

F110D User Manual



Statement

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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.
- Do not disconnect the power cord when the system is running to avoid damage to the sensitive components by instantaneous surge voltage.

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1. Product Introduction

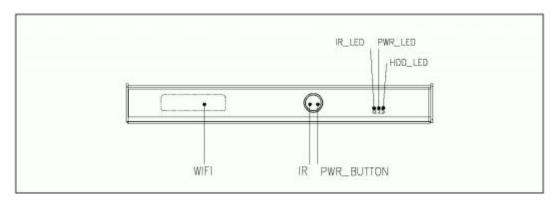
Giada

Based on Intel® Bay Trail platform, the player supports one HDMI and one VGA display outputs. The player is suitable to be applied in mainstream digital signage applications.

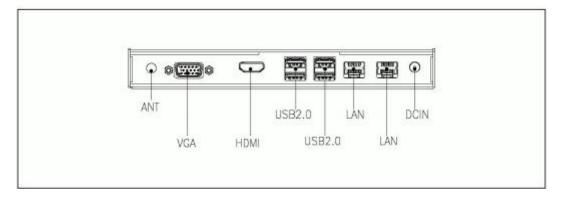
2. Interface Description and Hardware Specifications

2.1 Interface Description

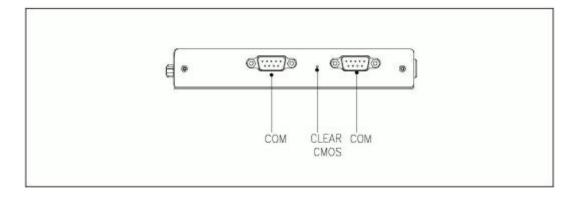
Front I/O Port



Rear I/O Port



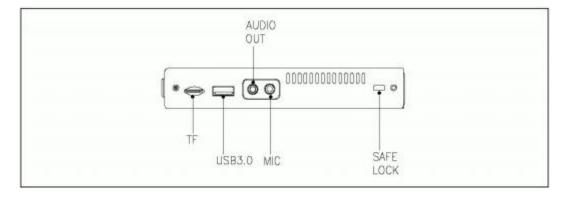
Left I/O Port



- 3 -



Right I/O port



2.2 Hardware Specifications

F110D		F110D-BD000	F110D-BB000
	СРИ	Intel® Celeron J1900	Intel® Celeron N2807
Processor Frequency		2.00GHz (Up to 2.42GHz)	1.58GHz (Up to 2.16GHz)
	BIOS	AMI Source Code	
	Chipset	soc	
	Туре	DDR3L-1333MHz	
Memory	Socket	1 x SO-DIMM	
	Max Capacity	8GB	
	GPU	Intel® HD Graphics	
Cronbine	Graphic Engine	DirectX 11.1, OpenGL 3.0, OCL 1.1, OpenGL ES 2.0	
Graphics	НДМІ	1 x HDMI (Max.1920x1080@60Hz)	
	VGA	1 x VGA (Max. 2048 x 1280@60Hz)	
Network	Controller	2 x Realtek 8111H Gigabit Ethernet	
Network	Interface	2 x RJ45	
	USB	1 x USB 3.0, 4 x USB 2.0	
	Audio	1 x MIC-IN, 1 x AUDIO-OUT & SPDIF	
I/O Interface	Mini PCle #1	1 x Full-size Mini-PCle for mSATA/3G/4G	
I/O interface	Mini PCle #2	1 x Half-size Mini-PCIe for WiFi/BT	
	SIM Slot	1 x SIM Slot	
	Serial Port	2 x RS232	
	SATA	1 x 2.5" SATA	
Storage	mSATA	1 x Full-size mSATA	
	Card Reader	1 x TF Card Reader	
JAHC	JAHC	Watchdog / Auto power on/IR Remote Control / RTC/Wake On Lan	
Operation System	os	Windows 7/8.1/10(64-bit) / Linux	



Power Type	DC-IN		
Power	Input Voltage	19V/2.1A	
	Construction	Metal	
	Mounting	Desk/VESA Mounting (JZ183)	
Mechanical	Dimension 400 Cmm v 440	189.6mm x 148.3mm x 26mm	
	(W x D x H)	109.011111 X 140.311111 X 2011111	
	Color	Black	
	Operating	0℃ ~40℃ (32 ℉ ~104 ℉) at 0.7m/s Air Flow	
Environment	Temperature	0 C - 40 C (32 1 - 104 1) at 0.7111/3 All 1 10W	
	Relative Humidity	95%@40°C (non-condensing)	
Certification		CE/FCC	

3. Accessories Installation Steps

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

How to open the top cover and bottom cover

Unscrew the four screws and remove the top cover. (2.5" SATA slot is on top side)
Unscrew the four screws. Push and remove the bottom cover. (SO-DIMM, full-size mini PCIE slot for MSATA, half-size mini PCIE slot for WIFI/BT are on bottom side)









3.1 Memory Installation

- ▲ This product only supports DDR3L SO-DIMM memory modules.
- 1. Locate the SO-DIMM slot on the board.
- 2. Gently insert the module into the slot in a 45-degree angle.
- 3. Carefully push down the memory module until it snaps into the locking mechanism.









3.2 WiFi/BT (Half-size Mini-PCIe) Installation

- 1. Plug the WIFI module into half-size mini PCIE slot.
- 2. Secure the module to the carrier by tightening up the screw.
- 3. Connect the black cable to **Main** and grey cable to **AUX**. Install the antenna.









3.3 MSATA Installation

- 1. Plug the SSD (MSATA) into the mini PCIE slot.
- 2. Secure the MSATA module to the carrier by tightening up the screw.











3.4 2.5" SATA Installation

- 1. Plug 2.5" SATA into the slot.
- 2. Tighten up the three screws from another (bottom) side
- 3. Remove the clear membrane of the thermal pad and paste the pad on the 2.5" SATA.
- 4. Remove the blue membrane of the thermal pad.









4 Bios Setup

Notice:

The descriptions relating to BIOS setup in this Manual is for reference only since 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 in 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 occurs. If the indicative information disappears before operating, 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 press < Ctrl > + < Alt > + < Delete > simultaneously.

B. Function Keys definitions

Hot Key	Description
↑	(Up key) Move to the previous item
\downarrow	(Down key) Move to the next item
←	(Left key) Move to the left item
\rightarrow	(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 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.



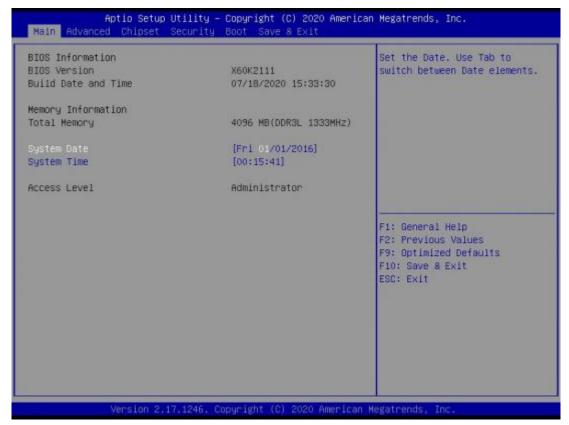


Fig 1

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) Chipset
- 4) Security (set the administrator/user password)
- 5) Boot (startup configuration characteristics)

6) Save & Exit (option of exit)

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

4.1 Main (Standard CMOS Setup)



1) System time (hh:mm:ss)

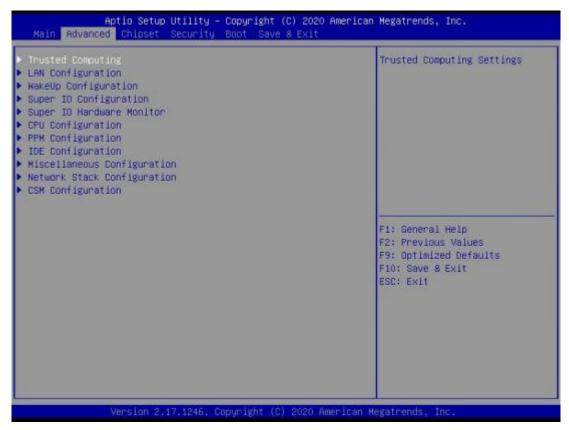
Use this item to set the time for the computer, with the format as "HH / MM / SS".

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 Advanced (Advanced BIOS Setup)

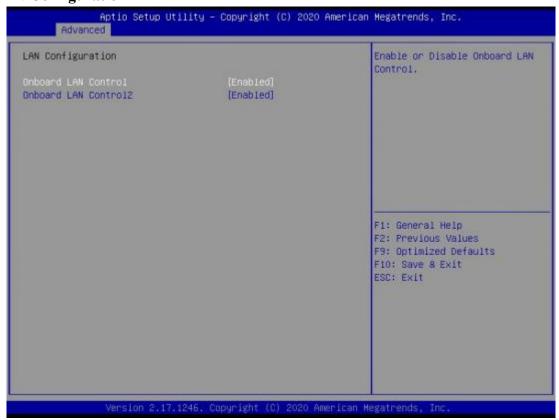


4.2.1 Trusted Computing





4.2.2 LAN Configuration



4.2.3 Wakeup Configuration





Wake Configuration Menu	Description
	Enable or disable System wake on alarm event.
Wake system from RTC	Select FixedTime, system will wake on the hr::min::sec specified.
	Select DynamicTime, System will wake on the current time + Increase minute(s).
	Enabled or Disabled Wake Up by USB KB/MOUSE from S3 Status.
Resume On USB	 Disabled: The wake on USB is disabled by default.
	Enabled.

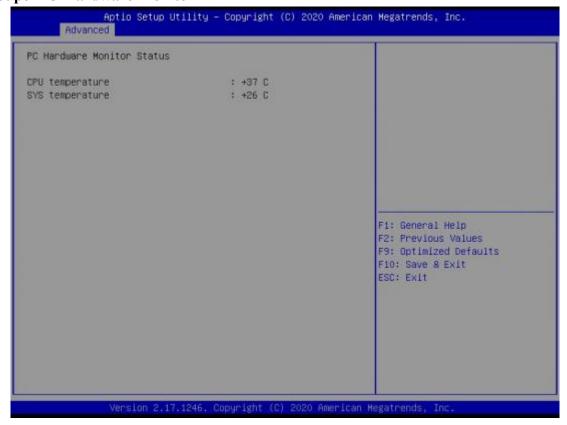
4.2.4 Super IO Configuration



Super IO Configuration Menu	Description
Serial Port 1 Configuration	Enables or Disables serial port 1
Serial Port 2 Configuration	Enables or Disables serial port 2



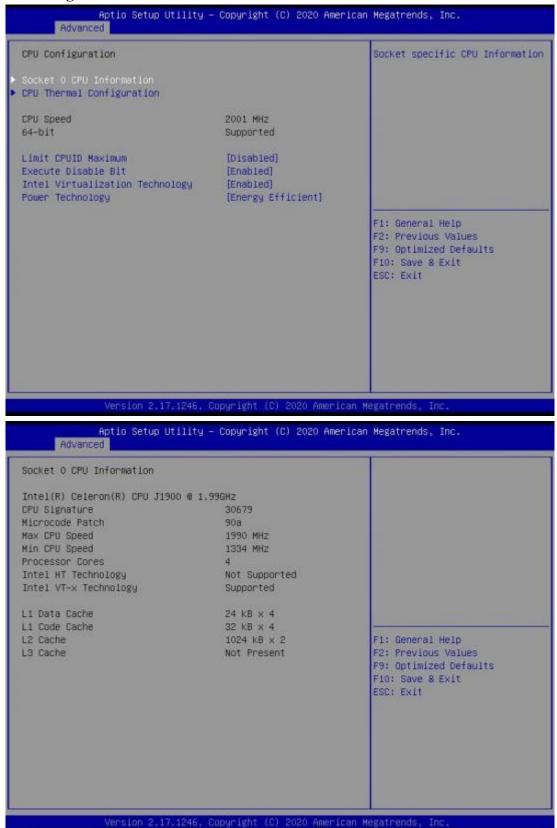
4.2.5 Super IO Hardware Monitor



Super IO Hardware Monitor Menu	Description
PC Health Monitor Status	
SYS temperature	The Current System temperature
CPU temperature	The Current CPU temperature



4.2.6 CPU Configuration





Cpu Thermal Configuration	Enabled/Disable Digital Thermal Sensor.
	F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit

CPU Configuration Menu	Description	
Socket 0 CPU Information	Socket specific CPU information.	
CPU Thermal Configuration		
DTS	Enabled/Disabled Digital Thermal Sensor.	
Limit CPUID Maximum	Disabled for windows XP	
Thermal Monitor	Enable/Disable Thermal Monitor.Enabled. This item is enabled by default.Disabled.	
Execute Disabled Bit	XD can prevent certain classes of malicious buffer overflow attacks when combined with a supporting OS (WINDOWS SERVER 2003 SP1,Windows XP SP2,SuSE LINUX 9.2 and Redhat Enterprise 3 update 3.)	
Intel Virtualization Technology	Intel Virtualization Technology is enabled by default. User can enable and disable the Intel Virtualization Technology function.	
Power Technology	Enabled/Disabled power management features.	



4.2.7 PPM Configuration



CPU Configuration Menu	Description
CPU C State Report	This option controls Max C state that the Processor will support.
O0ix	Enabled/Disabled CPU S0ix state.



4.2.8 IDE Configuration

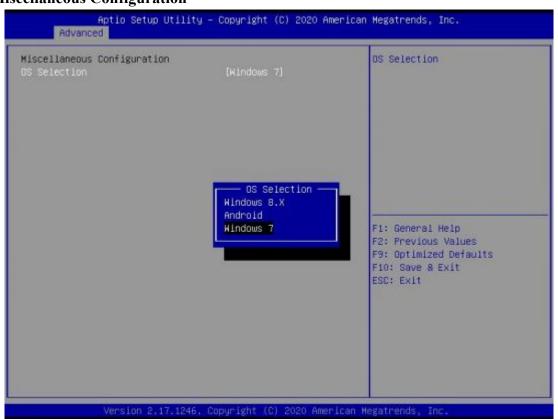


IDE Configuration menu	Description
Serial-ATA(SATA)	SATA Controller.Disabled.Enabled: The SATA controller is enabled by default.
SATA Test Mode	DisabledEnabled
SATA Speed Support	Set SATA Speed Gen2 Gen1
SATA ODD Port	Current SATA ODD device list Port0 ODD: Port1 ODD: No ODD
SATA Mode IDE Mode AHCI Mode	



IDE Configuration menu	Description
	Enable/Disable Serial-ATA Port0
Serial-ATA Port 0	Enabled
	Disabled
	Enable/Disable Serial-ATA Port0 Hotplug function
SATA Port0 HotPlug	Enabled
	Disabled
	Enable/Disable Serial-ATA Port1
Serial-ATA Port 1	Enabled
	Disabled
	Enable/Disable Serial-ATA Port1 Hotplug function
SATA Port1 HotPlug	Enabled
	Disabled
SATA Port0	Current SATA Port0 device model
SATA Port1	Current SATA Port1 device model

4.2.9 Miscellaneous Configuration





Miscellaneous Menu	Description
OS Selection	It can be set according to user's needs. If using window OS, OS Selection must be windows. If using Linux, OS Selection must be Android or Linux. Windows 7. Windows 8.X Android

4.2.10 Network Stack Configuration

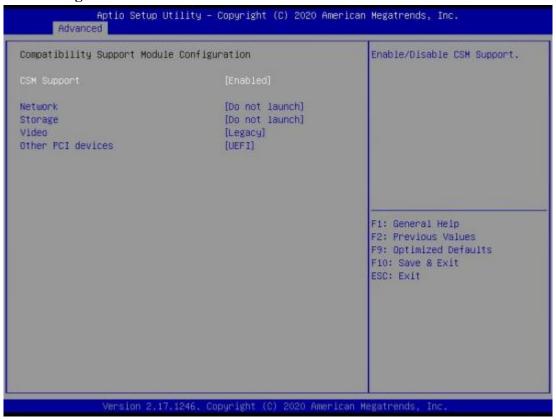


Network stack Menu	Description
Network Stack	This item can enable and disable UEFI network stack.
Ipv4 PXE Support	The user can enable or disable IPV4 PXE Boot support. If disabled, IPV4 PXE boot option will not be created. • Enabled. • Disabled.IPV4 PXE support is disabled by default.



Network stack Menu	Description
Ipv6 PXE Support	The user can enable or disable IPV4 PXE Boot support. If disabled, IPV6 PXE boot option will not be created. • Enabled. • Disabled.IPV6 PXE support is disabled by default.
PXE boot wait time	It means the wait time to press ESC key to abort the PXE boot.
Media detect count	Number of time presence of media will be checked.

4.2.11 CSM Configuration

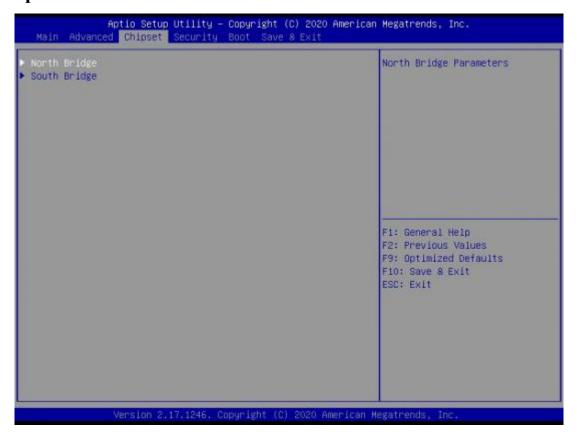


Advanced Menu	Description	
Compatibility Support Module Configuration		
CSM Support	Enabled: The CSM support function is enabled by default.	
	Disabled.	
	Network ROM Boot.	
Network	Do not launch: Do not Boot.	
INGENIOLK	UEFI: It will support UEFI mode network ROM.	
	Legacy: It will support legacy mode network ROM.	



Advanced Menu	Description
	Storage ROM Boot.
Ot a war wa	Do not launch: Do not Boot.
Storage	UEFI: It will support UEFI mode storage ROM.
	Legacy: It will support legacy mode storage ROM.
	Video ROM Boot.
Video	UEFI: It will support UEFI mode Video ROM.
	Legacy: It will support Legacy mode Video ROM.
	Do not launch: Do not Boot.
Other PCI devices	UEFI: It will support UEFI mode PCI ROM.
	Legacy: It will support Legacy mode PCI ROM.

4.3 Chipset





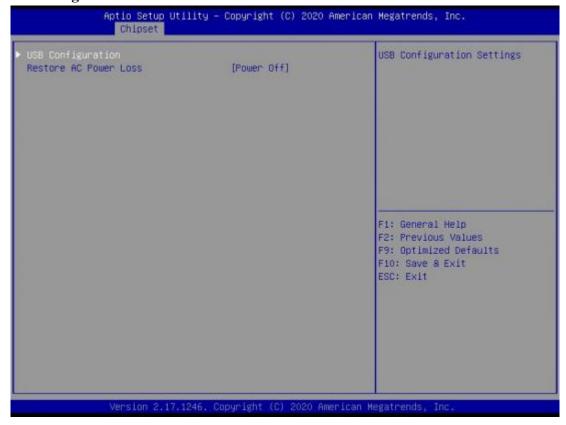
4.3.1 North Bridge



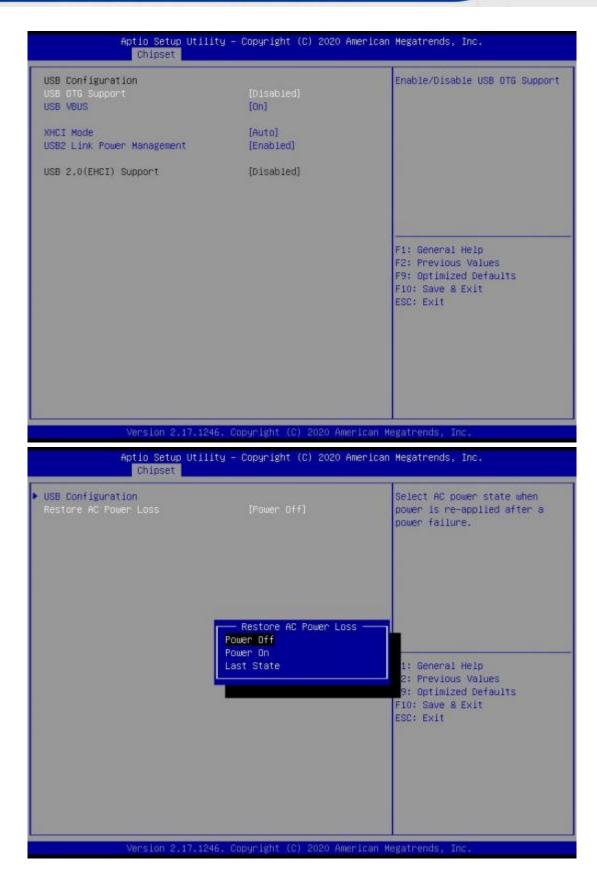


Chipset menu	Description
North Bridge Configuration	
Intel IGD Configuration	
GOP Driver	Enabling GOP Driver will unload VBIOS; Disabling it will load VBIOS.
IGD Turbo Enabled	Enable/Disable IGD Turbo.

4.3.2 South Bridge





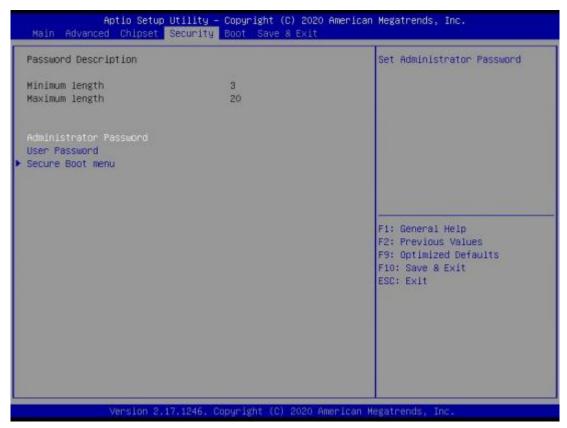


Chipset menu	Description
South Bridge Configuration	



Chipset menu	Description
USB Configuration	
USB OTG Support	Enabled/Disabled USB OTG support.
USB VBUS	VBIOS should be On in HOST mode. It should be OFF in OTG device mode.
XHCI MODE	Mode of operation of XHCI controller.
USB LINK Power Management	Enable/Disable USB2 Link Power Management.
Restore AC Power Loss	
Restore AC Power Loss	Specify what state to go to when power is re-applied after a power failure (G3 state)
	Power Off (Default): If set it as S5 State, it means the system will remain shutdown state
	Power On: If set it as Power on State, it means the system will be power on automatically.
	Last State: If set it as Last State, it means the system will keep State of last setup.

4.4 Security



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

Enter New Password hhhhhh

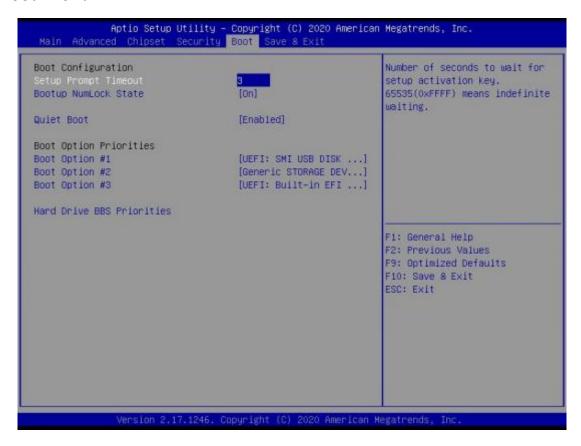
Then enter a password which is no more than eight characters and press <Enter>. BIOS will require to enter the password again.

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.

4.5 Boot Menu

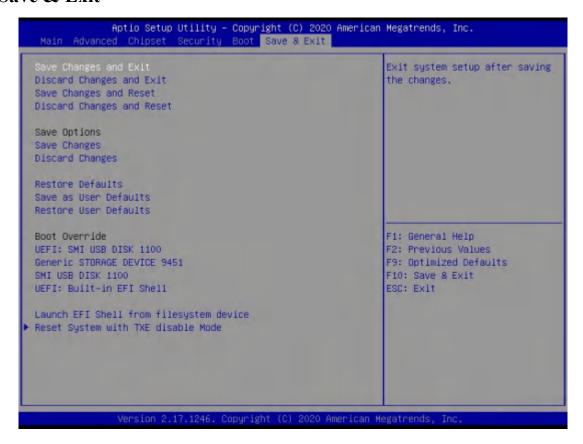




Boot Item	Description
Boot Configuration	
Setup Prompt Timeout	This item is used to set the waiting time of entering the operation system. During the BIOS post, if user doesn't press the keyboard, it won't respond unless you reboot the BIOS. The Setup Prompt Timeout is 3s by default. You can set the time as you want.
Bootup NumLock 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.
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].
FIXED 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.
Fast Boot	Most probes are skipped to reduce time spent during boot.
Hard Drive BBS Priorities	You can set and manage legacy Hard disk device after enabling this option.



4.6 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.
Save Changes and Reset	Reset the system after saving the changes.
Discard Changes and Reset	Reset system setup without saving any changes.
Save Changes	Save changes done so far to any of the setup options.
Discard Changes	Discard changes done so far to any of the setup options.
Restore Defaults	Recover it to default.
Save as User Defaults	Save the changes done so far as user default.
Restore User Defaults	Restore the user default to all the setup options.
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.
- 4. Infrared remote control (Optional IR controller).

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". Please refer to FIG1.



FIG (1)

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

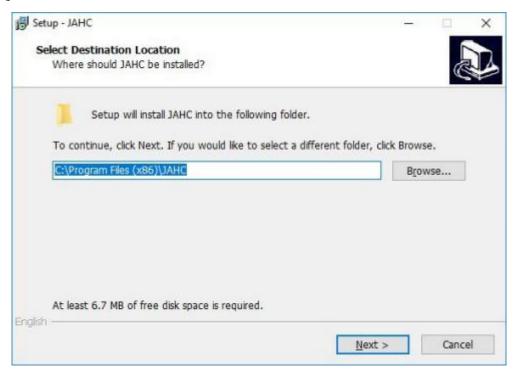
System Requirements:

- 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.

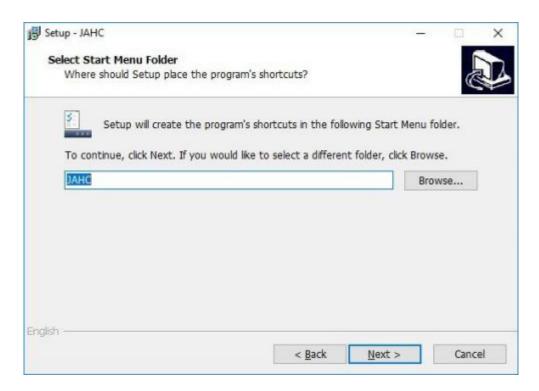
How to install JAHC software:

Please download the JAHC.EXE from Giada website: www.giadatech.com, then follow up below steps:

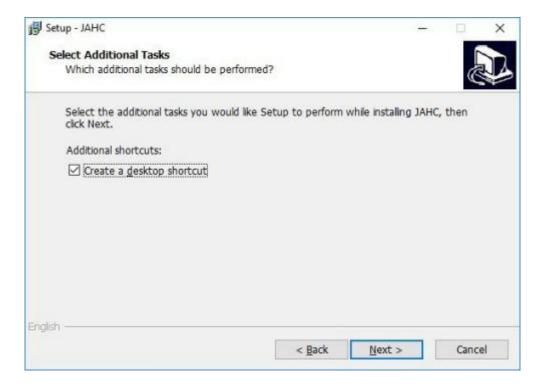
a. Double-click the JAHC.EXE file, the setup wizard will pop up, select destination location and click [Next] button to continue the installation.



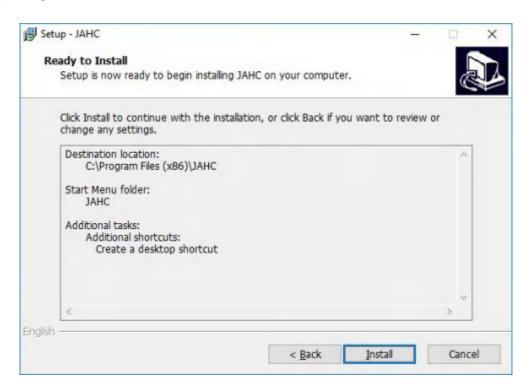
b. Click [Next] button to continue the installation.

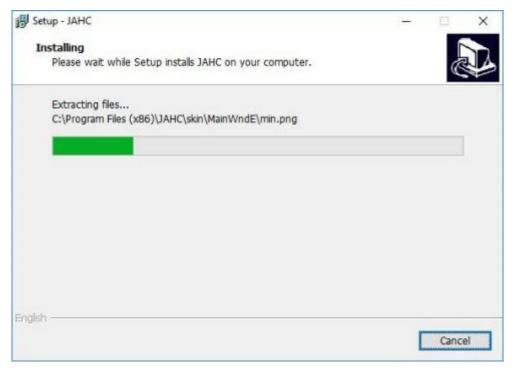


c. Select [Create a desktop shortcut] and click [Next] button.



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





Giada

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.



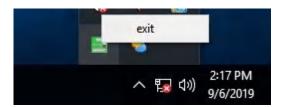
After finishing the setup, the menu window will notice the resume time and shutdown time.

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

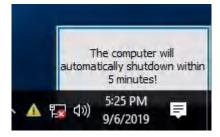
Click [Cancel] button to restore the time settings and cancel the shutdown status.

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

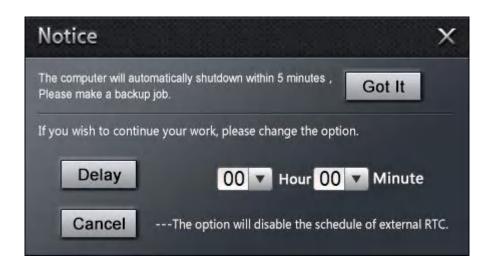
Right click the JAHC icon on taskbar and select [exit] to exit the software.



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.



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