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AE613 User Manual



Shenzhen JIEHE Technology Development Co., Ltd.

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.
- Don't disconnect the power cord when the system is running to avoid damage to the sensitive components by instantaneous surge voltage.

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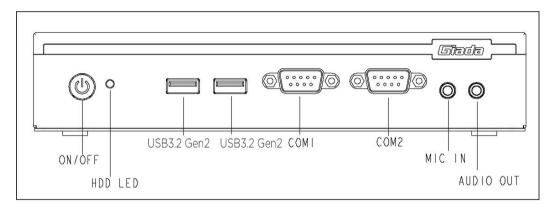
1. Product Introduction

Based on Intel[®] Raptor Lake platform, Giada AE613 is a fanless model featured with Intel[®] 13th Gen Core processors. With one DP and two HDMI display outputs, the DP port supports max 8K resolution and the two HDMI supports max 4K resolution. It's also a semi-industrial PC supporting wide temperature ($-20^{\circ}C \sim 60^{\circ}C$) and voltage ($12 V \sim 24 V$) range. With 4 x USB3.2 Gen2 (10 Gbps), 2 x USB2.0 and two COM ports, the player is suitable to be applied in high-end outdoor Digital signage, Kiosk, AI etc. applications.

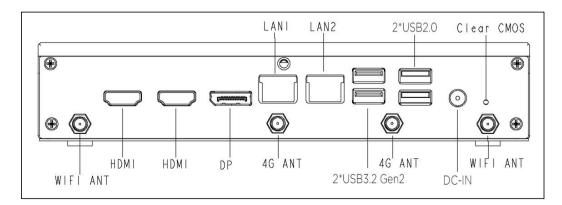
2. Interface Description and Hardware Specifications

2.1 Interface Description

Front I/O Port



Rear I/O port



2.2 Hardware Specifications

AE613		AE613-1315U40N0G-GIA	AE613-1335U40N0G-GIA	
	CPU	Intel [®] Core [™] i3-1315U	Intel [®] Core [™] i5-1335U	
_	E-Core Frequency	3.30 GHz / 3.40 GHz		
Processor	P-Core Frequency	4.50 GHz / 4.60 GHz		
	BIOS	AMI Source Code		
	Chipset	SOC		
	Туре	DDR4-3200MHz		
Memory	Socket	2 x SO-DIMM		
	Max Capacity	64 GB		
	GPU	Intel [®] UHD Graphics (Core [™] Core i3) /	IRIS [®] Xe Graphics (Core [™] Core i5)	
Graphics	Graphic Engine	DirectX 12.1, OpenGL 4.6, OpenCL 3.0	, 8K 60fps 12b 4:2:0 HEVC/VP9/SCC	
	DP 1.4	1 x DP (Max.7680 x 4320@60Hz)		
	HDMI 2.0	2 x HDMI (Max.4096 x 2304@60Hz)		
Network	Controller	1 x Intel [®] i219-LM Gigabit Ethernet / 1 >	Intel [®] i210-IT Gigabit Ethernet	
Network	Interface	2 x RJ45		
	USB	4 x USB3.2 Gen2 (10 Gbps), 2 x USB2.0		
	Serial Port	1 x RS232, 1 x RS232/422/485		
	Audio	1 x MIC-IN, 1 x AUDIO-OUT		
I/O Interface		1 x M-Key M.2 (2280) for PCIe SSD		
	M.2	1 x E-Key M.2 (2230) for WiFi/BT, support Wi-F i5, Wi-Fi 6, Wi-Fi 6E(CNVi)		
		1 x B-Key M.2 (3042) for 3G/4G		
	SIM	1 x SIM Slot		
Storage	М.2	1 x M-Key M.2 (2280) for PCIe SSD		
Operation System	OS	Windows 11 (64bit) / Linux Ubuntu (64bit)		
	Power Type	DC-IN		
Power	Power Requirement	65W (Core™ i3) / 90W (Core™ i5)		
	Input Voltage	12 ~ 24V		
	Construction	Metal		
Mechanical	Mounting			
Mechanical	Dimension(W x D x H)			
	Color			
Operating -20°C ~ 60°C (-4°F ~ 140°F) @0.7m/s Air Flow		Air Flow		
	Temperature			
Environment	Humidity	10% ~ 90% @45°C (non-condensing) ture -40°C ~ 80°C (-40°F ~ 176°F) not include the package		
	Storage Temperature			
Certification		CE, FCC Class B, UKCA		

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 then remove the bottom cover. SO-DIMM #1 and #2, M.2 for SSD slot are at the left side. M.2 slot for 3G/4G, M.2 for Wifi and SIM card slot are at the right side.



3.1 Memory Installation

- ▲ This product only supports DDR4 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 SSD (M.2) Installation

- 1. Plug the M-Key M.2 (2280) SSD (PCIe protocol) into the appropriate slot.
- 2. Secure the module to the carrier by tightening up the screw.



3.3 WIFI (M.2) Installation

- 1. Plug the E-Key (2230) WIFI module into the appropriate slot.
- 2. Secure the module to the carrier by tightening up the screw.
- 3. Connect the two black cable to WIFI module and install the antennas.



3.4 SIM Card Installation

- ▲ This product supports standard SIM card with the size of 25mm × 15mm.
- 1. [Open] the SIM card holder and pull it up.
- 2. Insert the SIM card.
- 3. [Lock] the card holder.





3.5 3G/4G Installation

• 3G/4G Installation

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

- 1. Plug the 3G/4G module B-Key M.2 (3042) into the appropriate slot.
- 2. Secure the module to the carrier by tightening up the screw.
- 3. Connect the cable to **Main** and install the antenna.



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 down 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.

Hot Key	Description
1	(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

B. Function Keys definitions

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.

Main Advanced Security Boot	Aptio Setup – AMI Save & Exit	
BIOS Information BIOS Vendor Core Version Project Version Build Date and Time Processor Information Name Type	American Megatrends 5.27 66R001A4 09/01/2023 14:55:15 RaptorLake ULT 13th Gen Intel(R) Core(TM) i5–1335U	Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 1998–9999 Months: 1–12 Days: Dependent on month Range of Years may vary.
Total Memory Memory Frequency ME FW Version System Date System Time	4096 MB 2667 MHz 16.1.25.2020 [Wed 09/20/2023] [10:15:57]	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
L	ion 2.22.1287 Copyright (C) 2	023 AMI

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)

Main Advanced Security Boot	Aptio Setup – AMI Save & Exit	
BIOS Information BIOS Vendor Core Version Project Version Build Date and Time Processor Information Name Type	American Megatrends 5.27 66R001A4 09/01/2023 14:55:15 RaptorLake ULT 13th Gen Intel(R) Core(TM) i5–1335U	Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 1998–9999 Months: 1–12 Days: Dependent on month Range of Years may vary.
Total Memory Memory Frequency ME FW Version System Date System Time	4096 MB 2667 MHz 16.1.25.2020 [Wed 05/20/2023] [10:15:57]	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Vens	ion 2.22.1287 Copyright (C) 2	023 AMI

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)

Main Advanced Security Boot Sav	Aptio Setup – AMI ve & Exit	
 ACPI Setting CPU Configuration WAKE Configuration Trusted Computing IT8784 Super IO Configuration System Devices Configuration 		ACPI information and configuration parameters
		<pre> ++: Select Screen t↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Version 2	2.22.1287 Copyright (C) 2023	AMI
Advanced	Aptio Setup – AMI	
Advanced ACPI Sleep State	Aptio Setup – AMI [S3 (Suspend to RAM)]	Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.
		state the system will enter when the SUSPEND button is

4.2.1 ACPI Settings

ACPI Menu	Description	
ACPI Sleep State	• Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.	
JAHC Enable	 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. 	

4.2.2 CPU Configuration

Aptio Setup – AMI Main Advanced Security Boot Save & Exit	
 ACPI Setting CPU Configuration WAKE Configuration Trusted Computing IT8784 Super ID Configuration System Devices Configuration 	CPU information and configuration parameters ++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit
Version 2.22.1287 Copyright (C) 2023	3 AMI

CPU Configuration		Select the performance state that the BIOS will set
Type ID Speed MX	13th Gen Intel(R) Core(TM) i5–1335U 0x806A3 1300 MHz Supported	that the BIOS will set starting from reset vector.
SMX/TXT	Supported	
Boot performance mode	[Turbo Performance]	
Intel (VMX) Virtualization Fechnology	[Enabled]	
intel(R) SpeedStep(tm)	[Enabled]	
Race To Halt (RTH)	[Enabled]	++: Select Screen
Intel(R) Speed Shift Technology	[Enabled]	↑↓: Select Item
Hyper–Threading) states	[Enabled] [Disabled]	Enter: Select +/-: Change Opt.
Turbo Mode	[Enabled]	F1: General Help
	[2.100200]	F2: Previous Values
		F9: Optimized Defaults
		F10: Save & Exit
		ESC: Exit

CPU Configuration Menu	Description
Boot performance mode	Select the performance state that the BIOS will set starting from reset vector.
Intel (VMX) Virtualization Technology	Intel [®] Virtualization Technology is enabled by default. User can enable and disable the Intel Virtualization Technology function.
Intel [®] SpeedStep (tm)	Allows more than two frequency range to be supported.
Race To Halt (RTH)	RTH will dynamically increase CPU frequency in order to enter PKG C-State faster to reduce overall power.
Intel [®] speed Shift Technology	Intel [®] Speed Shift Technology uses hardware-controlled P-states to deliver dramatically quicker responsiveness with single-threaded, transient (short duration) workloads, such as web browsing, by allowing the processor to more quickly select its best operating frequency and voltage for optimal performance and power efficiency.
Hyper-Threading	Enable/Disable Hyper-Threading
C-States	Allows CPU to go to C states when it's not 100% utilized.
Turbo Mode	Enable/Disable processor Turbo Mode (Requires Intel Speed Step or Intel Speed Shift to be available and enabled).

4.2.3 Wake Configuration

ACPI Setting OPU Configuration HAKE Configuration Trusted Computing ITB786 Super ID Configuration System Devices Configuration *: Select Screen 11: Select Item Enter: Select Values F2: Previous Values F3: Optimized Defaults F10: Save & Exit ESC: Exit Version 2.22.1287 Copyright (C) 2023 AMI Advanced Aptio Setup - AMI Advanced PACE Configuration Hake Up On RLT LAN Hake system from S5 State After 63 (So State) Enabled/Disabled Resume On LAN Hake System State State F3: Select Item Enter: Select Values F3: Optimized Defaults F10: Save & Exit Enabled/Disabled Resume On LAN Hake System from S5 (So State) **: Select Screen F3: Select Item Enter: Select Item Enter: Select Item Enter: Select Item Enter: Select Item F3: Optimized Defaults F10: Save & Exit F3: Optimized Screen F3: Select Item F3: Device Values F3: Optimized Defaults F10: Save & Exit F3: Optimized Screen F3: Select Item F4: Select Item F5: Optimized Defaults F3: Optimized Defaults <	Main Advanced Security	Aptio Setup – AMI Boot Save & Exit	
Advanced Enabled/Disabled Resume On LAN Enabled/Disabled Resume On LAN Fiselect G3 Advanced Advanced Advanced Fiselect Screen Select Item Enter: Select Item Enter: Select Item Enter: Select Advanced Enabled/Disabled Resume On LAN Advanced Advanced Advanced Advanced Advanced Enabled/Disabled Resume On LAN Advanced Adv	 CPU Configuration WAKE Configuration Trusted Computing IT8784 Super IO Configura: 		++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit
Advanced Advanced Advanced Finabled Advanced Finabled Finabl		Version 2.22.1287 Copyright (C) 2023) AMI
Advanced WAKE Configuration Enabled] Wake Up On RLT LAN [Enabled] Wakeup By USB KB/MS [Enabled] Wake system from S5 [Disabled] State After G3 [SO State] **: Select Screen 11: Select Item Enter: Select */-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults			
Wake Up On RLT LAN [Enabled] Wake system from S5 [Disabled] State After G3 [S0 State] *+: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults	Advanced		
ESC: Exit Version 2.22.1287 Copyright (C) 2023 AMI	Wake Up On RLT LAN Wakeup By USB KB/MS Wake system from S5	[Enabled] [Disabled]	★+: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit

WAKE Configuration Options	Description	
WAKE Configuration		
	Wake On LAN Function.	
Wake Up On RTL LAN	• Disabled: The WOL is disabled by default.	
	• Enabled.	
Wakeup By USB KB/MS	 Enabled/Disabled Wake Up by USB KB/Mouse from S3 Status. 	
Wake system from S5	 Disabled: By default, the functions is disabled. Fixed Time: You can use the fixed Time menu to modify the wake time. Dynamic Time: You can set multithreaded to wake system from S5 after enabling Dynamic Time. 	
State After G3	 State After G3 means after restore power supply. S5 State (Default): If set it as S5 State, it means the system will remain shutdown state S0 State: If set it as S0 State, it means the system will be power on automatically. 	

4.2.4 Trusted Computing

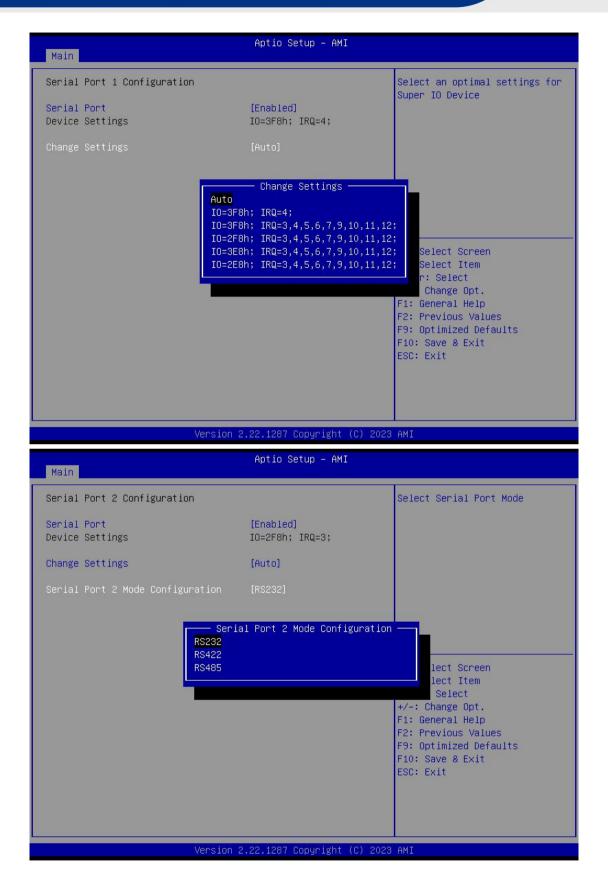
Aptio Setup – AMI Main Advanced Security Boot Save & Exit	
 ACPI Setting CPU Configuration WAKE Configuration Trusted Computing IT8784 Super IO Configuration System Devices Configuration 	Trusted Computing Settings
	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Version 2.22.1287 Copyright (C) 2023	AMI

TPM 2.0 Device Found		Enables or Disables BIOS
Firmware Version:	600.18	support for security device.
Vendor:	INTC	O.S. will not show Security Device. TCG EFI protocol and
Security Device Support	[Enable]	INTIA interface will not be
Active PCR banks	SHA256	available.
Available PCR banks	SHA256,SHA384,SM3	
SHA256 PCR Bank	[Enabled]	
SHA384 PCR Bank	[Disabled]	
SM3_256 PCR Bank	[Disabled]	
Pending operation	[None]	
Platform Hierarchy	[Enabled]	++: Select Screen
Storage Hierarchy	[Enabled]	↑↓: Select Item
Endorsement Hierarchy	[Enabled]	Enter: Select
Physical Presence Spec Version	[1.3]	+/-: Change Opt.
TPM 2.0 InterfaceType Device Select	[CRB] [Auto]	F1: General Help F2: Previous Values
Device Select	[huto]	F9: Optimized Defaults
		F10: Save & Exit
		ESC: Exit

Version 2.22.1287 Copyright (C) 2023 AMI		
TPM20 Device Found	Description	
Firmware Version	• TPM FW version is 600.18	
Vendor	• The vendor is INTC	
Security Device Support	DisabledEnabled. This item is enabled by default.	
SHA256 PCR Bank	Disabled. This item is Enabled by defaultEnabled.	
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.	

4.2.5 IT8784 Super IO Configuration

Main Advanced Security Boot Sav	Aptio Setup – AMI ve & Exit	
 ACPI Setting CPU Configuration WAKE Configuration Trusted Computing IT8784 Super IO Configuration System Devices Configuration 		System Super IO Chip Parameters.
		<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Version (2.22.1287 Copyright (C) 2023	AMI
Advanced	Aptio Setup — AMI	
Huvanceu		
IT8784 Super IO Configuration Super IO Chip > Serial Port 1 Configuration > Serial Port 2 Configuration > Parallel Port Configuration	IT8784	Set Parameters of Serial Port 1 (COMA)
IT8784 Super IO Configuration Super IO Chip > Serial Port 1 Configuration > Serial Port 2 Configuration	IT8784	The second se



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Serial Port	Description
Serial Port 1 Configuration	
Device Settings	Set parameters of serial port
	Select an optimal settings for super IO device.
	Auto
	IO=3F8h; IRQ=4;
Change Settings	IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12;
	IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;
	IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;
	IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;
Serial Port 2 Configuration	
	Select an optimal settings for super IO device.
	IO=3F8h; IRQ=4;
Change Cattings	IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12;
Change Settings	IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;
	IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;
	IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;
Serial Port 2 Mode Configuration	• The user can set it as RS422 and RS485.The port is RS232 by default.

4.2.6 System Devices Configuration

Main <mark>Advanced</mark> Security Boot	Aptio Setup – AMI : Save & Exit	
 ACPI Setting CPU Configuration WAKE Configuration Trusted Computing IT8784 Super IO Configuration System Devices Configuration 		Configure Sytem Device related functions
		<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Vers	ion 2.22.1287 Copyright (C) 20	23 AMI
Advanced	Aptio Setup — AMI	
darim cad	Aptio Setup - AMI [Enabled] [AHCI] [Enabled] [Disabled] [Enabled] [Enabled] [Enabled]	Enable/Disable SATA Device.
Advanced SATA Controller(s) SATA Mode Selection HD Audio Network Stack VT-d WIFI Controller	[Enabled] [AHCI] [Enabled] [Disabled] [Enabled] [Enabled] [Enabled]	

Menu	Description
SATA Controller(s)	The SATA controller is enabled by default.EnabledDisabled.
SATA Mode Selection	• Determines how SATA controller(s) operate.
HD Audio	 Control Detection of the HD-Audio device. HAD will be unconditionally disabled when disabled. HAD will be unconditionally Enabled when Enabled.
Network Stack	The Network Stack is disabled by default. Enabled Disabled.
VT-d	The Network Stack is enabled by default.EnabledDisabled.
WIFI Controller	The Network Stack is disabled by default.EnabledDisabled.
BLUETOOTH Controller	The Network Stack is disabled by default.EnabledDisabled.

4.3 Security

Main Advanced Security Boot Sav	Aptio Setup - AMI e & Exit	
 Password Description If ONLY the Administrator's password then this only limits access to Setu only asked for when entering Setup. If ONLY the User's password is set, is a power on password and must be e boot or enter Setup. In Setup the Us have Administrator rights. The password length must be in the following range: Minimum length Maximum length Administrator Password User Password Secure Boot 	p and is then this ntered to	Set Administrator Password ++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit
Version 2	.22.1287 Copyright (C) 2023	OMT
VCI 31011 2	.22.1201 Copyright (C) 2020	1014
	Aptio Setup – AMI	
Security	Aptio Setup – AMI	
Security System Mode	Aptio Setup - AMI Setup	
System Mode	Setup [Enabled]	
System Mode Secure Boot Secure Boot Mode ▶ Restore Factory Keys ▶ Reset To Setup Mode	Setup [Enabled] Not Active	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit

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 Mode 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 Configuration Setup Prompt Timeout Bootup NumLock State Quiet Boot	1 [On] [Enabled]	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
<pre>FIXED BOOT ORDER Priorities Boot Option #1 Boot Option #2 Boot Option #3 Boot Option #4 Boot Option #5 Boot Option #6 Boot Option #7 • UEFI Application Boot Priorities • UEFI USB Drive BBS Priorities</pre>	[UEFI AP] [NVME] [Hard Disk] [CD/DVD] [SD] [USB Device] [Network]	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>

Boot Item	Description
Boot Configuration	
Setup Prompt Timeout	This item is use 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 Prioritie	'S

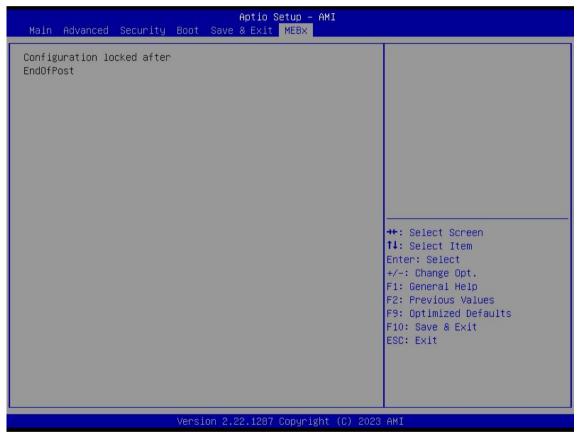
Boot Option #1	The first boot device. If BIOS doesn't detect the first boot device, it will check the second boot device.
Boot Option #2	The second boot device.
Boot Option #3	The third boot device.
Boot Option #4	The fourth boot device.
Boot Option #5	The fifth boot device.
Boot Option #6	The sixth boot device.
Boot Option #7	The seventh boot device.
UEFI Application Boot Priorities	You can set and manage UEFI hard disk after enabling this option.
UEFI USB Drive BBS Priorities	You can set and manage UEFI USB device after enabling this option.

4.5 Save & Exit

Aptio Setup – AMI Main Advanced Security Boot Save & Exit	
Save Options Save Changes and Reset Discard Changes and Exit Restore Defaults Boot Override UEFI: KingstonDataTraveler 3.00000, Partition 1 (KingstonDataTraveler 3.00000) UEFI: Built-in EFI Shell	Reset the system after saving the changes.
	<pre>**: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
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Save Exit Item	Description
Save Options	
Save Changes and Reset	Save all changes and exit
Discard Changes and Exit	Give up the settings and exit.
Restore Defaults	Recover it to default.
Boot Override	Whole Boot devices

4.6 MEBx



The MEBx option is used for VPRO.The MEBx option can be enable and disable if the CPU supports VPRO.

5. JAHC Introduction

JIEHE 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".

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.

Main Advanced Security Boot	Aptio Setup – AMI Save & Exit	
BIOS Information BIOS Vendor Core Version Project Version Build Date and Time Processor Information Name Type	American Megatrends 5.27 66R001A4 09/01/2023 14:55:15 RaptorLake ULT 13th Gen Intel(R) Core(TM) i5–1335U	Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 1998–9999 Months: 1–12 Days: Dependent on month Range of Years may vary.
Total Memory Memory Frequency ME FW Version System Date System Time	4096 MB 2667 MHz 16.1.25.2020 [Wed 09/20/2023] [10:15:57]	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Vers	ion 2.22.1287 Copyright (C) 2	023 AMI

b. Select Advanced- > ACPI Setting- > JAHC Enable- > Enabled.

Aptio Setup - AMI	
[S3 (Suspend to RAM)] [Enabled]	Enable/Disabled JAHC Controller.
	<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
Version 2.22.1287 Copyright (C) 20	23 AMI
Aptio Setup – AMI	
[S3 (Suspend to RAM)] [Enabled]	Enable/Disabled JAHC Controller.
Save & Exit Setup — Save configuration and exit?	+: Select Screen
Yes No	<pre>1: Select Item nter: Select /-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>
	[S3 (Suspend to RAM)] [Enabled] Version 2.22.1287 Copyright (C) 20 Aptio Setup - AMI [S3 (Suspend to RAM)] [Enabled] Save & Exit Setup



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

Advanced	Aptio Setup — AMI	
ACPI Sleep State JAHC Enable	[S3 (Suspend to RAM)] [Enabled] Save & Exit Setup	Enable/Disabled JAHC Controller.
	Save configuration and exit? Yes No Provide the second s	<pre>★: Select Screen ↓: Select Item nter: Select /-: Change Opt. F1: General Help F2: Previous Values F9: Optimized Defaults F10: Save & Exit ESC: Exit</pre>

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 circleb. 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: <u>www.giadatech.com</u>, 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.

🔋 Setup - JAHC	- 🗆 ×
Select Destination Location	
Where should JAHC be installed?	
Setup will install JAHC into the followi	ng folder.
To continue, click Next. If you would like to s	elect a different folder, click Browse.
C:\Program Files (x86)\JAHC	B <u>r</u> owse
At least 6.7 MB of free disk space is required.	
nalish	
120101 T	Next > Cancel

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

Where should Setup place the program's shortcuts? Setup will create the program's shortcuts in the following Start Menu folde To continue, click Next. If you would like to select a different folder, click Browse. IAHC Browse	Start Menu Folder			ſ
To continue, click Next. If you would like to select a different folder, click Browse. IAHC Browse	ere should Setup place the	e program's shortcuts?		Č
To continue, click Next. If you would like to select a different folder, click Browse. IAHC Browse	Setup will create the	program's shortcuts in th	ne following Start Menu fo	lder.
Browse				
n				

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

谩 Setup - JAHC	<u> 87</u>		×
Select Additional Tasks Which additional tasks should be performed?		0	
Select the additional tasks you would like Setup to perform while inst click Next.	alling JAHC:	, then	
Additional shortcuts:			
Create a <u>desktop shortcut</u>			
English	t>	Canc	el

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

eady to Install			
Setup is now ready to begin install	ng JAHC on your con	nputer.	Q
Click Install to continue with the in change any settings.	stallation, or click Bacl	k if you want to review	or
Destination location: C:\Program Files (x86)\JAHC Start Menu folder:			^
JAHC			
Additional tasks: Additional shortcuts: Create a desktop shortcut			
<			×
1977 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -			

谩 Setup - JAHC	÷1		;
Installing			5
Please wait while Setup installs JAHC on your computer.		Ċ	3
Extracting files			
C:\Program Files (x86)\JAHC\skin\MainWndE\min.png			
English			
		Cancel	

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.



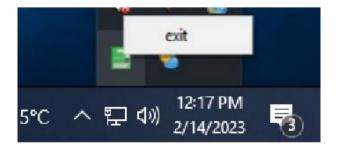
One week as a circle, maximum 3 schedules per day. Select each schedule to set up the resume time and shutdown time. Click [Confirm] button to launch the schedule.



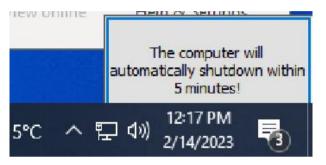
After finishing the setup, the menu window will notice the resume time and shutdown time.

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

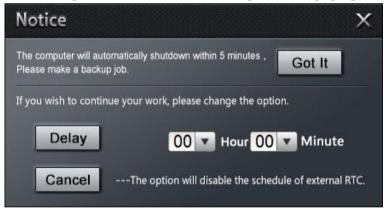
Click [Cancel] button to restore the time settings and cancel the shutdown status. Click [X] button to hide the menu. You can find it on taskbar. Right click the JAHC icon on taskbar and select [exit] to exit the software.



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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