



# — EMB-2121

10\*10 主板  
USER Manual V1.1

## USER MANUAL 用户手册

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## 安全须知

1	产品使用前，务必仔细阅读产品说明书。
2	对未准备安装的板卡，应将其保存在防静电保护袋中。
3	在从包装袋中拿板卡前，应将手先置于接地金属物体上一会儿，以释放身体及手中的静电。
4	在拿板卡时，需佩带静电保护手套，并且应该养成只触及边缘部份的习惯。
5	主板与电源连接时，请确认电源电压。
6	为避免人本被电击或产品被损坏，在每次对主板、板卡进行拔插或生新配置时须先关闭交流电源或将交流电源线从电源插座中拔掉。
7	在对板卡进行搬动前，先将交流电源线从电源插座中拔掉。
8	当您需连接或拔除任何设备前，须确定所有的电源线事先已被拔掉。
9	为避免频繁开关机对产品造成不必要的损伤,关机后,应至少等待30秒后再开机。
10	设备在使用过程时出现异常情况，请找专业人员处理。

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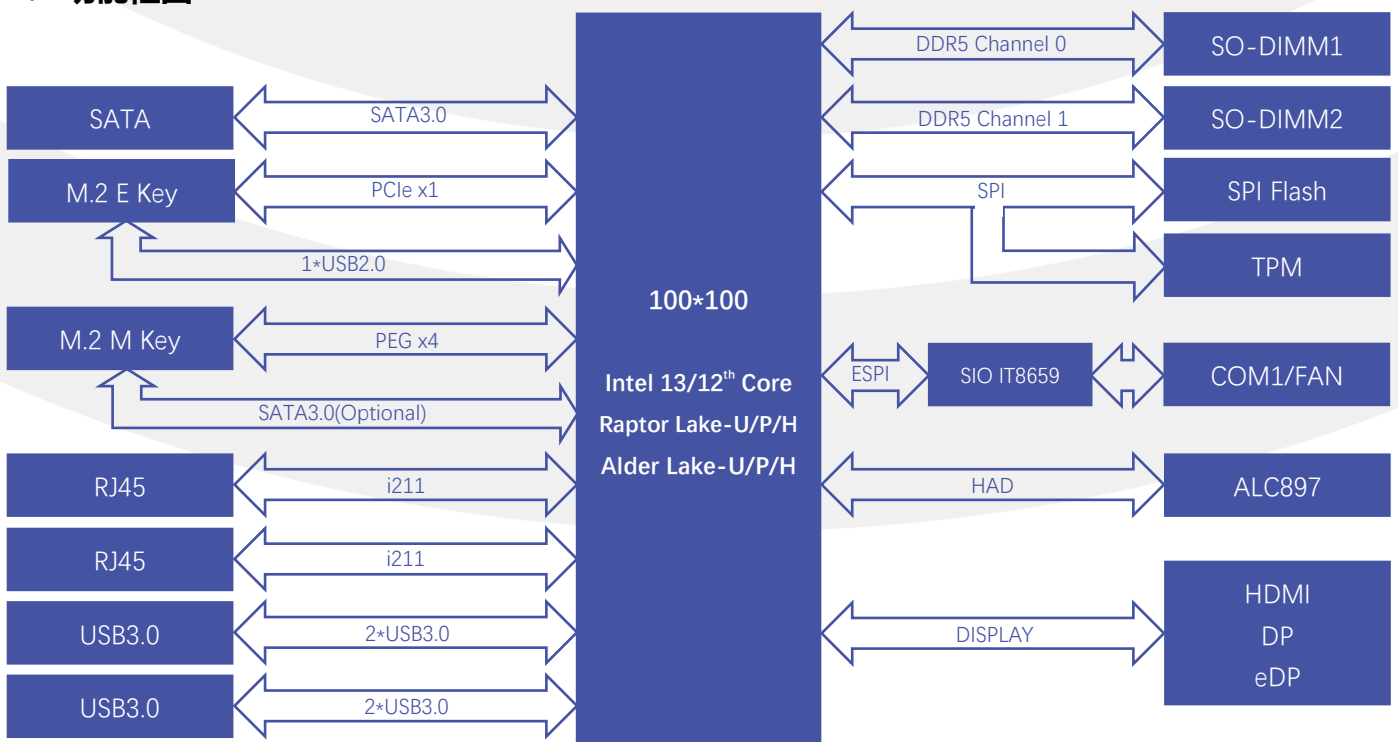
## 第一章 产品介绍

### 1.1 产品规格

Model		EMB-2121		
配置 Item	规格 Specification	描述 Describe		
处理器 Processor System	处理器 CPU	i3-1220P	i5-1250P	i7-1270P
	内核数 Core Number	10C/12T	12C/16T	12C/16T
	最高主频 Max. Speed	3.3 GHz	3.3 GHz	3.5 GHz
	三级缓存 L3 Cache	12M	12M	18M
	功耗 TDP (W)	28W	28W	28W
	BIOS	AMI EFI with CMOS backup in 32MB SPI BIOS		
内存 Memory	规格 Technology	DDR5 4800MHz		
	最大容量 Max. Capacity	64G		
	插槽 Socket	2*SO-DIMM		
存储 Storage	SATA	1*SATA3.0 2Pin 5V		
扩展插槽 Expansion Slot	M.2	1*M.2 M-Key 2280(NVMe PCIe 4.0 x4 or SATA3.0 协议) 1*M.2 E-Key(Pcie+USB2.0 协议, WIFI/BT)		
显示 Graphics	最多显示 Multiple Display	3Ports		
	后面板 Rear I/O	1*HDMI2.0 1*DP++		
	插针 Header Pin	1*eDP		
	分辨率 Resolution	HDMI2.0:4096*2160@60Hz DP:4096*2160@60Hz eDP:4096*2160@120Hz HDR		
USB / Type-C	前面板 Front I/O	4*USB3.2		
	插针 Header Pin	1*USB2.0(2.0mm_2*5Pin)		
串口 COM	插针 Header Pin	1*RS232/485/422(2.0mm)		

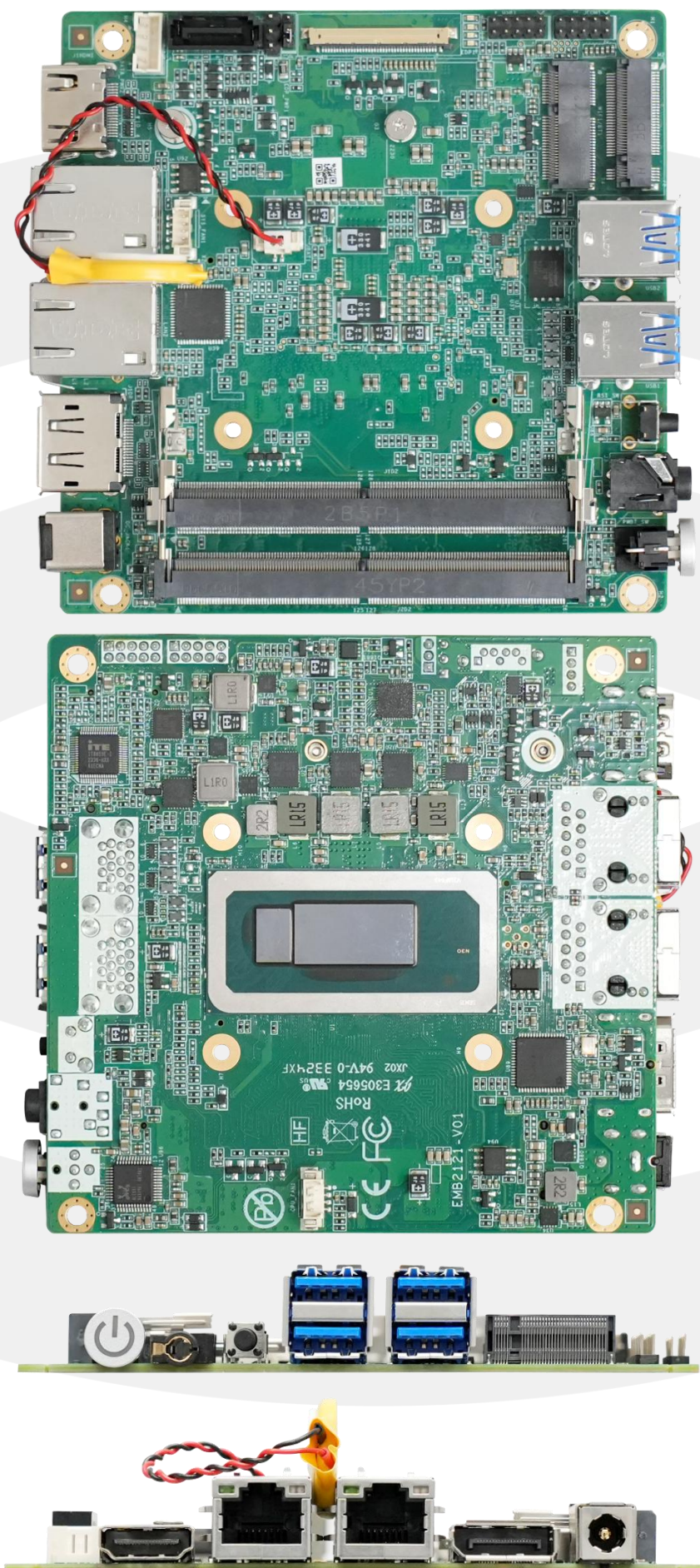
<b>音频</b> Audio	<b>前面板</b> Front I/O	二合一音频孔
<b>以太网</b> Ethernet	<b>控制器</b> Controller	Integrated 10/100/1000M/Adaption (Intel® Ethernet Controller i211)
	<b>后面板</b> Rear I/O	2*RJ45
<b>其它</b> Others	<b>按钮</b> Button	1*Power Button 1*Reset Button
	<b>TPM</b>	TPM2.0(Optional)
<b>电源</b> Power Requirements	<b>电源类型</b> Power Type	DC 12-19V, 150W 1*DC Jack
	<b>连接器</b> Connector type	适配器供电
<b>环境</b> Environment	<b>工作温度</b> Operating Temperature	-20~60°C
	<b>存储温度</b> Storage Temperature	-40~85°C
<b>物理特性</b> Physical	<b>尺寸</b> Dimensions	100*100mm
	<b>PCB 颜色</b> Color	Green
<b>操作系统</b> OS	<b>Windows</b>	Support
	<b>Linux</b>	Support

## 1.2 功能框图





1.3 产品照片

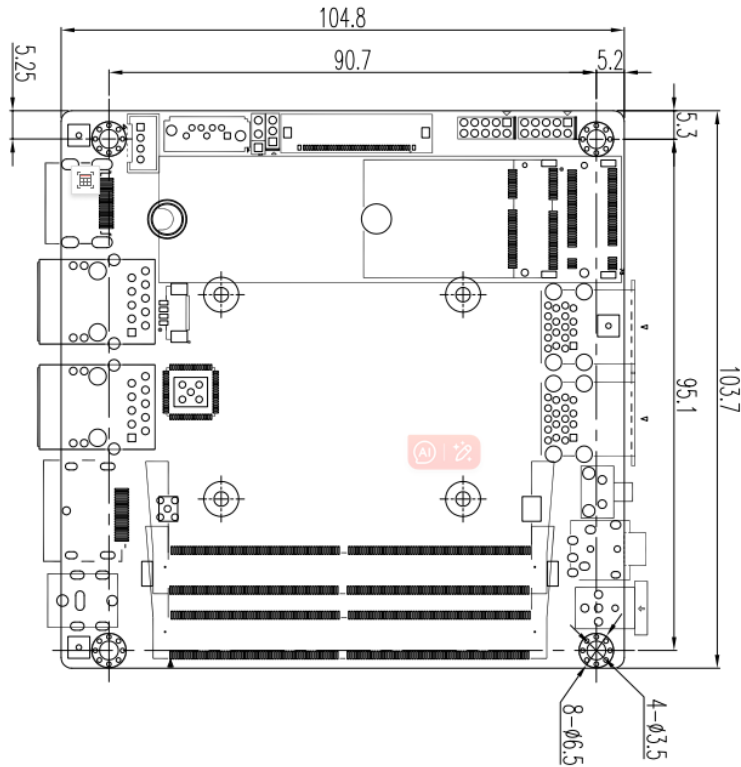




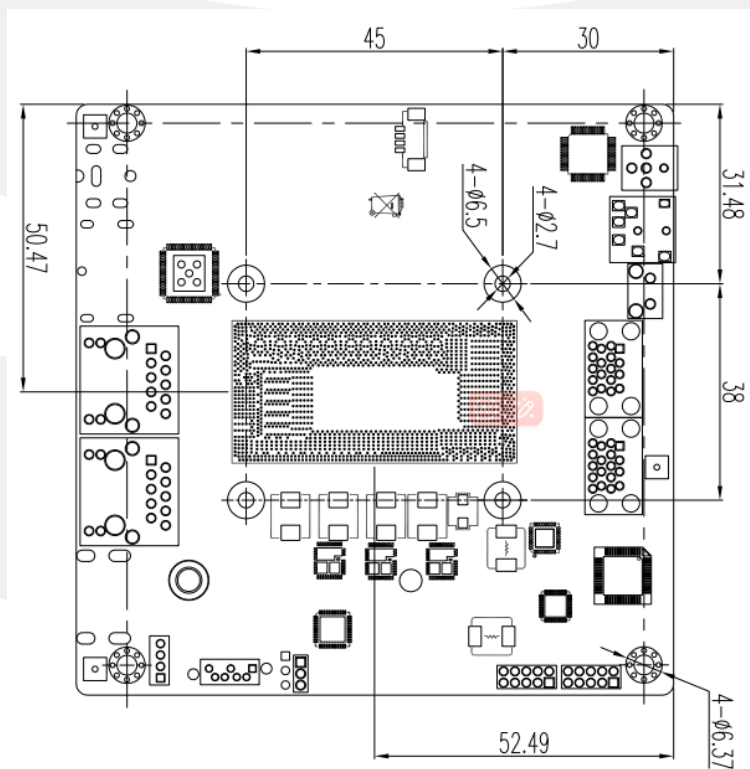
## 第二章 安装说明

### 2.1 接口/尺寸图

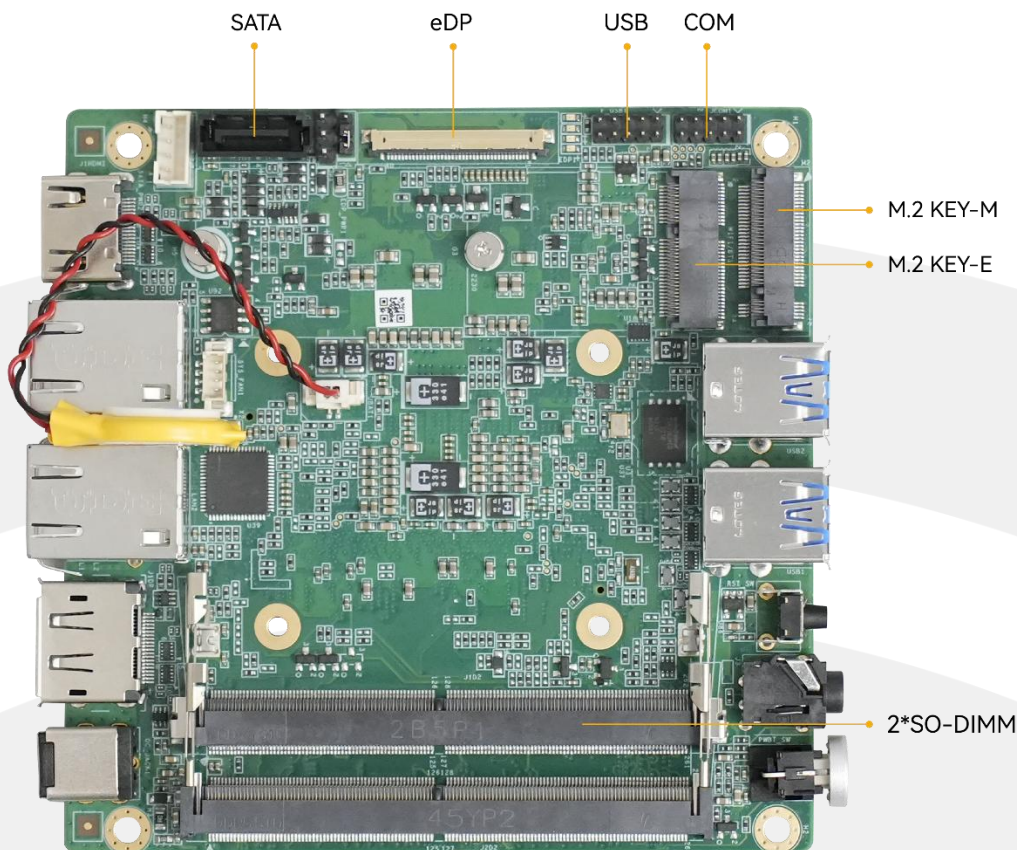
下图为主板的接口图。安装设备时，请对照此示意图并仔细阅读下面的说明，安装组件过程中必须小心，对于有些部件，如果安装不正确，设备将不能正常工作。



正面接口



反面接口



## 2.2 硬件安装

**⚠ 注意：操作时，请戴上防静电手套，因为静电有可能会损坏部件。**

本主板关键元器件都是集成电路，而这些元件很容易因为遭受静电的影响而损坏。因此，请在正式安装主板之前，请先做好以下的准备：

1. 拿主板时手握板边，尽可能不触及元器件和插头插座的引脚。
2. 接触集成电路元件（如 CPU、RAM 等）时，最好戴上防静电手环/手套。
3. 在集成电路元件未安装前，需将元件放在防静电垫或防静电袋内。
4. 在确认电源的开关处于断开位置后，再插上电源插头。

## 2.3 跳线功能设置

在进行硬件设备安装之前请按照您的需要对相应的跳线进行设置。

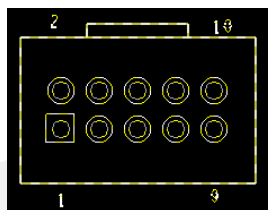
提示：如何识别跳线、接口的第 1 针脚，观察插头插座旁边的文字标记，会用“1”或加粗的线条或三角符号表示；看看背面的焊盘，方型焊盘为第 1 针脚；所有跳线的针脚 1 旁都有 1 个白色箭头。

JBAT1: 1x2pin, 清 CMOS 跳线设置

设置		功能
	1-2 短路	插掉电池，1-2 清除 CMOS 内容，所有 BIOS 设置恢复成出厂值
	1-2 开路	插上电池正常工作状态(Default)

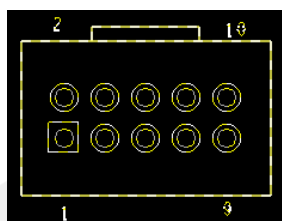
## 2.4 插针接口定义

F\_USB1: USB2.0, 2.0mm 间距 2\*5 插针



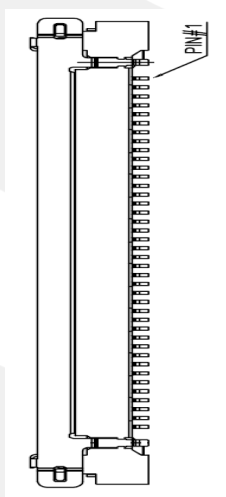
管脚	信号名称	管脚	信号名称
1	5V	2	5V
3	USB_N0	4	USB_N1
5	USB_P0	6	USB_P1
7	GND	8	GND
9	NC	10	GND

JCOM1 插针串口: 2.0mm 间距 2\*5 插针



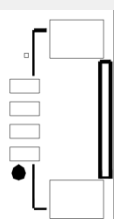
管脚	信号名称	管脚	信号名称
1	DCDN	2	SINN
3	SOUTN	4	DTRN
5	GND	6	DSRN
7	RTSN	8	CTSN
9	RIN	10	NC

eDP1 接口: 0.5mm\_1\*40Pin



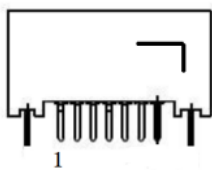
管脚	信号名称	管脚	信号名称
1	NC	21	LVDS-VDD
2	GND	22	NC
3	TMDS Data3-	23	GND(VDD)
4	TMDS Data3+	24	GND(VDD)
5	GND	25	GND(VDD)
6	TMDS Data2-	26	GND(VDD)
7	TMDS Data2+	27	HPD
8	GND	28	GND(BKL)
9	TMDS Data1-	29	GND(BKL)

CPU\_FAN1/SYS\_FAN1: CPU 和系统风扇座子



管脚	信号名称
1	GND
2	+5V
3	FAN_IO
4	FAN_PWM

## SATA 接口: SATA1 7Pin 数据座



管脚	信号名称	管脚	信号名称
1	GND	2	SATA_TX_P
3	SATA_TX_N	4	GND
5	SATA_RX_N	6	SATA_RX_P
9	GND		

## M.2 PCIe 卡槽

数量	卡槽	类型	协议
1	WIFI/BT1	E_KEY	WiFi/蓝牙
1	M2_KEY_M	M_KEY	4x PCIe

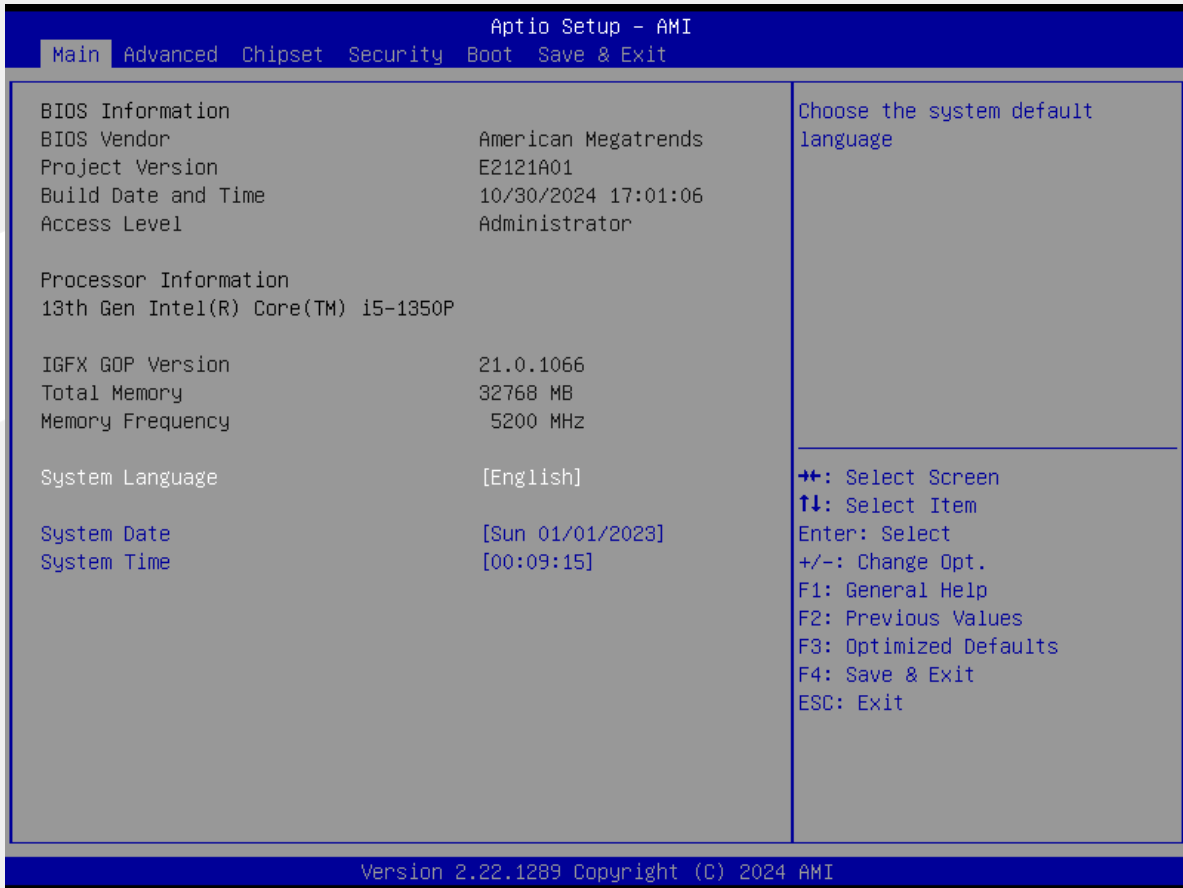
## 第三章 BIOS 设置说明

### Setup Utility User Interface

This document describes BIOS Setup Utility user interface.

#### 3.1 Main Screen

The Main screen is the first screen that is displayed when the BIOS Setup is entered.

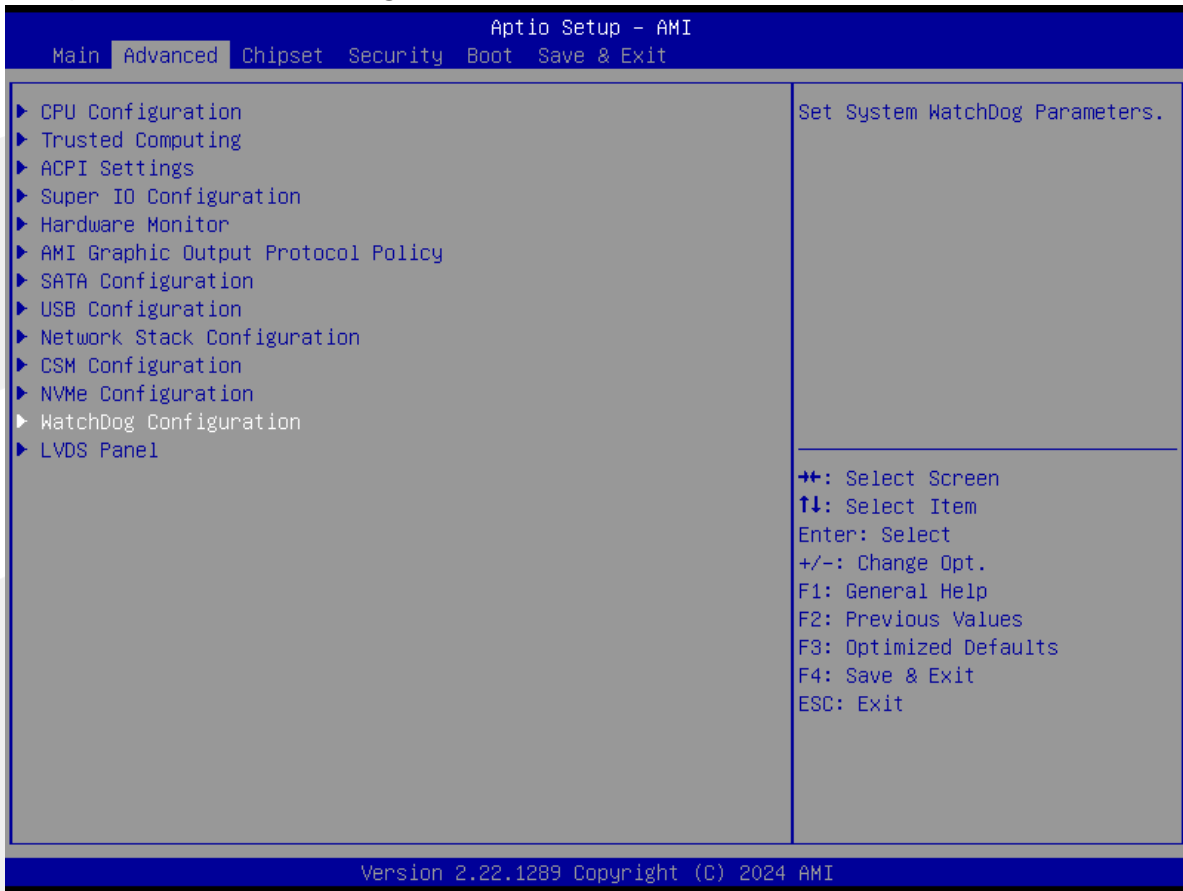


Setup Item	Options	Help Text	Comments
<b>BIOS Information</b>			
BIOS Vendor			Displays BIOS vendor.
Project Version			Displays the current BIOS version: Format: AAAABBC <b>AAAAA</b> = Project name <b>BB</b> = BIOS revision <b>C</b> = Customer number
Build Date and Time			Displays the current BIOS build date.
Access Level			Displays password level that setup is running in: Administrator or User. With no passwords set, Administrator is the default mode.

Setup Item	Options	Help Text	Comments
<b>Process Information</b>			
CPU XXXXX			Displays the CPU BrandString installed in the system.
<b>Memory Information</b>			
Total Memory			Displays the total physical memory installed in the system, MB Unit.
Memory Speed			
System Language	English	Choose the system default language.	
System Date	[Day of week MM/DD/YYYY]	Set and display the Date..	
System Time	[HH:MM:SS]	Set and display the Time.	

### 3.2 Advanced Screen

The Advanced screen provides an access point to configure several options. On this screen, the user selects the option that is to be configured.



Setup Item	Options	Help Text	Comments
CPU Configuration		CPU Configuration Parameters.	
Trusted Computing		Trusted Computing Settings.	
ACPI Settings		System ACPI Parameters.	
Super IO Configuration		System Super IO chip Parameters.	
HW Monitor		Monitor hardware stats.	
AMI Graphic Output Protocol Policy			
SATA Configuration		SATA Devices Configuration.	
USB Configuration		USB Configuration Parameters.	
Network Stack configuration		Enable/Disable UEFI Network Stack.	
CSM Configuration		CSM configuration: Enable/Disable, Option ROM execution settings, etc.	
NVMe Configuratioin		NVMe Device Options Settings.	
Watchdog configuration		Set System WatchDog Parameters.	
OemSetup Settings		OemSetup Parameters.	



### 3.2.1 CPU Configuration Screen

The CPU Configuration screen allows the user to view the processor information, and to enable or disable processor options. To access this screen from the Main screen, choose **Advanced > CPU Configuration**.



Aptio Setup - AMI

Advanced

<p>CPU - Power Management Control</p> <p>Boot performance mode [Max Non-Turbo]</p> <p>Intel(R) SpeedStep(tm) [Enabled]</p> <p>Turbo Mode [Enabled]</p> <p>▶ Config TDP Configurations</p> <p>C states [Disabled]</p> <p>Tcc Activation Offset 15</p>	<p>Select the performance state that the BIOS will set starting from reset vector.</p> <hr/> <p>↔: Select Screen                  ↑↓: Select Item                  Enter: Select                  +/-: Change Opt.                  F1: General Help                  F2: Previous Values                  F3: Optimized Defaults                  F4: Save &amp; Exit                  ESC: Exit</p>
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Aptio Setup - AMI

Advanced

<p>Config TDP Configurations</p> <p>Enable Configurable TDP [Applies to cTDP]</p> <p>Configurable TDP Boot Mode [Nominal]</p> <p>Configurable TDP Lock [Disabled]</p> <p>CTDP BIOS control [Disabled]</p> <p>ConfigTDP Levels 2</p> <p>ConfigTDP Turbo Activation Ratio 28 (Unlocked)</p> <p>Power Limit 1 45.0W (MSR:45.0)</p> <p>Power Limit 2 83.0W (MSR:83.0)</p> <p>Custom Settings Nominal</p> <p>ConfigTDP Nominal Ratio:29 TAR:28 PL1:13.0W</p> <p>Power Limit 1 0</p> <p>Power Limit 2 0</p> <p>Power Limit 1 Time Window [0]</p> <p>ConfigTDP Turbo Activation Ratio 0</p> <p>Custom Settings Down</p> <p>ConfigTDP Level1 Ratio:24 TAR:23 PL1:3.0W</p> <p>Power Limit 1 0</p> <p>Power Limit 2 0</p> <p>Power Limit 1 Time Window [0]</p> <p>ConfigTDP Turbo Activation Ratio 0</p>	<p>Applies TDP initialization settings based on non-cTDP or cTDP. Default is 1: Applies to cTDP; if 0 then applies non-cTDP and BIOS will bypass cTDP initialization flow</p> <hr/> <p>↔: Select Screen                  ↑↓: Select Item                  Enter: Select                  +/-: Change Opt.                  F1: General Help                  F2: Previous Values                  F3: Optimized Defaults                  F4: Save &amp; Exit                  ESC: Exit</p>
--	--

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Setup Item	Options	Help Text	Comments
<b>CPU Configuration</b>			
Type			
ID			
Speed			
VMX			
SMX/TXT			
Hardware Prefetcher	Enabled Disabled	To turn on/off the MLC streamer prefetcher.	
Adjacent Cache line Prefetch	Enabled Disabled	To turn on/off prefetching of adjacent cache lines.	
Intel(VMX) Technology	Enabled Disabled	When enabled,a VMM can utilize the additional hardware capabilities provided by vanderpool technology.	
AVX	Enabled		
AVX3	Enabled		
Active Processor Cores	All 1 2 3	Number of cores to enable in each processor package.	
Hyper-Threading	Enabled		
<b>CPU - Power Management Control</b>			
Boot performance mode	Max Non-Turbo Max battery Turbo Performance	Select the performance state that the BIOS will set starting from reset vector.	
Intel® SpeedStep™	Enabled Disabled	Allows more than two frequency ranges to be supported.	
Turbo Mode	Enabled Disabled	Enabled/Disabled processor Turbo Mode.	
<b>Config TDP configurations</b>			
C states	Disabled		
Tcc Activation Offset	15		

### 3.2.2 Trusted Computing

The screen allows the user to set the Trusted Computing(TPM) parameters. To access this screen from the Main screen, choose **Advanced > Trusted Computing**.



### 3.2.3 ACPI Settings Screen

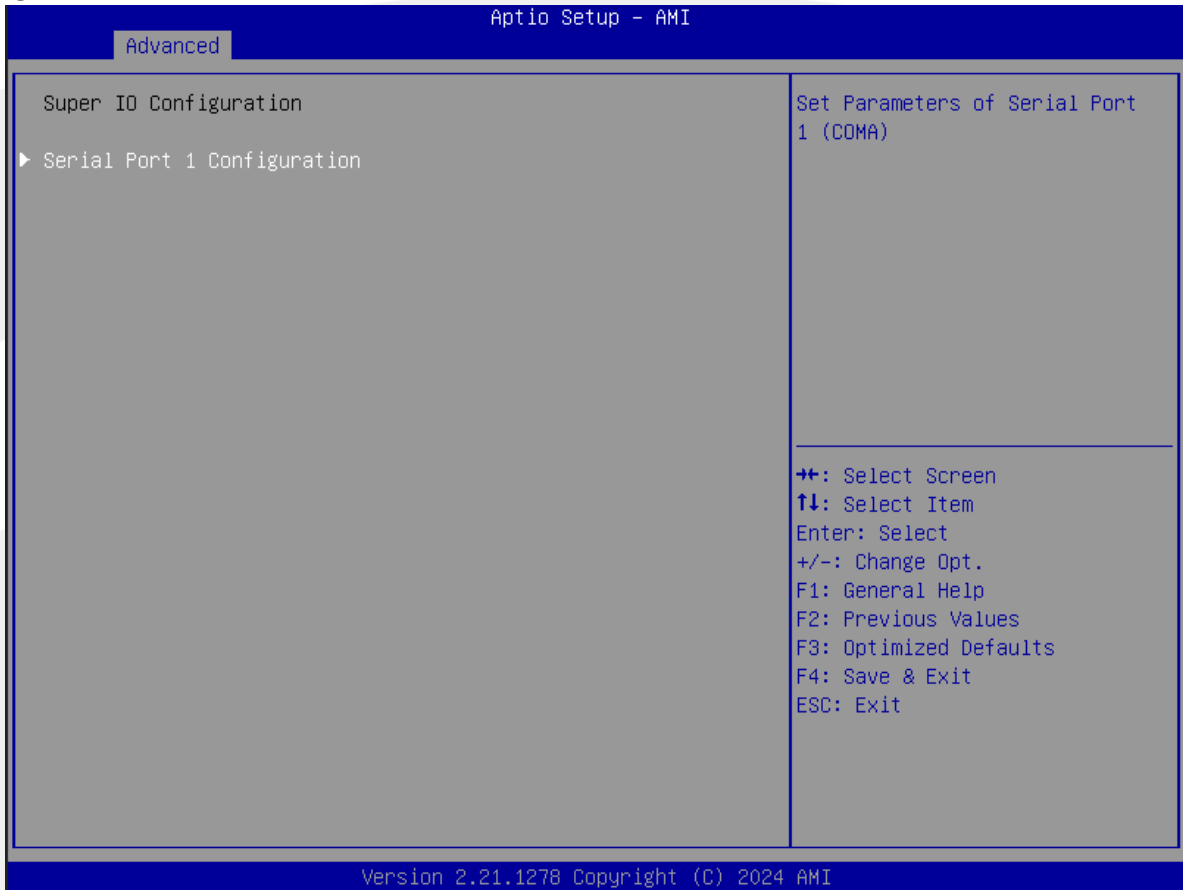
The ACPI Settings screen allows the user to set the system ACPI parameters. To access this screen from the Main screen, choose **Advanced > ACPI Settings**.



Setup Item	Options	Help Text	Comments
<b>ACPI Settings</b>			
Enable Hibernation	Enabled		
ACPI Sleep State	Suspend Disabled S3 (Suspend to RAM)	Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.	Sleep supported optionally.

### 3.2.4 Super IO Configuration

The Super IO Configuration screen allows the user to view the super IO information, and to enable or disable super IO options. To access this screen from the Advanced screen, choose **Advanced > Super IO Configuration**.



Setup Item	Options	Help Text	Comments
<b>Super IO Configuration</b>			
Serial Port 1 Configuration			Set Parameters of Serial Port 1 (COM1).

### 3.2.4.1 Serial PortX Configuration

The Super IO Configuration screen allows the user to view the super IO information, and to enable or disable serial port options. To access this screen from the Advanced screen, choose **Advanced-> Super IO Configuration->Serial PortX Configuration**.

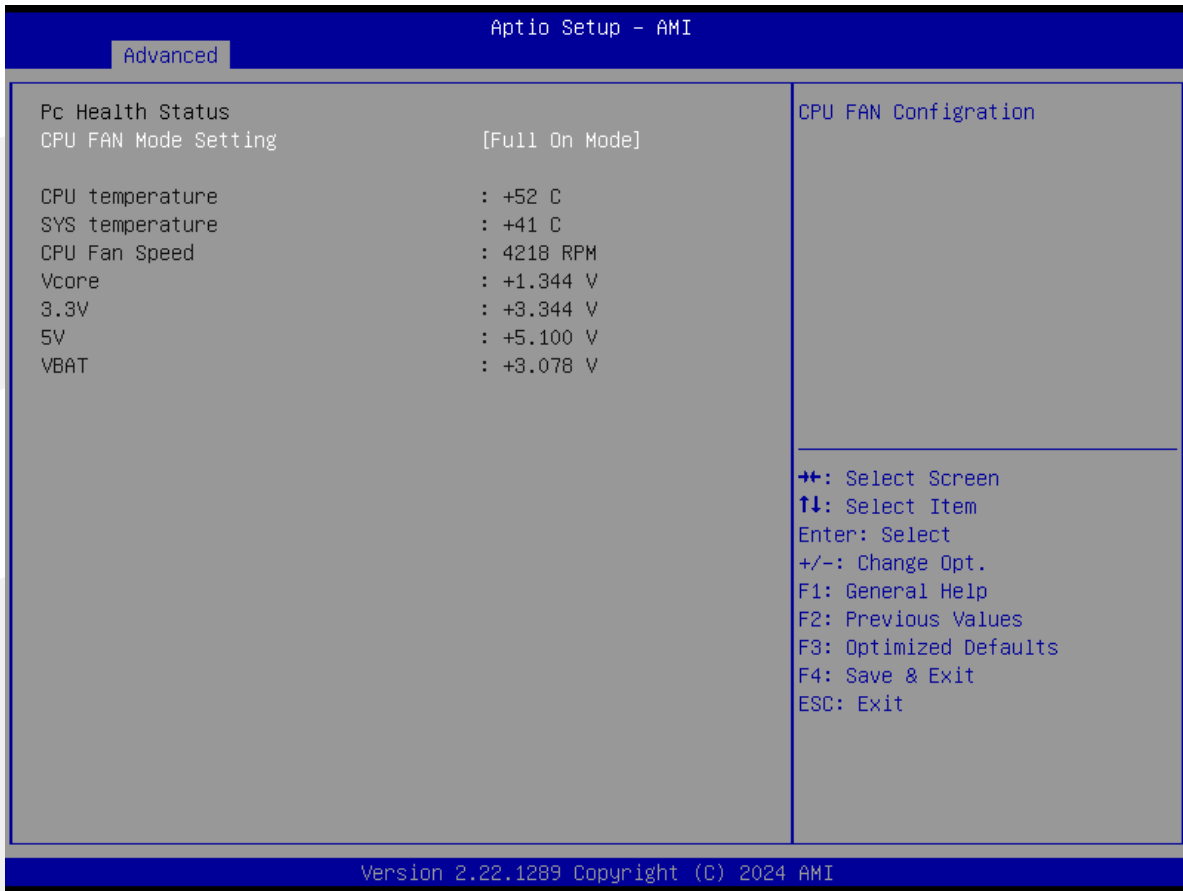


Setup Item	Options	Help Text	Comments
<b>Serial PortX Configuration</b>			
Serial Port	Enabled/Disabled	Enabled or Disabled Serial Port (COM).	
Device Settings			



### 3.2.5 Hardware Monitor

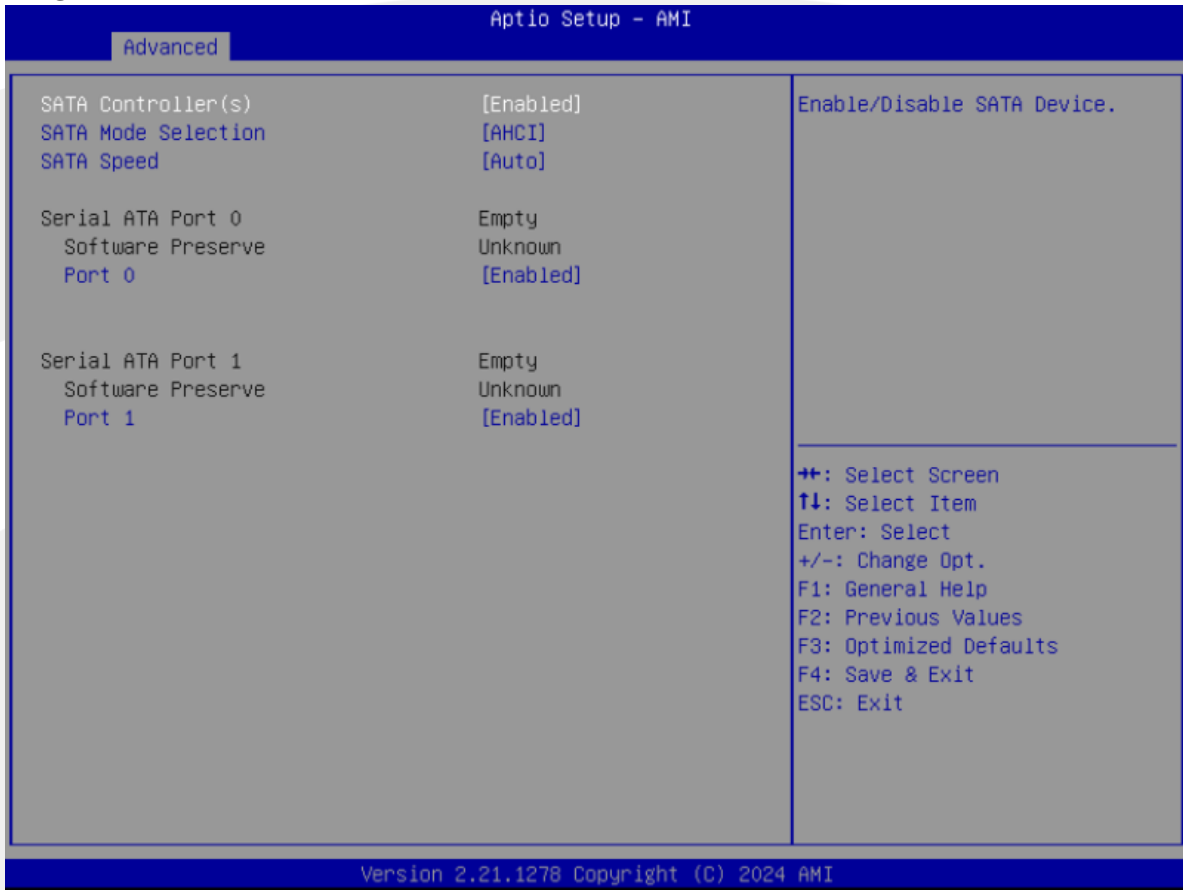
The hardware monitor screen allows the user to view the hardware information. To access this screen from the Advanced screen, choose **Advanced-> Hardware Monitor**.



Setup Item	Options	Help Text	Comments
<b>SMART FAN Control</b>			
CPU FAN Mode Setting	Full On mode Automatic mode Manual mode	Fan control mode select.	When Manual mode selected, Manual PWM Setting shows to set FAN PWM Duty.
<b>PC Health Status</b>			
CPU temperature		Shows Current CPU temperature.	NOTE1: Sometimes not the actual temperature value, just indicates temperature tolerance limitation.
CPU FAN Speed			HW Information.

### 3.2.6 SATA Configuration

The SATA Configuration screen allows the user to view the SATA Controller information, and to enable or disable SATA Controller options. To access this screen from the Main screen, choose **Advanced > SATA Configuration**.

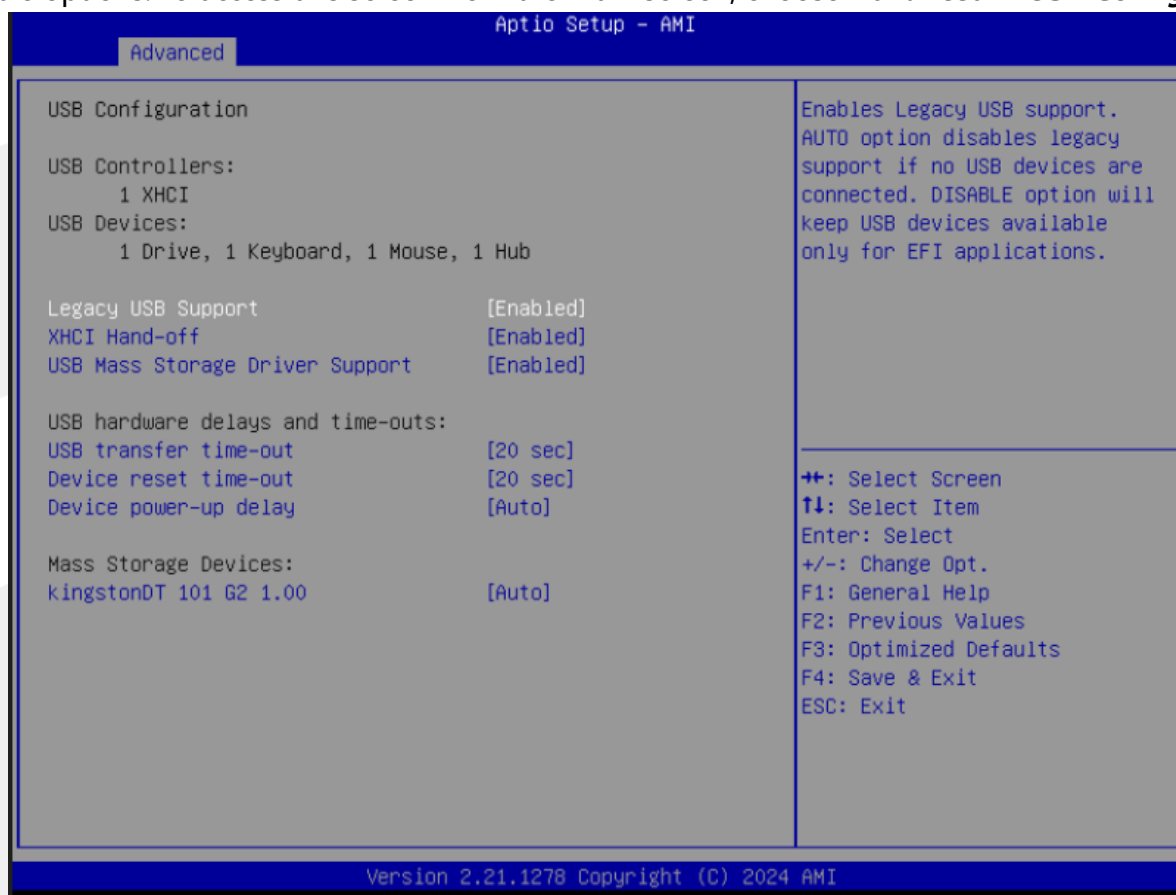


Setup Item	Options	Help Text	Comments
<b>SATA Configuration</b>			
SATA Controller(s)	Enabled Disabled	Enable / Disable SATA Device.	
SATA Mode Selection	AHCI Mode	Select AHCI.	
SATA Speed	Auto Gen1 Gen2 Gen3	Configure SATA Speed.	
Serial ATA Port 0			Show HDD information connected.
Serial ATA Port 1			

*Note: If SATA or PCIe RAID groups are configured separately, contact technical support.*

### 3.2.7 USB Configuration

The USB Configuration screen allows the user to view the USB Configuration information, and to enable or disable options. To access this screen from the Main screen, choose **Advanced > USB Configuration**.



Setup Item	Options	Help Text	Comments
<b>USB Configuration</b>			
Legacy USB Support	Enabled Disabled	Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.	
XHCI Hand-off	Enabled Disabled	This is a workaround for OSES without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.	
USB MASS Storage Driver Support	Enabled Disabled	Enable/Disable USB Mass Storage Driver Support.	
<b>USB hardware delays and time-outs:</b>			
USB transfer time-out	1 sec 5 sec 10 sec 20 sec	The time-out value for Control, Bulk, and Interrupt transfers.	

Setup Item	Options	Help Text	Comments
Device reset time-out	1 sec 5 sec 10 sec 20 sec	USB mass storage device Start Unit command time-out.	
Device power-up delay	Auto Manual	Maximum time the device will take before it properly reports itself to the Host Controller. ' auto' uses default value: for a Root port it is 100ms,for a Hub port the delay is taken from Hub descriptor.	

### 3.2.8 Network Stack Configuration

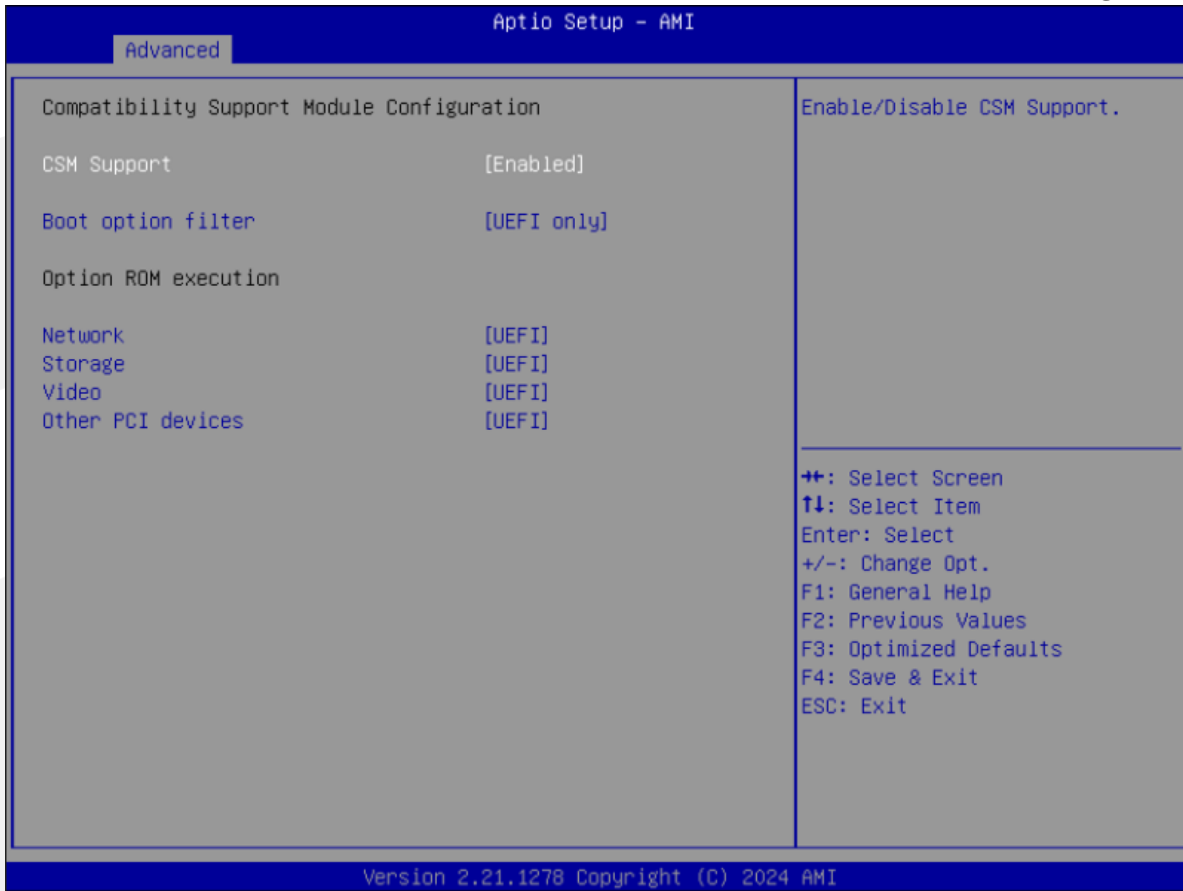
To access this screen from the Main screen, choose **Advanced > Network Stack Configuration**.



Setup Item	Options	Help Text	Comments
<b>Network Stack Configuration</b>			
Network Stack	Disabled Enabled		Enable/Disable UEFI Network Stack
IPv4 PXE Support	Disabled Enabled		Enable/Disable IPv4 PXE boot support
IPv4 HTTP Support	Disabled Enabled		Enable/Disable IPv4 HTTP boot support.
IPv6 PXE Support	Disabled Enabled		Enable/Disable IPv6 PXE boot support
IPv6 HTTP Support	Disabled		
PXE boot wait time	0		
Media detect count	1		

### 3.2.9 CSM Configuration

The CSM Configuration screen allows the user to view the CSM information, and to enable or disable CSM options. To access this screen from the Main screen, choose **Advanced > CSM Configuration**.



Setup Item	Options	Help Text	Comments
<b>CSM Configuration</b>			
CSM Support	Enabled Disabled	Enable / Disable CSM support.	
Boot option filter	UEFI and Legacy Legacy only UEFI only	This option control Legacy/UEFI ROMs priority.	
<b>Option ROM execution</b>			
Network	Legacy UEFI Do not lunch	Control the execution of UEFI and Legacy PXE OpROM.	
Storage	Legacy UEFI Do not lunch	Control the execution of UEFI and Legacy Storage OpROM.	
Video	Legacy UEFI Do not lunch	Control the execution of UEFI and Legacy video OpROM.	

Setup Item	Options	Help Text	Comments
Other PCI devices	Legacy UEFI Do not lunch	Determines OpROM execution policy for devices other than Network, Storage or video.	



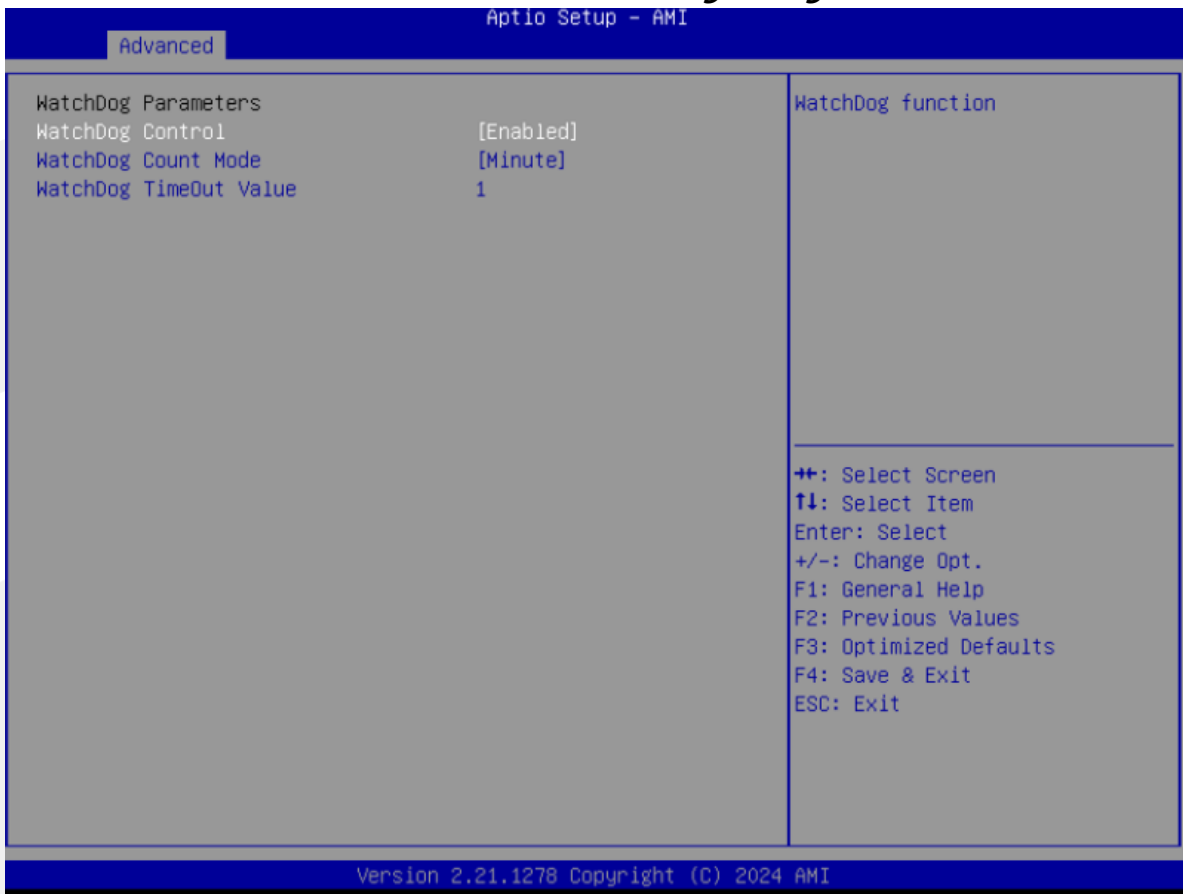
### 3.2.10 NVMe Configuration

The NVMe Configuration screen allows the user to view the NVMe Device information. To access this screen from the Main screen, choose **Advanced > NVMe Configuration**.



### 3.2.11 Watchdog Configuration

The Watchdog Configuration screen allows the user to Set System WatchDog Parameters. To access this screen from the Main screen, choose **Advanced > Watchdog Configuration**.



Setup Item	Options	Help Text	Comments
<b>Watchdog Parameters</b>			
WatchDog Control	Disabled Enabled		WatchDog function.
WatchDog Count Mode	Minute Second		WatchDog Count Mode Selection.
WatchDog TimeOut Value	1		Fill WatchDog TimeOut (0~255),0 means function disabled.

### 3.2.12 OemSetup Settings

To access this screen from the Main screen, choose **Advanced > OemSetup Settings**.



Setup Item	Options	Help Text	Comments
<b>OemSetup Settings</b>			
LVDS Panel	Disabled Enabled		Enable or Disable for LVDS control(Only Support LVDS bom)
LVDS Panel	1024*768/24/Single		
HeartBeat Default	LOW High	HeartBeat Default value, as high, low.	

### 3.3 Chipset Screen

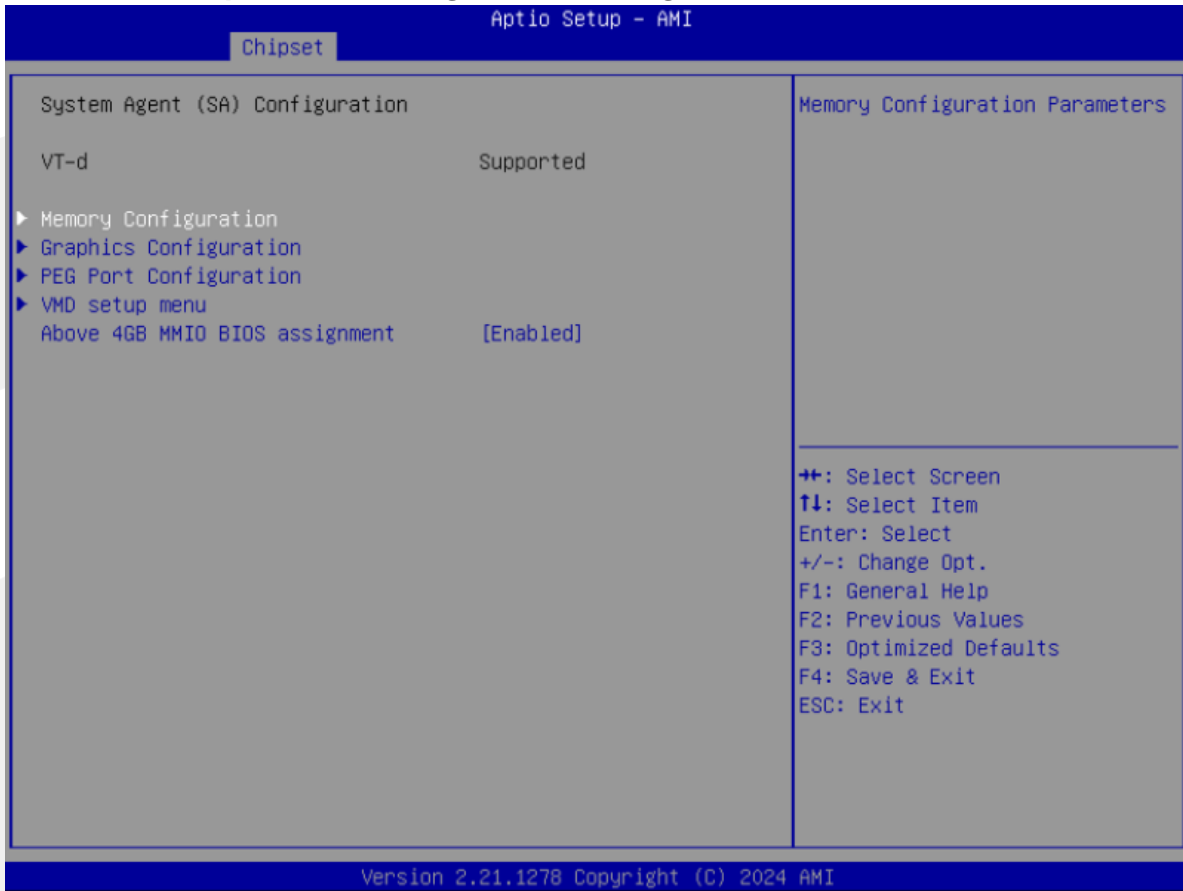
The Chipset screen provides an access point to configure SA Configuration and PCH-IO configuration. To access this screen from the Main screen, press the right arrow until the Chipset screen is chosen.



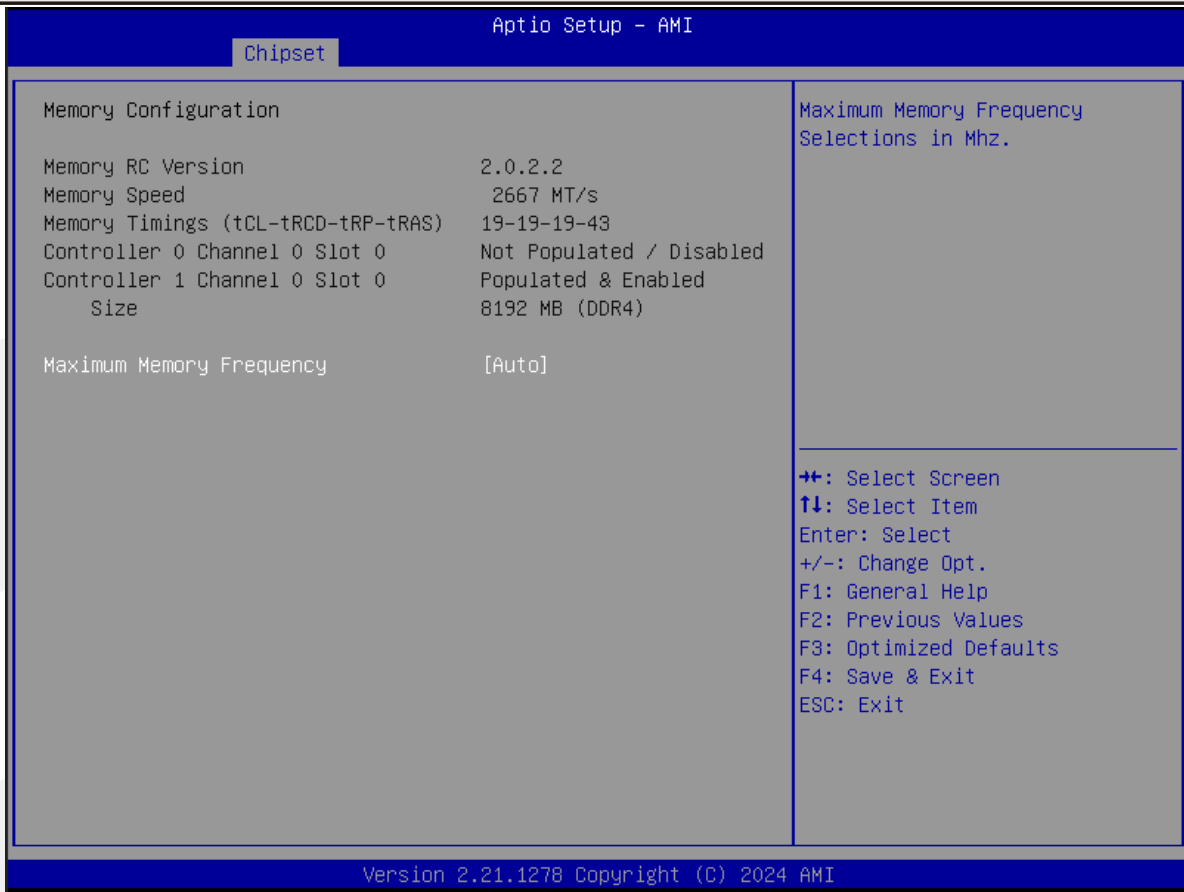
Setup Item	Options	Help Text	Comments
<b>Chipset Screen</b>			
System Agent (SA) Configuration		System Agent (SA) Parameters.	
PCH-IO Configuration		PCH Parameters.	

### 3.3.1 System Agent (SA) Configuration

The North Bridge Screen allows user to set NB chipset configuration. To access this screen, from the Main screen, choose **Chipset > System Agent (SA) Configuration**.



Setup Item	Options	Help Text	Comments
<b>System Agent (SA) Configuration</b>			
Memory Configuration		Show Memory information.	
Graphics Configuration		Graphics Configuration.	
PEG Port Configuration		PEG Port Options.	
VMD setup memu			
Above 4GB MMIO BIOS assignment	Disabled Enabled	Enable/Disable above 4GB MemoryMappedIO BIOS assignment.	

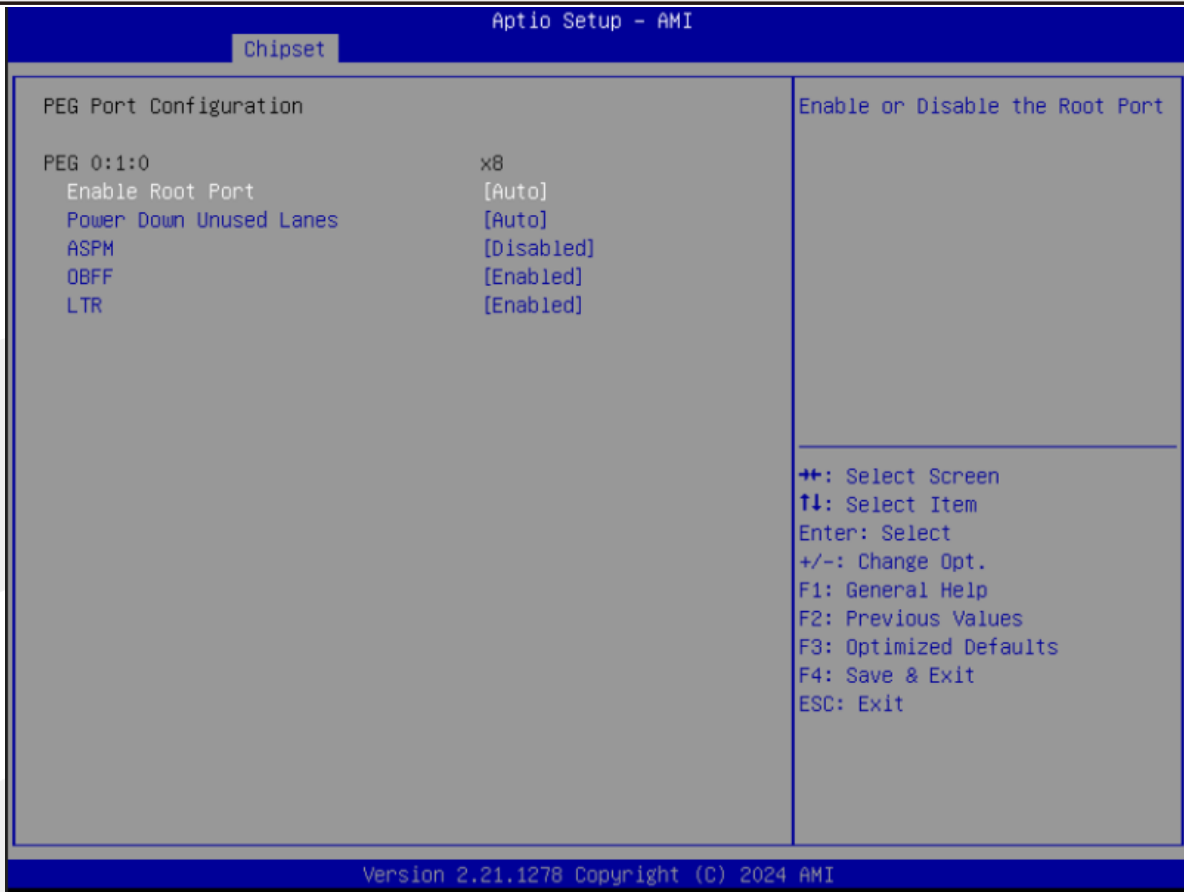


Setup Item	Options	Help Text	Comments
<b>Memory Information</b>			
Maximum Memory Frequency	Auto	Maximum Memory Frequency Selections in Mhz.	



Setup Item	Options	Help Text	Comments
<b>Graphics Configuration</b>			
Primary Display	Auto IGFX PEG PCH	Select which of IGFX/PEG/PCI Graphics device should be Primary Display Or select HG for Hybrid Gfx.	
Select PCIE Card	Auto		
Internal Graphics	Auto Disabled Enabled	Keep IGFX enabled based on the setup options.	
GTT Size	2MB 4MB 8MB	Select the GTT Size.	
Aperture Size	128MB 256MB 512MB 1024MB 2048MB	Select the Aperture Size. Note: Above 4GB MMIO BIOS assignment is automatically enabled when selecting 2048MB aperture. To use this feature, please disable CSM Support.	
DVMT Pre-Allocated	32M		
DVMT Total Gfx Mem	128M 256M MAX	Select DVMT5.0 Total Graphic Memory size used by the Internal Graphics Device.	
LCD Control			





Setup Item	Options	Help Text	Comments
<b>PEG Port Configuration</b>			
PEG Port Configuration		PEG Port Options.	
PEG 0:1:0			
Enable Root Port	Auto Disabled Enabled	Enable or Disable the Root Port.	
Power Down Unused Lanes	Auto Disabled	Power Down Unused Lanes.	
ASPM	Disabled Enabled	Control ASPM support for the PEG 0.	
OBFF	Disabled Enabled	CPU PEG0 (0,1,0) OBFF Enable/Disable.	
LTR	Enabled		

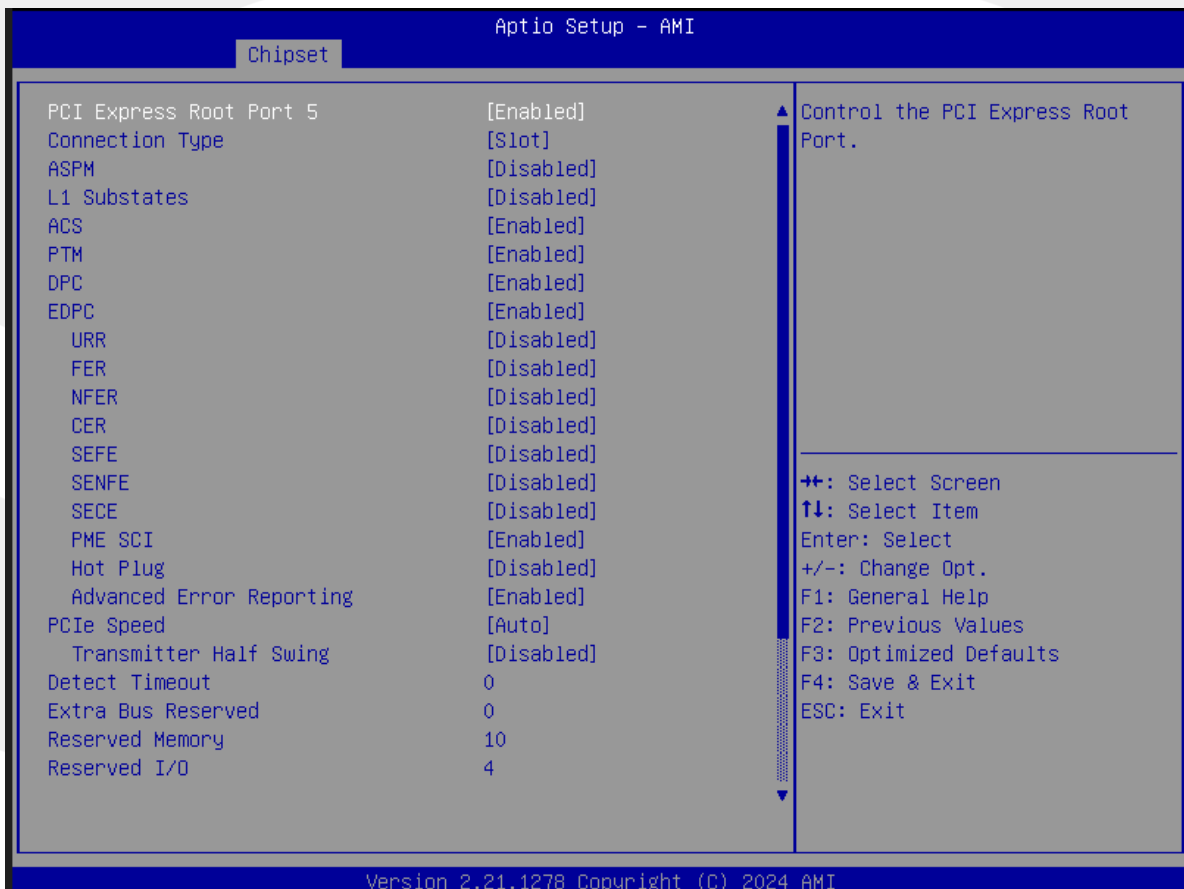
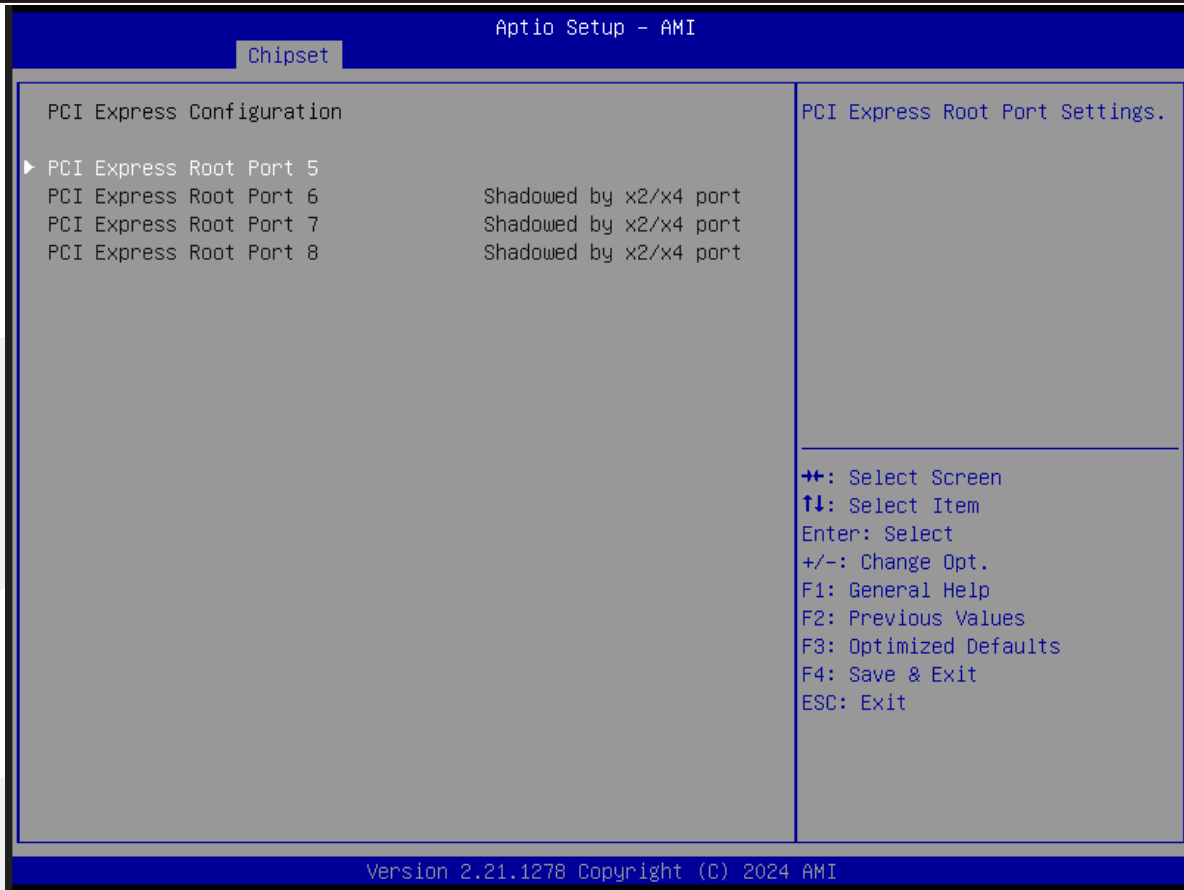
### 3.3.2 PCH-IO Configuration

The South Bridge Screen allows user to set SB chipset configuration.

To access this screen from the Main screen, choose **Chipset> PCH-IO Configuration**.



Setup Item	Options	Help Text	Comments
<b>PCH-IO Configuration</b>			
Restore AC Power Loss	Power on Power off	Select AC power state when power is re-applied after a power failure.	
PCI Express Configuration			
PCI Express Root Port 5			



### 3.4 Security

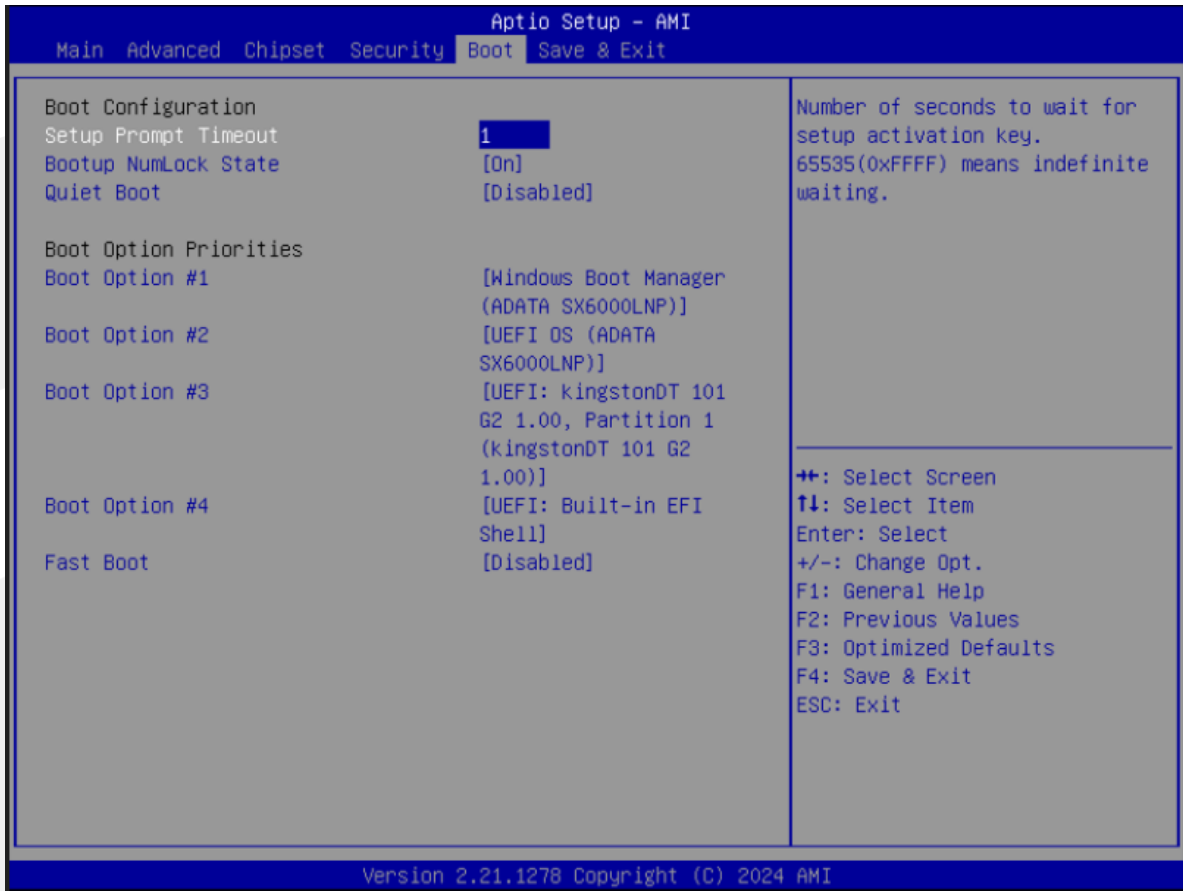
To access this screen form the Main screen, choose **Security**.



Setup Item	Options	Help Text	Comments
<b>Security</b>			
Administrator Password		Set Administrator Password.	
User Password		Set User Password.	

### 3.5 Boot Screen

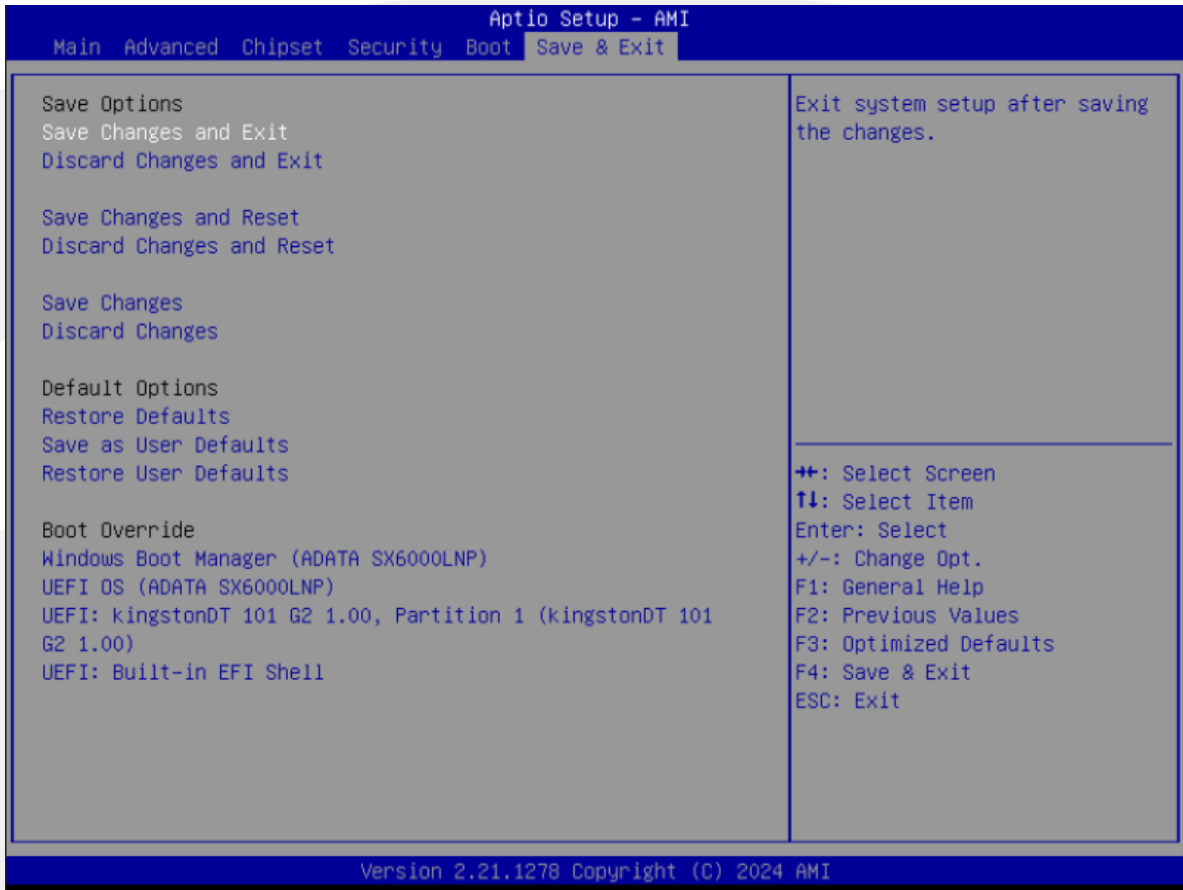
The Boot screen displays any bootable media encountered during POST, and allows the user to configure desired boot device. To access this screen from the Main screen, choose **Boot**.



Setup Item	Options	Help Text	Comments
<b>Boot Configuration</b>			
Setup Prompt Timeout	1~65535	Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.	
Bootup NumLock State	On off	Select the keyboard Number state.	
Quiet Boot	Disabled Enabled	Enables or disables Quiet Boot option.	
<b>Boot Option Priorities</b>			
Boot Option #1		Sets the system boot order.	Note : Showed When boot devices existed.
Boot Option #2		Sets the system boot order.	
Boot Option #3		Sets the system boot order.	
Boot Option #4		Sets the system boot order.	
Fast Boot	Disabled		
Hard Drive BBS Priorities		Set the order of the legacy devices in this group.	Set boot order in each group of the same kind, such as HDD, network.

### 3.6 Save & Exit Screen

The Save & Exit screen allows the user to choose whether to save or discard the configuration changes made on the other screens. It also allows the user to restore the server to the factory defaults or to save or restore them to set of user-defined default values.



Setup Item	Options	Help Text	Comments
<b>Save &amp; Exit Screen</b>			
<b>Save Options</b>			
Save Changes and Exit		Exit system setup after saving the changes.	User is prompted for confirmation only if any of the setup fields were modified.
Discard Changes and Exit		Exit system setup without saving any changes.	
Save Changes and Reset		Reset the system after saving the changes.	
Discard Changes and Reset		Reset system setup without saving and changes.	
Save Changes		Save Changes done so far to any of the setup options.	
Discard Changes		Discard Changes done so far to any or the setup options.	
<b>Default Options</b>			
Restore Defaults		Restore/Load Default values for all the setup options.	

Setup Item	Options	Help Text	Comments
Save as User Defaults		Save the changes done so far as User Defaults.	
Restore User Defaults		Restore the User Defaults to all the setup options.	
<b>Boot Override</b>			
Shows the Device can boot.			Note : Showed When boot devices existed.

## 第四章 故障问题排除

故障	排除
硬盘启动项设置	1、开机时按 DEL 进 BIOS 设置选 Advanced。 2、选 CSM Configuration 回车。 3、选 CSM Support 打开 Enabled。 4、选 Boot option filter 回车。 5、UEFI and Legacy 是两种不同的系统引导方式，可以实现网络启动，UEFI 只支持 64 位操作系统。 6、Legacy only Legacy 启动是 BIOS 之前的启动方式，不能实现网络启动。但它可以引导 32 位操作系统，也可以引导 64 位操作系统。
设置来电开机	开机时按 DEL 进 BIOS 设置 Chipset→PCH-Io Configuration 回车。 1) AC Power loss 将 Power off→Power ON 上电开机。 2) State After G3 选 S5 State S0 State 上电开机。
开机时核显可以正常显示，但独显不显示 拼接设置	开机时按 DEL 进 BIOS 设置选 Chipset。 1、选 System Agent(SA) Configuration 回车。 2、选 Graphics Configuration 回车。 3、选 Primary Display 回车。 3.1)Auto 独显。 3.2)IGFX 核显。(做分屏拼接选 IGFX 模式)



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