



All-in-one



## **All rights reserved**

Shenzhen Syoung Technology Co., Ltd. 2020. All rights reserved.

Without the written permission of the company, any unit or individual shall not extract or reproduce part or all of the contents of this document, and shall not transmit it in any form.

## **Notice**

Due to product version upgrades or other reasons, the content of this document will be updated from time to time. Unless otherwise agreed, this document is for use only as a guide, and all statements, information and recommendations in this document do not constitute any express or implied warranty.

## Table of contents

|                                                      |    |
|------------------------------------------------------|----|
| Product Overview .....                               | 3  |
| Product Introduction.....                            | 3  |
| Application Scenario .....                           | 3  |
| Product Specification.....                           | 3  |
| Product Size & Display .....                         | 5  |
| Installation & Instructions .....                    | 6  |
| BIOS programming.....                                | 7  |
| Enter BIOS method .....                              | 7  |
| Main menu (BIOS information and date and time) ..... | 8  |
| (Advanced Menu Settings) .....                       | 8  |
| Chipset Menu (Chipset Settings) .....                | 15 |
| Security (password settings).....                    | 17 |
| BOOT (boot settings) .....                           | 18 |
| Save & Exit .....                                    | 19 |
| Product Care and Maintenance .....                   | 21 |

# Product description

## Product introduction

This product adopts Intel Celeron J1900 series, capacitive touch. It adopts aluminum alloy structure, which is more beautiful and supports 7\*24 hours of work; it is compatible with Windows and Linux at the same time, making the product more widely used. Support wired network, WIFI, network use more smoothly. Products are widely used in education, medical, industrial, smart equipment and other application scenarios.

## Application scenarios

- Teaching computer, calligraphy model, integrated desk
- Registration terminal, printing terminal, inquiry terminal, self-service physical examination all-in-one machine
- CNC machine tools, manufacturing, industrial control cabinets, industrial automation production lines
- Robots, intelligent production lines, express cabinets, intelligent terminals, visual terminals

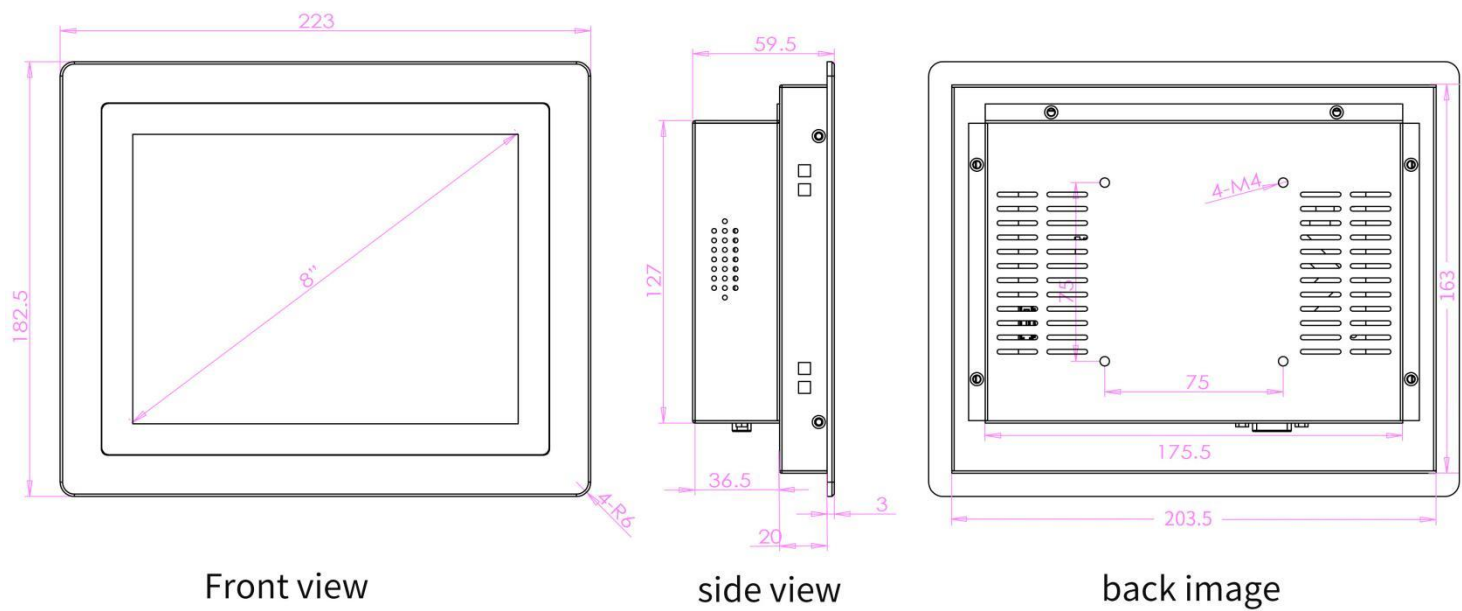
## Product Specifications

| Specification    |                    | Parameter                                                                            |
|------------------|--------------------|--------------------------------------------------------------------------------------|
| Screen           | size               | 8"                                                                                   |
|                  | Resolution         | 1024×768                                                                             |
|                  | screen brightness  | 300cd/m <sup>2</sup>                                                                 |
| Capacitive touch | Surface hardness   | 6H                                                                                   |
|                  | Number of contacts | 10 point                                                                             |
| Trumpet          | Built-in empty     | 2W+2W/8Ω;                                                                            |
| Hardware         | CPU                | Intel Celeron J1900 quad core 2.0GHz                                                 |
|                  | chipset            | Intel Bay trail SOC                                                                  |
|                  | GPU                | Intel HD Graphics(Sandy Bridge)                                                      |
|                  | ROM                | 2GB DDR3                                                                             |
|                  | RAM                | 64G SSD                                                                              |
| IO               | LAN                | 1-way RJ45 network port, support wake on LAN and PXE diskless boot function.<br>WiFi |
|                  | Audio              | Support audio output (green)<br>Support microphone input (red)                       |
|                  | USB                | USB 3.0*1                                                                            |

|              |                                                                               |                                                                                                  |
|--------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|              |                                                                               | USB2.0*3                                                                                         |
|              | RS232                                                                         | RS232*1                                                                                          |
|              | Display interface                                                             | DB15 VGA<br>HDMI                                                                                 |
|              | Button                                                                        | M12 metal switch button                                                                          |
| Other        | working environment                                                           | Working temperature: -20~60°C;<br>Working humidity: 5%~95% relative temperature, no condensation |
|              | storage environment                                                           | Storage temperature: -30~70°C;<br>Storage humidity: 5%~95% relative temperature, no condensation |
|              | Power on                                                                      | BIOS supports power-on, timed-on, and remote power-on/off settings                               |
|              | electronic dog                                                                | Support watchdog, hardware reset function (256 levels, 0~255 seconds)                            |
|              | Size                                                                          | As shown below                                                                                   |
|              | Protection class                                                              | Surface IP65                                                                                     |
|              | Power supply                                                                  | DC12V (±10%)                                                                                     |
|              | Installation method                                                           | Embedded, wall-mounted, desktop                                                                  |
| Packing List | Machine*1, Power Adapter*1, Power Cord*1, Instruction Manual*1, Certificate*1 |                                                                                                  |

# Product Size

## 8 inch industrial all in one PC

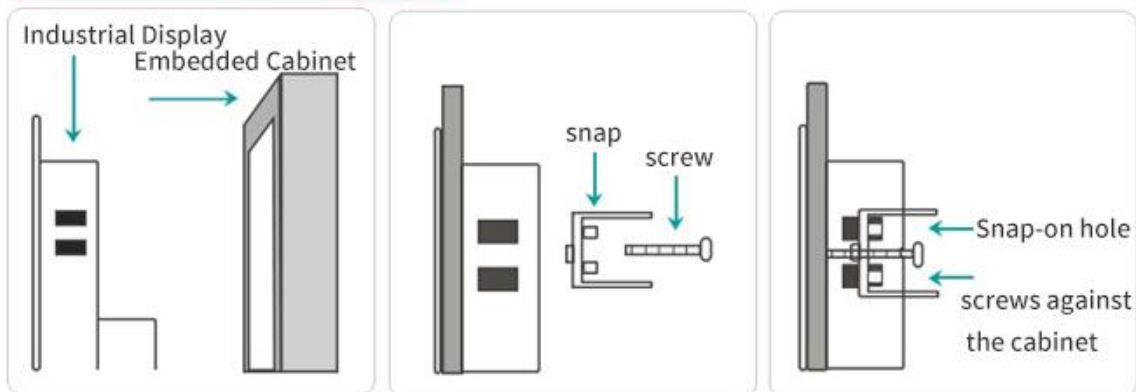


warm reminder:the size unit is millimeter(mm),and the error is within  $\pm 0.5\text{mm}$

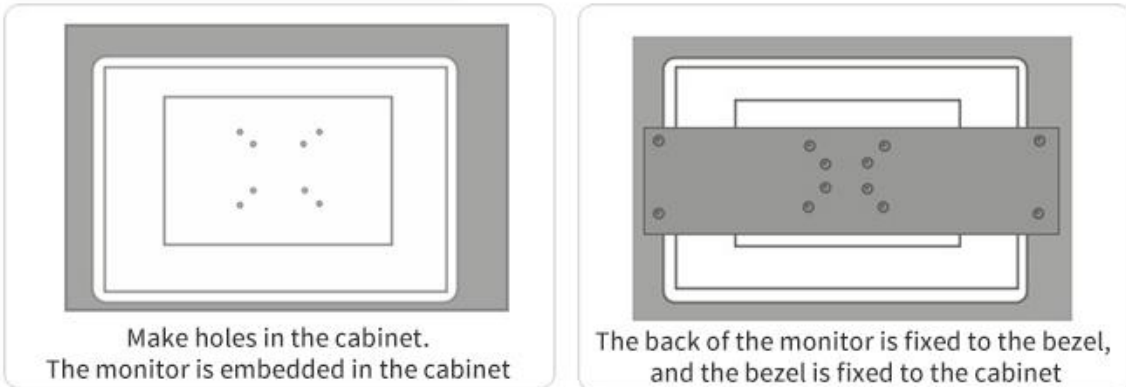
## Multiple installation methods Use more options

Provide a variety of touch screen accessories selection, four bracket configurations  
Choose from: Folding Stand, Triangle Stand, Wall Mount, Recessed Stand.

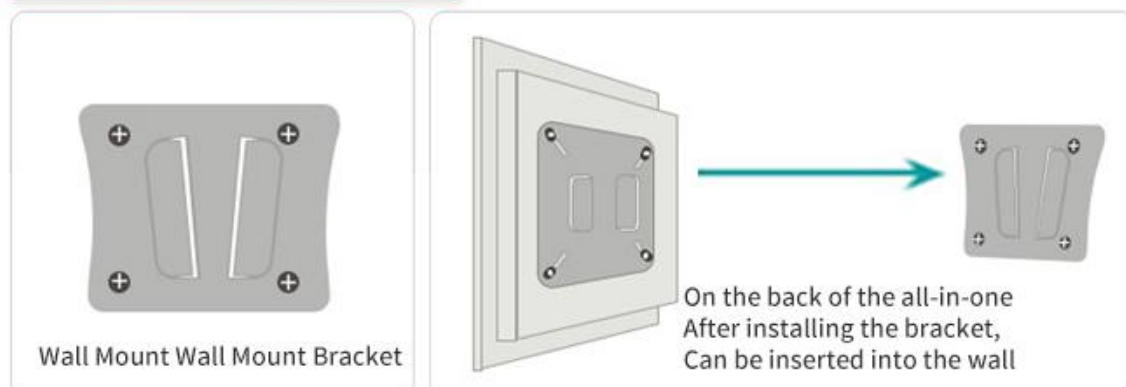
### Embedded installation



### Back-mounted installation



### wall-mounted installation



## Interface display



The above interfaces are standard interfaces for reference only. Different sizes and positions will vary. There are no green terminals as standard.



# Installation & Instructions

## Installation Notes

1. Open the package
2. Take out the power pack and the machine; install and fix the machine (different brackets have different installation methods, please refer to the "Bracket Installation Instructions" for details)
3. Connect the power adapter and connect the connected power adapter to the host



1. If the machine is not set to power on, press the "POWER" key switch after connecting the power supply.

# BIOS program setting

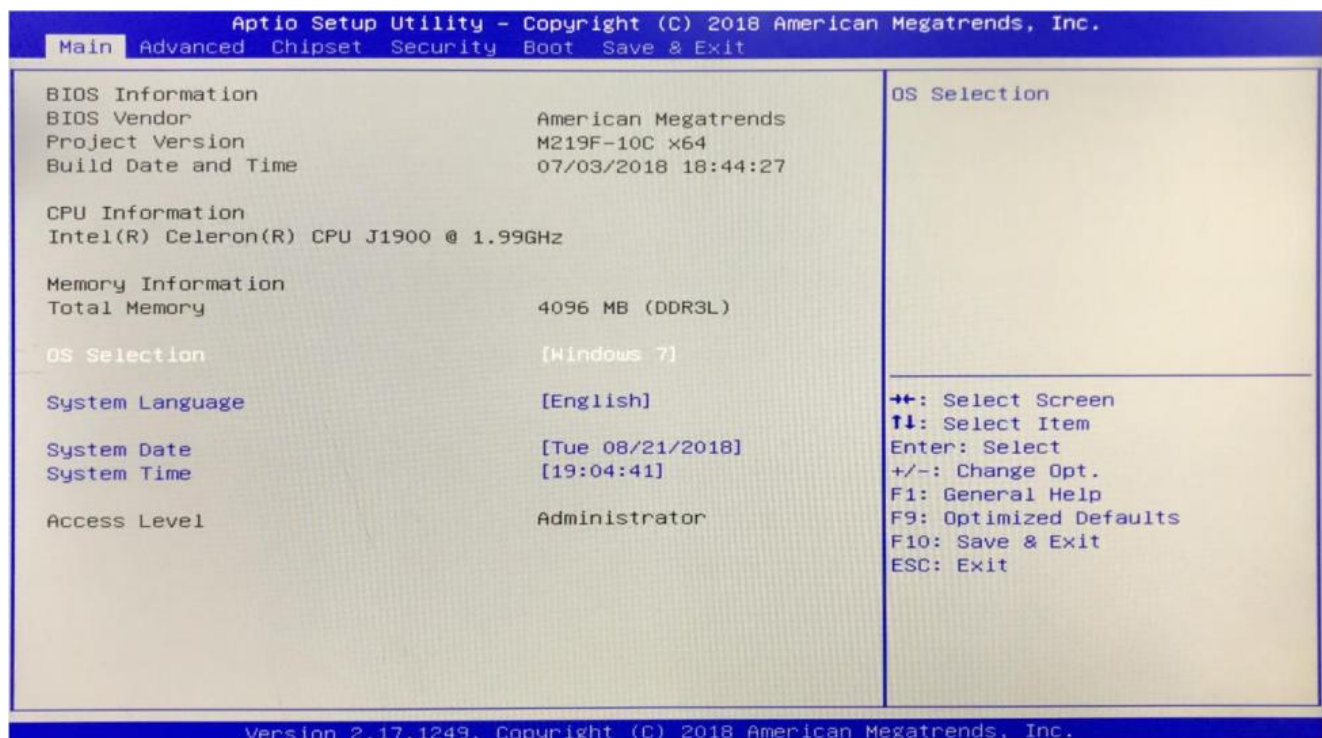
(take J1900 as an example, other items are subject to the actual product)

## Enter the BIOS method:

1. After booting, press Delete continuously to enter the BIOS directly
2. Press F11 continuously after booting, and then select Enter Setup to enter

BIOS hotkeys: F1: Help; F9: Factory Reset; F10: Save and Exit; ESC: Exit

## Main menu (BIOS information and time and date)



BIOS Vendor: BIOS Vendor, American Megatrends

Project Version : core version

Build Date and Time: BIOS date and time, 07/03/2018

CPU Information : CPU processor information

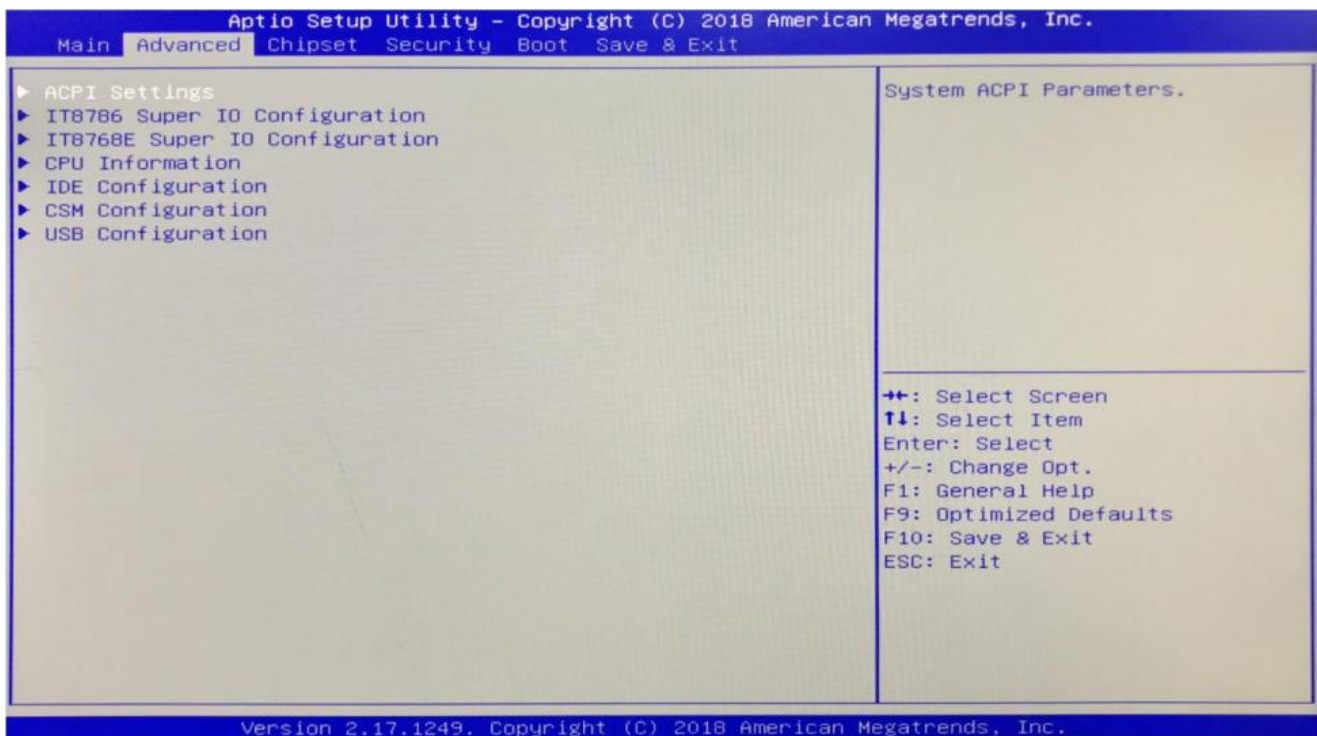
Memory Information: memory information

OS Selection: System selection, optional Windows 7 / Linux / Windows 8.X

System Date : System date setting, the format is week month/day/year

System Time : System time setting, the format is hours/minutes/seconds

## Advanced (Advanced Menu Settings)



ACPI Settings : Advanced configuration and power management interface settings

IT8786 Super IO Configuration: Super IO configuration information

IT8768E Super IO Configuration: Super IO configuration information

CPU Information: CPU parameter information and common setting options

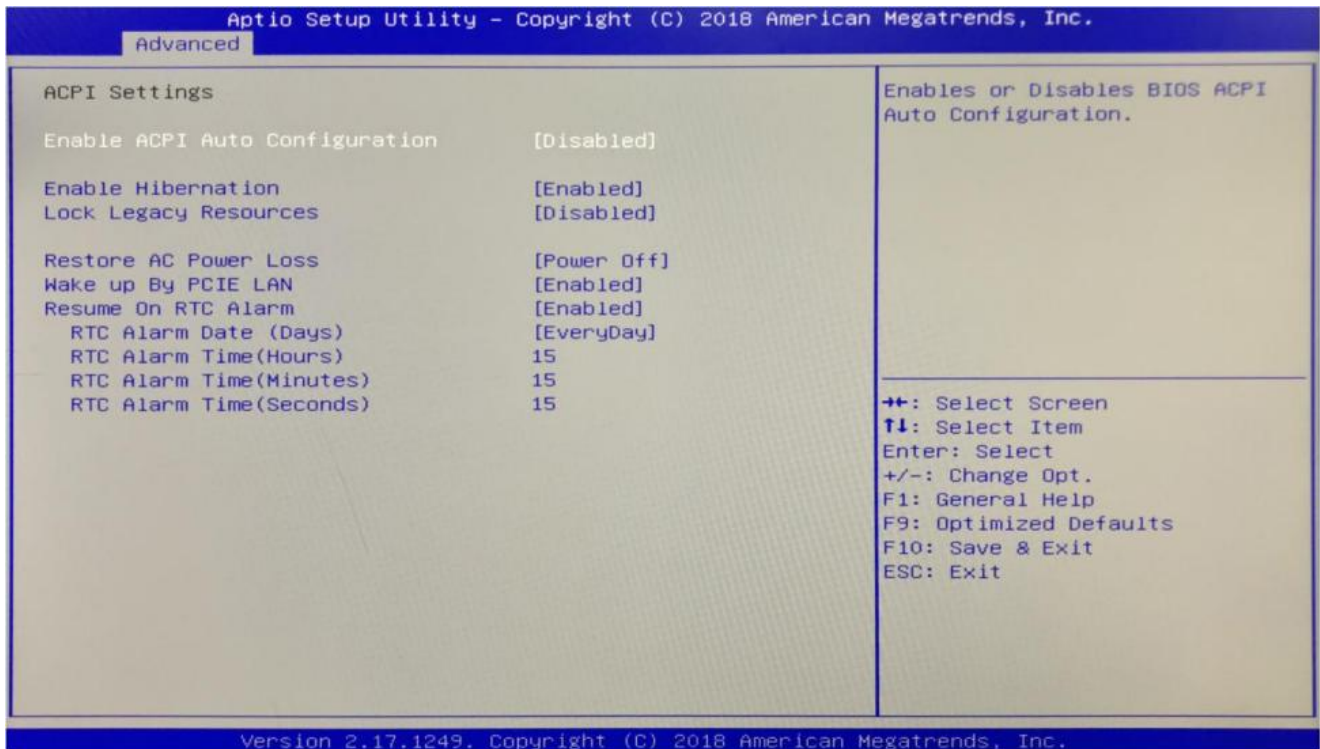
IDE Configuration: hard disk mode settings and hard disk information

CSM Configuration : CSM configuration

USB Configuration: USB information and control options

# ACPI

## Settings



Enable ACPI Auto Configuration : This item is ACPI auto configuration, Enabled or Disabled BIOS

ACPI automatic configuration, the default is off (Disabled)

Enable Hibernation: This item is to start hibernation support, enable or disable the system hibernation function

(OS/S4 sleep state), this option does not take effect under some OS, the default is Enabled (Enabled)

Lock Legacy Resources: Resource latch, enable or disable the resource latch function

Wake up By PCIE LAN: Wake up on LAN switch, the default Enabled is on, Disabled is off

## Power-on settings

Restore AC Power Loss: The default Power Off is to turn off the power-on, and set to Power On to turn on

## Timing boot settings

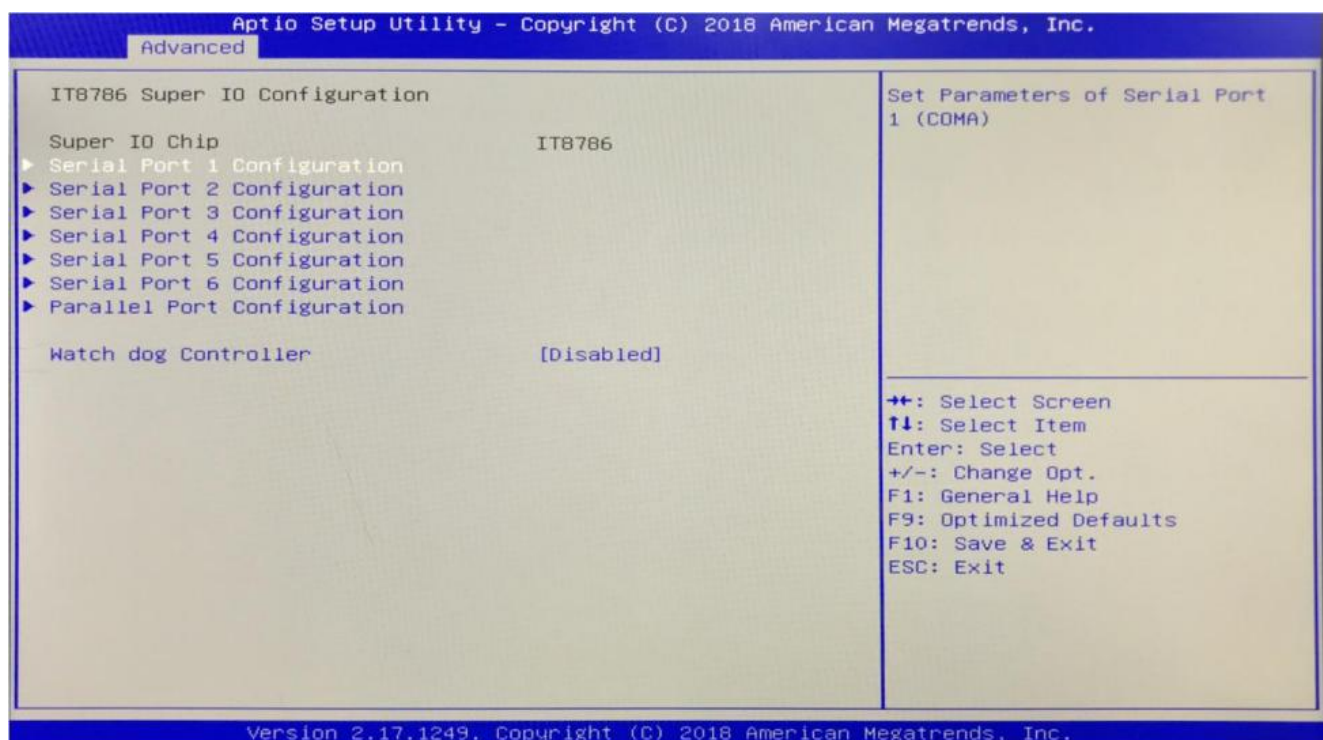
Resume On RTC Alarm: Timer power-on setting, Disabled is disabled by default, Enabled is enabled

RTC Alarm Date (Days) is the date, Every Day is every day; RTC Alarm Time (Hours) is the hour; RTC

Alarm Time (Minutes) is minutes; RTC Alarm Time (Seconds) is seconds

## IT8782 Super IO

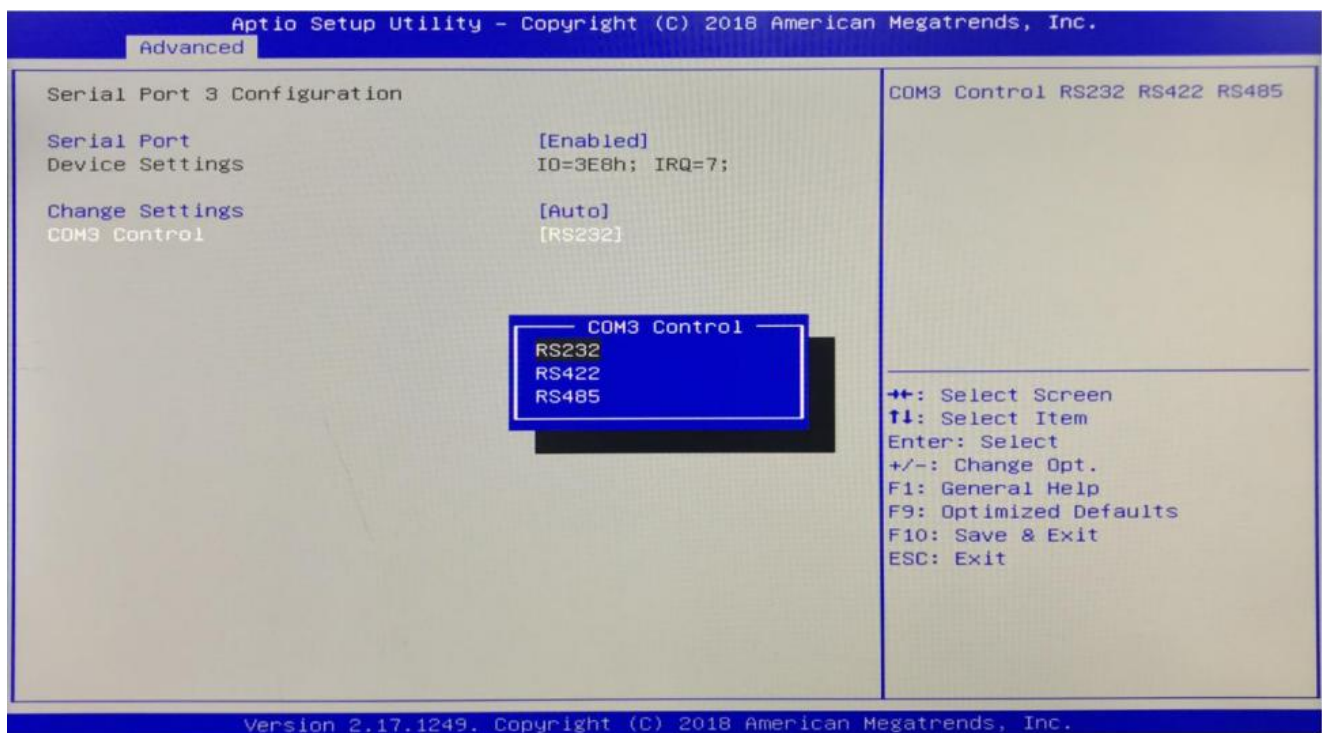
### Configuration



Contains serial port COM1~COM6 and parallel port (LPT port) configuration information and settings

Watch dog Controller: Watch dog settings

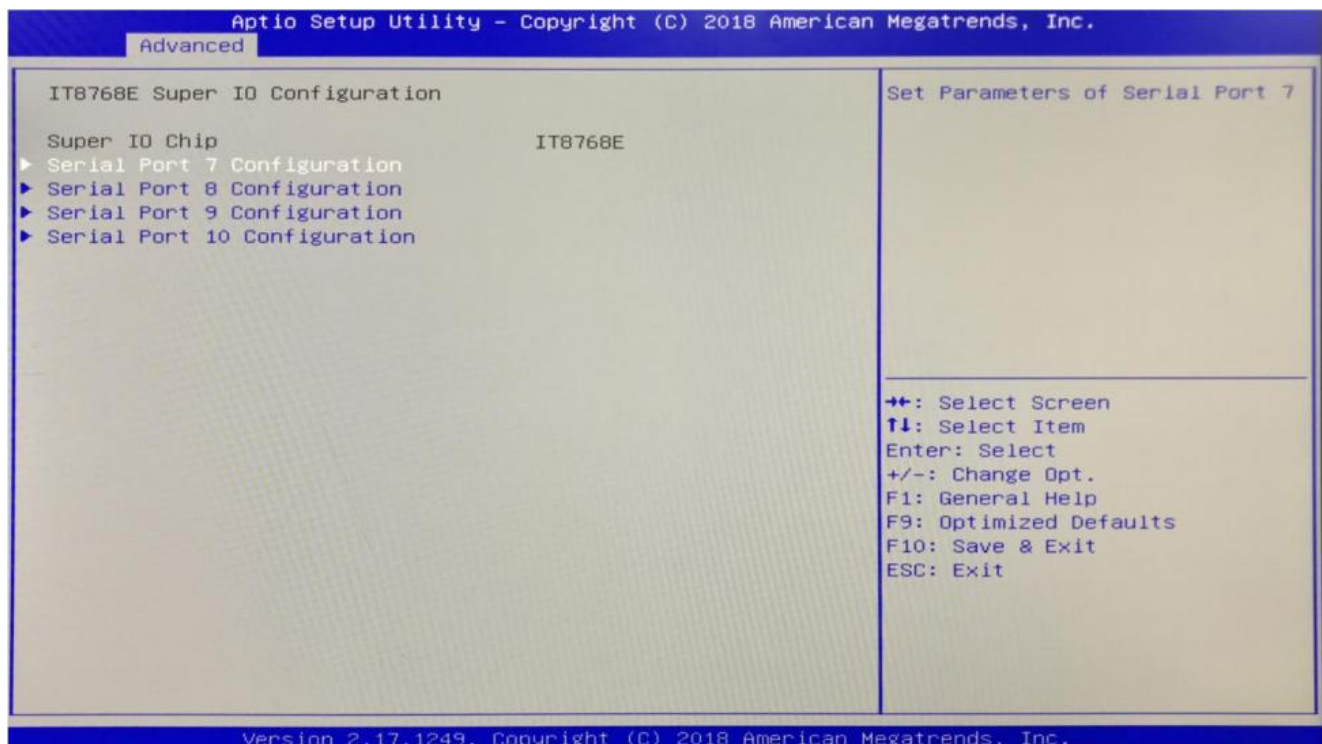
## RS232/422/485 settings for COM3/4/6





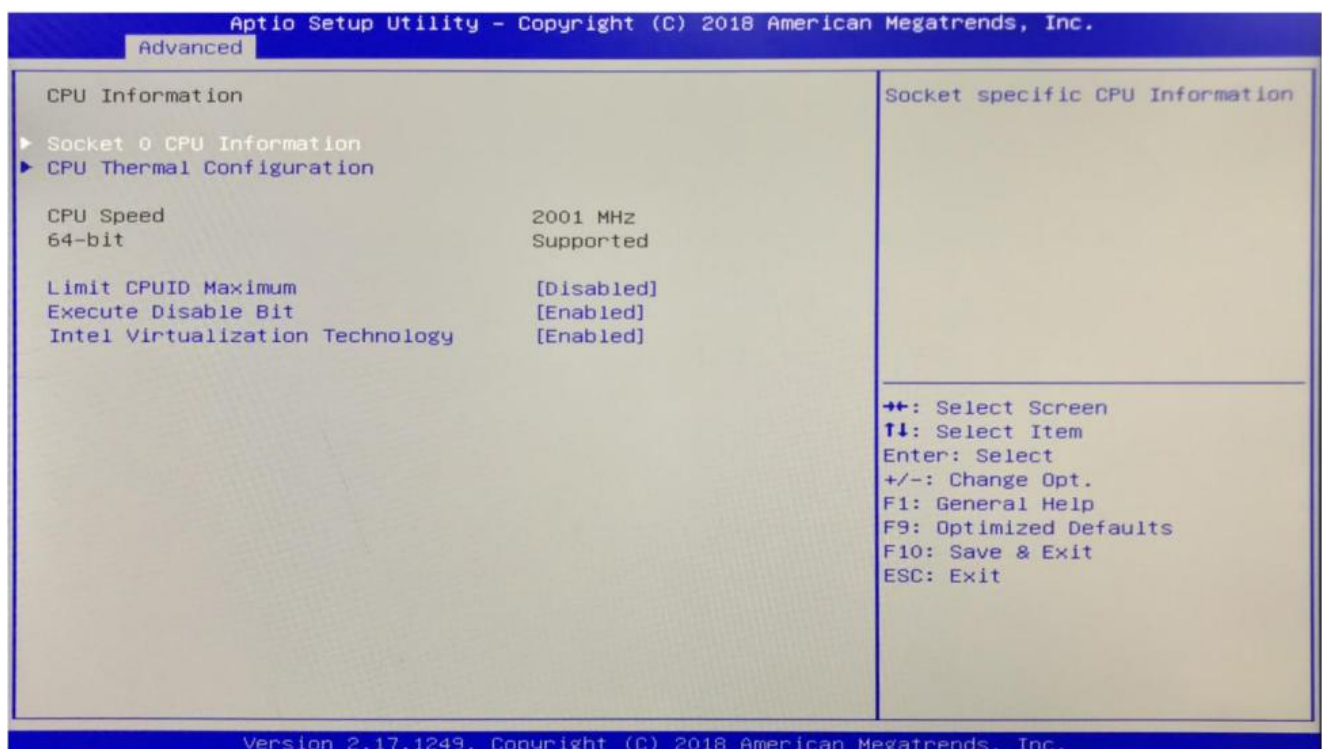
# IT8768E Super IO

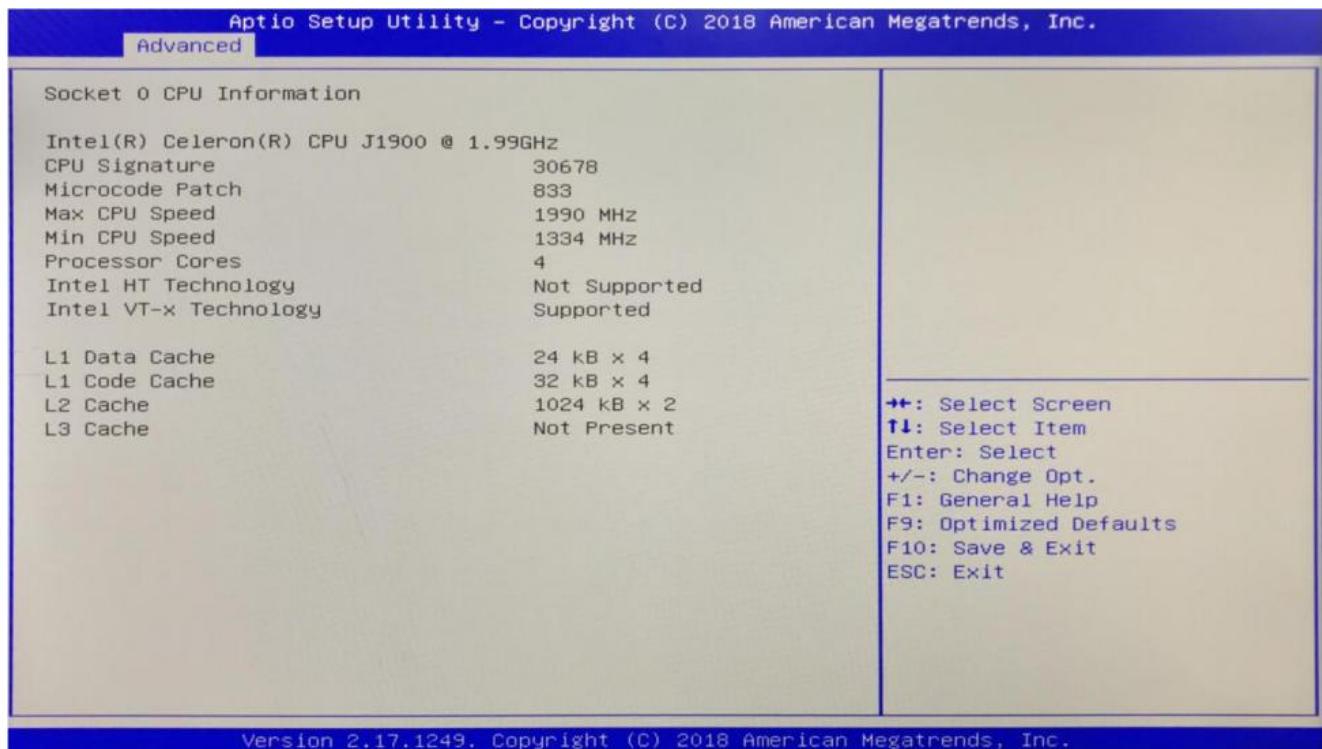
## Configuration



Contains serial port COM7~COM10 configuration information and settings

## CPU Information (CPU configuration information)

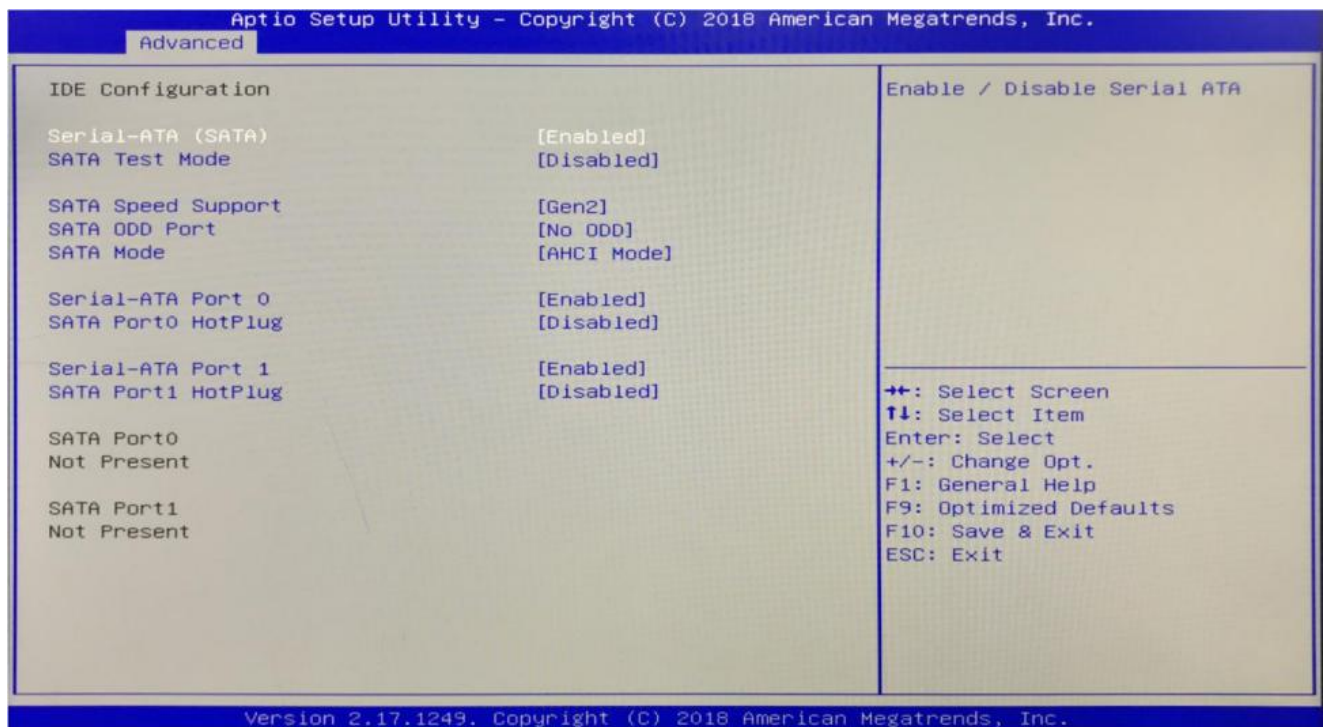




The read-only item contains the detailed information of the CPU, including the CPU manufacturer, model, frequency, cache size, etc.

## IDE Configuration

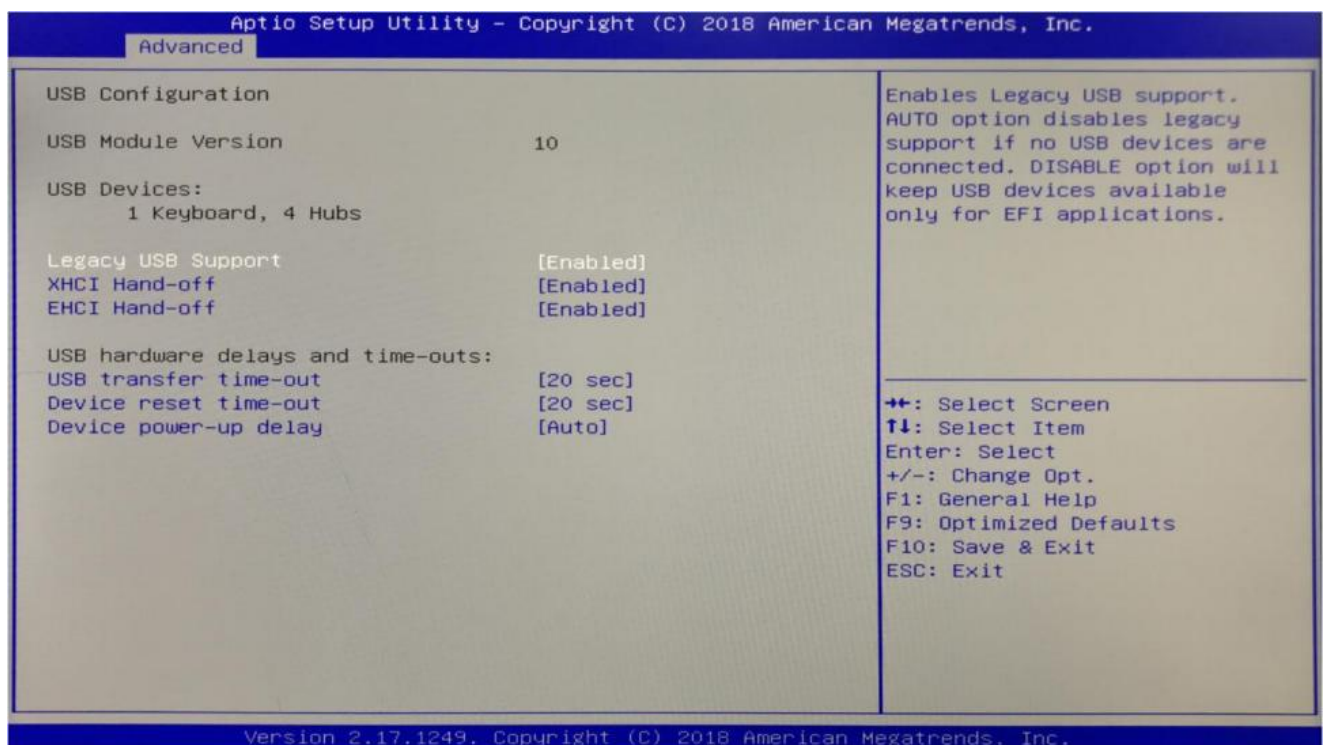




SATA Test Mode: Hard drive test mode

SATA Mode: hard disk mode setting

## USB Configuration



Legacy USB Support :

This item is used for the settings of the old version of USB. If you need to support USB devices, U disk, USB keyboard, etc. under DOS, you should set this item to [Enabled] or [Auto], otherwise select [Disabled]

XHCI Hand-off: Whether to enable USB XCHI transfer protocol

EHCI Hand-off: This option is used to decide whether to switch the USB port into USB2.0 mode before entering the OS, set to Disable

USB Transfer time-out:

USB transfer timeout: Set the timeout time for control, batch and interrupt transfer, the default is 20 seconds

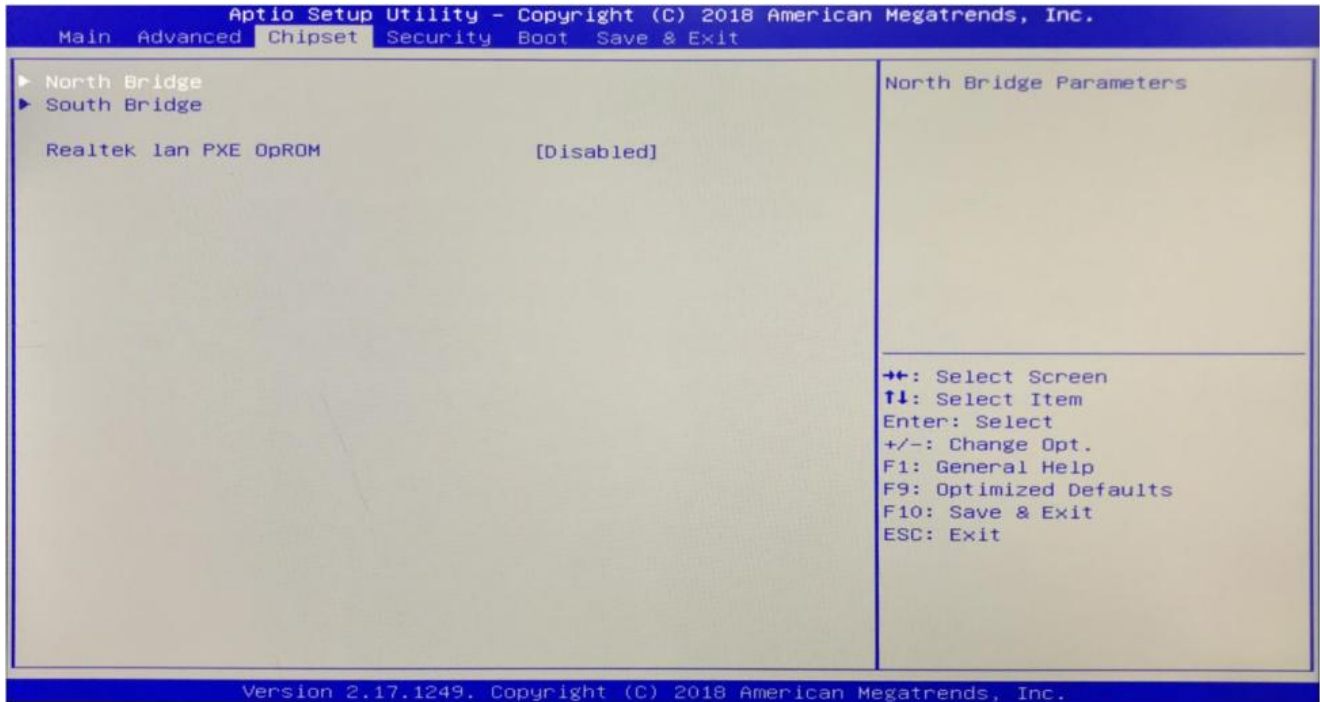
Device reset time-out:

Device reset timeout: Set the timeout time for the boot command of the large-capacity USB disk. The default is 20 seconds

Device Power-up Delay:

Device power-on delay: Set the maximum delay time for the USB device to report to the host controller

## **Chipset Menu (Chipset Settings)**



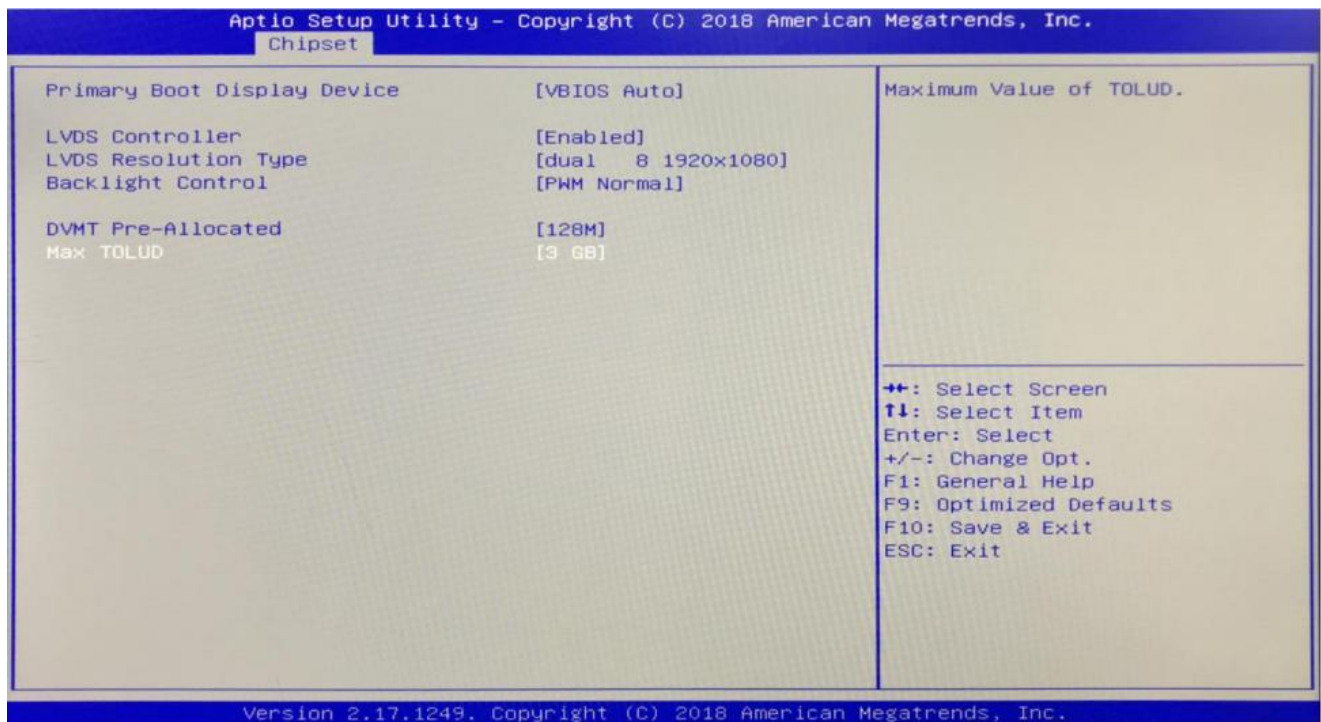
North Bridge: North Bridge configuration options, including video memory, display devices and other options

South Bridge: South Bridge configuration options, including PCI-E, USB, PXE and more

Realtek lan PXE OpROM: Diskless Boot (NIC PXE Setup)

## North Bridge

### LVDS setup options



Primary Boot Display Device: Primary display boot (VBIOS Auto is automatically recognized, can also be set to VGA / HDMI /LVDS)

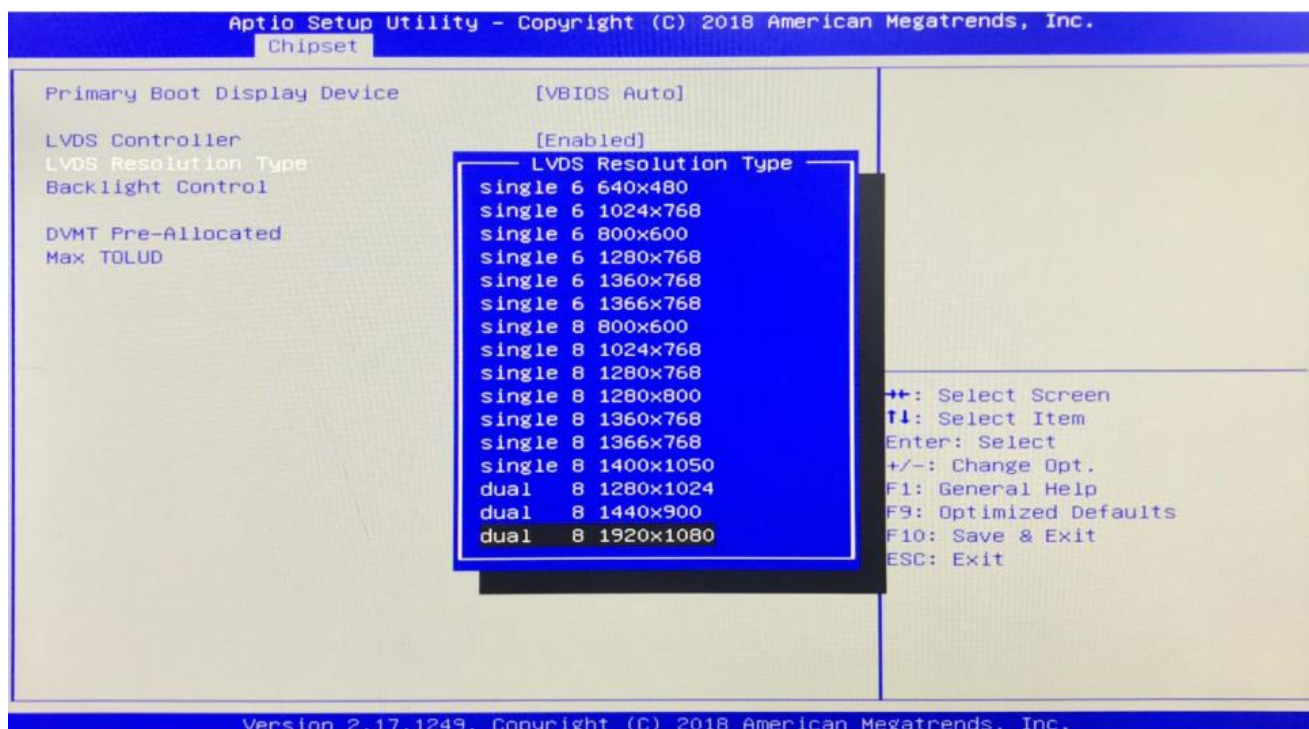
LVDS Controller: LVDS switch (Enabled is on, Disabled is off)

LCD Resolution Type: Set LVDS resolution options (only for LVDS)

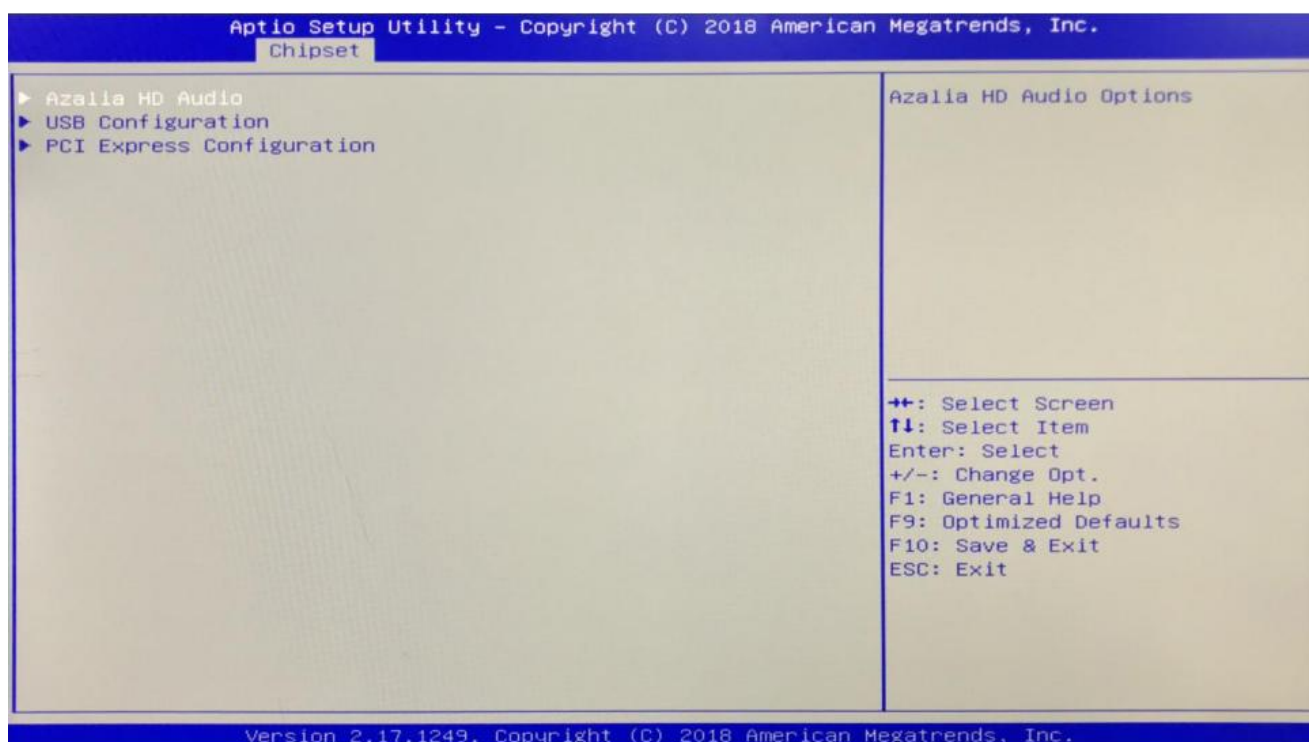
Backlight Control: Backlight control options (PWM Inverted inverted duty cycle; PWM Normal normal duty cycle)

DVMT Pre-Allocated: Pre-allocated DVMT

## List of LVDS resolutions:



## South Bridge



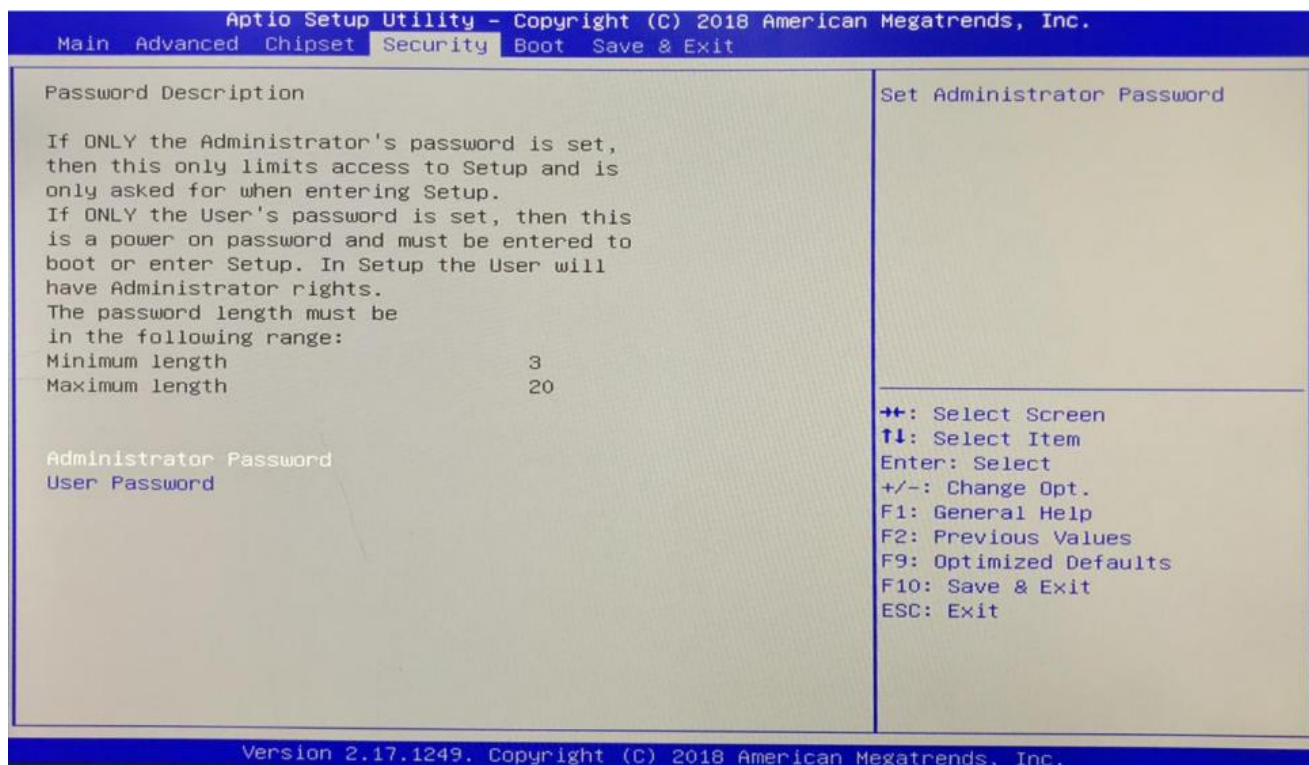
Azalia HD Audio: This is the sound card configuration

USB configuration: This item is the USB setting

PCI Express Configuration: This item is the PCIE setting

## Security





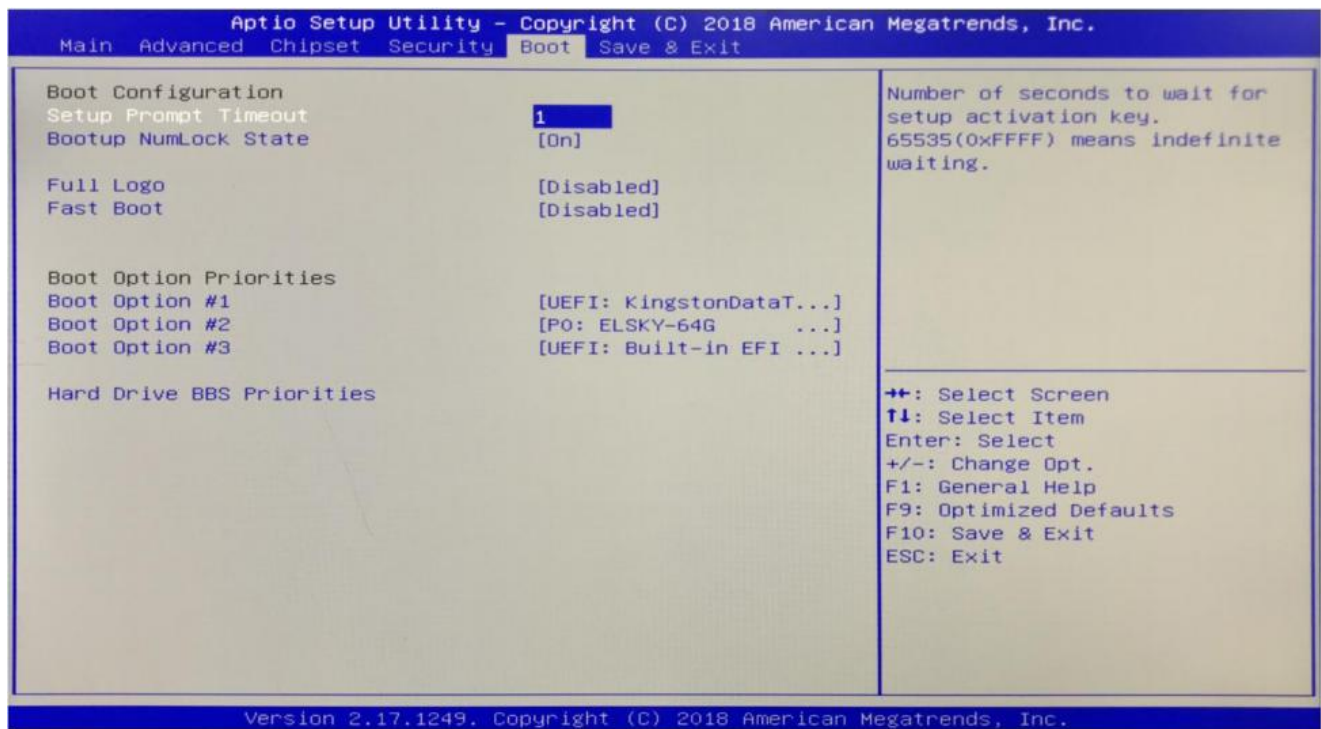
Administrator Password:

This prompt line is used to set the superuser password

User Password:

This prompt line is used to set the normal user password

## BOOT



Setup Prompt Timeout: Set the prompt timeout time, the waiting time for pressing the Setup shortcut key, if there is no prompt within the set time

Continue to start by pressing the Setup shortcut

Bootup NumLock State: This feature allows the NumLock function of the keypad to be activated after the system is powered on to a DOS system. Defaults

If it is On, the number lock will be on when the system starts up; if it is set to Off, the keypad will be in the cursor control state when the system is started.

Full Logo: Customize the boot logo display switch (Disabled is off, Enabled is on)

Fast Boot: Fast boot (Disabled is off, Enabled is on)

Boot Option Priorities: The system will detect devices in the set order until a bootable device is found, and then

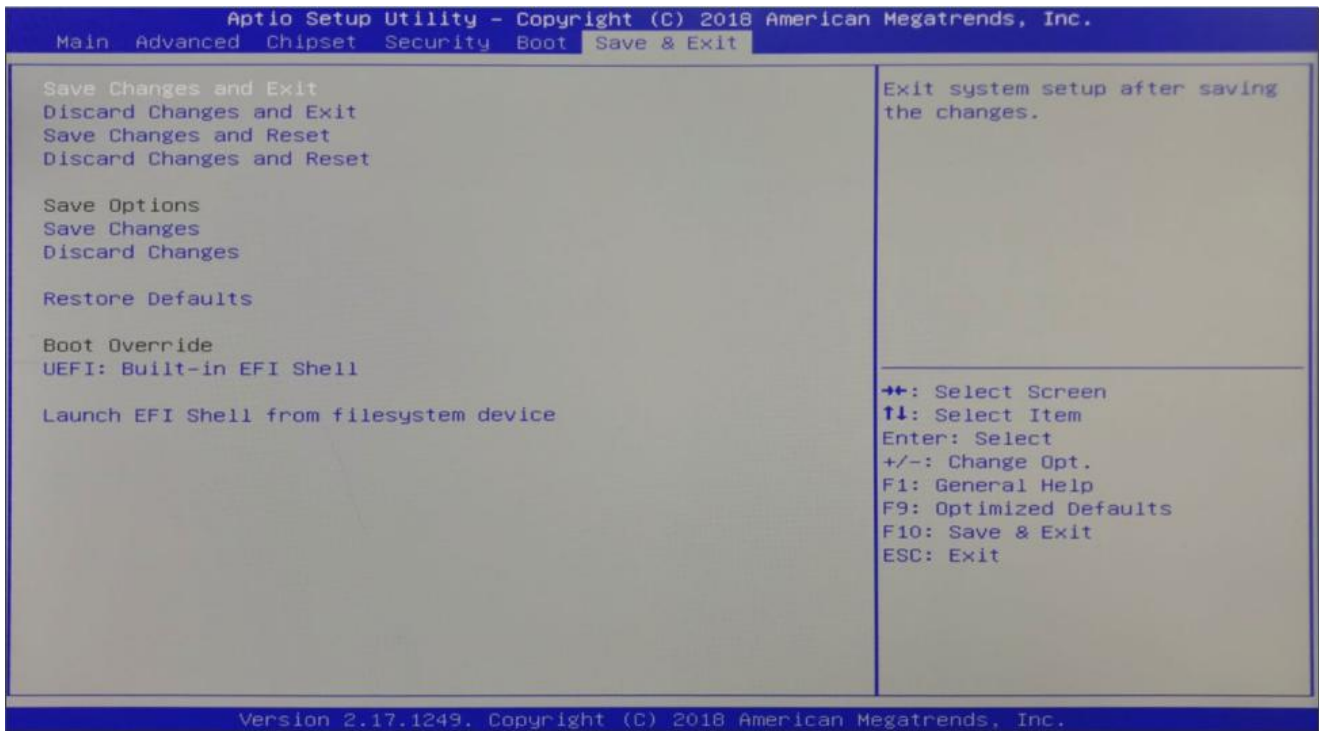
Boot from this device. Boot option #1 is the highest priority boot device

Hard Disk Boot Priority: hard disk boot priority setting (this option is only available when the hard disk is connected)



You can also directly select the specified device to start by pressing F11 at startup.

## Save & Exit



Save Changes and Exit: Save the BIOS settings and exit the setting interface, continue to start the computer

Discard Changes and Exit: Discard changes and exit the settings interface, continue to start the computer

Save Changes and Reset: Save the BIOS settings and exit the setting interface, restart the computer

Discard Changes and Reset: Discard changes and exit the settings interface, restart the computer

Save Changes : Save BIOS settings

Discard Changes: Discard changes to settings

Restore Defaults : restore default settings

Boot Override: Select the specified boot device, such as SATA hard disk, U disk, EFI Shell, PXE, etc., directly boot without saving and exiting

## Product Care and Maintenance

When you receive the product, please pay attention to check whether the outer packaging is damaged or deformed. If you find any damage or deformation, please contact the logistics personnel as soon as possible or open the packaging in the presence of the logistics personnel to check the internal damage of the product.

Individual brackets will be equipped with corresponding screws, please pay attention to the accessories.

When installing the bracket, please ensure that the product is installed firmly before use. Please pay attention to the placement of the column floor bracket, as it is easy to collide and fall to the ground.

Installation sequence: connect the signal cables between components first, and then connect the power cables. Only connect the power cable last when all components are properly connected.

During the installation process, the electrical safety regulations of the country and the region of use must be strictly observed. When the plug and socket are matched, they must be inserted in place. After checking that the connection is correct, tighten the plug screws to ensure a stable connection.

When choosing an adapter, please check whether the adapter meets the specifications for use. Please use an adapter that complies with local safety standards.

When connecting to AC power, it is required that the power plug is not easy to loosen after plugging in, and the plug must have a ground wire.

The installation should be carried out without electricity, and live installation is prohibited.

Power sequence: connect the adapter first, then connect the AC power.

You are responsible for configuring all passwords and other related product security settings reasonably, and keep the account username and password of the manager's authority properly.

If the device does not work properly, do not disassemble and repair it by yourself, otherwise it will affect the device warranty.

Ensure that the surface of the product is clean during use, so as to avoid dirt or dust particles covering the LCD screen and affecting normal use.

Avoid extreme high temperature (or low temperature), high humidity, vibration, radiation, chemical corrosion and other harsh or extreme environments during installation and use.

Machine maintenance requires professional personnel from our company or personnel trained by our company to operate to avoid unnecessary dangers