

CLOUD15-PX6

AND

SEA

AIR

15" Rugged Smart Display with 6 (up to 20) Programmable function keys



USER MANUAL

Safety Information

Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Make sure that your power supply is set to the correct voltage in your area.
- If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your local distributor.

Operation safety

- Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Place the product on a stable surface.
- If you encounter any technical problems with the product, contact your local distributor

Statement

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Table of content

Sa	ifety l	Information	01
1.	Prod	cut Introductio	04
	1.1Fr	ront view	04
	1.2R	ear view	04
	1.3N	1E dimension	05
2.	Com	ponents	06
	2.1 L	ocation	06
	2.2 R	Ruggedness	06
	2.3 P	ower supply	06
	2.4 C	Display Panel	06
	2.5 T	ouch screen	07
3.	Spec	ification	07
	איא 3.1 S	ystem specification	07
	3.2 I	nterface	09
		3.2.1 (X1) 2x 1GbE LAN & Cable kit connector	09
		3.2.2 (X2) 2x USB2.0 + 1x RS485 & Cable kit connector	10
		3.2.3 (X3) 1x Mini-DP connector	11
		3.2.4 (X4) 1x Power-IN & Cable kit connector	11
4.	Oper	rations Introduction	12
	4.1	F1~F6 Function Keys	12
	4.2	Power Button	12
	4.3	LED indicator	12
	4.4	Brightness Up or Down	12
	4.5	Fn-Key backlight on/Off	13
	4.6	NVIS Mode	13
5	BIO	PS Setup	13
	5.1	Main Page	13
	5.2	Advanced Page	16
		5.2.1 Onboard Device	18
		5.2.2 CPU configuration	21
		5.2.3 Trusted Computing	23

		5.2.4 NCT	6126D Super IO Configuration	24
		5.2.5 Seri	al Port 1 Configuration	25
		5.2.6 Seri	al Port 2 Configuration	26
		5.2.7 Seri	al Port 3 Configuration	27
		5.2.8 Seri	al Port 4 Configuration	28
		5.2.9 Har	dware Monitor	
		5.2.10	RTC Wake Settings	30
		5.2.11	Network Stack Configuration	31
		5.2.12	NVMe Configuration	32
	5.3	Event lo	Dgs	
		5.3.1 Ena	bling/Disabling Options	
		5.3.2 Viev	v Smbios Event log	35
	5.4	Security	Page	
		5.4.1 HDD) Security	37
		5.4.2 Secu	ıre Boot	
		5.4.3 Key	Management (Secure Boot Mode set to Custom)	
		5.4.4 BIO	S Update	42
		5.4.5 Boo	t Page	43
		5.4.5.	1 (List Boot Device Type) Drive BBS Priorities	45
		5.4.6 Save	e & Exit Page	46
6	Pro	gramable	e function key setup	47
		PreFace	2	47
	6.1	Start H	ot Key International Version	47
	6.2	Introdu	ction to Hotkey Trigger Mode Operation	48
		6.2.1 Hot	key Trigger Mode - Save Cmd	48
		6.2.2 Hot	key Trigger Mode - Delete Step	49
		6.2.3 Hot	key Trigger Mode – Cancel Edit	50
	6.3	Introdu	ction to Key combination Mode Operation	51
		6.3.1 Hot	Key Key combination Mod - Save Cmd	51
		6.3.2 Hot	Key Key combination Mod - Delete Step	54
		6.3.3 Hot	Key Trigger Mode – Cancel Edit	55

Chapter 1: Product Introduction

1.1 Front View



1.2 Rear View



1.3 ME Dimension





Chapter 2: Components

2.1 Location

A clean and moisture free environment is preferred. Make room for air circulation. Avoid areas with:

- Sudden or extreme changes in temperature.
- Extreme heat.
- Strong electromagnetic fields.
- Dust or high humidity.

If it is necessary to work in a hostile environment, please regularly maintain your display by cleaning dust, water, etc. to keep it in optimal condition.

2.2 Ruggedness

The display is designed with rugged features such as vibration, shock, dust and rain/water protection. However, it is still necessary to provide appropriate protection while operating in harsh environments. NEVER immerse the unit in water. Doing so may cause permanent damage. All connectors will corrode if exposed to water or moisture. Corrosion is accelerated if the system's power is ON. Please take proper water-resistant measures for cable connections.

The DC jack and cables are sealed and may be operated with water splashing while attached. All port covers should be in place when no cable is attached.

2.3 Power supply

The display can be powered via DC-IN (9~36V) Optional: 6~36V DC-IN (150W max) MIL-STD-461, MIL-STD-1275

2.4 Display Panel

The panel of the CLOUD15 series is a 4:3,1024 x 768 XGA panel with typical 1000 cd/m2 brightness, a contrast of 2000:1 and a LED backlight.

2.4.1 Brightness

The brightness of the display can be changed by simple pressing the brightness up/down keys in normal operational mode.

2.5 Touch screen

CLOUD15 series is equipped with a 15" G.F.G touch screen. The touch screen PC can be connected and used with an external LCD panel via the mini-DP (DP by cable kit) interface. It is designed to meet requirement and environmental specifications dictated by the nature of military systems.

15 " TFT LCD Display & Resistor Touch screen				
Resolution	1024x768 XGA	Brightness	1000 Nits	
Aspect Ratio	4:3	Contrast Ratio	2000	
ouch Panel Glass-Film-Glass 5-Wire resistor touch panel (Optional)				

Chapter 3: Specification

3.1 System SPEC

CPU	11st Gen Tiger Lake UP3 Intel [®] Core™ i /Celeron ULV Processor i3-1115G4E (Dual Core, 6MB Cache, up to 3.90 GHz) i7-1185G7E (Quad Core, 12MB Cache, up to 4.40 GHz)				
Memory type	1x DDR4 3200 MHz, 1x 260-pin SO-DIMM, up to 32GB, Non-ECC memory				
Graphics	Intel [®] Iris Xe Graphics				
Display interface	Mini-DP (DP by Cable kit)				
Storage	1 x SATA III/1x SATA power header; 1 x M.2 B Key SATA III/USB2.0/PCIe x1				
Ethernet	Intel® I225-LM 2.5GbE LAN + Intel® I219-LM Giga LAN				
Audio	Realtek [®] ALC256/ALC888S				
I/O Chipset	Nuvoton NCT6126D				
ТРМ	Nuvoton NPCT750AABYX TPM2.0				
Triple Mode	Day Mode: Ultra-Brightness 1000 nits Night Mode: NVIS (Dimmable under 1% Nits) Invisible Mode: Backlight off				
OSD	Backlight Dim+ Backlight Dim- Function key backlight On/Off				
Function Keys	6 Soft programmable function Buttons + 1 power button (On/Off)				
DC-IN	9V ~ 36 V, 12V DC-IN Optional:18V~36V, MIL-STD-461, MIL-STD-1275,				
Connectors					
	[X1] 2x 1GbE LAN Amphenol TV07RW-13-35S				
IO Ports	[X2] 2x USB2.0 + 1x RS485 Amphenol TV07RW-13-35S				
	[X3] 1x Mini-DP Amphenol MDPFTV7AGF312				
	[X4]: 1x Power-IN Amphenol TVS07RF-11-5P				
Applications					
Applications	Marine, Naval, Ground and Airborne environment.				

OS	Windows [®] 11 64-bit, Li	nux (Support by request)			
Physical	Physical				
Dimension	435 x 360 x 65 mm (W	x H x D), Weight: 4.5kg,			
Finish	Anodic aluminum				
	oxide				
	Aluminum Alloy,	Ingress Protection	IP65 Dust /water Proof		
Chassis	Corrosion Resistant.				
MIL Compliance					
MIL-STD-810 (Opera	ation Test)				
Low Temp.	Method 502.5	9 Exposure(24h x 3 cycle) a	t -10℃ min.		
High Temp.	Method 501.5	60ºC for 2 hrs after temper	ature stabilization		
Humidity	Method 507.5	RH -95%. Test cycles: ten 24-hrs , functional test after 5th and 10th cycles			
Vibration	Method 514.6	10-500Hz 1.04Grms Test duration: 1 hr x 3 axis (total 3 hrs)			
Shock	Method 516.6 20G, 11mSec, 3 per axis				
MIL-STD-810 (Non-0	Operating Tests)				
Low Temp.	Method 502.5	Exposure(24h x 7 cycle) at -	-20℃ min.		
High Temp.	Method501.5	71ºC for 2 hrs after temperation	ature stabilization.		
Vibration	Method 514.6	200 to 2000Hz Test duratio	n: 1hr per axis; rms = 7.7 gs		
Shock	Method 516.6	20G, 11mSec, 3 per axis			
MIL-STD-461					
CE102	2 MHz - 30 MHz				
RE102	1.5 MHz -30 MHz -	- 5 GHz			
RS103	1.5 MHz - 5 GHz				
Environmental G	Qualifications				
Regulatory	CE ,FCC Complia	nce			
Operation Temp.	-40°C~60°C (amb	pient with air flow)			
Storage Temp.	-40~+85°C				
Green Product	RoHS. WEEE com	pliance			

3.2 Interface

3.2.1 (X1) 2x 1GbE LAN & Cable kit connector

AMPHENOL TV07RW-13-35S







TV07RW-13-35S	RJ45			TV07RW-13-35S	RJ45		
1	1	WHITE / ORANGE	TP1+	8	1	WHITE / ORANGE	TP1+
2	2	ORANG	TP1-	9	2	ORANG	TP1-
3	3	WHITE / GREEN	TP2+	10	3	WHITE / GREEN	TP2+
4	6	GREEN	TP2-	11	6	GREEN	TP2-
5	4	WHITE / BLUE	TP3+	12	4	WHITE / BLUE	TP3+
6	5	BLUE	TP3-	13	5	BLUE	TP3-
15	7	WHITE / BROWN	TP4+	19	7	WHITE / BROWN	TP4+
16	8	BROWN	TP4-	20	8	BROWN	TP4-
7				14			
17				21			
18				22			
SHELL	SHELL		SHELL GND	SHELL	SHELL		SHELL GND

AMPHENOL TV06RW-13-35P







TV06RW-13-35P	RJ45			TV06RW-13-35P	RJ45		
1	1	WHITE / ORANGE	TP1+	8	1	WHITE / ORANGE	TP1+
2	2	ORANG	TP1-	9	2	ORANG	TP1-
3	3	WHITE / GREEN	TP2+	10	3	WHITE / GREEN	TP2+
4	6	GREEN	TP2-	11	6	GREEN	TP2-
5	4	WHITE / BLUE	TP3+	12	4	WHITE / BLUE	TP3+
6	5	BLUE	TP3-	13	5	BLUE	TP3-
15	7	WHITE / BROWN	TP4+	19	7	WHITE / BROWN	TP4+
16	8	BROWN	TP4-	20	8	BROWN	TP4-
7				14			
17				21			
18				22			
SHELL	SHELL		SHELL GND	SHELL	SHELL		SHELL GND

3.2.2 (X2) 2x USB2.0 + 1x RS485 & Cable kit connector

AMPHENOL TV07RW-13-35SB



TV07RW-13-35SB	USB2.0	RS485	TV07RW-13-35SB	USB2.0	RS485
1	VBUS		8	VBUS	
2	DATA-		9	DATA-	
3	DATA+		10	DATA+	
4	GND		11	GND	
5		D-	12		N.C.
6		D+	13		N.C.
7		N.C.	14		N.C.
16		N.C.	19		N.C.
17		GND	20		N.C.
15	GND		21	GND	
18	GND		22	GND	
SHELL	SHELL		SHELL	SHELL	





TV06RW-13-35PB	USB2.0	RS485	TV06RW-13-35PB	USB2.0	RS485
1	VBUS		8	VBUS	
2	DATA-		9	DATA-	
3	DATA+		10	DATA+	
4	GND		11	GND	
5		D-	12		N.C.
6		D+	13		N.C.
7		N.C.	14		N.C.
16		N.C.	19		N.C.
17		GND	20		N.C.
15	GND		21	GND	
18	GND		22	GND	
SHELL	SHELL		SHELL	SHELL	

3.2.3 (X3) 1x Mini-DP connector

AMPHENOL MDFTV7AG312



3.2.4 (X4) 1x Power-IN & Cable kit connector

AMPHENOL TVS07RF-11-5P



AMPHENOL TVS06RF-11-5 S





Cable color	TVS07RF- 11-5P	Pin define
YELLOW	А	Vin +
YELLOW	В	Vin +
N.C.	С	N.C.
BLACK	D	Vin -
BLACK	E	Vin –
	Shell	Shell GND

Cable color	TVS06RF- 11-5S	Pin define
YELLOW	А	Vin +
YELLOW	В	Vin +
N.C.	С	N.C.
BLACK	D	Vin -
BLACK	E	Vin -
	Shell	Shell GND



Chapter 4: Operation Introduction

4.1 F1~F6 Function Keys

Programming function keys could be customized depend on customer's requirement.

4.2 Power Button

Turn the Panel PC powe on by pressing the power button. Turn the display Off by pressing the power button again.

PS: When ambient temperature is under -20 °C, heater will be enabled automatically to increase ambient temperature until over than -20°C, system power boot up automatically.

4.3 LED Indicators

Blue: When adapter is connected to DC connector.

Red: When heater is enabled.

4.4 Brightness Up or Down

Dim+:LCD backlight increase

Dim-:LCD backlight decrease

4.5 Fn-key backlight on off

Turn the Fn-key backlight on/off by pressing the Fn-key backlight on/off button. **4.6 NVIS Mode**

NVIS: LCD Backlight<1.7 nits, keypad backlight and Led indicator off.

On: LCD Backlight 0~1000 nits, keypad backlight and led indicator on and can be controlled formally.

Off: LCD Backlight off, keypad backlight and led indicator off.

Chapter 5: BIOS Setup

5.1 Main Page

Main Advanced Event Logs	Aptio Setup – AMI Security Boot Save & Exit	
BIOS Information BIOS Vendor BIOS Version Build Date and Time	American Megatrends D8340X04 11/23/2020 16:33:10	Set the Date. Use Tab to switch between Date elements. Default Ranges: Year: 1998–2099 Months: 1–12
Processor Information Name Type Microcode Revision	TigerLake ULT Genuine Intel(R) CPU 0000 @ 2.30GHz 68	Days: Dependent on month Range of Years may vary.
Total Memory Memory Speed	4096 MB 2133 MT/s	++: Select Screen
PCH Information		↑↓: Select Item
Name ME FW Version	15.0.0.1240	⊢nter: Select +/-: Change Opt. F1: General Help
Serial ATA Port 1	Empty	F2: Previous Values
Serial ATA Port 2	Empty	F3: Optimized Defaults
System Date System Time	[Wed 01/01/2020] [02:33:13]	ESC: Exit

Version 2.21.1278 Copyright (C) 2020 AMI

Field Name	BIOS Vendr
Default Value	American Megatrends
Comment	This field is not selectable. There is no help text associated with it.

Field Name	BIOS Vendr
Default Value	Display the version of the BIOS
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Build Date and Time
Default Value	Display build date of the BIOS
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Processor Information
Value	Display the installed CPU brand.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Microcode Version
Value	Display the CPU microcode revision.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Total Memory
Value	Display the installed memory size.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Memory Speed
Value	Display the installed memory Frequency
Comment	This field is not selectable. There is no help text associated with it.

Field Name	PCH Information
Value	Display PCH family
Comment	This field is not selectable. There is no help text associated with it.

Field Name	ME FW Version
Value M	ME Firmware Version.
Comment T	This field is not selectable. There is no help text associated with it.

Field Name	Serial ATA Port 1

Value	Display the installed SATA device model/size of port 1.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Serial ATA Port 2
Value	Display the installed SATA device model/size of port 2.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	System Date
Default Value	[Www mm/dd/yyyy]
Possible Value	Www : Mon/Tue/Wed/Thu/Fri/Sat/Sun
	mm : 1-12
	dd : 1-31
	уууу : 1998-2099"
Help	Set the Date. Use Tab to switch between Date elements. Default Rangers:
	Year : 1998-2099
	Months : 1-12
	Days : Dependent on month Range of Years may vary."

Field Name	System Time
Default Value	[hh:mm :ss]
Possible Value	hh : 0-23
	mm : 0-59
	ss : 0-59"
Help	Set the Time. Use Tab to switch between Time elements.

5.2 Advanced Page

Aptio Setup – AMI Main Advanced Event Logs Security Boot Save & Exit	
Main Advanced Event Logs Security Boot Save & Exit • Onboard Device Configuration • CPU Configuration • Power & Performance • Trusted Computing • NCT6126D Super IO Configuration • Hardware Monitor • S5 RTC Wake Settings • Network Stack Configuration • NVMe Configuration • Intel(R) Ethernet Controller (3) I225-LM - 00:A0:C9:00:00:00	Onboard Device Configuration ++: Select Screen 1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
Version 2.21.1278 Copyright (C) 202	1 AMI

Field Name	Onboard Device
Help	Onboard Device Configuration.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	CPU Configuration
Help	CPU Configuration Parameters.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Power & Performance
Help	Power & Performance Options.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Trusted Computing
Help	Trusted Computing Settings
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	NCT6126D Super IO Configuration
Help	System Super IO Chip Parameters.

Comment Press Enter when selected to go into the associated Sub-Menu.

Field Name	HW Monitor
Help	Monitor hardware status
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	S5 RTC Wake Settings
Help	Enable system to wake from S5 using RTC alarm
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Network Stack Configuration
Help	Network Stack Settings.
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	NVMe Configuration
Help	NVMe Device Options Settings .
Comment	Press Enter when selected to go into the associated Sub-Menu.

5.2.1 Onboard Device

Advanced	Aptio Setup — AMI	
Onboard Device Turbo Mode State After G3 DVMT Pre-Allocated DVMT Total Gfx Mem Wake on LAN Enable HD Audio ME Update LVDS Interface Type TPM Device Selection	[Enabled] [S5 State] [64M] [256M] [Enabled] [Disabled] [Disabled] [Disabled]	Enable/Disable processor Turbo Mode (requires EMTTM enabled too).
G-Sensor Enable/Disable	[Disabled]	<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
Ver	sion 2.21.1278 Copyright (C) :	2021 AMI

Field Name	Turbo Mode
Default Value	[Enable]
Possible Value	Enabled
	Disabled
Help	SetEnable/Disable processor Turbo Mode (requires EMTTM enabled too)

Field Name	State After G3
Default Value	[S5 State]
Possible Value	S0 State
	S5 State
Help	S Specify what state to go to when power is re-applied after a power failure
	(G3 State)

Field Name	DVMT Pre-Allocated
Default Value	[64M]
Possible Value	64M
	32M/F7
	36M

	40M
	44M
	48M
	52M
	56M
	60M
Help	Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the
	Internal Graphics Device.

Field Name	DVMT Total Gfx Mem
Default Value	[256M]
Possible Value	128M
	256M
	MAX
Help	Select DVMT5.0 Total Graphic Memory size used by the Internal Graphics Device.

Field Name	Wake on LAN Enable
Default Value	[Enabled]
Possible Value	Enabled
	Disabled
Help	Enable/Disable integrated LAN to wake the system.

Field Name	HD Audio
Default Value	[Enabled]
Possible Value	Enabled
	Disabled
Help	Control Detection of the HD Audio device.
	Disabled = HDA will be unconditionally disabled
	Enabled = HDA will be unconditionally enabled.

Field Name	ME Update
Default Value	[Enabled]
Possible Value	Enabled
	Disabled
Help	Temporary disable Intel CSME for ME FW Update. Enabled = Intel CSME
	disabled after first time reboot only.

Note: Visible in LVDS SKU.

Field Name	LVDS Interface TypeD Audio
Default Value	[Disabled]
Possible Value	8 bit-VESA Single Channel
	8 bit-VESA Dual Channel
	6 bit-VESA Single Channel
	6 bit-VESA Dual Channel
	8 bit-JEIDA Single Channel
	8 bit-JEIDA Dual Channel
Help	Sets LVDS connectivity.

Note: Visible when LVDS Interface Type not set to disable.

Field Name	LVDS Panel Type
Default Value	[1920x1080 LVDS]
Possible Value	1024x768 LVDS
	1366x768 LVDS
	1920x1080 LVDS
Help	Select LVDS panel used by Internal Graphics Device by selecting the appropriate setup
	item

Field Name	TPM Device Selection
Default Value	[dTPM]
Possible Value	PTT
	dTPM
Help	Select TPM device: PTT or dTPM.
	PTT- Enables PTT in SkuMgr dTPM1.2
	- Disables PTT in SKuMgr Warning!
	- PTT/dTPM will be disabled and all data saved on it will be lost.

Field Name	G-Sensor Enabled /Disable
Default Value	[Disabled]
Possible Value	Enabled
	Disabled
Help	MS-26CAD-T10 Gsensor on/off Notice. If G-sensor enabled will reserve 2 pin from DIO.

5.2.2 CPU Configuration

	Advanced	Aptio Setup — AMI	
CPU C Type ID Speed L1 Da L1 In L2 Ca L3 Ca L4 Ca VMX SMX/T	Advanced configuration ta Cache struction Cache sche sche	Aptio Setup - AMI 11th Gen Intel(R) Core(TM) i7-1185G7E @ 2.80GHz 0x806C1 2800 MHz 48 KB × 4 32 KB × 4 1280 KB × 4 1280 KB × 4 12 MB N/A Supported Supported	++: Select Screen 1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values
Name	Туре	Version 2.21.1278 Copyright (C) 202	F3: Uptimized Defaults F4: Save & Reset ESC: Exit
l Name	Туре		

	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Default Value	[Intel CPU Brand String]
Comment	This field is not selectable. There is no help text associated with it.

Field Name	ID
Default Value	Displays CPU Signature.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Speed
Default Value	Displays the CPU speed.
Comment	This field is not selectable. There is no help text associated with it.

Field Name	L1 Data Cache
Default Value	L1 Data Cache Size
Comment	This field is not selectable. There is no help text associated with it.

Field Name	L1 Instruction Cache
Default Value	L1 instruction Cache Size

Comment This field is not selectable. There is no help text associated with it.

Field Name	L2 Cache
Default Value	L2 Cache Size
Comment	This field is not selectable. There is no help text associated with it.

Field Name	L3 Cache
Default Value	L3 Cache Size
Comment	This field is not selectable. There is no help text associated with it.

Field Name	L4 Cache
Default Value	L4 Cache Size
Comment	This field is not selectable. There is no help text associated with it.

Field Name	VMX
Default Value	VMX Supported or Not
Comment	This field is not selectable. There is no help text associated with it.

Field Name	SMX/TXT
Default Value	SMX/TXT supported or Not.
Comment	This field is not selectable. There is no help text associated with it.

5.2.3 Trusted Computing

Advanced	Aptio Setup – AM	I
TPM 2.0 Device Found Firmware Version: Vendor:	7.2 NTC	Enables or Disables BIOS support for security device. O.S. will not show Security Device. ICS EEL protocol and
Security Device Support Pending operation	[Enable] [None]	INT1A interface will not be available.
		++: Select Screen
		T∔: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values
		F3: Optimized Defaults F4: Save & Reset ESC: Exit
Vers	sion 2.21.1278 Copyright	(C) 2021 AMT

Field Name	Firmware Version	
Default Value	TPM module version	
Comment	This field is not selectable. There is no help text associated with it.	

Field Name	Vender
Default Value	TPM module vendor name
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Security Device Support	
Default Value	[Enable]	
Possible Value	Enable	
	Disable	
Help	Enables or Disables BIOS support for security device. O.S. will not show Security	
	Device . TCG EFI protocol and INT1A interface will not be available.	

Field Name	Pending operation.
Default Value	[None]
Possible Value	None

	TPM Clear	
Help	Schedule an Operation for the Security Device. NOTE: Your Computer will reboot during	
	restart in order to change State of Security Device.	

5.2.4 NCT6126D Super IO Configuration

	Advanced	Aptio Setup – AMI	
NC	T6126D Super IO Configuration		Set Parameters of Serial Port
Su > Se > Se	per IO Chip rial Port 1 Configuration rial Port 2 Configuration rial Port 3 Configuration rial Port 4 Configuration	NCT6126D	1 (COMC) ++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
	Version 2.	.21.1278 Copyright (C) 2020	AMI
ield Name	Serial Port 1 Configuration		
lelp	Set Parameters of Serial Po	rt 1 (COMC)	

Comment	Press Enter when selected to go into the associated Sub-Menu.
---------	---

Field Name	Serial Port 2 Configuration	
Help	Set Parameters of Serial Port 2 (COMD)	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	Serial Port 3 Configuration	
Help	Set Parameters of Serial Port 3 (COME)	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	Serial Port 4 Configuration	
Help	Set Parameters of Serial Port 4 (COMA)	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

5.2.5 Serial Port 1 Configuration

Help

	Advanced	Aptio Setup — AMI	
Sent	ial Port 1 Configuration		Enable or Disable Serial Port
Seri	ial Port	[Enabled]	(660)
Devi	ice Settings	IO=2E8h; IRQ=7;	
Sen:	ial Port Mode	[3T/5R RS-232]	
			++: Select Screen
			Enter: Select
			+/-: Change Opt. E1: General Help
			F2: Previous Values
			F3: Optimized Defaults F4: Save & Reset
			ESC: Exit
		Version 2.21.1278 Copyright (C) 2	021 AMI
Field Name	Serial Port		
Default Value	[Enable]		
Possible Value	Enable		
	Disable		

Field Name	Device Settings
Default Value	Device Super IO COM1 Address and IRQ
Comment	This field is not selectable. There is no help text associated with it.

Enable or Disable serial Port(COM)

Field Name	Mode Configuration
Default Value	[3T/5R RS232]
Possible Value	1T/1R RS422
	3T/5R RS232
	1T/1R RS485 TX ENABLE Low Active
	1T/1R RS422 with termination resistor
	1T/1R RS485 with termination resistor TX ENABLE Low Active
	Disabled
Help	Configure serial port as RS232/RS422/RS485.

5.2.6 Serial Port 2 Configuration

Advanced	Aptio Setup – AMI	
Serial Port 2 Configuration		Enable or Disable Serial Port
Serial Port	[Enabled]	(0011)
Device Settings	IO=3E8h; IRQ=11;	
		↔+: Select Screen ↑↓: Select Item Enter: Select
		+/-: Change Opt. F1: General Help F2: Previous Values
		F3: Optimized Defaults F4: Save & Reset ESC: Exit
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Field Name	Serial Port
Default Value	[Enable]
Possible Value	Disabled
	Enabled
Help	Enable or Disable serial Port(COM)

Field Name	Device Settings
Default Value	Device Super IO COM2 Address and IRQ
Comment	This field is not selectable. There is no help text associated with it.

5.2.7 Serial Port 3 Configuration

Advanced	Aptio Setup — AMI	
Serial Port 3 Configuration	7	Enable or Disable Serial Port (COM)
Serial Port Device Settings	[Enabled] IO=2EOh; IRQ=5;	++: Select Screen 14: Select Item Enter: Select +/-: Change Opt.
		F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit

Field Name	Serial Port
Default Value	[Enable]
Possible Value	Disabled
	Enabled
Help	Enable or Disable serial Port(COM)

Field Name	Device Settings
Default Value	Device Super IO COM3 Address and IRQ
Comment	This field is not selectable. There is no help text associated with it.

5.2.8 Serial Port 4 Configuration

Advanced	Aptio Setup – AMI	
Serial Port 4 Configuration		Enable or Disable Serial Port
Serial Port Device Settings	[Enabled] IO=3F8h; IRQ=4;	(COM) ++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
Version 2.21.1278 Copyright (C) 2021 AMI		

Field Name	Serial Port
Default Value	[Enable]
Possible Value	Disabled
	Enabled
Help	Enable or Disable serial Port(COM)

Field Name	Device Settings
Default Value	Device Super IO COM4 Address and IRQ
Comment	This field is not selectable. There is no help text associated with it.

5.2.9 Hardware Monitor

Advanced	Aptio Setup — AMI		
Advanced Pc Health Status DIMM Temperature CPU VR Temperature Fan Speed VBat VMem_Mon VCORE	: +7.3 % : +25.4 % : 3358 RPM : +2.976 V : +1.202 V : +1.744 V		
VCC3V VSB3V VCCRTC	: +3.328 V : +3.312 V : +3.088 V		
		<pre>++: Select Screen fl: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>	
Version 2.21.1278 Copyright (C) 2020 AMI			

Туре	Range
DIMM Temperature	70~-40 °C
CPU VR Temperature	70~-40 ℃
Fan Speed	There are many kinds of the fan could be installed into the system, so we could only set 0 RPM for the failed fan speed, and there is also no high RPM limitation.
VBat	2.0~ 3.65V
VMem_Mon	1.15 ! 1.25V
VCORE	0~2V
VCC3V	3.13~3.65V
VSB3V	3.13~3.65V
VCCRTC	2.0~3.2V

5.2.10 RTC Wake Settings

Advanced	Aptio Setup – American Megatrends Internat	ional, LLC.
Wake system from S5	[Disabled]	Enable or disable System wake on alarm event. Select FixedTime, system will wake on the hr::min::sec specified.
		<pre>++: Select Screen 1↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
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Field Name	Wake system from S5
Default Value	[Disabled]
Possible Value	Disabled Fixed Time
Help	Enable or disable System wake on alarm event, Select FixedTime, system will wake on the hr::min::sec specified.

Field Name	Wake up hour(Show when Wake system from S5 set to Fixed Time)
Default Value	0
Possible Value	0-23
Help	Select 0-23 For example enter 3 for 3 am and 15 for 3pm

Field Name	Wake up minute(Show when Wake system from S5 set to Fixed Time)
Default Value	0
Possible Value	0-59
Help	Select 0-59 for Minute

Field Name	Wake up second(Show when Wake system from S5 set to Fixed Time)
Default Value	0
Possible Value	0-59

Help

Select 0-59 for second

5.2.11 Network Stack Configuration

Advanced	- Setup - Americ an Megatrenus II	
Network Stack	[Disabled]	Enable/Disable UEFI Network Stack
		<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
Van 2 21 1277	Conuright (C) 2020 American Ma	

Field Name	Network stack
Default Value	[Disabled]
Possible Value	Disabled Enabled
Help	Enable/Disable UEFI Network stack

Field Name	Ipv4 PXE Support (Ava ilable when Network stack Enabled)
Default Value	[Enabled]
Possible Value	Disabled Enabled
Help	Enable/Disable Ipv4 PXE Boot Support. If disabled IPV4 PXE boot support will not be available.

Field Name	Ipv6 PXE Support (Available when Network stack En abled)
Default Value	[Enabled]
Possible Value	Disabled Enabled
Help	Enable/Disable Ipv6 PXE Boot Support. If disabled IPV6 PXE boot support will not be available.

5.2.12 NVMe Configuration

Advanced	Aptio Setup – AMI	
NVMe Configuration		
No NVME Device Found		
		<pre> ++: Select Screen f↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
Version 2.	21.1278 Copyright (C) 2020	AMI

Field Name	(Device)
Comment	Press Enter when selected to go into the associated Sub-Menu

5.3 Evnet logs

Aptio Setup – AMI Main Advanced <mark>Event Logs</mark> Security Boot Save & Exit	
▶ Change Smbios Event Log Settings ▶ View Smbios Event Log	Press <enter> to change the Smbios Event Log configuration.</enter>
	<pre>++: Select Screen f↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
Version 2.21.1278 Copyright (C) 2020	AMI

Field Name	Change Smbios Event Log Settings
Help	Press <enter> to change the Smbios Event Log configuration.</enter>
Comment	Press Enter when selected to go into the associated Sub-Menu

Field Name	View Smbios Event Log
Help	Press <enter> to view the Smbios Event Log records</enter>
Comment	Press Enter when selected to go into the associated Sub-Menu

5.3.1 Enabling/Disabling Options

Event Logs	Aptio Setup – AMI	
Enabling/Disabling Options Smbios Event Log	[Enabled]	Change this to enable or disable all features of Smbios Event Logging during boot.
Erasing Settings Erase Event Log When Log is Full	[No] [Do Nothing]	
		++: Select Screen
		T∔: Select Item Enter: Select +/-: Change Opt.
		F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset
		ESU: EXIT
Versio	n 2.21.1278 Copyright (C) 2	2020 AMI

Field Name	Smbios Event Log
Default Value	[Enabled]
Possible Value	Disabled Enabled
Help	Change this to enable or disable all features of Smbios Event Logging during boot.

Field Name	Erase Event Log
Default Value	[No]
Possible Value	No Yes, Next reset Yes, Every reset
Help	Choose options for erasing Smbios Event Log. Erasing is done prior to any logging activation during reset.

Field Name	When Log is Full
Default Value	[Do Nothing
Possible Value	Do Nothing Erase Immediately
Help	Choose options for reactions to a full Smbios Event Log.

5.3.2 View Smbios Event log

Aptio Setup – AMI Event Logs	
DATE TIME ERROR CODE SEVERITY COUNT 09/09/20 17:22:06 Smbios 0x16 N/A N/A 09/09/20 17:22:50 EFI 03008205 Unrecognized 02 09/09/20 17:22:50 EFI 03008105 Unrecognized 02 09/09/20 17:22:50 EFI 03008303 Unrecognized 02 09/09/20 17:54:26 EFI 03008103 Unrecognized 01 09/09/20 17:54:26 EFI 03008103 Unrecognized 01	DESCRIPTION Log Area Reset and Count is applicable only for Multi-Events
	++: Select Screen f4: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
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Field Name	DATE / TIME / ERROR CODE / SEVERITY / COUNT
Default Value	MM/DD/YY HH:MM:SS Smbios 0x16 N/A N/A
Possible Value	By Events
Help	By Events

5.4 Security Page

Aptio Setup – Am Main Advanced Security Boot Sav	erican Megatrends Internations e a Exit	onal, LLC.
Password Description		Set Administrator Password
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	is set, p and is then this ntered to er will 3	
Maximum length	20	↔: Select Screen
Administrator Password		↑↓: Select Item
user rasswuru		+/-: Change Opt. F1: General Help F2: Previous Values
HDD Security Configuration:		F3: Optimized Defaults
P1:128GB SATA Flash Drive		F4: Save & Reset ESC: Exit
▶ Secure Boot		
BIOS Update		
Ver. 2.21.1277 Conuright (C) 2020 American Megatrends	International LLC

Field Name	Administrator Password
Help	Set Administrator Password

Field Name	User Password
Help	Set User Password.

Field Name	HDD Security drive
Help	HDD Security Configuration for selected drive
Comment	Press Enter when selected to go into the associated Sub-Menu

Field Name	Secure Boot
Help	Secure Boot Configuration
Comment	Press Enter when selected to go into the associated Sub-Menu

Field Name	BIOS Update
Help	BIOS Update support
Comment	Press Enter when selected to go into the associated Sub-Menu

5.4.1 HDD Security

Aptio Setup – A Security	merican Megatrends Internati	onal, LLC.
HDD Password Description : Allows Access to Set, Modify and Cl Hard Disk User Password User Password is mandatory to Enabl If the 'Set User Password' option i do power cycle to enable the option HDD PASSWORD CONFIGURATION: Security Supported : Security Enabled : Security Locked : Security Frozen : HDD User Pwd Status:	ear e HDD Security. s hidden, again. Yes No Yes NOT INSTALLED	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
Ver. 2.21.1277 Copyright	(C) 2020 American Megatrends	International, LLC.

Field Name	Set User Password
Help	Set HDD User Password. *** Advisable to Power Cycle System after Setting Hard Disk Passwords ***.Discard or Save changes option in setup does not have any impact on HDD when password is set or removed. If the 'Set HDD User Password' option is hidden, do power cycle to enable the option again

5.4.2 Secure Boot

	Aptio Setup – AMI Security	
System Mode Secure Boot	Setup [Enabled] Not Active	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
Secure Boot Mode ▶ Restore Factory Keys ▶ Reset To Setup Mode	[Standard]	platform reset
▶ Key Management		
		++: Select Screen f1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit
ame Secure Boot	Version 2.21.1278 Copyright (C) 2020 AMI
Value [Enabled]		

Field Name	Secure Boot
Default Value	[Enabled]
Possible Value	Enabled Disabled
Help	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

Field Name	Secure Boot Mode
Default Value	[Standard]
Possible Value	Standard Custom
Help	Secure Boot mode options:Standard or Custom.In Custom mode, Secure Boot Policy variables can be configured by a physically present user without full authentication

Field Name	Restore Factory Keys (Secure Boot Mode set to Custom)	
Help	Force System to User Mode. Install factory default Secure Boot key databases	

Field Name	Reset to Setup Mode (After Restore Factory keys Provision)
Help	Delete all Secure Boot key databases from NVRAM

Field Name	Key Management
Help	Enables expert users to modify Secure Boot Policy variables without full authentication

Comment

Enables expert users to modify Secure Boot Policy variables without full authentication.

5.4.3 Key Management (Secure Boot Mode set to Custom)

Aptio Setup – American Megatrends International, LLC. Security			
Vendor Keys	Valid	Install factory default Secure Boot keys after the platform	
Factory Key Provision Restore Factory Keys Reset To Setup Mode Export Secure Boot variables Enroll Efi Image	[Disabled]	reset and while the System is in Setup mode	
Device Guard Ready ▶ Remove 'UEFI CA' from DB ▶ Restore DB defaults			
Secure Boot variable Size > Platform Key(PK) 0 > Key Exchange Keys 0 > Authorized Signatures 0	Keys Key Source 0 No Keys 0 No Keys 0 No Keys	++: Select Screen f4: Select Item Enter: Select	
 Forbidden Signatures Authorized TimeStamps 0 	0 No Keys 0 No Keys	+/-: Change Opt. E1: General Heln	
▶ OsRecovery Signatures 0	0 No Keys	F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit	
Ver. 2.21.1277 Cop	yright (C) 2020 American Megatrends	International, LLC.	

Field Name	Factory Key Provision
Default Value	[Disabled]
Possible Value	Disabled Enabled
Help	Install factory default Secure Boot keys after the platform reset and while the System is in Setup mode

Field Name	Restore Factory Keys
Help	Force System to User Mode. Install factory default Secure Boot key databases

Field Name	Reset to Setup Mode
Help	Delete all Secure Boot key databases from NVRAM

Field Name	Export Secure Boot variables
Help	Copy NVRAM content of Secure Boot variables to files in a root folder on a file system device

Field Name	Enroll Efi Image
Help	Allow the image to run in Secure Boot mode. Enroll SHA256 Hash certificate of a PE image into Authorized Signature Database (db)

Field Name	Remove 'UEFI CA' from DB
Help	Device Guard ready system must not list 'Microsoft UEFI CA' Certificate in Authorized Signature database (db)

Field Name	Restore DB defaults
Help	Restore DB variable to factory defaults

Field Name	Platform Key (PK)
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu "Key Management".

Field Name	Key Exchange Keys
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Authorized Signatures
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EF I_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Forbidden Signatures
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key So urce: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	Authorized TimeStamps
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Pub lic Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub Menu.

Field Name	OsRecovery Signatures
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_C ERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF Image(SHA256) Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu.

5.4.4 BIOS Update



Field Name	Path for ROM Image
Help	Enter the path to the Secure flash option

5.4.5 Boot Page

Main Advanced Chipset Event Logs	Aptio Setup – AMI Security Boot Save & Ex	it
Boot Configuration Number of seconds to wait for setup Prompt Timeout Bootup NumLock State [Off] 65535(0xFFFF) means indefinite waiting.		
FIXED BOOT ORDER Priorities Boot Option #1 [USB Floppy] Boot Option #2 [USB CD/DVD] Boot Option #3 [Hard Disk] Boot Option #4 [USB Key:UEFI: USB FLASH DRIVE PMAP,		
Boot Option #5 Boot Option #6 Boot Option #7	[USB Hard Disk] [NVME] [Network]	<pre>++: Select Screen 1↓: Select Item Enter: Select</pre>
► UEFI USB Key Drive BBS Priorities +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit		
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Field Name	Setup Prompt Timeout
Default Value	1
Possible Value	1~65535
Help	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

Field Name	Bootup NumLock State
Default Value	[Off]
Possible Value	On Off
Help	Select the keyboard NumLock state

Field Name	Boot Option #1
Default Value	[USB Floppy]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #2
Default Value	[USB CD/DVD]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk, NVME,

	Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #3
Default Value	[Hard Disk]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #4
Default Value	[USB Key]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #5
Default Value	[USB Hard Disk]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk, USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #6
Default Value	[NVME]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk, USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	Boot Option #7
Default Value	[Network]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk, NVME, Network, Disabled
Help	Sets the system boot order

Field Name	(UEFI) USB Floppy Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available USB Floppy Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) USB CDROM/DVD ROM Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available USB/CDROM/DVD Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) Hard Disk Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available Hard Disk Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) USB KEY Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available USB Key Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) USB Hard Disk Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available USB Hard Disk Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) NVME Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available NVME Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

Field Name	(UEFI) NETWORK Drive BBS Priorities	
Help	Specifies the Boot Device Priority sequence from available NETWORK Drives.	
Comment	Press Enter when selected to go into the associated Sub-Menu.	

5.4.5.1 (List Boot Device Type) Drive BBS Priorities

3oot Option #1	[Windows Boot Manager (128GB SATA Flash Drive)]	Sets the system boot order
		<pre>++: Select Screen t↓: Select Item Enter: Select +/-: Change Opt.</pre>
		F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit

Field Name	Boot Option #1
Default Value	
Possible Value	Boot Device Name 1 of this type, Disable

Help	Sets the system boot order	
5.4.6	Save & Exit Page	
	Aptio Setup – American Mega Main Advanced Security Boot Save & Exit	atrends International, LLC.
	Save Changes and Reset Discard Changes and Reset Restore Defaults	Reset the system after saving the changes.
		<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Reset ESC: Exit</pre>
_	Ver. 2.21.1277 Copyright (C) 2020 Ame	erican Megatrends International, LLC.

Field Name	Save Changes and Reset
Help	Reset the system after saving the changes.

Field Name	Discard Changes and Rest
Help	Reset system setup without saving any changes.

Field Name	Restore Defaults
Help	Restore/Load Default values for all the setup options.

Chapter 6: Programable Function Key Setup

PreFace

All operations within this document must be performed with the HotKey hardware connected in order to function properly.

6.1 Start Hot Key International Version

Click the Hot Key International Version.exe program and wait for it to finish initializing. Once the program interface appears, it means that the initialization is complete and you can proceed with the operations. If the hardware is not connected or cannot be connected properly, an error message "Hardware Connect Fail" will appear.



Click the Hot Key International Version.exe program and wait for it to finish initializing.



Once the program interface appears, it means that the initialization is complete and you can

proceed with the operations.

	×
Hardware Connect Fail	
確定	

If the hardware is not connected or cannot be connected properly, an error message "Hardware Connect Fail" will appear.

6.2 Introduction to Hotkey Trigger Mode Operation

This chapter demonstrates the steps for setting up Trigger mode, including Save Cmd/Delete Step/Cancel Edit.

6.2.1 Hotkey Trigger Mode - Save Cmd

Clicking on the first command "F1" will bring up a window to select Trigger Mode and Key Combination Mode. Select Trigger Mode and then choose "1" after entering Trigger Mode. Press "Save Cmd" to write the command to the hardware.

	X
F1	
F2	(TARE
F3	
F4	
F5	
F6	
F7	Operating Mode
F8	Key Trigger Mode combination
F9	Mode
F10	
F11	
F12	
F13	
F14	
F15	

Clicking on the first command "F1" will bring up a window to select Trigger Mode and Key Combination Mode. Select Trigger Mode

																-	
Â	EIRE																
3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Pause Break
	~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	Page UP
	Tab	Q	w	E	R	т	Y	U	I	o	Р	ſ	1	N	Delete	End	Page Dowr
	Caps Lock	A	s	D	F	G	н	J	к	L		;		Enter			
	Shift	z	x	с	v	в	N	м	<	>	?			Shift		Тор	
1	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Right
2	爛祿,1					Caura									J		
3						Cmd											
4					Delete Step	Cance Edit											
5 *																	

Select Trigger Mode and then choose "1" after entering Trigger Mode. Press "Save Cmd" to write the command to the hardware.

6.2.2 Hotkey Trigger Mode - Delete Step

Select the instruction to be deleted in the instruction display window, and then press "Delete Step". Confirm that the instruction in the instruction display window has been deleted to complete the deletion action.

															-	
EIAR																
Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Pau Bre
~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	Pa U
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/描談,1					Save											
				Delete Step	Cancel Edit											
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Select the instruction to be deleted in the instruction display window, and then press "Delete Step"

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	EARE														٦		
3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Paus Brea
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	Shift	z	x	с	v	в	N	м	<	>	?			Shift		Тор	
	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Righ
2						Save											
3						Cmd											
4					Delete Step	Cancel Edit											
5 4					<u> </u>												

Confirm that the instruction in the instruction display window has been deleted to complete the deletion action.

6.2.3 Hotkey Trigger Mode – Cancel Edit

Click "Cancel Edit" and wait to return to the splash screen to complete the operation.

e																-	□ ×
F1																	
F2															_		
F3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Pause Break
F4						-	6	-		•				Backsp			Page
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F6	Tab	Q	w	E	R	т	Y	U	Т	ο	Р	I	1	X	Delete	End	Page Down
F8	Caps	A	s	D	F	G	н	L	к	L		;		Enter			
50	LOCK																
F10	Shift	z	x	с	v	В	N	м	<	>	?			Shift		Тор	
F11	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Right
F12						Save											
F13						Cmd											
F14					Delete Step	Cance Edit											
F15	×																

Click "Cancel Edit" and wait to return to the splash screen

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F15	v _		

Returning to the splash screen signifies the completion of the operation.

6.3 Key combination Mode Introduction

This chapter demonstrates the operation steps for setting up the Key Combination Mode, including Save Cmd/Delete Step/Cancel Edit.

6.3.1 HotKey Key combination Mod - Save Cmd

Clicking on the first command "F1" will bring up a window to choose between Trigger Mode and Key Combination Mode. Selecting Key Combination Mode will take you to a window where you can choose "Ctrl" on the left, which will bring up a window with three options: Open, Press, and Cancel. Select "Press" here, where Open indicates releasing the key, Press indicates pressing the key, and Cancel indicates cancelling the action. Once the configuration is complete, the instruction display window will show the configured command. Since the Key Combination Mode is designed to provide combination function, the action to be performed here is to simulate the "Select All" action. Therefore, you need to sequentially configure the "Ctrl" and "A" on the left to be in the "Press" state, followed by configuring the "Ctrl" and "A" on the left to be in the "Open" state, and then click on "Save Cmd" to write the command into the hardware.

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F1			
F2	EIRE		
F3			
F4			
F5			
F6			
F7	Operating Mode		
F8	Trigger Mode Key		
F9	Mode		
F10			
F11			
F12			
F13			
F14			
F15			

Clicking on the first command "F1" will bring up a window to choose between Trigger Mode and Key Combination Mode.

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^																	
	STAR LAKE																
	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	P
	~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	
	Tab	Q	w	E	R	T Trigger	V Mode	u		0	Р	ſ	1	X	Delete	End	
	Caps Lock	A	s	D	F		Open	Pr	ess	Cance		;	•	Enter			
	Shift	z	x	с	v	В	N	м	<	>	?			Shift		Тор	
	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	F
						Save Cmd											
					Delete Step	Cancel Edit	1										
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Choose "Ctrl" on the left, which will bring up a window with three options: Open, Press, and Cancel. Select "Press".

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1																	
2	EARE														٦		
3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Pause Break
5	~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	Page UP
	Tab	Q	w	E	R	т	Y	U	I	o	Р	I	1	١	Delete	End	Page Dowr
	Caps Lock	A	s	D	F	G	н	J	к	L		;		Enter			
	Shift	z	x	с	v	в	N	м	<	>	?			Shift		Тор	
	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Righ
	按下,LeftChl				1	Save											
З						Cmd											
4					Delete Step	Cancel Edit											
5 .	~																

Once the configuration is complete, the instruction display window will show the configured command.

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F2	PARE														1		
F3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Paus Brea
F5	~	1	2	3	4	5	6	7	8	9	o	-	=	Backsp ace	Insert	Home	Page UP
F6	Tab	Q	w	E	R	т	Y	U	I	ο	Р	ſ	1	X	Delete	End	Page Dow
F7	Caps Lock	A	s	D	F	G	н	J	к	L		;	•	Enter			
F9	Shift	z	x	с	v	в	N	м	<	>	?			Shift		Тор	
F10	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Righ
F12	按下,LeftCtd 按下,A 按關LeftCtd				1	Save	1]		
F13	放戰人					Cmd											
F14					Delete Step	Cancel Edit											
F15	~																

Sequentially configure the "Ctrl" and "A" on the left to be in the "Press" state, followed by configuring the "Ctrl" and "A" on the left to be in the "Open" state, and then click on "Save Cmd" to write the command into the hardware.

6.3.2 HotKey Key combination Mod - Delete Step

In the instruction display window, select the command to be deleted, and then click on "Delete Step". Confirm that the command has been deleted in the instruction display window to complete the deletion action.

Fit F2 F3 F4 F5 F7 F8 F9 F10 F11 F12 Esc I I I F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F3 Screen Screen </th <th></th> <th>-</th> <th>1</th>																-	1
Esc Image: Similar Simil	EIRE														7		
~ 1 2 3 4 5 6 7 8 9 0 = Backsp acc Insert Home Tab Q W E R T Y U 1 0 P []] \Left Delete End Caps Lock A S D F G H J K L J \Left Delete End Shift Z X C V B N M < > ? Y Enter Top Ctrl Windo Alt Space I I I I I I I Insert Home	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	
Tab Q W E R T Y U I O P I J \\ Caps Lock A S D F G H J K L I I J \\ Shift Z X C V B N M <	~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	
Caps Lock A S D F G H J K L J S J Enter Shift Z X C V B N M <	Tab	Q	w	E	R	т	Y	U	I	ο	Р	I	1	X	Delete	End	
Shift Z X C V B N M < > ? I Shift Top Ctrl Mindo Alt Space I <td>Caps Lock</td> <td>Α</td> <td>s</td> <td>D</td> <td>F</td> <td>G</td> <td>н</td> <td>L</td> <td>к</td> <td>L</td> <td></td> <td>;</td> <td>•</td> <td>Enter</td> <td></td> <td></td> <td></td>	Caps Lock	Α	s	D	F	G	н	L	к	L		;	•	Enter			
Ctrl Windo n Alt Space Alt Ctrl Left Down	Shift	z	x	с	v	В	N	м	<	>	?			Shift		Тор	
	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	

In the instruction display window, select the command to be deleted, and then click on "Delete Step".

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														_		
Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Paus Brea
~	1	2	3	4	5	6	7	8	9	0	-	=	Backsp ace	Insert	Home	Page UP
Tab	Q	w	E	R	т	Y	U	I.	ο	Р	ſ	1	N	Delete	End	Page Dow
Caps Lock	A	s	D	F	G	н	ſ	к	L		;	•	Enter			
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Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Righ
安下,Left Ctil 安下,A 波開,A					Save											
					Cmd											
				Delete Step	Cancel Edit											

Confirm that the command has been deleted in the instruction display window to complete the deletion action.

6.3.3 HotKey Trigger Mode – Cancel Edit

Click on "Cancel Edit" and wait until you return to the splash screen to complete the operation.

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F2	LARE														7		
F3	Esc		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	Print Screen	Scroll Lock	Pause Break
F4																	
F5	~	1	2	3	4	5	6	7	8	9	0	-	=	ace	Insert	Home	Page UP
F6	Tab	Q	w	E	R	т	Y	U	I	ο	Р	I	1	١	Delete	End	Page
F7																	
F8	Caps Lock	A	s	D	F	G	н	J	к	L		;	•	Enter			
F9	Shift	z	x	с	v	в	N	м	<	>	?			Shift		Тор	
F10	Ctrl	Windo n	Alt	Space									Alt	Ctrl	Left	Down	Right
F12	接下,Left Ctrl 按下,A 放開,A				1	Save											
F13						Cmd											
F14					Delete Step	Cancel Edit											
F15	*						-										

Click on "Cancel Edit" and wait until you return to the splash screen.

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F15	×		

Returning to the splash screen signifies the completion of the operation.