

ACP-1075

7" WSVGA Open-frame Panel PC

User's Manual 1st Ed

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Packing List

Before setting up your product, please make sure the following items have been shipped:

Item	Quantity
● ACP-1075	1

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

About this Document

This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product.

Users may refer to the product page at AAEON.com for the latest version of this document.

Safety Precautions

Please read the following safety instructions carefully. It is advised that you keep this manual for future references

1. All cautions and warnings on the device should be noted.
2. All cables and adapters supplied by AAEON are certified and in accordance with the material safety laws and regulations of the country of sale. Do not use any cables or adapters not supplied by AAEON to prevent system malfunction or fires.
3. Make sure the power source matches the power rating of the device.
4. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
5. Always completely disconnect the power before working on the system's hardware.
6. No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
7. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
8. Always disconnect this device from any AC supply before cleaning.
9. While cleaning, use a damp cloth instead of liquid or spray detergents.
10. Make sure the device is installed near a power outlet and is easily accessible.
11. Keep this device away from humidity.
12. Place the device on a solid surface during installation to prevent falls
13. Do not cover the openings on the device to ensure optimal heat dissipation.
14. Watch out for high temperatures when the system is running.
15. Do not touch the heat sink or heat spreader when the system is running
16. Never pour any liquid into the openings. This could cause fire or electric shock.

17. As most electronic components are sensitive to static electrical charge, be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.
18. If any of the following situations arises, please the contact our service personnel:
 - i. Damaged power cord or plug
 - ii. Liquid intrusion to the device
 - iii. Exposure to moisture
 - iv. Device is not working as expected or in a manner as described in this manual
 - v. The device is dropped or damaged
 - vi. Any obvious signs of damage displayed on the device
19. **DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.**

Warning!



This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution:

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.

Attention:

Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte. Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur. Recycler les batteries usées en accord avec les instructions du fabricant et les directives gouvernementales de recyclage.

产品中有毒有害物质或元素名称及含量

AAEON System

QO4-381 Rev.A0

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯 醚(PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
外壳	○	○	○	○	○	○
中央处理器 与内存	×	○	○	○	○	○
硬盘	×	○	○	○	○	○
液晶模块	×	○	○	○	○	○
光驱	×	○	○	○	○	○
触控模块	×	○	○	○	○	○
电源	×	○	○	○	○	○
电池	×	○	○	○	○	○

本表格依据 SJ/T 11364 的规定编制。

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 GB/T 26572 标准规定的限量要求以下。

×：表示该有害物质的某一均质材料超出了 GB/T 26572 的限量要求，然而该部件仍符合欧盟指令 2011/65/EU 的规范。

备注：

- 一、此产品所标示之环保使用期限，系指在一般正常使用状况下。
- 二、上述部件物质中央处理器、内存、硬盘、光驱、电源为选购品。
- 三、上述部件物质液晶模块、触控模块仅一体机产品适用。

Hazardous and Toxic Materials List

AAEON System

QO4-381 Rev.A0

Component Name	Hazardous or Toxic Materials or Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBBS)	Polybrominated ethers (PBDES)
PCB and Components	X	○	○	○	○	○
Wires & Connectors for Ext.Connections	X	○	○	○	○	○
Chassis	○	○	○	○	○	○
CPU & RAM	X	○	○	○	○	○
HDD Drive	X	○	○	○	○	○
LCD Module	X	○	○	○	○	○
Optical Drive	X	○	○	○	○	○
Touch Control Module	X	○	○	○	○	○
PSU	X	○	○	○	○	○
Battery	X	○	○	○	○	○

This form is prepared in compliance with the provisions of SJ/T 11364.
 ○: The level of toxic or hazardous materials present in this component and its parts is below the limit specified by GB/T 26572.
 X: The level of toxic of hazardous materials present in the component exceed the limits specified by GB/T 26572, but is still in compliance with EU Directive 2011/65/EU (RoHS 2).

Notes:

1. The Environment Friendly Use Period indicated by labelling on this product is applicable only to use under normal conditions.
2. Individual components including the CPU, RAM/memory, HDD, optical drive, and PSU are optional.
3. LCD Module and Touch Control Module only applies to certain products which feature these components.

Table of Contents

- Chapter 1 - Product Specifications1**
 - 1.1 Specifications.....2
- Chapter 2 – Hardware Information 5**
 - 2.1 Dimensions6
 - 2.2 Jumpers and Connectors 10
 - 2.3 List of Connectors 13
 - 2.3.1 LAN (RJ-45) Port (CN10) 14
 - 2.3.2 USB 3.2 Gen 1 Ports 0 and 1 (CN11) 14
 - 2.3.3 HDMI Port (CN13)..... 16
 - 2.3.4 USB (CN47/CN48) 17
 - 2.3.5 COM Port (CN51/CN61)..... 17
 - 2.3.6 USB 2.0 Port (CN48)..... 18
- Chapter 3 - AMI BIOS Setup.....19**
 - 3.1 System Test and Initialization 20
 - 3.2 AMI BIOS Setup21
 - 3.3 Setup Submenu: Main..... 22
 - 3.4 Setup Submenu: Advanced 23
 - 3.4.1 Trusted Computing..... 24
 - 3.4.2 CPU Configuration 26
 - 3.4.3 SATA Configuration27
 - 3.4.4 SCC Configuration..... 29
 - 3.4.5 Camera Configuration..... 30
 - 3.4.6 Hardware Monitor 31
 - 3.4.6.1 CPU Smart Fan Mode Configuration: Full Mode..... 32
 - 3.4.6.2 CPU Smart Fan Mode Configuration: Manual Mode 33
 - 3.4.6.3 CPU Smart Fan Mode Configuration: Auto Mode 34

3.4.7	SIO Configuration.....	36
3.4.7.1	Serial Port 1.....	37
3.4.7.2	Serial Port 2	38
3.4.8	Trusted Platform Technology.....	39
3.4.9	Power Management.....	40
3.4.10	Digital IO Port Configuration	41
3.5	Setup Submenu: Chipset	42
3.5.1	North Bridge.....	43
3.6	Setup Submenu: Security	44
3.6.1	Secure Boot.....	45
3.6.1.1	Key Management	46
3.7	Setup Submenu: Boot.....	48
3.8	Setup Submenu: Save & Exit	49
Chapter 4 – Drivers Installation		50
4.1	Driver Download/Installation	51
Appendix A - I/O Information.....		53
A.1	I/O Address Map.....	54
A.2	Memory Address Map.....	55
A.3	IRQ Mapping Chart	56

Chapter 1

Product Specifications

1.1 Specifications

System

Processor	Intel® Pentium® Processor N4200 Intel® Celeron® Processor N3350 Optional: MOQ 50 pcs: Intel Atom® x7-E3950 Intel Atom® x5-E3940 Intel Atom® x5-E3930
System Memory	Onboard DDR3L, 4GB
LCD/CRT Controller	-
Display Area	153.6mm (H) × 90.0mm (V)
Ethernet	GbE x 1
I/O Port	LAN x 1 COM x 2 USB 3.2 Gen 1 x 2 USB 2.0 x 1 HDMI x 1
Storage	Onboard eMMC, 64GB
Expansion	M.2 2280 B-Key x 1 M.2 2230 E-Key x 1
OS Support	Windows® 10 (64-bit)

Mechanical

Construction	SECC
Architecture	Open-frame Design
Front Bezel	Open-frame Design
Mounting	-

Mechanical

Dimension	7.18" x 4.73" x 2.09" (182.3mm x 120.1mm x 53.04mm)
Carton Dimension	14.17" x 9.65" x 4.65" (360mm x 245mm x 118mm)
Gross Weight	1.9 lb. (0.88Kg)

Environmental

Operating Temperature	32°F ~ 131°F (0°C ~ 55°C) with 0.5 m/s airflow
Storage Temperature	32°F ~ 149°F (0°C ~ 65°C)
Storage Humidity	90% @40°C; non-condensing
Vibration	1 Grms/ 5~ 500Hz/ operation – with HDD
Shock	15 G peak acceleration (11 msec. duration) – with HDD
Drop	92cm (1 Corner, 3 Edge, 6 Surface)
EMC	N/A

Power Supply

DC Input	12V DC In
----------	-----------

LCD

Display Type	7" WSVGA Color TFT LCD Display
Max Resolution	1024 x 600
Max. Colors	16.7M
Luminance	320 nits
Viewing Angle	70°/75° (H); 75°/75° (V)
Backlight	LED
Backlight MTBF (Hours)	20,000

Touchscreen

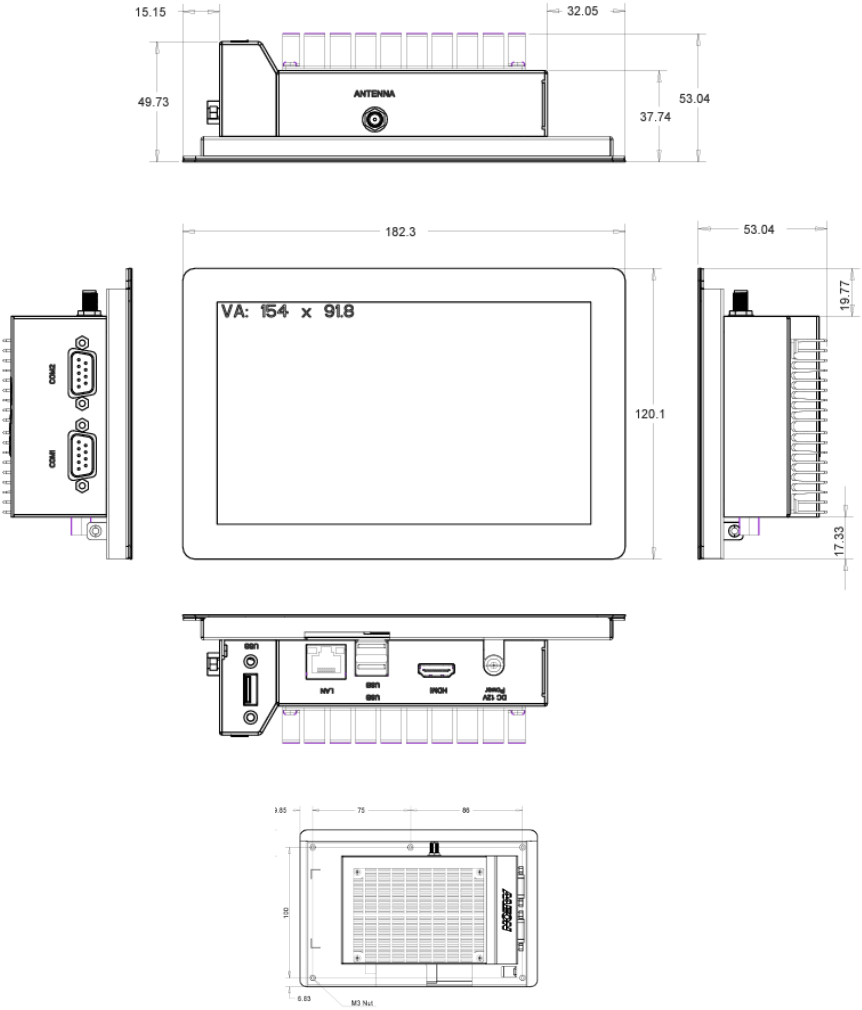
Type	Projected Capacitive Touch
Contrast	1000:1
Touch Mode	TBD
Interface	USB
Touch Point	10 Point
Light Transmission	> =86%

Chapter 2

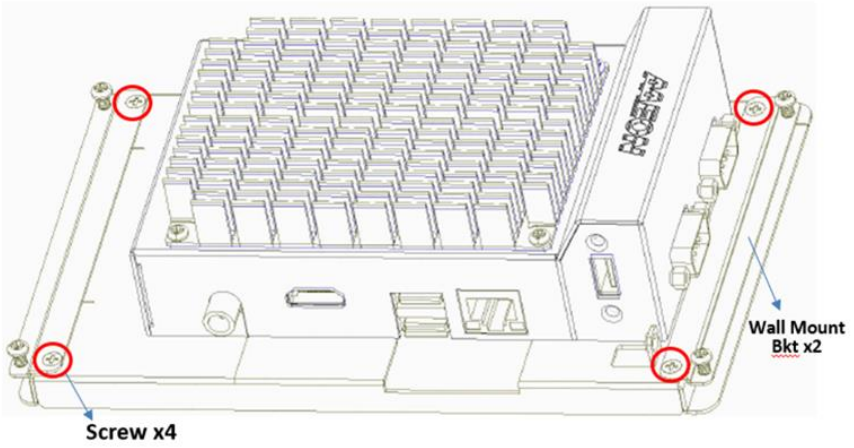
Hardware Information

2.1 Dimensions

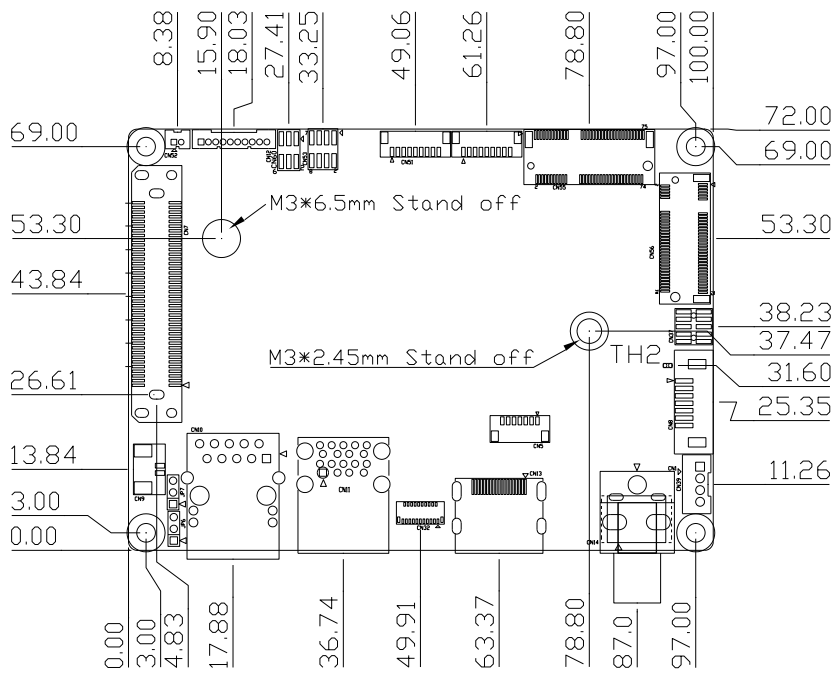
System



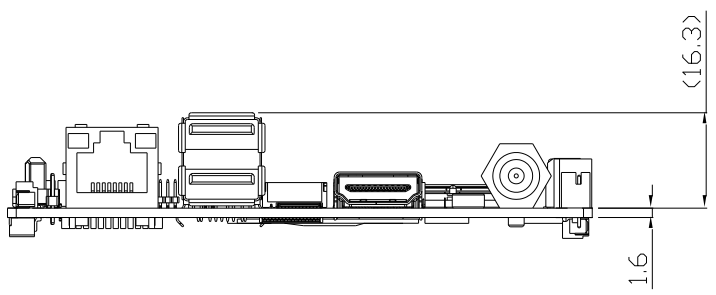
Wall Mount Installation

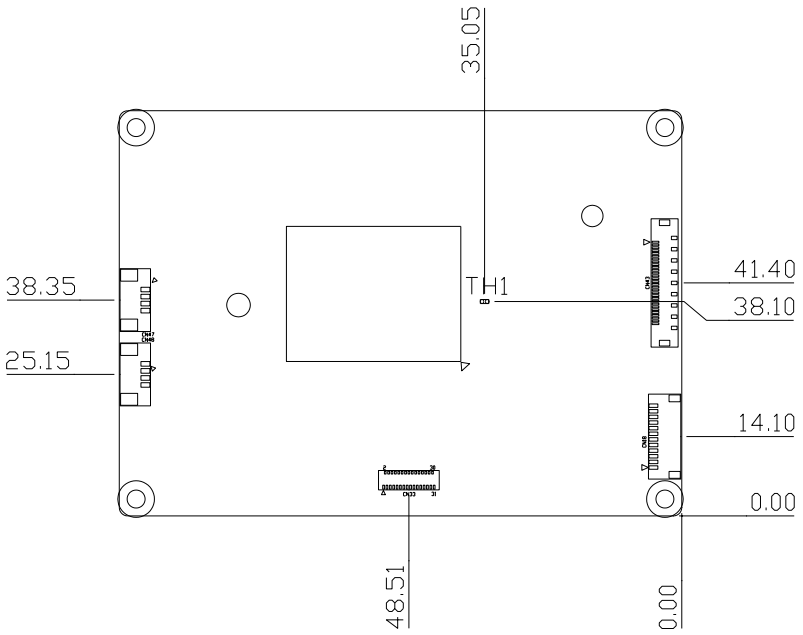


Board Component Side



Component Side

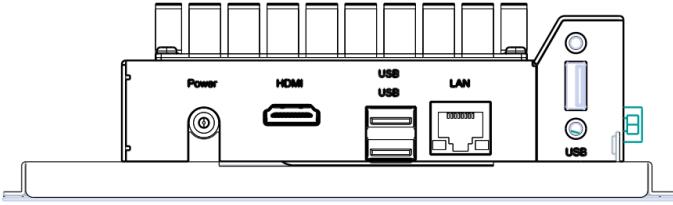




Solder Side

2.2 Jumpers and Connectors

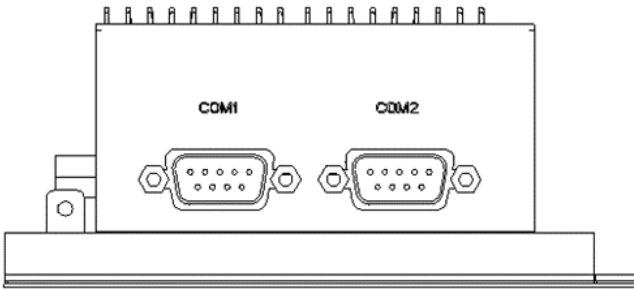
Bottom Side View



Label	Function
HDMI	HDMI Type A Connector for HDMI Cable
USB	USB Type A Connector for USB 2.0 and USB 3.2 Gen 1
LAN	Giga LAN port. (Main)
Power	DC Power Jack for 12V DC input

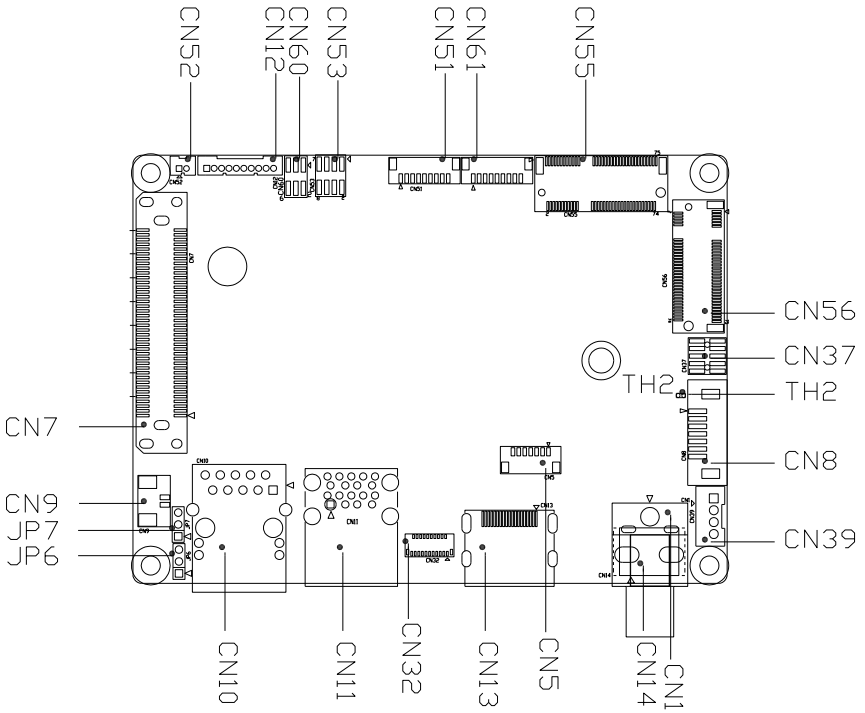
Note: Giga LAN port supports Wide Area Network (WAN) with Debian OS.
This port only supports Local area network (LAN) with Android OS.

Left Hand Side View

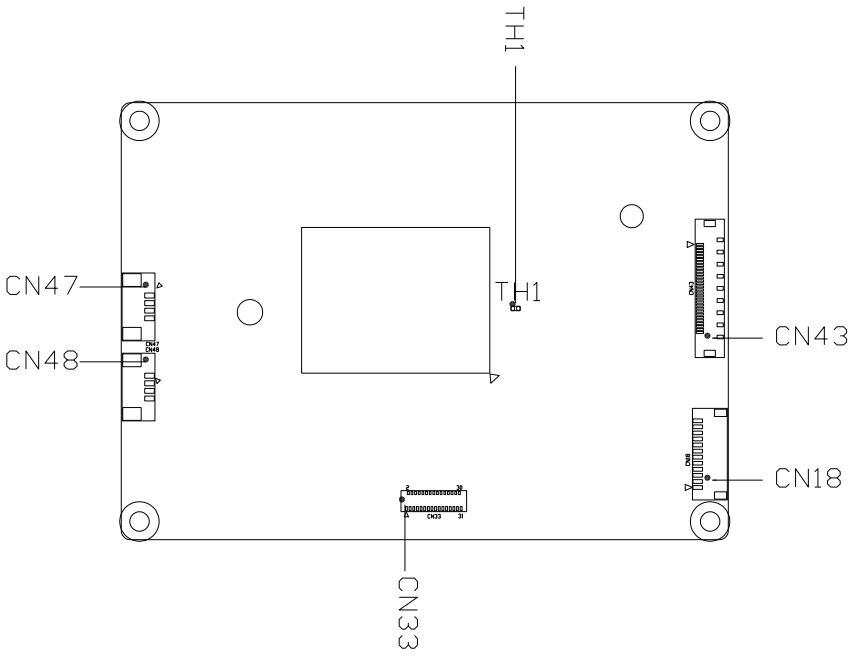


Label	Function
COM	DB-9 for RS-232

Component Side



Solder Side



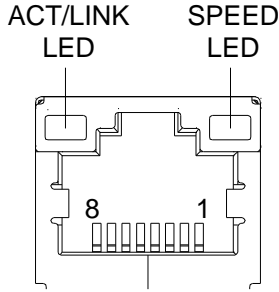
2.3 List of Connectors

Please refer to the table below for all of the board's connectors and their functions.

Label	Function
CN10	RJ-45 LAN
CN11	USB 3.2 Gen 1 Ports 0 and 1
CN13	HDMI Port
CN48	USB 2.0 Port
CN51	COM Port (RS-232)
CN61	COM Port (RS-232)

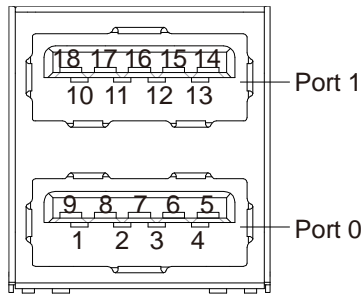
Note: The availability of the connector interfaces listed below is dependent on the mechanical design of the system. As such, while connectors may be present on its PCBA, this does not guarantee that the interface is present in the I/O of the standard system product. For information on the physical interfaces of the system, please refer to section 2.2.

2.3.1 LAN (RJ-45) Port (CN10)



Pin	Pin Name	Signal Type	Signal Level
1	MDI0+	DIFF	
2	MDI0-	DIFF	
3	MDI1+	DIFF	
4	MDI2+	DIFF	
5	MDI2-	DIFF	
6	MDI1-	DIFF	
7	MDI3+	DIFF	
8	MDI3-	DIFF	

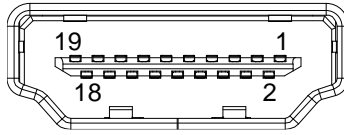
2.3.2 USB 3.2 Gen 1 Ports 0 and 1 (CN11)



Pin	Pin Name	Signal Type	Signal Level
1	+5VA	PWR	+5V

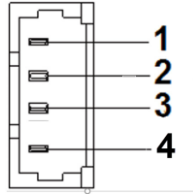
Pin	Pin Name	Signal Type	Signal Level
2	USB0_D-	DIFF	
3	USB0_D+	DIFF	
4	GND	GND	
5	USB0_SSRX-	DIFF	
6	USB0_SSRX+	DIFF	
7	GND	GND	
8	USB0_SSTX-	DIFF	
9	USB0_SSTX+	DIFF	
10	+5VA	PWR	+5V
11	USB1_D-	DIFF	
12	USB1_D+	DIFF	
13	GND	GND	
14	USB1_SSRX-		
15	USB1_SSRX+		
16	GND	GND	
17	USB1_SSTX-		
18	USB1_SSTX+		

2.3.3 HDMI Port (CN13)



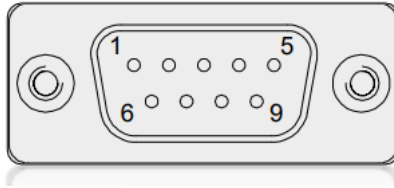
Pin	Pin Name	Signal Type	Signal Level
1	TMDS_DAT2+	DIFF	
2	GND	GND	
3	TMDS_DAT2-	DIFF	
4	TMDS_DAT1+	DIFF	
5	GND	GND	
6	TMDS_DAT1-	DIFF	
7	TMDS_DAT0+	DIFF	
8	GND	GND	
9	TMDS_DAT0-	DIFF	
10	TMDS_CLK+	DIFF	
11	GND	GND	
12	TMDS_CLK-	DIFF	
13	NC		
14	NC		
15	DDC_CLK	I/O	+5V
16	DDC_DATA	I/O	+5V
17	GND	GND	
18	+5V	I/O	+5V
19	HPLG_DETECT	IN	

2.3.4 USB (CN47/CN48)



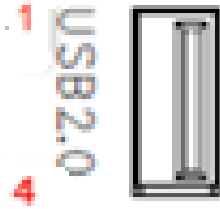
Pin	Pin Name	Signal Type	Signal Level
1	+USB_PWR	PWR	5V
2	USB-	Diff	
3	USB+	Diff	
4	GND	GND	

2.3.5 COM Port (CN51/CN61)



RS-232			
Pin	Pin Name	Signal Type	Signal Level
1	DCD#	IN	
2	RXD	IN	
3	TXD	OUT	
4	DTR#	OUT	
5	GND	GND	
6	DSR#	IN	
7	RTS#	OUT	
8	CTS#	IN	
9	RI#	IN/ PWR	

2.3.6 USB 2.0 Port (CN48)



Pin	Pin Name	Signal Type	Signal Level
1	+5V	PWR	+5V
2	USB_D-	DIFF	
3	USB_D+	DIFF	
4	GND	GND	

Chapter 3

AMI BIOS Setup

3.1 System Test and Initialization

The system uses certain routines to perform testing and initialization. If an error, fatal or non-fatal, is encountered, a few short beeps or an error message will be outputted. The board can usually continue the boot up sequence with non-fatal errors.

The system configuration verification routines check the current system configuration against the values stored in the CMOS memory. If they do not match, an error message will be outputted, in which case you will need to run the BIOS setup program to set the configuration information in memory.

There are three situations in which you will need to change the CMOS settings:

- You are starting your system for the first time
- You have changed your system's hardware
- The CMOS memory has lost power and the configuration information is erased

The system's CMOS memory uses a backup battery for data retention, which is to be replaced once emptied.

3.2 AMI BIOS Setup

The AMI BIOS ROM has a pre-installed Setup program that allows users to modify basic system configurations, which is stored in the battery-backed CMOS RAM and BIOS NVRAM so that the information is retained when the power is turned off.

To enter BIOS Setup, press immediately while your computer is powering up.

The function for each interface can be found below.

Main – Date and time can be set here. Press <Tab> to switch between date elements

Advanced – Enable/ Disable boot option for legacy network devices

Chipset – For hosting bridge parameters

Security – The setup administrator password can be set here

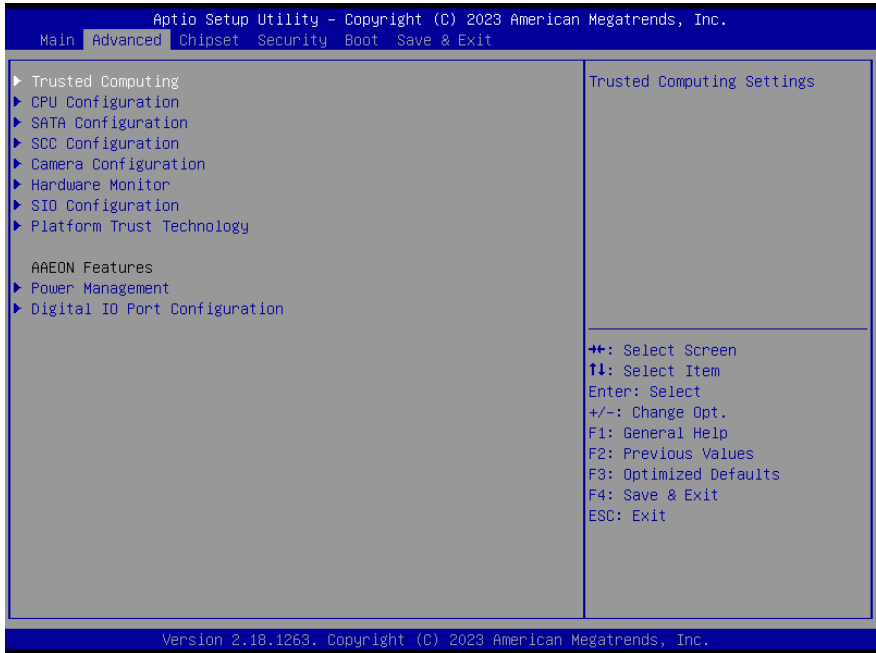
Boot – Enable/ Disable quiet Boot Option

Save & Exit – Save your changes and exit the program

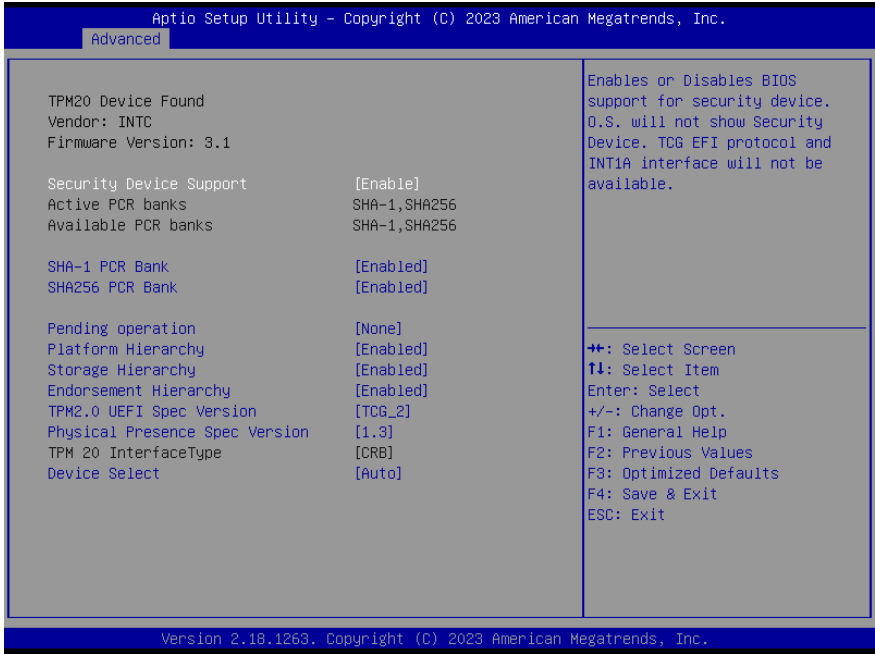
3.3 Setup Submenu: Main



3.4 Setup Submenu: Advanced



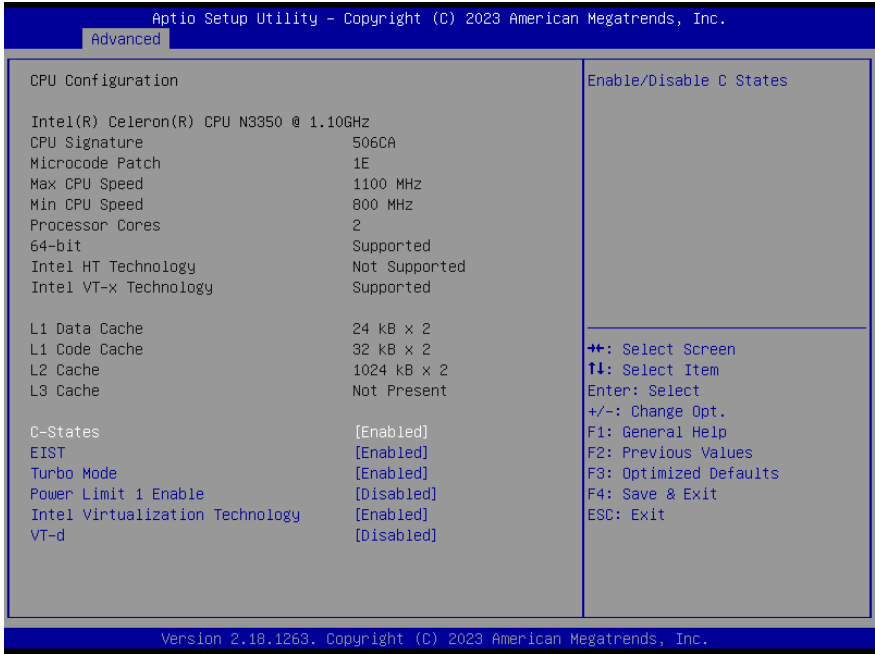
3.4.1 Trusted Computing



Options Summary		
Security Device Support	Disable	
	Enable	Optimal Default, Failsafe Default
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.		
SHA-1 PCR Bank	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable SHA-1 PCR Bank.		
SHA256 PCR Bank	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable SHA-256 PCR Bank.		
Pending operation	None	Optimal Default, Failsafe Default
	TPM Clear	
Schedule an Operation for the Security Device. NOTE: Your Computer will reboot during restart in order to change state of Security Device.		

Options Summary		
Platform Hierarchy	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable Platform Hierarchy.		
Storage Hierarchy	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable Storage Hierarchy.		
Endorsement Hierarchy	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable Endorsement Hierarchy.		
TPM2.0 UEFI Spec Version	TCG_1_2	
	TCG_2	Optimal Default, Failsafe Default
Select the TCG2 Spec Version Support. TCG_1_2: The Compatible mode for Win8/Win10. TCG_2: Support new TCG2 protocol and event format for Win10 or later.		
Physical Presence Spec Version	1.2	
	1.3	Optimal Default, Failsafe Default
Select to Tell O.S. to support PPI Spec Version 1.2 or 1.3. Note some HCK tests might not support 1.3.		
Device Select	TPM 1.2	
	TPM 2.0	
	Auto	Optimal Default, Failsafe Default
TPM 1.2 will restrict support to TPM 1.2 device. TPM 2.0 will restrict support to TPM 2.0 devices. Auto will support both with the default set to TPM 2.0 devices if not found. TPM 1.2 device will be enumerated.		

3.4.2 CPU Configuration



Options Summary		
C-states	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable/Disable C States.		
EIST	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable/Disable Intel SpeedStep.		
Turbo Mode	Disabled	
	Enabled	Optimal Default, Failsafe Default
Turbo Mode.		
Power Limit 1 Enable	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enable/Disable Power Limit 1.		
Intel Virtualization Technology	Disabled	
	Enabled	Optimal Default, Failsafe Default

Options Summary

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

VT-d	Disabled	Optimal Default, Failsafe Default
	Enabled	

Enable/Disable CPU VT-d.

3.4.3 SATA Configuration

Aptio Setup Utility - Copyright (C) 2023 American Megatrends, Inc.

Advanced

SATA Configuration	SATA GEN SPEED SELECTION
SATA GEN SPEED [Auto]	
Chipset SATA [Enable]	
SATA Port 0 [Not Installed]	
Port 0 [Enabled]	
SATA Port 0 Hot Plug Capability [Disabled]	
M.2 SATA Port [Not Installed]	
M.2 SATA Port [Enabled]	
	++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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Options Summary

SATA GEN SPEED	Auto	Optimal Default, Failsafe Default
	GEN1	
	GEN2	
	GEN3	

SATA gen speed selection.

Chipset SATA	Disable	
	Enable	Optimal Default, Failsafe Default

Options Summary

Enables or Disables the Chipset SATA Controller. The Chipset SATA controller supports the 2 black internal SATA ports (up to 3Gb/s supported per port).

Port 0	Disabled	
	Enabled	Optimal Default, Failsafe Default

Enable or Disable SATA Port.

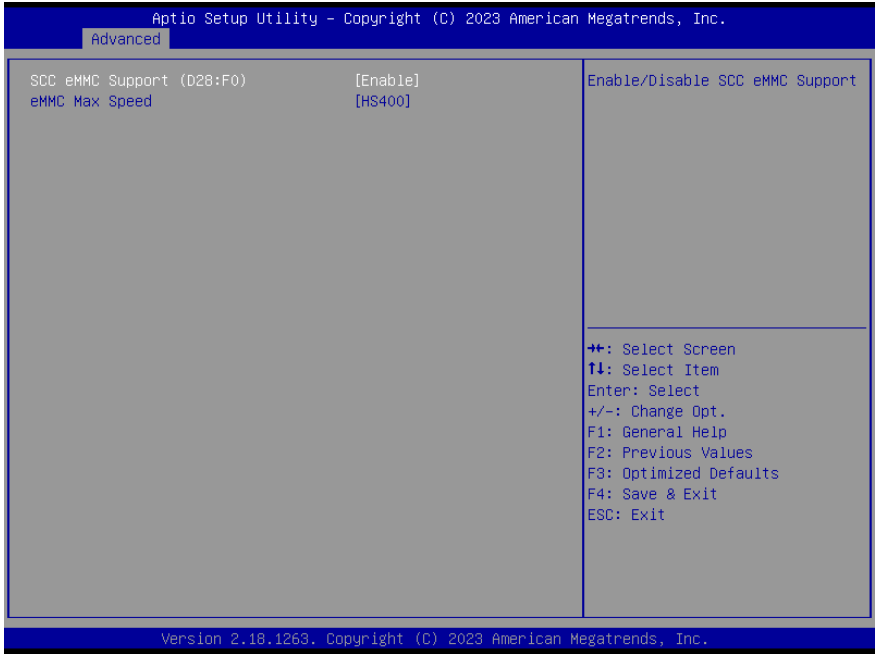
SATA Port 0 Hot Plug Capability	Disable	Optimal Default, Failsafe Default
	Enable	

If enabled, SATA port will be reported as Hot Plug capable.

M.2 SATA Port	Disabled	
	Enabled	Optimal Default, Failsafe Default

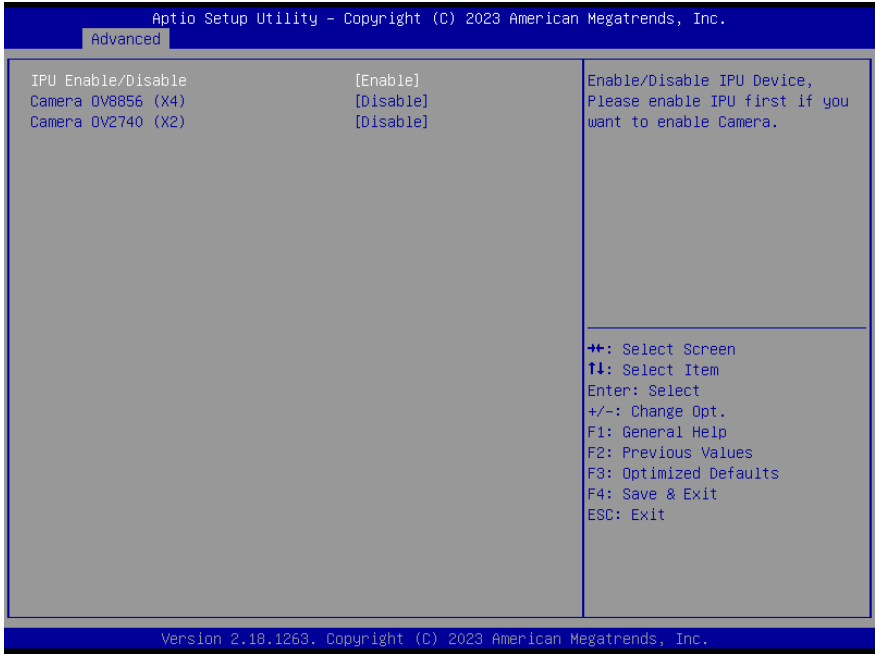
Enable or Disable SATA Port.

3.4.4 SCC Configuration



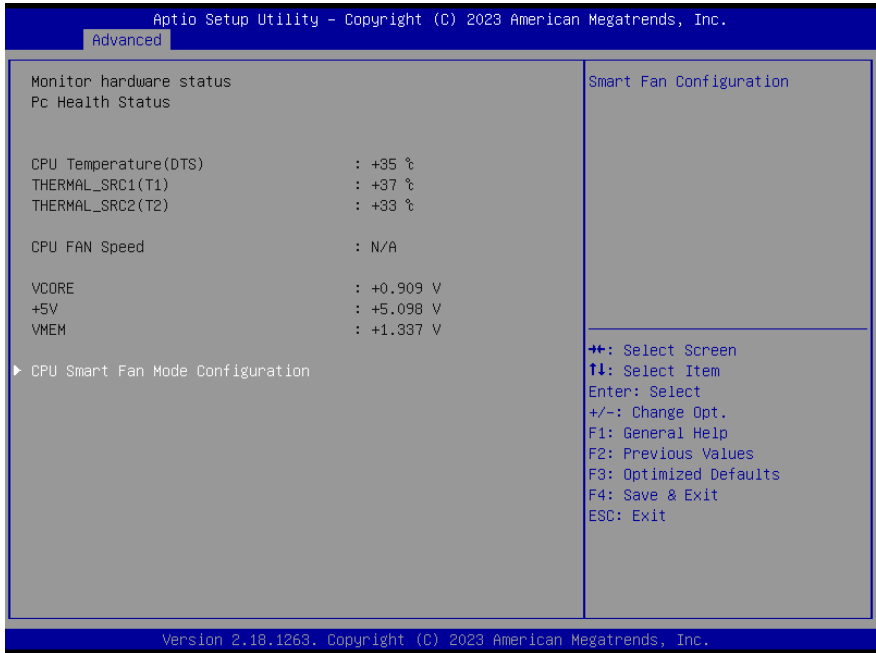
Options Summary		
SCC eMMC Support (D28:F0)	Disable	
	Enable	Optimal Default, Failsafe Default
Enable/Disable SCC eMMC Support.		
eMMC Max Speed	HS400	Optimal Default, Failsafe Default
	HS200	
	DDR50	
Select the eMMC max Speed allowed.		

3.4.5 Camera Configuration

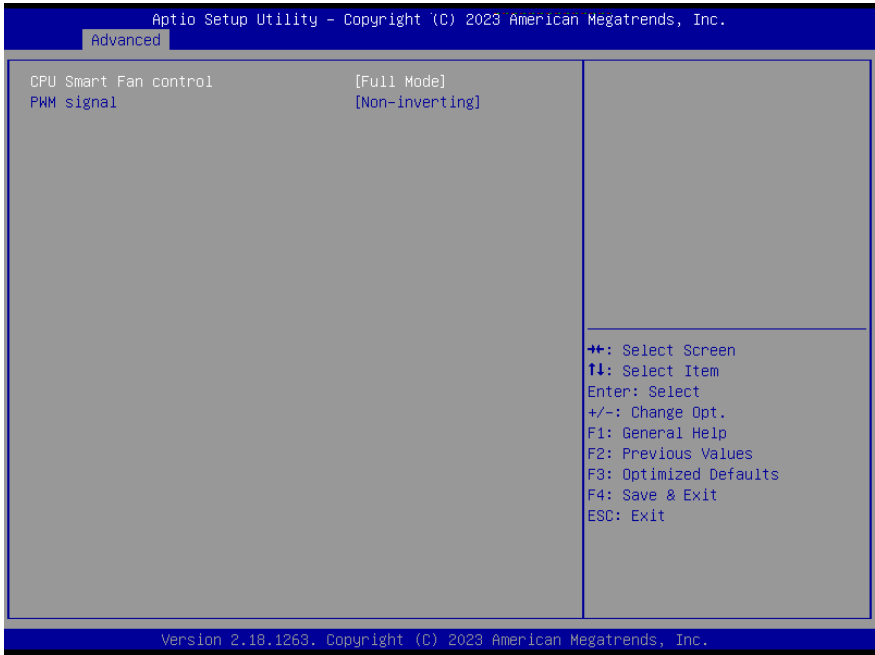


Options Summary		
IPU Enable/Disable	Disable	Optimal Default, Failsafe Default
	Enable	
Enable/Disable IPU Device, please enable IPU first if you want to enable Camera.		
Camera OV8856 (X4)	Disable	Optimal Default, Failsafe Default
	Enable	
Enable/Disable Camera OV8856.		
Camera OV2740 (X2)	Disable	Optimal Default, Failsafe Default
	Enable	
Enable/Disable Camera OV2740.		

3.4.6 Hardware Monitor

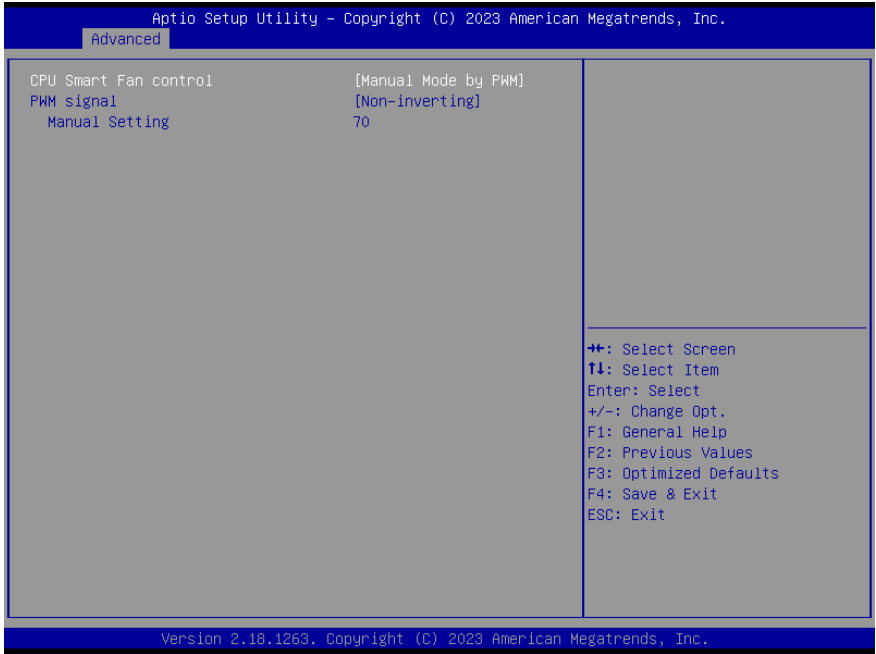


3.4.6.1 CPU Smart Fan Mode Configuration: Full Mode



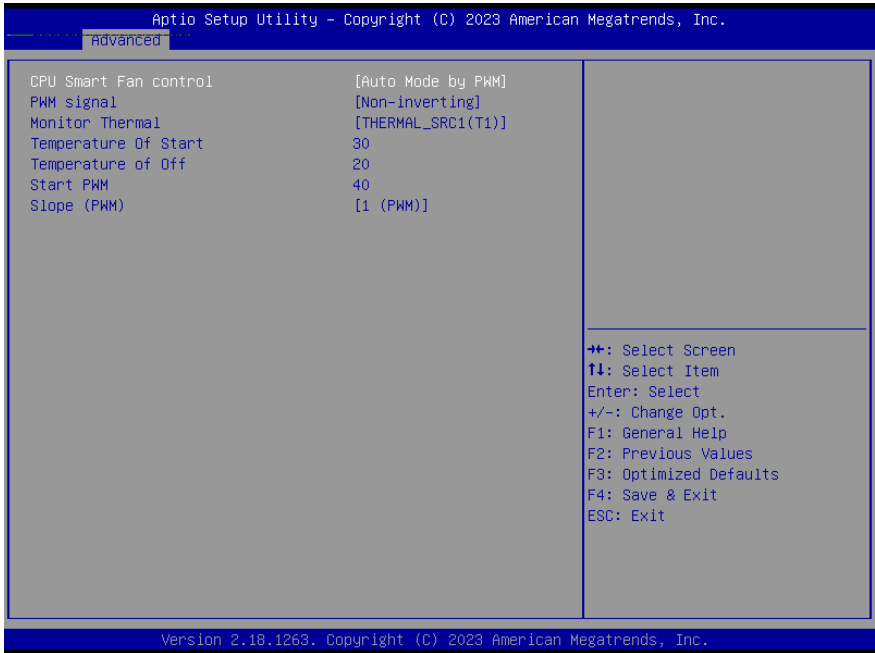
Options Summary		
CPU Smart Fan Mode	Full Mode	Optimal Default, Failsafe Default
	Manual Mode by PWM	
	Auto Mode by PWM	
PWM signal	Non-inverting	Optimal Default, Failsafe Default
	Inverting	
Select output PWM of inverting or non-inverting signal.		

3.4.6.2 CPU Smart Fan Mode Configuration: Manual Mode



Options Summary		
CPU Smart Fan Mode	Full Mode	
	Manual Mode by PWM	Optimal Default, Failsafe Default
	Auto Mode by PWM	
PWM signal	Non-inverting	Optimal Default, Failsafe Default
	Inverting	
Select output PWM of inverting or non-inverting signal.		
Manual Setting	70	Optimal Default, Failsafe Default
Set Fan at fixed Duty-Cycle Min=0 Max=100 Please input Dec number:		

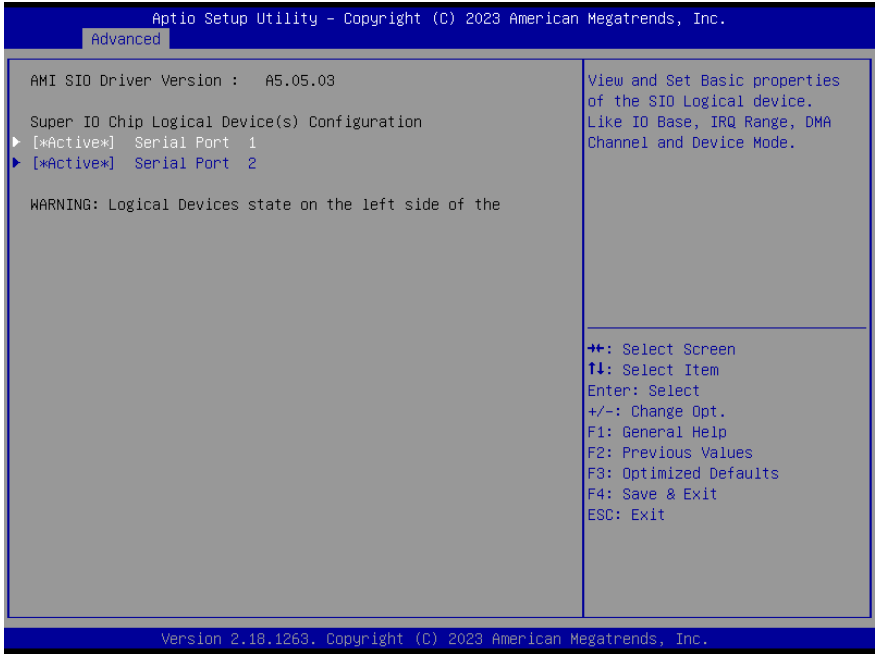
3.4.6.3 CPU Smart Fan Mode Configuration: Auto Mode



Options Summary		
CPU Smart Fan Mode	Full Mode	
	Manual Mode by PWM	
	Auto Mode by PWM	Optimal Default, Failsafe Default
PWM signal	Non-inverting	Optimal Default, Failsafe Default
	Inverting	
Select output PWM of inverting or non-inverting signal.		
Monitor Thermal	THERMAL_SRC1(T1)	Optimal Default, Failsafe Default
	THERMAL_SRC2(T2)	
Select monitor thermal source.		
Temperature of Start	30	Optimal Default, Failsafe Default
Temperature of Start.		
Temperature of Off	20	Optimal Default, Failsafe Default
Temperature of Off.		
Start PWM	40	Optimal Default, Failsafe Default

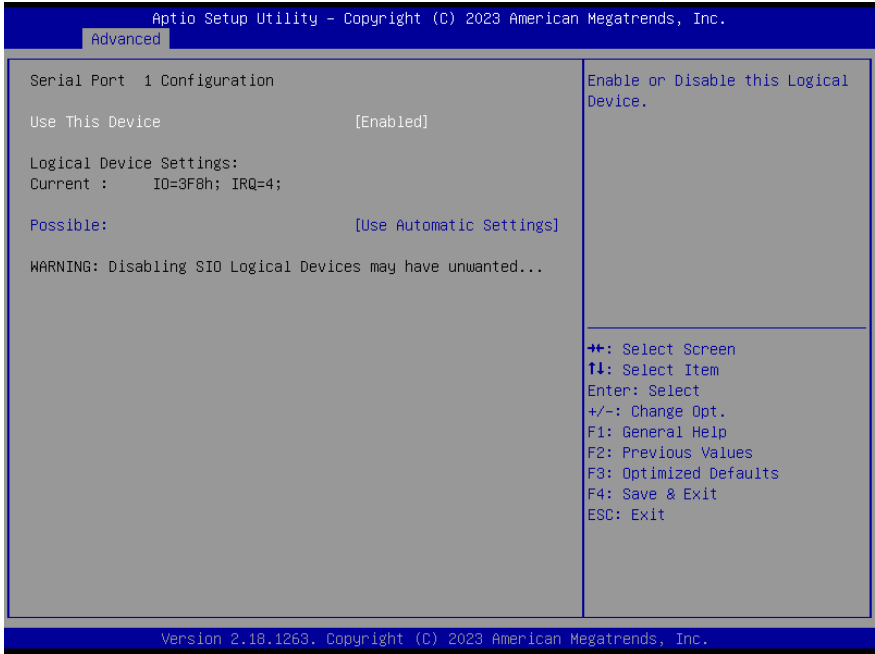
Options Summary		
Start PWM.		
Slope (PWM)	0 (PWM)	
	1 (PWM)	Optimal Default, Failsafe Default
	2 (PWM)	
	4 (PWM)	
	8 (PWM)	
	16 (PWM)	
	32 (PWM)	
	64 (PWM)	
Slope (PWM).		

3.4.7 SIO Configuration



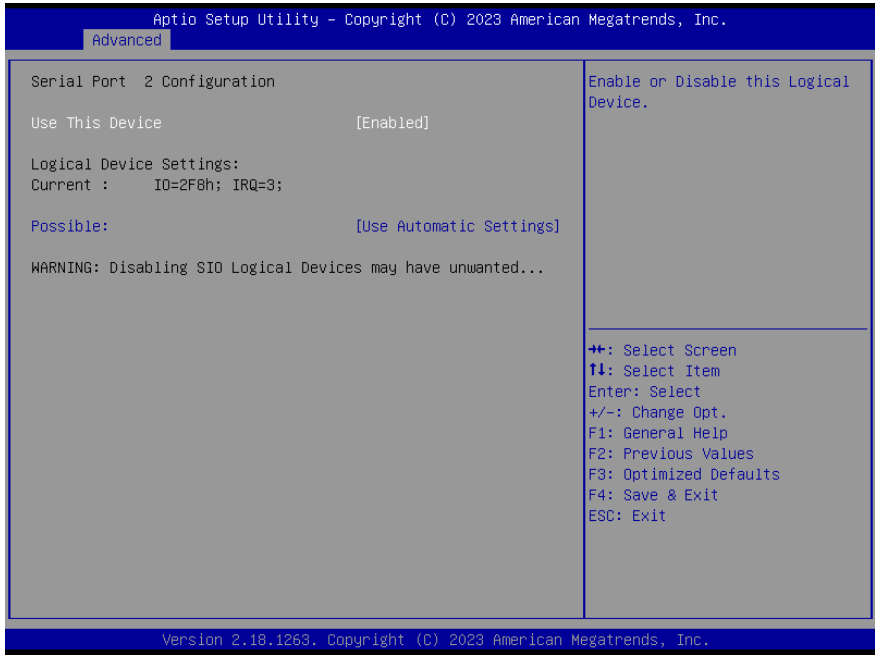
Options Summary		
[*Active*] Serial Port N		
View and Set Basic properties of the SIO Logical device. Like IO Base, IRQ Range, DMA Channel and Device Mode.		

3.4.7.1 Serial Port 1



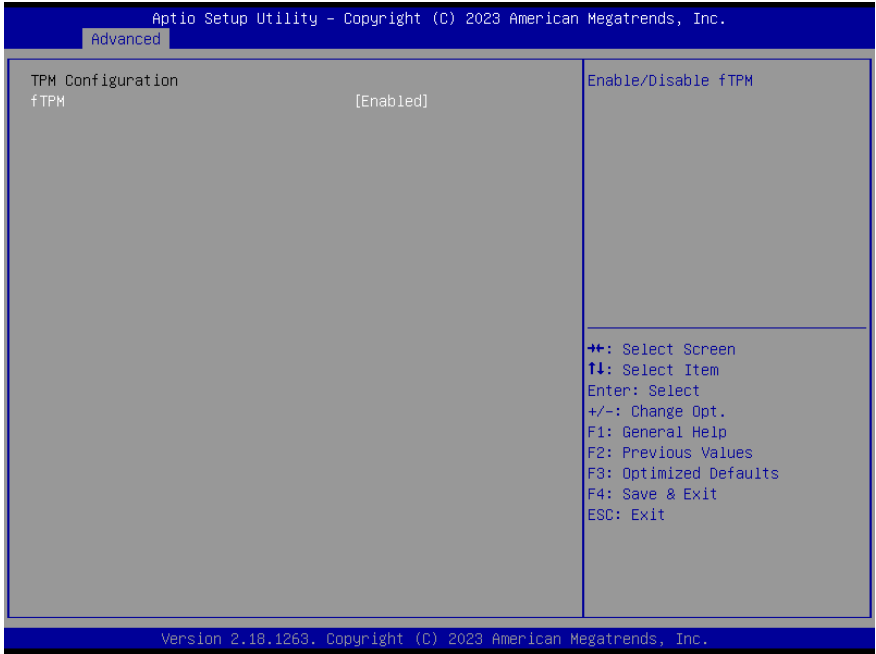
Options Summary		
Use This Device	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable or Disable this Logical Device.		
Possible	Use Automatic Settings	Optimal Default, Failsafe Default
	IO=3F8h; IRQ=4;	
Allows the user to change the device's resource settings. New settings will be reflected on this setup page after system restarts.		

3.4.7.2 Serial Port 2



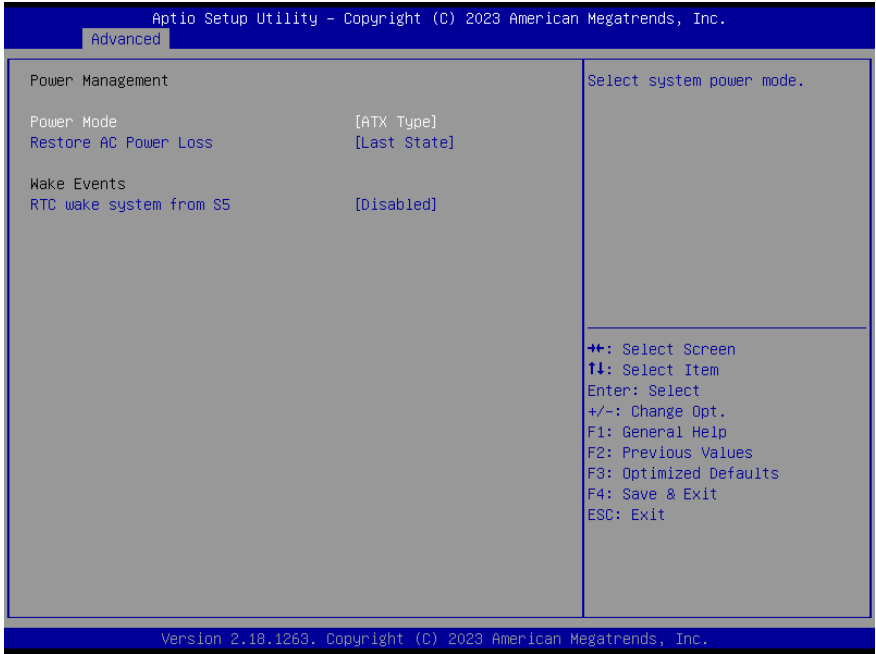
Options Summary		
Use This Device	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable or Disable this Logical Device.		
Possible	Use Automatic Settings	Optimal Default, Failsafe Default
	IO=2F8h; IRQ=3;	
Allows the user to change the device's resource settings. New settings will be reflected on this setup page after system restarts.		

3.4.8 Trusted Platform Technology



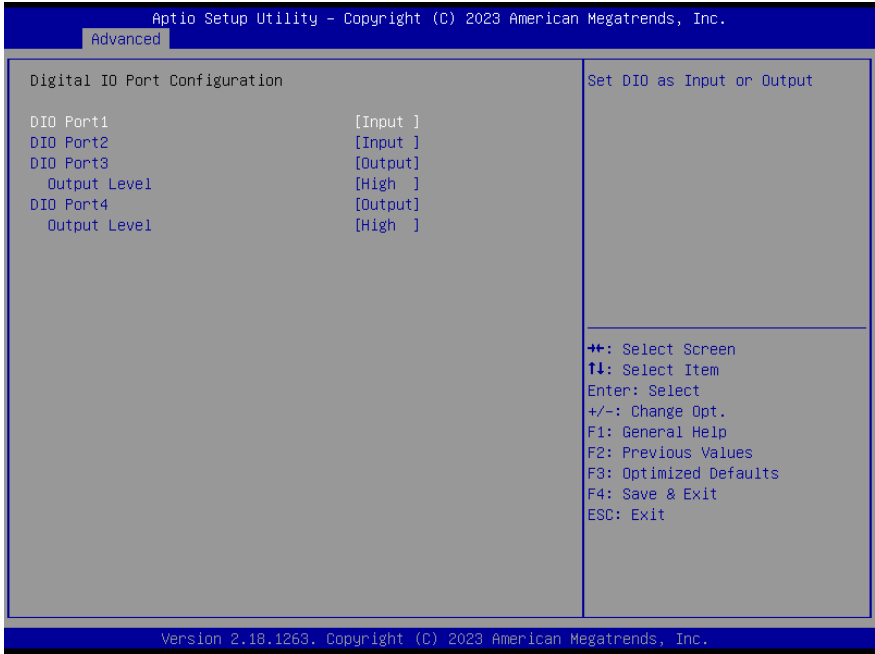
Options Summary		
fTPM	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable/Disable fTPM.		

3.4.9 Power Management



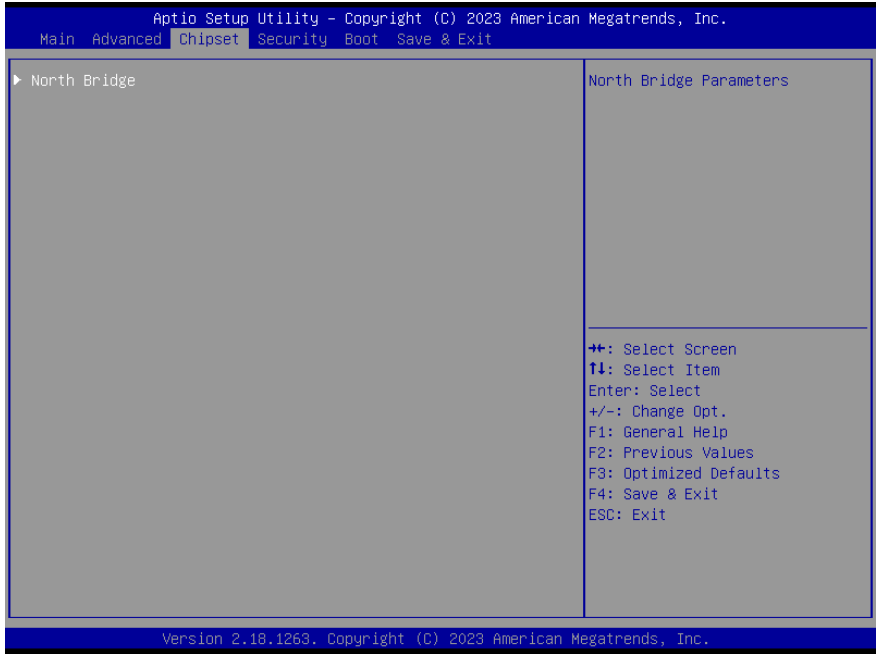
Options Summary		
Power Mode	ATX Type	Optimal Default, Failsafe Default
	AT Type	
Select system power mode.		
Restore AC Power Loss	Last State	Optimal Default, Failsafe Default
	Always On	
	Always Off	
Specify what state to go to when power is re-applied after a power failure (G3 state).		
RTC wake system from S5	Disabled	Optimal Default, Failsafe Default
	Fixed Time	
	Bypass	
Fixed Time: System will wake on the hr :: min :: sec specified.		
Bypass: BIOS will not control RTC wake function during system shutdown.		

3.4.10 Digital IO Port Configuration

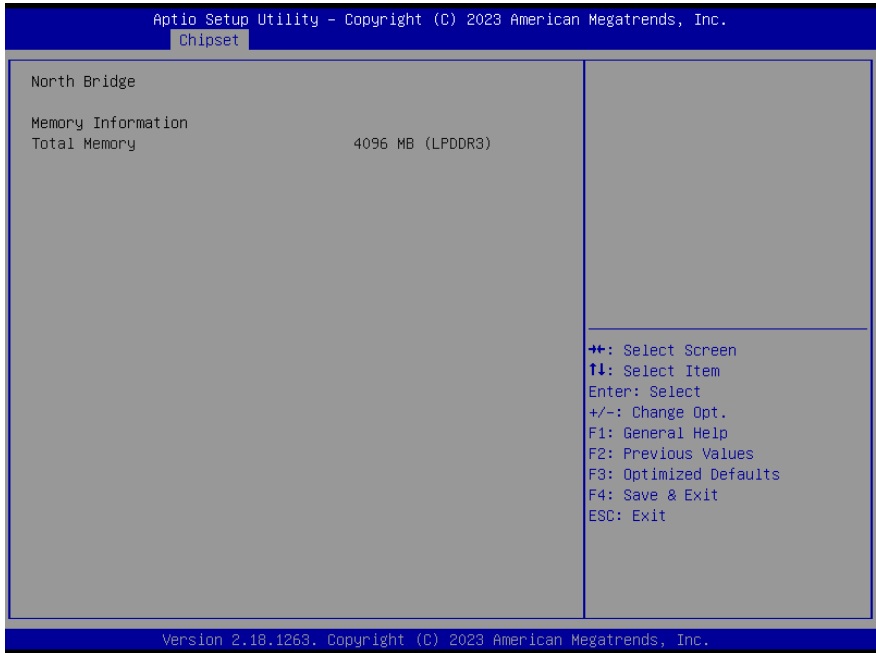


Options Summary		
DIO Port[1 – 2]	Input	Optimal Default, Failsafe Default
	Output	
Set DIO as Input or Output.		
DIO Port[3 – 4]	Input	
	Output	Optimal Default, Failsafe Default
Set DIO as Input or Output.		
Output Level	Low	
	High	Optimal Default, Failsafe Default
Set output level when DIO pin is output.		

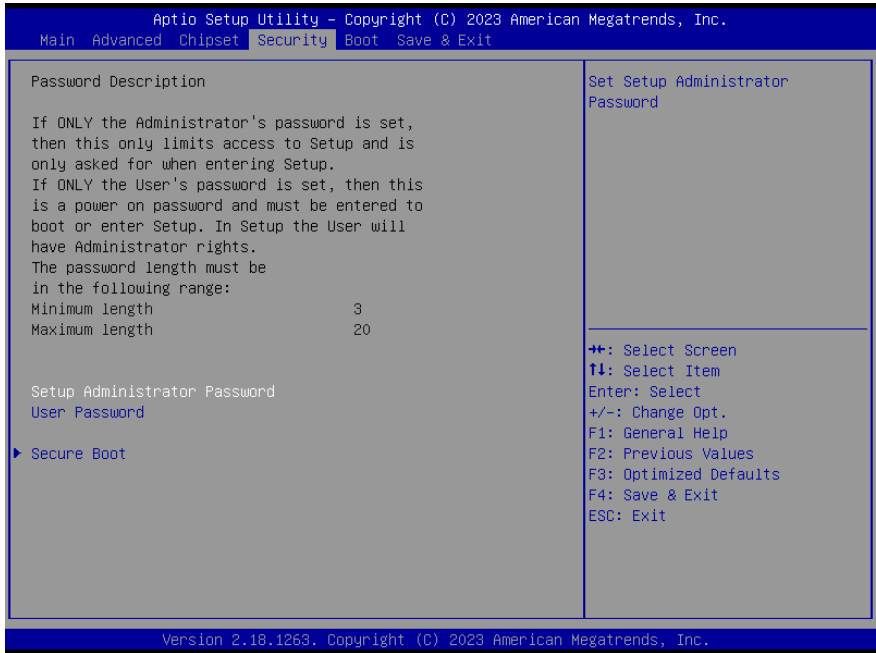
3.5 Setup Submenu: Chipset



3.5.1 North Bridge



3.6 Setup Submenu: Security



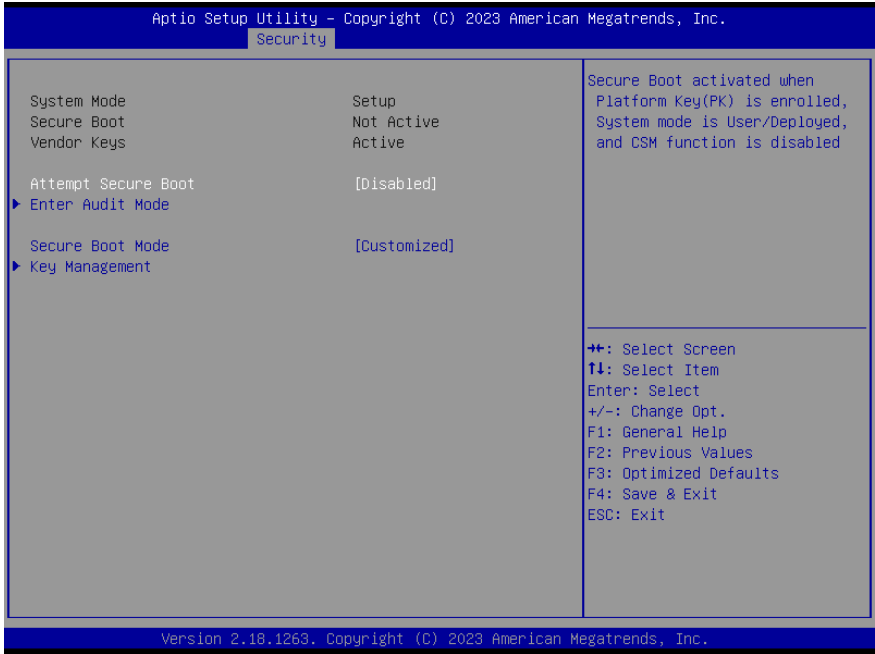
Change User/Administrator Password

You can set a User Password once an Administrator Password is set. The password will be required during boot up, or when the user enters the Setup utility. Please Note that a User Password does not provide access to many of the features in the Setup utility. Select the password you wish to set, press Enter to open a dialog box to enter your password (you can enter no more than six letters or numbers). Press Enter to confirm your entry, after which you will be prompted to retype your password for a final confirmation. Press Enter again after you have retyped it correctly.

Removing the Password

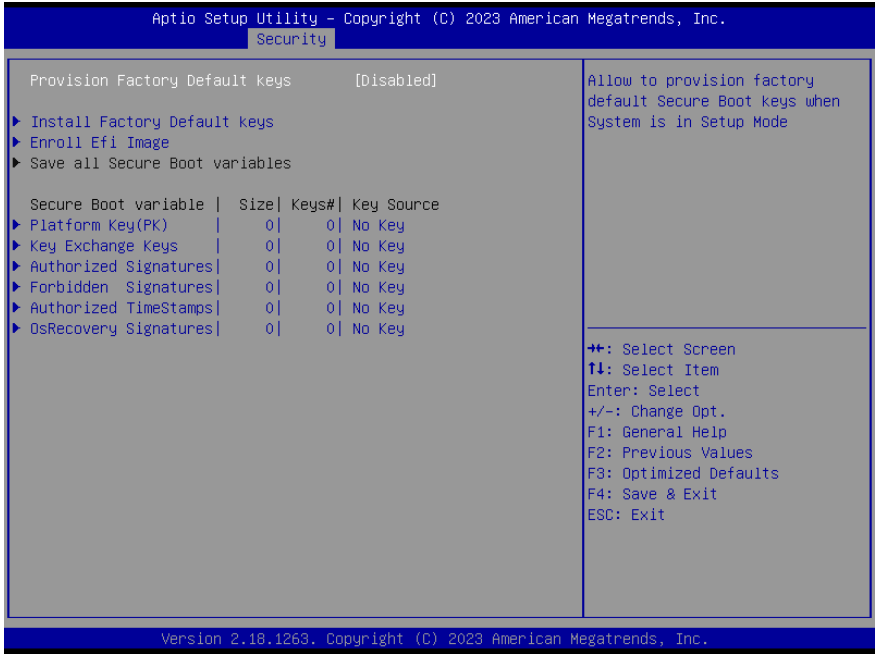
Highlight this item and type in the current password. At the next dialog box press Enter to disable password protection.

3.6.1 Secure Boot



Options Summary		
Attempt Secure Boot	Disabled	Optimal Default, Failsafe Default
	Enabled	
Secure Boot activated when Platform Key (PK) is enrolled, System mode is User/Deployed, and CSM function is disabled.		
Secure Boot Mode	Standard	
	Customized	Optimal Default, Failsafe Default
Secure Boot Mode – Custom & Standard, Set UEFI Secure Boot Mode to STANDARD mode or CUSTOM mode, this change is effect after save. And after reset, the mode will return to STANDARD mode.		

3.6.11 Key Management



Options Summary		
Provision Factory Default keys	Disabled	Optimal Default, Failsafe Default
	Enabled	
Allow to provision factory default Secure Boot keys when System is in Setup Mode.		
Install Factory Default keys		
Force system to User Mode – install all Factory Default keys.		
Enroll EFI Image		
Allow the image to run in Secure Boot mode. Enroll SHA256 Hash Certificate of the Image into Authorized Signature Database (db).		
Save all Secure Boot Variables.		
Save NVRAM content of Secure Boot policy variables to the files (EFI_SIGNATURE_LIST data format) in root folder on a target file system device.		

Options Summary

Secure Boot Variables

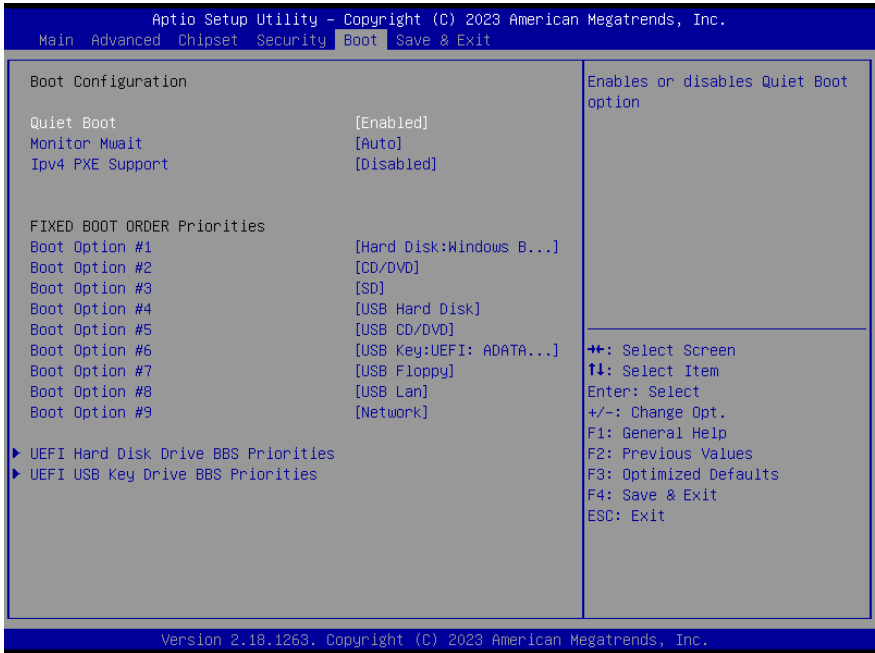
Enroll Factory Defaults or load certificates from a file:

1. Public Key Certificate in:
 - a) EFI_SIGNATURE_LIST
 - b) EFI_CERT_X509 (DER encoded)
 - c) EFI_CERT_RSA2048 (bin)
 - d) EFI_CERT_SHA256,384,512
2. Authenticated UEFI Variable
3. EFI PE/COFF Image (SHA256)

Key Source:

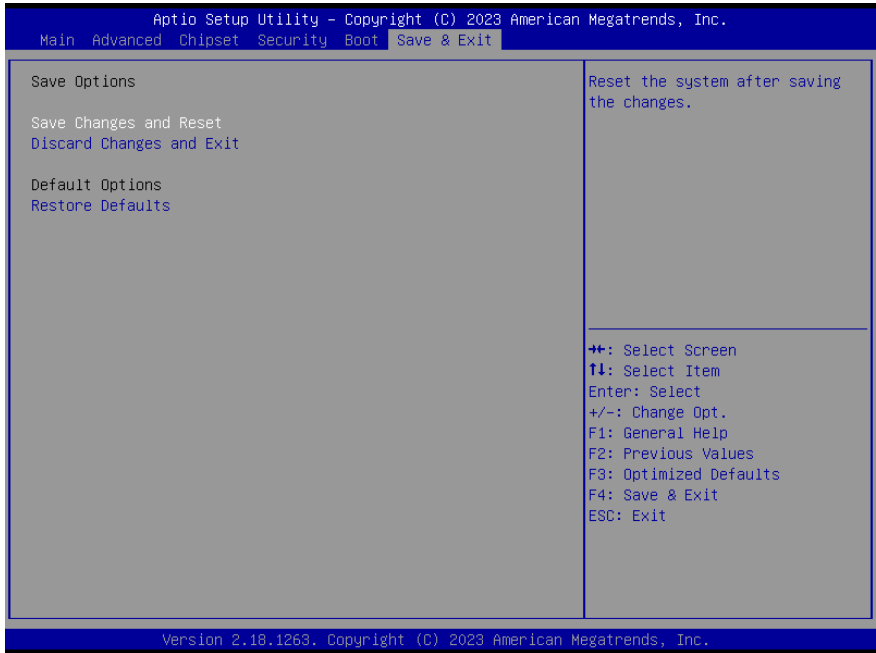
Default, External, Mixed, Test.

3.7 Setup Submenu: Boot



Options Summary		
Quiet Boot	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable / Disable Quiet Boot option.		
Monitor Mwait	Disabled	
	Enabled	
	Auto	Optimal Default, Failsafe Default
Enable/Disable Monitor Mwait.		
Ipv4 PXE Support	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enable Ipv4 PXE Boot Support. If disabled IPV4 PXE boot option will not be created.		
FIXED BOOT ORDER Priorities		
Sets the system boot order.		

3.8 Setup Submenu: Save & Exit



Chapter 4

Drivers Installation

4.1 Driver Download/Installation

Drivers for the ACP-1075 can be downloaded from the product page on the AAeon website by following this link:

<https://www.aaeon.com/en/p/industrial-multi-touch-panel-solutions-acp-1075>

Download the driver(s) you need and follow the steps below to install them.

Install Chipset Driver

1. Open the **Chipset Driver** folder and open the **SetupChipset.exe** file
2. Follow the instructions
3. Drivers will be installed automatically

Install Graphic Driver

1. Open the **Graphics Driver** folder and open the **Setup.exe** file
2. Follow the instructions
3. Driver will be installed automatically

Install LAN Driver

1. Open the **LAN Driver** folder and open the **Setup.exe** file
2. Follow the instructions
3. Driver will be installed automatically

Install Audio Driver

1. Open the **Audio Driver** folder and open the **0005-Win7_Win8_Win81_Win10_R279.exe** file
2. Follow the instructions
3. Driver will be installed automatically

Install TXE Driver

1. Open the **ME & TXE Driver** folder and open the **SetupTXE.exe** file
2. Follow the instructions
3. Driver will be installed automatically

Install Serial IO Driver

1. Open the **COM port Driver** folder and open the **SetupSerialIO.exe** file
2. Follow the instructions
3. Driver will be installed automatically

Appendix A

I/O Information

A.1 I/O Address Map

7th WSVGA Open-frame Panel PC
ACP-1075

Address Range	Device Name
[0000000000000000 - 000000000000006F]	PCI Express Root Complex
[0000000000000020 - 0000000000000021]	Programmable interrupt controller
[0000000000000024 - 0000000000000025]	Programmable interrupt controller
[0000000000000028 - 0000000000000029]	Programmable interrupt controller
[000000000000002C - 000000000000002D]	Programmable interrupt controller
[000000000000002E - 000000000000002F]	Motherboard resources
[0000000000000030 - 0000000000000031]	Programmable interrupt controller
[0000000000000034 - 0000000000000035]	Programmable interrupt controller
[0000000000000038 - 0000000000000039]	Programmable interrupt controller
[000000000000003C - 000000000000003D]	Programmable interrupt controller
[0000000000000040 - 0000000000000043]	System timer
[000000000000004E - 000000000000004F]	Motherboard resources
[0000000000000050 - 0000000000000053]	System timer
[0000000000000061 - 0000000000000061]	Motherboard resources
[0000000000000063 - 0000000000000063]	Motherboard resources
[0000000000000065 - 0000000000000065]	Motherboard resources
[0000000000000067 - 0000000000000067]	Motherboard resources
[0000000000000070 - 0000000000000070]	Motherboard resources
[0000000000000070 - 0000000000000077]	System CMOS/real time clock
[0000000000000078 - 00000000000000CF7]	PCI Express Root Complex
[0000000000000080 - 000000000000008F]	Motherboard resources
[0000000000000092 - 0000000000000092]	Motherboard resources
[00000000000000A0 - 00000000000000A1]	Programmable interrupt controller
[00000000000000A4 - 00000000000000A5]	Programmable interrupt controller
[00000000000000A8 - 00000000000000A9]	Programmable interrupt controller
[00000000000000AC - 00000000000000AD]	Programmable interrupt controller
[00000000000000B0 - 00000000000000B1]	Programmable interrupt controller
[00000000000000B2 - 00000000000000B3]	Motherboard resources
[00000000000000B4 - 00000000000000B5]	Programmable interrupt controller
[00000000000000B8 - 00000000000000B9]	Programmable interrupt controller
[00000000000000BC - 00000000000000BD]	Programmable interrupt controller
[00000000000002F8 - 00000000000002FF]	Communications Port (COM2)
[00000000000003F8 - 00000000000003FF]	Communications Port (COM1)
[0000000000000400 - 000000000000047F]	Motherboard resources
[00000000000004D0 - 00000000000004D1]	Programmable interrupt controller
[0000000000000500 - 00000000000005FE]	Motherboard resources
[0000000000000680 - 000000000000069F]	Motherboard resources
[0000000000000D00 - 0000000000000FFF]	PCI Express Root Complex
[0000000000000E00 - 0000000000000FFF]	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5AD8
[0000000000000F00 - 0000000000000FFF]	Realtek PCIe GbE Family Controller
[000000000000F000 - 000000000000F03F]	Intel(R) HD Graphics
[000000000000F040 - 000000000000F05F]	Intel(R) Celeron(R)/Pentium(R) Processor SMBUS - 5AD4
[000000000000F060 - 000000000000F07F]	Standard SATA AHCI Controller
[000000000000F080 - 000000000000F083]	Standard SATA AHCI Controller
[000000000000F090 - 000000000000F097]	Standard SATA AHCI Controller





















































A.2 Memory Address Map





















































7th WSVGA Open-frame Panel PC
ACP-1075





















































Memory	
[00000007B800001 - 00000007BFFFFFFF]	PCI Express Root Complex
[00000007C000001 - 00000007CFFFFFFF]	PCI Express Root Complex
[000000080000000 - 00000008FFFFFFF]	Intel(R) HD Graphics
[000000080000000 - 00000008CFFFFFFF]	PCI Express Root Complex
[000000091000000 - 000000091FFFFFFF]	Intel(R) HD Graphics
[000000092000000 - 0000000920FFFFFFF]	High Definition Audio Controller
[000000092100000 - 0000000921FFFFFFF]	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5AD8
[0000000921FB000 - 0000000921FBFFFF]	Realtek PCIe GbE Family Controller
[0000000921FC000 - 0000000921FCFFFF]	Realtek PCIe GbE Family Controller
[000000092200000 - 00000009220FFFFFFF]	Intel(R) USB 3.0 eXtensible Host Controller - 1.0 (Microsoft)
[000000092210000 - 000000092213FFFF]	High Definition Audio Controller
[000000092214000 - 000000092215FFFF]	Standard SATA AHCI Controller
[000000092218000 - 0000000922180FFF]	Intel(R) Celeron(R)/Pentium(R) Processor SMBUS - 5AD4
[000000092219000 - 000000092219FFFF]	Intel SD Host Controller
[00000009221A000 - 00000009221AFFFF]	Intel SD Host Controller
[00000009221B000 - 00000009221BFFFF]	Intel(R) Serial IO I2C Host Controller - 5AB4
[00000009221C000 - 00000009221CFFFF]	Intel(R) Serial IO I2C Host Controller - 5AB4
[00000009221D000 - 00000009221DFFFF]	Intel(R) Serial IO I2C Host Controller - 5AAE
[00000009221E000 - 00000009221EFFFF]	Intel(R) Serial IO I2C Host Controller - 5AAE
[00000009221F000 - 00000009221FFFFF]	Intel(R) Serial IO I2C Host Controller - 5AAC
[000000092220000 - 000000092220FFFF]	Intel(R) Serial IO I2C Host Controller - 5AAC
[000000092221000 - 0000000922217FFF]	Standard SATA AHCI Controller
[000000092222000 - 0000000922220FFF]	Standard SATA AHCI Controller
[000000092226000 - 000000092226FFFF]	PCI Simple Communications Controller
[00000000CF00000 - 00000000CFFFFFFF]	Intel(R) Imaging Signal Processor 2600
[00000000D0C0000 - 00000000D0C00653]	Intel(R) Serial IO GPIO Host Controller - INT3452
[00000000D0C4000 - 00000000D0C40763]	Intel(R) Serial IO GPIO Host Controller - INT3452
[00000000D0C5000 - 00000000D0C5076B]	Intel(R) Serial IO GPIO Host Controller - INT3452
[00000000D0C7000 - 00000000D0C70673]	Intel(R) Serial IO GPIO Host Controller - INT3452
[00000000E000000 - 00000000EFFFFFFF]	Motherboard resources
[00000000E000000 - 00000000EFFFFFFF]	PCI Express Root Complex
[00000000FEA0000 - 00000000FEAFFFFFFF]	Motherboard resources
[00000000FED0000 - 00000000FED003FF]	High precision event timer
[00000000FED0100 - 00000000FED01FFF]	Motherboard resources
[00000000FED0300 - 00000000FED03FFF]	Motherboard resources
[00000000FED0600 - 00000000FED06FFF]	Motherboard resources
[00000000FED0800 - 00000000FED09FFF]	Motherboard resources
[00000000FED1C00 - 00000000FED1CFFF]	Motherboard resources
[00000000FED4000 - 00000000FED44FFF]	Trusted Platform Module 2.0
[00000000FED8000 - 00000000FEDBFFFF]	Motherboard resources
[00000000FEE0000 - 00000000FEEFFFFFFF]	Motherboard resources





















































A.3 IRQ Mapping Chart





















































▼	Interrupt request (IRQ)	
	(ISA) 0x00000000 (00)	System timer
	(ISA) 0x00000003 (03)	Communications Port (COM2)
	(ISA) 0x00000004 (04)	Communications Port (COM1)
	(ISA) 0x00000008 (08)	High precision event timer
	(ISA) 0x0000000E (14)	Intel(R) Serial IO GPIO Host Controller - INT3452
	(ISA) 0x0000000E (14)	Intel(R) Serial IO GPIO Host Controller - INT3452
	(ISA) 0x0000000E (14)	Intel(R) Serial IO GPIO Host Controller - INT3452
	(ISA) 0x0000000E (14)	Intel(R) Serial IO GPIO Host Controller - INT3452
	(ISA) 0x00000037 (55)	Microsoft ACPI-Compliant System
	(ISA) 0x00000038 (56)	Microsoft ACPI-Compliant System
	(ISA) 0x00000039 (57)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003A (58)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003B (59)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003C (60)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003D (61)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003E (62)	Microsoft ACPI-Compliant System
	(ISA) 0x0000003F (63)	Microsoft ACPI-Compliant System
	(ISA) 0x00000040 (64)	Microsoft ACPI-Compliant System
	(ISA) 0x00000041 (65)	Microsoft ACPI-Compliant System
	(ISA) 0x00000042 (66)	Microsoft ACPI-Compliant System
	(ISA) 0x00000043 (67)	Microsoft ACPI-Compliant System
	(ISA) 0x00000044 (68)	Microsoft ACPI-Compliant System
	(ISA) 0x00000045 (69)	Microsoft ACPI-Compliant System
	(ISA) 0x00000046 (70)	Microsoft ACPI-Compliant System
	(ISA) 0x00000047 (71)	Microsoft ACPI-Compliant System
	(ISA) 0x00000048 (72)	Microsoft ACPI-Compliant System
	(ISA) 0x00000049 (73)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004A (74)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004B (75)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004C (76)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004D (77)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004E (78)	Microsoft ACPI-Compliant System
	(ISA) 0x0000004F (79)	Microsoft ACPI-Compliant System
	(ISA) 0x00000050 (80)	Microsoft ACPI-Compliant System
	(ISA) 0x00000051 (81)	Microsoft ACPI-Compliant System
	(ISA) 0x00000052 (82)	Microsoft ACPI-Compliant System
	(ISA) 0x00000053 (83)	Microsoft ACPI-Compliant System
	(ISA) 0x00000054 (84)	Microsoft ACPI-Compliant System
	(ISA) 0x00000055 (85)	Microsoft ACPI-Compliant System
	(ISA) 0x00000056 (86)	Microsoft ACPI-Compliant System
	(ISA) 0x00000057 (87)	Microsoft ACPI-Compliant System
	(ISA) 0x00000058 (88)	Microsoft ACPI-Compliant System
	(ISA) 0x00000059 (89)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005A (90)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005B (91)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005C (92)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005D (93)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005E (94)	Microsoft ACPI-Compliant System
	(ISA) 0x0000005F (95)	Microsoft ACPI-Compliant System
	(ISA) 0x00000060 (96)	Microsoft ACPI-Compliant System
	(ISA) 0x00000061 (97)	Microsoft ACPI-Compliant System





















































 (ISA) 0x00000062 (98)	Microsoft ACPI-Compliant System
 (ISA) 0x00000063 (99)	Microsoft ACPI-Compliant System
 (ISA) 0x00000064 (100)	Microsoft ACPI-Compliant System
 (ISA) 0x00000065 (101)	Microsoft ACPI-Compliant System
 (ISA) 0x00000066 (102)	Microsoft ACPI-Compliant System
 (ISA) 0x00000067 (103)	Microsoft ACPI-Compliant System
 (ISA) 0x00000068 (104)	Microsoft ACPI-Compliant System
 (ISA) 0x00000069 (105)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006A (106)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006B (107)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006C (108)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006D (109)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006E (110)	Microsoft ACPI-Compliant System
 (ISA) 0x0000006F (111)	Microsoft ACPI-Compliant System
 (ISA) 0x00000070 (112)	Microsoft ACPI-Compliant System
 (ISA) 0x00000071 (113)	Microsoft ACPI-Compliant System
 (ISA) 0x00000072 (114)	Microsoft ACPI-Compliant System
 (ISA) 0x00000073 (115)	Microsoft ACPI-Compliant System
 (ISA) 0x00000074 (116)	Microsoft ACPI-Compliant System
 (ISA) 0x00000075 (117)	Microsoft ACPI-Compliant System
 (ISA) 0x00000076 (118)	Microsoft ACPI-Compliant System
 (ISA) 0x00000077 (119)	Microsoft ACPI-Compliant System
 (ISA) 0x00000078 (120)	Microsoft ACPI-Compliant System
 (ISA) 0x00000079 (121)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007A (122)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007B (123)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007C (124)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007D (125)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007E (126)	Microsoft ACPI-Compliant System
 (ISA) 0x0000007F (127)	Microsoft ACPI-Compliant System
 (ISA) 0x00000080 (128)	Microsoft ACPI-Compliant System
 (ISA) 0x00000081 (129)	Microsoft ACPI-Compliant System
 (ISA) 0x00000082 (130)	Microsoft ACPI-Compliant System
 (ISA) 0x00000083 (131)	Microsoft ACPI-Compliant System
 (ISA) 0x00000084 (132)	Microsoft ACPI-Compliant System
 (ISA) 0x00000085 (133)	Microsoft ACPI-Compliant System
 (ISA) 0x00000086 (134)	Microsoft ACPI-Compliant System
 (ISA) 0x00000087 (135)	Microsoft ACPI-Compliant System
 (ISA) 0x00000088 (136)	Microsoft ACPI-Compliant System
 (ISA) 0x00000089 (137)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008A (138)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008B (139)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008C (140)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008D (141)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008E (142)	Microsoft ACPI-Compliant System
 (ISA) 0x0000008F (143)	Microsoft ACPI-Compliant System
 (ISA) 0x00000090 (144)	Microsoft ACPI-Compliant System
 (ISA) 0x00000091 (145)	Microsoft ACPI-Compliant System
 (ISA) 0x00000092 (146)	Microsoft ACPI-Compliant System
 (ISA) 0x00000093 (147)	Microsoft ACPI-Compliant System
 (ISA) 0x00000094 (148)	Microsoft ACPI-Compliant System
 (ISA) 0x00000095 (149)	Microsoft ACPI-Compliant System





















































 (ISA) 0x00000096 (150)	Microsoft ACPI-Compliant System
 (ISA) 0x00000097 (151)	Microsoft ACPI-Compliant System
 (ISA) 0x00000098 (152)	Microsoft ACPI-Compliant System
 (ISA) 0x00000099 (153)	Microsoft ACPI-Compliant System
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 (ISA) 0x0000009C (156)	Microsoft ACPI-Compliant System
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 (ISA) 0x0000009F (159)	Microsoft ACPI-Compliant System
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 (ISA) 0x000000AF (175)	Microsoft ACPI-Compliant System
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 (ISA) 0x0000017F (383)	Microsoft ACPI-Compliant System
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 (ISA) 0x0000019E (414)	Microsoft ACPI-Compliant System
 (ISA) 0x0000019F (415)	Microsoft ACPI-Compliant System
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 (ISA) 0x000001A2 (418)	Microsoft ACPI-Compliant System
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 (ISA) 0x000001A5 (421)	Microsoft ACPI-Compliant System
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 (ISA) 0x000001FC (508)	Microsoft ACPI-Compliant System
 (ISA) 0x000001FD (509)	Microsoft ACPI-Compliant System
 (ISA) 0x000001FE (510)	Microsoft ACPI-Compliant System
 (ISA) 0x000001FF (511)	Microsoft ACPI-Compliant System
 (PCI) 0x00000019 (25)	High Definition Audio Controller

 (PCI) 0x000001B (27)	Intel(R) Serial IO I2C Host Controller - 5AAC
 (PCI) 0x000001C (28)	Intel(R) Serial IO I2C Host Controller - 5AAE
 (PCI) 0x000001F (31)	Intel(R) Serial IO I2C Host Controller - 5AB4
 (PCI) 0x0000027 (39)	Intel SD Host Controller
 (PCI) 0xFFFFFFF6 (-10)	Realtek PCIe GbE Family Controller
 (PCI) 0xFFFFFFF7 (-9)	Intel(R) Imaging Signal Processor 2600
 (PCI) 0xFFFFFFF8 (-8)	Intel(R) USB 3.0 eXtensible Host Controller - 1.0 (Microsoft)
 (PCI) 0xFFFFFFF9 (-7)	Intel(R) HD Graphics
 (PCI) 0xFFFFF6A (-6)	Standard SATA AHCI Controller
 (PCI) 0xFFFFF6B (-5)	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5ADB
 (PCI) 0xFFFFF6C (-4)	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5ADA
 (PCI) 0xFFFFF6D (-3)	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5AD9
 (PCI) 0xFFFFF6E (-2)	Intel(R) Celeron(R)/Pentium(R) Processor PCI Express Root Port - 5AD8