

ACM-XE21B6

COM Express Basic Module Type 6
with Intel® CM246



User Manual

Acrosser Technology Co., Ltd.
www.acrosser.com

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Purpose

This document is intended to provide the information about the features and use of the product.

Audience

The intended audiences are technical personnel, not for general audiences.

WARNING

Danger of explosion if batteries are incorrectly replaced. Always replace the battery with the same specifications. Dispose of used batteries according to the manufacturer's instructions.

Before running the system, make sure the power cord is firmly plugged into the socket.

CAUTION



IEC 60417-6042 (2010-11)



IEC 60417-6172 (2012-09)

All power cords must be disconnected during product repair.

Ver: 100

Date: Dec. 28, 2021

To read this User Manual on your smart phone, you will have to install an APP that can read PDF file format first. Please find the APP you prefer from the APP Market.

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5. FAQ29

Q 1. Where can I find the serial number of this product? 29

1. Introduction

ACM-XE21B6 is the latest COM Express Type 6 Basic Module of Acrosser that is equipped with the new Coffee Lake CM246 platform with both i7 9850HE & Xeon E-2176M highest performance CPU for selecting. And also, it includes a total of 24 PCIe Lanes for expansion (1x PCIe x16 or 2x PCIe x8, selected by BIOS setting and 8x PCIe x1), which fully complies with the PICMG.COM standard specification, so it can offer higher CPU computing & higher data transmission speed in industrial applications.

1.1. Specifications

CPU	<ul style="list-style-type: none"> • ACM-XE21B6-A1: Intel® Xeon® E-2176M (6C/12T, 12M Cache, 2.7GHz/4.4GHz) • ACM-XE21B6-A2: Intel® Core™ i7 9850HE (6C/12T, 9M Cache, 2.7GHz/4.4GHz)
Chipset	<ul style="list-style-type: none"> • Intel® CM246
BIOS	<ul style="list-style-type: none"> • Software protection function • BIOS setting for 1x PCI-e x16 & 2x PCI-e x8
Memory	<ul style="list-style-type: none"> • 2x DDR4 SO-DIMM 2666MHz up to 64GB
Graphic Chipset	<ul style="list-style-type: none"> • Intel Gen9 UHD Graphics 630 Engine
VGA	<ul style="list-style-type: none"> • 1x VGA (Connector on the carrier board)
Digital Display Interface	<ul style="list-style-type: none"> • 2 ports (Connector on the carrier board)
Ethernet Chipset	<ul style="list-style-type: none"> • Intel I210IT chipset, support PXE Boot
Ethernet	<ul style="list-style-type: none"> • 1x GbE, support PXE Boot function and set as 1st boot device (Connector on the carrier board)
SATA	<ul style="list-style-type: none"> • 4x SATA III (6.0Gb/s) (Connector on the carrier board)
RAID	<ul style="list-style-type: none"> • Support RAID 0, 1, 5, 0+1
USB	<ul style="list-style-type: none"> • 8x USB2.0 • 4x USB3.1 • (Connector on the carrier board)
Serial Port	<ul style="list-style-type: none"> • 2x RS-232 (Only TX & RX) • (Connector on the carrier board)
GPIO	<ul style="list-style-type: none"> • 4-bit x GPI and 4-bit x GPO • (Connector on the carrier board)
Fan Connector	<ul style="list-style-type: none"> • 1x 2.54mm 3-pin wafer for CPU fan
Audio	<ul style="list-style-type: none"> • Intel High Definition Audio • (Connector on the carrier board)

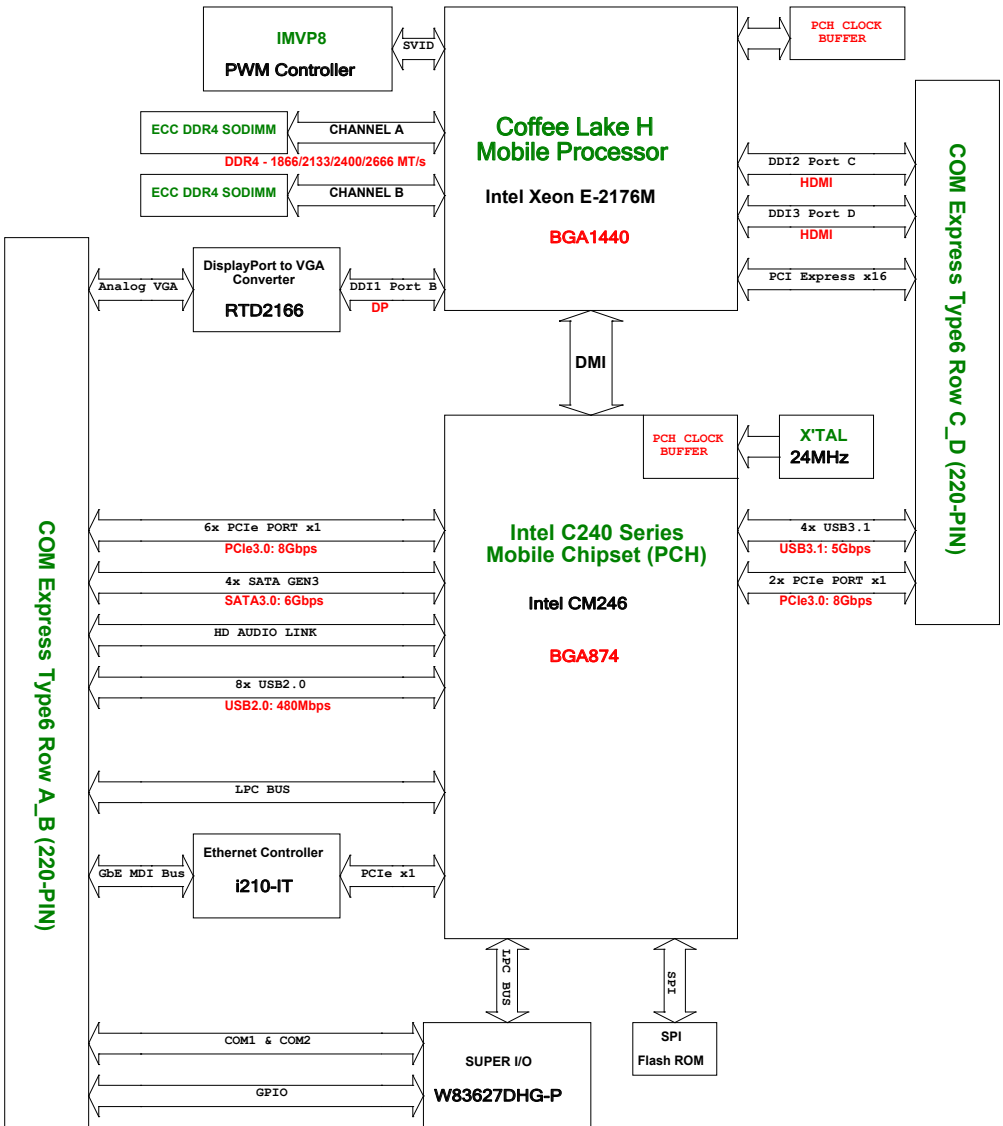
Expansion	<ul style="list-style-type: none">• 1x PCIe x16(PEG), 8x PCIe x1• LPC (w/o connector), SPI, SMBus, I2C• (Connector on the carrier board)
OS Support	<ul style="list-style-type: none">• Linux Kernel 4.14
Watchdog Timer	<ul style="list-style-type: none">• Software programmable 0~255 seconds, 0 = disable timer.
Power Mode	<ul style="list-style-type: none">• AT Mode (System auto on after power in, no button needed)
CMOS Battery	<ul style="list-style-type: none">• Without CMOS Battery
Operating Temperature	<ul style="list-style-type: none">• 0~60°C (32~104°F)
Dimension	<ul style="list-style-type: none">• 125 x 95mm (4.92" x 3.74")
Safety	<ul style="list-style-type: none">• CE, FCC Class A

1.2. Packing List

Check if the following items are included in the package.

	Item	Q'ty
<input type="checkbox"/>	ACM-XE21B6-A1 (Xeon E-2176M) or ACM-XE21B6-A2 (Core i7 9850HE)	1
<input type="checkbox"/>	Heat spreader + CPU FAN	1
<input type="checkbox"/>	1g thermal grease	1

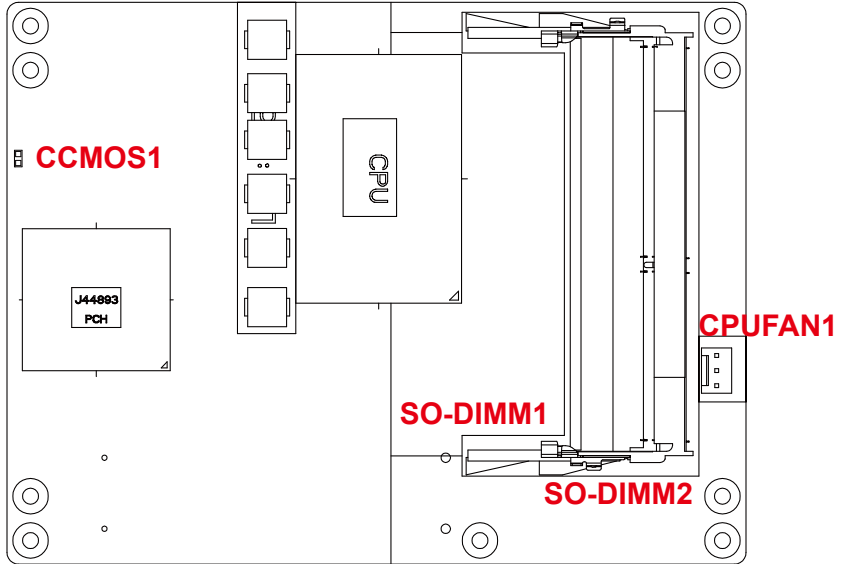
1.3. Block Diagram



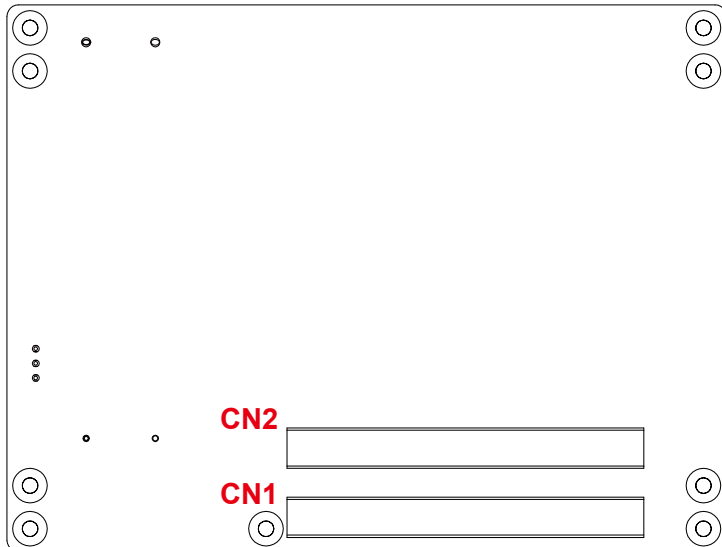
2. Hardware Information

2.1. Mainboard Layout

Top View



Bottom View




2.2. Connector Pin Definition

CCMOS1

CMOS Memory Clearing Pads

Short these two soldering pads and then open to reset PCH registers in the RTC well to default value.

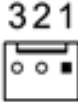
	PADS	Signal
	Short	Clear CMOS
	Open	Normal

SO-DIMM1, SO-DIMM2

ECC DDR4 SO-DIMM 260P

CPUFAN1

Fan Connector

	Pin #	Signal
	1	GND
	2	+12V
	3	FAN Speed Sensor

Header: 3-pin. Pitch: 2.54mm.

CN1, CN2

CN1: COM Express Module Type 6 Connector Rows A/B

CN2: COM Express Module Type 6 Connector Rows C/D

(Refer to the following CN1, CN2 Pin Assignments)

2.2.1. CN1, CN2 Pin Assignments

Pin #	CN1 – Row A	CN1 – Row B	CN2 – Row C	CN2 – Row D
1	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
2	GBE0_MDI3-	GBE0_ACT#	GND(FIXED)	GND(FIXED)
3	GBE0_MDI3+	LPC_FRAME#	USB_SSRX0-	USB_SSTX0-
4	GBE0_LINK100#	LPC_AD0	USB_SSRX0+	USB_SSTX0+
5	GBE0_LINK1000#	LPC_AD1	GND(FIXED)	GND(FIXED)
6	GBE0_MDI2-	LPC_AD2	USB_SSRX1-	USB_SSTX1-
7	GBE0_MDI2+	LPC_AD3	USB_SSRX1+	USB_SSTX1+
8	No Connect (Note1)	LPC_DRQ0#	GND(FIXED)	GND(FIXED)
9	GBE0_MDI1-	LPC_DRQ1#	USB_SSRX2-	USB_SSTX2-
10	GBE0_MDI1+	LPC_CLK	USB_SSRX2+	USB_SSTX2+
11	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
12	GBE0_MDI0-	PWRBTN#	USB_SSRX3-	USB_SSTX3-
13	GBE0_MDI0+	SMB_CK	USB_SSRX3+	USB_SSTX3+

Pin #	CN1 – Row A	CN1 – Row B	CN2 – Row C	CN2 – Row D
14	GBE0_CTREF	SMB_DAT	GND(FIXED)	GND(FIXED)
15	SUS_S3#	SMB_ALERT#	DDI1_PAIR6+	DDI1_CTRLCLK_AUX+
16	SATA0_TX+	SATA1_TX+	DDI1_PAIR6-	DDI1_CTRLDATA_AUX-
17	SATA0_TX-	SATA1_TX-	RSVD	RSVD
18	SUS_S4#	SUS_STAT#	RSVD	RSVD
19	SATA0_RX+	SATA1_RX+	PCIE_RX6+	PCIE_TX6+
20	SATA0_RX-	SATA1_RX-	PCIE_RX6-	PCIE_TX6-
21	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
22	SATA2_TX+	SATA3_TX+	PCIE_RX7+	PCIE_TX7+
23	SATA2_TX-	SATA3_TX-	PCIE_RX7-	PCIE_TX7-
24	SUS_S5#	PWR_OK	DDI1_HPD	RSVD
25	SATA2_RX+	SATA3_RX+	DDI1_PAIR4+	RSVD
26	SATA2_RX-	SATA3_RX-	DDI1_PAIR4-	DDI1_PAIR0+
27	BATLOW#	WDT	RSVD	DDI1_PAIR0-
28	SATA_ACT#	AC/HDA_SDIN2	RSVD	RSVD
29	AC/HDA_SYNC	AC/HDA_SDIN1	DDI1_PAIR5+	DDI1_PAIR1+
30	AC/HDA_RST#	AC/HDA_SDIN0	DDI1_PAIR5-	DDI1_PAIR1-
31	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
32	AC/HDA_BITCLK	SPKR	DDI2_CTRLCLK_AUX+	DDI1_PAIR2+
33	AC/HDA_SDOUT	I2C_CK	DDI2_CTRLDATA_AUX-	DDI1_PAIR2-
34	BIOS_DIS0#	I2C_DAT	DDI2_DDC_AUX_SEL	DDI1_DDC_AUX_SEL
35	THRMTRIP#	THRM#	RSVD	RSVD
36	USB6-	USB7-	DDI3_CTRLCLK_AUX+	DDI1_PAIR3+
37	USB6+	USB7+	DDI3_CTRLDATA_AUX-	DDI1_PAIR3-
38	USB_6_7_OC#	USB_4_5_OC#	DDI3_DDC_AUX_SEL	RSVD
39	USB4-	USB5-	DDI3_PAIR0+	DDI2_PAIR0+
40	USB4+	USB5+	DDI3_PAIR0-	DDI2_PAIR0-
41	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
42	USB2-	USB3-	DDI3_PAIR1+	DDI2_PAIR1+
43	USB2+	USB3+	DDI3_PAIR1-	DDI2_PAIR1-
44	USB_2_3_OC#	USB_0_1_OC#	DDI3_HPD	DDI2_HPD
45	USB0-	USB1-	RSVD	RSVD
46	USB0+	USB1+	DDI3_PAIR2+	DDI2_PAIR2+
47	VCC_RTC (Note3)	EXCD1_PERST#	DDI3_PAIR2-	DDI2_PAIR2-

Pin #	CN1 – Row A	CN1 – Row B	CN2 – Row C	CN2 – Row D
48	EXCD0_PERST#	EXCD1_CPPE#	RSVD	RSVD
49	EXCD0_CPPE#	SYS_RESET#	DDI3_PAIR3+	DDI2_PAIR3+
50	LPC_SERIRQ	CB_RESET#	DDI3_PAIR3-	DDI2_PAIR3-
51	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
52	PCIE_TX5+	PCIE_RX5+	PEG_RX0+	PEG_TX0+
53	PCIE_TX5-	PCIE_RX5-	PEG_RX0-	PEG_TX0-
54	GPI0	GPO1	TYPE0#	PEG_LANE_RV#
55	PCIE_TX4+	PCIE_RX4+	PEG_RX1+	PEG_TX1+
56	PCIE_TX4-	PCIE_RX4-	PEG_RX1-	PEG_TX1-
57	GND	GPO2	TYPE1#	TYPE2#
58	PCIE_TX3+	PCIE_RX3+	PEG_RX2+	PEG_TX2+
59	PCIE_TX3-	PCIE_RX3-	PEG_RX2-	PEG_TX2-
60	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
61	PCIE_TX2+	PCIE_RX2+	PEG_RX3+	PEG_TX3+
62	PCIE_TX2-	PCIE_RX2-	PEG_RX3-	PEG_TX3-
63	GPI1	GPO3	RSVD	RSVD
64	PCIE_TX1+	PCIE_RX1+	RSVD	RSVD
65	PCIE_TX1-	PCIE_RX1-	PEG_RX4+	PEG_TX4+
66	GND	WAKE0#	PEG_RX4-	PEG_TX4-
67	GPI2	WAKE1#	RSVD	GND
68	PCIE_TX0+	PCIE_RX0+	PEG_RX5+	PEG_TX5+
69	PCIE_TX0-	PCIE_RX0-	PEG_RX5-	PEG_TX5-
70	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
71	No Connect (Note3)	No Connect (Note3)	PEG_RX6+	PEG_TX6+
72	No Connect (Note3)	No Connect (Note3)	PEG_RX6-	PEG_TX6-
73	No Connect (Note3)	No Connect (Note3)	GND	GND
74	No Connect (Note3)	No Connect (Note3)	PEG_RX7+	PEG_TX7+
75	No Connect (Note3)	No Connect (Note3)	PEG_RX7-	PEG_TX7-
76	No Connect (Note3)	No Connect (Note3)	GND	GND
77	No Connect (Note3)	No Connect (Note3)	RSVD	RSVD
78	No Connect (Note3)	No Connect (Note3)	PEG_RX8+	PEG_TX8+
79	No Connect (Note3)	No Connect (Note3)	PEG_RX8-	PEG_TX8-
80	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
81	No Connect (Note3)	No Connect (Note3)	PEG_RX9+	PEG_TX9+

Pin #	CN1 – Row A	CN1 – Row B	CN2 – Row C	CN2 – Row D
82	No Connect (Note3)	No Connect (Note3)	PEG_RX9-	PEG_TX9-
83	No Connect (Note3)	No Connect (Note3)	RSVD	RSVD
84	No Connect (Note3)	VCC_5V_SBY	GND	GND
85	GPI3	VCC_5V_SBY	PEG_RX10+	PEG_TX10+
86	RSVD	VCC_5V_SBY	PEG_RX10-	PEG_TX10-
87	RSVD	VCC_5V_SBY	GND	GND
88	PCIE_CLK_REF+	BIOS_DIS1#	PEG_RX11+	PEG_TX11+
89	PCIE_CLK_REF-	VGA_RED	PEG_RX11-	PEG_TX11-
90	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
91	SPI_POWER (3.3V)	VGA_GRN	PEG_RX12+	PEG_TX12+
92	SPI_MISO	VGA_BLU	PEG_RX12-	PEG_TX12-
93	GPO0	VGA_HSYNC	GND	GND
94	SPI_CLK	VGA_VSYNC	PEG_RX13+	PEG_TX13+
95	SPI_MOSI	VGA_I2C_CK	PEG_RX13-	PEG_TX13-
96	TPM_PP	VGA_I2C_DAT	GND	GND
97	TYPE10#	SPI_CS#	RSVD	RSVD
98	SER0_TX	RSVD	PEG_RX14+	PEG_TX14+
99	SER0_RX	RSVD	PEG_RX14-	PEG_TX14-
100	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)
101	SER1_TX	No Connect	PEG_RX15+	PEG_TX15+
102	SER1_RX	FAN_TACHIN	PEG_RX15-	PEG_TX15-
103	LID#	No Connect	GND	GND
104	VCC_12V	VCC_12V	VCC_12V	VCC_12V
105	VCC_12V	VCC_12V	VCC_12V	VCC_12V
106	VCC_12V	VCC_12V	VCC_12V	VCC_12V
107	VCC_12V	VCC_12V	VCC_12V	VCC_12V
108	VCC_12V	VCC_12V	VCC_12V	VCC_12V
109	VCC_12V	VCC_12V	VCC_12V	VCC_12V
110	GND(FIXED)	GND(FIXED)	GND(FIXED)	GND(FIXED)

Note 1: *There are only 3 LED outputs for ACT#, LINK100# and LINK1000# which supplied signals by the Ethernet controller on Module board.*

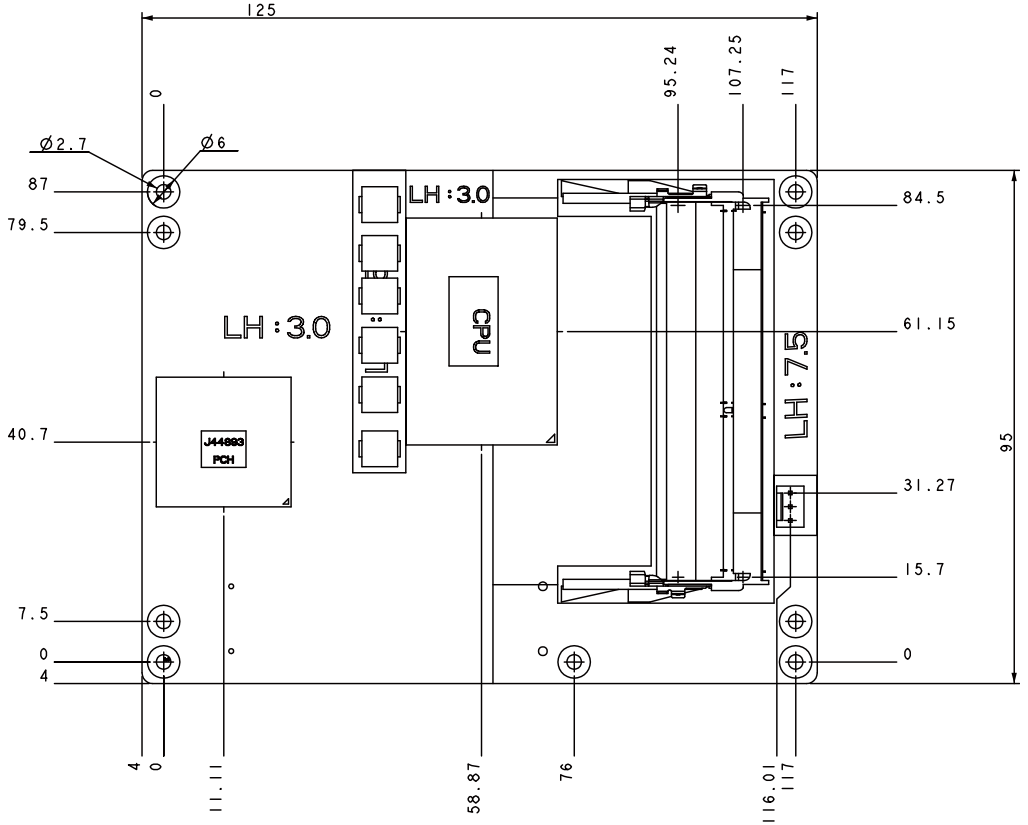
Note 2: *LVDS is not supported.*

Note 3: *DO NOT connect VBAT_RTC to GND directly, it may cause board damaging.*

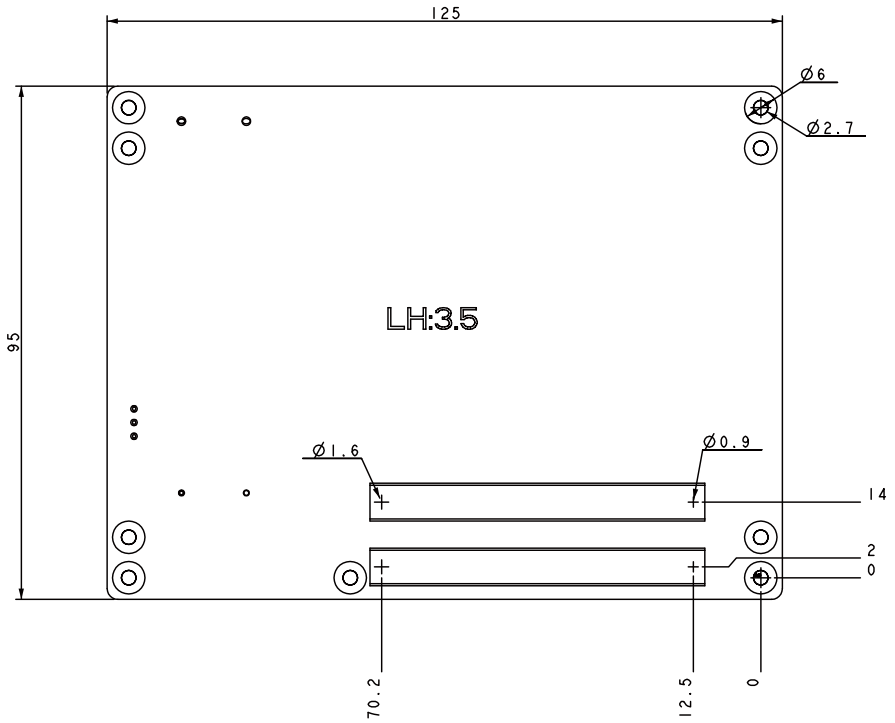
2.3. Board Dimension

(Unit: mm)

Top view



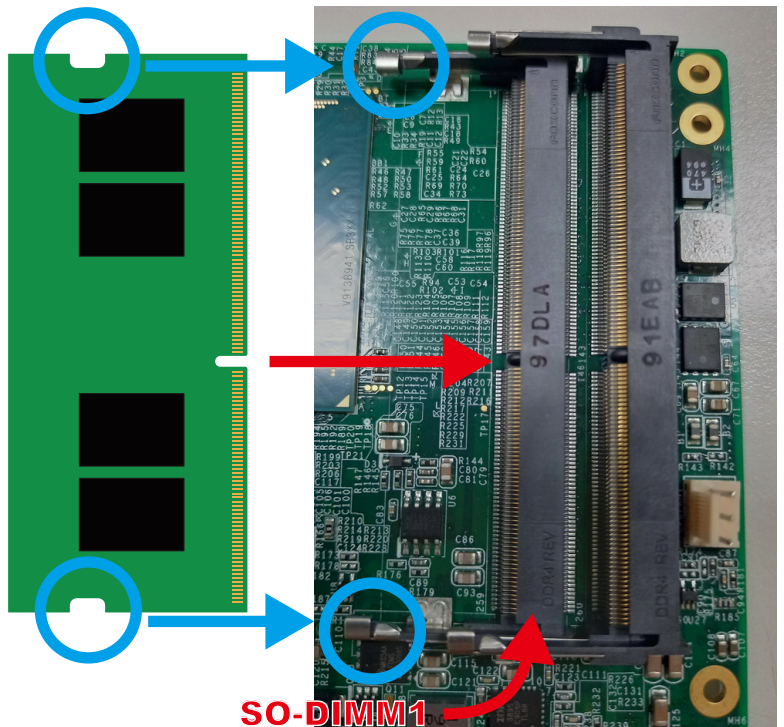
Bottom view



2.4. Memory Module Installation

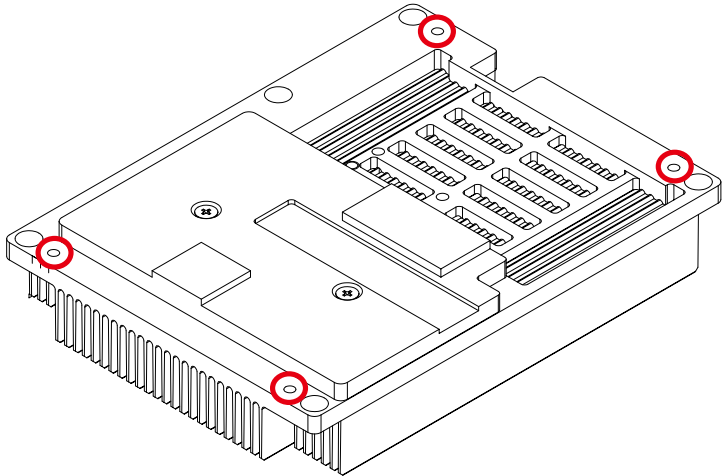
As memory modules are highly sensitive technical components, the use of ESD tools and anti-static gloves or wristband is highly recommended.

- Step 1: Align the memory module key along with the memory socket key.
- Step 2: Hold the SO-DIMM module by the sides and slide it into slot SO-DIMM1 at the appropriate angle, golden contacts first.
- Step 3: Insert the module carefully until the golden contacts are all inserted and the module is snug in its slot. Press the memory downward until the lock/ejector tabs engage and click into place.

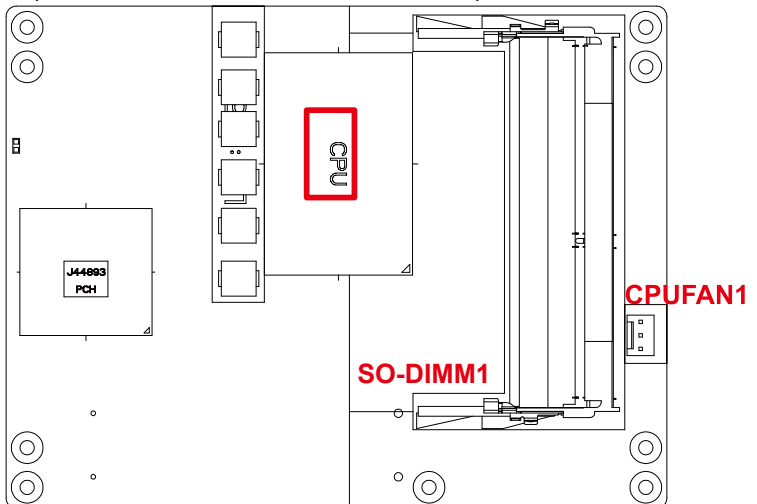


2.5. Heat Spreader Installation

Step 1: Use 4 round-head screws to mount 4 standoffs onto the board.

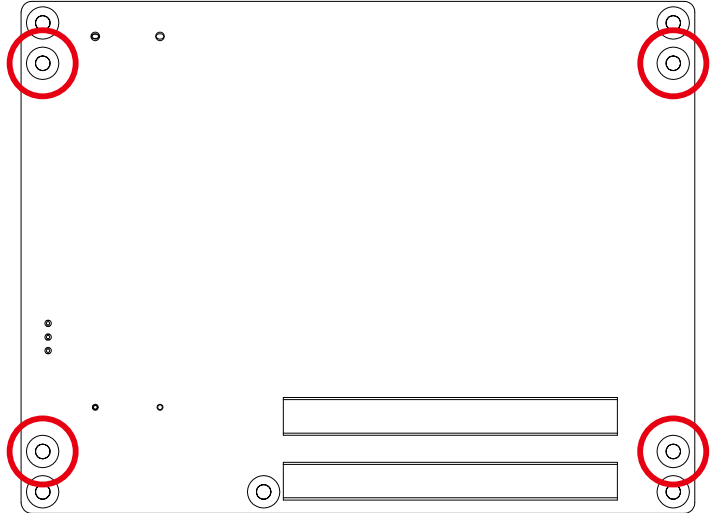


Step 2: Paste appropriate amount of thermal grease and apply it evenly on CPU chip. Please be careful not to touch with the parts on the board.

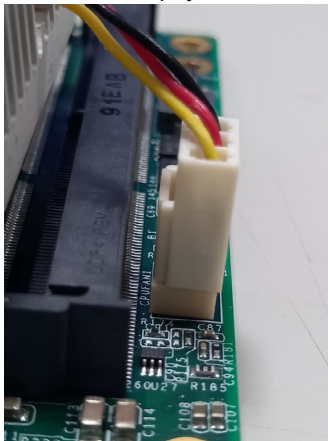


Step 3: Remove the thermal pad transparent film on the heat spreader module, and attach the board with its CPU facing the heat spreader module. Please note that the fan and CPUFAN1 must be located at the same side.

Step 4: Use 4 flat-head screws to tighten the board.



Step 5: Connect the cooling module fan connector to the header CPUFAN1 on board. Please pay attention to connect to the bottom and its orientation.



3. BIOS Settings

This chapter describes the BIOS menu displays and explains how to perform common tasks needed to get the system up and running. It also gives detailed explanation of the elements found in each of the BIOS menus. The following topics are covered:

- Main Setup
- Advanced Setup
- Chipset Setup
- Boot Setup
- Security Setup
- Save & Exit Setup

Once you enter the Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen. Use the arrow keys to highlight the item and then use the <Pg Up> <Pg Dn> keys to select the value you want in each item.

3.1. Main Setup

The BIOS setup main menu includes some options. Use the [Up/Down] arrow key to highlight the option, and then press the [Enter] key to select the item and configure the functions.

```

Aptio Setup Utility - Copyright (C) 2021 American Megatrends, Inc.
Main  Advanced  Chipset  Boot  Security  Save & Exit

BIOS Information
BIOS Vendor          American Megatrends
Core Version         5.13
Compliancy           UEFI 2.7; PI 1.6
Project Name         ACM-XE21B6
Release Version      V1.0
Build Date and Time  01/01/2021 00:00:00

Processor Information
Name                 Coffeelake Halo
Type                 Intel(R) Core(TM)
                    i7-9850HE CPU @ 2.70GHz

Total Memory         65536 MB
Memory Frequency     2400 MHz

System Date          [Fri 01/01/2021]
System Time          [00:00:00]

Set the Date. Use Tab to
switch between Date
elements.

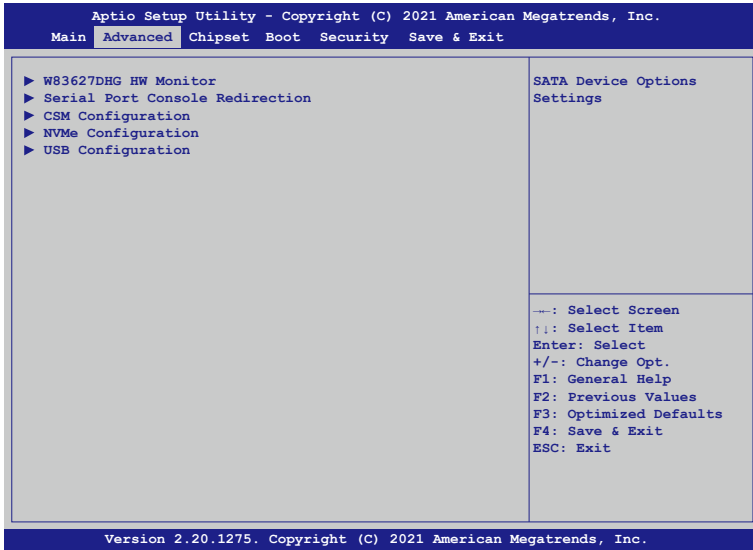
---: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

Version 2.20.1275. Copyright (C) 2021 American Megatrends, Inc.
    
```

Note: Listed at the bottom of the menu are the control keys. If you need any help with the item fields, you can press <F1> key, and it will display the relevant information.

- **System Date**
Set the system date.
- **System Time**
Set the system time.

3.2. Advanced Setup



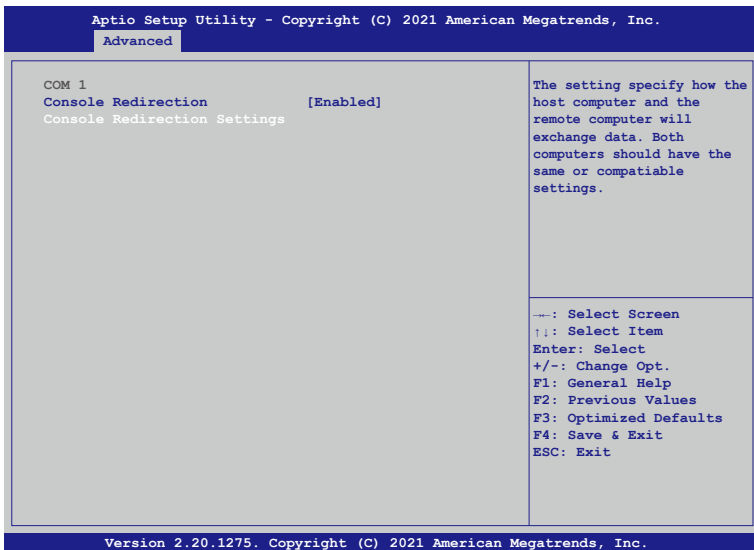
- **W83627DHG HW Monitor**
Display hardware monitor status.
- **Serial Port Console Redirection**
Console port setting.
- **Network Stack Configuration**
Network stack setting.
- **CSM Configuration**
Compatibility Support Module Configuration. Enable/Disable Option ROM execution settings, etc.
- **NVMe Configuration**
Set NVMe configuration.
- **USB Configuration**
Set USB configuration parameters.

3.2.1. W83627DHG HW Monitor



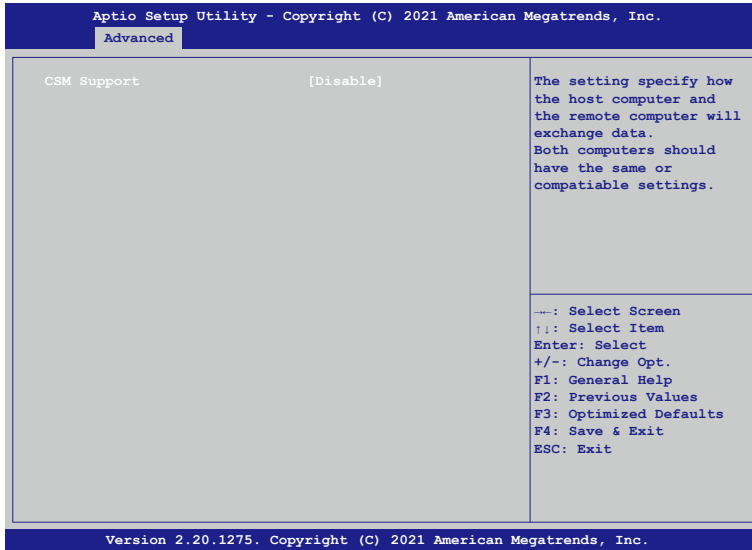
- **Smart Fan Function**
Enable or Disable Smart Fan.

3.2.2. Serial Port Console Redirection



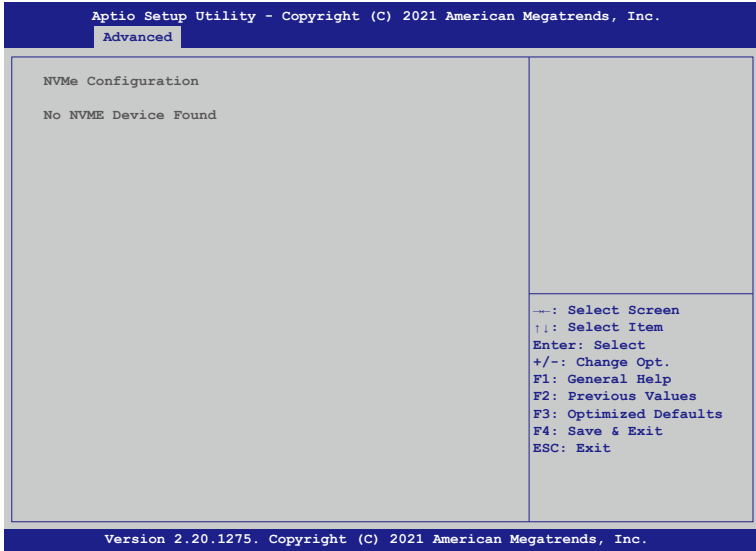
- **Console Redirection**
Console Enable/Disable
- **Console Redirection Settings**
The setting specify how the host computer and the remote computer will exchange data. Both computers should have the same or compatible settings.

3.2.3. CSM Configuration

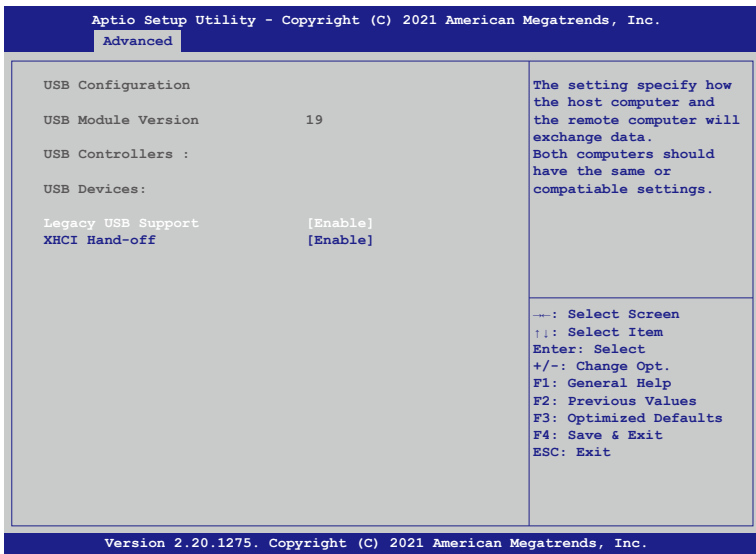


- **CSM Support**
The setting specify how the host computer and the remote computer will exchange data.Both computers should have the same or compatible settings.

3.2.4. NVMe Configuration



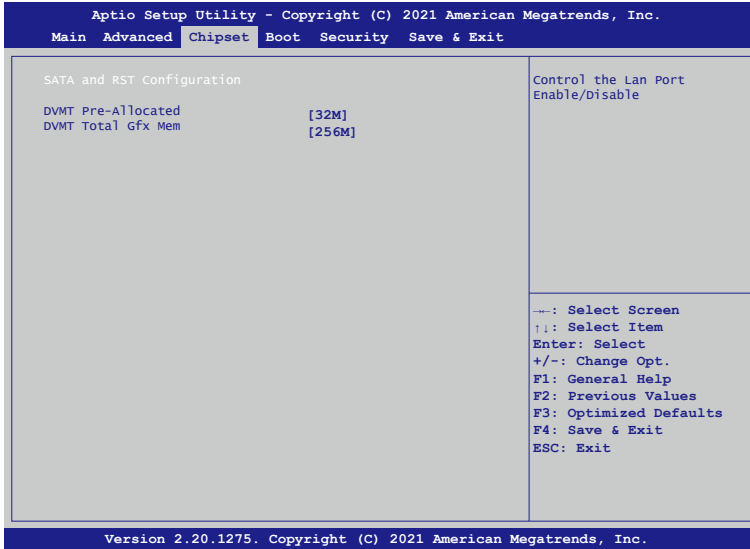
3.2.5. USB Configuration



- Legacy USB Support**
 The setting specify how the host computer and the remote computer will exchange data. Both computers should have the same or compatible settings.

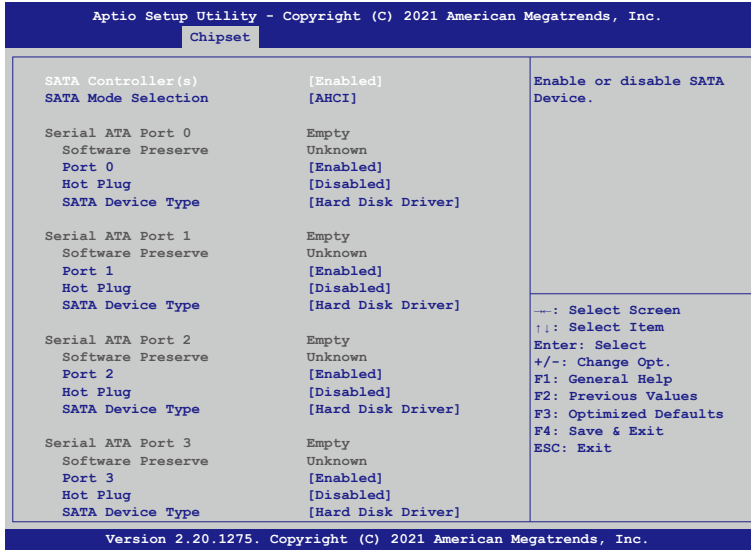
- **XHCI Hand-off**
This is a workaround for Oses without XHCI hand-off support.

3.3. Chipset Setup



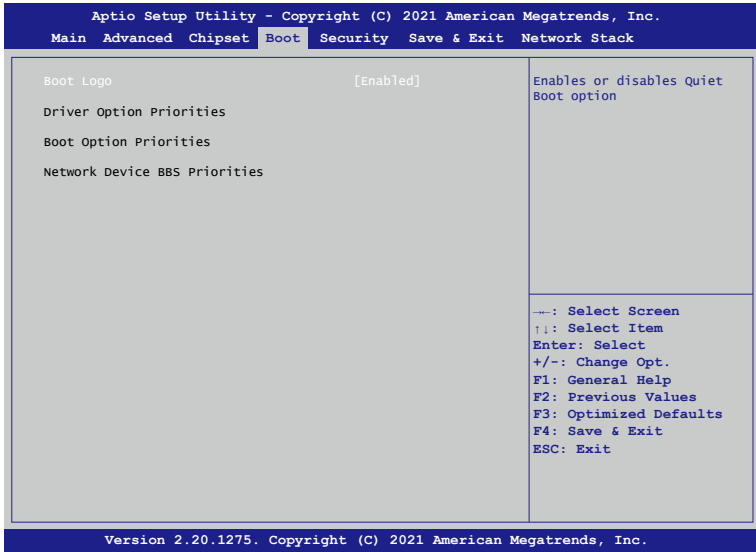
- **DVMT Pre-Allocated**
Select DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.
- **DVMT Total Gfx Mem**
Select DVMT5.0 Total Graphic Memory size used by the unternal Graphics Devices.

3.3.1. SATA and RST Configuration



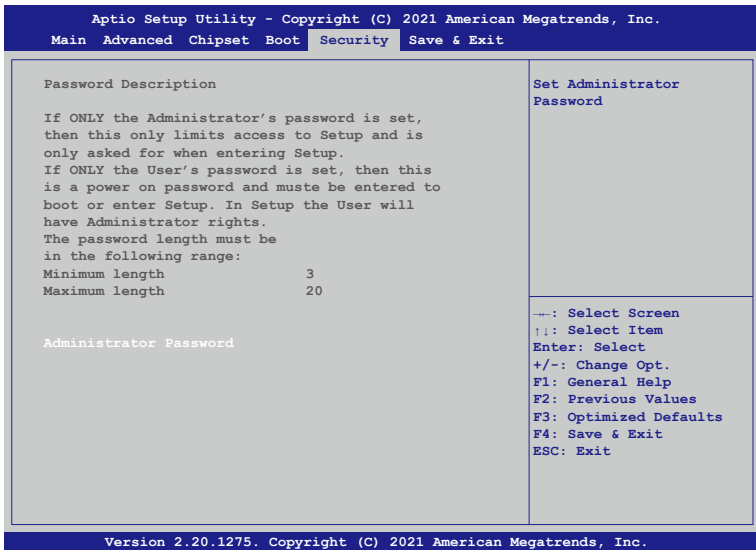
- **SATA Controller(s)**
Enable or disable SATA Device.
- **SATA Mode Selection**
Determines how SATA controller(s) operate.
- **Port 0**
Enable or Disable SATA Port
- **Hot Plug**
Designates this port as Hot Pluggable.
- **External**
Makes this port as external.

3.4. Boot Setup



- **Boot Logo**
Enables or disabled Quiet Boot option.

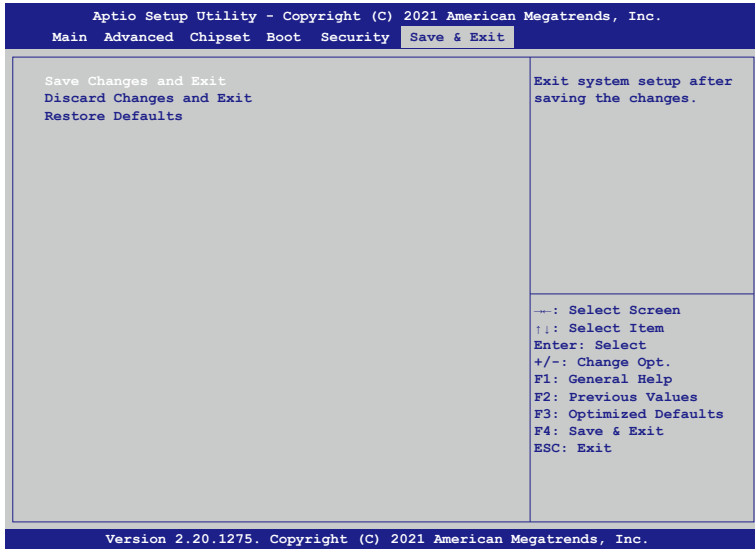
3.5. Security Setup



Once a password is effective, you have to enter the administrator password or user password before you access into the BIOS setup interface.

- **Administrator Password**
Set Administrator Password.

3.6. Save & Exit Setup



- **Save Changes and Exit**
Exit system setup after saving the changes.
- **Discard Changes and Exit**
Exit system setup without saving any changes.
- **Restore Defaults**
Restore/Load the default values for all the set up options.

4. Software Installation and Programming Guide

4.1. Introduction

4.1.1. Environment

This test utility develop is based on Ubuntu 18.04.1 Server 64bit.

4.1.2. GPIO and Watchdog

This model provides both a GPIO interface and a Watchdog timer. Users can use the GPIO and Watchdog APIs to configure and to access the GPIO interface and the Watchdog timer. The GPIO has four input pins and four output pins. The Watchdog timer can be set to 1~255 seconds. Setting the timer to zero disables the timer. The remaining seconds of the timer to reboot can be read from the timer.

4.2. API List and Descriptions

4.2.1. GPIO

Syntax:	Get_gpio_status(int pin)
Description:	Get the status of GPIO input pins and output pins status.
Parameters:	This function takes a pointer to an unsigned char variable as the parameter. The pin0 ~ 3 is the status of the output pins. The pin4 ~ pin7 is the status of the input pins.
Return Value:	1:HIGH, 0:LOW.
Syntax:	Set_gpio(int pin, int value)
Description:	Set the status of GPIO Output value.
Parameters:	Set value 0 is Low, 1 is High
Return Value:	If the function sets the values successfully, it returns 0 or -1, any other returned value stands for error.

4.2.2. Watchdog

Syntax:	Wdt_start(int value)
Description:	This function of the watchdog time to start counter.
Parameters:	The parameter 'val' is the value to set to watchdog timer register. The range is 1~ 255 .
Return Value:	None
Syntax:	Wdt_stop(Void)
Description:	Any time call this function will stop Watchdog Timer.
Parameters:	None
Return Value:	None
Syntax:	Get_wdt_count()
Description:	This function read the value of the watchdog time counter.
Parameters:	None
Return Value:	This function returns the value of the time counter.

5. FAQ

Q 1. *Where can I find the serial number of this product?*

- The serial number (S/N) is a label printed with alpha-numeric character. You can find the S/N label on the bottom of this product or on its packing box.

Technical Support Form

We deeply appreciate your purchase of Acrosser products. Please find the “**tech_form.doc**” file in our utility CD. If you have any questions or problems about Acrosser products, please fill in the following information. We will answer your questions in the shortest time possible.

Describe Your Info and Acrosser System Info

- Your Company Name: _____
- Your Contact Info: _____ Phone Number: _____
- Your E-Mail Address: _____
- Your Company Address: _____

- Acrosser Model Name: _____
- Acrosser Serial Number: _____

Describe System Configuration

- CPU Type: _____
- Memory Size: _____
- Storage Device (e.g. HDD, CF, or SSD): _____
- Additional Peripherals (e.g. Graphic Card): _____
- Operating System & Version (e.g. Windows 7 Embedded): _____
- Special API or Driver: _____
(If yes, please provide it for debug.)
- Running Applications: _____
- Others: _____

Describe Your Problems or Questions:

Send the above information to one of the following Acrosser contacts:

- Acrosser Local Sales Representative
- Acrosser Authorized Sales Channels
- Acrosser Inquiry --- <http://www.acrosser.com/inquiry.html>
- Acrosser FAX Number --- 886-2-29992887

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Acrosser Headquarters

241新北市三重區光復路一段61巷26號10樓
10F., No.26, Ln. 61, Sec. 1, Guangfu Rd.,
Sanchong Dist., New Taipei City 241, Taiwan
(R.O.C.)

TEL: +886-2-29999000

FAX: +886-2-29992887 / +886-2-29993960

Acrosser Taichung Office

414台中市烏日區僑仁街8號10樓之1
10F.-1, No.8, Qiaoren St., Wuri Dist.,
Taichung City 414, Taiwan (R.O.C.)

TEL: +886-4-2337-0715

FAX: +886-4-2337-3422

Acrosser China Subsidiary

深圳市欣扬通电子有限公司
深圳市福田区泰然八路安华工业区6号楼7层
706室 (邮编: 518040)

Room 706, floor 7, building 6, Anhua Industrial
Zone, Tairan 8th Road, Futian District, Shenzhen,
China (Postal: 518040)

TEL: +86-755-83542210

FAX: +86-755-83700087

Acrosser Nanjing Office

欣扬通电子有限公司 南京办事处
江苏省南京市江宁区天元东路228号504室
(邮编: 211100)

Room 504, No. 228, Tian Yuan East Rd.,
Jiang Ning Dist., Nanjing City, Jiangsu Province,
China (Postal: 211100)

Mobile: 13611932003

TEL: +86-025-86137002

FAX: +86-025-86137003

Acrosser Beijing Office

欣扬通电子有限公司 北京办事处
北京市昌平区沙河镇沙阳路巩华新村8号楼2单元
1403室 (邮编: 102206)

Room 1403, Unit 2, Building 8, Gonghua Village,
Shahe Town, Changping District, Beijing, China
(Postal: 102206)

Mobile: 13311317329

Acrosser USA Inc.

8351 Elm Ave. Suite 107, Rancho Cucamonga,
CA91730, USA

TEL: +1-909-476-0071

FAX: +1-909-466-9951