COM-ADNC6

COM Express Module

User's Manual 2nd Ed

Last Updated: February 10, 2025

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Packing List

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

Item	Quantity
● COM-ADNC6	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. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system's hardware.
5. No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
6. 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.
7. Always disconnect this device from any AC supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent falls
12. Do not cover the openings on the device to ensure optimal heat dissipation.
13. Watch out for high temperatures when the system is running.
14. Do not touch the heat sink or heat spreader when the system is running
15. Never pour any liquid into the openings. This could cause fire or electric shock.
16. 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.

17. 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
18. DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.

FCC Statement

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.

China RoHS Requirements (CN)

产品中有毒有害物质或元素名称及含量

AAEON 主板/子板/背板 QO4-381 Rev.A2

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	×	○	○	○	○	○

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。

环保使用期限(EFUP (Environmental Friendly Use Period)) : 10年

备注：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。

China RoHS Requirement (EN)

Name and content of hazardous substances in product

AAEON Main Board/Daughter Board/Backplane QO4-381 Rev.A2

Part Name	Hazardous Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
PCB Assemblies	×	O	O	O	O	O
Connector and Cable	×	O	O	O	O	O

The table is prepared in accordance with the provisions of SJ/T 11364.

O：Indicates that said hazardous substance contained in all of the homogenous materials for this product is below the limit requirement of GB/T 26572.

×：Indicates that said hazardous substance contained in at least one of the homogenous materials used for this part is above the limit requirement of GB/T 26572. But this product still be compliance with 2011/65/EU Directive (allowed with 2011/65/EU Annex III of RoHS exemption with number 6(c),7(a),7(c)-1).

EFUP (Environment Friendly Use Period) value: 10 years

Notes: This product defined period of use is under normal condition.

Table of Contents

Chapter 1

Product Specifications

1.1 Specifications

System	
Form Factor	COM Express Type 6, Compact Size
CPU	Intel Atom® Processors x7000E/Intel® Processor N-series/Intel® Core™ i3 Processor N-series CPU: Intel® Core™ i3-N305 (8C, up to 3.8 GHz, 15W) Intel Atom® x7425E (4C, up to 3.4 GHz, 12W) Intel Atom® x7211E (2C, up to 3.2 GHz, 6W) Intel® Processor N97 (4C, up to 3.6 GHz, 12W) Intel® Processor N50 (2C, up to 3.4 GHz, 6W)
Chipset	Integrated with Intel ® SoC
Memory	DDR5 4800MHz, Single-Channel SODIMM x 1, up to 16GB
Onboard Storage	-
BIOS	AMI UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Dimension (L x W)	3.74" x 3.74" (95mm x 95mm)
Security	TPM 2.0

Power	
Power Requirement	+12V and +5VSB for ATX, +12V for AT
Power Type	AT (default)/ATX, switch by BIOS
Power Consumption (Typical)	Intel® Core™ i3-N305, 1.57A @+12V

Display

Graphics Controller	Intel® UHD Graphics
Video Output	3 Displays:
	18/24-bit Single/Dual-Channel LVDS/eDP x 1,
	up to 1920 x 1080/3840 x 2160
	DP x 2, up to 3840 x 2160

I/O

Ethernet	Intel® Ethernet Controller I226-V/IT, 2.5GbE x 1
Audio	High Definition Audio Interface
USB Port	USB 2.0 x 8
	USB 3.2 Gen 2 x 2
Serial Port	2-Wire UART x 2 (Tx/Rx)
HDD Interface	SATA 6Gb/s x 2
Expansion	PCIe ([x1] x 4 or [x2] x 2, configurable by BIOS)
	LPC, WDT, HWM
GPIO	8-bit
SMBus/I2C	I2C x 1
	SMBus x 1

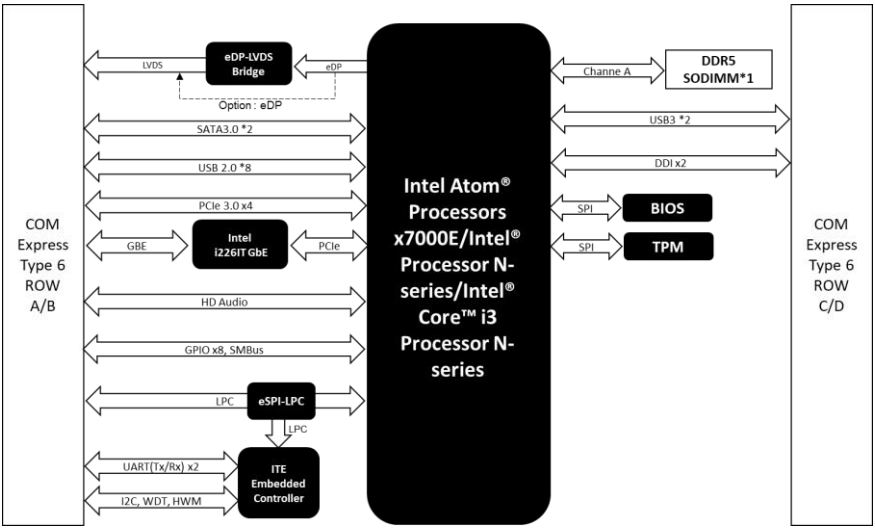
Environmental

Operating Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
	-40°F ~ 185°F (-40°C ~ 85°C) on selected CPU SKUs
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
EMC	CE/FCC Class A
OS Support	Windows® 10 (64-bit)
	Linux Ubuntu 22.04.02/Kernel 5.19.0

Environmental

Weight	0.26 lb. (0.12Kg)

1.2 Block Diagram

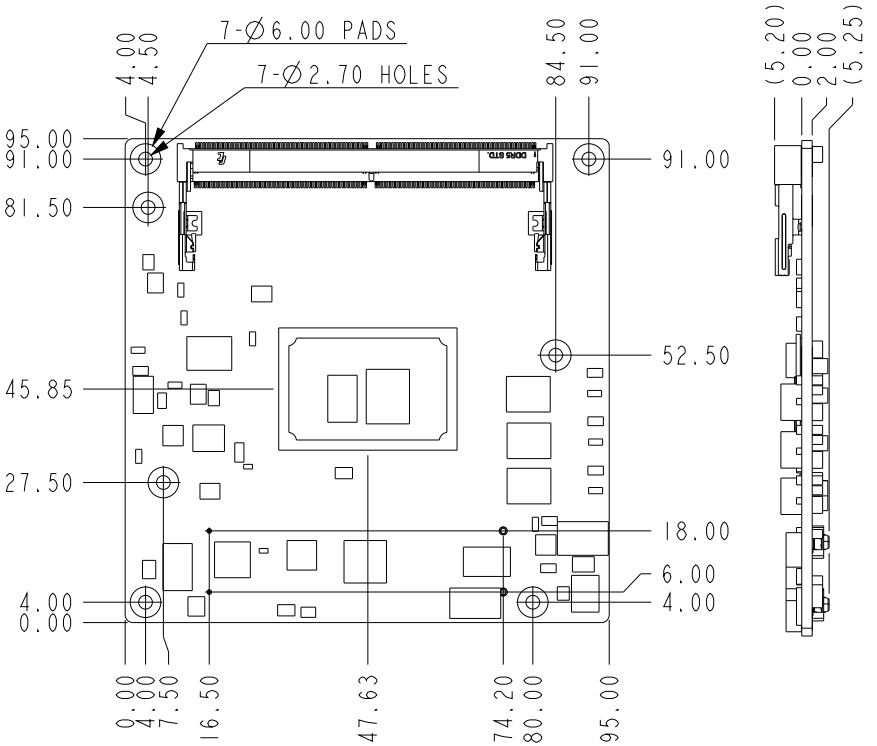


Chapter 2

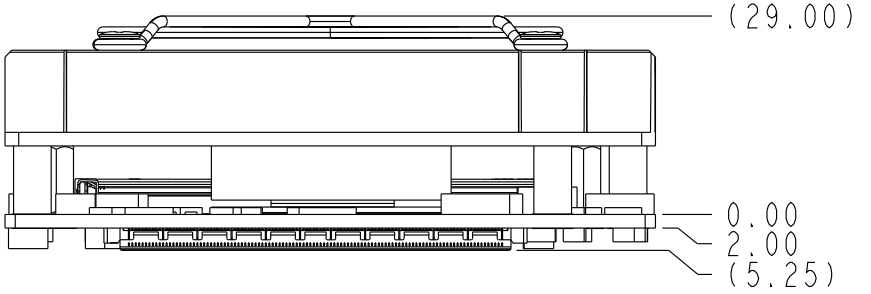
Hardware Information

2.1 Dimensions

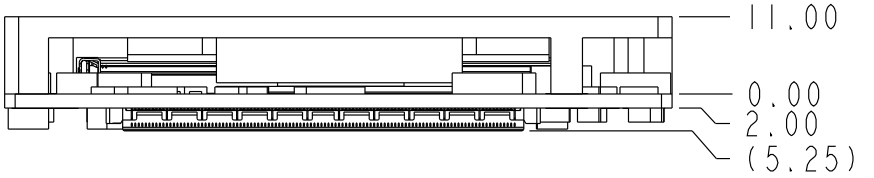
Top Side



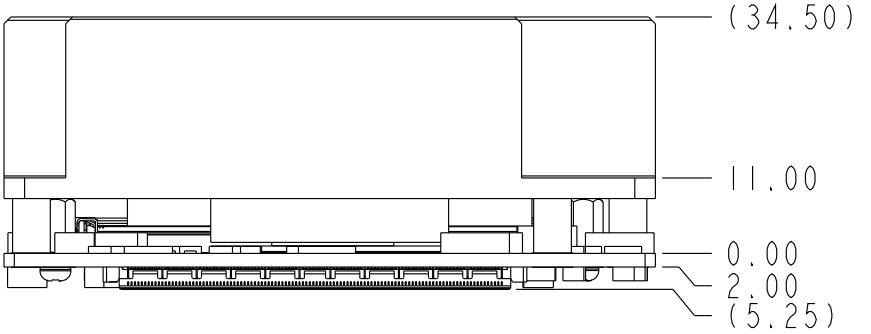
With Active Cooler



With Heatspreader

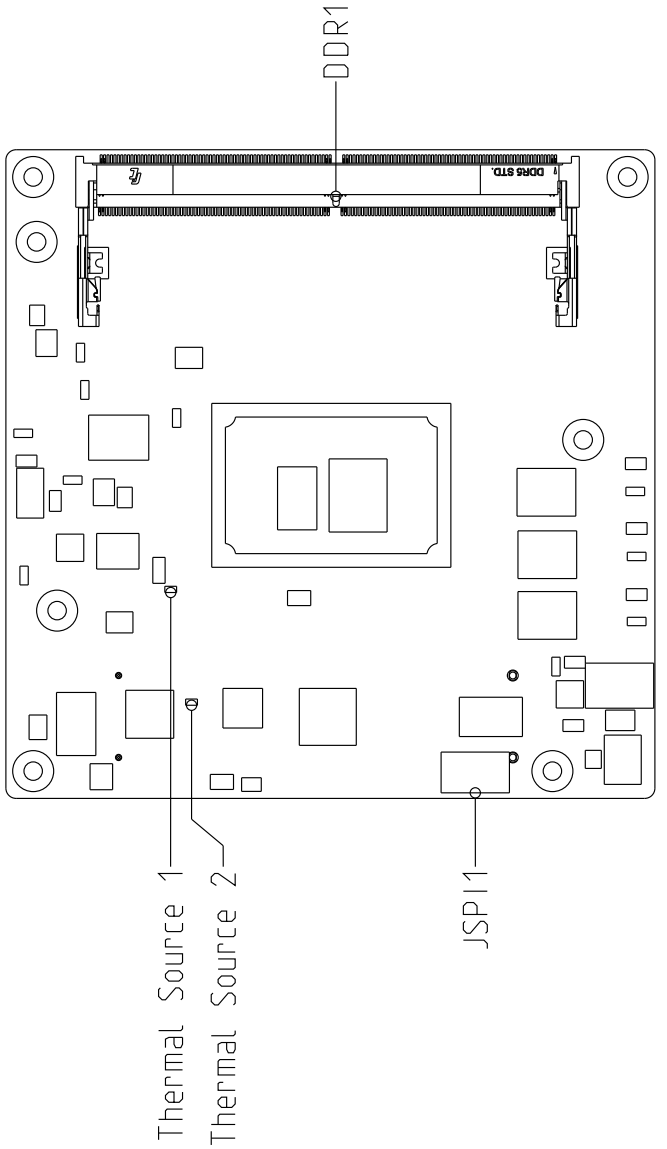


With Heatsink

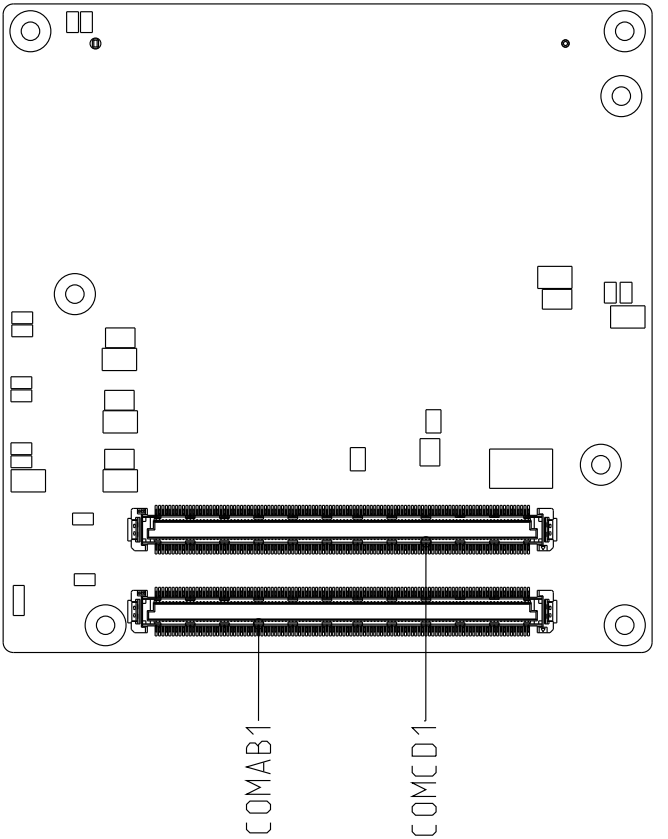


2.2 Jumpers and Connectors

Top Side



Bottom Side



2.3 List of Connectors

Please refer to the table below for all of the board's connectors that you can configure for your application

Label	Function
JSPI1	SPI ROM Flash Tool
COMAB1	Type 6 Row A/B
COMCD1	Type 6 Row C/D

2.3.1 SPI ROM Flash Tool (JSPI1)

Pin	Signal	Pin	Signal
1	SPI MISO	2	GND
3	SPI CLK	4	+V3P3A
5	SPI MOSI	6	SPI CS0#
7	NA		

2.3.2 Type 6 Row A/B (COMAB1)

Row A		Row B	
A1	GND	B1	GND
A2	GBE0_MDI3-	B2	GBE0_ACT#
A3	GBE0_MDI3+	B3	LPC_FRAME#/ESPI_CS0#
A4	GBE0_LINK100#	B4	LPC_AD0/ESPI_IO_0
A5	GBE0_LINK1000#	B5	LPC_AD1/ESPI_IO_1
A6	GBE0_MDI2-	B6	LPC_AD2/ESPI_IO_2
A7	GBE0_MDI2+	B7	LPC_AD3/ESPI_IO_3
A8	GBE0_LINK#	B8	LPC_DRQ0#/ESPI_ALERT0#(NC)
A9	GBE0_MDI1-	B9	LPC_DRQ1#/ESPI_ALERT1#(NC)
A10	GBE0_MDI1+	B10	LPC_CLK/ESPI_CK
A11	GND	B11	GND
A12	GBE0_MDI0-	B12	PWRBTN#
A13	GBE0_MDI0+	B13	SMB_CLK
A14	GBE0_CTREF(NC)	B14	SMB_DAT
A15	SUS_S3#	B15	SMB_ALERT#
A16	SATA0_TX+	B16	SATA1_TX+
A17	SATA0_TX-	B17	SATA1_TX-
A18	SUS_S4#	B18	SUS_STAT#/ESPI_RESET#
A19	SATA0_RX+	B19	SATA1_RX+
A20	SATA0_RX-	B20	SATA1_RX-
A21	GND	B21	GND

Row A		Row B	
A22	SATA2_TX+(NC)	B22	SATA3_TX+(NC)
A23	SATA2_TX-(NC)	B23	SATA3_TX-(NC)
A24	SUS_S5#	B24	PWR_OK
A25	SATA2_RX+(NC)	B25	SATA3_RX+(NC)
A26	SATA2_RX-(NC)	B26	SATA3_RX-(NC)
A27	BATLOW#	B27	WDT
A28	(S)ATA_ACT#	B28	HDA_SDIN2/SNDW0_CLK(NC)
A29	HDA_SYNC	B29	HDA_SDIN1/SNDW0_DAT
A30	HDA_RST#	B30	HDA_SDIN0
A31	GND	B31	GND
A32	HDA_BITCLK	B32	SPKR
A33	HDA_SDOUT	B33	I2C_CK
A34	BIOS_DIS0#/ESPI_SAFS	B34	I2C_DAT
A35	THRMTRIP#	B35	THRM#
A36	USB6-	B36	USB7-
A37	USB6+	B37	USB7+
A38	USB_6_7_OC#	B38	USB_4_5_OC#
A39	USB4-	B39	USB5-
A40	USB4+	B40	USB5+
A41	GND	B41	GND
A42	USB2-	B42	USB3-
A43	USB2+	B43	USB3+
A44	USB_2_3_OC#	B44	USB_0_1_OC#
A45	USB0-	B45	USB1-
A46	USB0+	B46	USB1+
A47	VCC_RTC	B47	ESPI_EN#
A48	RSMRST_OUT#	B48	USB0_HOST_PRSNT(NC)
A49	GBE0_SDP	B49	SYS_RESET#
A50	LPC_SERIRQ/ESPI_CS1#	B50	CB_RESET#
A51	GND	B51	GND
A52	PCIE_TX5+(NC)	B52	PCIE_RX5+(NC)
A53	PCIE_TX5-(NC)	B53	PCIE_RX5-(NC)
A54	GPI0	B54	GPO1

Row A		Row B	
A55	PCIE_TX4+(NC)	B55	PCIE_RX4+(NC)
A56	PCIE_TX4-(NC)	B56	PCIE_RX4-(NC)
A57	GND	B57	GPO2
A58	PCIE_TX3+	B58	PCIE_RX3+
A59	PCIE_TX3-	B59	PCIE_RX3-
A60	GND	B60	GND
A61	PCIE_TX2+	B61	PCIE_RX2+
A62	PCIE_TX2-	B62	PCIE_RX2-
A63	GPI1	B63	GPO3
A64	PCIE_TX1+	B64	PCIE_RX1+
A65	PCIE_TX1-	B65	PCIE_RX1-
A66	GND	B66	WAKE0#
A67	GPI2	B67	WAKE1#
A68	PCIE_TX0+	B68	PCIE_RX0+
A69	PCIE_TX0-	B69	PCIE_RX0-
A70	GND	B70	GND
A71	LVDS_A0+	B71	LVDS_B0+
A72	LVDS_A0-	B72	LVDS_B0-
A73	LVDS_A1+	B73	LVDS_B1+
A74	LVDS_A1-	B74	LVDS_B1-
A75	LVDS_A2+	B75	LVDS_B2+
A76	LVDS_A2-	B76	LVDS_B2-
A77	LVDS_VDD_EN	B77	LVDS_B3+
A78	LVDS_A3+	B78	LVDS_B3-
A79	LVDS_A3-	B79	LVDS_BKLT_EN
A80	GND	B80	GND
A81	LVDS_A_CK+	B81	LVDS_B_CK+
A82	LVDS_A_CK-	B82	LVDS_B_CK-
A83	LVDS_I2C_CK	B83	LVDS_BKLT_CTLR
A84	LVDS_I2C_DAT	B84	VCC_5V_SBY_0
A85	GPI3	B85	VCC_5V_SBY_1
A86	GP_SPI_MOSI	B86	VCC_5V_SBY_2
A87	eDP_HPD	B87	VCC_5V_SBY_3

Row A		Row B	
A88	PCIE0_CK_REF+	B88	BIOS_DIS1#
A89	PCIE0_CK_REF-	B89	VGA_RED(NC)
A90	GND	B90	GND
A91	SPI_POWER	B91	VGA_GRN(NC)
A92	SPI_MISO	B92	VGA_BLU(NC)
A93	GPO0	B93	VGA_HSYNC(NC)
A94	SPI_CLK	B94	VGA_VSYNC(NC)
A95	SPI_MOSI	B95	VGA_I2C_CK(NC)
A96	TPM_PP	B96	VGA_I2C_DAT(NC)
A97	TYPE10#(NC)	B97	SPI_CS#
A98	RS1_TX	B98	GP_SPI_MISO
A99	RS1_RX	B99	GP_SPI_CK
A100	GND	B100	GND
A101	RS2_TX	B101	FAN_PWMOUT
A102	RS2_RX	B102	FAN_TACHIN
A103	LID#	B103	SLEEP#
A104	VCC_12V_0	B104	VCC_12V_6
A105	VCC_12V_1	B105	VCC_12V_7
A106	VCC_12V_2	B106	VCC_12V_8
A107	VCC_12V_3	B107	VCC_12V_9
A108	VCC_12V_4	B108	VCC_12V_10
A109	VCC_12V_5	B109	VCC_12V_11
A110	GND	B110	GND

2.3.3 Type 6 Row C/D (COMCD1)

Row C		Row D	
C1	GND	D1	GND
C2	GND	D2	GND
C3	USB_SSRX0-	D3	USB_SSTX0-
C4	USB_SSRX0+	D4	USB_SSTX0+
C5	GND	D5	GND
C6	USB_SSRX1-	D6	USB_SSTX1-
C7	USB_SSRX1+	D7	USB_SSTX1+
C8	GND	D8	GND
C9	USB_SSRX2-(NC)	D9	USB_SSTX2-(NC)
C10	USB_SSRX2+(NC)	D10	USB_SSTX2+(NC)
C11	GND	D11	GND
C12	USB_SSRX3-(NC)	D12	USB_SSTX3-(NC)
C13	USB_SSRX3+(NC)	D13	USB_SSTX3+(NC)
C14	GND	D14	GND
C15	USB4_1_LSTX(NC)	D15	DDI1_CTRLCLK_AUX+/USB4_1_AUX+
C16	USB4_1_LSRX(NC)	D16	DDI1_CTRLDATA_AUX-/USB4_1_AUX-
C17	USB4_RT_ENA(NC)	D17	USB4_PD_I2C_ALERT#(NC)
C18	RSVD(GND)	D18	PMCALERT#
C19	PCIE_RX6+(NC)	D19	PCIE_TX6+(NC)
C20	PCIE_RX6-(NC)	D20	PCIE_TX6-(NC)
C21	GND	D21	GND
C22	PCIE_RX7+(NC)	D22	PCIE_TX7+(NC)
C23	PCIE_RX7-(NC)	D23	PCIE_TX7-(NC)
C24	DDI1_HPD	D24	RSVD(GND)
C25	SML0_CLK	D25	RSVD(GND)
C26	SML0_DAT	D26	DDI1_PAIR0+/USB4_1_SSTX0+
C27	SML1_CLK	D27	DDI1_PAIR0-/USB4_1_SSTX0-
C28	SML1_DAT	D28	GND_50(NC)
C29	USB4_PD_I2C_CLK(NC)	D29	DDI1_PAIR1+/USB4_1_SSRX0+
C30	USB4_PD_I2C_DAT(NC)	D30	DDI1_PAIR1-/USB4_1_SSRX0-

Row C		Row D	
C31	GND	D31	GND
C32	DDI2_CTRLCLK_AUX+/USB4_2 AUX+	D32	DDI1_PAIR2+/USB4_1_SSTX1+
C33	DDI2_CTRLDATA_AUX-/USB4_ 2AUX-	D33	DDI1_PAIR2-/USB4_1_SSTX1-
C34	DDI2_DDC_AUX_SEL	D34	DDI1_DDC_AUX_SEL
C35	USB4_2_LSTX(NC)	D35	USB4_2_LSRX(NC)
C36	DDI3_CTRLCLK_AUX+(NC)	D36	DDI1_PAIR3+/USB4_1_SSRX1+
C37	DDI3_CTRLDATA_AUX-(NC)	D37	DDI1_PAIR3-/USB4_1_SSRX1-
C38	DDI3_DDC_AUX_SEL(NC)	D38	RSVD(GND)
C39	DDI3_PAIR0+(NC)	D39	DDI2_PAIR0+/USB4_2_SSTX0+
C40	DDI3_PAIR0-(NC)	D40	DDI2_PAIR0-/USB4_2_SSTX0-
C41	GND	D41	GND
C42	DDI3_PAIR1+(NC)	D42	DDI2_PAIR1+/USB4_2_SSRX0+
C43	DDI3_PAIR1-(NC)	D43	DDI2_PAIR1-/USB4_2_SSRX0-
C44	DDI3_HPD(NC)	D44	DDI2_HPD
C45	GP_SPI_CS#	D45	RSVD(GND)
C46	DDI3_PAIR2+(NC)	D46	DDI2_PAIR2+/USB4_2_SSTX1+
C47	DDI3_PAIR2-(NC)	D47	DDI2_PAIR2-/USB4_2_SSTX1-
C48	RSVD_6(NC)	D48	RSVD(GND)
C49	DDI3_PAIR3+(NC)	D49	DDI2_PAIR3+/USB4_2_SSRX1+
C50	DDI3_PAIR3-(NC)	D50	DDI2_PAIR3-/USB4_2_SSRX1-
C51	GND	D51	GND
C52	PEG_RX0+(NC)	D52	PEG_TX0+(NC)
C53	PEG_RX0-(NC)	D53	PEG_TX0-(NC)
C54	TYPE0#(NC)	D54	PEG_LANE_RV#(NC)
C55	PEG_RX1+(NC)	D55	PEG_TX1+(NC)
C56	PEG_RX1-(NC)	D56	PEG_TX1-(NC)
C57	TYPE1#(NC)	D57	TYPE2#
C58	PEG_RX2+(NC)	D58	PEG_TX2+(NC)
C59	PEG_RX2-(NC)	D59	PEG_TX2-(NC)
C60	GND	D60	GND
C61	PEG_RX3+(NC)	D61	PEG_TX3+(NC)

Row C		Row D	
C62	PEG_RX3-(NC)	D62	PEG_TX3-(NC)
C63	RSVD(GND)	D63	RSVD(GND)
C64	RSVD(GND)	D64	RSVD(GND)
C65	PEG_RX4+(NC)	D65	PEG_TX4+(NC)
C66	PEG_RX4-(NC)	D66	PEG_TX4-(NC)
C67	RAPID_SHUTDOWN	D67	GND
C68	PEG_RX5+(NC)	D68	PEG_TX5+(NC)
C69	PEG_RX5-(NC)	D69	PEG_TX5-(NC)
C70	GND	D70	GND
C71	PEG_RX6+(NC)	D71	PEG_TX6+(NC)
C72	PEG_RX6-(NC)	D72	PEG_TX6-(NC)
C73	GND	D73	GND
C74	PEG_RX7+(NC)	D74	PEG_TX7+(NC)
C75	PEG_RX7-(NC)	D75	PEG_TX7-(NC)
C76	GND	D76	GND
C77	RSVD(GND)	D77	RSVD(GND)
C78	PEG_RX8+(NC)	D78	PEG_TX8+(NC)
C79	PEG_RX8-(NC)	D79	PEG_TX8-(NC)
C80	GND	D80	GND
C81	PEG_RX9+(NC)	D81	PEG_TX9+(NC)
C82	PEG_RX9-(NC)	D82	PEG_TX9-(NC)
C83	RSVD(GND)	D83	RSVD(GND)
C84	GND	D84	GND
C85	PEG_RX10+(NC)	D85	PEG_TX10+(NC)
C86	PEG_RX10-(NC)	D86	PEG_TX10-(NC)
C87	GND	D87	GND
C88	PEG_RX11+(NC)	D88	PEG_TX11+(NC)
C89	PEG_RX11-(NC)	D89	PEG_TX11-(NC)
C90	GND	D90	GND
C91	PEG_RX12+(NC)	D91	PEG_TX12+(NC)
C92	PEG_RX12-(NC)	D92	PEG_TX12-(NC)
C93	GND	D93	GND
C94	PEG_RX13+(NC)	D94	PEG_TX13+(NC)

Row C		Row D	
C95	PEG_RX13-(NC)	D95	PEG_TX13-(NC)
C96	GND	D96	GND
C97	RSVD(GND)	D97	RSVD(GND)
C98	PEG_RX14+(NC)	D98	PEG_TX14+(NC)
C99	PEG_RX14-(NC)	D99	PEG_TX14-(NC)
C100	GND	D100	GND
C101	PEG_RX15+(NC)	D101	PEG_TX15+(NC)
C102	PEG_RX15-(NC)	D102	PEG_TX15-(NC)
C103	GND	D103	GND
C104	VCC_12V_0	D104	VCC_12V_6
C105	VCC_12V_1	D105	VCC_12V_7
C106	VCC_12V_2	D106	VCC_12V_8
C107	VCC_12V_3	D107	VCC_12V_9
C108	VCC_12V_4	D108	VCC_12V_10
C109	VCC_12V_5	D109	VCC_12V_11
C110	GND	D110	GND

Chapter 3

AMI BIOS Setup

3.1 System Test and Initialization

These routines test and initialize board hardware. If the routines encounter an error during the tests, you will either hear a few short beeps or see an error message on the screen. There are two kinds of errors: fatal and non-fatal. The system can usually continue the boot up sequence with non-fatal errors.

System configuration verification

These routines check the current system configuration stored in the CMOS memory and BIOS NVRAM. If system configuration is not found or system configuration data error is detected, system will load optimized default and re-boot with this default system configuration automatically.

There are four situations in which you will need to setup system configuration:

1. You are starting your system for the first time
2. You have changed the hardware attached to your system
3. The system configuration is reset by Clear-CMOS jumper
4. The CMOS memory has lost power and the configuration information has been erased.

The COM-ADNC6 CMOS memory has an integral lithium battery backup for data retention. However, you will need to replace the complete unit when it finally runs down.

3.2 AMI BIOS Setup

The AMI BIOS ROM has a built-in Setup program that allows users to modify the basic system configuration. This information is stored in the battery-backed CMOS RAM and BIOS NVRAM so it retains the Setup information when the power is turned off.

To enter Setup, power on the computer and press <Del> immediately.

The function of each menu is as follows:

Main

Set the date, use tab to switch between date elements.

Advanced

Enable disable boot option for legacy network devices.

Chipset

Host bridge parameters.

Boot

Enables/disable quiet boot option.

Security

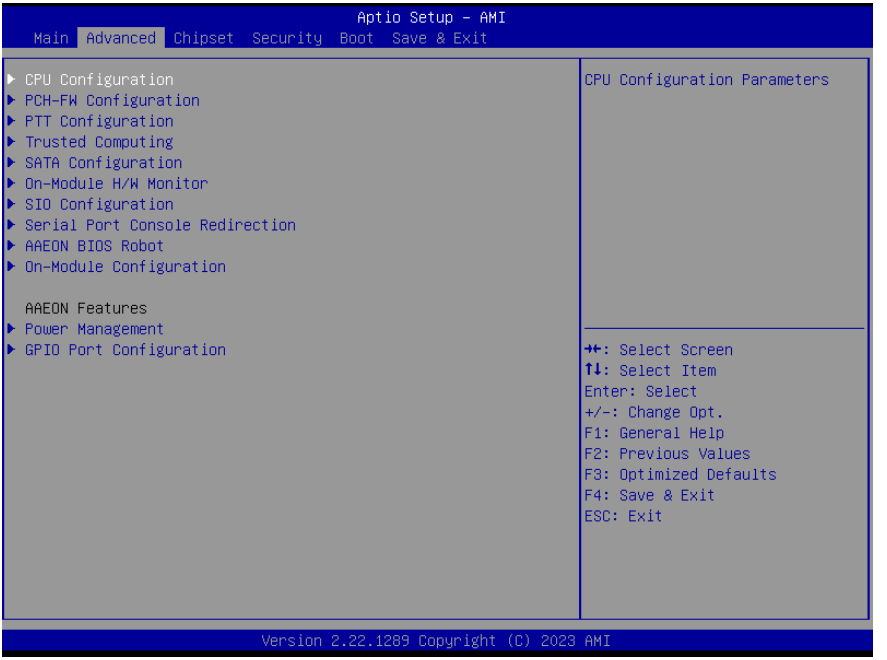
Set setup administrator password.

Save & Exit

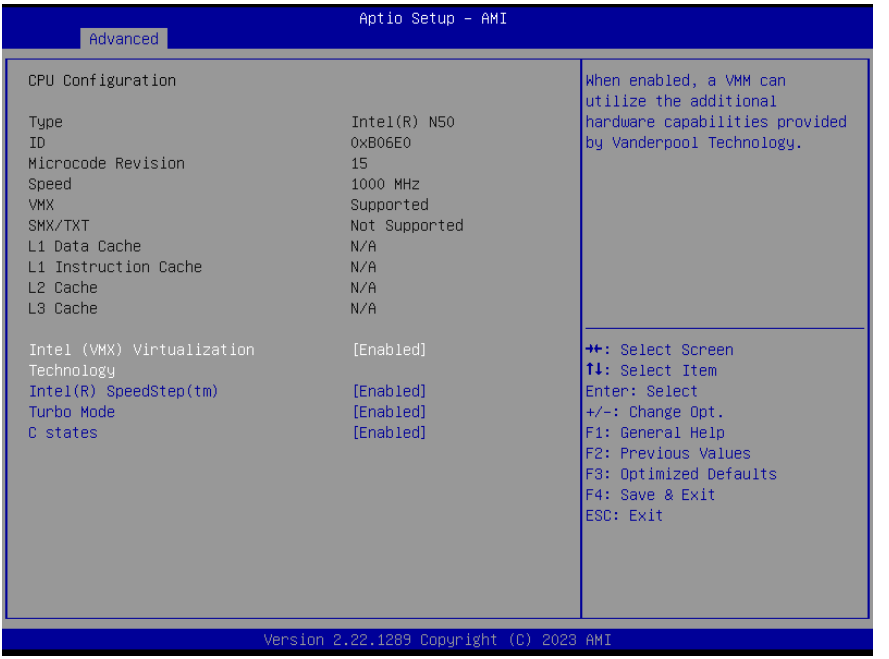
Exit system setup after saving the changes.

3.3 Setup Submenu: Main

3.4 Setup Submenu: Advanced

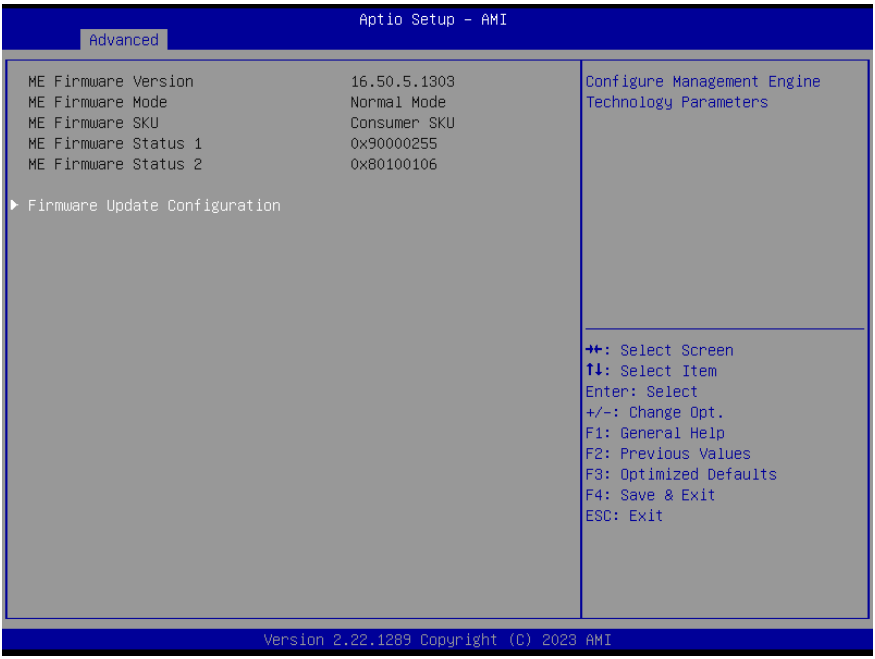


3.4.1 CPU Configuration

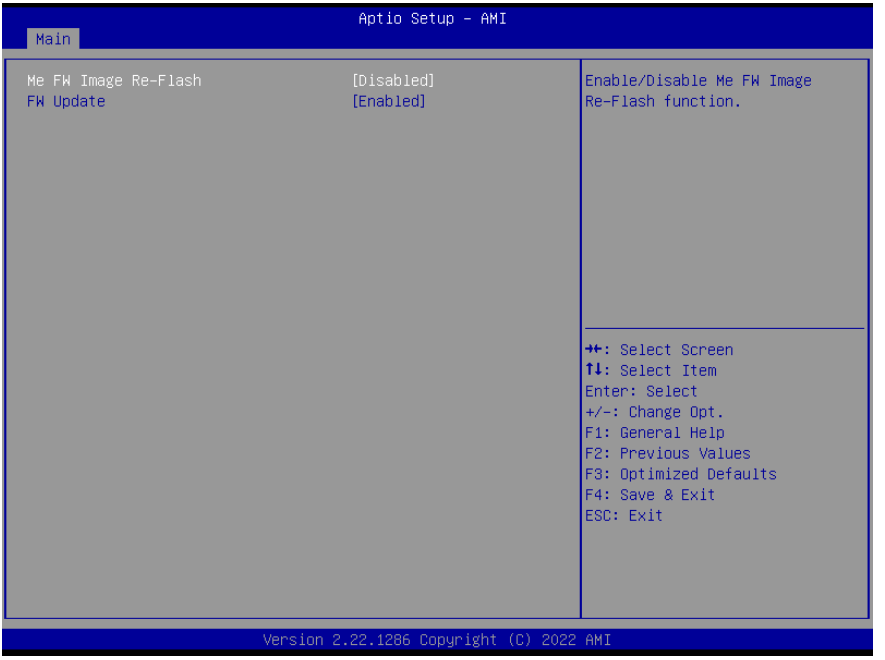


Options Summary		
Intel (VMX) Virtualization Technology	Disabled	
	Enabled	Optimal Default, Failsafe Default
When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.		
Intel® SpeedStep™	Disabled	
	Enabled	Optimal Default, Failsafe Default
Allows more than two frequency ranges to be supported.		
Turbo Mode	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable or Disable processor Turbo Mode (requires EMTTM enable too). AUTO means enabled.		
C states	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable/Disable CPU Power Management. Allows CPU to go to C states when it's not 100 utilized.		

3.4.2 PCH-FW Configuration

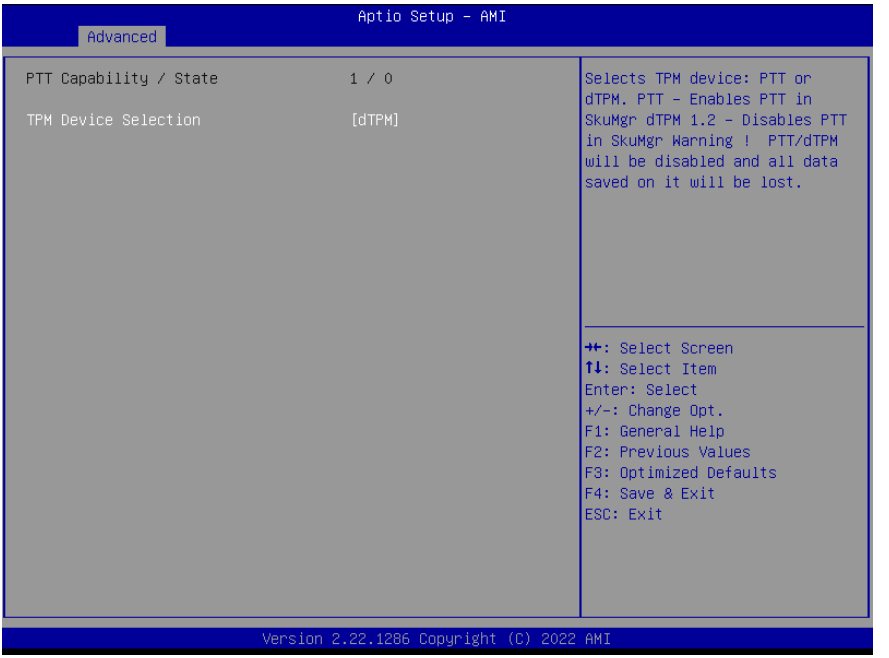


3.4.3 Firmware Update Configuration



Options Summary		
Me FW Image Re-Flash	Enabled	
	Disabled	Optimal Default, Failsafe Default
Enable/Disable Me FW Image Re-Flash function.		
FW Update	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable/Disable ME FW Update function.		

3.4.4 PTT Configuration



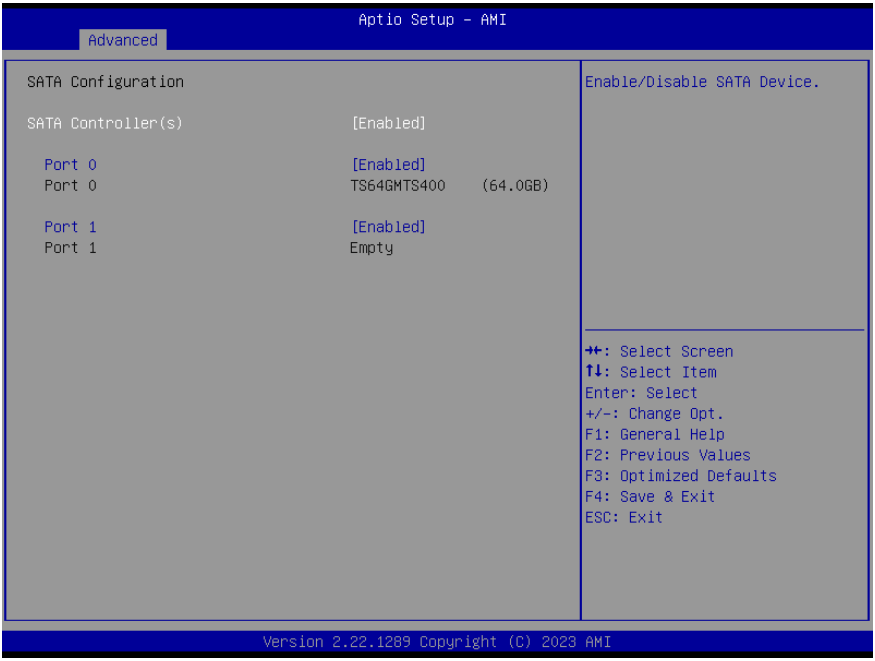
Options Summary		
TPM Device Selection	dTPM	Optimal Default, Failsafe Default
	PTT	
Selects TPM device: PTT or discrete TPM. PTT - enables PTT in SkuMgr dTPM - disables PTT is SkuMgr Warning! PTT/dTPM will be disabled and all data saved on it will be lost.		

3.4.5 Trusted Computing

Options Summary		
Security Device Support	Enable	Optimal Default, Failsafe Default
	Disable	
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.		
SHA256 PCR Bank	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable SHA256 PCR Bank.		
SHA384 PCR Bank	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable SHA384 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.		

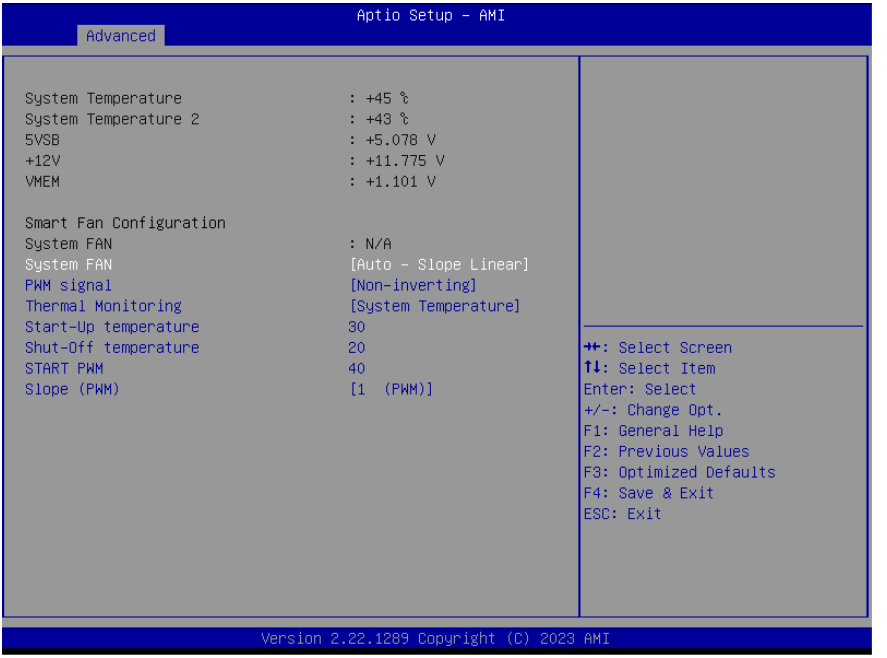
Options Summary		
Platform Hierarchy	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable Platform Hierarchy		
Storage Hierarchy	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable Storage Hierarchy		
Endorsement Hierarchy	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable Endorsement Hierarchy		
Physical Presence Spec Version	1.3	Optimal Default, Failsafe Default
	1.2	
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	Auto	
	TPM 1.2	
	TPM 2.0	Optimal Default, Failsafe Default
TPM 1.2 will restrict support to TPM 1.2 devices. 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 devices will be enumerated.		

3.4.6 SATA Configuration



Options Summary		
SATA Controller(s)	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable/Disable SATA Device.		
Port 0	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable SATA Port.		
Port1	Enabled	Optimal Default, Failsafe Default
	Disabled	
Enable or Disable SATA Port.		

3.4.7 On-Module Hardware Monitor

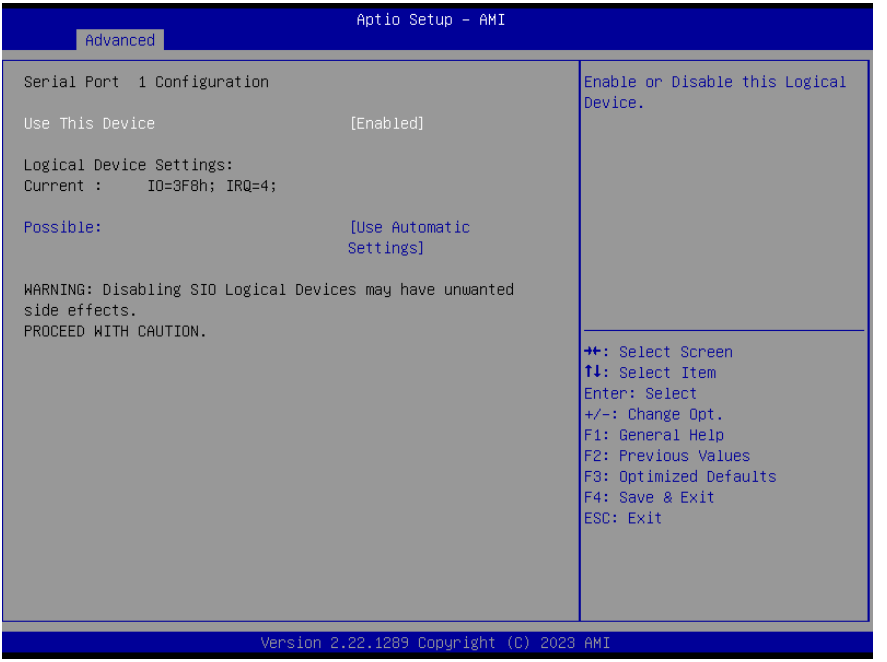


Options Summary		
System Fan	Full Mode	
	Manual Mode	
	Auto – Slope Linear	Optimal Default, Failsafe Default
PWM signal	Non-inverting	Optimal Default, Failsafe Default
	Inverting	
Select output PWM of inverting or non-uninverting signal.		
Thermal Monitoring	System Temperature	Optimal Default, Failsafe Default
	System Temperature 2	
Monitoring thermal sensor select.		
Start-UP temperature	30	
PWM output when monitoring thermal sensor is exceeded Range: 0-100.		
Start-Off temperature	20	
PWM turns off when monitoring thermal sensor is less or equal to Range: 0-100.		
START PWM	40	
The beginning PWM output value when Start-Up temperature is triggered.		

Options Summary		
Slope (PWM)	0 (PWM)	
	1 (PWM)	Optimal Default, Failsafe Default
	2 (PWM)	
	4 (PWM)	
	8 (PWM)	
	16 (PWM)	
	32 (PWM)	
	64 (PWM)	
When the monitored temperature is higher than the Start-Up temperature, the PWM output increases per degree.		

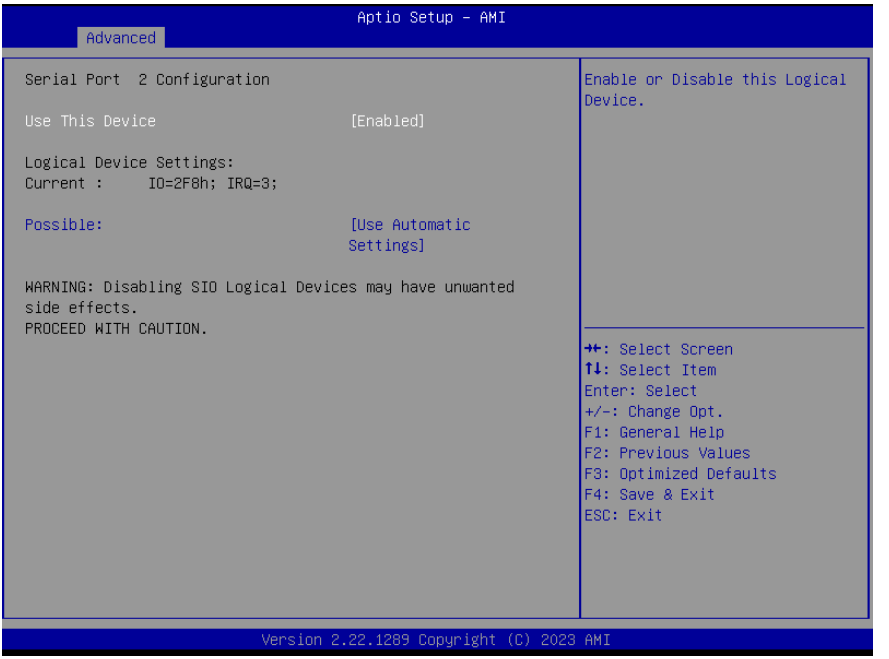
3.4.8 SIO Configuration

3.4.8.1 Serial Port 1 Configuration



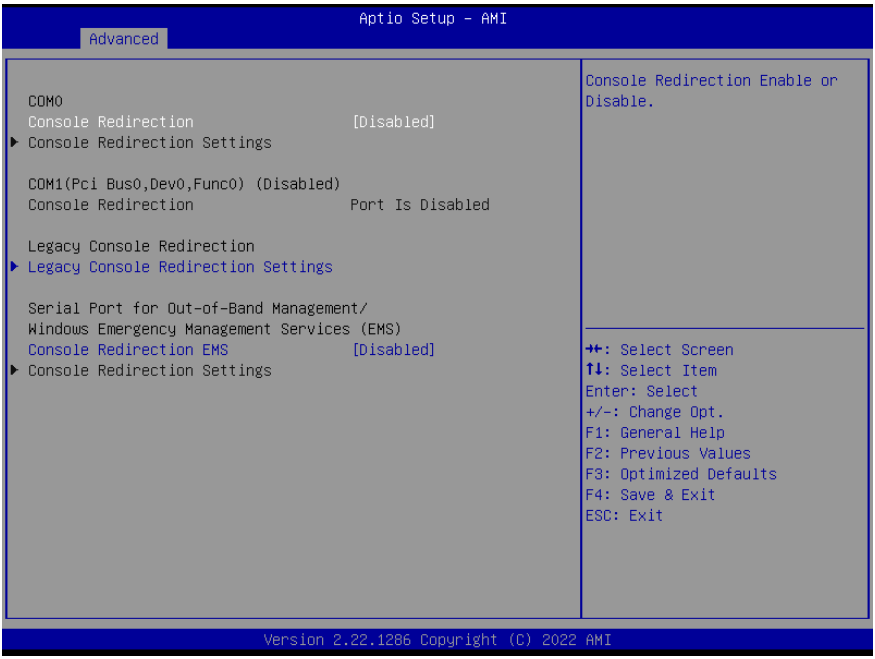
Options Summary		
Use This Device	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable this Logical Device.		
Possible:	Use Automatic Settings	Optimal Default, Failsafe Default
	IO=3F8h; IRQ=4	
	IO=2C8h; IRQ=11	
Allows user to change Device's Resource settings. New settings will be reflected on This Setup Page after System restarts.		

3.4.8.2 Serial Port 2 Configuration



Options Summary		
Use This Device	Disable	
	Enable	Optimal Default, Failsafe Default
Enable or Disable this Logical Device.		
Possible:	Use Automatic Settings	Optimal Default, Failsafe Default
	IO=2F8h; IRQ=3	
	IO=3D8h; IRQ=10	
Allows user to change Device's Resource settings. New settings will be reflected on This Setup Page after System restarts.		

3.4.9 Serial Port Console Redirection



Options Summary		
Console Redirection	Disabled	Optimal Default, Failsafe Default
	Enabled	
Console Redirection Enable or Disable.		
Console Redirection EMS	Disabled	Optimal Default, Failsafe Default
	Enabled	
Console Redirection Enable or Disable.		

3.4.10 Legacy Console Redirection Settings

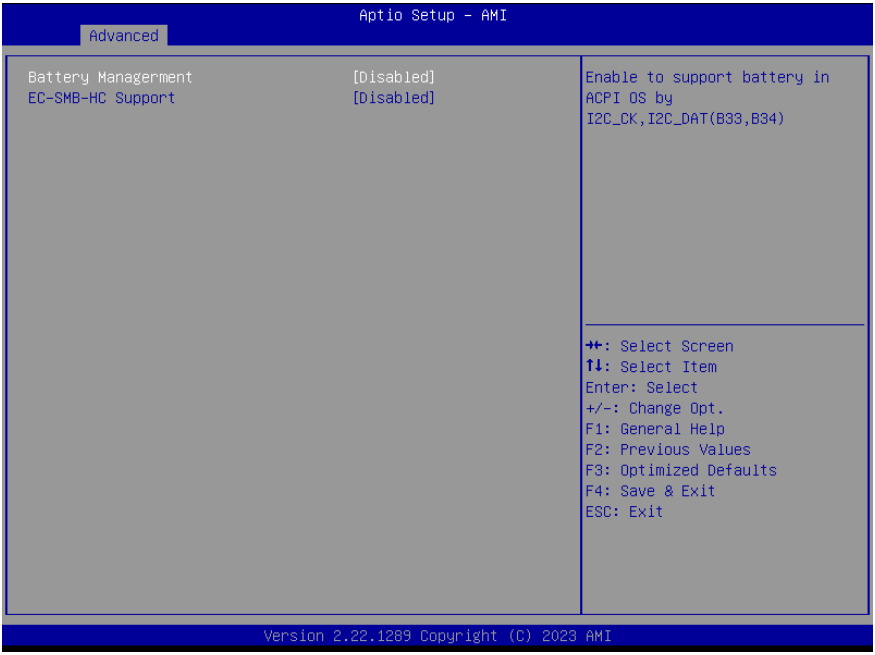
Options Summary		
Redirection COM port	COM0	Optimal Default, Failsafe Default
	COM1(Pci Bus0, Dev0, Func0) (Disabled)	
Select a COM Port to display redirection of Legacy OS and Legacy OPROM message.		
Resolution	80x24	Optimal Default, Failsafe Default
	80x25	
On Legacy OS, the number of Rows and Columns supported redirection.		
Redirect After POST	Always Enable	Optimal Default, Failsafe Default
	BootLoader	
When Bootloader is selected, then Legacy Console Redirection is disabled before booting to legacy OS. When Always Enable is selected, then Legacy Console Redirection is enabled for legacy OS. Default setting for this option is set to Always Enable.		

3.4.11 AAEON BIOS Robot

Options Summary		
Sends watch dog before BIOS POST	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enabled - Robot set Watch Dog Timer (WDT) right after power on, before BIOS start POST process. And then Robot will clear WDT on completion of POST. WDT will reset system automatically if it is not cleared before its timer counts down to zero.		
POST Timer (second)	30	Optimal Default, Failsafe Default
Timer count set to Watch Dog Timer for POST. WARNING: Do not set to a value equal or shorter than normal POST time, otherwise system may never complete POST unless clearing BIOS settings. More than 2x normal POST time is suggested.		
Sends watch dog before booting OS	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enabled - Robot set Watch Dog Timer (WDT) after POST completion, before BIOS transfer control to OS. WARNING: Before enabling this function, a program in OS must be in responsible for clearing WDT. Also, this function should be disabled if OS is going to update itself.		

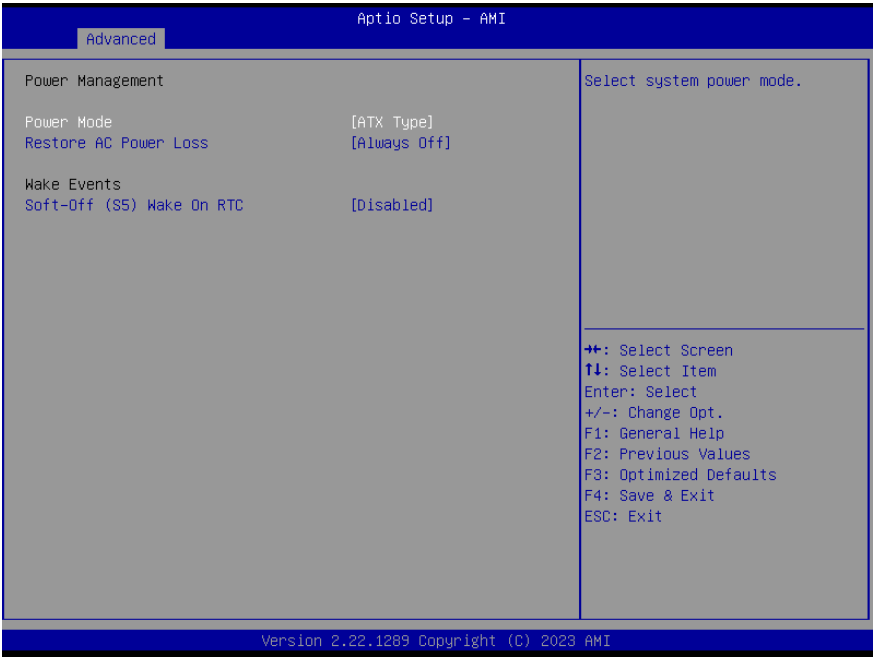
Options Summary		
OS Timer (minute)	3	Optimal Default, Failsafe Default
Timer count set to Watch Dog Timer for OS loading.		
Delayed POST (PEI phase)	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enabled - Robot holds BIOS from starting POST, right after power on. This allows BIOS POST to start with stable power or start after system is physically warmed-up. Note: Robot does this before 'Sends watch dog'.		
Delayed time (second)	10	Optimal Default, Failsafe Default
Period of time for Robot to hold BIOS from POST.		
Delayed POST (DXE phase)	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enabled - Robot holds BIOS before POST completion. This allows BIOS POST to start with stable power or start after system is physically warmed-up. Note: Robot does this after 'Sends watch dog before BIOS POST'.		
Delayed time (second)	10	Optimal Default, Failsafe Default
Period of time for Robot to hold BIOS from POST.		
Reset system once	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enabled - Robot resets system for one time on each boot. This will send a soft or hard reset to onboard devices, thus puts devices to more stable state.		
Soft or hard reset	Soft reset	Optimal Default, Failsafe Default
	Hard reset"	
Select reset type robot should send on each boot.		

3.4.12 On-Module Configuration



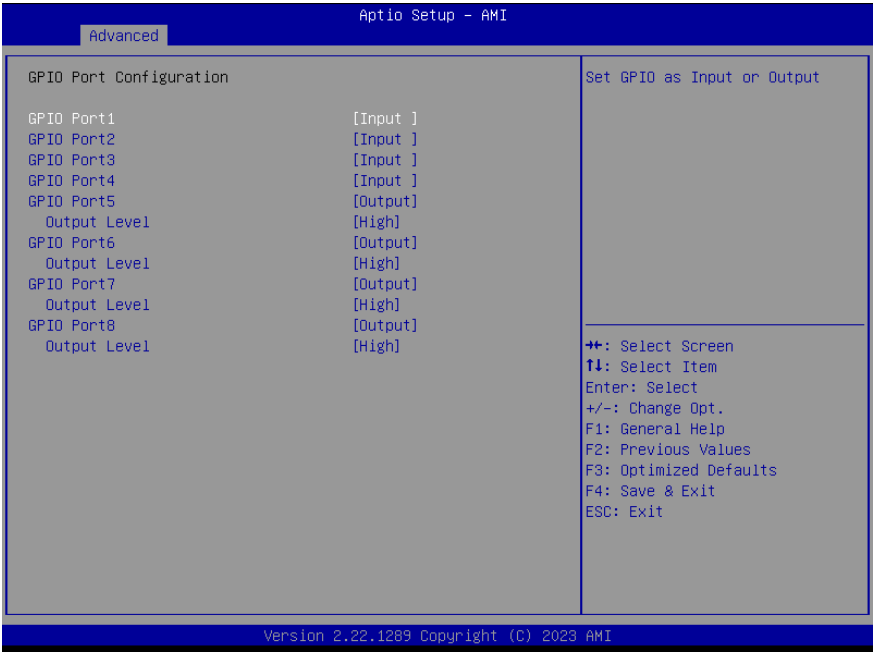
Options Summary		
Battery Management	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enable to support battery in ACPI OS by I2C_CK, I2C_DAT(B33,B44).		
EC-SMB-HC Support	Disabled	Optimal Default, Failsafe Default
	Enabled	
SMBus Host Controller Interface via Embedded Controller by (B33, B34).		

3.4.13 Power Management



Options Summary		
Power Mode	ATX Type	Optimal Default, Failsafe Default
	AT Type	
Select power supply mode.		
Restore AC Power Loss	Last State	
	Always On	
	Always Off	Optimal Default, Failsafe Default
Select power state when power is re-applied after a power failure.		
Soft-Off (S5) Wake On RTC	Disable	Optimal Default, Failsafe Default
	By Date	
	By Weekday	
	Bypass	
By Date: System will wake on the with hr::min::sec specified. By Weekday: System will wake on the enabled weekday with hr::min::sec specified. Bypass: BIOS will not control RTC wake function.		

3.4.14 GPIO Port Configuration



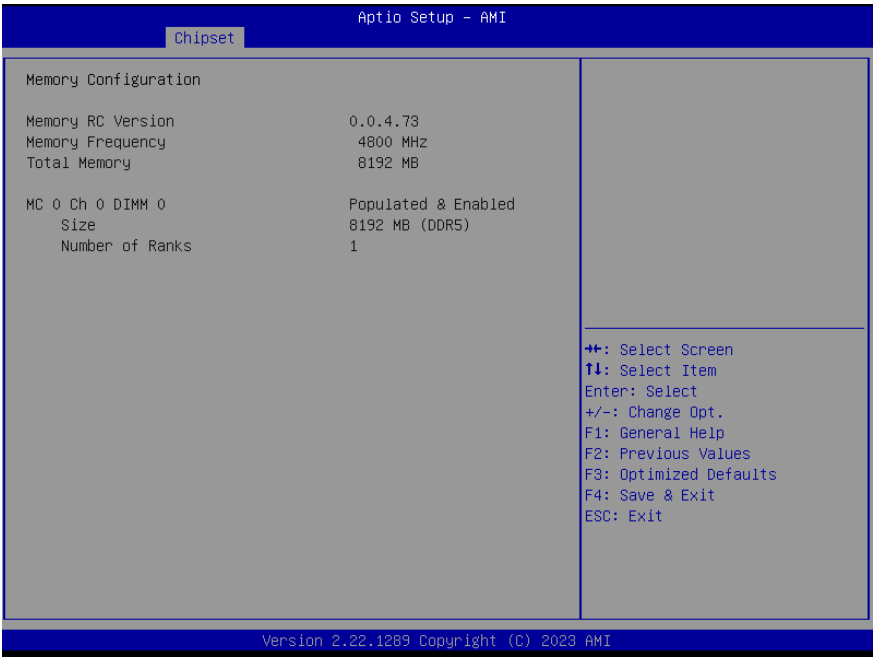
Options Summary		
GPIO Port*	Output	
	Input	
Set GPIO as Input or Output.		
Output Level	High	
	Low	
Set output level when GPIO pin is output.		

3.5 Setup Submenu: Chipset

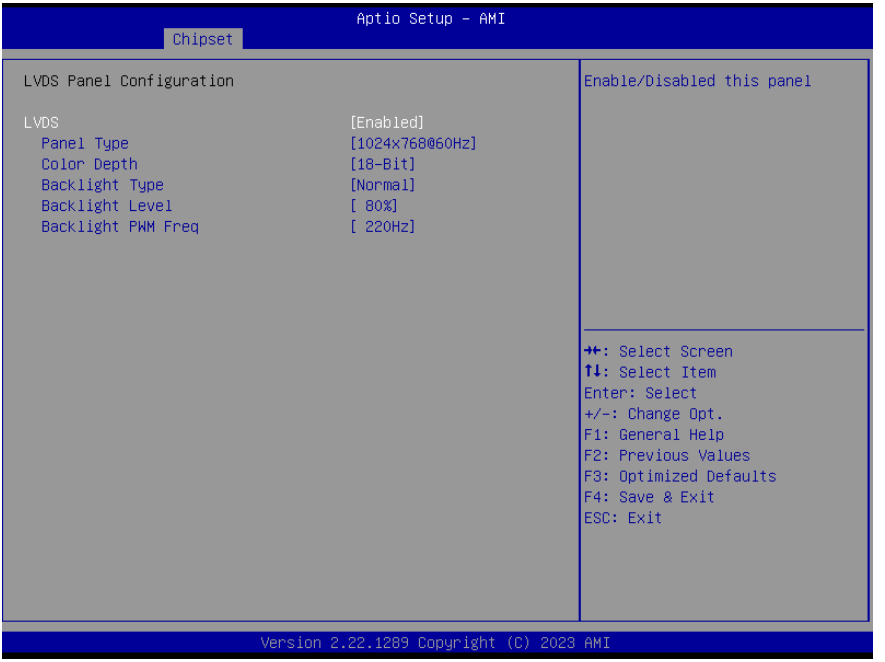
3.5.1 System Agent (SA) Configuration

Options Summary		
VT-d	Disabled	Optimal Default, Failsafe Default
	Enabled	
VT-d capability.		

3.5.2 Memory Configuration



3.5.3 LVDS Panel Configuration



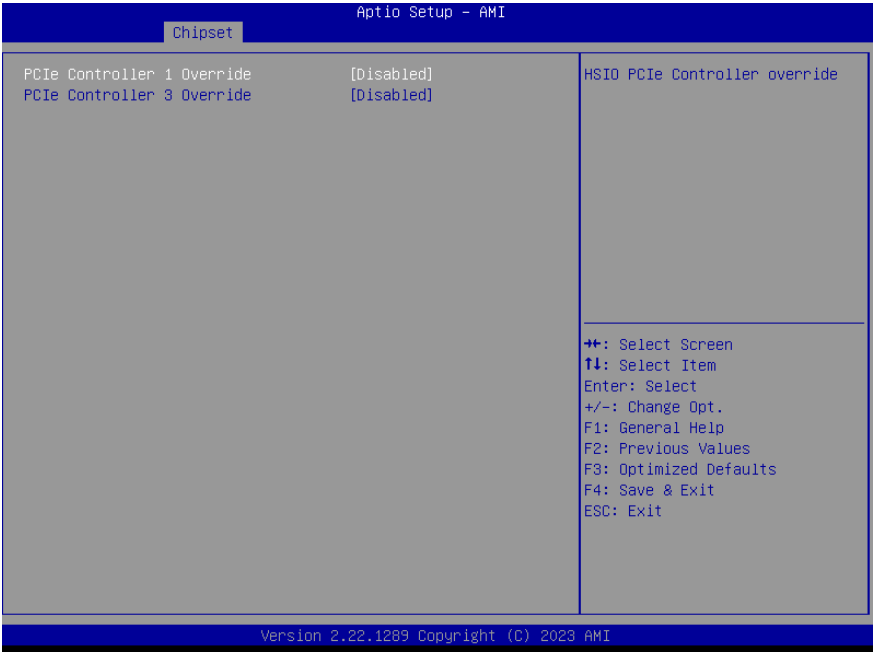
Options Summary		
LVDS	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable/Disabled this panel.		
LVDS Panel Type	640x480,18bit,60Hz	
	800x480,18bit,60Hz	
	800x600,18bit,60Hz	
	1024x600,18bit,60Hz	
	1024x768,18bit,60Hz	
	1024x768,24bit,60Hz	Optimal Default, Failsafe Default
	1280x768,24bit,60Hz	
	1280x1024,48bit,60Hz	
	1366x768,24bit,60Hz	
	1440x900,48bit,60Hz	
	1600x1200,48bit,60Hz	
	1920x1080,48bit,60Hz	

Options Summary		
LVDS Panel Type (cont.)	1920x1200,48bit,60Hz	
Select LCD panel used by Internal Graphics Device by selecting the appropriate setup item.		
Color Depth	18-bit	Optimal Default, Failsafe Default
	24-bit	
	36-bit	
	48-bit	
Select panel type.		
Backlight Type	Normal	Optimal Default, Failsafe Default
	Inverted	
Select backlight control signal type.		
Backlight Type	Normal	Optimal Default, Failsafe Default
	Inverted	
Select backlight control signal type.		
Backlight Level	0%	
	10%	
	20%	
	30%	
	40%	
	50%	
	60%	
	70%	
	80%	Optimal Default, Failsafe Default
	90%	
	100%	
Select backlight control level.		
Backlight PWM Freq	100Hz	
	200Hz	
	220Hz	Optimal Default, Failsafe Default
	500Hz	
	1KHz	
	2.2KHz	
	6.5KHz	
Select PWM frequency of backlight control signal.		

3.5.4 PCH-IO Configuration

Options Summary		
HD Audio	Disabled	
	Enabled	Optimal Default, Failsafe Default
Control Detection of the HD-Audio device. Disable = HAD will be unconditionally disabled Enable = HAD will be unconditionally enabled.		

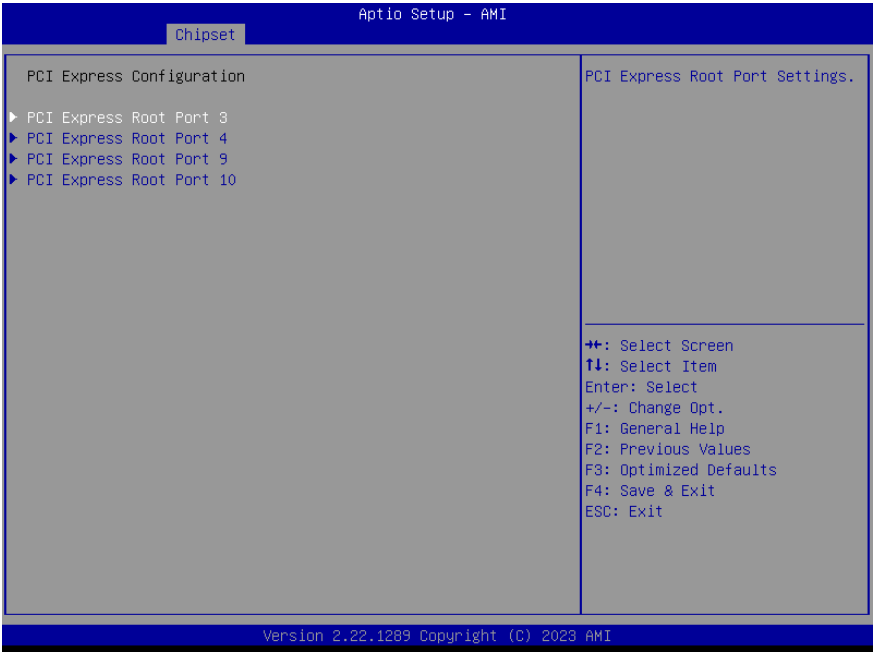
3.5.5 HSIO Configuration



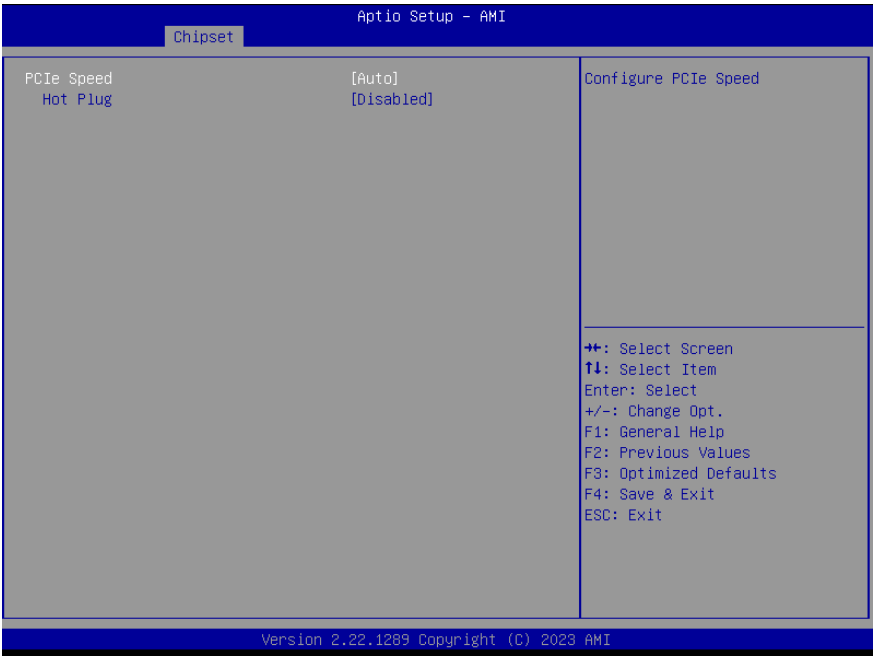
Options Summary		
PCIe Controller 1 Override	Disabled	Optimal Default, Failsafe Default
	Enabled	
HSIO PCIe Controller override.		
PCIe Controller 1 Setting	PCIE Controller are four x1	Optimal Default, Failsafe Default
	PCIE Controller are two x2	
PCIe Controller Setting.		
PCIe Controller 1 Reversal	Non-Reversed	Optimal Default, Failsafe Default
	Reversed	
PCIE LANE REVERSAL.		
PCIe Controller 3 Override	Disabled	Optimal Default, Failsafe Default
	Enabled	
HSIO PCIe Controller override.		

Options Summary		
PCIe Controller 3 Setting	PCIE Controller are four x1	Optimal Default, Failsafe Default
	PCIE Controller are two x2	
PCIe Controller Setting.		
PCIe Controller 3 Reversal	Non-Reversed	Optimal Default, Failsafe Default
	Reversed	
PCIE LANE REVERSAL.		

3.5.5.1 PCI Express Configuration

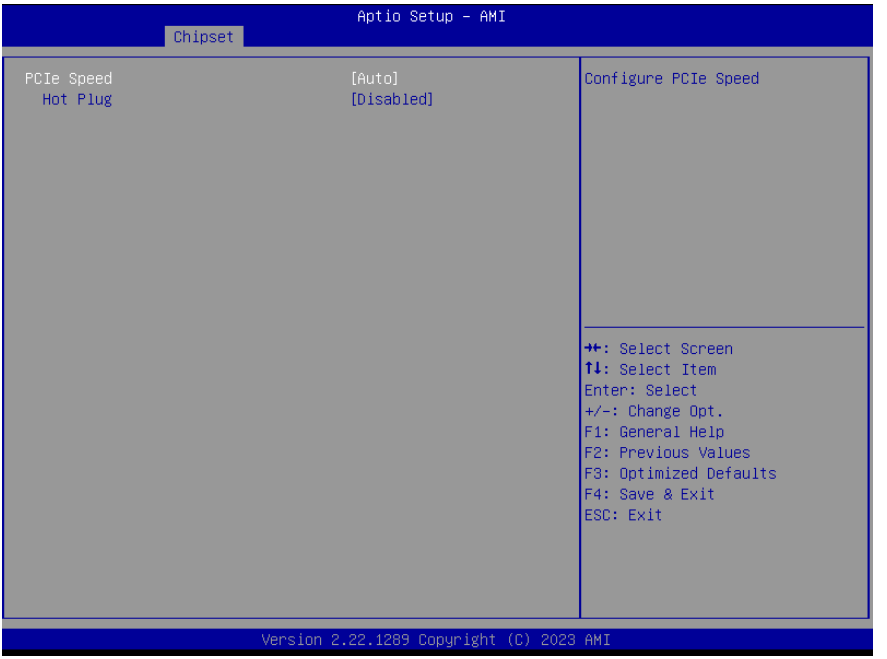


3.5.5.2 PCI Express Root Port 3



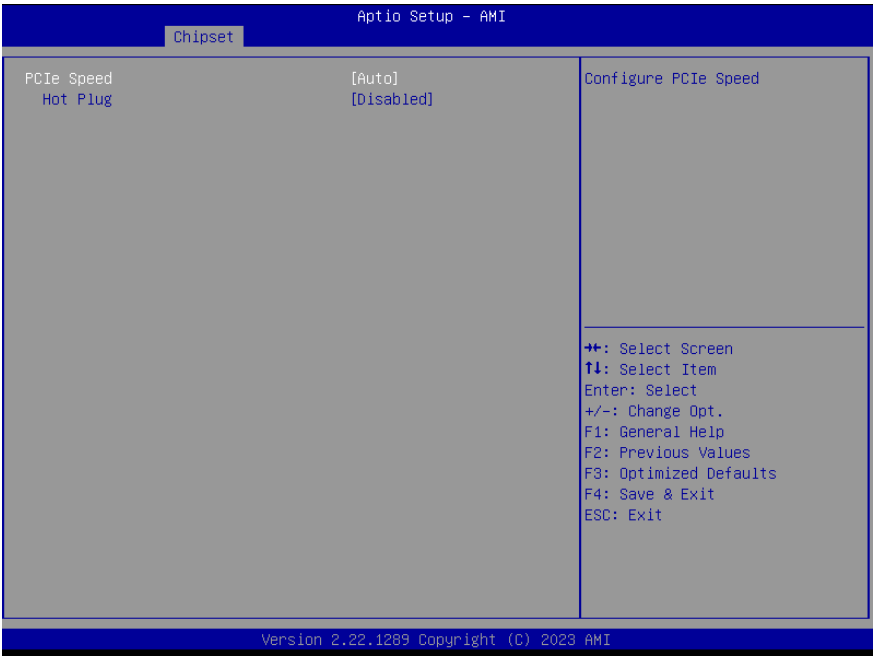
Options Summary		
PCIe Speed	Auto	Optimal Default, Failsafe Default
	Gen 1	
	Gen 2	
	Gen 3	
Configure PCIe Speed.		
Hot Plug	Disabled	Optimal Default, Failsafe Default
	Enabled	
PCI Express Hot Plug Enable/Disable.		

3.5.5.3 PCI Express Root Port 4



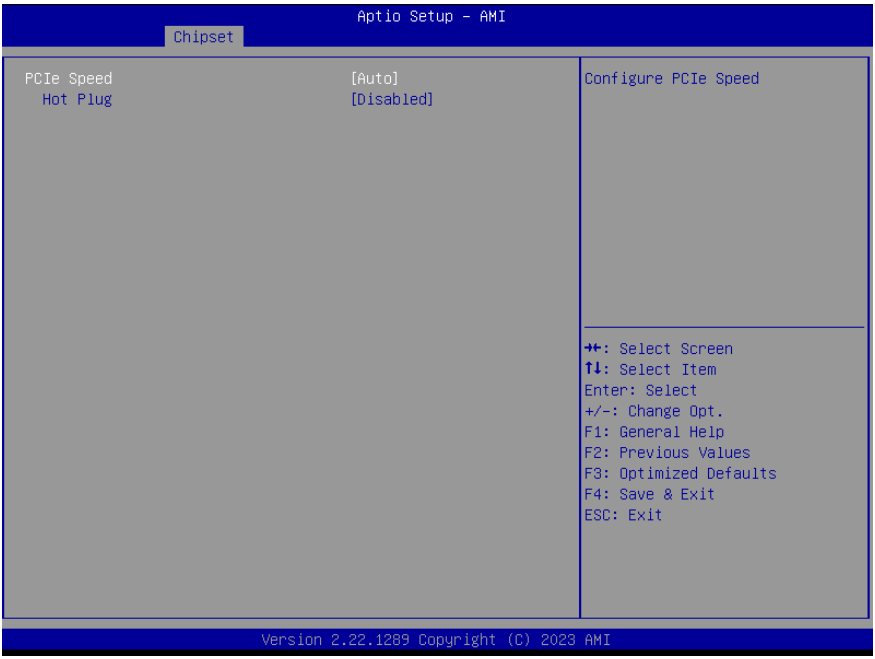
Options Summary		
PCIe Speed	Auto	Optimal Default, Failsafe Default
	Gen 1	
	Gen 2	
	Gen 3	
Configure PCIe Speed.		
Hot Plug	Disabled	Optimal Default, Failsafe Default
	Enabled	
PCI Express Hot Plug Enable/Disable.		

3.5.5.4 PCI Express Root Port 9



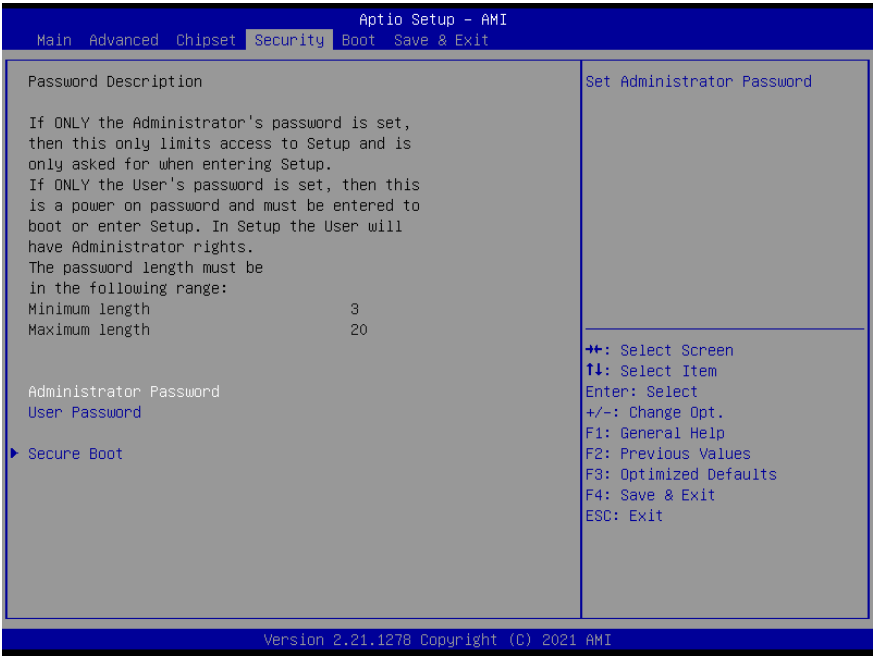
Options Summary		
PCIe Speed	Auto	Optimal Default, Failsafe Default
	Gen 1	
	Gen 2	
	Gen 3	
Configure PCIe Speed.		
Hot Plug	Disabled	Optimal Default, Failsafe Default
	Enabled	
PCI Express Hot Plug Enable/Disable.		

3.5.5.5 PCI Express Root Port 10



Options Summary		
PCIe Speed	Auto	Optimal Default, Failsafe Default
	Gen 1	
	Gen 2	
	Gen 3	
Configure PCIe Speed.		
Hot Plug	Disabled	Optimal Default, Failsafe Default
	Enabled	
PCI Express Hot Plug Enable/Disable.		

3.6 Setup Submenu: Security



Change Administrator/User Password

You can set an Administrator password. If you set an Administrator password, you can then set a User password. User passwords do not have access to many of the features in the Setup utility.

Select the password you want to set and press <Enter>. A dialog box will appear which lets you set the password. Passwords must be between 3 and 20 letters or numbers. Press <Enter> and re-enter the password into the next dialog box that appears. Press <Enter> after you have retyped it correctly. The password is required at boot time, or when the user enters the Setup utility.

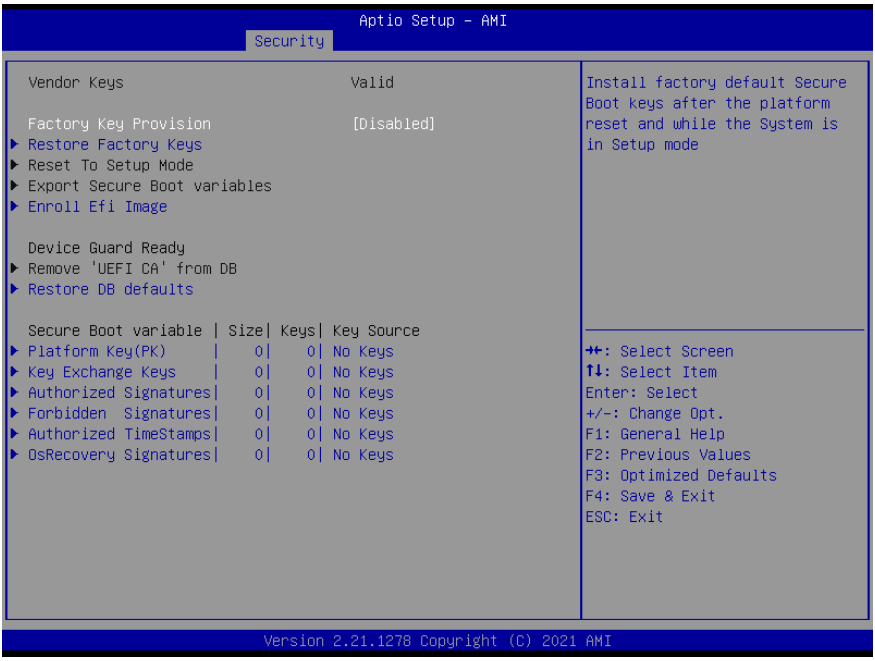
Remove Password

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		
Secure Boot	Disabled	Optimal Default, Failsafe Default
	Enabled	
Secure Boot feature is Active if Secure Boot is Enabled, Platform Key (PK) is enrolled and the System is in User mode. The mode change requires platform reset.		
Secure Boot Mode	Custom	Optimal Default, Failsafe Default
	Standard	
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.		
Restore Factory Keys		
Force System to User Mode. Install factory default Secure Boot key databases.		
Reset to Setup Mode		
Delete all Secure Boot key databases from NVRAM.		

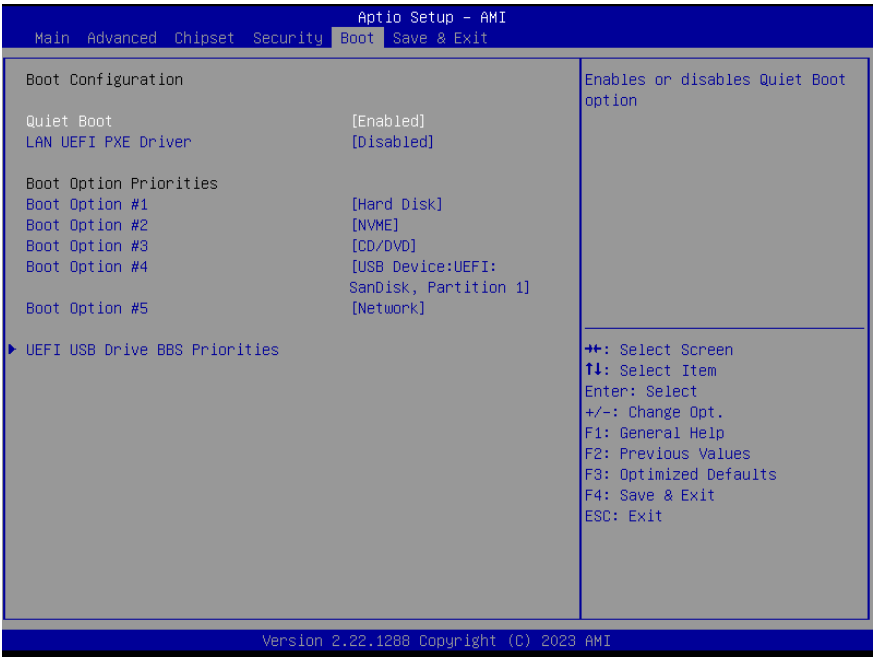
3.6.2 Key Management



Options Summary		
Factory Key Provision	Disabled	Optimal Default, Failsafe Default
	Enabled	
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.		
Restore Factory Keys		
Force System to User Mode. Install factory default Secure Boot key databases.		
Reset to Setup Mode		
Delete all Secure Boot key databases from NVRAM.		
Export Secure Boot variables		
Copy NVRAM content of Secure Boot variables to files in a root folder on a file system device.		
Enroll Efi Image		
Allow the image to run in Secure Boot mode. Enroll SHA256 Hash certificate of a PE image into Authorized Signature Database (db).		
Remove 'UEFI CA' from DB		

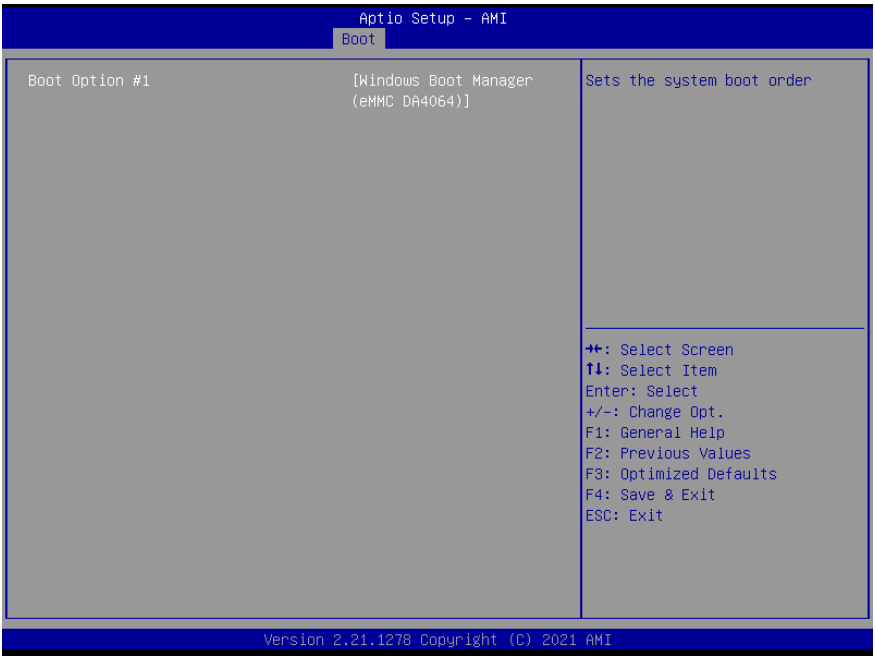
Options Summary	
Device Guard ready system must not list 'Microsoft UEFI CA' Certificate in Authorized Signature database (db).	
Restore DB defaults	
Restore DB variable to factory defaults.	
Platform Key (PK)	Details
	Export
	Update
	Delete
Key Exchange Keys	Details
	Export
	Update
	Append
	Delete
Authorized Signatures	Details
	Export
	Update
	Append
	Delete
Forbidden Signatures	Details
	Export
	Update
	Append
	Delete
Authorized TimeStamps	Update
	Append
OsRecovery Signatures	Update
	Append
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.	

3.7 Setup Submenu: Boot

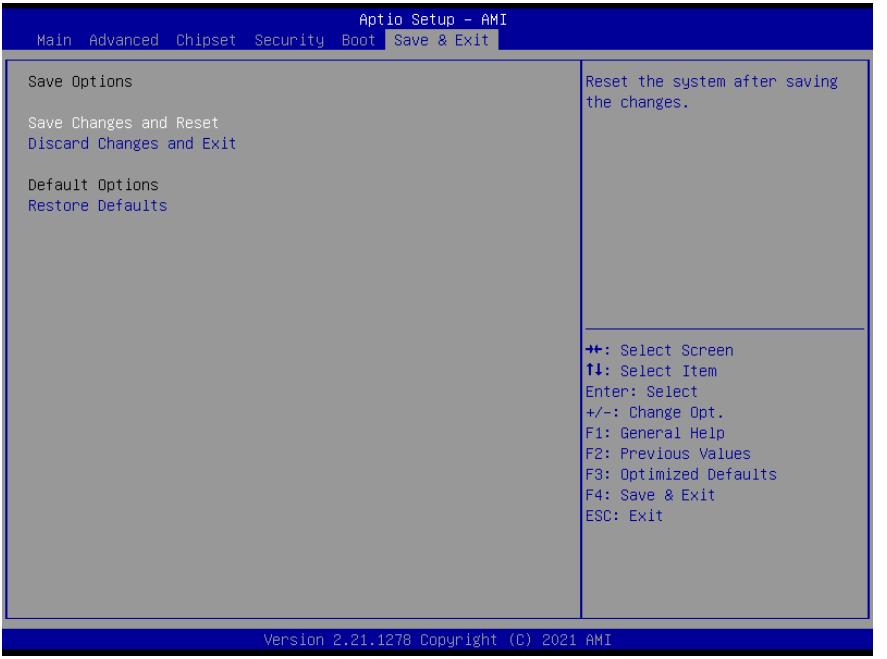


Options Summary		
Quiet Boot	Disabled	
	Enabled	Optimal Default, Failsafe Default
Enable or Disable Quiet Boot option.		
UEFI PXE Support	Disabled	Optimal Default, Failsafe Default
	Enabled	
Enable/Disable UEFI Network Stack.		
FIXED BOOT ORDER Priorities		
Sets the system boot order.		

3.7.1 BBS Priorities



3.8 Setup Submenu: Save & Exit



Options Summary	
Save Changes and Reset	Reset the system after saving the changes.
Discard Changes and Exit	Exit system setup without saving any changes.
Restore Defaults	Restore/Load Default values for all the setup options.

Chapter 4

Drivers Installation

4.1 Drivers Download and Installation

Drivers for the COM-ADNC6 can be downloaded from the product page on the AAEON website by following this link:

https://www.aaeon.com/en/p/com-express-cpu-modules-com-adnc6

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

Chipset Driver

1. Open the folder where you unzipped the **Chipset Drivers**
2. Run the **SetupChipset.exe** file in the folder
3. Follow the instructions
4. Drivers will be installed automatically

Graphics Driver

1. Open the folder where you unzipped the **Graphics Drivers**
2. Run the **Installer.exe** file in the folder
3. Follow the instructions
4. Drivers will be installed automatically

LAN Drivers

1. Open the folder where you unzipped the **LAN Drivers**
2. Follow the instructions contained in the Setup Information file to manually install drivers.

Install Audio Drivers

Note: Ensure Intel Smart Sound Driver (Intel_SST_ADL_v10.29.00.8467) is installed before the Realtek Audio driver (Realtek Audio 6.0.9034.2)

Install Intel Smart Sound Driver

1. Open the Audio folder
2. Open the Intel(R)_SST_ADL_v10.29.00.8467 subfolder
3. Follow the setup information within the file to manually install driver.

Install Realtek Audio Driver

1. Open the Audio folder
2. Open the Realtek Audio 6.0.9034.2 folder
3. Run the Setup.exe file in the folder
4. Follow the instructions
5. Driver will be installed automatically

Install Serial IO Driver

1. Open the Peripheral Driver folder
2. Run the SetupSerialIO.exe file in the folder
3. Follow the instructions
4. Drivers will be installed automatically

Install COM Port Driver

1. Open the COM Port Driver folder
2. Run the SerialPatch_v3.0.6.8MS.exe file in the folder
3. Follow the instructions
4. Drivers will be installed automatically

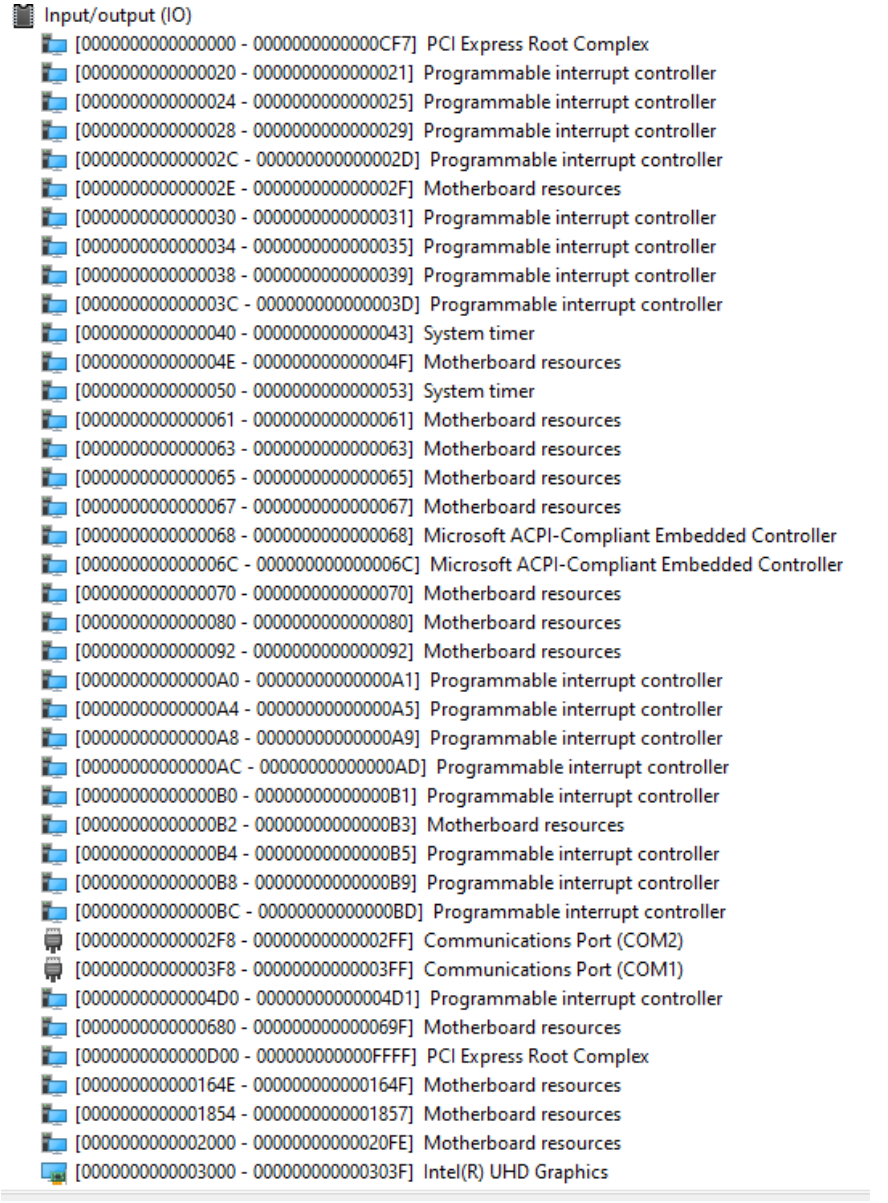
Install ME & TXE Driver

1. Open the **ME & TXE** folder
2. Run the **SetupME.exe** file in the folder
3. Follow the instructions
4. Drivers will be installed automatically

Appendix A

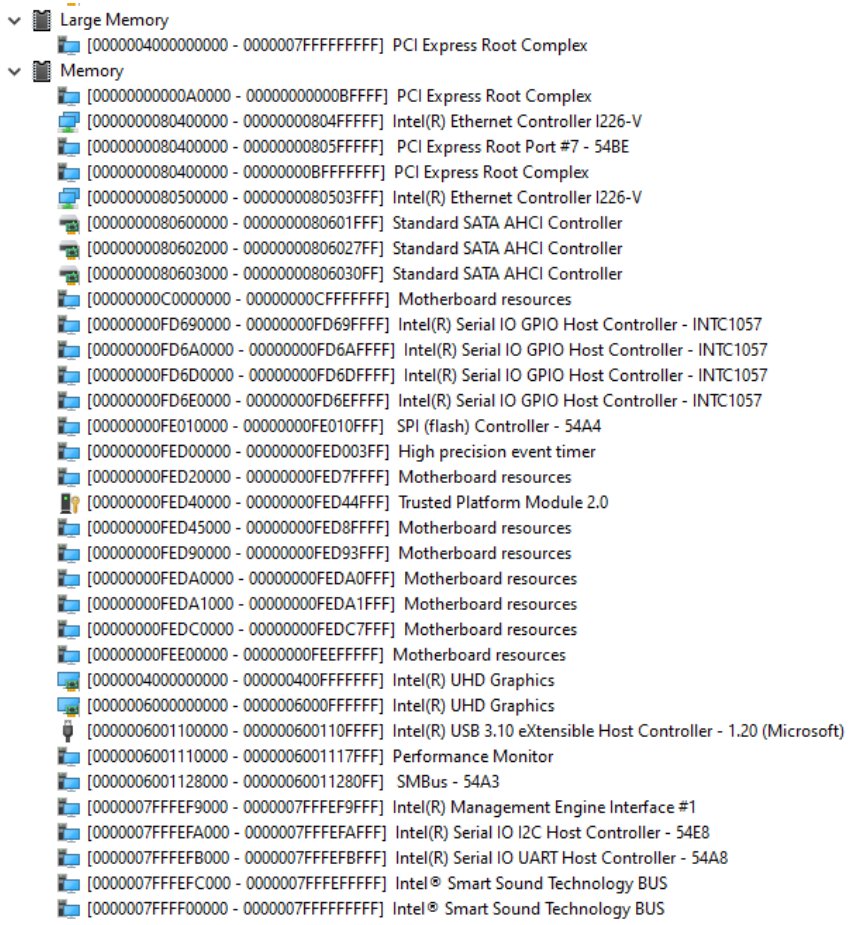
I/O Information

A.1 I/O Address Map

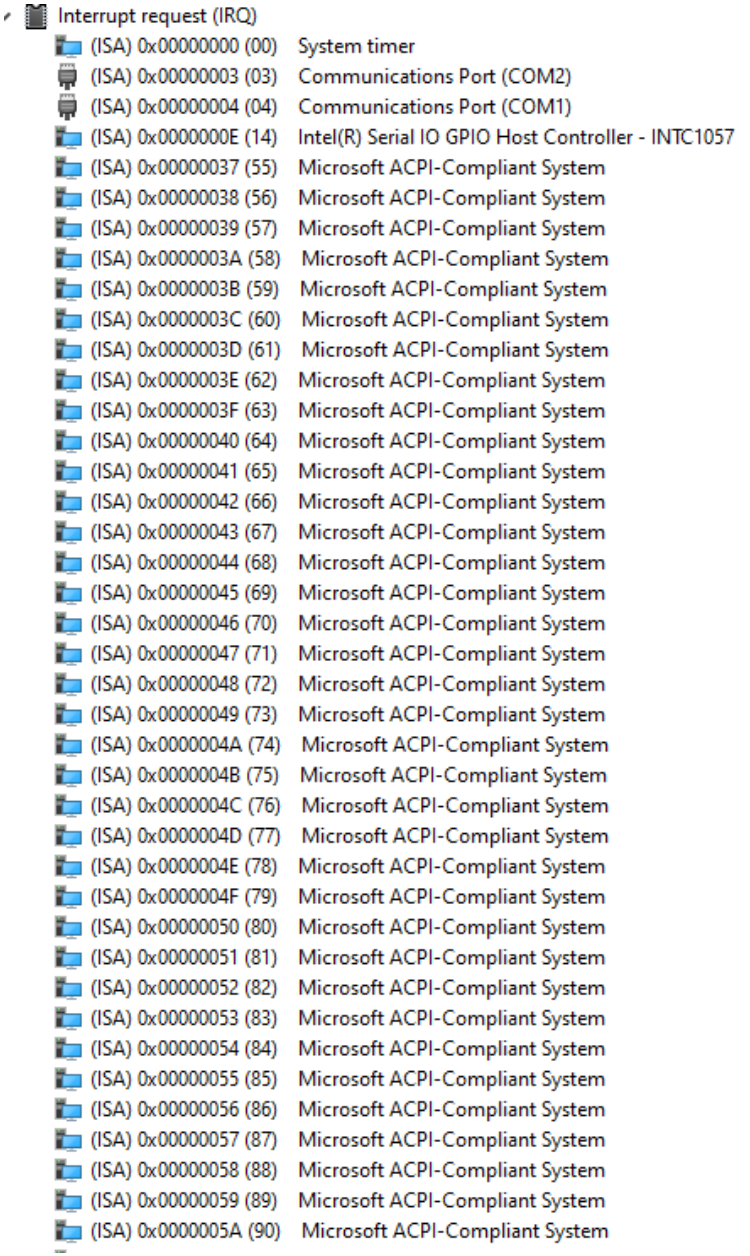



[0000000000003060 - 000000000000307F] Standard SATA AHCI Controller
[0000000000003080 - 0000000000003083] Standard SATA AHCI Controller
[0000000000003090 - 0000000000003097] Standard SATA AHCI Controller
[000000000000EFA0 - 000000000000EFBF] SMBus - 54A3

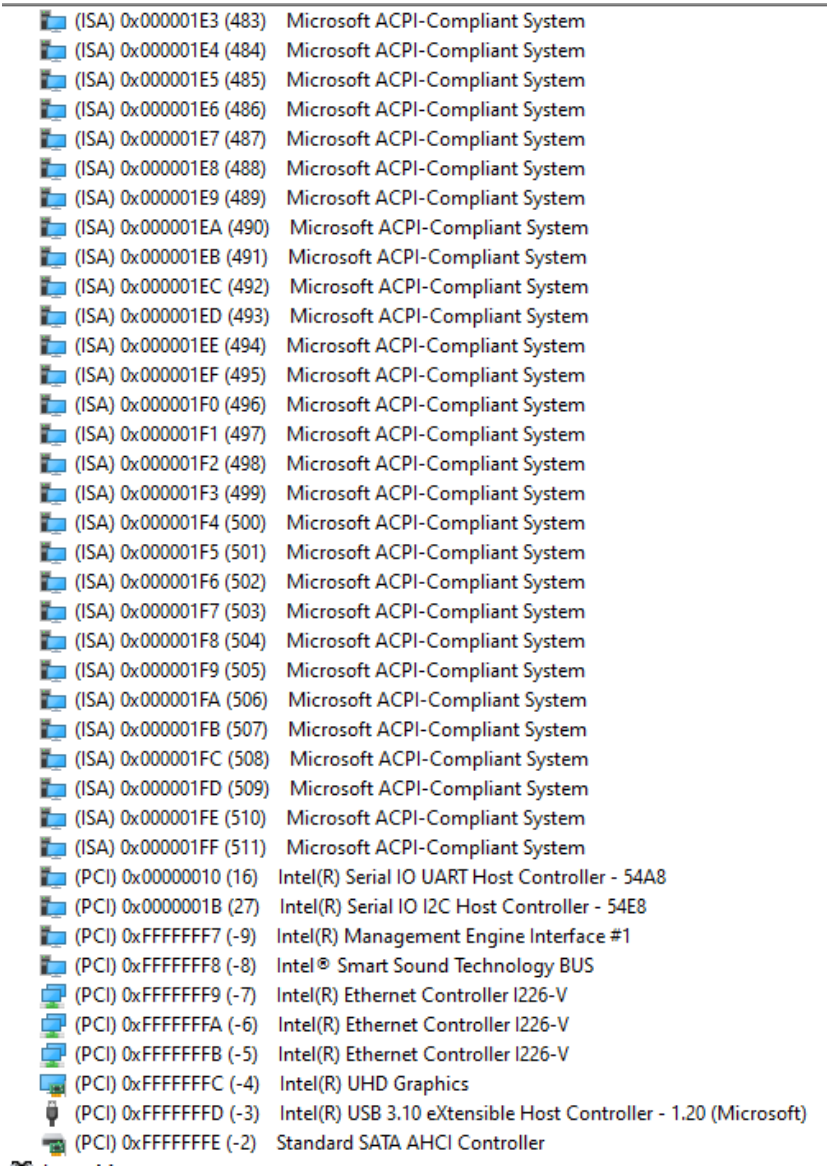
A.2 Memory Address Map



A.3 IRQ Mapping Chart



(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) 0x000001E3 (483) Microsoft ACPI-Compliant System
(ISA) 0x000001E4 (484) Microsoft ACPI-Compliant System
(ISA) 0x000001E5 (485) Microsoft ACPI-Compliant System
(ISA) 0x000001E6 (486) Microsoft ACPI-Compliant System
(ISA) 0x000001E7 (487) Microsoft ACPI-Compliant System
(ISA) 0x000001E8 (488) Microsoft ACPI-Compliant System
(ISA) 0x000001E9 (489) Microsoft ACPI-Compliant System
(ISA) 0x000001EA (490) Microsoft ACPI-Compliant System
(ISA) 0x000001EB (491) Microsoft ACPI-Compliant System
(ISA) 0x000001EC (492) Microsoft ACPI-Compliant System
(ISA) 0x000001ED (493) Microsoft ACPI-Compliant System
(ISA) 0x000001EE (494) Microsoft ACPI-Compliant System
(ISA) 0x000001EF (495) Microsoft ACPI-Compliant System
(ISA) 0x000001F0 (496) Microsoft ACPI-Compliant System
(ISA) 0x000001F1 (497) Microsoft ACPI-Compliant System
(ISA) 0x000001F2 (498) Microsoft ACPI-Compliant System
(ISA) 0x000001F3 (499) Microsoft ACPI-Compliant System
(ISA) 0x000001F4 (500) Microsoft ACPI-Compliant System
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(ISA) 0x000001F6 (502) Microsoft ACPI-Compliant System
(ISA) 0x000001F7 (503) Microsoft ACPI-Compliant System
(ISA) 0x000001F8 (504) Microsoft ACPI-Compliant System
(ISA) 0x000001F9 (505) Microsoft ACPI-Compliant System
(ISA) 0x000001FA (506) Microsoft ACPI-Compliant System
(ISA) 0x000001FB (507) Microsoft ACPI-Compliant System
(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) 0x00000010 (16) Intel(R) Serial IO UART Host Controller - 54A8
(PCI) 0x0000001B (27) Intel(R) Serial IO I2C Host Controller - 54E8
(PCI) 0xFFFFFFF7 (-9) Intel(R) Management Engine Interface #1
(PCI) 0xFFFFFFF8 (-8) Intel® Smart Sound Technology BUS
(PCI) 0xFFFFFFF9 (-7) Intel(R) Ethernet Controller I226-V
(PCI) 0xFFFFFFFA (-6) Intel(R) Ethernet Controller I226-V
(PCI) 0xFFFFFFFB (-5) Intel(R) Ethernet Controller I226-V
(PCI) 0xFFFFFFFC (-4) Intel(R) UHD Graphics
(PCI) 0xFFFFFFFD (-3) Intel(R) USB 3.10 eXtensible Host Controller - 1.20 (Microsoft)
(PCI) 0xFFFFFFFE (-2) Standard SATA AHCI Controller