

D108 User Manual



Statement

The copyright of this manual belongs to Shenzhen JIEHE Technology Development Co., Ltd. (Giada, JIEHE's global brand) and all rights are reserved. The company reserves the right to change this manual at any time without notification. Specifications here are for reference only, please take the real product as standard.

Without official authorization of Giada, other company or individual may not copy, plagiarize, translate or disseminate this manual for commercial purpose.

The information provided in this manual is accurate and reliable. The company does not take any legal responsibility for the consequences of infringement use of this manual.

Safety Notice

- Read the user manual carefully before setting up the Giada product.
- Disconnect the power cord before installing the internal components
- Most electronic components are sensitive to static electrical charge, please wear a wrist-grounding strap when installing the internal components.
- Don't disconnect the power cord when the system is running to avoid damage to the sensitive components caused by instantaneous surge voltage.

Contact Information

Shenzhen JIEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-3330 0336

Email: support@giadatech.com

Address: 37F, Holdfound Sky Plaza Office Building, 11008 Beihuan Blvd.,
Nanshan, SZ, China, 518051

Table of Contents

1. Product Introduction	5
2. Interface Description	5
3. Accessories Installation Steps	7
3.1 Memory Installation	7
3.2 SIM Card Installation	8
3.3 3G/4G Installation	9
3.4 SSD(M.2) Installation	9
3.5 WIFI(M.2) Installation	10
4. BIOS Setup	11
4.1 Main (Standard CMOS setting)	14
4.2 AMD CBS Settings	15
4.2.1 AMD CBS Setting	15
4.2.2 The JACH Configuration Settings	16
4.2.3 The ACPI Settings	18
4.2.4 S5 RTC Wake Settings	19
4.2.5 Trusted Computing Settings	20
4.2.6 HW Monitor & Smart FAN	22
4.2.7 The Network Stack Configuration Settings	23
4.3 Security Setup	25
4.4 Boot Menu.....	26

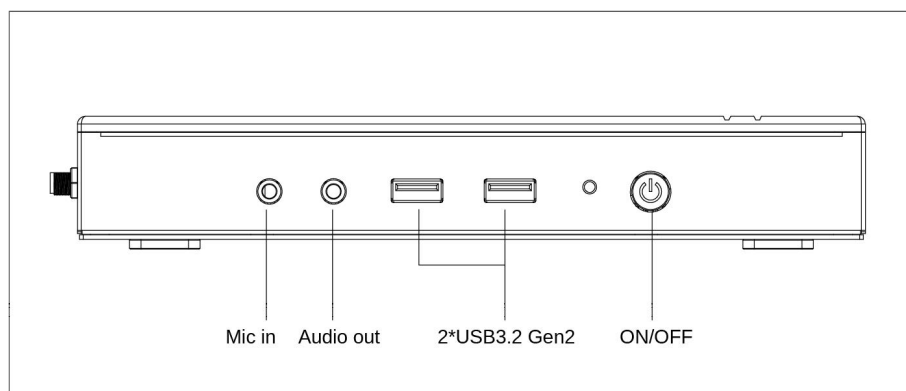
4.5 Save & Exit	27
5. JAHC Introduction	28
5.1 Auto Power on	28
5.2 JAHC Software	30
5.2.1 JAHC Software Functions	30
5.2.2 JAHC Software Installation Guide	30
5.2.3 Startup & Shutdown Time Setup	33
5.3 Watchdog API and Instruction	35

1. Product Introduction

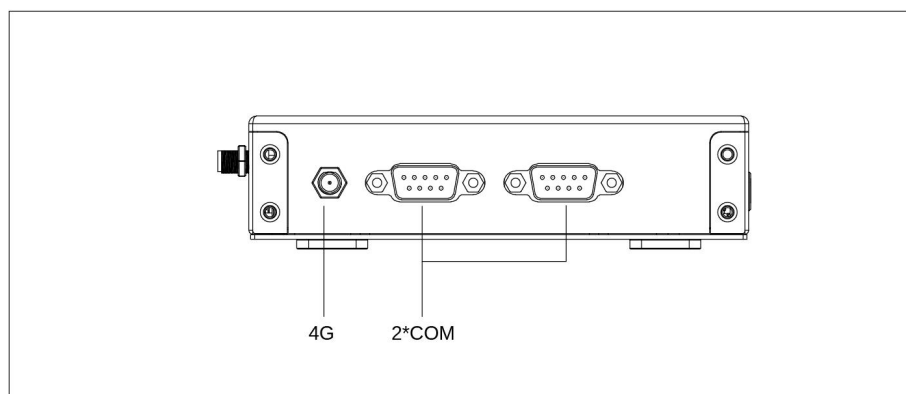
This PC adopts high-performance Ryzen 7000/8000 series processors, and supports up to 96 GB dual-channel DDR5 memory and provides flexible storage expansion via M.2 slot. With up to 38 TOPS overall AI performance, the D108 can efficiently handle various AI tasks locally, enhancing workplace efficiency and privacy. The player features AMD Radeon 780M graphic. It has four independent HDMI 2.0a displays with up to 4K @60Hz (Max. 3840 x 2160 @60Hz) resolution in each display with hardware EDID emulation. Wi-Fi 6/6E, Bluetooth and optional 4G network are supported. This new design is built with high reliability, making it suitable for digital signage, gaming and edge AI applications.

2. Interface Description

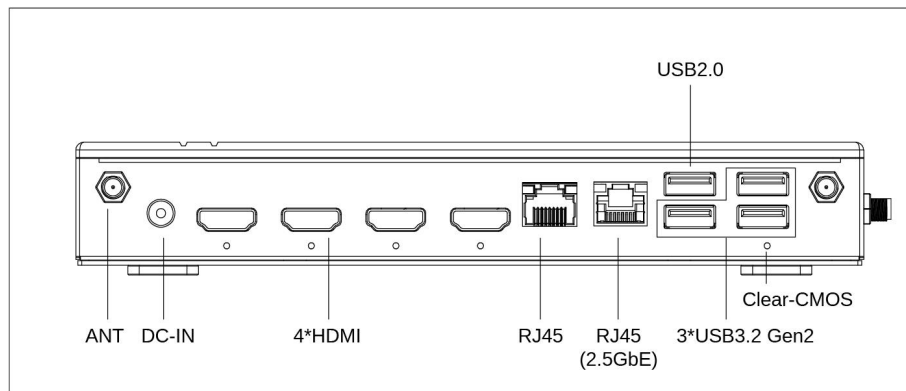
Front I/O Port



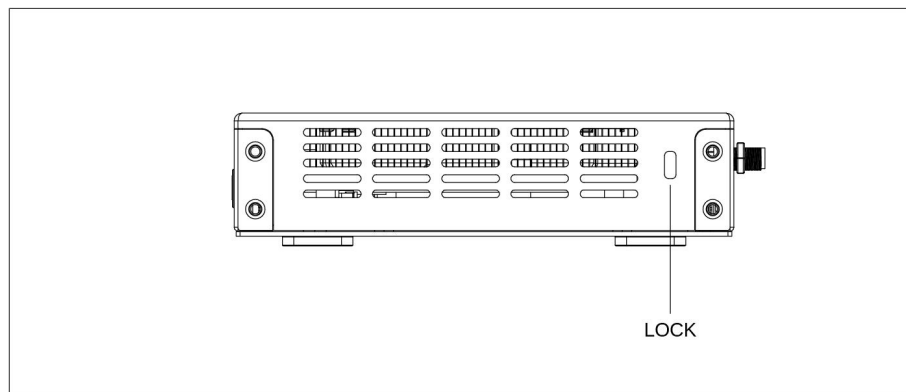
Left I/O Port



Rear I/O Port



Right I/O port



3. Accessories Installation Steps

▲ For safety reasons, please ensure that the power cord is disconnected before opening the case.

How to open the top cover and bottom cover

1. Remove the screws on the bottom side, rear panel, and the lockable DC power connector.
2. Slide the bottom cover in the indicated direction, then lift it to open.
3. Disconnect the antenna cable.
4. Remove the bottom cover completely.
(M.2 slot for 3G/4G and SIM card slot are on the bottom side).



3.1 Memory Installation

▲ This product only supports DDR5 SO-DIMM memory modules.

1. Locate the SO-DIMM slot on the board.
2. Gently insert the module into the slot at a 45-degree angle.
3. Carefully push down the memory module until it snaps into the locking mechanism.





3.2 SIM Card Installation

⚠ This product supports standard SIM card with the size of 12.3mm × 8.8mm.

1. Locate the SIM card holder on the mainboard.
2. Slide the holder to the open position.
3. Insert the SIM card into the holder.
4. Slide the holder to the locked position to secure the SIM card in place.



3.3 3G/4G Installation

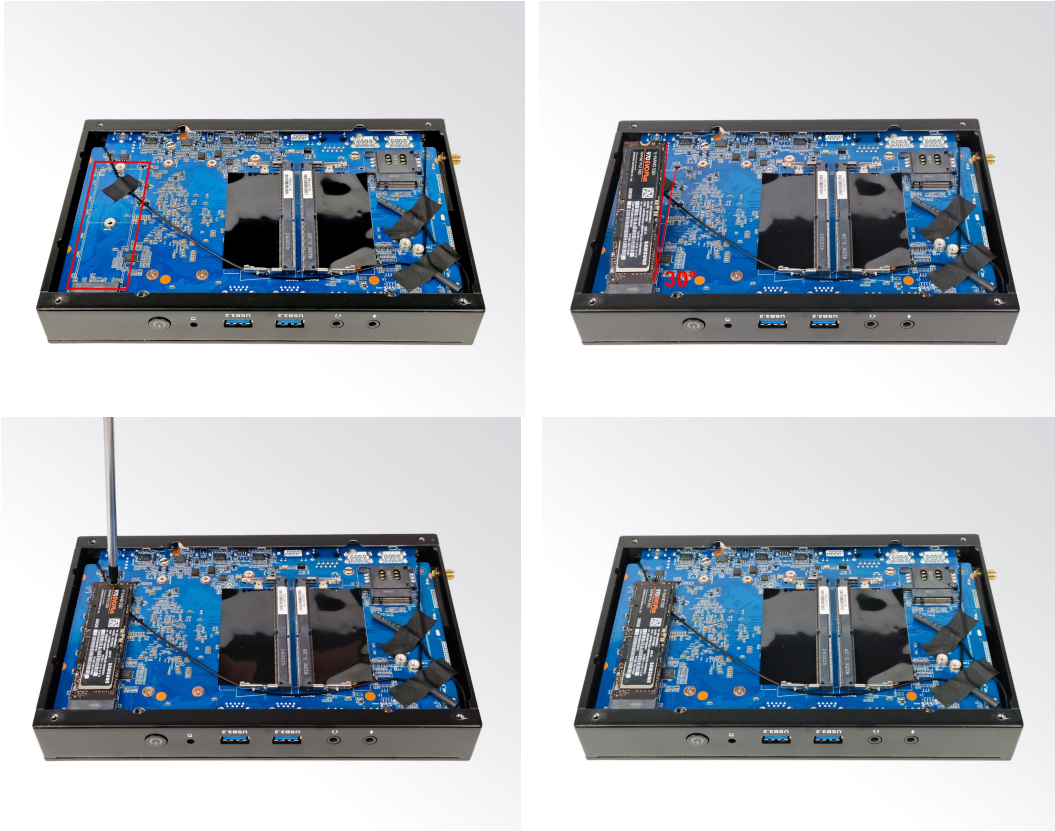
▲ Default SMA connector and cable is for WIFI. Please change to 3G/4G SMA connector and cable.

1. Locate the M.2 WWAN slot on the mainboard.
2. Insert the module into the slot at an angle of approximately 30°.
3. Press the module down and secure the module with a screw to fix it in place.
4. Connect the antenna cable to the antenna connector on the module. Route the antenna cable properly and connect them to the external antenna.



3.4 SSD (M.2) Installation

1. Locate the SSD on the mainboard
2. Insert the SSD (M.2 PCIE signal) into the appropriate slot.
3. Secure the module to the carrier by tightening up the screw.



3.5 WIFI (M.2) Installation

1. Insert the WI-FI module into the appropriate slot.
2. Secure the module to the carrier by tightening up the screw.
3. Connect the two cables to WIFI module and install the antennas.





4. BIOS Setup

Notice:

The descriptions relating to BIOS setup in this Manual is for reference only when the BIOS version of the product might be upgraded. Giada provides no guarantee that all the contents in this Manual are consistent with the information you acquired.

BIOS is a basic I/O control program saved in the Flash Memory. Bridging the motherboard and the operation system, BIOS is used for managing the setup of the related parameters between them.

When the computer is activated, the system is first controlled by the BIOS program. Firstly, a self-detection called POST is performed to check all hard devices and confirm the parameters of the synchronous hardware.

Once all detections are completed, BIOS will hand over the controlling to the operation system (OS). As BIOS serves as the only channel that connects the hardware and software, whether your computer can run stably and work in optimized state will hinge on how to properly set the parameters in BIOS. Therefore, the correct setup of BIOS plays a key role for stably running the system and optimizing its performance.

The CMOS Setup will save the set parameters in the built-in CMOS SRAM on the motherboard. When the power is shut off, the lithium battery on the motherboard will provide continuously power to CMOS SRAM.

The BIOS setup program will allow you to configure the following items:

1. HD drive and peripheral devices
2. Video display type and display items
3. Password protection
4. Power management characteristics

A. State of BIOS Setup

When the computer is started up, BIOS will run the self-detection (Post) program. This program includes series of diagnosis fixed in BIOS. When this program is executed, the following information will appear if any error is found:

Press [F1] to Run General help

Press [F2] to Load previous values and continue

To enter BIOS, you can press F2 to load the default values and enter the system, you can press DEL to enter the BIOS interface if no error is found. If the indicative information disappears before you operate, you can shut off the computer and turn it on again, or you can press the RESET key on the product case. To restart your computer, you can also simultaneously press < Ctrl > + < Alt > + < Delete >.

B. Function Keys definitions

Hot Key	Description
↑	(Up key) Move to the previous item
↓	(Down key) Move to the next item
←	(Left key) Move to the left item
→	(Right key) Move to the right item
ESC	Exit the current interface
Page Up	Change the setup state, or add the values
Page Down	Change the setup state, or deduct the values
F1	Display the information of the current function Keys definitions.
F9	Load the optimized values
F10	Save the settings and exit the CMOS SETUP

C. Auxiliary information on Main interface

When the system enters the main interface of Setup, the major selected contents will be displayed at the lower part of the interface with the change of the options.

When you set the value for each column, you can view the preset value of the column and the values that can be set if you press F2, for example, the BIOS default values or CMOS Setup values.

To exit the interface for auxiliary information, press [ESC].

1) Main menu

When the system enters the CMOS Setup menu, you can see the main menu on the upper part of the

screen, as shown in Figure 1.

In this main menu, you can use the left and right direction keys to select the setup items.

Once the item is selected, the lower part of the computer screen will show the details of setting.

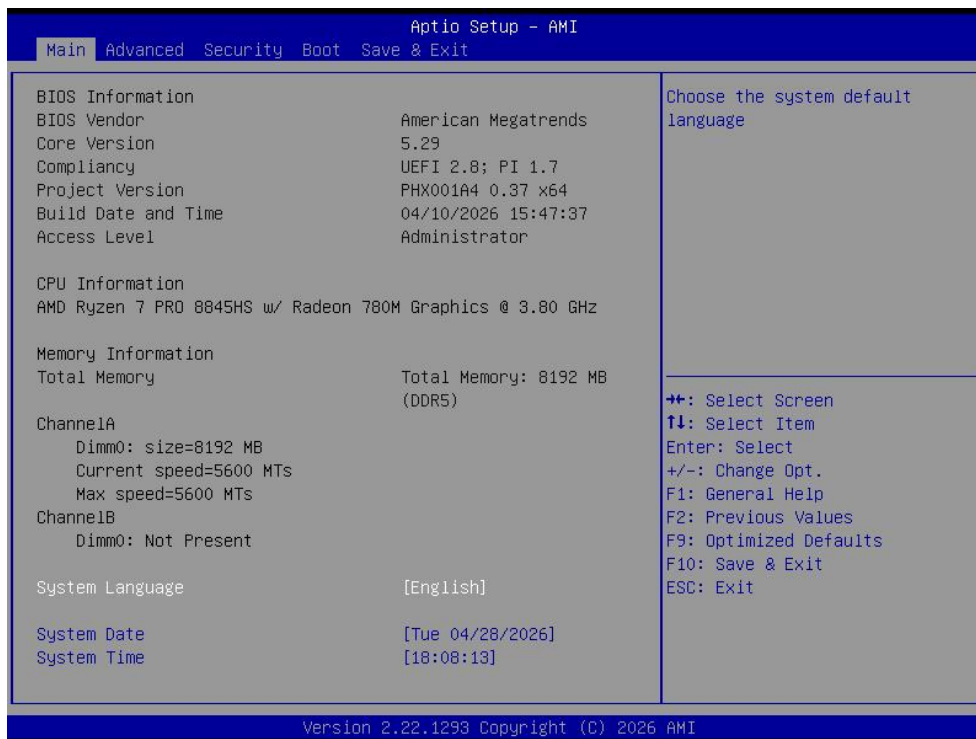


Fig 1

1) Main (standard CMOS setup)

This item is used for setting the date and time.

2) Advanced (advanced BIOS setup)

This item is used for setting the advanced functions provided by BIOS, such as specifications of PCIe facilities, CPU, HDD, etc.

3) Security (set the administrator/user password)

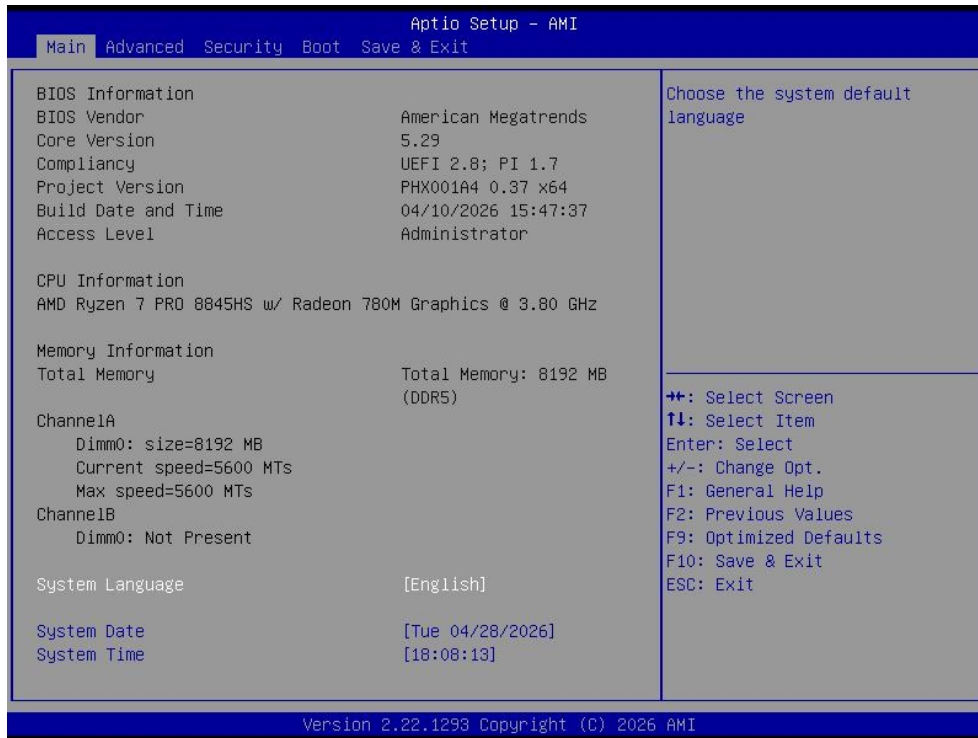
4) Boot (startup configuration characteristics)

5) Save & Exit (option of exit)

This item includes load optimal defaults / load failsafe defaults value / discard changes / discard changes and exit.

6) MEBx

4.1 Main (Standard CMOS setting)



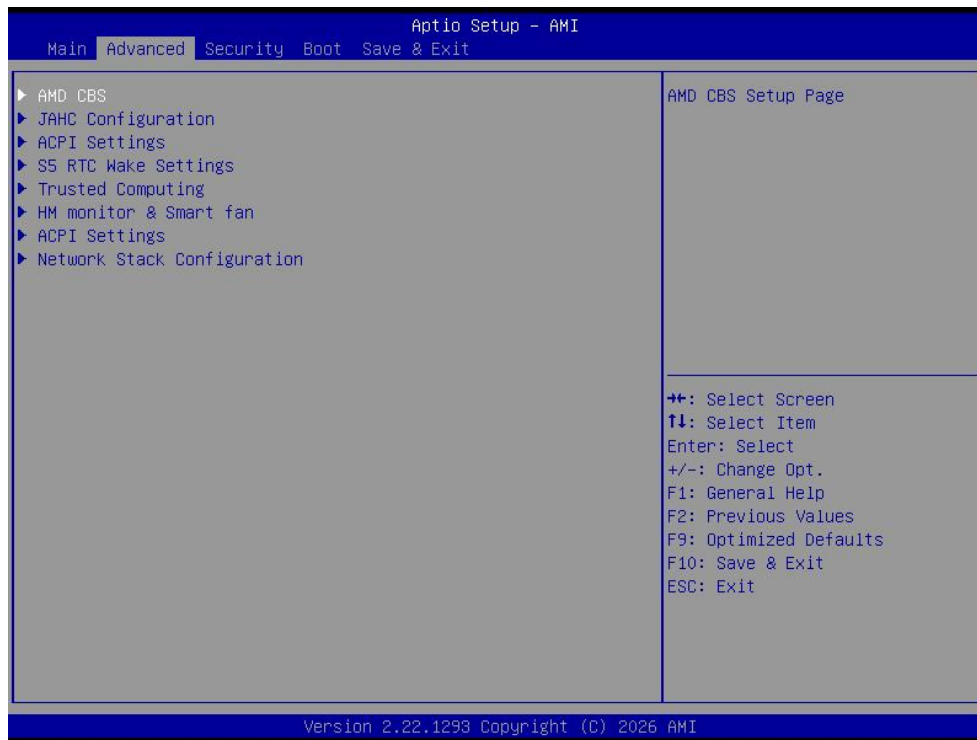
1) System time (hh:mm:ss)

Use this item to set the time for the computer, with the format as “HH / MM / SS”.

2) System date (mm:dd:yy)

Use this item to set the date for the computer, with the format as “week, MM / DD / YY”.

4.2 AMD CBS Settings

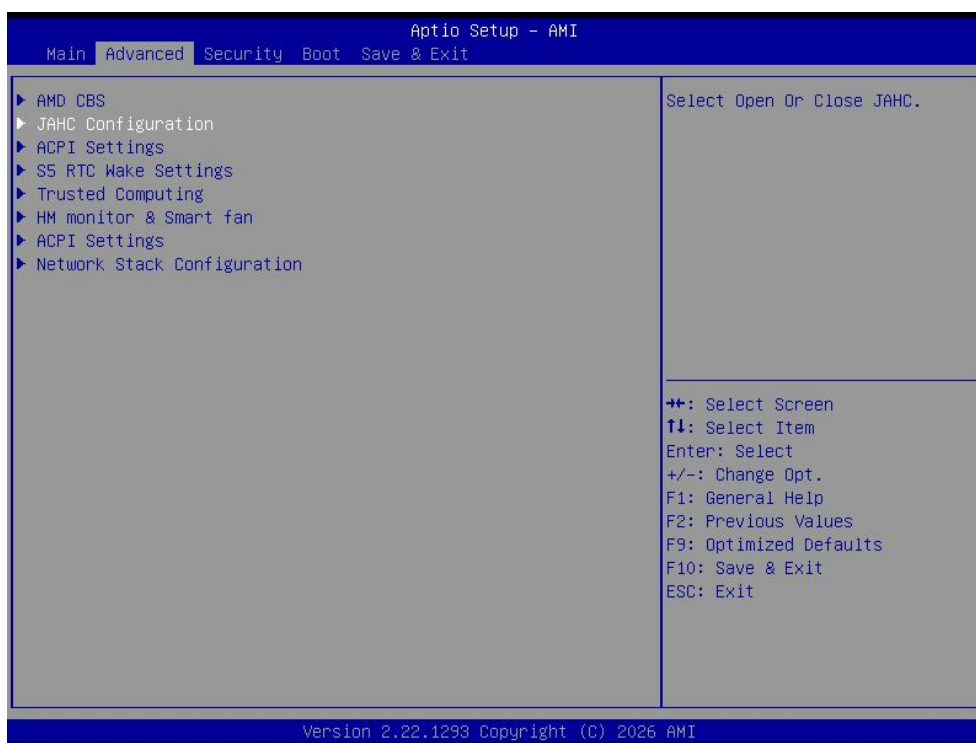


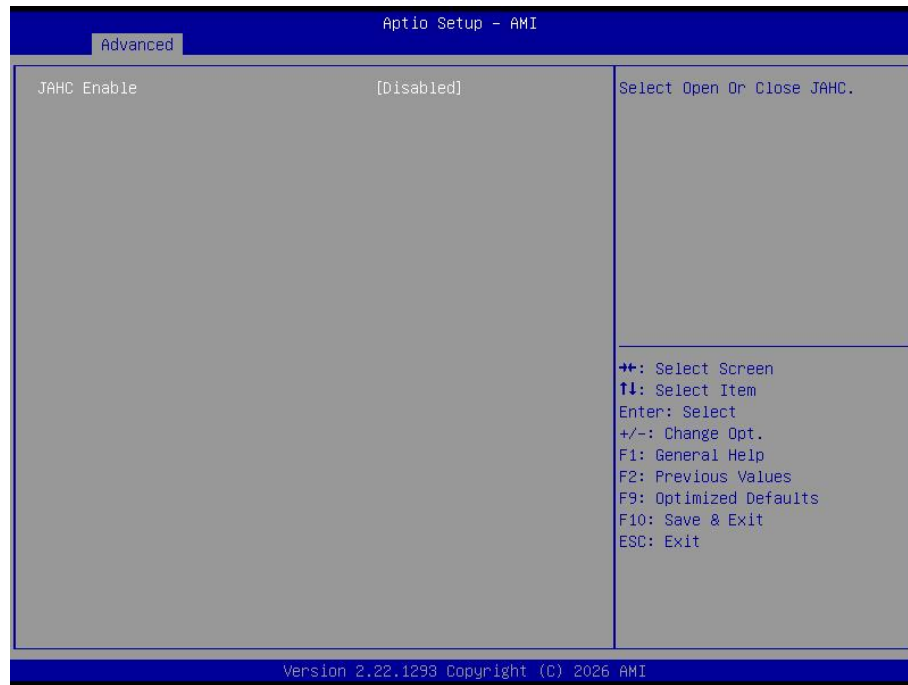
4.2.1 AMD CBS Setting



AMD CBS Options	Description
JH Control	● Hide and show BIOS options
AC Power Loss Options	● AC Power Loss means after restore power supply. ● Always Off (Default): If set it as always off, it means the system will remain shutdown state ● Always On: If set it as always on, it means the system will be power on automatically. ● Previous: If set it as Previous, it means the system will keep State of last setup.

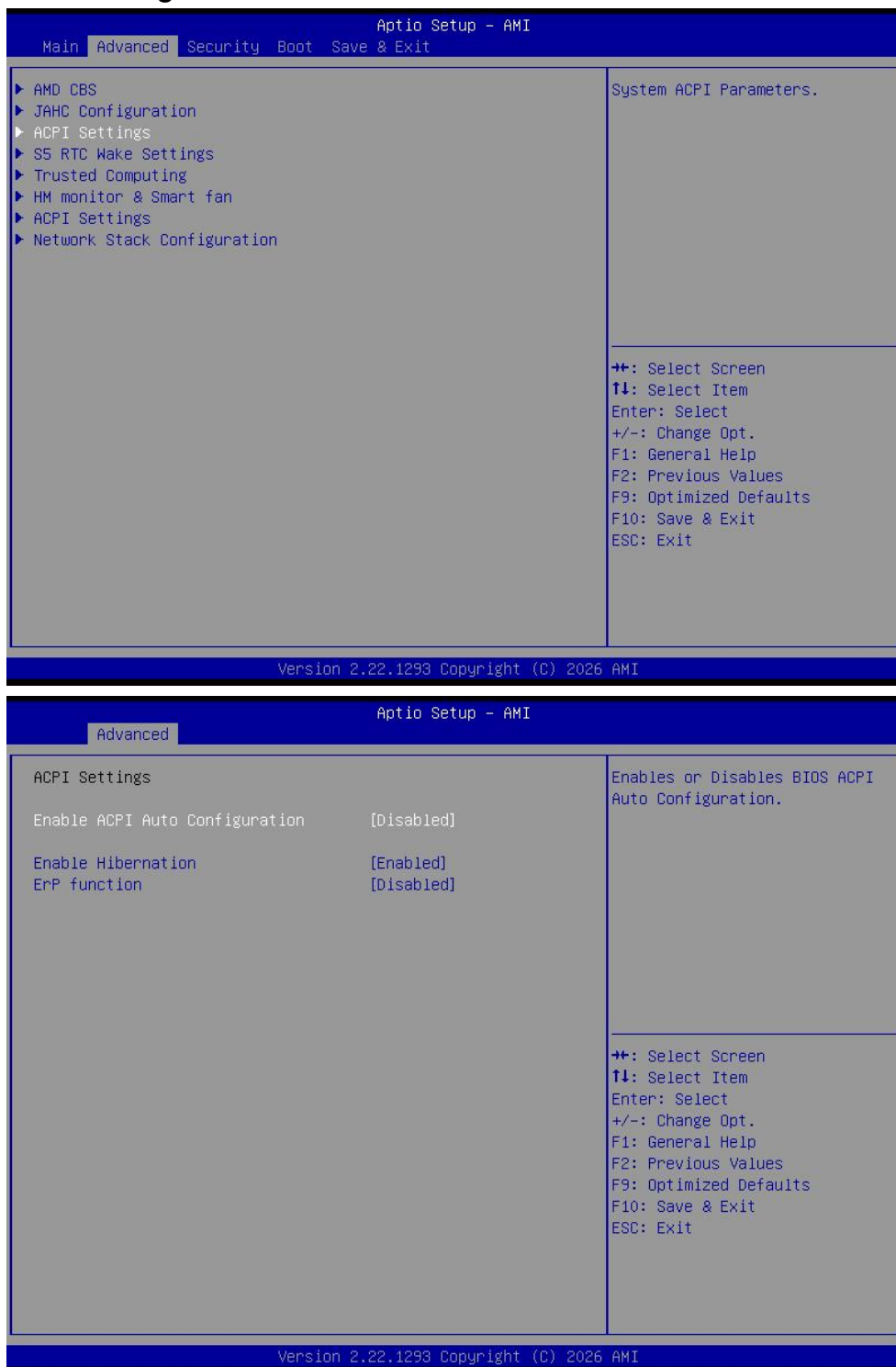
4.2.2 The JACH Configuration Settings





The JAHC Option	Description
JAHC Configuration	
JAHC Enabled	JIEHE Active Hardware Control (JAHC) management system includes both hardware Micro Control Unit (MCU) and software (JAHC Technology Manager). ● Disabled: The JAHC is disable by default. ● Enabled.

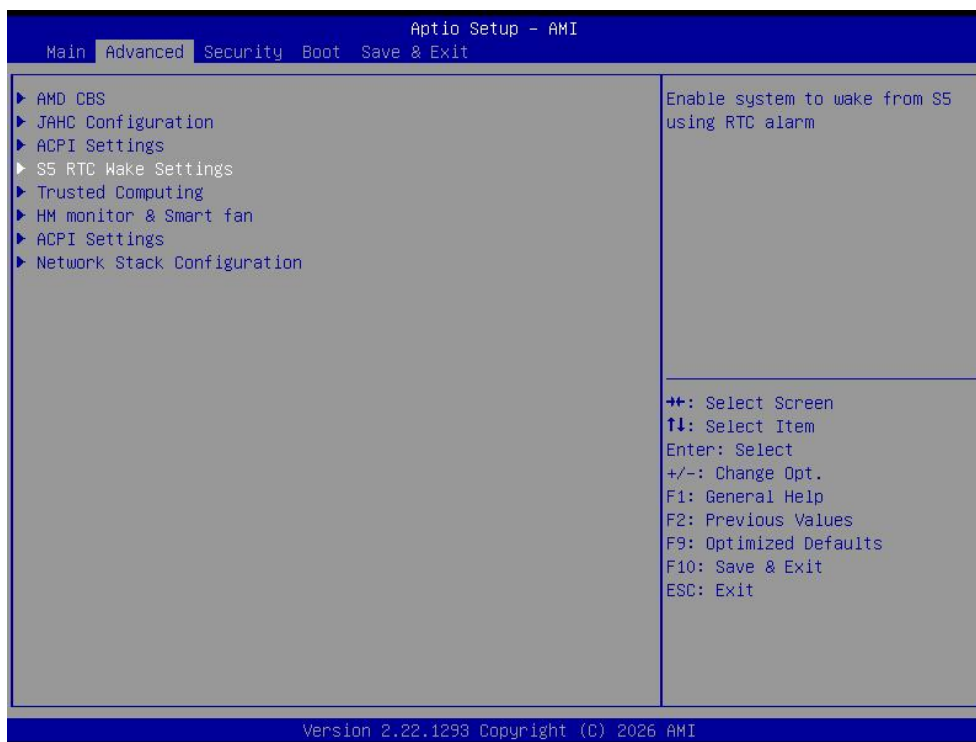
4.2.3 The ACPI Settings



The ACPI Options	Description
The ACPI Settings	
Enable ACPI Auto Configuration	Enable or Disable BIOS ACPI AUTO Configuration

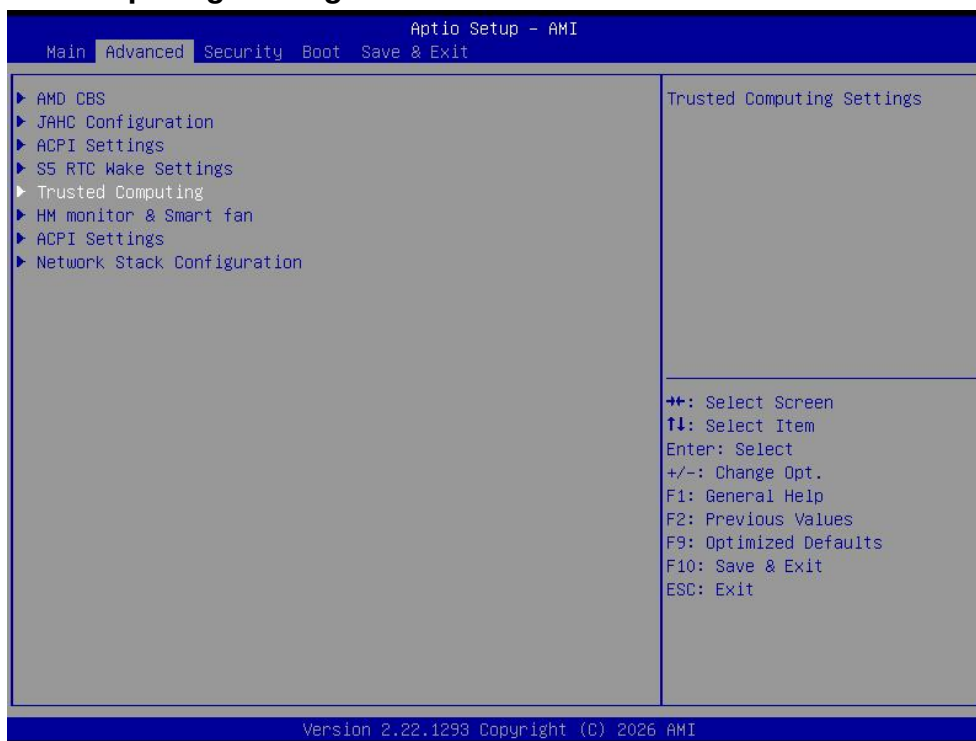
Enable Hibernation	Enable or Disabled Hibernation
ErP Function	Enables or Disables ErP

4.2.4 S5 RTC Wake Settings



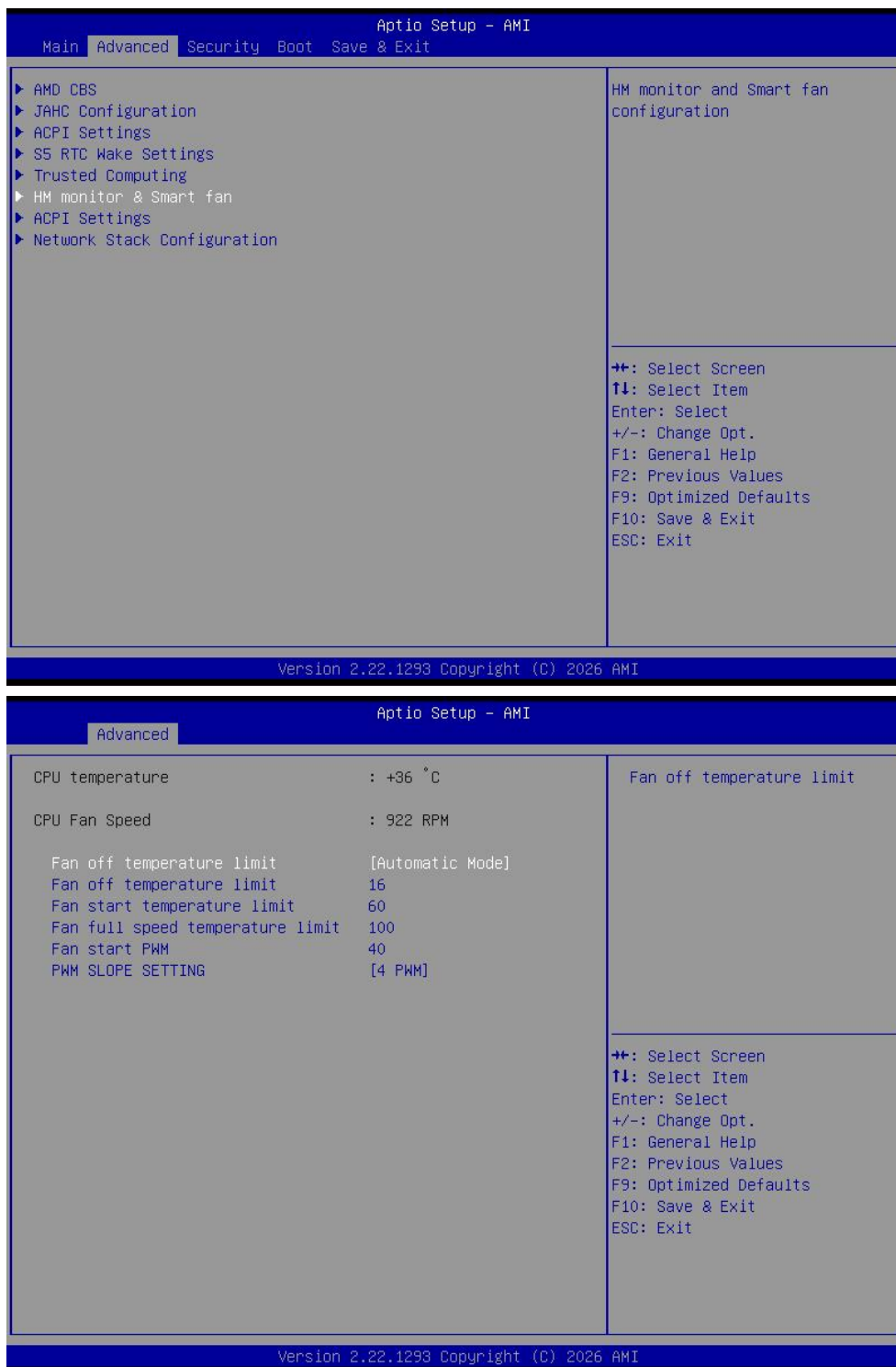
S5 RTC Wake Settings	Description
Wake System by RTC	Enable or disable System wake on alarm event. Select FixedTime, system will wake on the hr::min::sec specified. Select DynamicTime, System will wake on the current time + Increase minute(s).

4.2.5 Trusted Computing Settings



Options	Description
Trusted Computing	
TPM20 Device Found Firmware Version: Vendor:	It shows the information of TPM device.
SHA256 PCR Bank	Disable or Enable the SHA256 PCR Bank. The option is enabled by default.
SHA384 PCR Bank	Disable or Enable the SHA384 PCR Bank. The option is enabled by default.
Pending operation	It includes None and TPM Clear function.
Platform Hierarchy	Disable or Enable the Platform Hierarchy.
Storage Hierarchy	Disable or Enable the Storage Hierarchy.
Endorsement Hierarchy	Disable or Enable the Endorsement Hierarchy.
Physical Presence Spec Version	You can choose 1.2 or 1.3. The version is 1.3 by default.
TPM 20 Interface Type	TPM2.0 Interface Type is CRB by default.
Device Select	You can select TPM1.2 or TPM2.0 or Auto. Auto is set up by default.

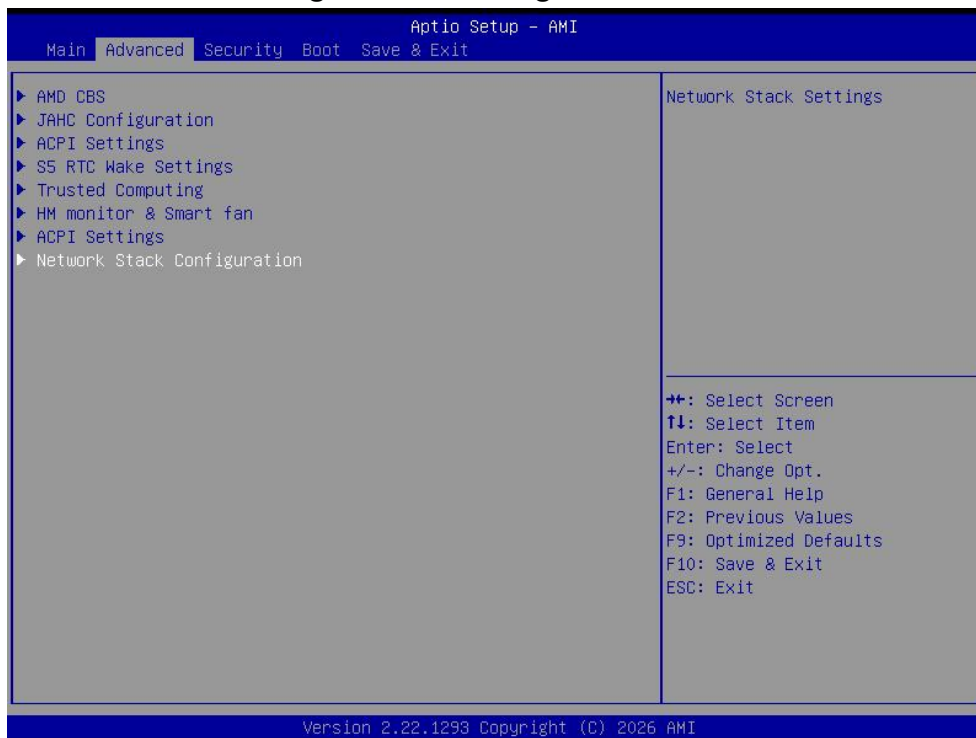
4.2.6 HM Monitor & Smart FAN

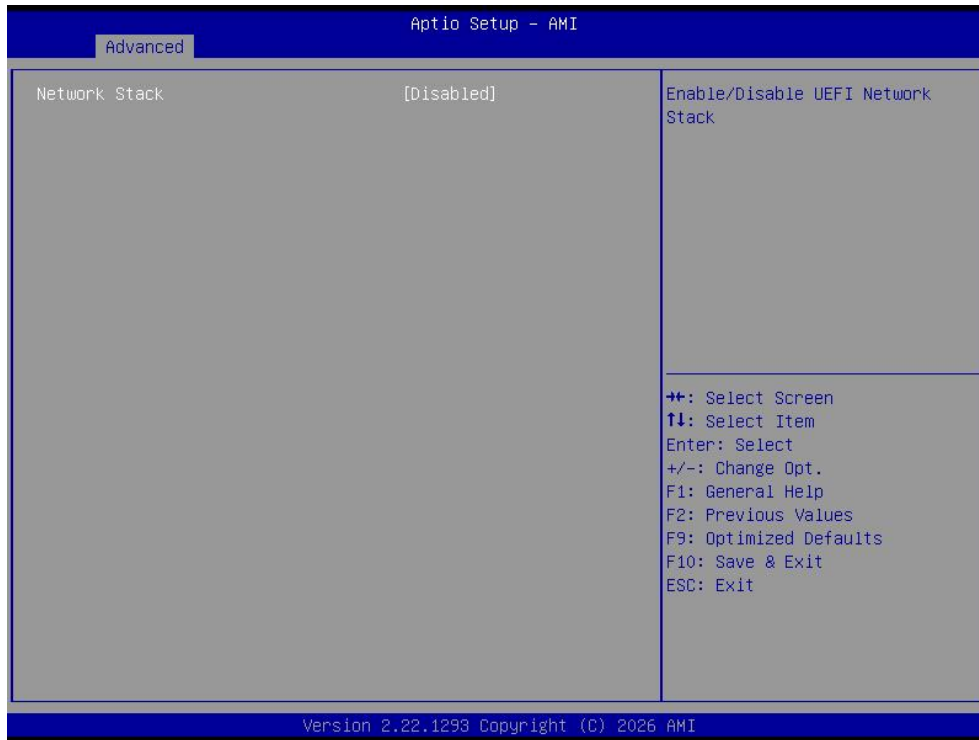


Pc Health Menu	Description
Pc Health Status	
Fan off temperature limit	FAN will stop work If temperature is lower than the Fan off temperature limit value.

Fan start temperature limit	● If the temperature is higher than fan off temperature limit, FAN will start work.
Fan Full Speed Temp limit	● If the temperature is higher than the FAN Full Speed temp limit value, the FAN will work at full speed.
Fan start PWM	● If the temperature is higher than the FAN start PWM value, the FAN will start work.
PWM slope setting	● 0.125 PWM ● 0.25 PWM ● 0.5 PWM ● 1 PWM ● 2 PWM ● 4 PWM ● 8 PWM ● 15.875 PWM

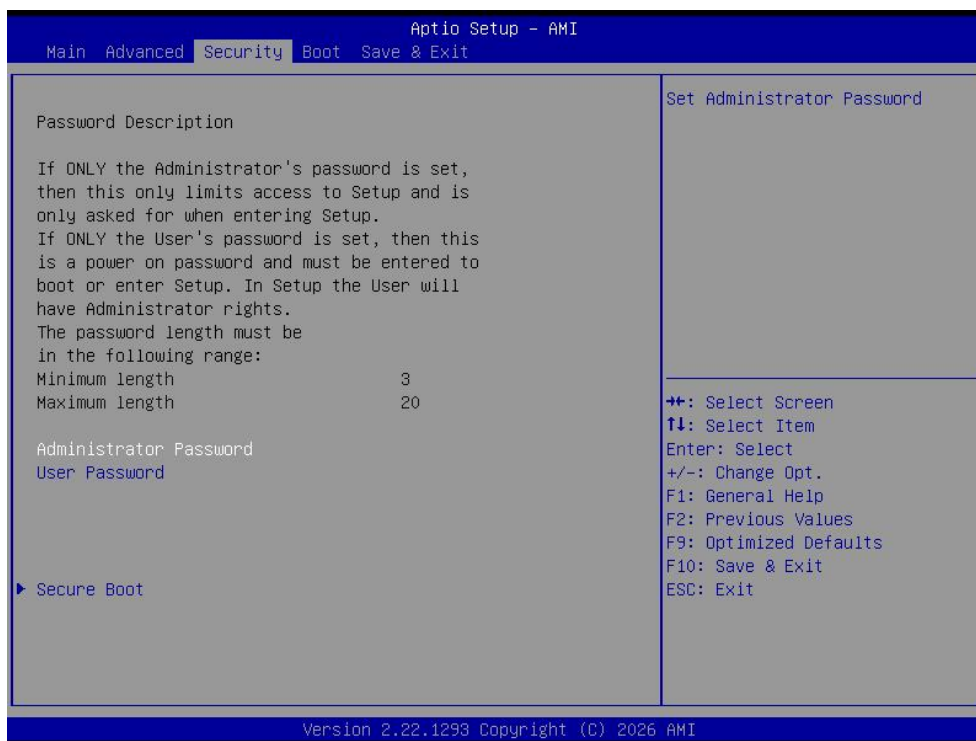
4.2.7 The Network Stack Configuration Settings





The Network Stack	Description
Pc Health Status	
Network Stack	The Network Stack is disabled by default. ● Enabled ● Disabled.

4.3 Security Setup (set the administrator/user password)



If this function is selected, the following information will appear:

Enter New Password hhhhhh

Then enter a password which is no more than eight characters and press <Enter>. BIOS will require to enter the password again.

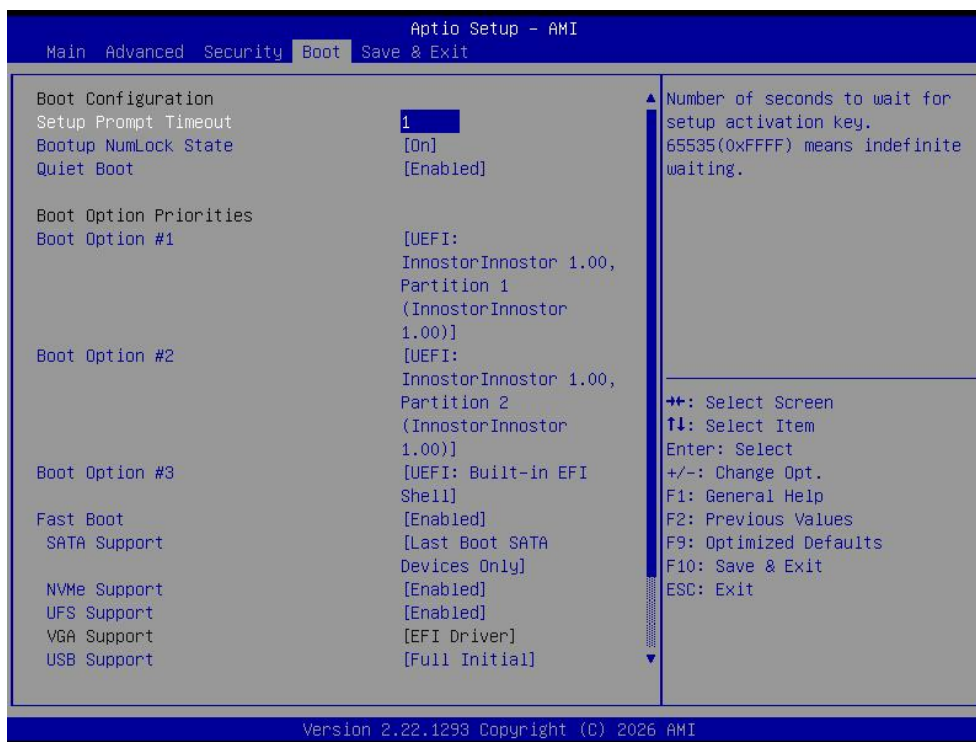
Once you enter it again, BIOS will save the set password. Once the password item is enabled, you will be required to enter the password every time before the system entering to the setup program of BIOS. The user can set this item through the Security Option in advanced BIOS properties. If the Security Option is set as System, the password will be required to be entered before both the system guides and entering to the setup program of BIOS. If it is set as Setup, the password will be required to be entered only before the system entering to the setup program of BIOS.

To delete the password, press <Enter> in the popped-up window that requires to enter the password. Then information for confirmation will appear on the screen to allow you decide whether the password will be disabled. Once the password is disabled, you can enter the setup program directly without password when the system is restarted.

Boot Sector Virus Protection. This item is used for setting the alarm function in case of virus attack in IDE disk sector. If this item is set as Enable and some program writes information in the sector, BIOS will display alarm information on the screen and buzz.

Security Item	Description
System boot Configuration	
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 includes Standard and Custom mode. In Custom mode,Secure Boot Policy variables can be configured by a physically present user without full authentication.

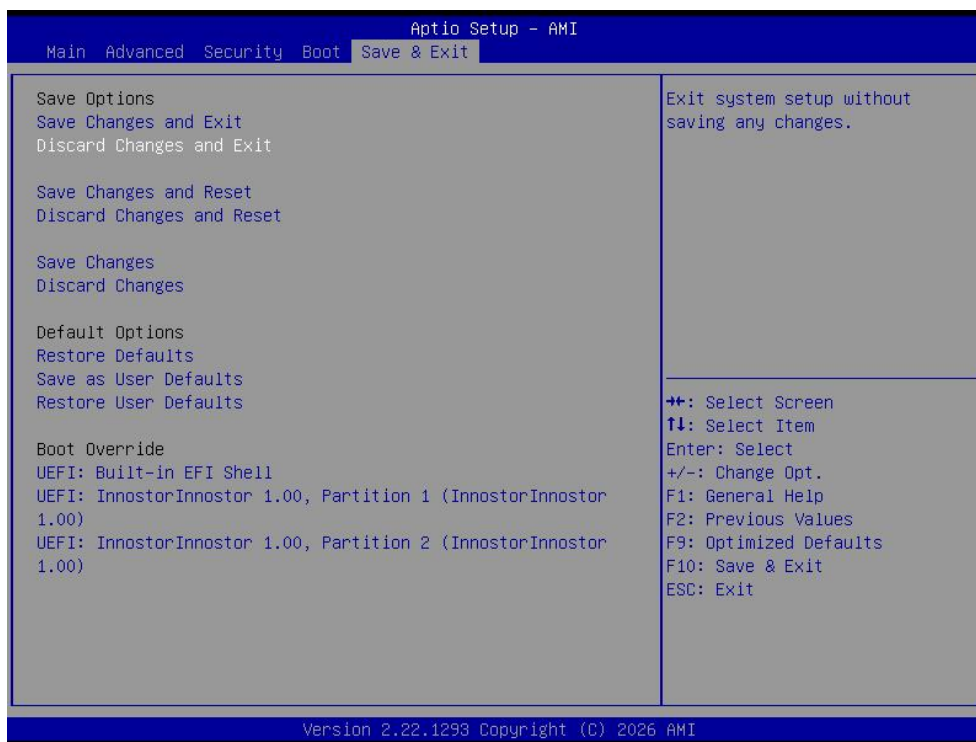
4.4. Boot Menu



Boot Item	Description
Boot Configuration	
Setup Prompt Timeout	This item is used to set the waiting time of entering the operation system. During the BIOS post, if user doesn't press the keyboard, it won't respond unless you reboot the BIOS. The Setup Prompt Timeout is 3s by default. You can set the time as you want.
Boot up Num Lock State	Options are OFF and ON. In other words, this item can be used to set the state of Num Lock after entering the system. It can be set according to user's needs and doesn't affect the performance of the computer.

Boot Item	Description
Quiet Boot	If this item is set as Enabled, the system can be started within five seconds and some detection items will be ignored. The options are [Disabled] and [Enabled].
BOOT ORDER Priorities	
Boot Option #1	The first boot device. If BIOS doesn't detect the first boot device, it will check the second boot device.
Boot Option #2	The second boot device.
Boot Option #3	The third boot device.

4.5 Save&Exit



Save Exit Item	Description
Save Options	
Save Changes and Reset	Save all changes and exit
Discard Changes and Reset	Give up the settings and exit.
Restore Defaults	Recover it to default.
Boot Override	Whole Boot devices

5. JAHC Introduction

JEHE Active Hardware Control (JAHC) management system includes both hardware Micro Control Unit (MCU) and software (JAHC Technology Manager). It can support following functions:

1. Automatically boot up when power on. It is controlled by the Micro Control Unit (MCU) chip.
2. Real Timer Controller (RTC) wake up: user can install the JAHC software to set up automatic startup and shutdown, one week as a circle.
3. Watchdog timer. It is a built-in API interface.

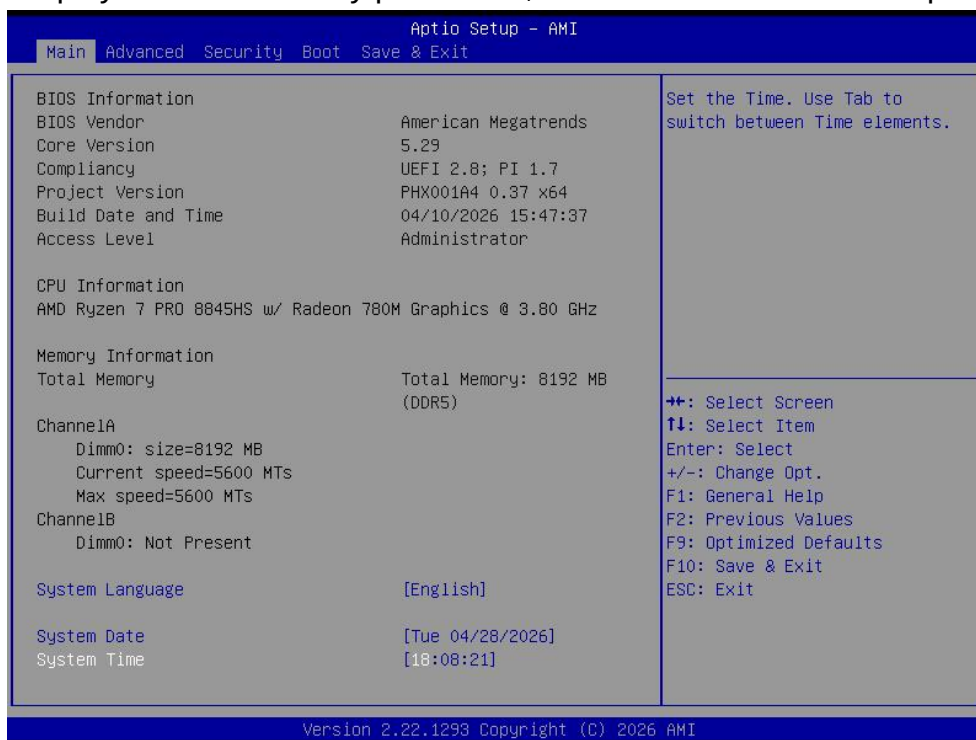
5.1 How to set up Auto power on function

Automatically reboot when power on

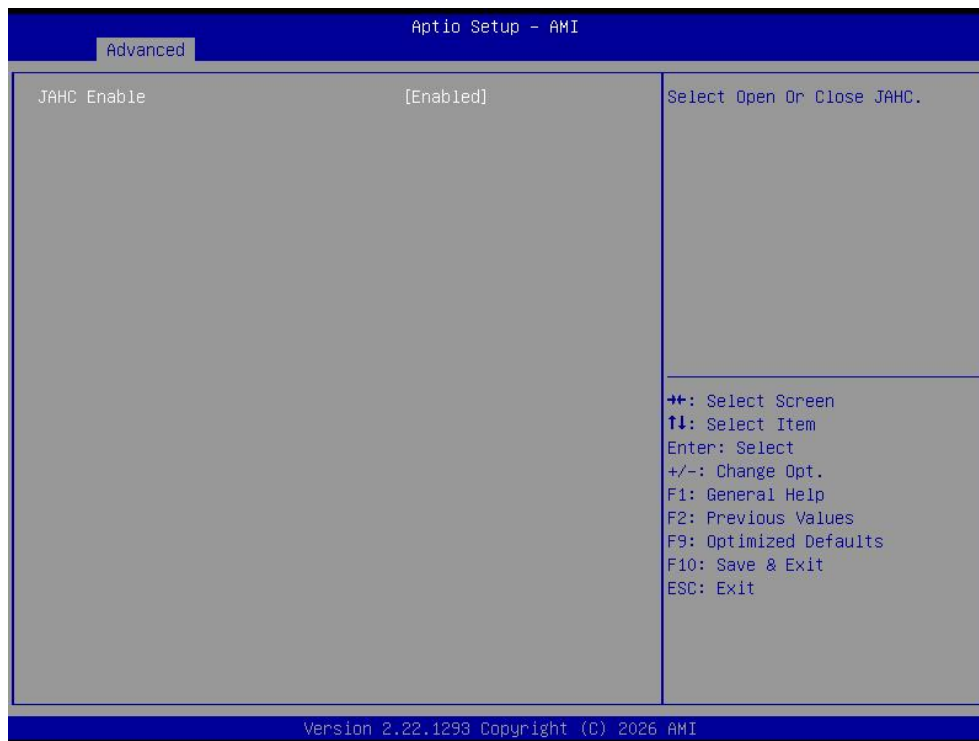
The function of automatically reboot when power on is controlled by hardware. You can enable it by switching the JAHC button to “on”.

If you cannot find the physical switch on the player, then you can go into the BIOS to enable it by following steps:

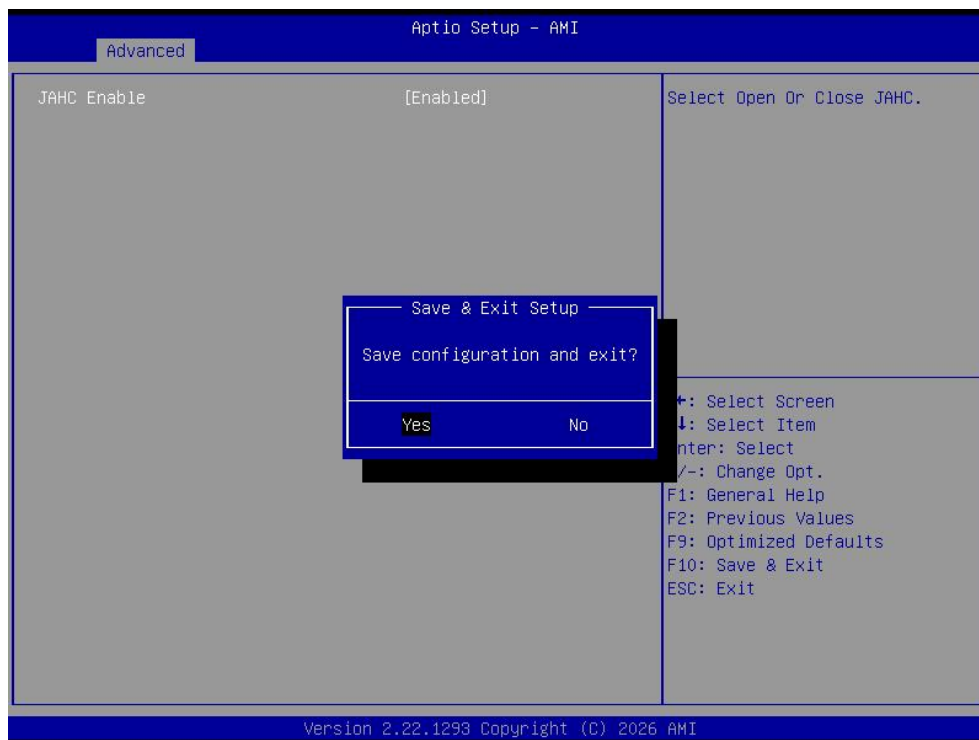
- a. Turn on the player and continually press ‘Del’, then it can enter BIOS setup menu.



- b. Select Advanced- >JAHC Configuration- > JAHC Enable- > Enabled.



c. Press 'F10' to save change & exit after select "JAHC enabled" option.



5.2 JAHC software

5.2.1 JAHC software functions

- a. RTC wake up. The user can set up automatic startup and shutdown, one week as a circle
- b. Caution message prior to shutdown to remind user to save the data. User can also choose to postpone the shutdown process.
- c. When JAHC is running, it can support reboot automatically when system is crashed. No additional settings needed.

5.2.2 JAHC software installation guide

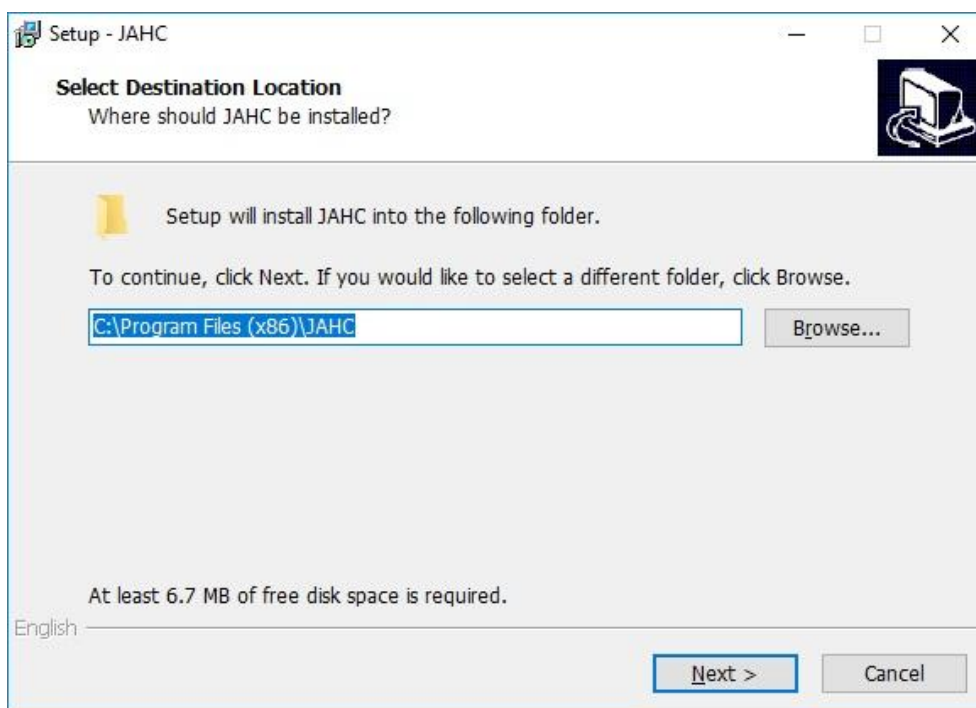
System Requirements:

- a. Giada player with JAHC function.
- b. Switch the JAHC button to “on” or enable it in BIOS if there is no physical button on the chassis.
- c. Supported operation system: Windows 10 64bit, Linux 64bit.

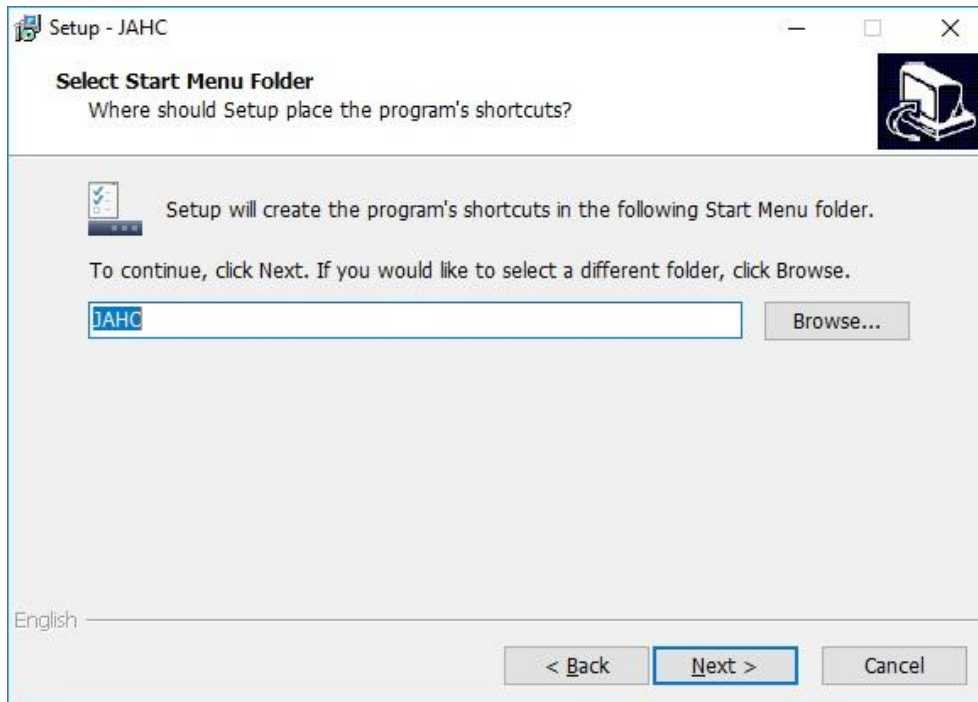
How to install JAHC software:

Please download the JAHC.EXE from Giada DVD, then follow up below steps:

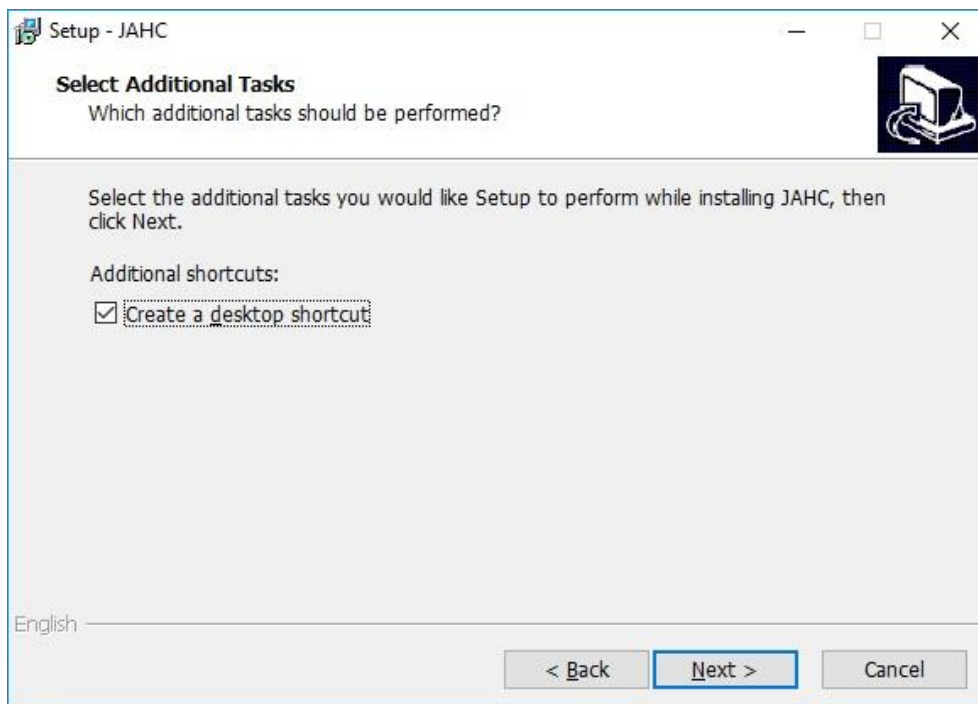
- a. Double-click the JAHC.EXE file, the setup wizard will pop up, select destination location and click [Next] button to continue the installation.



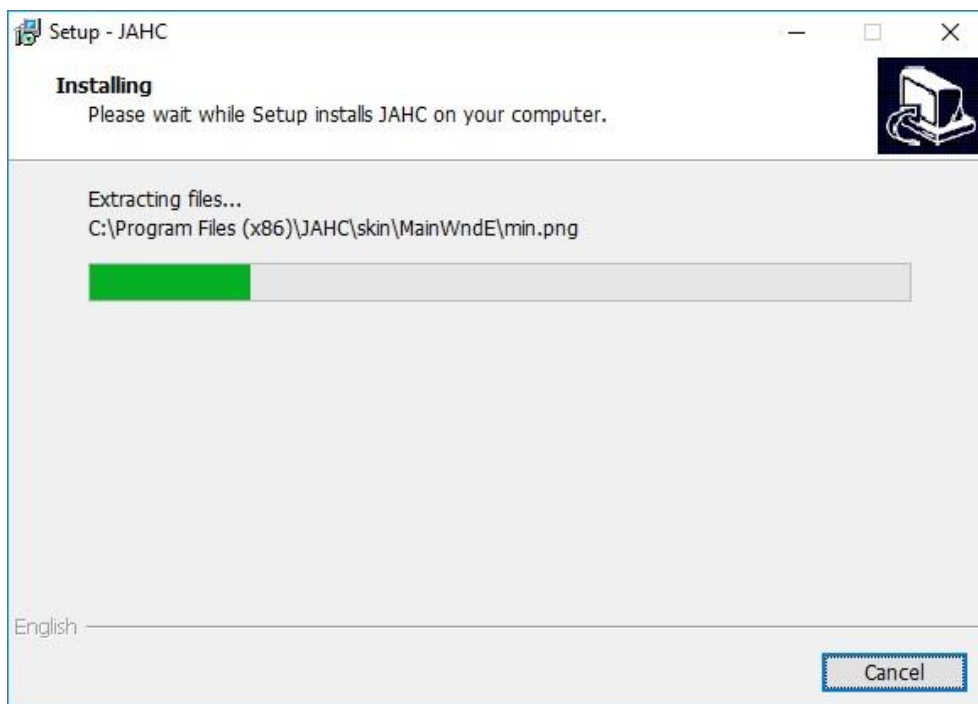
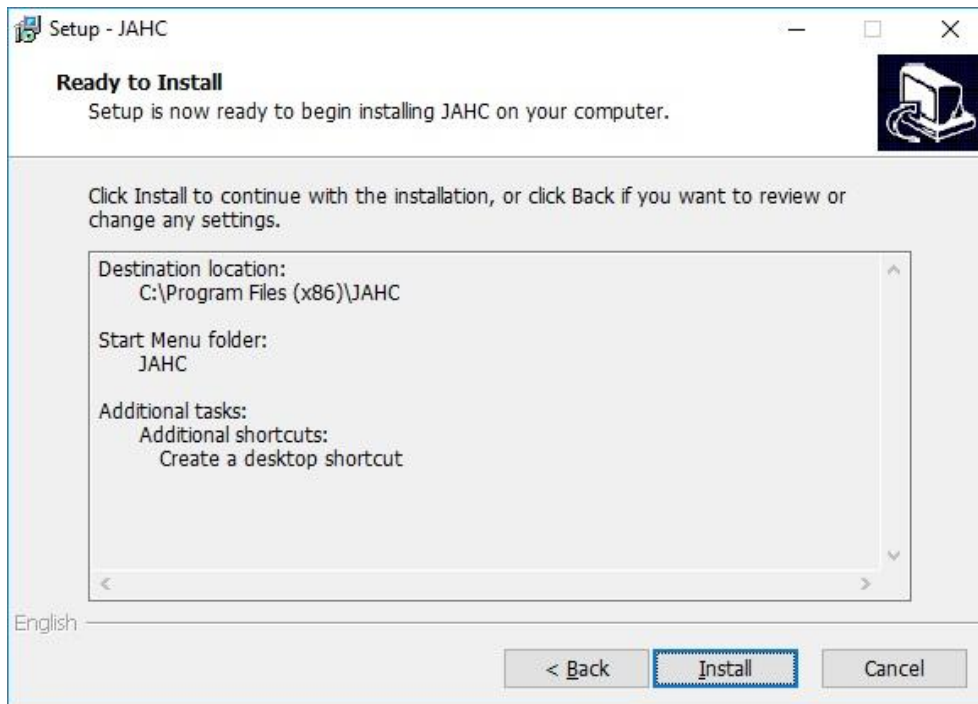
b. Click [Next] button to continue the installation.



c. Select [Create a desktop shortcut] and click [Next] button.



d. Click [Install] button to continue the installation.



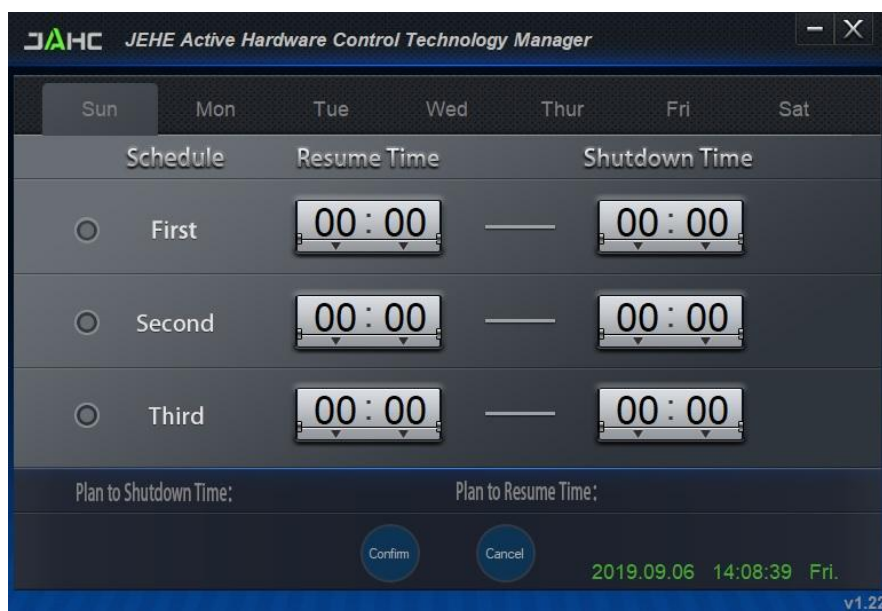
e. Click [Finish] button to finish the installation. You can select [Launch JAHC] to run the software automatically after finishing the installation.



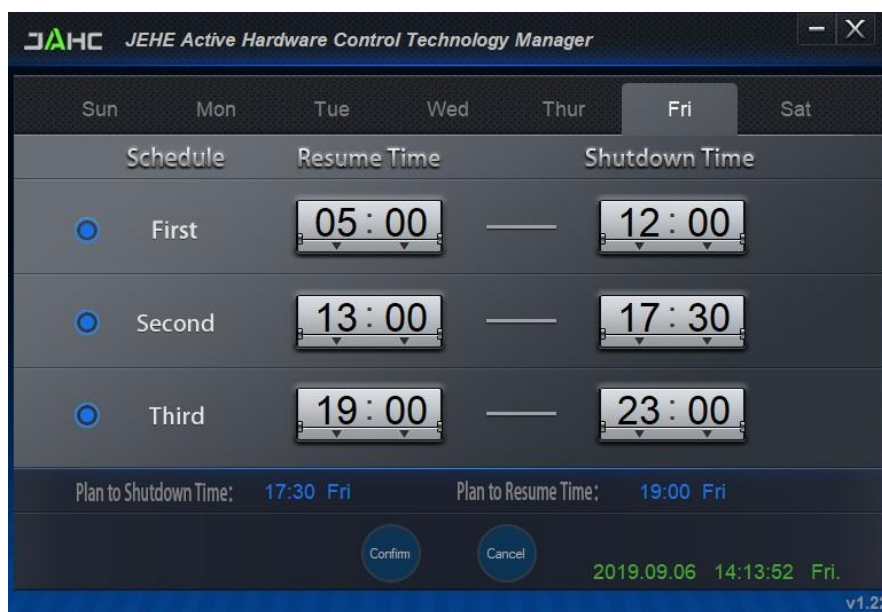
Notice: The JAHC will be added into boot item when it is installed. It will start up when system boot up.

5.2.3 Startup & shutdown time setup

After install the JAHC software, double click the JAHC icon on taskbar and the setup menu will pop up.



One week as a circle, maximum 3 schedules per day. Select each schedule to set up the resume time and shutdown time. Click [Confirm] button to launch the schedule.



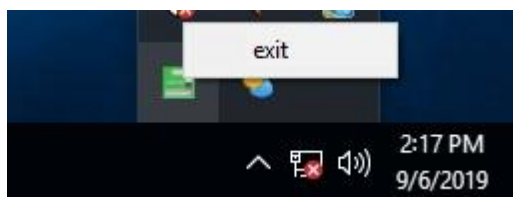
After finishing the setup, the menu window will notice the resume time and shutdown time.

▲ Caution: If the interval from shutdown time to next resume time is less than 3 minutes, the system will not shut down.

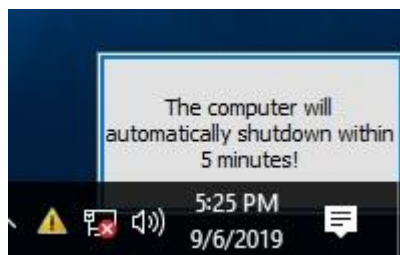
Click [Cancel] button to restore the time settings and cancel the shutdown status.

Click [X] button to hide the menu. You can find it on taskbar.

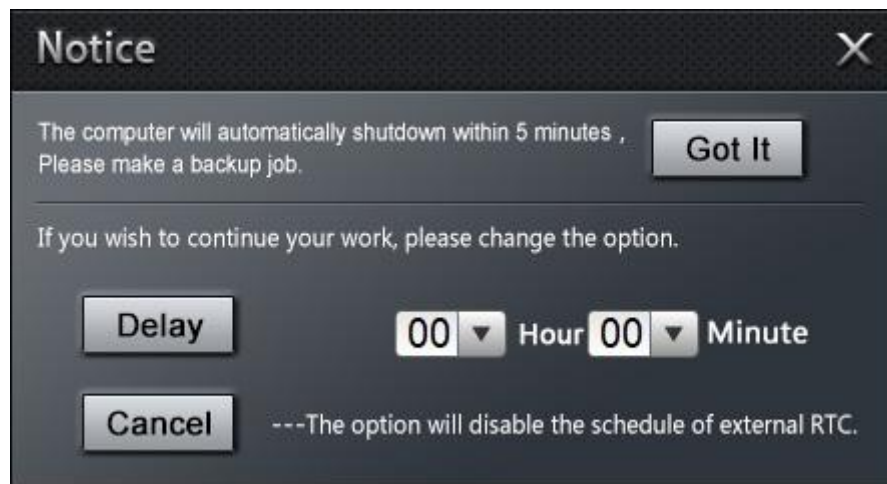
Right click the JAHC icon on taskbar and select [exit] to exit the software.



Shutdown caution: the shutdown caution will pop up before the system shutdown.



You can double click the message window and a new dialog box will pop up.



You can click [Delay] button and set up the time to delay the shutdown or click [Cancel] button to cancel the shutdown.

5.3 Watchdog API and instruction

Please contact Giada FAE (email:support@giadatech.com) for watchdog API software and instruction.



Shenzhen JIEHE Technology Development Co., Ltd.

Website: www.giadatech.com

Phone: +86-755-3330 0326

Email: support@giadatech.com

Address: 37F, Holdfound Sky Plaza Office Building, 11008
Beihuan Blvd., Nanshan, SZ, China, 518051



The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.