INS8325A

Thin-mini ITX with Intel® Alder Lake-N SoC

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

- All product specifications are subject to change without prior notice

Revision History

Revision	Date (mm.dd.yyyy)	Changes
V1.0	02.10.2025	First release

Packing list

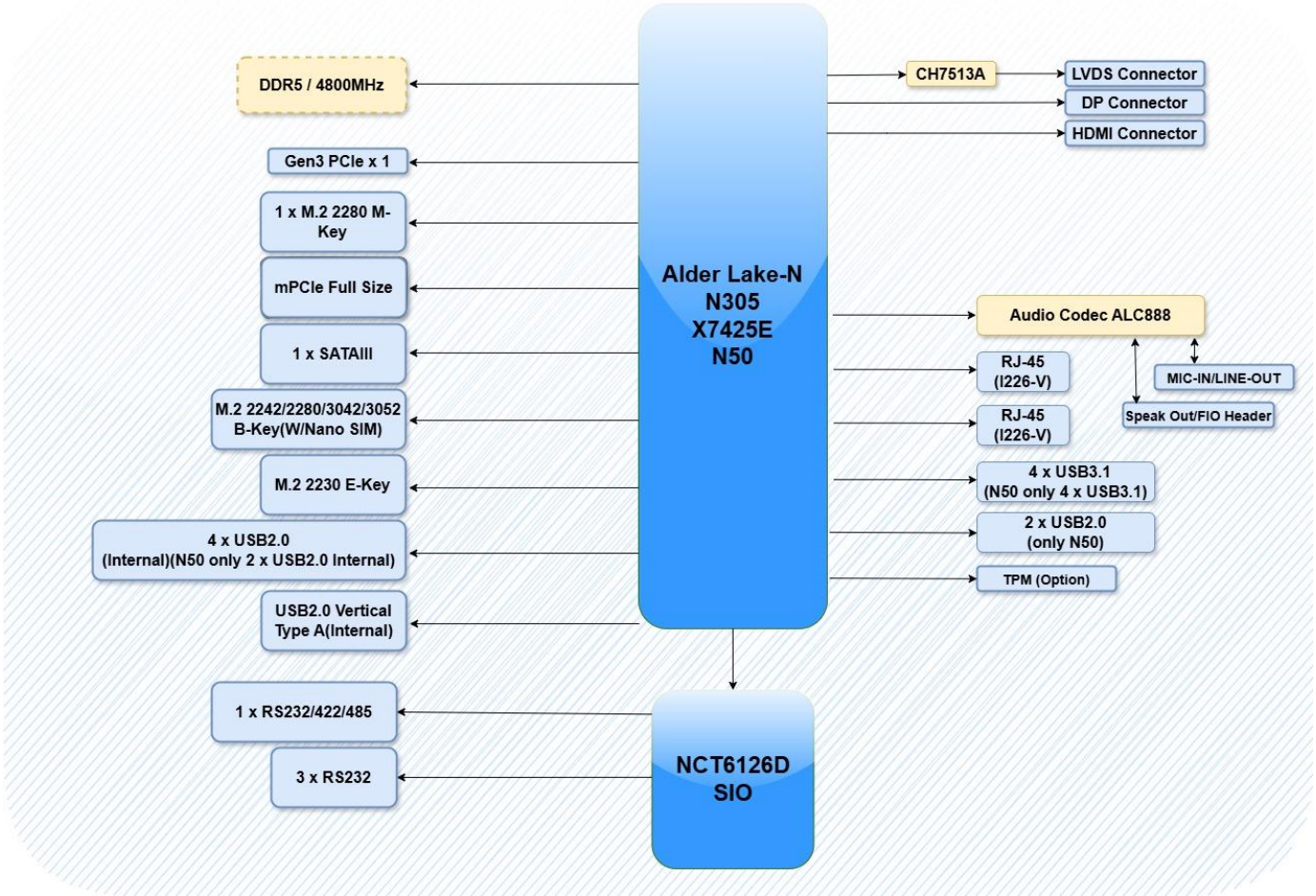
Item	Description	Q'ty
1	INS8325A Thin-mini itx	1
2	CD(Drivier + User's manual)	1

If any of the above items is damaged or missing, please contact your local distributor.

Table of Contents

Chapter 1: Product Information

1.1 Block Diagram



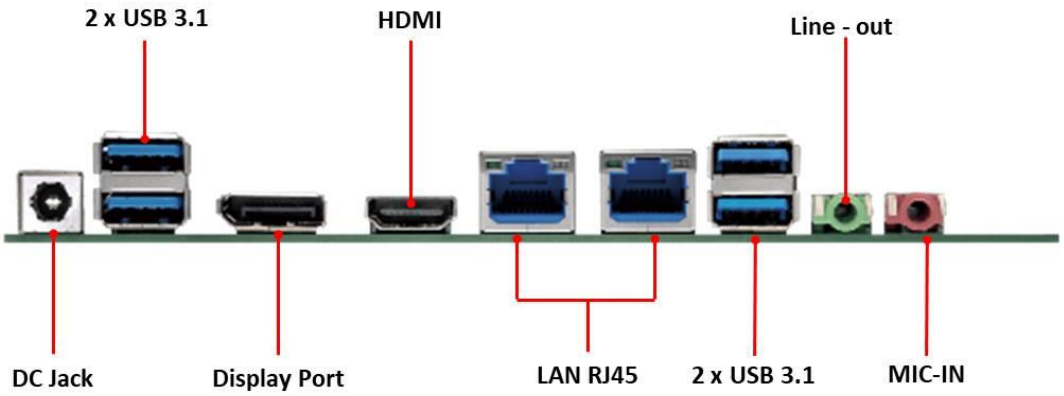
1.2 Key Feature

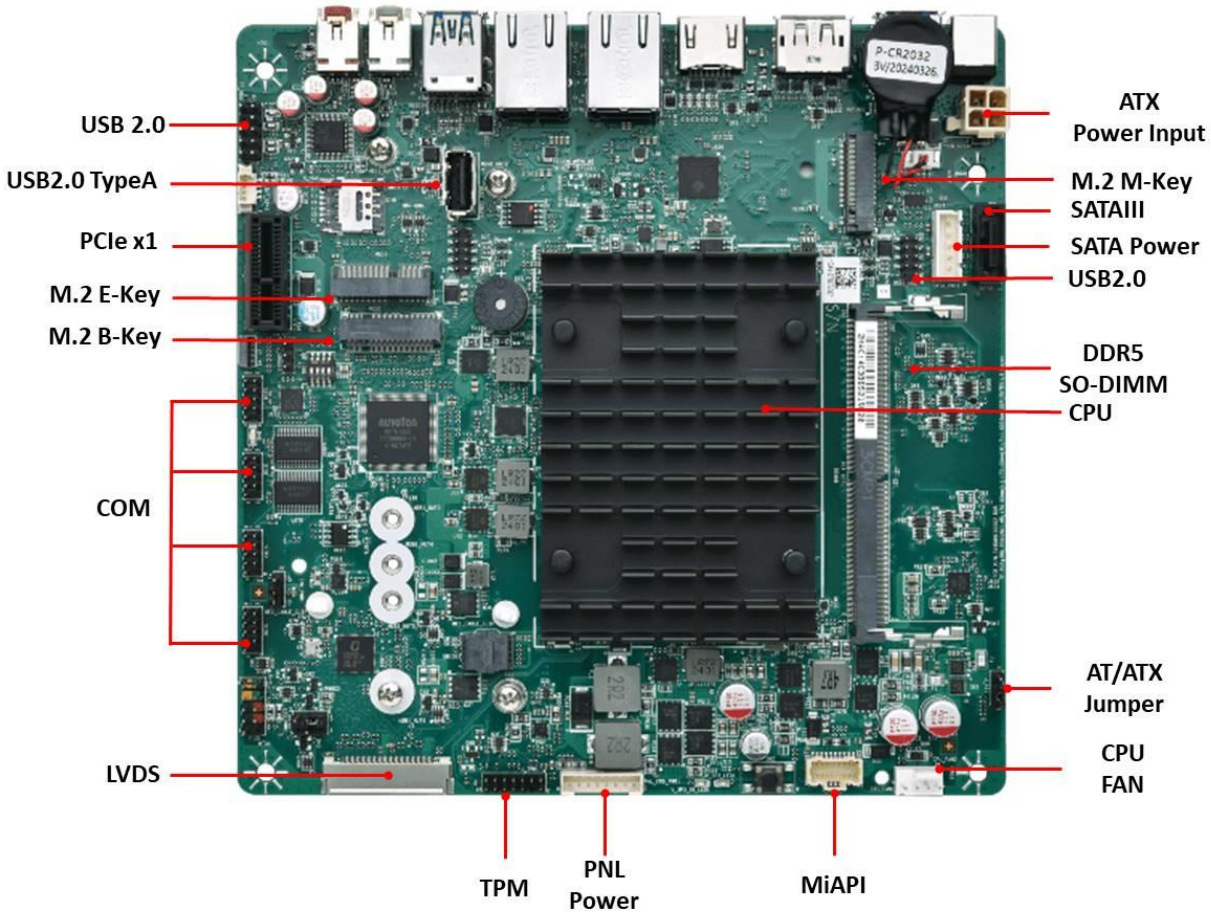
System	
CPU	Intel® Alder Lake-N : N50 (2C/6M Cache, up to 3.40 GHz , TDP 6W) Core i3-N305(8C/6M Cache, up to 3.80 GHz, TDP 15W) Atom x7425E(4C/6M Cache, up to 3.40 GHz, TDP 12W)
Memory type	DDR5 4800 MHz / 1 x 260-pin SO-DIMM / Max. 16GB (Non-ECC)
Chipset	Intel® SoC Integrated
Graphic	Intel® HD Graphics
TPM	Nuvoton NPCT750AABYX TPM2.0 (Optional)
I/O Chipset	Nuvoton NCT6126D(eSPI)
Watchdog	1-255 sec. or 1-255 min. software programmable and can be generate system reset
Display	
Display Port	Up to 4K (4096 x 2160) @30 Hz
HDMI	Up to 4K (4096 x 2160) @60 Hz
LVDS	Up to 1920 x 1200 @60 Hz
Audio	
Codec	Realtek® ALC888
Expansion Slot	
M.2	1 x M.2 2242/3042/3052 B Key (USB2.0/PCIeX1/SATAIII) 1 x M.2 2280 M Key (PCIeX1 / SATAIII) 1 x M.2 2230 E key (PCIeX1 / USB2.0)
Ethernet	
Chipset	2 x Intel® I226-V 2.5 Giga LAN
Front I/O	
USB	- i3-N305 & x7425E : 1 x USB 3.2 Gen2, 3 x USB 3.2 Gen1 - N50 : 1 x USB 3.2 Gen2, 1 x USB 3.2 Gen1, 2 x USB 2.0
Display I/O	1 x HDMI 1.4, 1 x DisplayPort 1.4
LAN	2 x RJ45
DC IN	1 x DC-IN Jack
Internal I/O	
SATA	1 x SATA power header / 1 x SATAIII (Multiplexed with M.2 M Key)
USB	- i3-N305 & x7425E : 4 x USB 2.0 / 1 x USB2.0 Vertical Type A - N50 : 2 x USB 2.0
Display I/O	1 x LVDS 1 x Backlight Connector
Audio I/O	1 x Speaker Header 1 x Front Audio Header (Mic-in / Line-out)
Serial Port	- i3-N305 & x7425E : 1 x RS232/RS422/485/3 x RS232 - N50 : 3 x RS232
Parallel Port	1 x MiAPI Header
Fan	1 x 4-pin CPU Fan Header
Power	1 x AT / ATX Mode Select Jumper / 1 x ATX 4-pin Power Connector
Others	1 x CMOS Jumper

	/ 1 x Chassis Front Panel Header (2 x 5-pin) / 1 x Front Audio Header (Mic-in & Line-out) / 1 x Buzzer / 1 x Panel power select header (default 3.3V, option to 5V, 12
Mechanical and Environment	
Form Factor	Mini ITX
Power Type	DC-IN 8~24V/ ATX 4-pin Power Connector
Dimension	170 mmX 170mm
Operating Temperature	ET : -20℃ ~ 70℃ UT : -40℃ ~ 85℃
Storage Temperature	-40℃ ~ 85℃
Relative humidity	10% to 90%, non-condensing
Standard Compliance	
Standard Compliance	CE/FCC
OS	
OS Support	Windows®10/11 64-bit Linux(Support by request)

***All specifications and photos are subject to change without notice.**

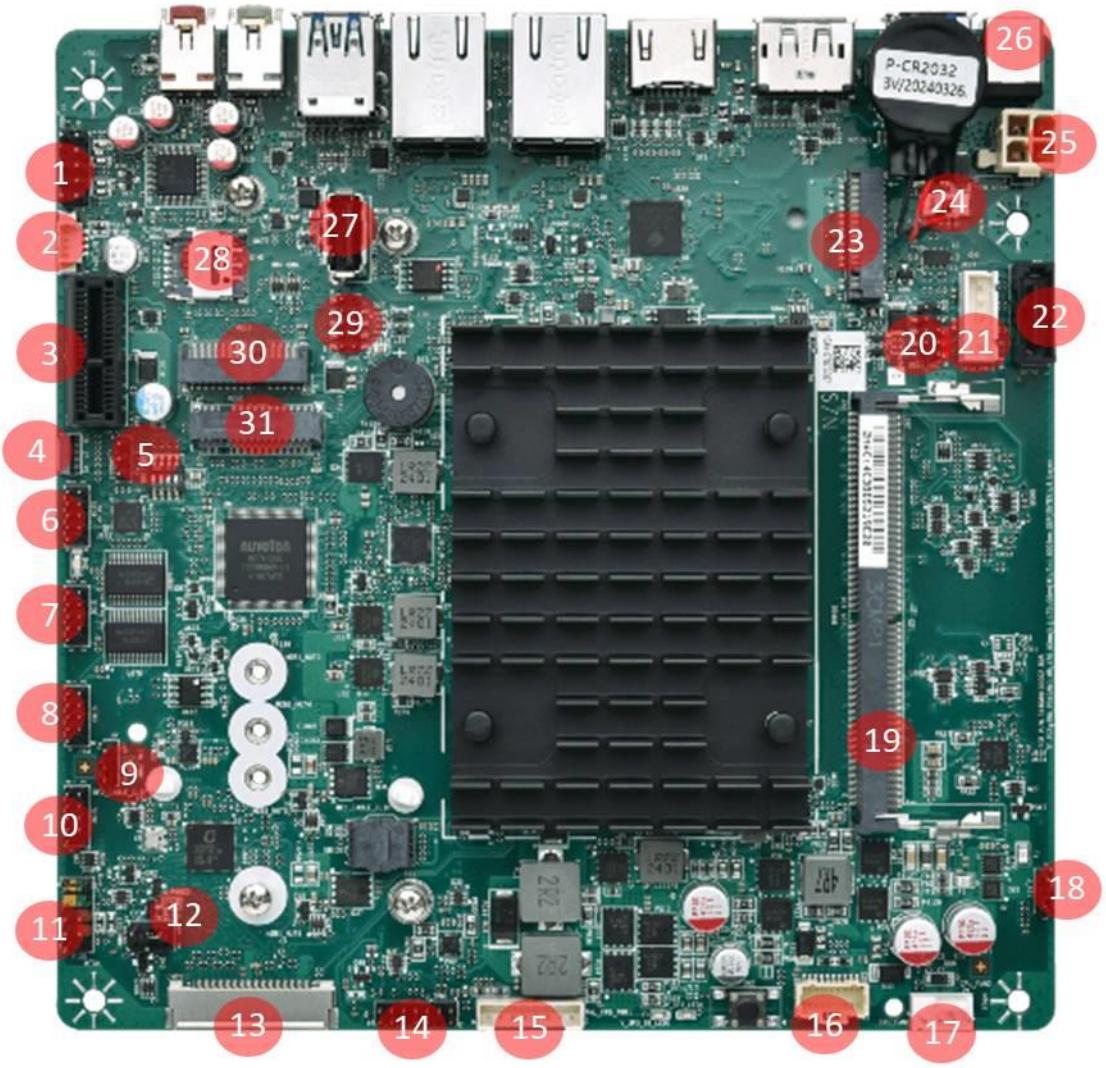
1.3 I/O Placement





Chapter 2: JUMPER SETTING AND PIN DEFINITION

2.1 Jumper and Internal Connector List

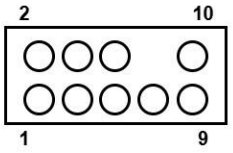


Label	Function
1	Front panel audio header
2	Internal speaker header
3	PCIEx1
4	eSPI interface
5	CMOS clear jumper
6	RS232/422/485 Serial port header (SIO4) *N50 sku NoPOP
7	RS232 Serial port header (SIO1)
8	RS232 Serial port header (SIO3)
9	LVDS inverter power header for BKL
10	RS232 Serial port header (SIO2)
11	Chassis Main Panel Header
12	Panel power Header as Jumper (default 3.3V, option to 5V, 12V)
13	LVDS connector (converter Chrontel® CH7513A-BF)
14	TPM header
15	FPD Brightness Header
16	MiAPi Header
17	CPU FAN header
18	ATX header
19	DDR5 SO-DIMMs memory
20	USB 2.0 HR2
21	SATA power header
22	SATA connector
23	M.2 2280 M key (SATA) for storage
24	CR2032 battery header
25	ATX 4pin Power header
26	DC-in Jack Power Connector
27	USB 2.0 con3
28	SIM slot
29	USB 2.0 HR1
30	M.2 2230 E key (PCIe、USB 2.0) for wireless
31	M.2 3042/3052/2242/2260/2280 B key (SATA, PCIE, USB)

2.2 Internal Connector Pin Define & Jumper Setting

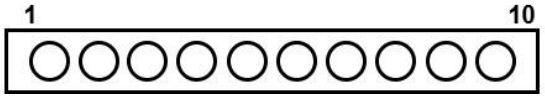
1. Front Panel Connector

PIN	DEFINITION	PIN	DEFINITION
1	FP_MIC_L_CONN	2	AGND
2	FP_MIC_R_CONN	4	FIO_AUD_DET_N
3	FP_HPOUT_R	6	AUD_SENSE_MIC_FP
4	FIO_SENSE	8	No pin
5	FP_HPOUT_L	10	AUD_SENSE_HP



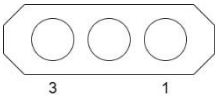
4. eSPI interface

PIN	DEFINITION
1	GND
2	ESPI_RESET_N_R
3	ESPI_CLK_R
4	ESPI_CS0_N_R
5	ESPI_IO3_R
6	ESPI_IO2_R
7	ESPI_IO1_R
8	ESPI_IO0_R
9	V_3P3
10	V_3P3_SB



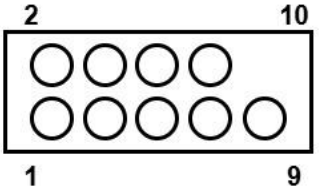
5. CMOS clear jumper

PIN	DEFINITION
1	CMOS_CLEAR
2	GND
3	RTC_CLEAR



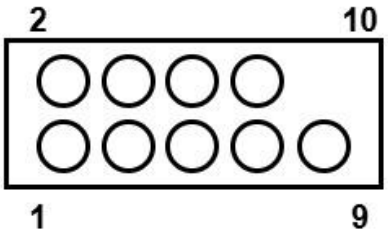
6. RS232/422/485 serial port header (SIO4)

PIN	RS232	RS422	RS485
1	NDCD6 (DCD)	TX-	Data-
2	NRX6 (RX)	TX+	Data+
3	NTX6 (TX)	RX+	NC
4	NDTR6 (DTR)	RX-	NC
5	GND	GND	GND
6	NDSR6 (DSR)	NC	NC
7	NRTS6 (RTS)	NC	NC
8	NCTS6 (CTS)	NC	NC
9	NRI6 (RI)	NC	NC



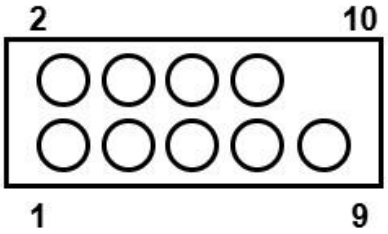
7. RS232 Serial port header (SIO1)

PIN	DEFINITION
1	MDCD3_F_N (DCD)
2	MSIN3_F_N (RX)
3	MSO3_F_N (TX)
4	MDTR3_F_N (DTR)
5	GND
6	MDSR3_F_N (DSR)
7	MRTS3_F_N (RTS)
8	MCTS3_F_N (CTS)
9	MRI3_F_N (RI)



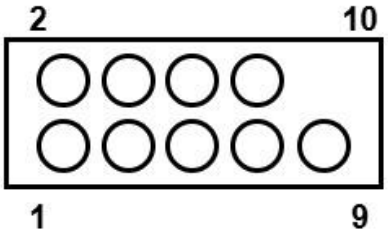
8. RS232 Serial port header (SIO2)

PIN	DEFINITION
1	MDCD4_F_N (DCD)
2	MSIN4_F_N (RX)
3	MSO4_F_N (TX)
4	MDTR4_F_N (DTR)
5	GND
6	MDSR4_F_N (DSR)
7	MRTS4_F_N (RTS)
8	MCTS4_F_N (CTS)
9	MRI4_F_N (RI)



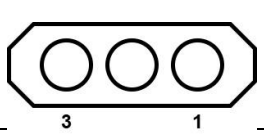
10. RS232 Serial port header (SIO3)

PIN	DEFINITION
1	MDCD5_F_N (DCD)
2	MSIN5_F_N (RX)
3	MSO5_F_N (TX)
4	MDTR5_F_N (DTR)
5	GND
6	MDSR5_F_N (DSR)
7	MRTS5_F_N (RTS)
8	MCTS5_F_N (CTS)
9	MRI5_F_N (RI)



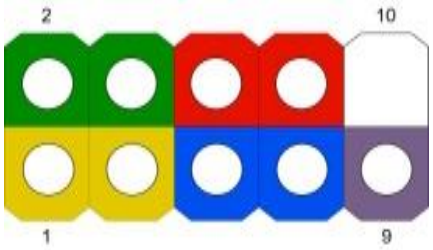
9. LVDS inverter power header

PIN	DEFINITION
1	V_5P
2	BKLT_PWR
3	+12V



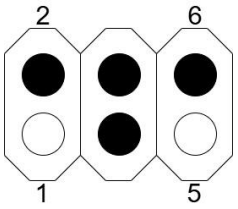
11. Chassis Main Panel Header

PIN	DEFINITION
1	PWR_LED_N_20mils
2	GRN_BLNK_HRD
3	HDD_LED_N
4	YLW_BLNK_HRD
5	GND
6	PS_ON_SW_FIO_N
7	SYS_RESET_FIO_N
8	GND
9	V_5P
10	No pin



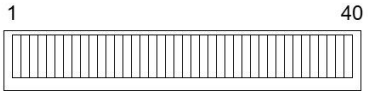
12. Panel power Header as Jumper

PIN	DEFINITION
1	NC
2	V_3P3
3	+12V
4	LCD_VCC_PWR
5	NC
6	V_5P



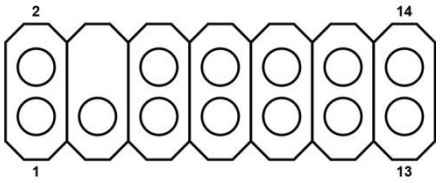
13. LVDS connector

PIN	DEFINITION	PIN	DEFINITION
1	LVDS0_LINK3_CON_DP	21	NC
2	LVDS0_LINK3_CON_DN	22	V_3P3
3	LVDS0_LINK2_CON_DP	23	GND
4	LVDS0_LINK2_CON_DN	24	GND
5	LVDS0_LINK1_CON_DP	25	GND
6	LVDS0_LINK1_CON_DN	26	LVDS0_CLK_CON_DP
7	LVDS0_LINK0_CON_DP	27	LVDS0_CLK_CON_DN
8	LVDS0_LINK0_CON_DN	28	GND
9	LVDS1_LINK3_CON_DP	29	GND
10	LVDS1_LINK3_CON_DN	30	GND
11	LVDS1_LINK2_CON_DP	31	CABLE_ID1
12	LVDS1_LINK2_CON_DN	32	CH7513_BL_EN
13	LVDS1_LINK1_CON_DP	33	CH7513_BKLT_CTRL
14	LVDS1_LINK1_CON_DN	34	LVDS1_CLK_CON_DP
15	LVDS1_LINK0_CON_DP	35	LVDS1_CLK_CON_DN
16	LVDS1_LINK0_CON_DN	36	BKLT_PWR
17	GND	37	BKLT_PWR
18	LCD_VCC	38	BKLT_PWR
19	LCD_VCC	39	CABLE_ID3
20	LCD_VCC	40	CABLE_ID2



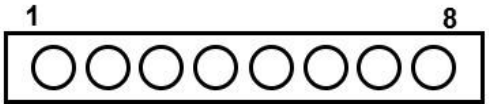
14. TPM Header

PIN	DEFINITION	PIN	DEFINITION
1	TPM_3V3_Power	2	SPI0_CS2_TPM_N
3	TPM_SPI_MISO_IO1	4	NC
5	TPM_SPI_MOSI_IO0	6	PCH_PLTRST_N
7	TPM_IRQ	8	GND
9	NC	10	PCH_PLTRST_N
11	NC	12	TPM_DET_1_N
13	NC	14	V_3P3_SB



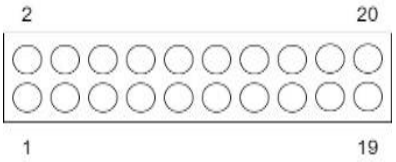
15. FPD Brightness Header

PIN	DEFINITION
1	PNL_BKLT_PWR_EN
2	PNL_BKLT_CTRL_PWM
3	BKLT_PWR
4	BKLT_PWR
5	GND
6	GND
7	PNL_BRIGHTNESS_UP
8	PNL_BRIGHTNESS_DOWN



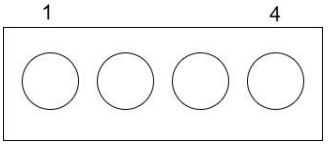
16. MIAPI Header

PIN	DEFINITION	PIN	DEFINITION
1	MAPI_GPIO1	2	V_5P
3	MAPI_GPIO2	4	MAPI_GPIO6
5	MAPI_GPIO3	6	MAPI_GPIO7
7	MAPI_GPIO4	8	MAPI_GPIO8
9	MAPI_GPIO5	10	MAPI_GPIO9
11	MAPI_WDTO_N	12	MAPI_GPIO10
13	MiAPI_PWRBT_IN_N	14	SMB_DATA_SOC_3P3SB
15	MAPI_UART_TXD	16	SMB_CLK_SOC_3P3SB
17	MAPI_UART_RXD	18	5VSB
19	GND	20	NC



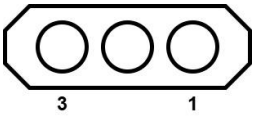
17. CPU Fan Header

PIN	DEFINITION
1	GND
2	+12V
3	CPUFANIN
4	CPU_FAN_CTRL



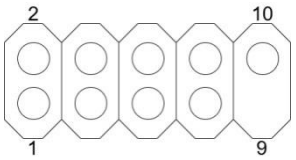
18. ATX Header

PIN	DEFINITION
1	SW_PWRBT_N
2	SIO_AT_L_ATX_H_SET
3	GND



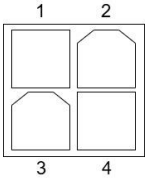
20. USB2.0 HR2

PIN	DEFINITION	PIN	DEFINITION
1	USB2B_5V	2	USB2B_5V
3	USB2_HR2_1N	4	USB2_HR2_2N
5	USB2_HR2_1P	6	USB2_HR2_2P
7	GND	8	GND
9	No pin	10	NC



25. ATX 4pin power header

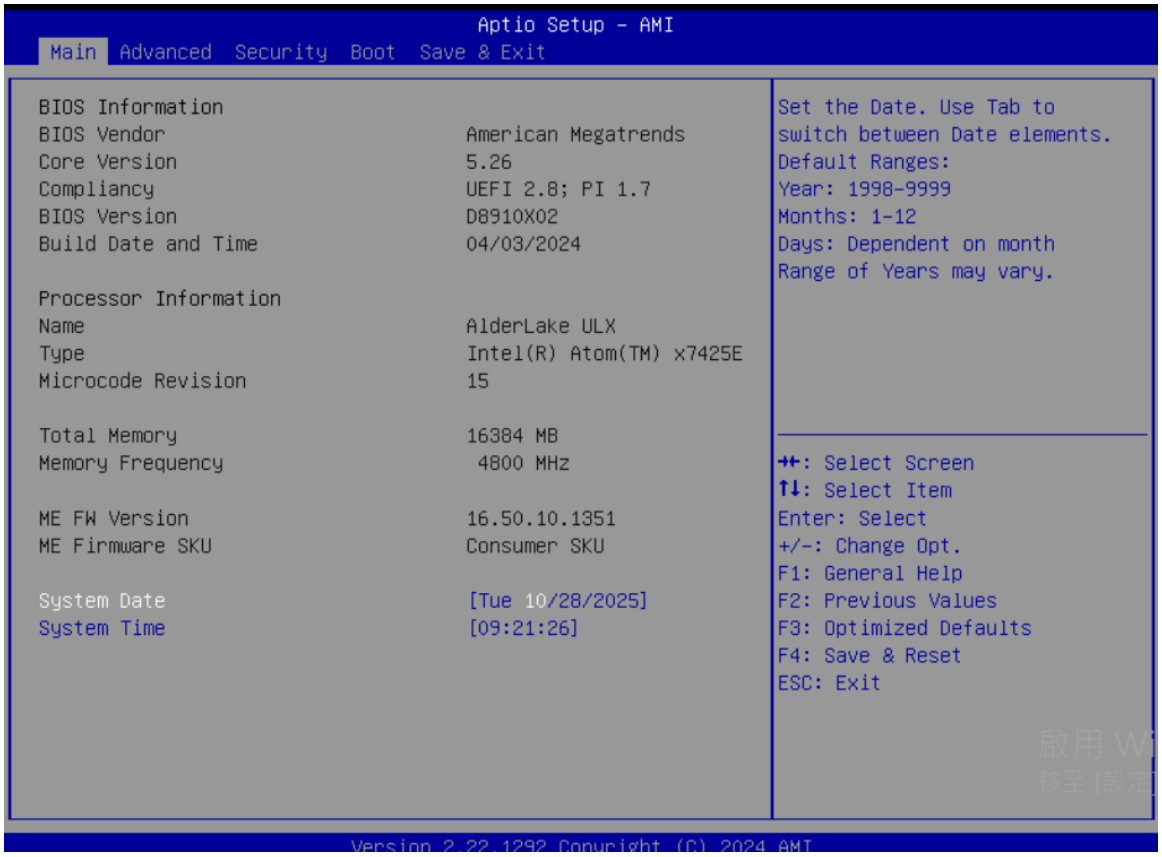
PIN	DEFINITION
1	GND
2	GND
3	VIN_9V_24V
4	VIN_9V_24V



Chapter 3: BIOS SETUP

This chapter provides information about how to set up BIOS and use BIOS menu items to adjust basic function settings.

3.1 Main Page



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

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

Field Name	Core Version
Default Value	5.26
Comment	This field is not selectable. There is no help text associated with it.

Field Name	Compliancy
Default Value	UEFI 2.7 ; PI 1.6
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**
Default Value	Display the installed CPU brand.
Comment	This field is not selectable. There is no help text associated with it.

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

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

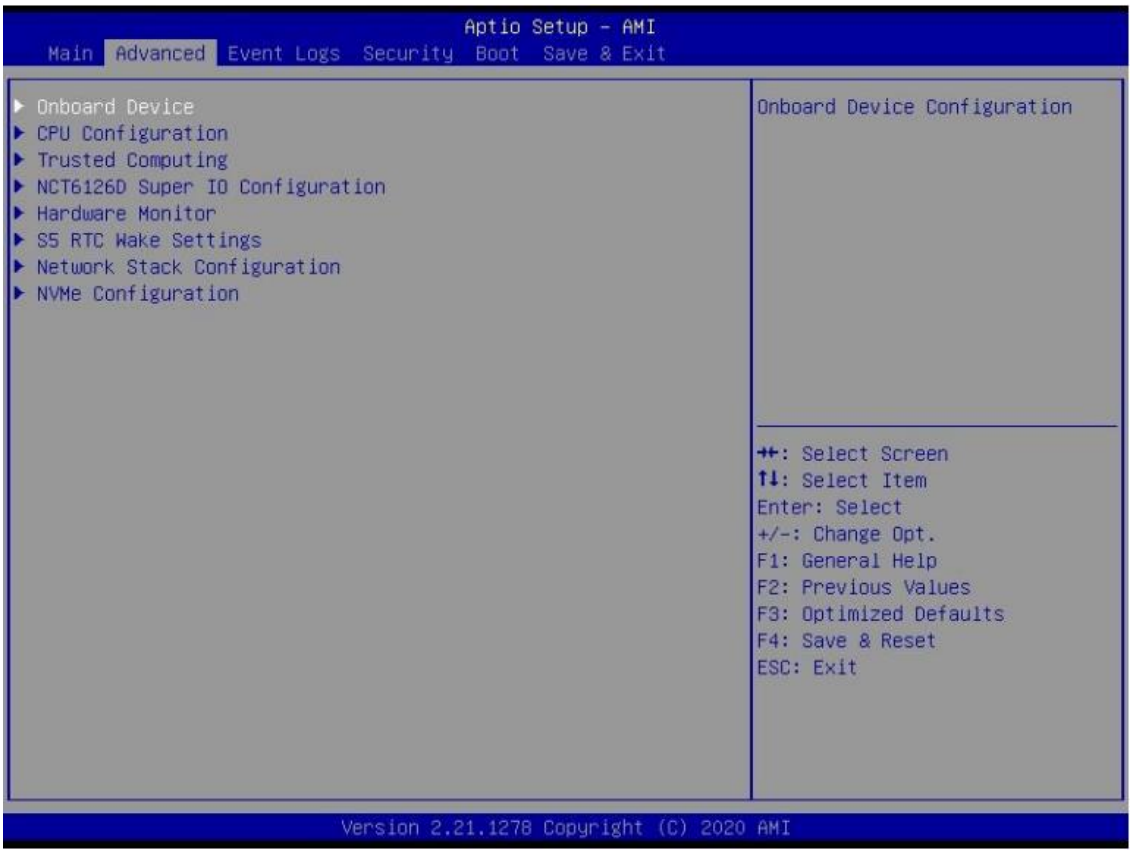
Field Name	**Memory Speed**
Default Value	Display the installed memory Frequency
Comment	This field is not selectable. There is no help text associated with it.

Field Name	**ME FW Version**
Default Value	ME Firmware Version.
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 yyyy : 2005-2099
Help	Set the Date. Use Tab to switch between Date elements. Default Rangers Year : 2005-2099 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.

3.2 Advanced Page



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	**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.

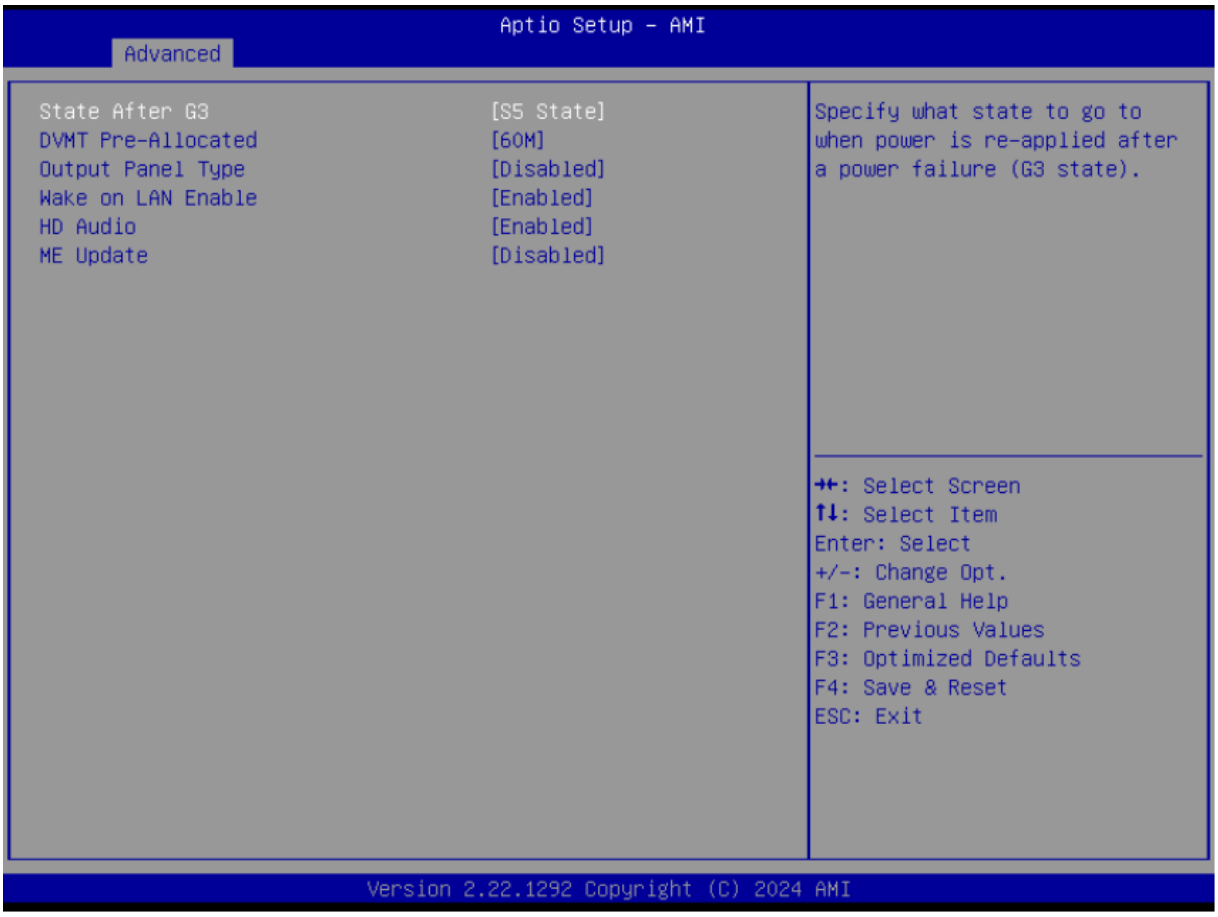
Field Name	**HW Monitor**
Help	Monitor hardware status
Comment	Press Enter when selected to go into the associated Sub-Menu.

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.

3.2.1 Onboard Device



Field Name	State After G3
Default Value	[S5 State]
Possible Value	S0 State S5 State
Help	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	Output Panel Type
Default Value	[Disabled]
Possible Value	LVDS Disabled
Help	Select Output Panel Type.

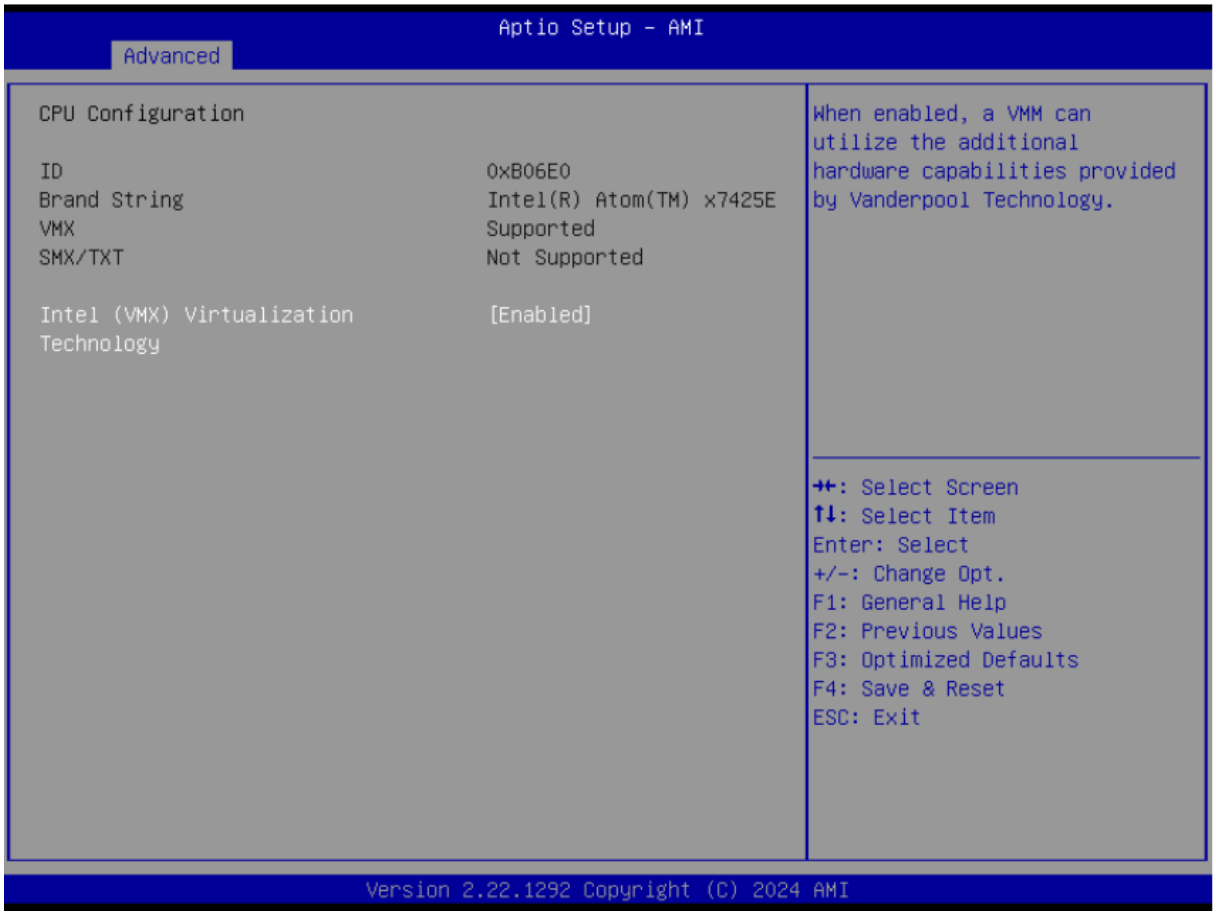
Field Name	LVDS Panel Type(show when Output Panel Type is LVDS)
Default Value	[1920x1080 24bit Dual Channel]
Possible Value	800x600 18bit Single Channel 1024x768 18bit Single Channel 1024x768 24bit Single Channel 1280x768 18bit Single Channel 1280x800 24bit Single Channel 1280x960 18bit Single Channel 1280x1024 24bit Dual Channel 1366x768 18bit Single Channel 1366x768 24bit Single Channel 1440x900 24bit Dual Channel 1440x1050 24bit Dual Channel 1600x900 24bit Dual Channel 1680x1050 24bit Dual Channel 1600x1200 24bit Dual Channel 1920x1080 24bit Dual Channel 1920x1200 24bit Dual Channel
Help	Select LVDS panel used by Internal Graphics Device by selecting the appropriate setup item.

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

3.2.2 CPU Configuration



Field Name	Brand String
Default Value	Displays the 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.

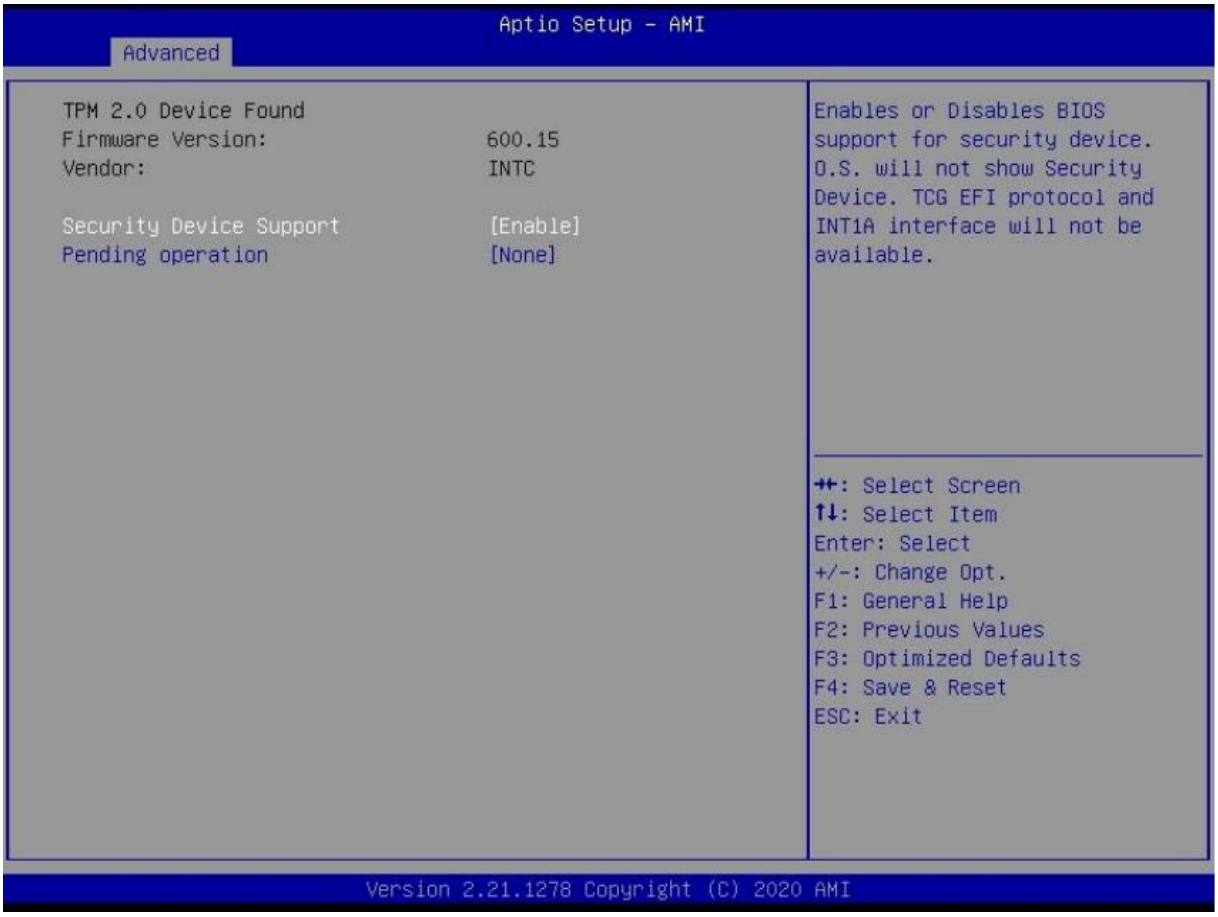
Field Name	VXM
Default Value	VMX Supported or Not
Comment	This field is not selectable. There is no help text associated with it.

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.

Field Name	Intel (VMX) Virtualization Technology
Default Value	[Enabled]
Possible Value	Enabled Disabled

Help	When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

3.2.3 Trusted Computing



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

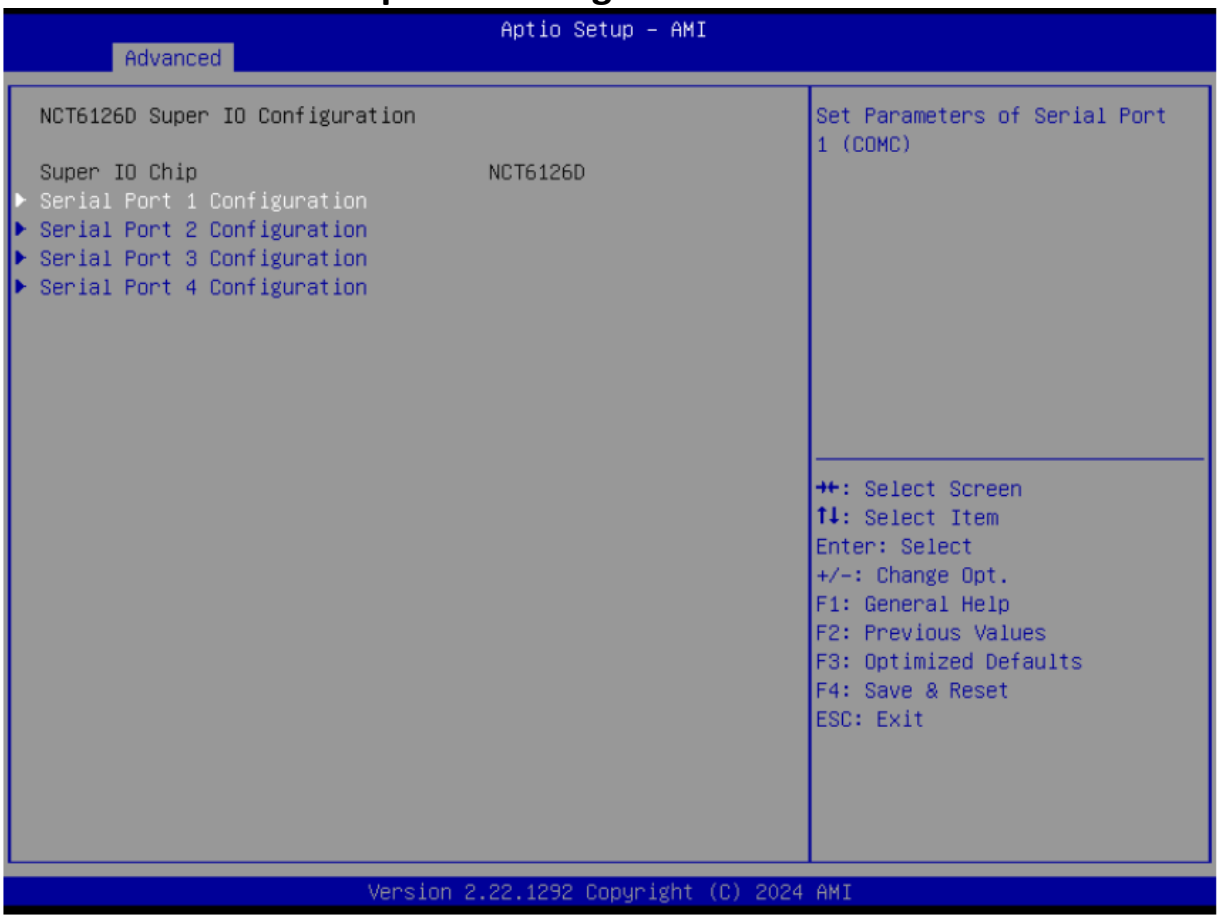
Field Name	**Vendor**
Default Value	TPM module vendor name.
Comment	This field is not selectable. There is no help text associated with it.

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.

3.2.4 NCT6126D Super IO Configuration



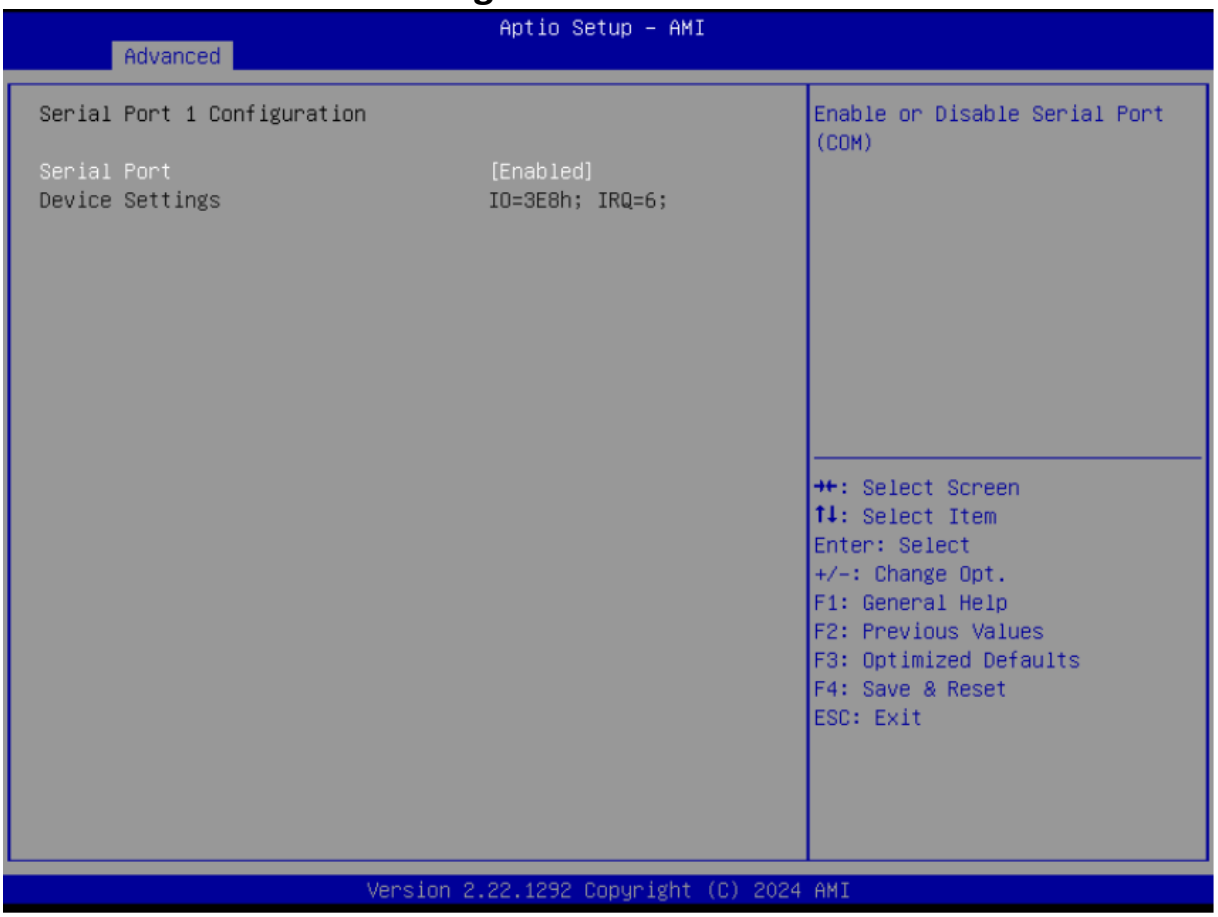
Field Name	**Serial Port 1 Configuration**
Help	Set Parameters of Serial Port 1 (COMC)
Comment	Press Enter when selected to go into the associated Sub-Menu.

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

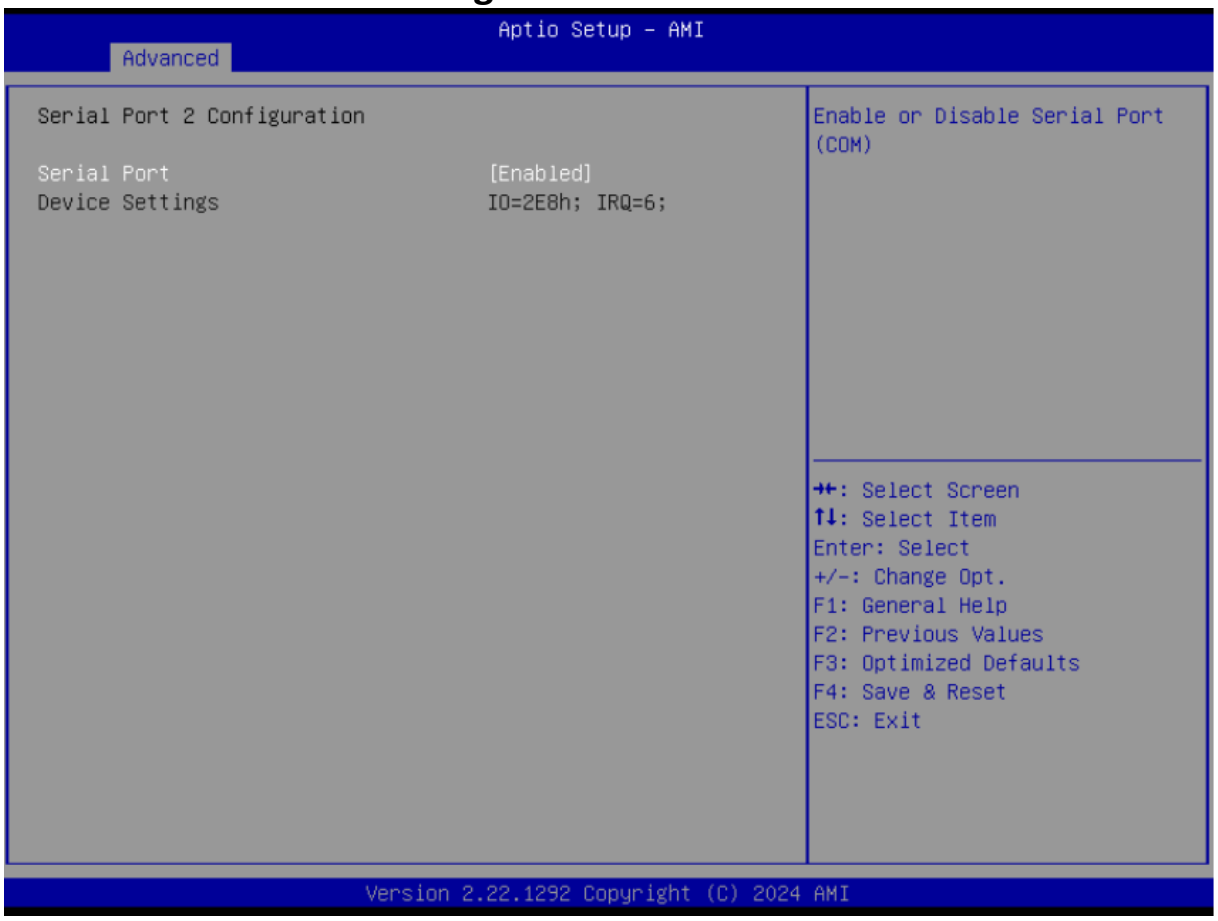
3.2.4.1 Serial Port 1 Configuration



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

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.

3.2.4.2 Serial Port 2 Configuration



Field Name	Serial Port
Default Value	[Enabled]
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.

3.2.4.3 Serial Port 3 Configuration

Field Name	Serial Port
Default Value	[Enabled]
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.

3.2.4.4 Serial Port 4 Configuration(Option)

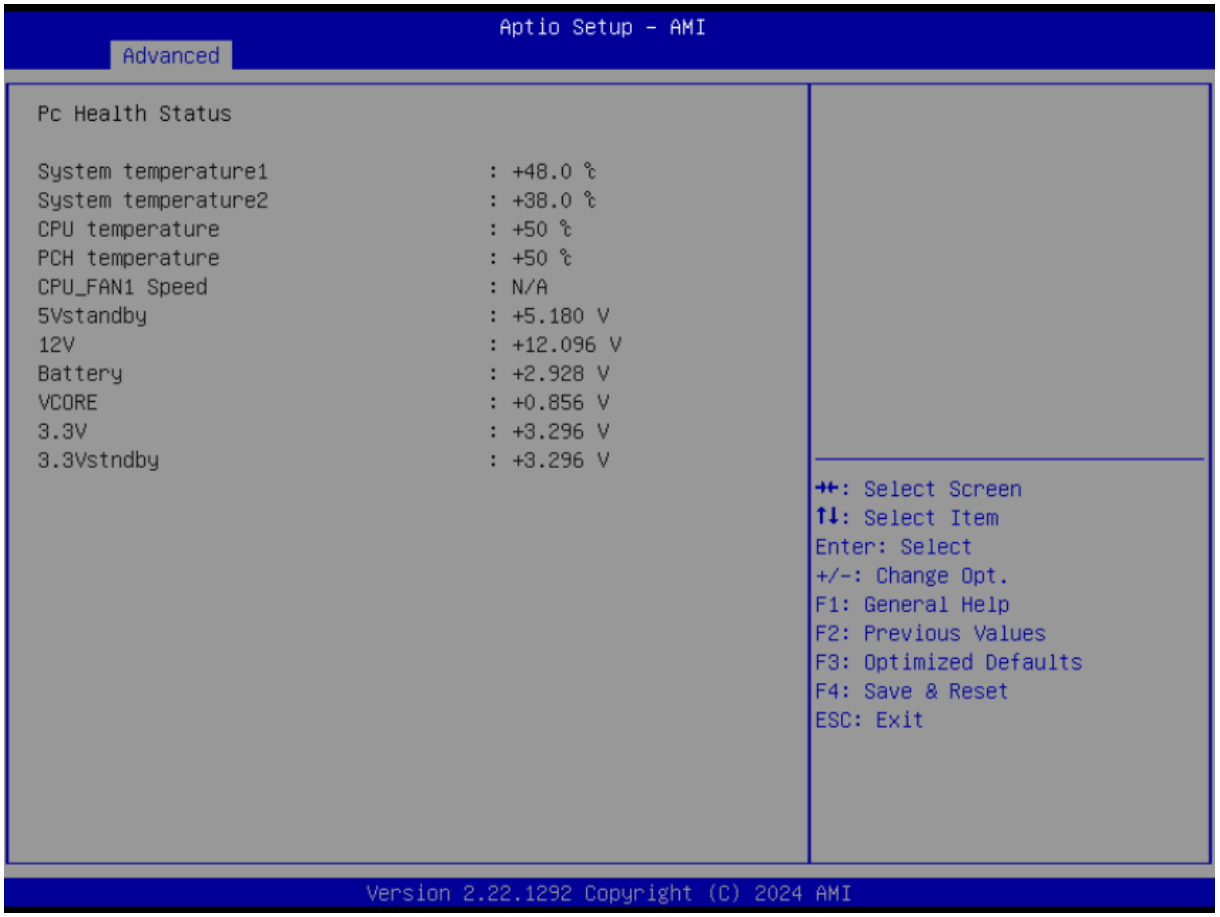
Field Name	Serial Port
Default Value	[Enabled]
Possible Value	Disabled Enabled
Help	Enable or Disable Serial Port(COM)

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.

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

Field Name	Slew Configuration
Default Value	[1.5Mbps]
Possible Value	256Kbps 1.5Mbps
Help	Configure serial port slew.

3.2.5 Hardware Monitor



Field Name	Range
CPU Temperature	Depend on CPU
System Temperature1	-20 ~ 120 °C
System Temperature2	-20 ~ 120 °C
CPU_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.
5Vstandby	4.75V~5.25V
12V	0.9975~1.1025V
Battery	1.045~1.155V
VCORE	3.135~3.465V
3.3V	3.135V~3.465V
3.3V Standby	3.135V~3.465V

3.2.6 S5 RTC Wake Settings

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 3am 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

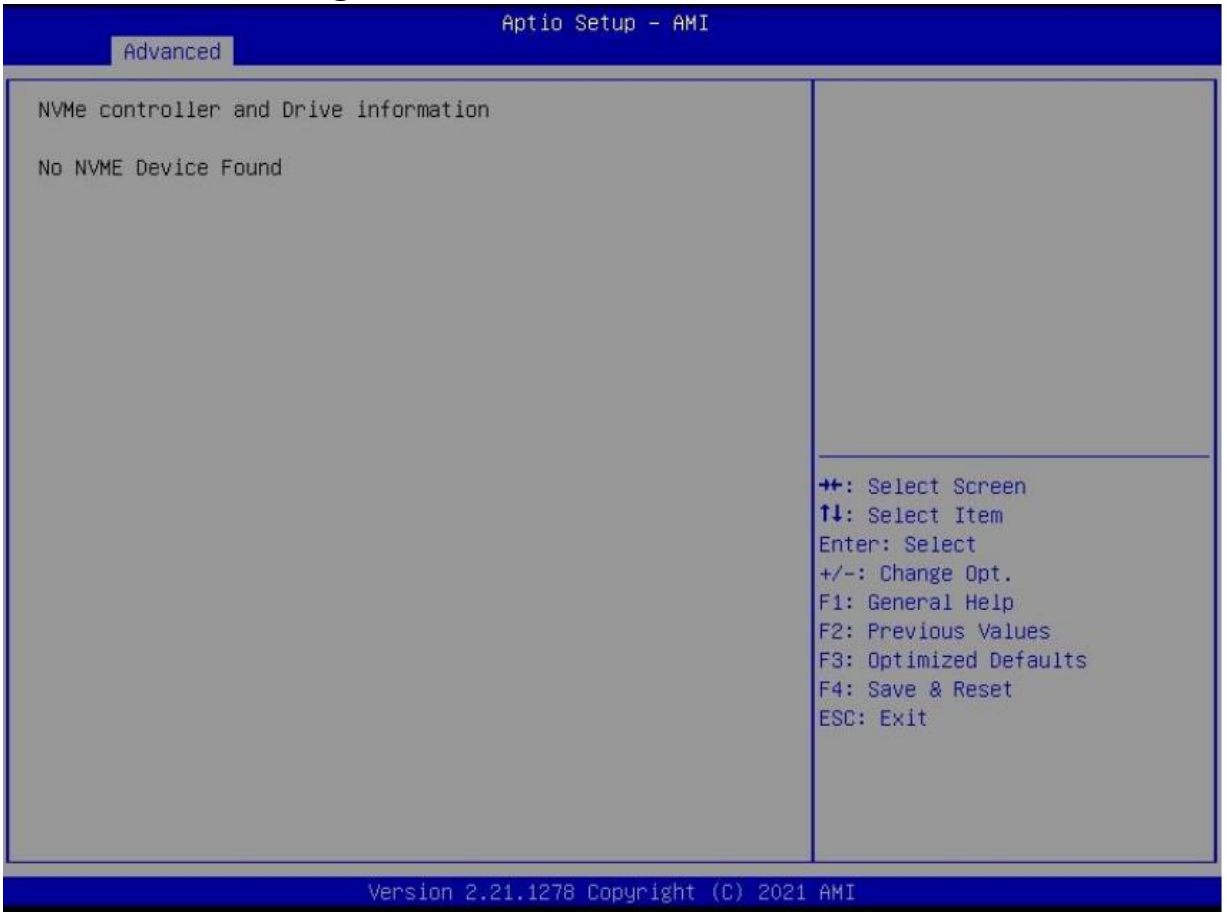
3.2.7 Network Stack Configuration

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

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

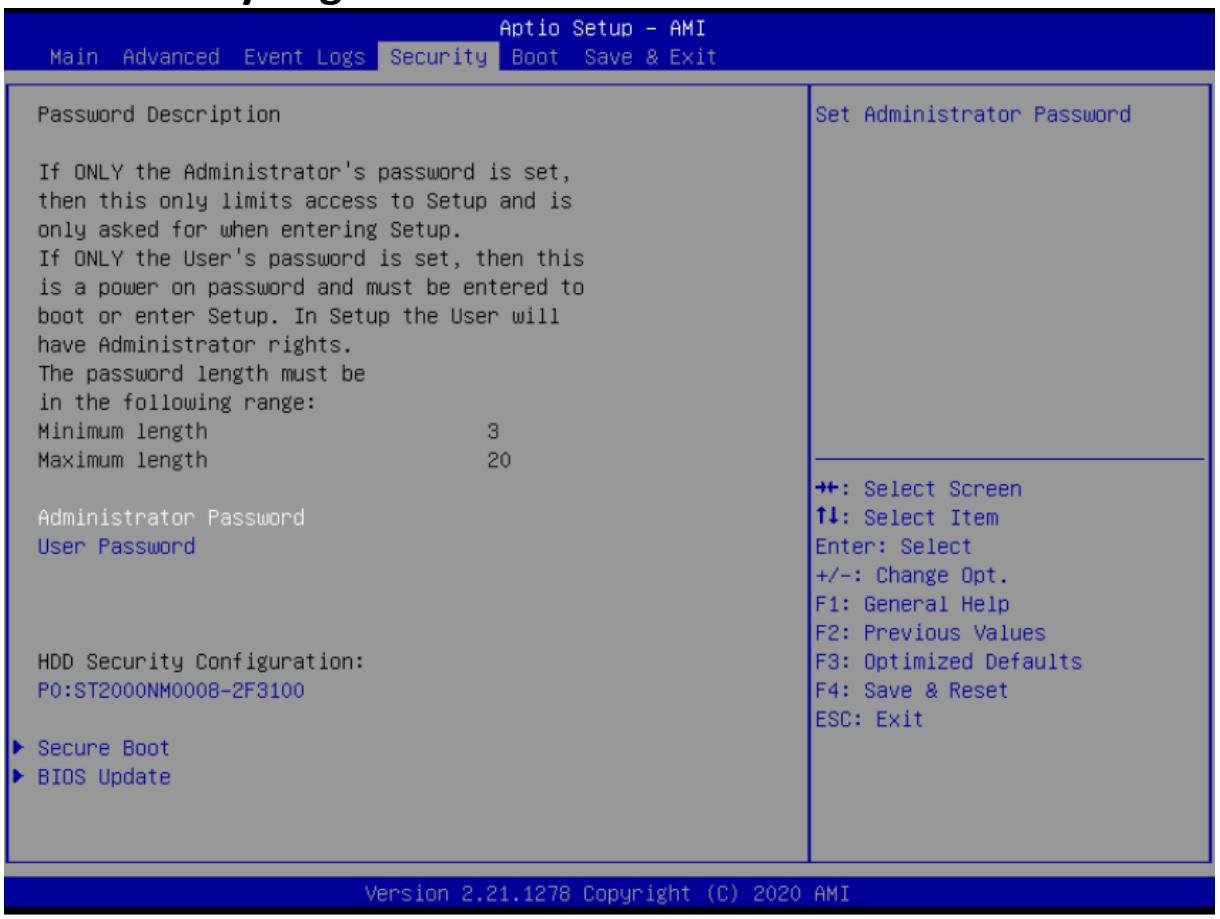
Field Name	Ipv6 PXE Support (Available when Network stack Enabled)
Default Value	[Disabled]
Possible Value	Disabled Enabled
Help	Enable/Disable Ipv6 PXE Boot Support. If disabled IPV6 PXE boot support will not be available.

3.2.8 NVMe Configuration



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

3.3 Security Page



Field Name	Administrator Password
Help	Set Administrator Password

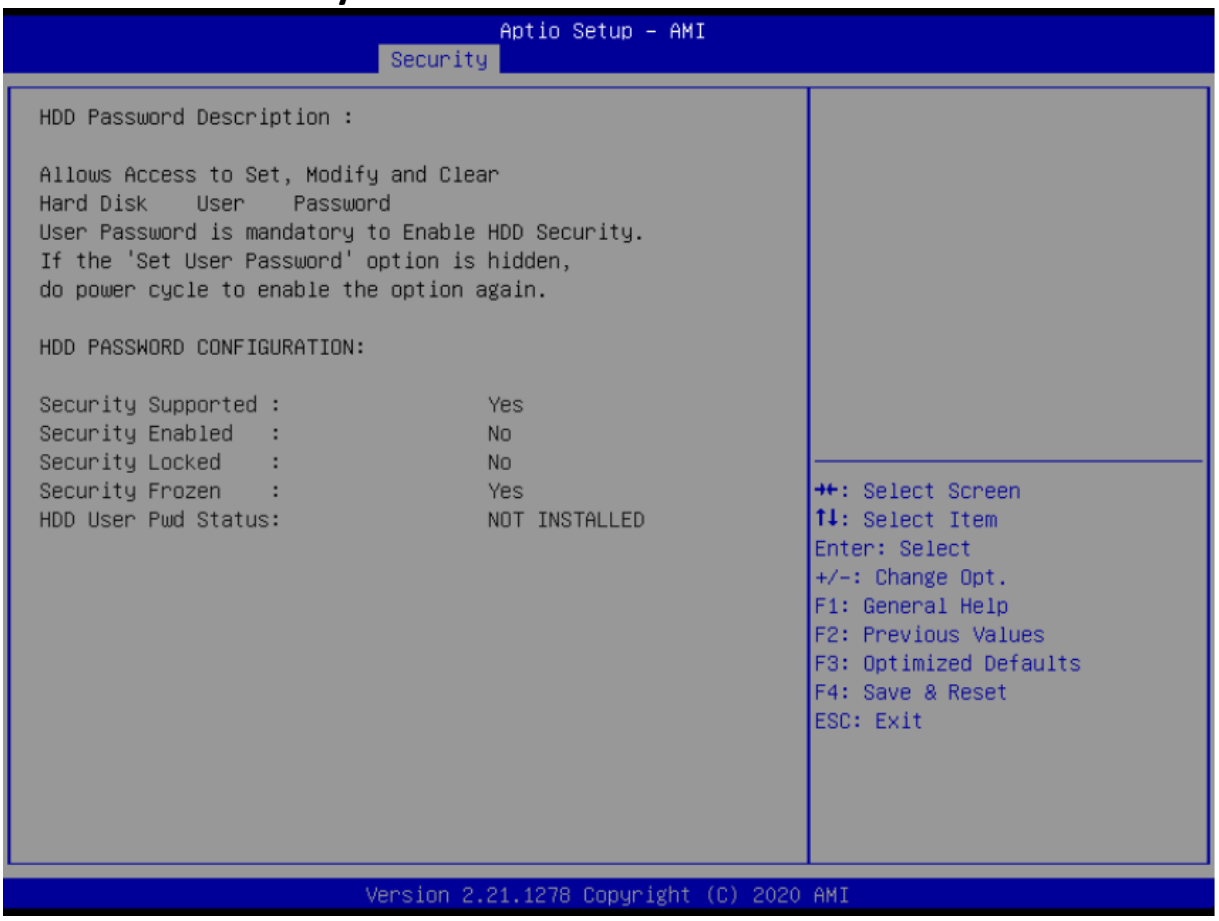
Field Name	User Password
Help	Set User Password.

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.

3.3.1 HDD Security



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

3.3.2 Secure Boot

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

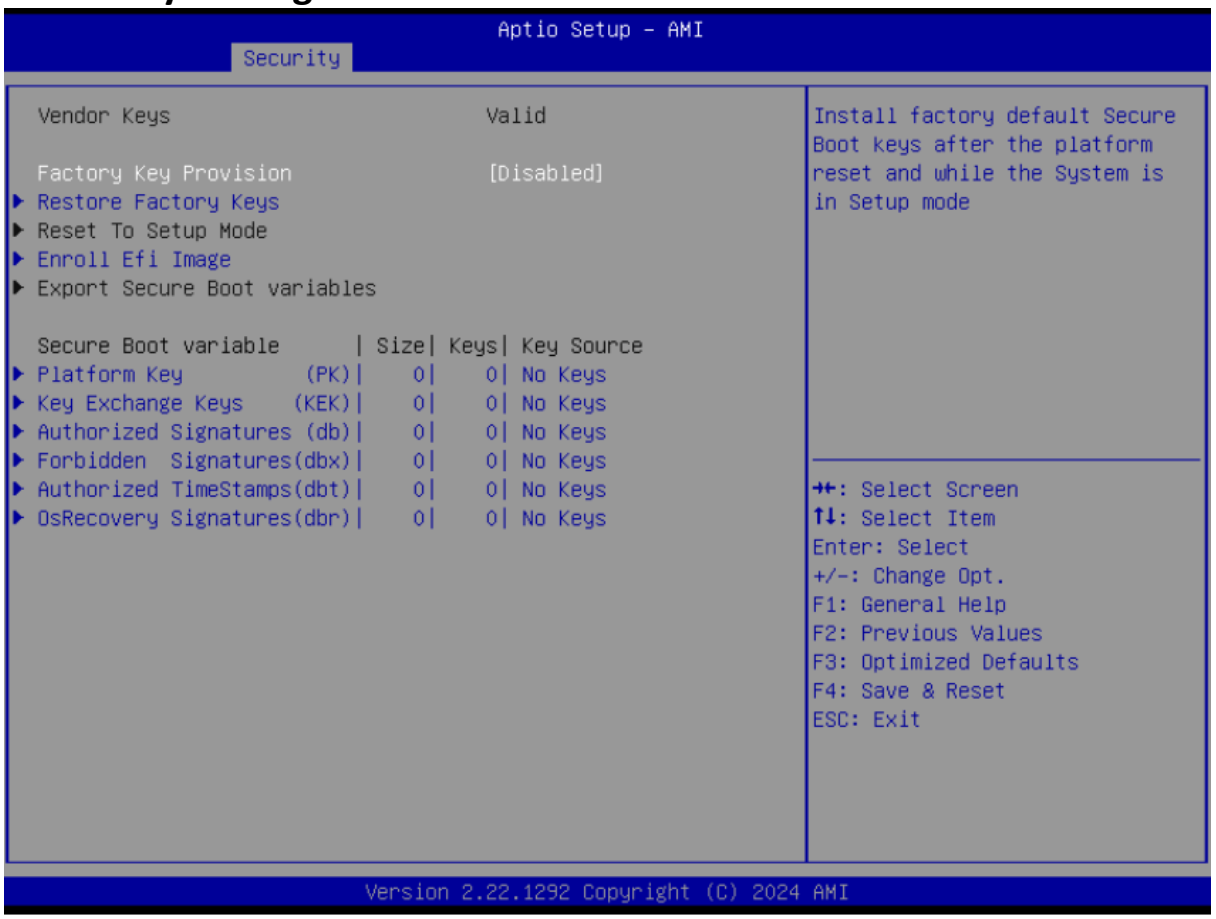
Field Name	Restore Factory Keys
Help	Force System to User Mode. Install factory default Secure Boot key databases

Field Name	Reset to Setup Mode

Help	Delete all Secure Boot key databases from NVRAM

Field Name	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

3.3.3 Key Management



Field Name	Factory Key Provision
Default Value	[Disabled]
Possible Value	Enabled Disabled
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	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(db)
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)

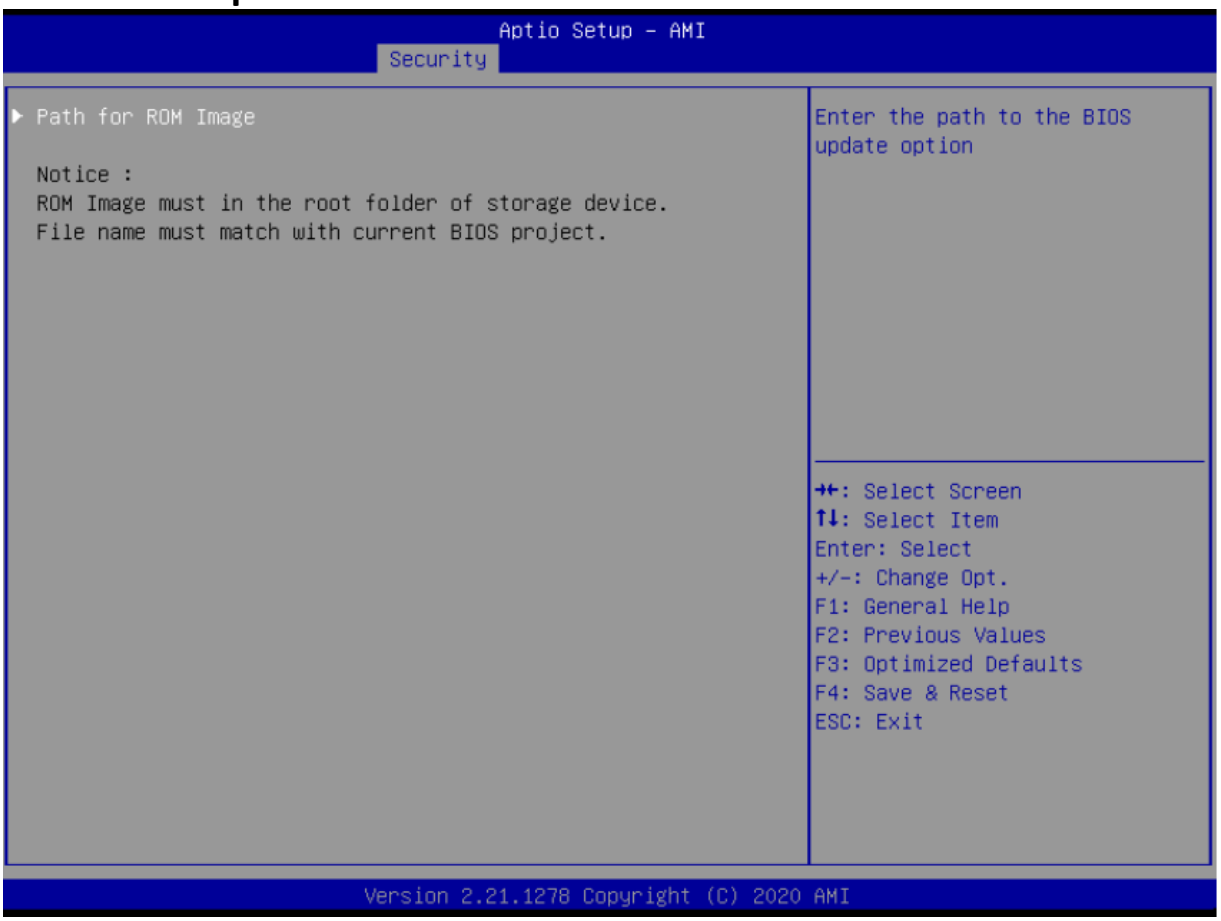
	Key Source: Factory,External,Mixed
Comment	Press Enter when selected to go into the associated Sub-Menu.

Field Name	**Forbidden Signatures(dbx)**
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 TimeStamps**
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.

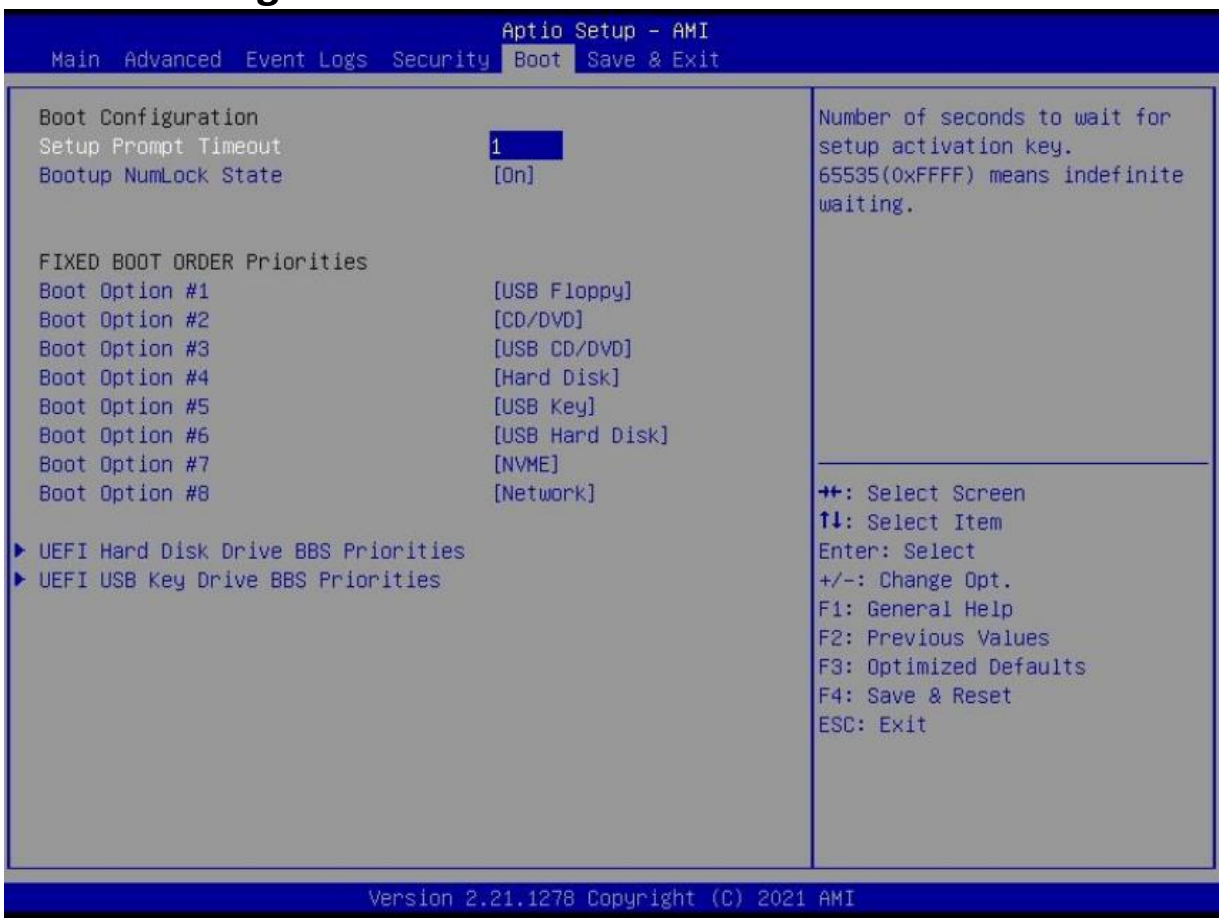
Field Name	**OsRecovery Signatures**
Default Value	Size:0, Keys:0, Key source: No Keys
Help	Enroll Factory Defaults or load certificates from a file: 1.Public Key Certificate: a)EFI_SIGNATURE_LIST b)EFI_CERT_X509 (DER) c)EFI_CERT_RSA2048 (bin) d)EFI_CERT_SHAXXX 2.Authenticated UEFI Variable 3.EFI PE/COFF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

3.3.4 BIOS Update



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

3.4 Boot Page



Field Name	Setup Prompt Timeout
Default Value	1
Possible Value	1~65535
Comment	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.

Field Name	Bootup NumLock State
Default Value	[On]
Possible Value	On Off
Comment	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
Comment	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
Comment	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
Comment	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
Comment	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
Comment	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
Comment	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
Comment	Sets the system boot order

Field Name	Boot Option #8
Default Value	[Network]
Possible Value	USB Floppy, CD/DVD, USB CD/DVD, Hard Disk , USB Key, USB Hard Disk , NVME, Network, Disabled
Comment	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) CDROM/DVD ROM Drive BBS Priorities**
Help	Specifies the Boot Device Priority sequence from available UEFI CDROM/DVD 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 Hard Disk 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 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 UEFI 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 Hard Disk Drives.
Comment	Press Enter when selected to go into the associated Sub-Menu.

3.4.1 (List Boot Device Type) Drive BBS Priorities

Field Name	Boot Option #1
Default Value	
Possible Value	Boot Device Name 1 of this type, Disable
Help	Sets the system boot order

3.5 Save & Exit Page

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.