-11115G4/11135G7 350 cd/m ² SP-211C-11115G4/11135G7 250 cd/m ²
Contrast Ratio	SP-151C-11115G4/11135G7 800:1 SP-211C-11115G4/11135G7 1000:1
Backlight	LED Backlight
Backlight Lifetime	SP-151C-11115G4/11135G7 50000 Hrs SP-211C-11115G4/11135G7 30000 Hrs
Touch Screen	P-cap Multi-Touch
Touch	35,000,000 times
View Angle	CR ≥ 10, 89° (T)/89° (B)/89° (L)/89° (R)
Power System	
Power Input	DC 10~36V 1 x Power Connector (2P Phoenix)
Qualification	
Certification	CE, FCC

External I/O		
Serial Ports	2 x RS232/422/485 (COM1/2) with DB9	
	2 x RS232/RS485, 2 x RS232 with 12PIN Phoenix connector	
USB Ports	4 x USB 3.1	
LAN	3 x RJ45	
Video Ports	1 x HDMI (up to 4096 x 2304@60Hz)	
Remote On-Off	1 x Remote ON-OFF	
Internal I/O		
Expansion	1 x Mini-PCIe (PCIe/USB2.0 signal supported)	
	1 x M.2 Key-E 2230 slot (WiFi +BT supported)	
	1 x SIM socket	
	1 x 8Bit GPIO	
Mechanical		
Front Panel	Aluminum	
Heat-Sink	Aluminum	
Rear Cover	SECC	
Reset button	1 x OS reset	
Power button	1 x Power button W/LED	
Mounting Type	Panel Mount, Wall and VESA-mount (100 x 100mm)	
Dimension (W x H x D)	SP-151C-11115G4/11135G7	395 x 245.5 x 59mm
	SP-211C-11115G4/11135G7	528.2 x 321.9 x 59mm
Weight (Net)	SP-151C-11115G4/11135G7	4.54 kg
	SP-211C-11115G4/11135G7	7.14 kg
Ingress Protection	Front panel IP66	
Environmental		
Operating Temp.	-10°C ~ 50°C	
Storage Temp.	-40°C ~ 70°C	
Operating Humidity	5 ~ 95% (non-condensing)	
Random Vibration	5~500Hz, 2Grms operation	
Sine Vibration	5~500Hz, 2G Non-operation	
Shock	10g 11ms operation, 30g 11ms Non-operation	
OS Support		
Windows 10, Linux		

1.4. Inside the Package

Upon opening the package, carefully inspect the contents. If any of the items is missing or appears damaged, contact your local dealer or distributor. The package should contain the following items:



1 x SP-XXXC-11115G4/11135G7
(SP-151C-11115G4/11135G7 / SP-211C-11115G4/11135G7)
*Product appearance varies by model.



1 x User's manual

1 x **Accessory Box** that contains the following items:

- 1 x 2pin Power Connector (Phoenix)
- 1 x 2pin SW connector
- 1 x 12pin serial phoenix contact
- Snap Hooks 4pcs x 1 package (15.6 inch) / Snap Hooks 4pcsx2 package (21.5 inch)
- 4 x Vesa-mount screws
- 4 x HDD screws
- 1 x Storage Thermal pad
- 1 x SSD Thermal Pad

1.5. Ordering Information

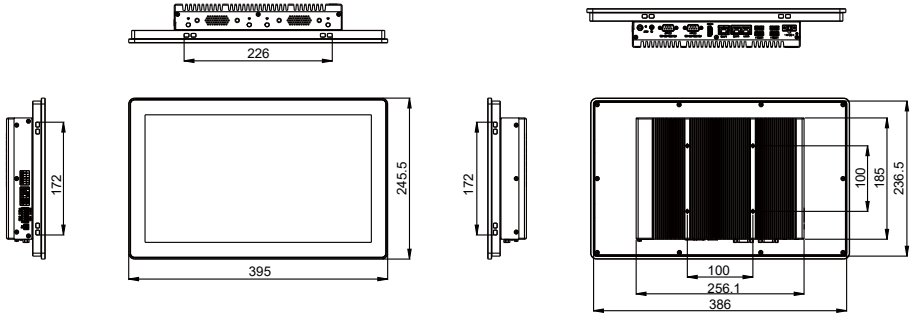
SP-151C-11115G4	15.6"(16:9) Panel PC, Intel® 11 th Gen Core™ i3-1115G4 3.0G processor, HDMI*1, USB*4, LAN*3, COM*4, DC10~36V power input
SP-151C-11135G7	15.6"(16:9) Panel PC, Intel® 11 th Gen Core™ i5-1135G7 2.4G processor, HDMI*1, USB*4, LAN*3, COM*4, DC10~36V power input
SP-211C-11115G4	21.5"(16:9) Panel PC, Intel® 11 th Gen Core™ i3-1115G4 3.0G processor, HDMI*1, USB*4, LAN*3, COM*4, DC10~36V power input
SP-211C-11135G7	21.5"(16:9) Panel PC, Intel® 11 th Gen Core™ i5-1135G7 2.4G processor, HDMI*1, USB*4, LAN*3, COM*4, DC10~36V power input

Chapter 2

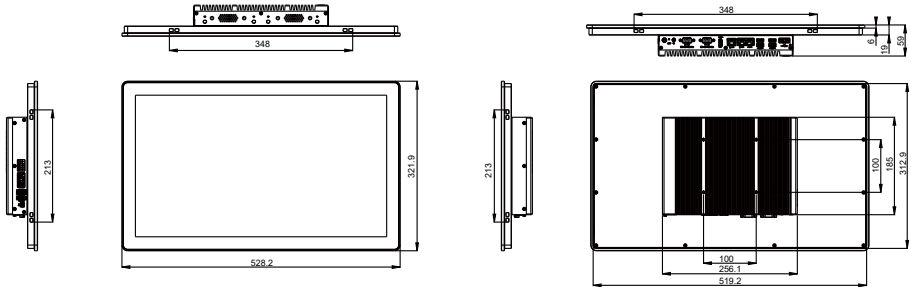
Getting Started

2.1. Dimensions

SP-151C-11115G4/SP-151C-11135G7



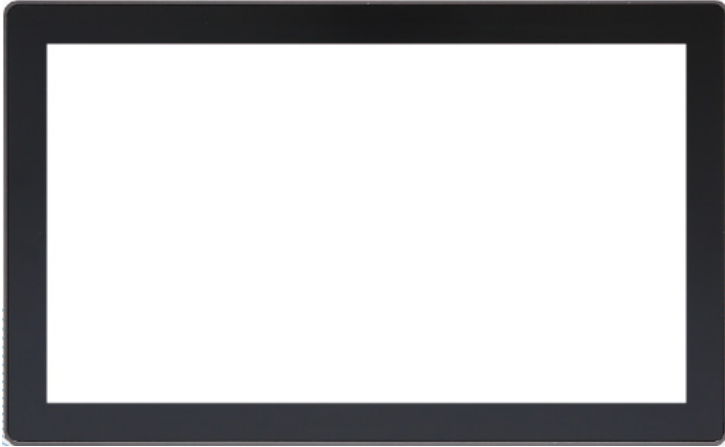
SP-211C-11115G4/SP-211C-11135G7



2.2. Tour the Computer

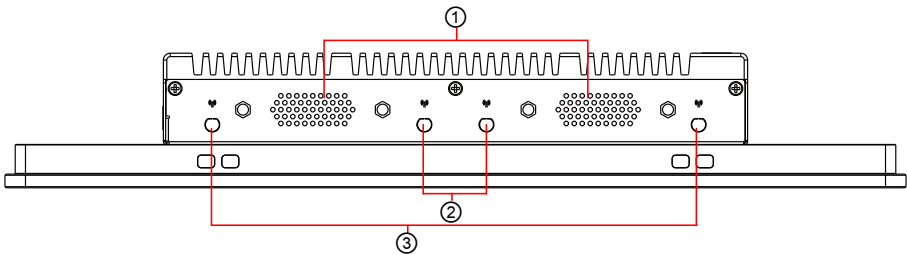
Take a look around the computer and find the external controls and connectors.

2.2.1. Front View

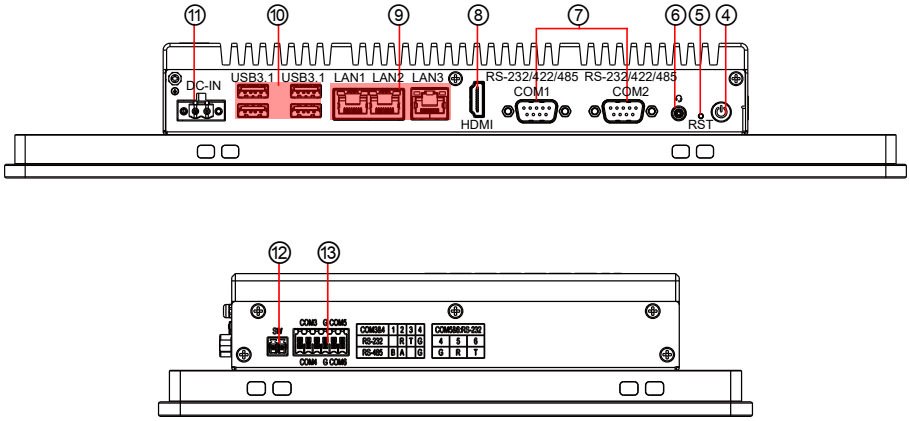


*Product appearance may vary by model.

2.2.2. Top & Bottom I/O View



Getting Started



No.	Description
①	Built-in Speaker
②	3G/4G Antenna Reserved hole
③	WiFi Antenna Reserved hole
④	Power On/Off Button
⑤	Hardware Reset
⑥	Audio(Line-out&Mic-in 2 in 1)
⑦	COM1~2:RS232/422/485
⑧	HDMI port
⑨	RJ45 LAN ports
⑩	USB 3.1 ports
⑪	DC-IN
⑫	Remote Control
⑬	COM3~6: RS-232

2.2.3. I/O Definition

②③ WiFi/3G/4G Antenna Reserved hole

Function Four antenna reserved holes are on top of the product to facilitate users' installation of the antenna for the wireless module.



④ Power On/Off Button

Function Power Button

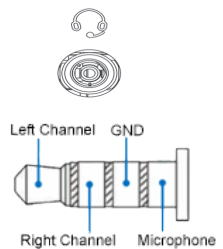
Description	Status
Power LED Status	<ul style="list-style-type: none"> ▶ Off: Power off or system is in hibernate mode ▶ Green LED Permanently: System is working ▶ Green LED Blinking: S1/S3 Sleeping States



⑥ Audio(Line-out & Mic-in 2 in 1)

Function: For external microphone, headphones or speakers.
Connector Type: 3.5mm audio port interface

Pin Assignment: Support a 2-in-1 audio I/O interface with a 3.5mm hole diameter for external microphones, headphones, or speakers on a 4-segment iPhone version devices.



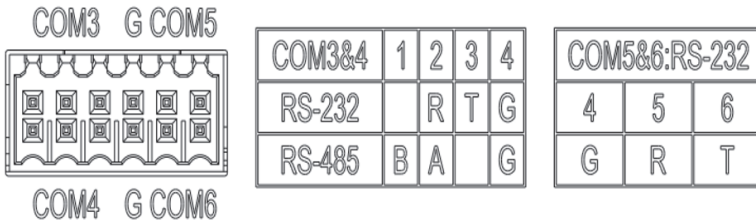
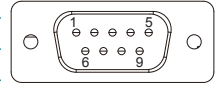
⑦ ⑬ COM Ports

Function: RS-232/422/485 Selectable Serial Port

Connector Type: External 9-pin D-sub male connector

Pin Assignment:

	Pin	Desc.	Pin	Desc.
RS-232	1	DCD	6	DSR
	2	RXD	7	RTS
	3	TXD	8	CTS
	4	DTR	9	RI
	5	GND		
RS-422	1	TX-		
	2	TX+		
	3	RX+		
	4	RX-		
	5	GND		
RS-485	1	DATA-		
	2	DATA+		



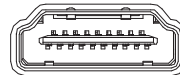
Note 1: COM1~2 support RS-232/422/485 three modes. The modes can be set in BIOS mode. Please refer to [5.2.1. COM Mode Setting on page 36](#).

Note 2: COM3~4 support RS-232/485 and COM5~6 support RS-232.

⑧ HDMI

Function: HDMI display output

Pin Assignment: The pin assignments conform to the industry standard.

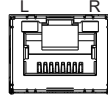


⑨ RJ45 LAN ports

Function: RJ-45 port for Giga Lan

Connector Type: 3 x RJ-45 connectors, that LAN1 and LAN2 support 10/100/1000Mbps fast Ethernet. LAN3 support 10/100/1000/2500Mbps high speed Ethernet.

Pin Assignment:



Three network interfaces are supported with 10/100/1000 Mbps. LAN1, LAN2, and LAN3 can support network wake-up function. LAN1 is connected with the Intel I226V GbE network chip, while LAN2 and LAN3 use the Intel I210AT co-lay with i211AT GbE network chip.

Light	Description	Status
L	Networking Status	Off: Not working Green: Working
R	Networking Speed Status	Off: 10Mbps Green: 100Mbps Orange: 1000Mbps - 2.5G

LAN1 LAN2 LAN3



Pin	Definition	Pin	Definition
1	BI_DA+(GHz)	2	BI_DA-(GHz)
3	BI_DB+(GHz)	4	BI_DC+(GHz)
5	BI_DC-(GHz)	6	BI_DB-(GHz)
7	BI_DD+(GHz)	8	BI_DD-(GHz)
9	H3 GND	10	H4 GND

⑩ USB Ports

Function: USB 3.1 ports
Connector Type: USB 3.1 type A connectors
Pin Assignment: The pin assignments conform to the industry standard. This series devices support 4 USB3.1 Gen2 10Gbps ports.

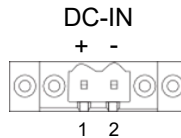


Pin	Definition	Pin	Definition
1	+5V	2	D-_0
3	D+_0	4	GND
5	USB0_SSRX-	6	USB0_SSRX+
7	GND	8	USB0_SSTX-
9	USB0_SSTX+	10	+5V
11	D-_1	12	D-_1
13	GND	-	-

⑪ DC-IN

Function: Power input terminal block
Connector Type: 1x2-pin Terminal block
Pin Assignment:

Pin	Desc.
1	+10~36V DC-in
2	GND



⑫ Remote On/Off Control

2-pin terminal block

Function: 2-pin terminal block for remote control
Connector Type: 1x2-pin Terminal block
Pin Assignment:

Pin	Desc.
1	GND
2	PWR_SW



2.3. Driver Installation Note

For operating system of Windows 10, please go to our website at www.arbor-technology.com and download the driver pack, product specification and report from the product page. Then unzip the downloaded file.

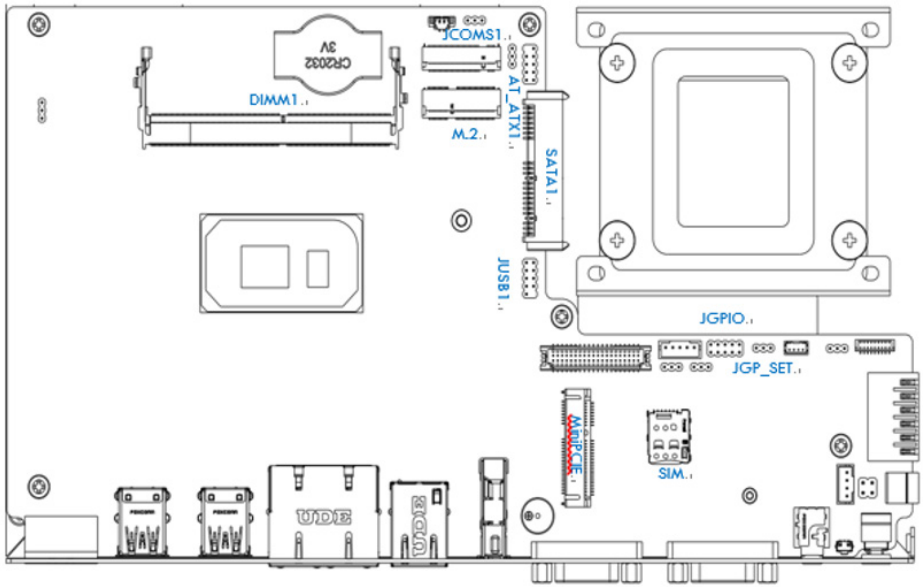
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Chapter 3

Engine of the Computer

3.1. Board Layout

Main Board (SP-1XXRC-1111XXXX)



Label	Description
(1) DIMM1	DDR4 SODIMM Slot
(2) M.2	M.2 2230 Wi-Fi/M.2 2242 Storage
(3) SATA1	Serial ATA Connector
(4) M_PCIE1	Extend 3G/4G, USB, COM
(5) JSIM1	SIM Card Socket
(6) JCMOS1	CMOS Jumper
(7) AT_ATX	ATX/AT Select
(8) JUSB1	Extend USB function
(9) JGPIO1	Extend GPIO function
(10) JGP_SET	+5V/+3.3V Select

3.2. Jumper Setting



3.2.1 ATX/AT Select (AT_ATX1)

AT_ATX1 is the switching jumper between AT and ATX startup. AT is the auto-start mode when the power connect, and ATX is the key startup mode (default setting). Default 1-2 ATX mode, 2-3 AT mode.

Function: AT_ATX1 is the switching jumper between AT and ATX startup. AT is the auto-start mode when the power connect, and ATX is the key startup mode (default setting)

Jumper Type: 2.00 mm pitch 1x3-pin header

Setting:



Pin	Description	
Short 1-2	ATX mode (default)	
Short 2-3	AT mode	

3.2.2 CMOS jumper setting (JCMOS1)

Function: Clears/keeps CMOS

Jumper Type: 2.00 mm pitch 1x3-pin header

Setting:



Pin	Description	
Short 1-2	Keeps CMOS (default)	
Short 2-3	Clears CMOS	

3.2.3 GPIO power jumper setting(JGPSET)

Function: Switching between 3V or 5V voltage.

Jumper Type: Onboard pitch 1x3-pin header

Setting:

Pin	Description	
Short 1-2	Support 3V(Default)	
Short 2-3	Support 5V for monitor	

3.3. Connector Setting

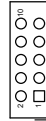
3.3.1 JUSB1

Function: JUSB1 is USB connector on the mainboard.

Connector Type: 2x5-pin header

Pin Assignment:

Pin	Description	Pin	Description
1	+5V_FUSB2	2	+5V_FUSB2
3	USBD5-	4	USBD6-
5	USBD5+	6	USBD6+
7	GND	8	GND
9	N/A	10	-



Note: JUSB1 is the built-in USB connector on the board, which can lead to two USB2.0 ports via USB cables.

3.3.2 JGPIO1

Function: JGPIO is extension connectors on the device, it is for 8bit GPIO function.

Connector Type: 2x5 pin box header

Pin Assignment:

Pin	Desc.	Pin	Desc.
1	JGPIO5	2	JGPIO1
3	JGPIO6	4	JGPIO2
5	JGPIO7	6	JGPIO3
7	JGPIO8	8	JGPIO4
9	GPIO_DUAL	10	GND



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Chapter 4

Installation & Maintenance

4.1. Disassembling and Assembling the Computer

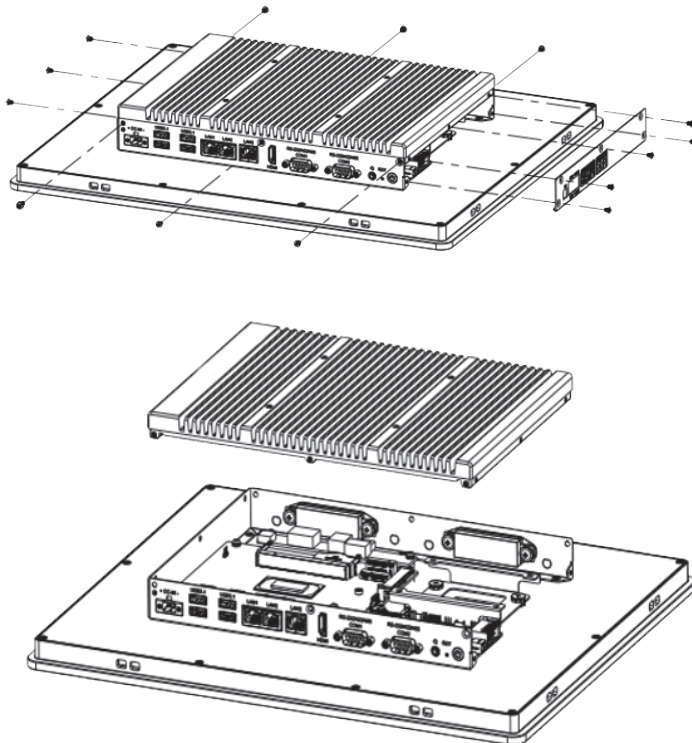
This section will guide you to install the Wi-Fi module and SSD. If you don't need to install the Wi-Fi module, skip the Wi-Fi related sections.

The installation procedures for SP-151C-TGLU and SP-211C-TGLU. This section will use the SP-151C-TGLU to illustrate the procedures.

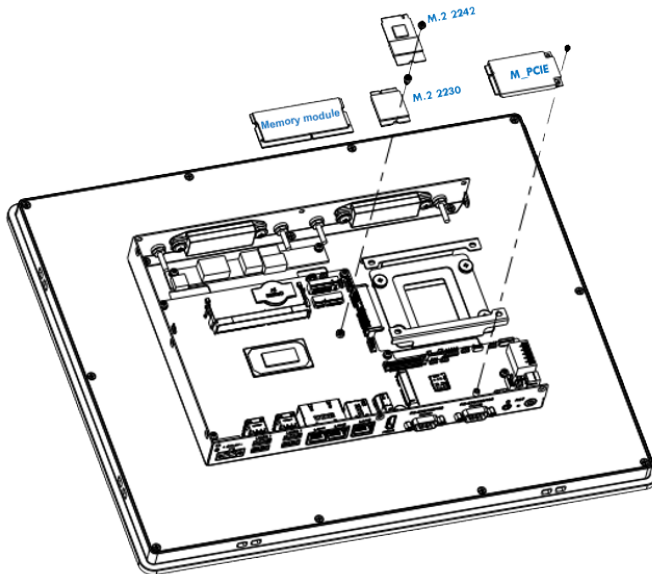
4.1.1. Disassembling the Computer

To use onboard jumpers/connectors or to install/remove internal components, you will need to open the computer to access the inside of the computer. Follow through the guide below to disassemble the computer.

1. Position the computer with the rear side facing up and remove screws securing the chassis as shown below .

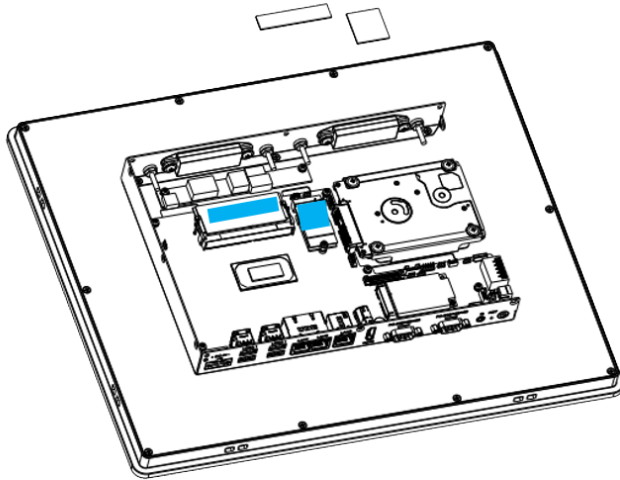


2. You are ready to access the components on the main board and make required configurations and connections.
3. Install the M.2 SSD (2242) and memory in the corresponding locations as shown in the figure. The Wifi module and SSD are located in the same interface and support M.2 2230. First, lock the hexagonal copper pillar in the accessory box to the corresponding position on the motherboard, and then use the accessory box screws to secure the SSD. Mini PCIe card/4G card and SIM card are locked with M3*3 pan-head screws.



4.1.3 SSD/Memory module installation

4. Put the thermal pad on the M.2 2242 and memory module.



4.1.4 SSD and memory module installation method

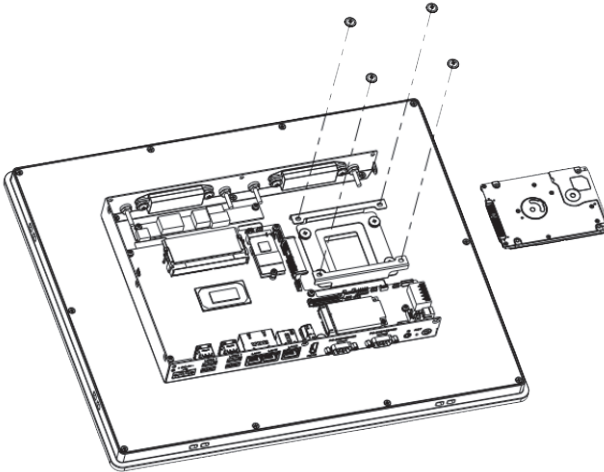
5. Check the thermal pad and secure the chassis after using the thermal paste.

4.1.2. Assembling the Computer

After completing the required hardware installation and jumpers settings, assemble the computer by performing the proceeding steps in reverse order.

4.2 Install 2.5" SSD/HDD

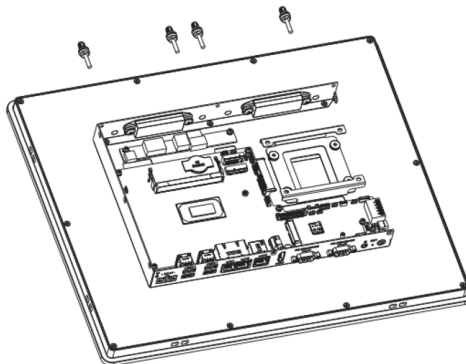
1. Follow steps 4.1 to disassemble the heat dissipation aluminum extrusion and side baffles.
2. Install the 2.5-inch SSD/HDD into the bracket as shown below and secure it with 4 screws.



4.2 2.5" SSD/HDD installation method

4.3 Install WiFi/4G antenna

1. To install the antenna, please refer to the WiFi/4G specifications to determine the corresponding number of antennas to be installed (up to four). Users may need to use tools to remove the pre-punched holes in the antenna holes before installation. Please install the antenna according to the position shown in the figure.



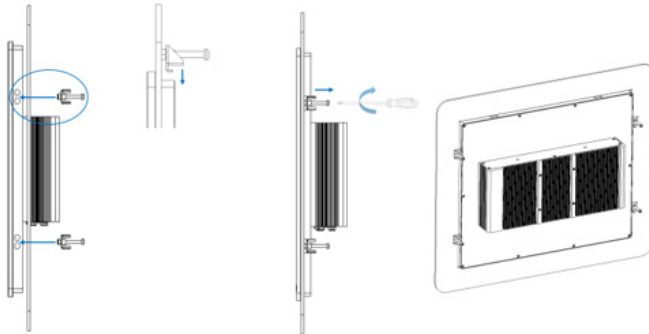
2. Connect the antenna to the corresponding socket of the Wifi or 4G module, organize the wiring, and assemble the device.

4.4 Mounting Method

There are different ways to mount the device, including panel mounting, VESA mounting, and cabinet mounting.

4.4.1 Panel Mounting

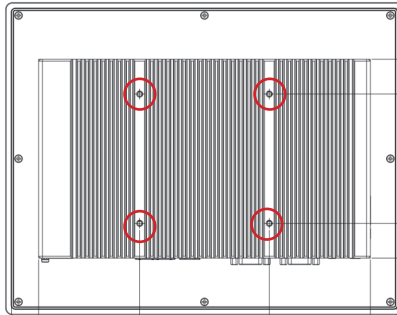
1. Position the product into the mounting holes.
2. Retrieve the installation buckle from the accessory box. Depending on the size of your product, you will find either 4PCS buckles (for 15-inch/15.6-inch products) or 8PCS buckles (for 17-inch to 21.5-inch products). Snap the buckle into the side of the product inside the mounting hole. You can adjust the buckle up and down or left and right to suit your application environment.
3. Secure the clips, tighten the screws firmly.



4.4.1 Panel Mounting Installation

4.4.2 VESA Mounting

Attach the VESA bracket to the product's 100 x 100mm VESA holes by four screws.



4.4.2 VESA Mounting Installation

4.4.3 Cabinet Mounting

1. Install the product into the cabinet according to chapter 5.1 panel Mounting;
2. Connect the cabinet to ground and make sure that there is a common ground inside the cabinet;
3. Connect the power supply ground inside the cabinet to cabinet ground;
4. Ensure that the product connect to the same ground with cabinet.

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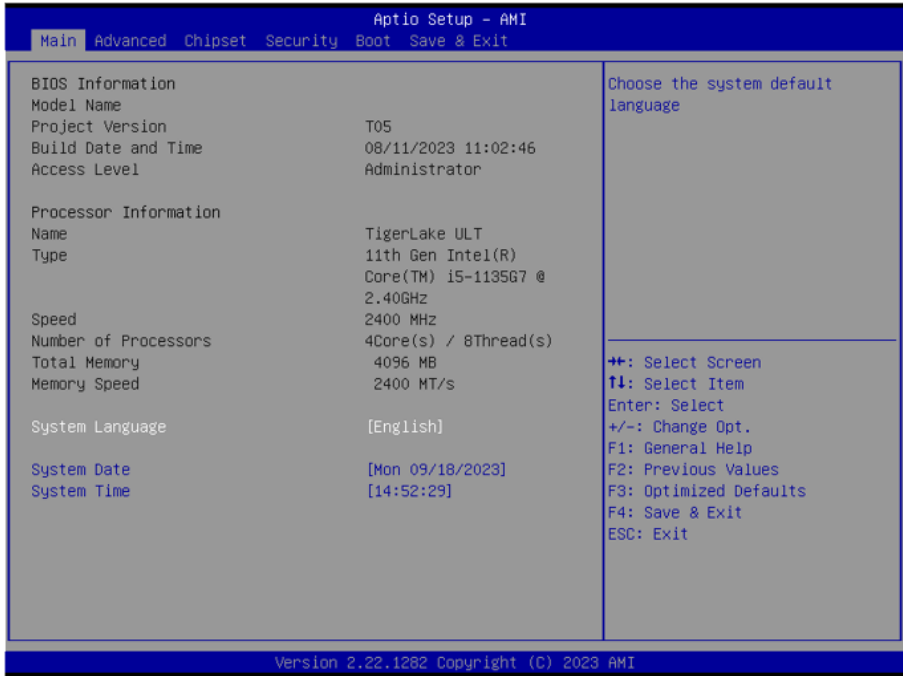
Chapter 5

BIOS

BIOS

The BIOS Setup utility for the SP series are featured by American Megatrends Inc to configure the system settings stored in the system's BIOS ROM. The BIOS is activated once the computer powers on. When the computer is off, the battery on the main board supplies power to BIOS RAM.

To enter the BIOS Setup utility, keep hitting the "Delete" key upon powering on the computer.



Note: Actual model name and board information varies according to your model.

Key Commands

The BIOS Setup utility relies on a keyboard to receive user's instructions. Hit the following keys to navigate within the utility and use the utility.

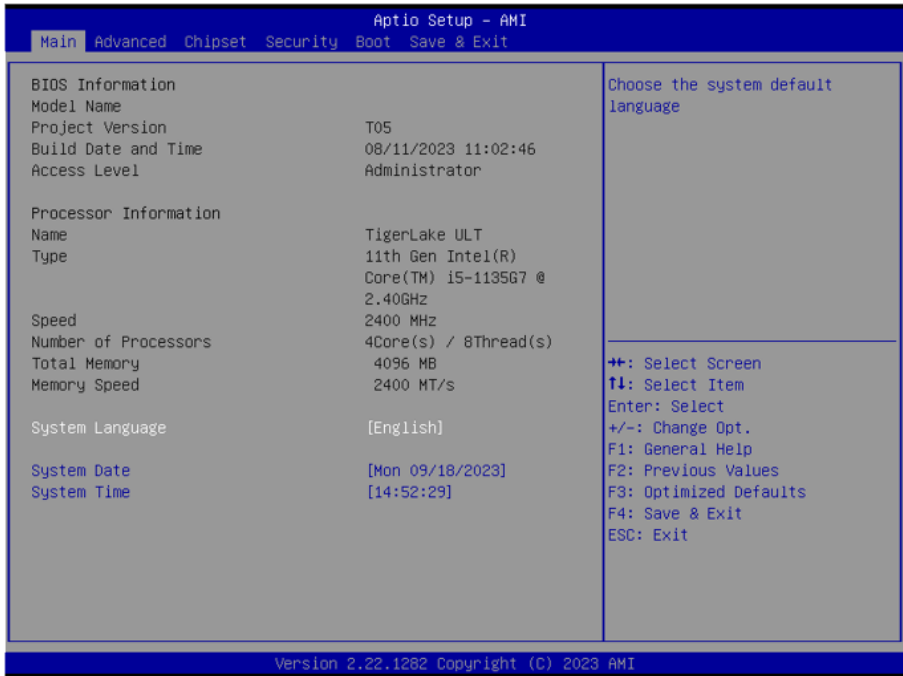
Keystroke	Function	
F7	Enter the boot up sequence menu	After System Open
DEL	Enter the BIOS menu	
Ctrl + Alt + DEL	Restart the system	
← →	Moves left/right between the top menus.	In BIOS
↓ ↑	Moves up/down between highlight items.	
Enter	Selects an highlighted item/field.	
Page Up / +	Increases current value to the next higher value or switches between available options.	
Page Down / -	Decreases current value to the next lower value or switches between available options.	
F3	Load defaults	
F4	Save the Settings and Quit the BIOS	
Esc	<ul style="list-style-type: none"> ▶ On the top menus: Use Esc to quit the utility without saving changes to CMOS. (The screen will prompt a message asking you to select OK or Cancel to exit discarding changes. ▶ On the submenus: Use Esc to quit current screen and return to the top menu. 	

Note: Pay attention to the “WARNING” that shows at the left pane onscreen when making any change to the BIOS settings.

This BIOS Setup utility is updated from time to time to improve system performance and hence the screenshots hereinafter may not fully comply with what you actually have onscreen.

5.1. Main - Sets system Time & Date.

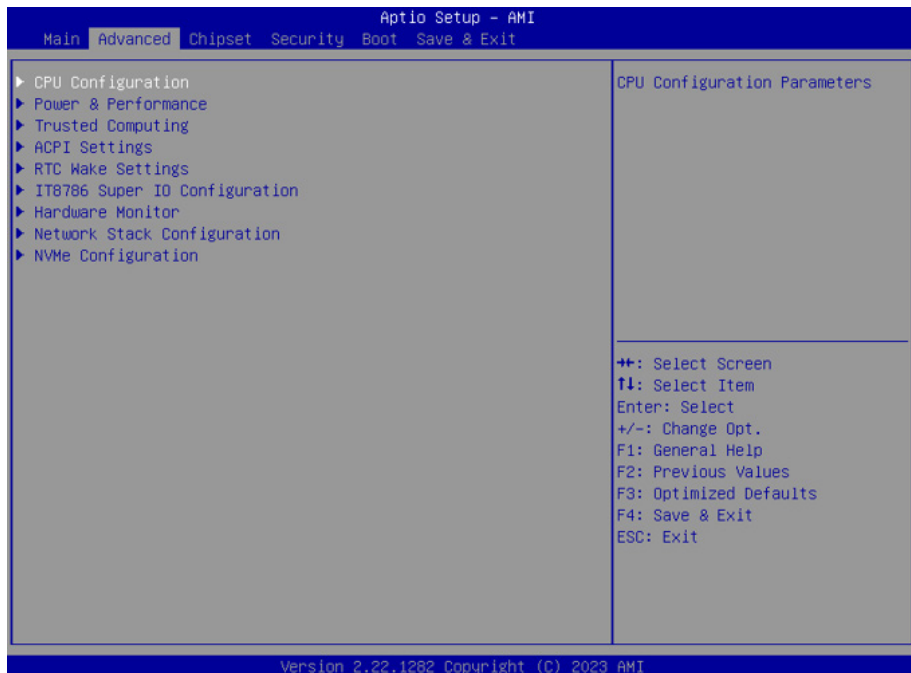
The **Main** menu features the settings of **System Date** and **System Time** and displays some BIOS info.



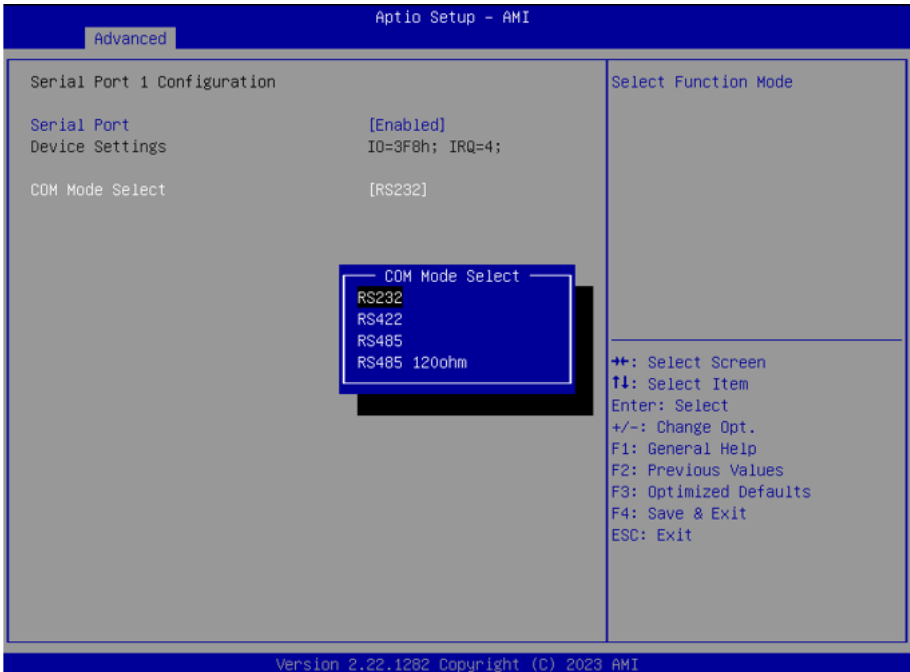
Note: Actual model name and board information varies according to your model.

Setting	Description
System Date	Sets system date.
System Time	Sets system time.

5.2. Advanced

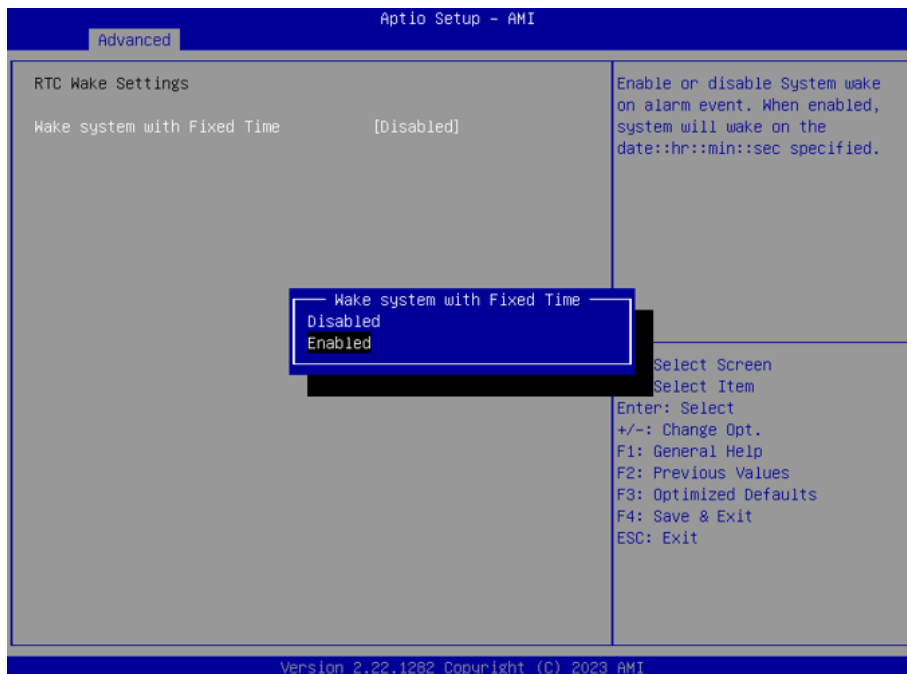


5.2.1. COM Mode Setting



Enter Advanced menu, select "IT8786 Super IO Configuration" -> "Serial Port X Configuration" -> "COM Mode Select". You can select RS232, RS422, RS485 for the COM Mode Setting then After setting, press F4 to save and exit, the system will take effect upon rebooting your system.

5.2.2. Wake System with Fixed time



Enter Advanced menu, select "**RTC Wake Settings**" -> "**Wake system with Fixed time**". Then select enabled you can select fixed date/time to wake the system.

Setting	Description
Wake System from S5	<p>Enable or Disable (default) system wake on alarm event.</p> <p>► Options available are:</p> <p>Disabled (default):</p> <p>Fixed Time: System will wake on the hr::min::sec specified.</p>

5.3 Chipset Menu



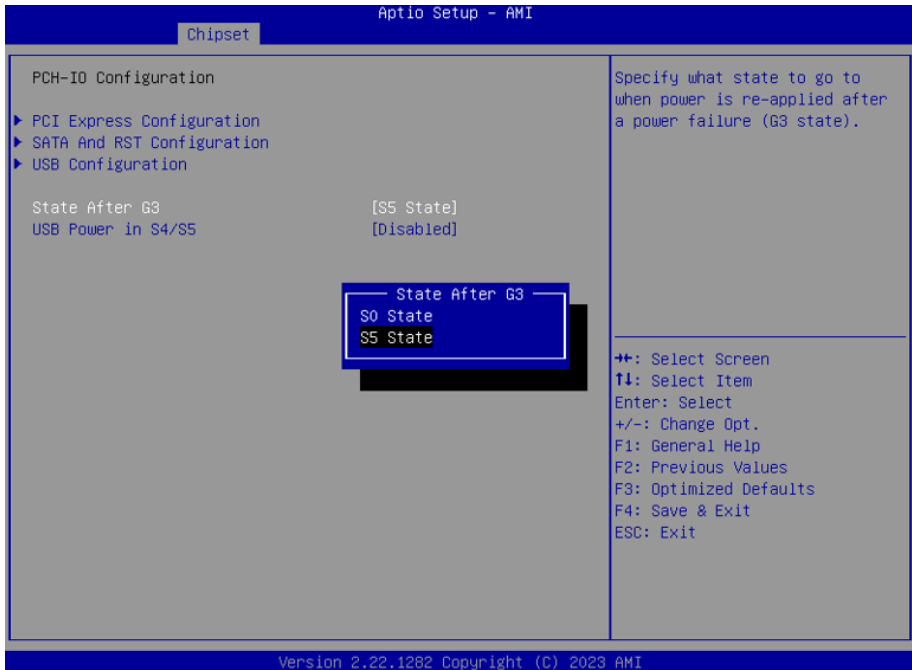
5.3.1 Graphics Configuration



Enter the **Chipset** interface, select **System Agent (SA) Configuration->Graphics Configuration**, and set it to **Auto**. The resolution/digits of the LCD screen and other related display parameters are adaptive.

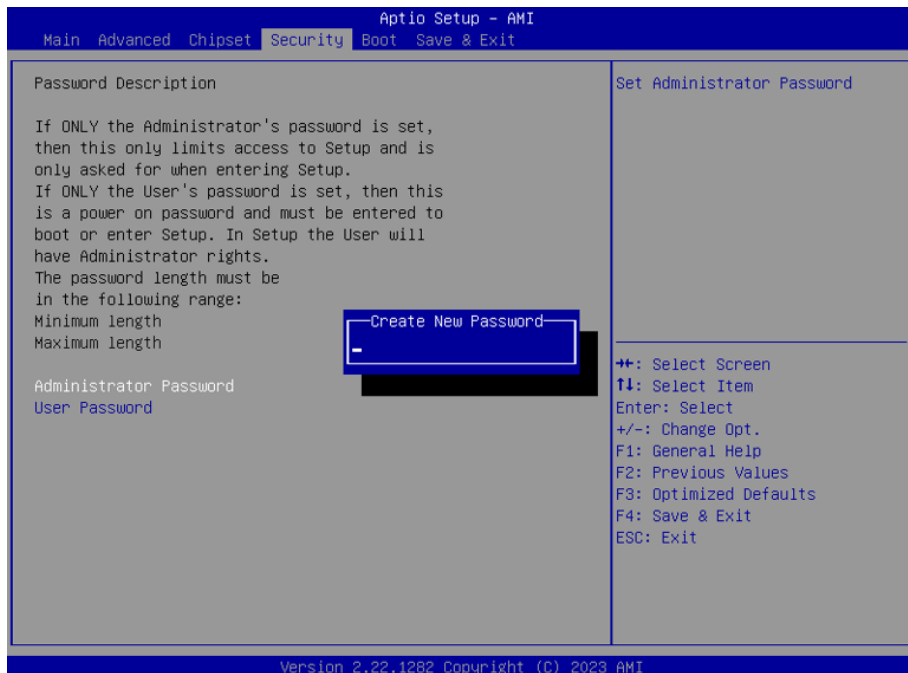
Note: After setting, press F4 to save and exit, the system will take effect upon rebooting your system.

5.3.2 AT/ATX Mode



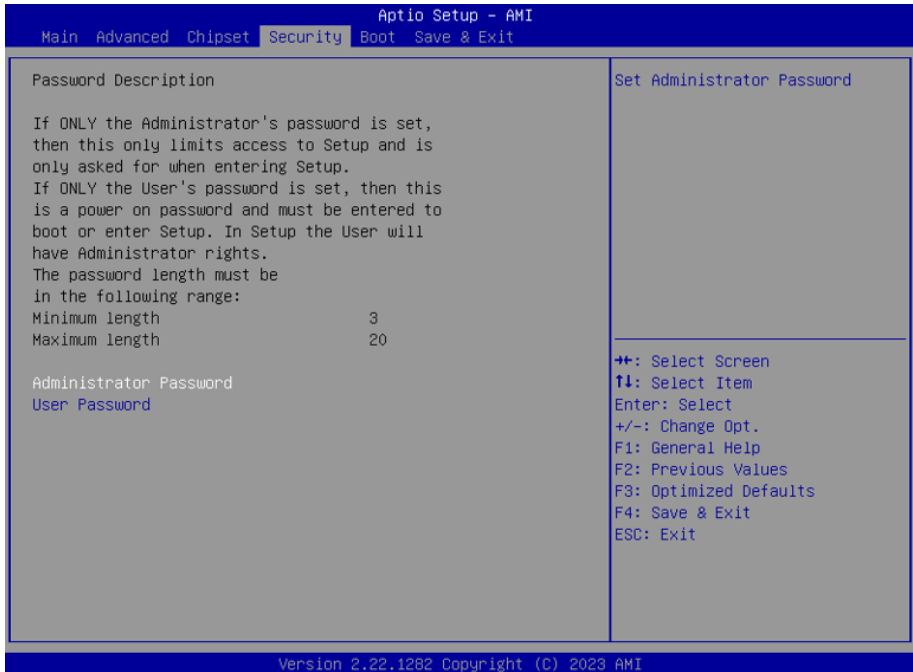
Enter the Chipset interface, then choose **PCH-IO Configuration -> State After G3. S0 State/S5 State** can be set for the device. S5 State is ATX mode, so when the power is connected users need to press Power button to open up the system. After the setting, press F4 to save and quit the BIOS the system will take effective after system restart.

5.4 Security



The **Security** interface contains security settings, where administrator and user passwords can be set to protect the computer from infringement.

5.4.1 Administrator & User Password



Setting	Description
Administrator Password	<p>To set up an administrator password:</p> <ol style="list-style-type: none"> 1. Select Administrator Password. 2. An Create New Password dialog then pops up onscreen. 3. Enter your desired password that is no less than 3 characters and no more than 20 characters. 4. Hit [Enter] key to submit.

5.5. Boot



The Boot interface includes the following startup settings. Users can set the startup logo, select the order of booting devices, etc.

5.5.1 Startup Logo

Setting	Description
Quiet Boot	Sets whether to display the POST (Power-on Self Tests) messages or the system manufacturer's full screen logo during booting. Select Quiet Boot ▶ Enabled: Logo will be displayed at boot. ▶ Disabled: Show the self-test screen at boot, without logo.

5.5.2 Boot Option Priority

Setting	Description
Boot Option Priority	Set the system boot priorities. After setting press F4 to save and exit, the Changes will take effect upon reboot.

Enter the Boot interface. In Boot Option Priorities, you can set the order of booting devices. Boot Option #1 is the first priority startup item, Boot Option #2 is the second startup item, and so on... After setting press F4 to save and exit, the Changes will take effect upon reboot.

5.6. Save & Exit



The Save&Exit menu shows you how to exit the BIOS Setup Utility. When you have completed the setup, you must save and exit for the changes to take effect.