FleetPC-8-i7C

In-Vehicle Computing

User's Manual

Version 1.0

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Reversion		**Date**	**Notes**	**Author(s)**
From	**To**			
1.0		July 23, 2018	Initial Document Issued	Stanley Chou

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User Manual

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Disclaimer

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This device complies to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must withstand any background interference including those that may cause undesired operation.

Safety Information

Read the following precautions before setting up a CARTFT.COM Product.

Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Make sure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

- Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or its equivalent as recommended by CarTFT.com e.K. Dispose used battery according to the manufacturer's instructions.

Technical Support

Please do not hesitate to call or e-mail our customer service when you still cannot fix the problems.

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E-mail : sales@cartft.com

Website : www.cartft.com

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INTRODUCTION

1.0 INTRODUCTION

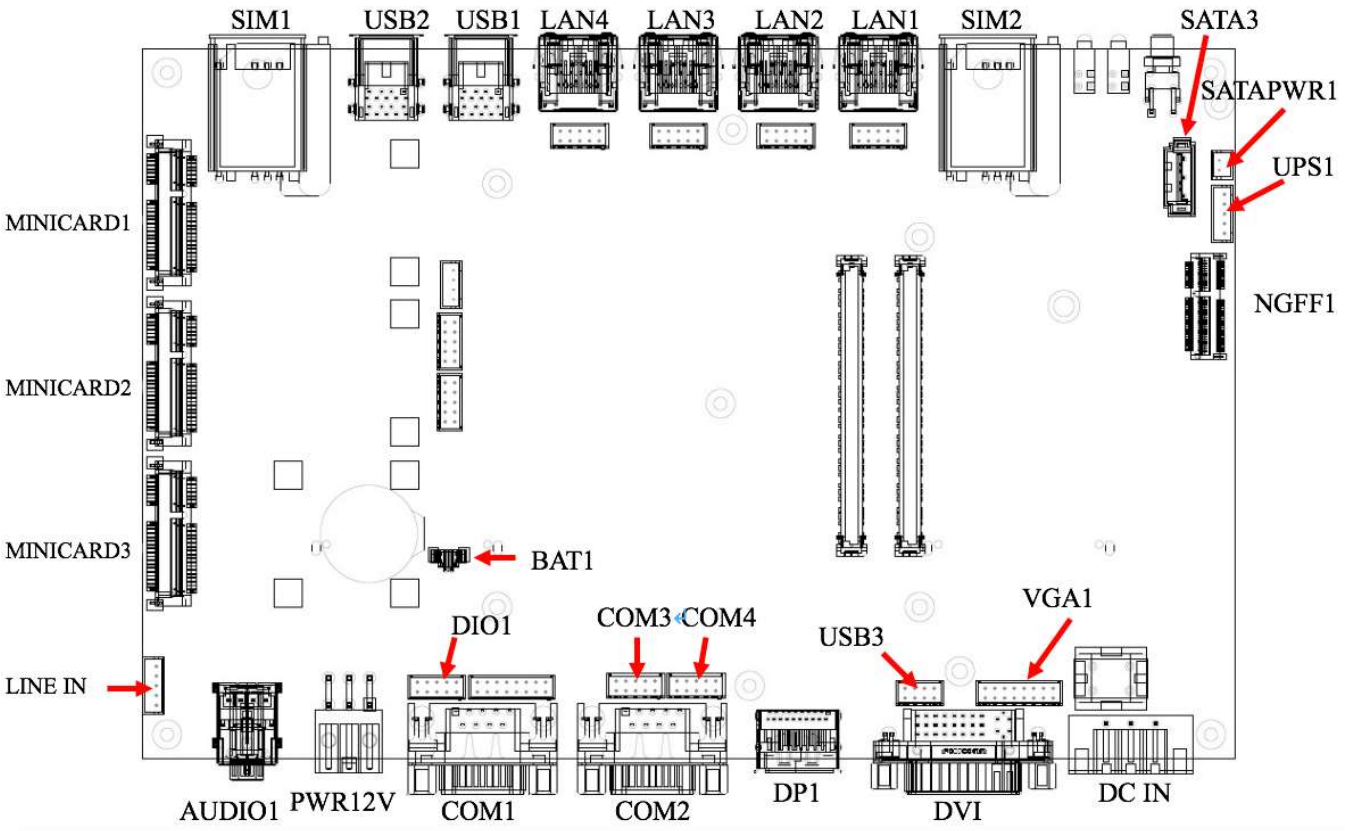
1.1 Model Specification

System	
CPU	Intel Gen 6 Core i7-6600U 2.6GHz up to 3.4GHz Intel Gen 6 Core i5-6300U 2.4GHz up to 3.0GHz Intel Gen 6 Core i3-6100U 2.3GHz Intel Gen 6 Dual Core 3955U 2.0GHz
Memory	2 x DDR4 2133MHz SO-DIMM up to 32GB
Chipset	Intel 6th Generation Core SoC Processor
LAN Chipset	Intel I210-AT Gb/s Ethernet Controllers Onboard Support PXE and WOL
Audio	Realtek ALC662 HD Codec onboard
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step
TPM	2.0
Power Requirement	
Power Input	9V-48V DC Power input
Power Protection	Automatics Recovery Short Circuit Protection
Power Management	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by BIOS and Software
Battery	Internal Battery Kit for 10 Mins Operating (Optional)
Storage	
Type	2 x 2.5” Drive Bay for SATA Type HDD / SSD, Support RAID 0, 1, 5 1 x SATA DOM

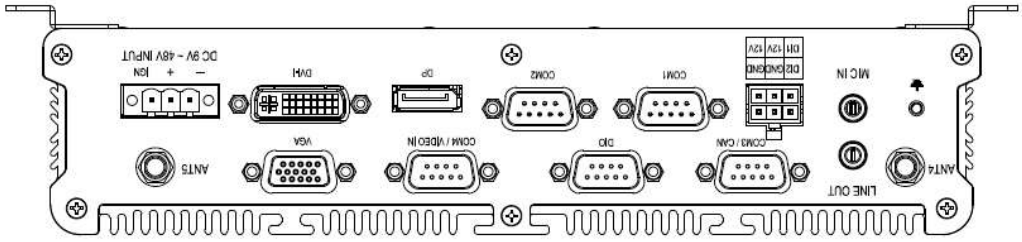
Graphics	
Graphics	Intel® HD Graphics 520 DirectX Video Acceleration (DXVA) for Accelerating Video Processing - Full AVC/VC1/MPEG2 HW Decode Supports DirectX 11/10.1/10/9 and OpenGL 4.0
Resolution	Max Resolution (HDMI 1.4) : 4096 x 2304@24Hz Max Resolution (DP) : 4096 x 2304@60Hz
I/O	
Serial Port	4 x RS-232 (2 with RS-422/485 (Auto Direction Control))
USB Port	2 x USB 3.0 Ports, 2 x USB 2.0 Ports
LAN	4 x RJ-45 Ports for GbE POE (1 port with iAMT)
Video Port	1 x DVI-I*, 1 x VGA and 1 x DP (support Triple Independent Display) *Use only with Single Link DVI Cables.
DIO Port	4 in and 4 out
Audio	1 x Line-out and 1 x Mic-in (Line-in Optional)
SIM Card Socket	2 x SIM Card sockets supported onboard with eject
Expansion Bus	3 x mini-PCIe cards, 1 x M.2 2230 A-E Key
Environment	
Operating Temp.	-40ºC ~ 70ºC
Storage Temp.	-40ºC ~ 85ºC
Relative Humidity	0% RH– 95% RH
Vibration (random)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis with SSD
Vibration Operating	MIL-STD-810G, Method 514.6, Procedure I, Category 4
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Crash Hazard	MIL-STD-810G, Method 516.5, Procedure V, Ground equipment=100
Certifications	CE, FCC Class A, E-13
Mechanical	
Construction	Aluminum alloy
Mounting	Supports both of wall-mount/VESA-mount
Weight	1.980 kg (bare-bone)
Dimensions	250 x 150 x 55 mm

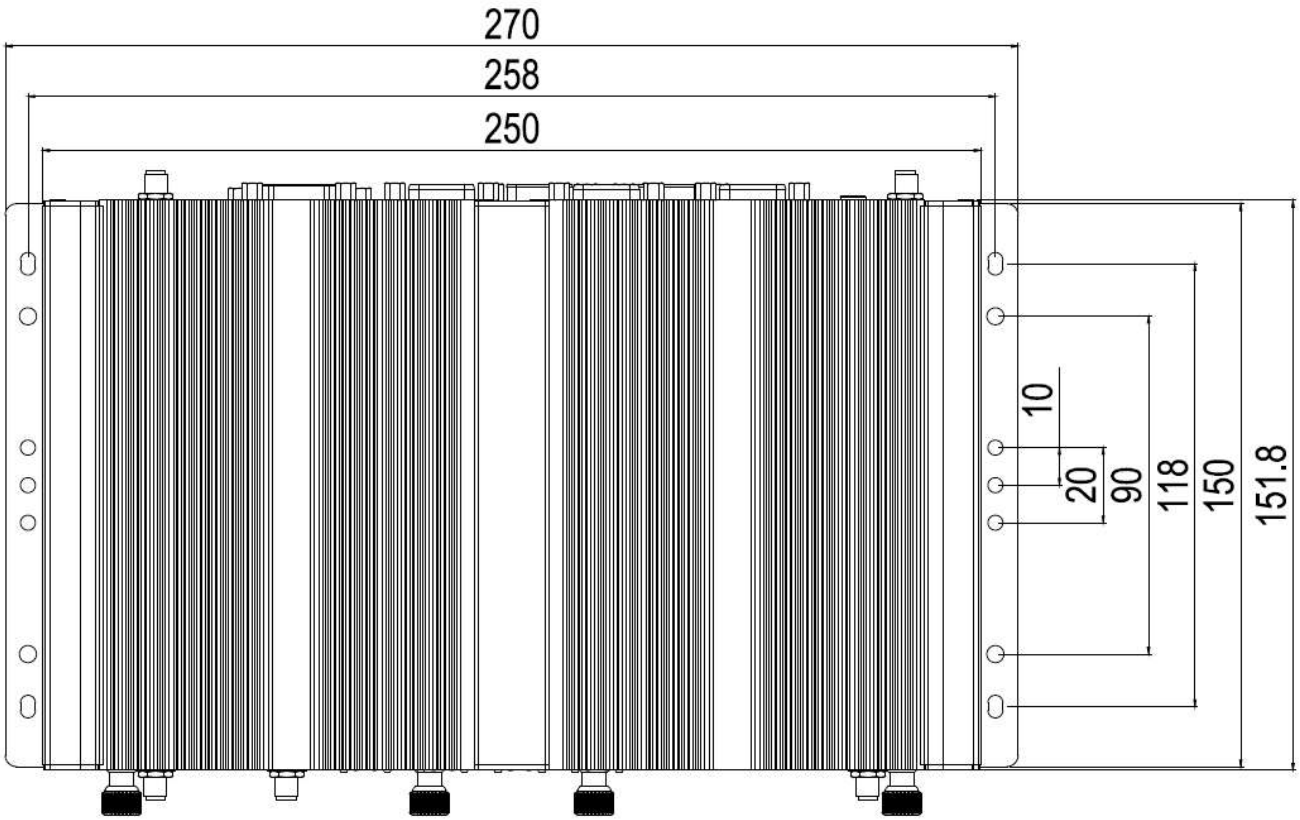
1.2 FleetPC-8-i7C Illustration (MB, System)

Main Board



System


DC 9V ~ 48V INPUT
IGN
DVI-I
DP
COM2
COM1
DIO
GND
+12V
MIC IN
VGA
COM4 / VIDEO IN
COM3 / CAN
LINE OUT
ANT5
ANT4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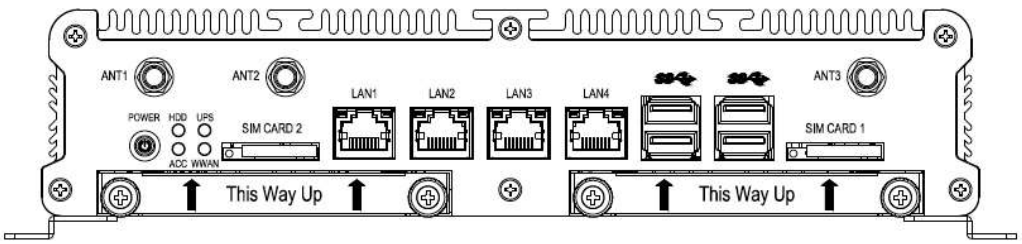
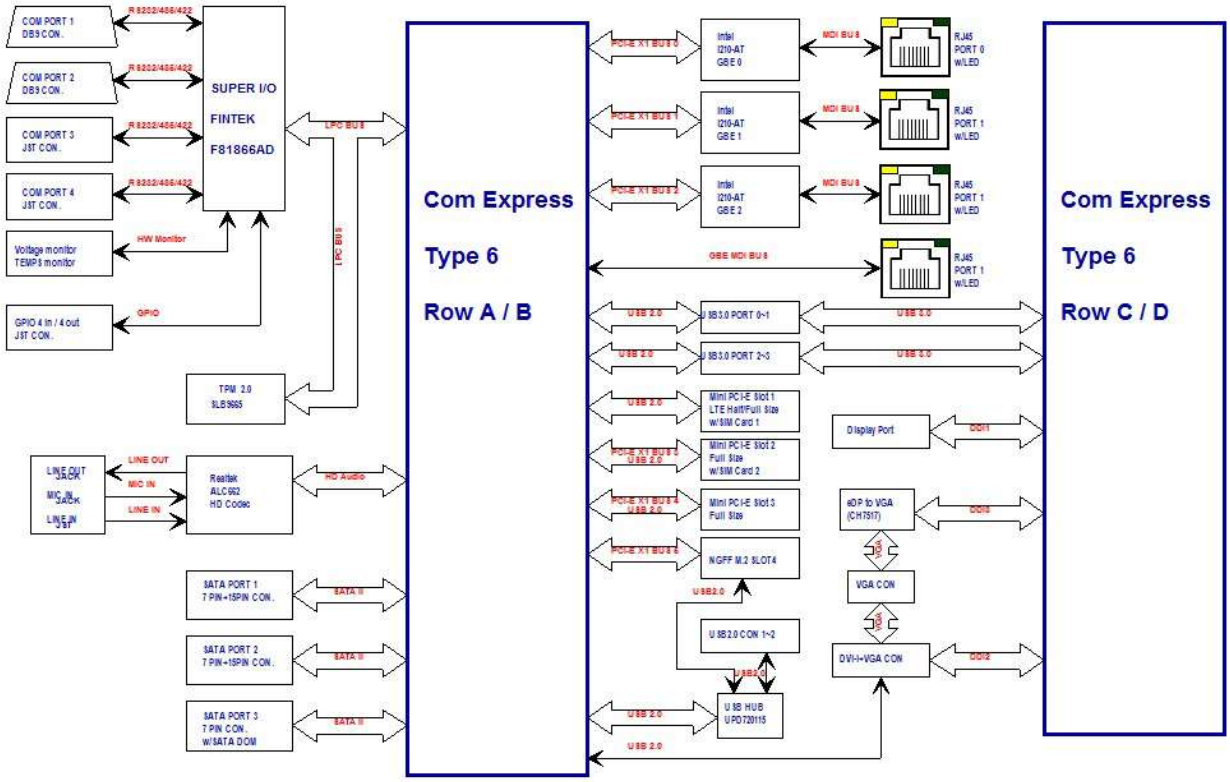

ANT1
ANT2
ANT3
POWER
HDD
UPS
ACC
WWAN
SIM CARD 2
SIM CARD 1
LAN1
LAN2
LAN3
LAN4
This Way Up
This Way Up

1.3 Architecture



1.4 Principal component Specification

CPU

Chip	Description
Intel	**1.** Power consumption:

CPU	Core Frequency	Cache	TDP	Tj
i7-6600U	2.6 GHz	4MB	15 W	100°C
i5-6300U	2.4 GHz	3MB	15 W	100°C
i3-6100U	2.3 GHz	3MB	15 W	100°C
Celeron 3955U	2.0 GHz	2MB	15 W	100°C

2.0
INTERNAL CONNECTOR SPECIFICATION

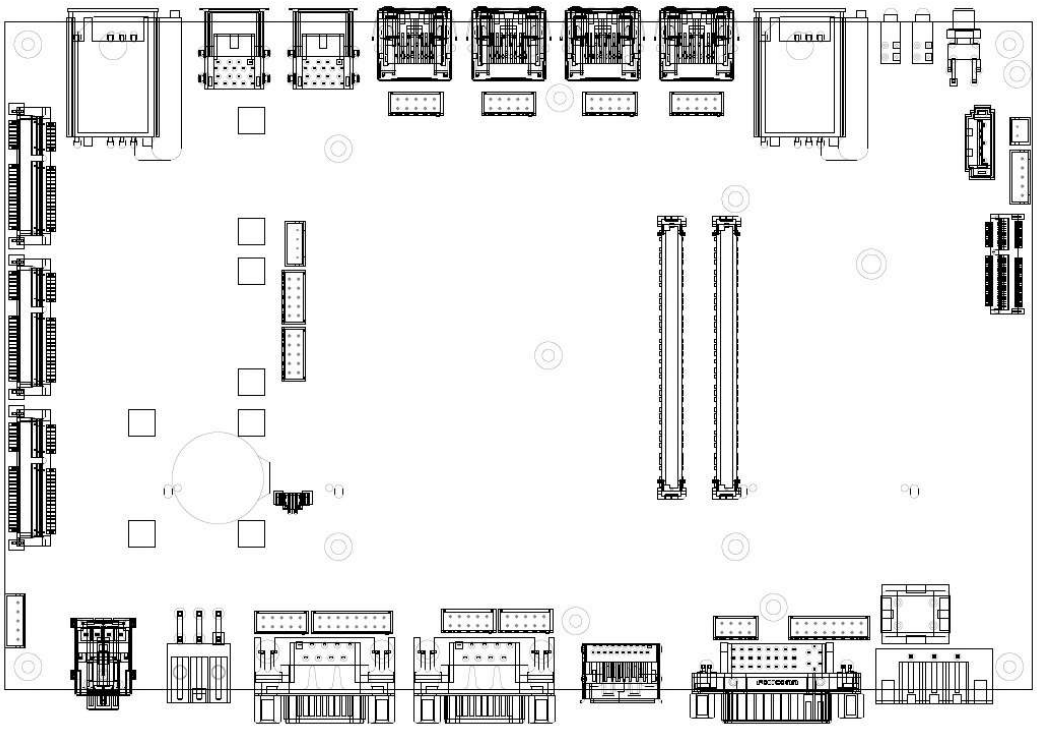
2.0 INTERNAL CONNECTOR

2.1 MINI PCI-E Connector (MINICARD1)

Connector size	2 X 26 = 52 Pin
Connector type	MINI PCI-E CON 9.2mmH
Connector location	**MINICARD1**

Connector pin definition

Pin	Signal	Pin	Signal
1	PCIE_WAKE#	2	3VSB
3	NC	4	GND
5	NC	6	NC
7	NC	8	UIM_PWR_A
9	GND	10	UIM_DAT_A
11	NC	12	UIM_CLK_A
13	NC	14	UIM_RST_A
15	GND	16	NC
17	NC	18	GND
19	NC	20	MINICARD0_DIS#
21	GND	22	PCIE_RST#
23	NC	24	3VSB
25	NC	26	GND
27	GND	28	NC
29	GND	30	NC
31	NC	32	NC
33	NC	34	GND
35	GND	36	USB_4N
37	GND	38	USB_4P
39	3VSB	40	GND
41	3VSB	42	LED_WWAN_A#
43	GND	44	NC
45	NC	46	NC
47	NC	48	NC
49	NC	50	GND
51	NC	52	3VSB

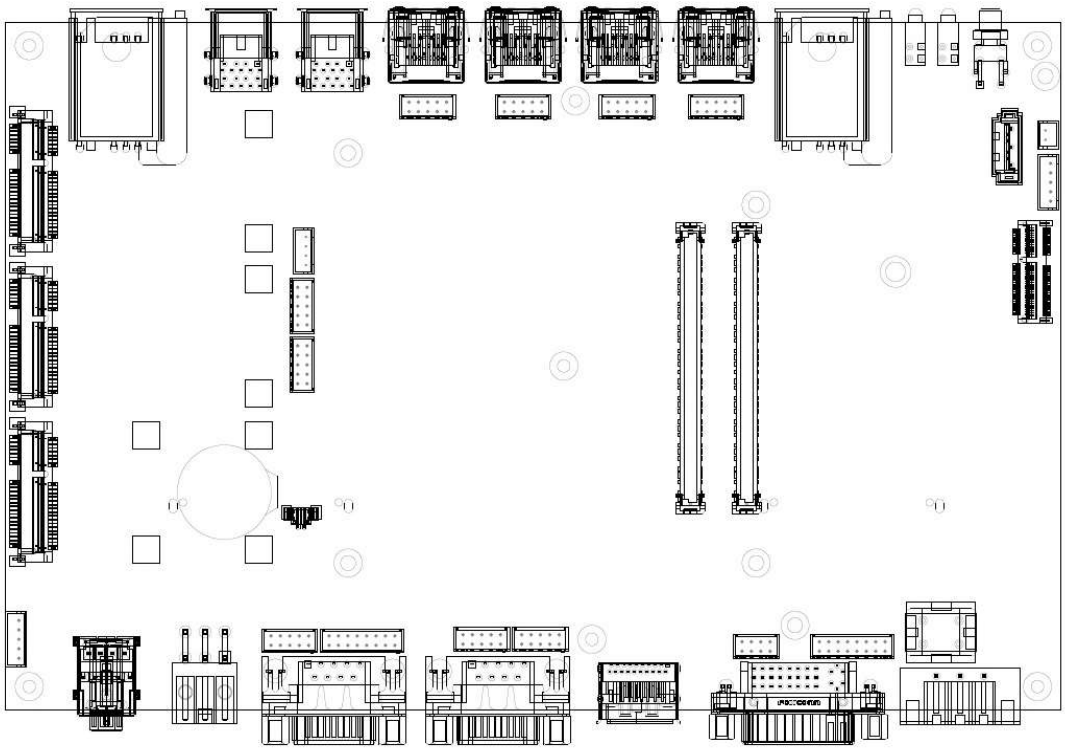
Connector map	

2.2 MINI PCI-E Connector (MINICARD2)

Connector size	2 X 26 = 52 Pin
Connector type	MINI PCI-E CON 9.2mmH
Connector location	**MINICARD2**

Connector pin definition

Pin	Signal	Pin	Signal
1	PCIE_WAKE#	2	3VSB
3	NC	4	GND
5	NC	6	+1.5V
7	MINICARD2_CLKREQ#	8	UIM_PWR_B
9	GND	10	UIM_DAT_B
11	PCIE1_MCARD2_CLK_DN	12	UIM_CLK_B
13	PCIE1_MCARD2_CLK_DP	14	UIM_RST_B
15	GND	16	NC
17	NC	18	GND
19	NC	20	MINICARD2_DIS#
21	GND	22	PCIE_RST#
23	PCIE1_MCARD2_RX_N	24	3VSB
25	PCIE1_MCARD2_RX_P	26	GND
27	GND	28	+1.5V
29	GND	30	SMB_CLK
31	PCIE1_MCARD2_TX_N	32	SMB_DATA
33	PCIE1_MCARD2_TX_P	34	GND
35	GND	36	USB_5N
37	GND	38	USB_5P
39	3VSB	40	GND
41	3VSB	42	NC
43	GND	44	NC
45	NC	46	NC
47	NC	48	+1.5V
49	NC	50	GND
51	NC	52	3VSB

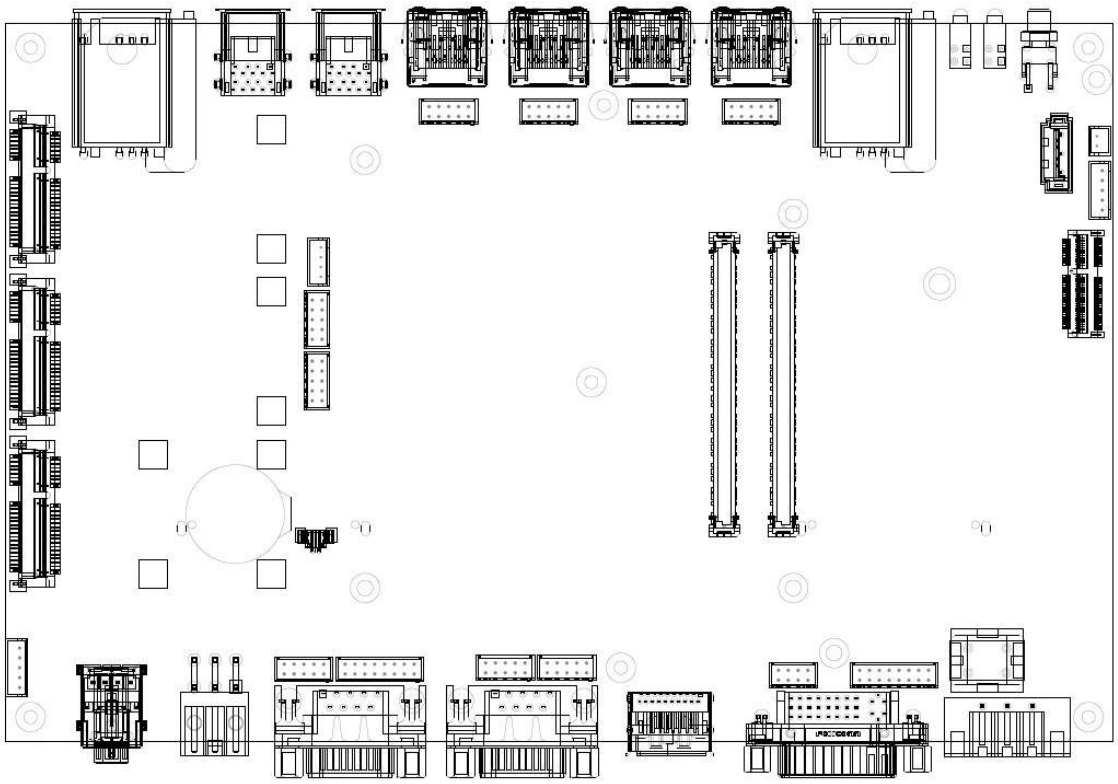
Connector map	

2.3 MINI PCI-E Connector (MINICARD3)

Connector size	2 X 26 = 52 Pin
Connector type	MINI PCI-E CON 9.2mmH
Connector location	**MINICARD3**

Connector pin definition

Pin	Signal	Pin	Signal
1	PCIE_WAKE#	2	3VSB
3	NC	4	GND
5	NC	6	+1.5V
7	MINICARD3_CLKREQ#	8	NC
9	GND	10	NC
11	PCIE2_MCARD3_CLK_DN	12	NC
13	PCIE2_MCARD3_CLK_DP	14	NC
15	GND	16	NC
17	NC	18	GND
19	NC	20	MINICARD3_DIS#
21	GND	22	PCIE_RST#
23	PCIE2_MCARD3_RX_N	24	3VSB
25	PCIE2_MCARD3_RX_P	26	GND
27	GND	28	+1.5V
29	GND	30	SMB_CLK
31	PCIE2_MCARD3_TX_N	32	SMB_DATA
33	PCIE2_MCARD3_TX_P	34	GND
35	GND	36	USB_9N
37	GND	38	USB_9P
39	3VSB	40	GND
41	3VSB	42	NC
43	GND	44	NC
45	NC	46	NC
47	NC	48	+1.5V
49	NC	50	GND
51	NC	52	3VSB

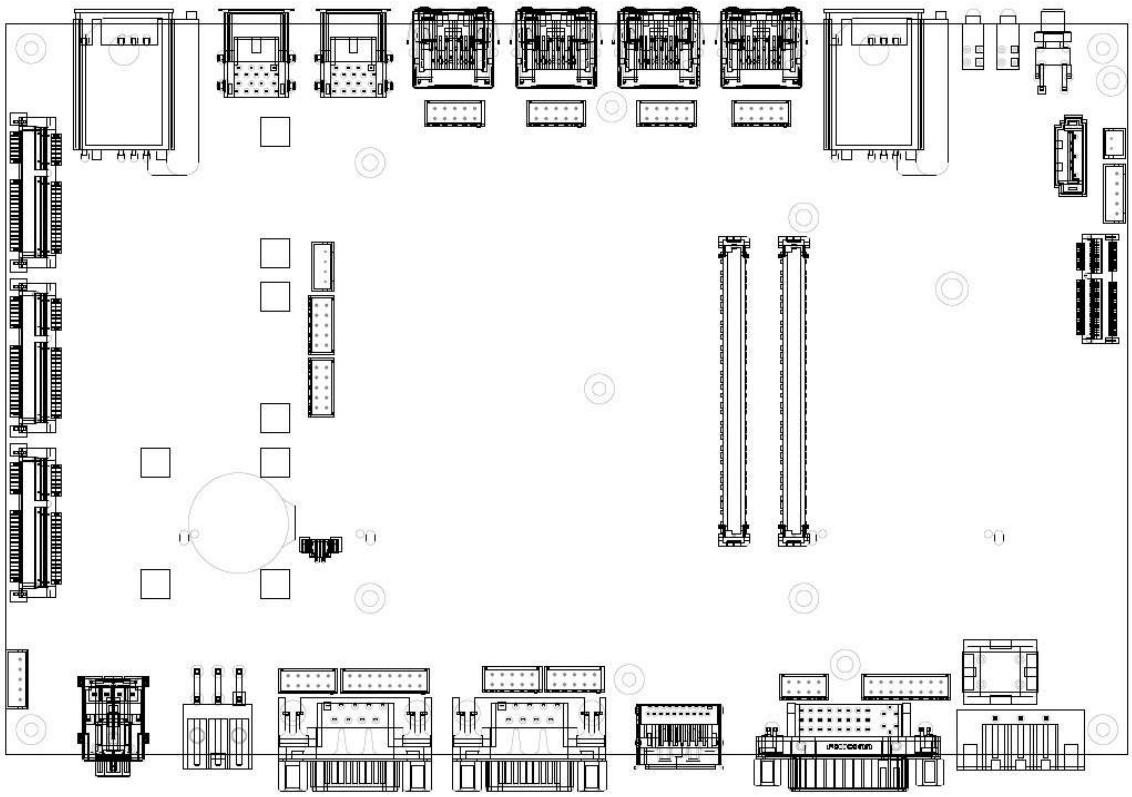
Connector map	

2.4 NGFF Connector

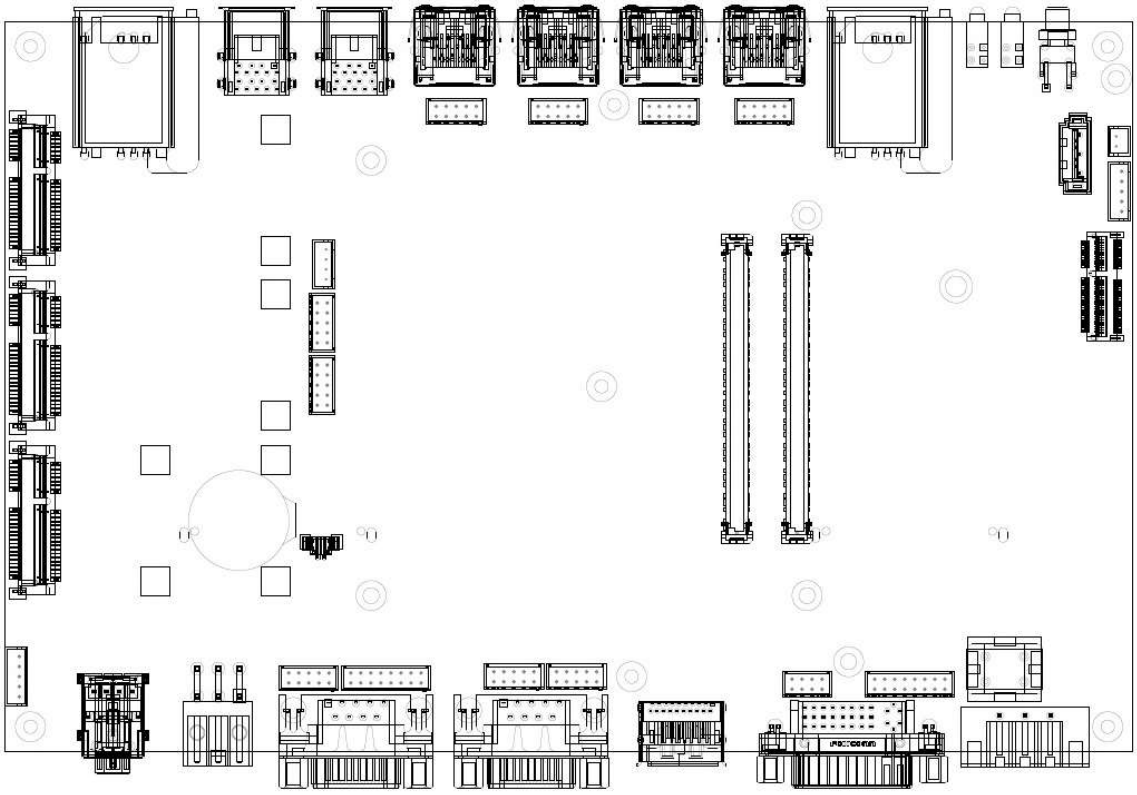
Connector size	2 X 34 = 67 Pin
Connector type	NGFF _AE KEY_H:8.5mm
Connector location	NGFF1

Connector pin definition

Pin	Signal	Pin	Signal
1	GND	2	3VSB
3	USB_7P	4	3VSB
5	USB_7N	6	NC
7	NC	8	NC
9	NC	10	NC
11	NC	12	NC
13	NC	14	NC
15	NC	16	NC
17	NC	18	NC
19	NC	20	NC
21	NC	22	NC
23	NC	24	KEY
25	KEY	26	KEY
27	KEY	28	KEY
29	KEY	30	KEY
31	KEY	32	NC
33	GND	34	NC
35	PCIE9_M.2_TX_0P	36	NC
37	PCIE9_M.2_TX_0N	38	NC
39	GND	40	NC
41	PCIE9_M.2_RX_0P	42	NC
43	PCIE9_M.2_RX_0N	44	NC
45	GND	46	NC
47	PCIE9_M.2_CLK_0P	48	NC
49	PCIE9_M.2_CLK_0N	50	NC
51	GND	52	M.2_RST
53	M.2_CLKREQ0#	54	M.2_DIS2#
55	PCIE_WAKE0#	56	M.2_DIS1#
57	GND	58	NC
59	NC	60	NC
61	NC	62	NC
63	GND	64	NC
65	NC	66	PCIE_RST#
67	NC	68	M.2_CLKREQ1#
69	GND	70	PCIE_WAKE0#
71	NC	72	NC
73	NC	74	NC
75	GND		

Connector map	

2.5 DIO1 JST Connector

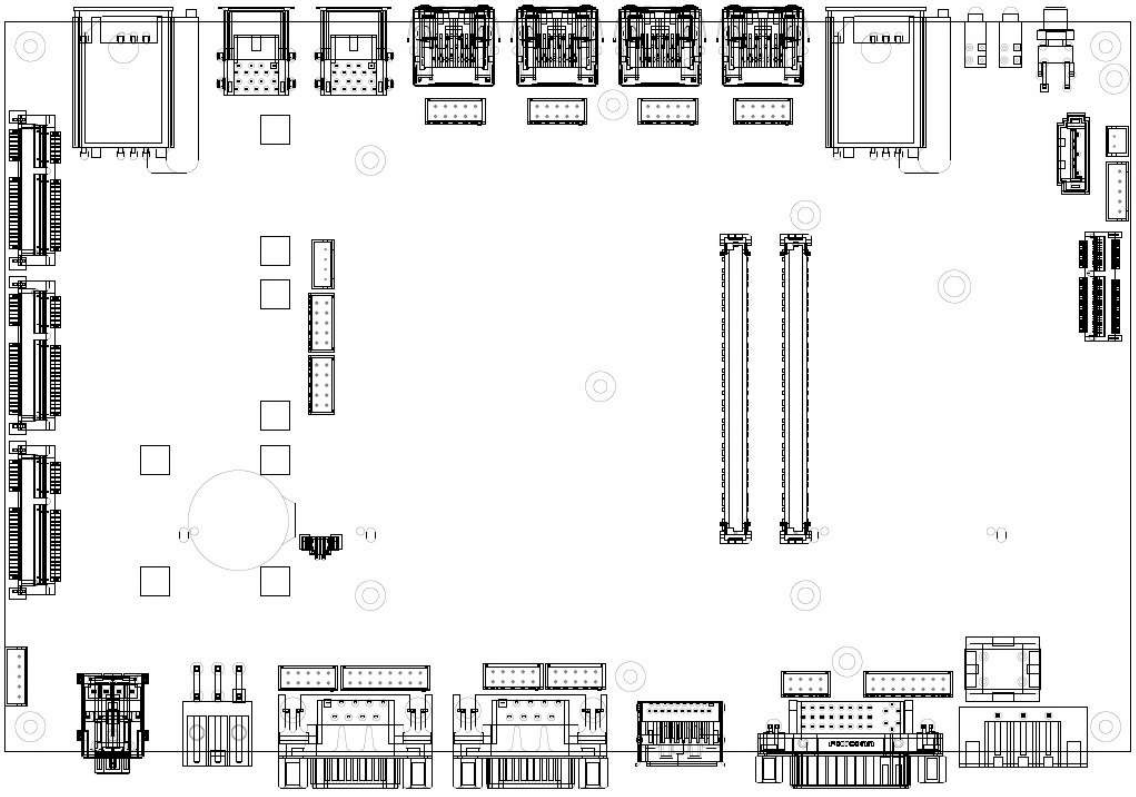
<table>
<tr><td>Connector size</td><td>2 X 5 = 10 Pin</td></tr>
<tr><td>Connector type</td><td>JST-2.0mm-M-180</td></tr>
<tr><td>Connector location</td><td>DIO1</td></tr>
<tr><td>Connector pin definition</td><td>
<table>
<tr><th>Pin</th><th>Signal</th><th>Pin</th><th>Signal</th></tr>
<tr><td>1</td><td>DI_1</td><td>2</td><td>DI_2</td></tr>
<tr><td>3</td><td>DI_3</td><td>4</td><td>DI_4</td></tr>
<tr><td>5</td><td>DO_1</td><td>6</td><td>DO_2</td></tr>
<tr><td>7</td><td>DO_3</td><td>8</td><td>DO_4</td></tr>
<tr><td>9</td><td>GND</td><td>10</td><td>+12V</td></tr>
</table>
GPI: High= 5V~48V; Low= 0V
GPO: 12V/100mA for each
</td></tr>
<tr><td>Connector map</td><td>  </td></tr>
</table>

2.6 COM JST Connector (COM3)

Connector size	2 X 5 = 10 Pin
Connector type	JST-2.0mm-M-180
Connector location	**COM3**
Connector pin definition	

Pin	Signal	Pin	Signal
1	COM3_DCD	2	COM3_RXD
3	COM3_TXD	4	COM3_DTR
5	GND	6	COM3_DSR
7	COM3_RTS	8	COM3_CTS
9	COM3_RI	10	GND

Connector map

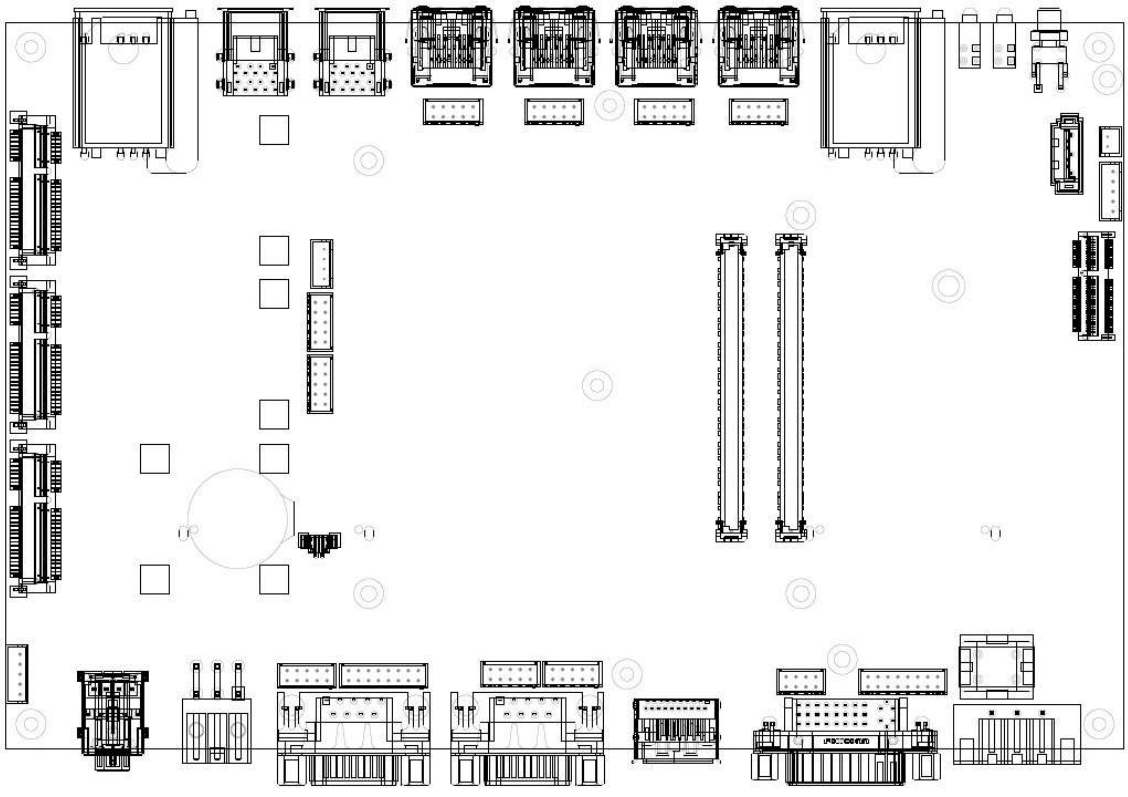


2.7 COM JST Connector (COM4)

Connector size	2 X 5 = 10 Pin
Connector type	JST-2.0mm-M-180
Connector location	**COM4**
Connector pin definition	

Pin	Signal	Pin	Signal
1	COM4_DCD	2	COM4_RXD
3	COM4_TXD	4	COM4_DTR
5	GND	6	COM4_DSR
7	COM4_RTS	8	COM4_CTS
9	COM4_RI	10	GND

Connector map

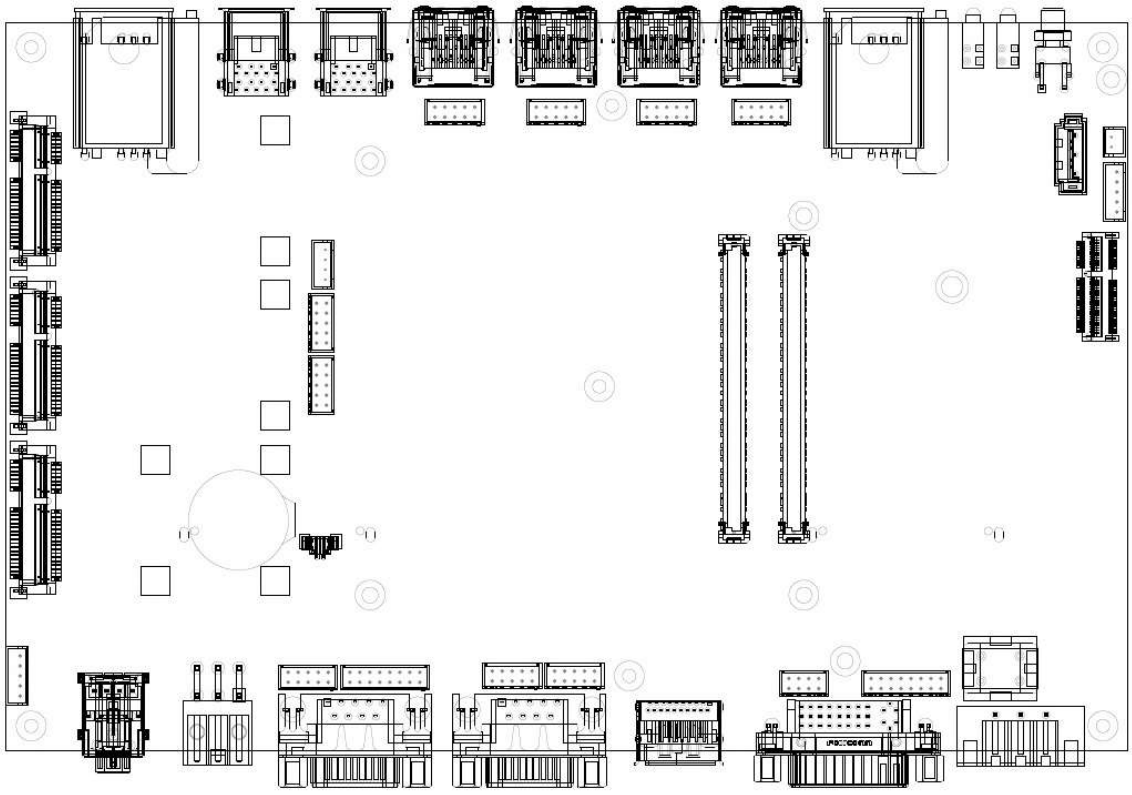


2.8 USB JST Connector (USB3)

Connector size	2 X 4 = 8 Pin
Connector type	JST-2.0mm-M-180
Connector location	**USB3**
Connector pin definition	

Pin	Signal	Pin	Signal
1	5VSB	2	5VSB
3	HubUSB_2N	4	HubUSB_3N
5	HubUSB_2P	6	HubUSB_3P
7	GND	8	GND

Connector map

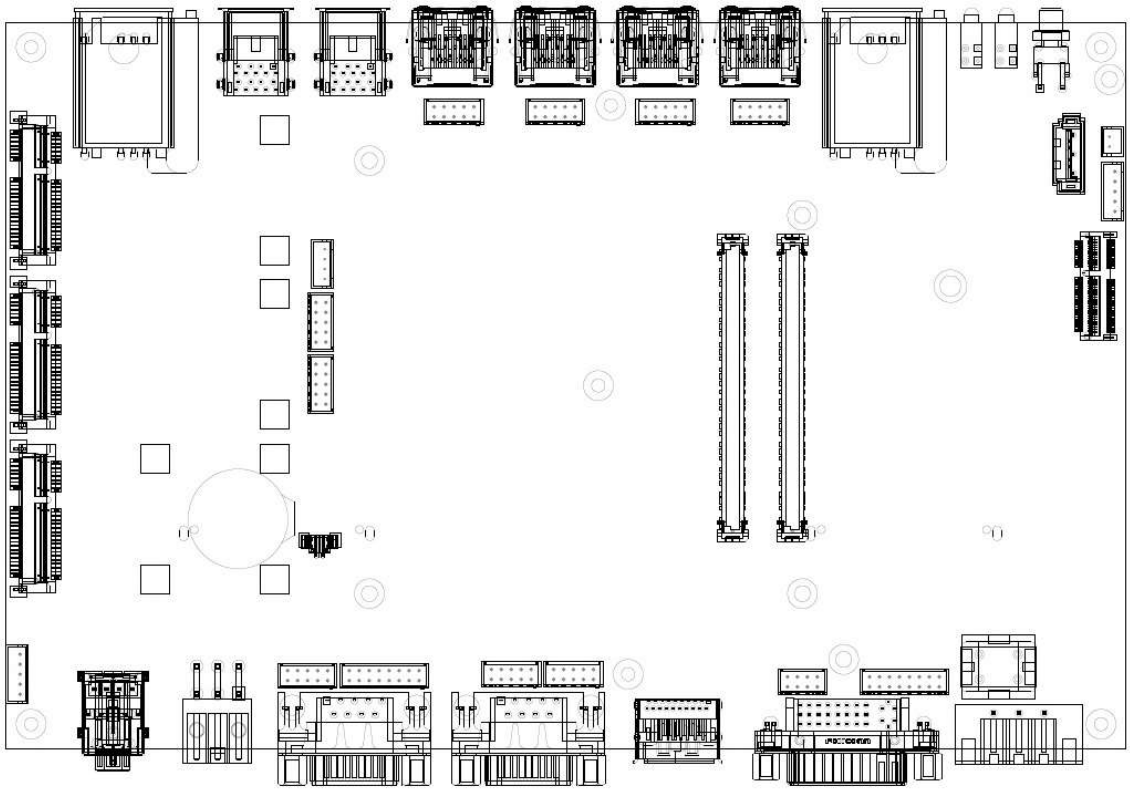


2.9 SATA Connector

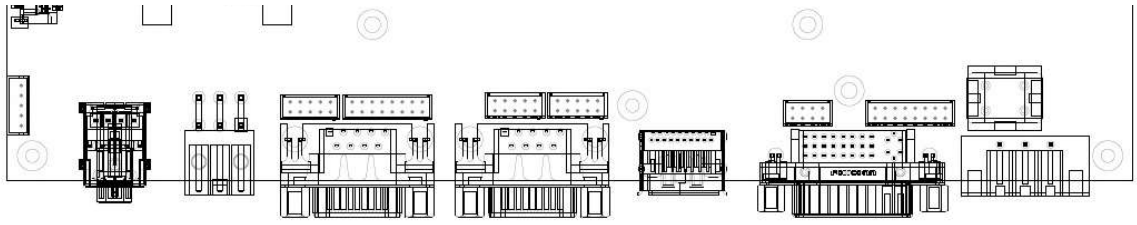
Connector size	1 X 7 = 7 Pin
Connector type	SATA 1.27mm-M-180D
Connector location	**SATA3**
Connector pin definition	

Pin	Signal
1	GND
2	SATA_TXP2
3	SATA_TXN2
4	GND
5	SATA_RXN2
6	SATA_RXP2
7	GND

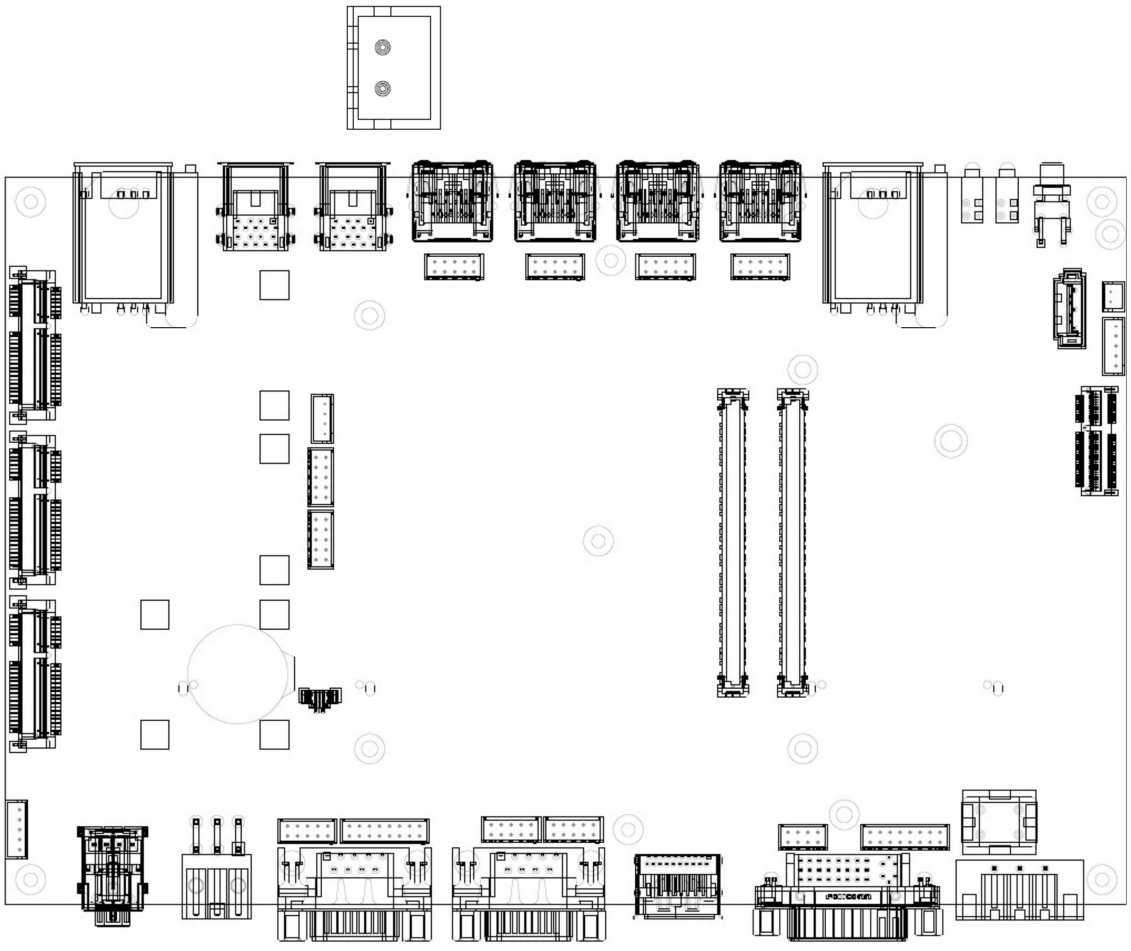
Connector map



2.10 LINE IN JST Connector



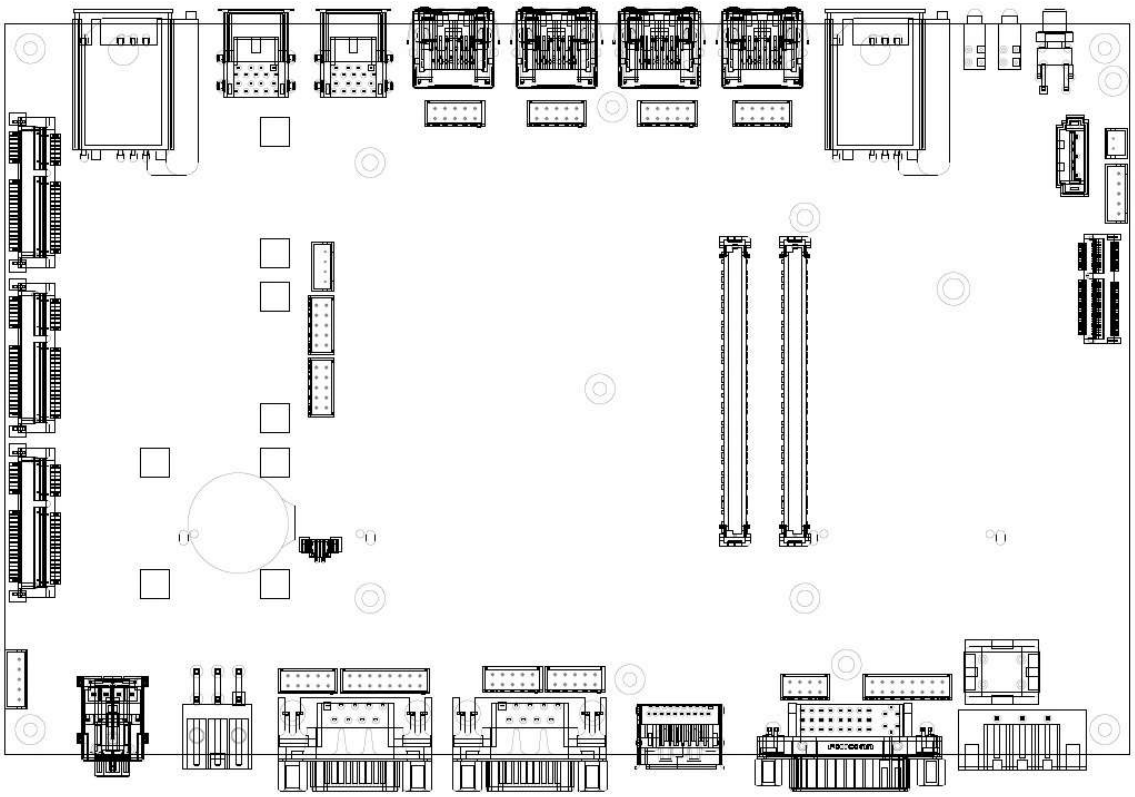
2.11 SATAPWR JST Connector

<table>
<tr><td>Connector size</td><td>1 X 2 = 2 Pin</td></tr>
<tr><td>Connector type</td><td>JST-2.0mm-M-180</td></tr>
<tr><td>Connector location</td><td>SATAPWR1</td></tr>
<tr><td>Connector pin definition</td><td>
<table>
<tr><th>Pin</th><th>Signal</th><th>Pin</th><th>Signal</th></tr>
<tr><td>1</td><td>GND</td><td>2</td><td>+5V</td></tr>
</table>
</td></tr>
<tr><td>Connector map</td><td>  </td></tr>
</table>

2.12 VGA JST Connector

Connector size	2 X 8 = 16 Pin
Connector type	JST-2.0mm-M-180
Connector location	**VGA1**
Connector pin definition	

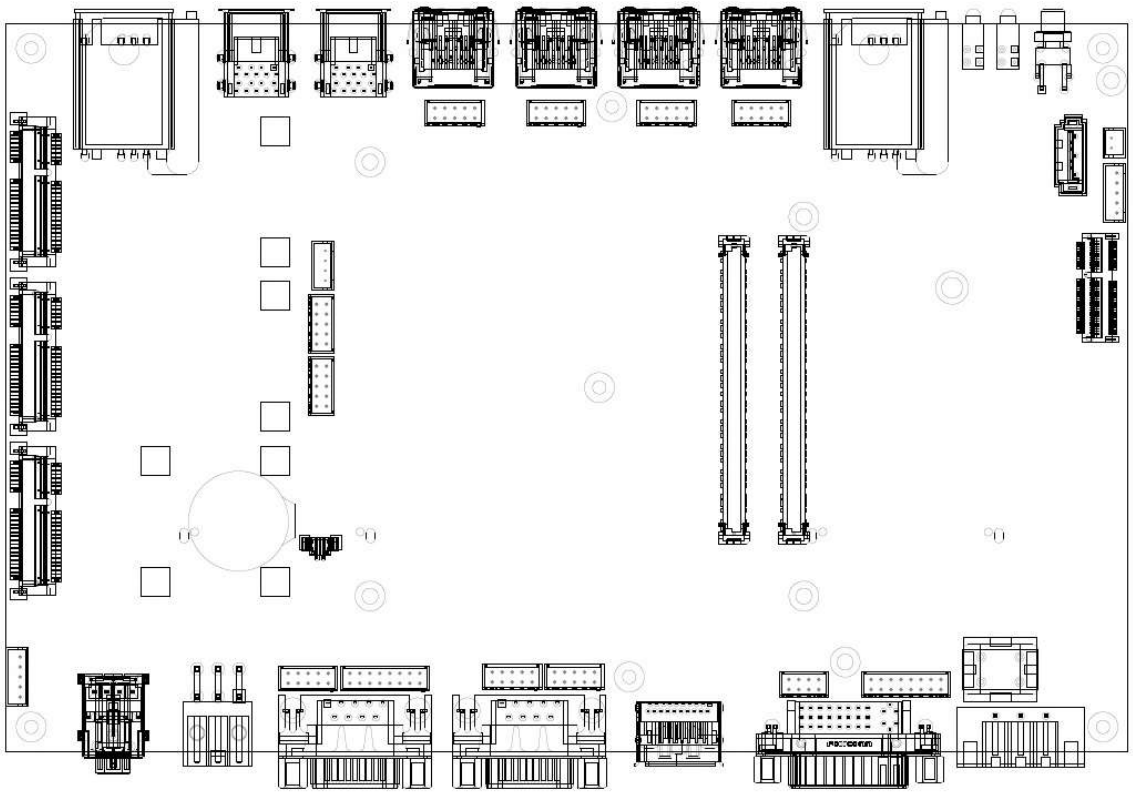
Pin	Signal	Pin	Signal
1	CRT_RED	2	CRT_GREEN
3	CRT_BULE	4	NC
5	GND	6	GND
7	GND	8	GND
9	CRT_+5V	10	GND
11	NC	12	CRT_SDATA
13	CRT HSYNC	14	CRT_VSYNC
15	CRT_SCLK	16	NC

Connector map	

2.13 UPS JST Connector

Connector size	1 X 5 = 5 Pi n
Connector type	WAFER 2.54mm-M-180
Connector location	UPS1
Connector pin definition	

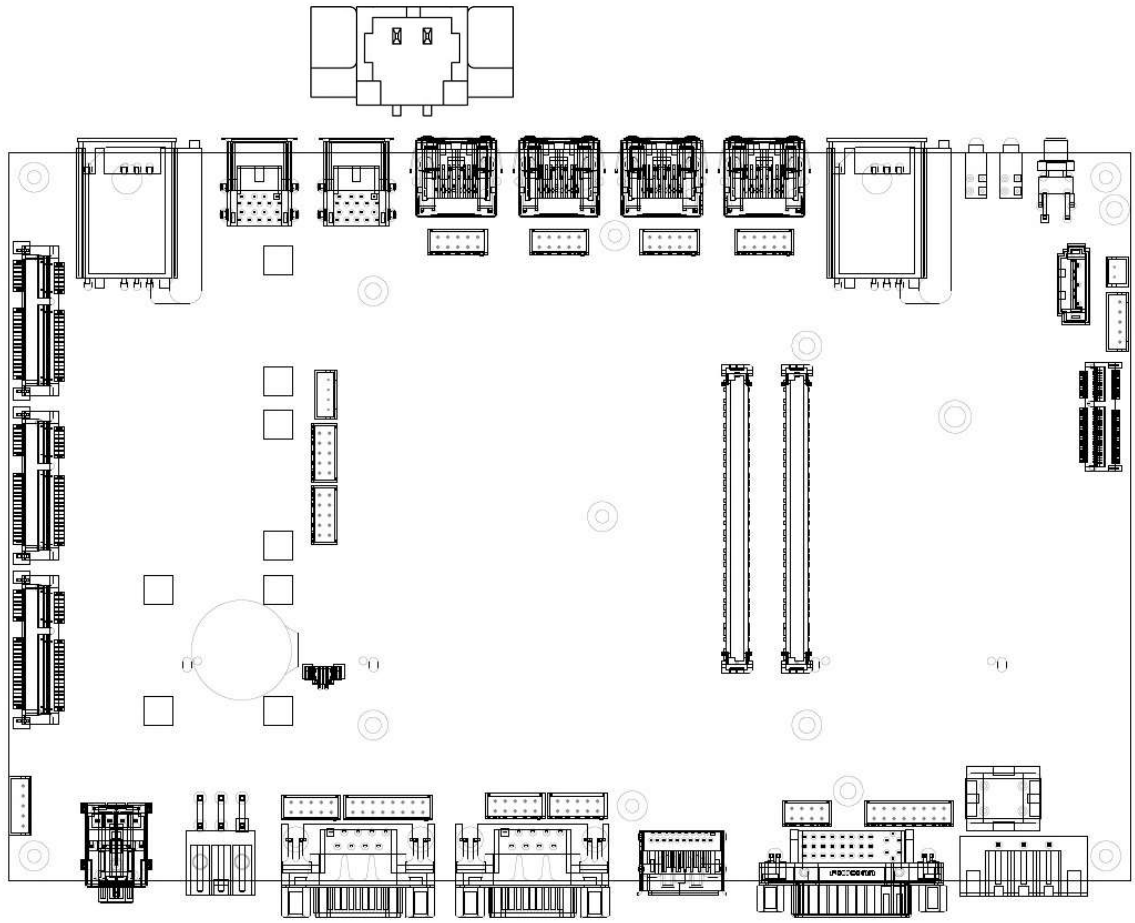
Pin	Signal
1	+12V
2	+12V
3	NC
4	GND
5	GND

Connector map	

2.14 BAT Power Connector

Connector size	1 X 2 = 2 Pin
Connector type	JST-1.25mm-M-180
Connector location	**BAT1**
Connector pin definition	

Pin	Signal
1	BAT +3V
2	GND

Connector map	

3.0
EXTERNAL CONNECTOR SPECIFICATION

3.0 EXTERNAL CONNECTOR SPECIFICATION

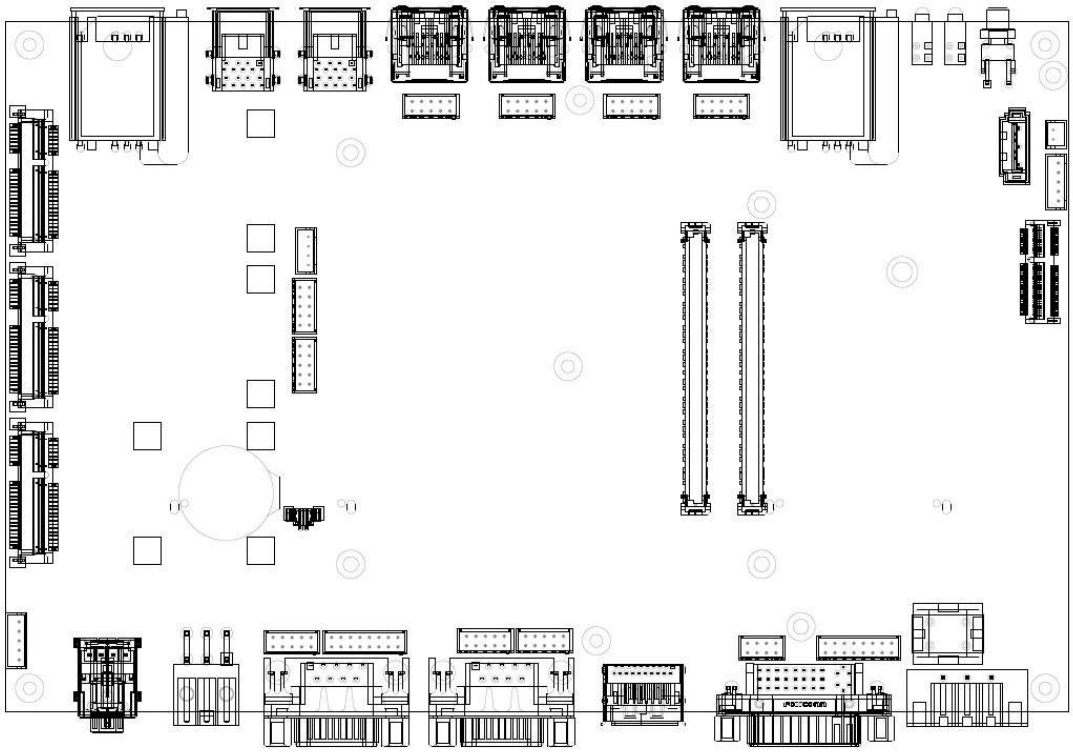
3.1 DP Connector

Connector size	20 Pin
Connector type	DP
Connector location	**DP1**

Connector pin definition

Pin	Signal	Pin	Signal
1	DP_LANE_0P	2	GND
3	DP_LANE_0N	4	DP_LANE_1P
5	GND	6	DP_LANE_1N
7	DP_LANE_2P	8	GND
9	DP_LANE_2N	10	DP_LANE_3P
11	GND	12	DP_LANE_3N
13	DP_AUX_EN#	14	GND
15	DP_AUXP_CLK	16	GND
17	DP_AUXN_DATA	18	DP_HPD
19	GND	20	DP_VCC+3V

Connector map

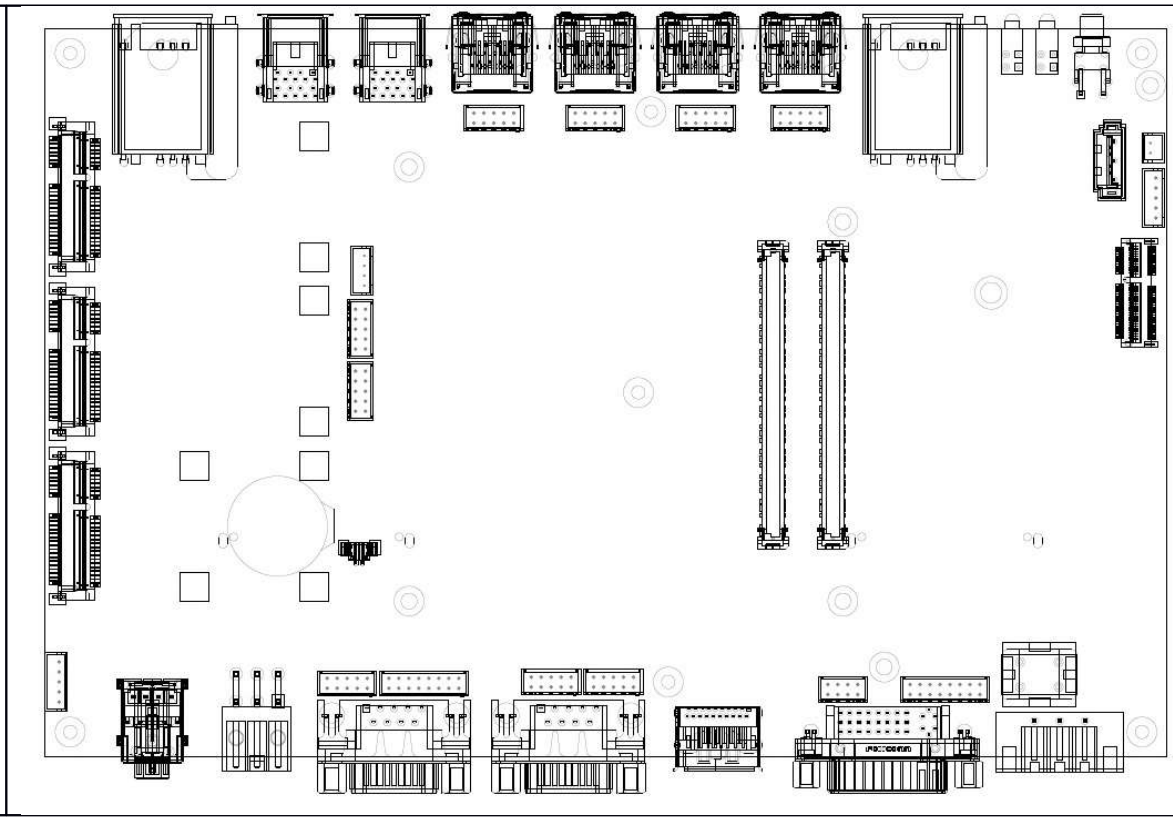


3.2 DVI Connector

Connector size	29 Pin
Connector type	DVI-I
Connector location	**DVI1**
Connector pin definition	

Pin	Signal	Pin	Signal
1	DVI_TX2N	2	DVI_TX2P
3	GND	4	+5VSB
5	+12V	6	DVI_DDC_CLK
7	DVI_DDC_DATA	8	CRT_VSYNC
9	DVI_TX1N	10	DVI_TX1P
11	GND	12	Hub USB_1N
13	Hub USB_1P	14	DVI_VCC+5V
15	GND	16	DVI_HPD
17	DVI_TX0N	18	DVI_TX0P
19	GND	20	CRT_SDATA
21	CRT_SCLK	22	NC
23	DVI_CLKP	24	DVI_CLKN
C1	CRT_RED	C2	CRT_GREEN
C3	CRT_BLUE	C4	CRT_HSYNC
C5	CRT_GND		

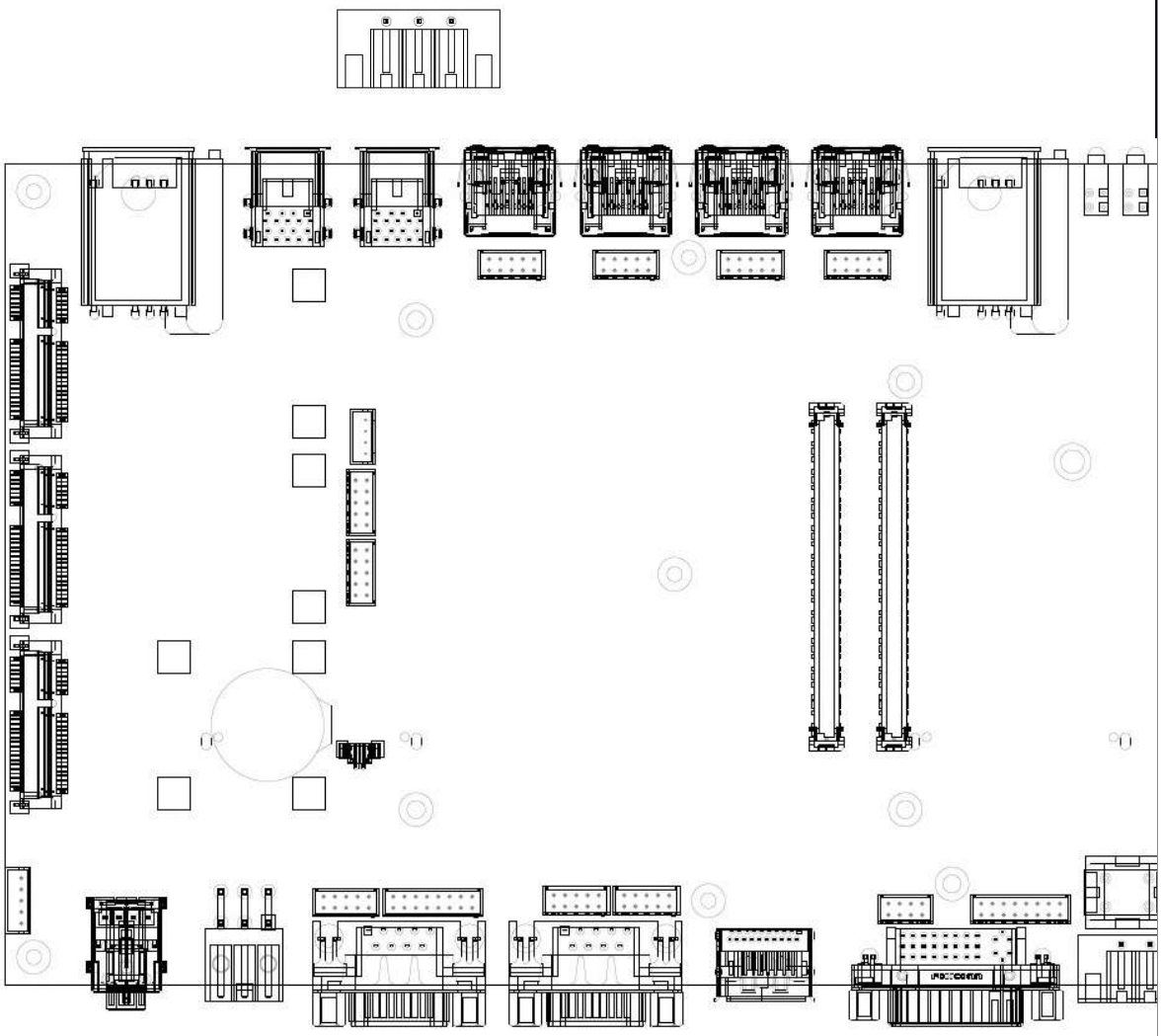
Connector map	



3.3 DC PWR Connector

Connector size	1 X 3 = 3 Pin
Connector type	DECA 5mm-F-90D-3PIN
Connector location	**PWR1**
Connector pin definition	

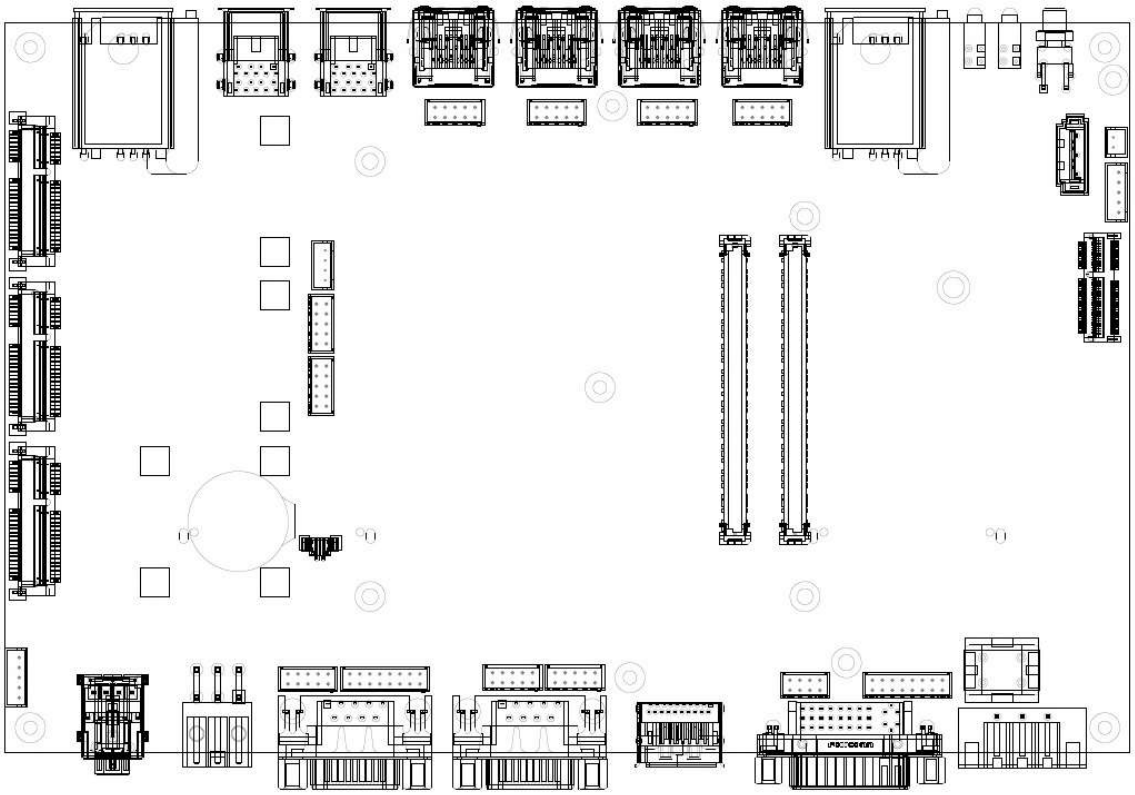
Pin	Signal	Pin	Signal
1	GND	2	DC IN 9V~48V
3	IGNITION		

Connector map	

3.4 COM Connector (COM1)

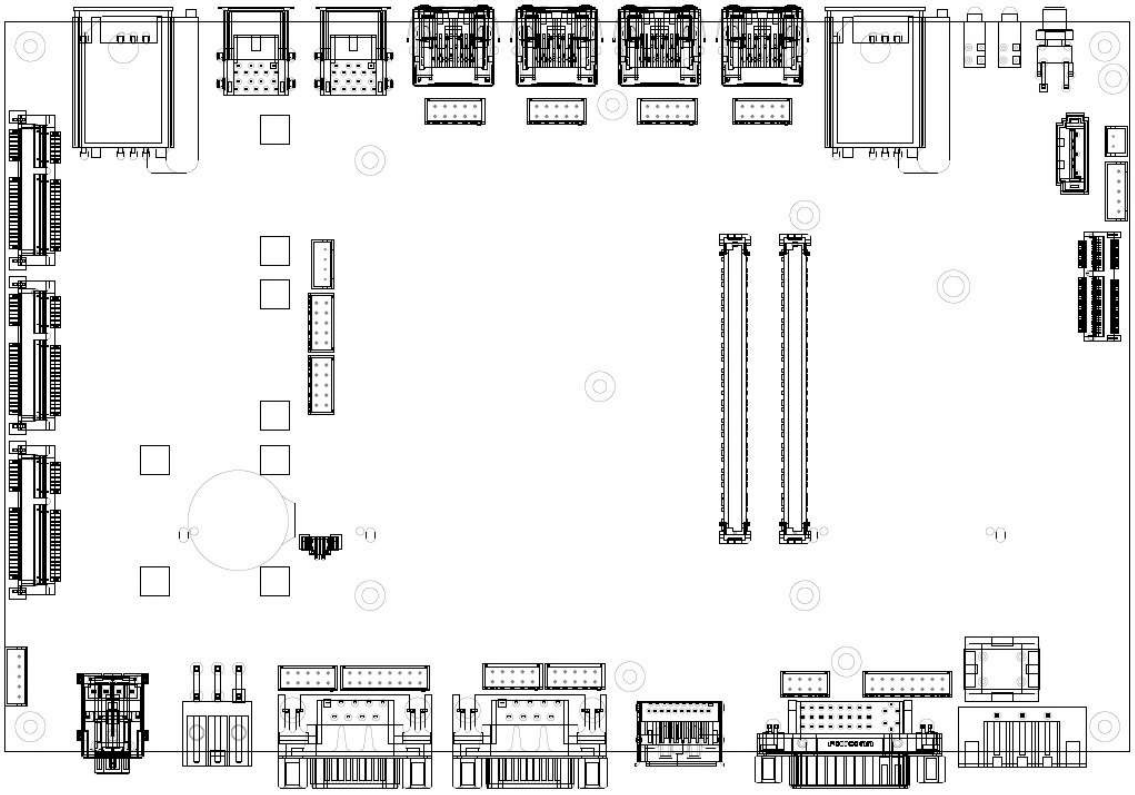
Connector size	9 Pin
Connector type	D-SUB_9P
Connector location	**COM1**
Connector pin definition	

Pin	Signal	Pin	Signal
1	COM1_DCD	2	COM1_RXD
3	COM1_TXD	4	COM1_DTR
5	GND	6	COM1_DSR

	7	COM1_RTS	8	COM1_CTS
	9	COM1_RI#		
Connector map				

3.5 COM Connector (COM2)

Connector size	9 Pin			
Connector type	D-SUB_9P			
Connector location	**COM2**			
Connector pin definition	Pin	Signal	Pin	Signal
	1	COM2_DCD	2	COM2_RXD
	3	COM2_TXD	4	COM2_DTR
	5	GND	6	COM2_DSR
	7	COM2_RTS	8	COM2_CTS

	9	COM2_RI#		
Connector map				

3.6 USB3.0 Connector (USB1)

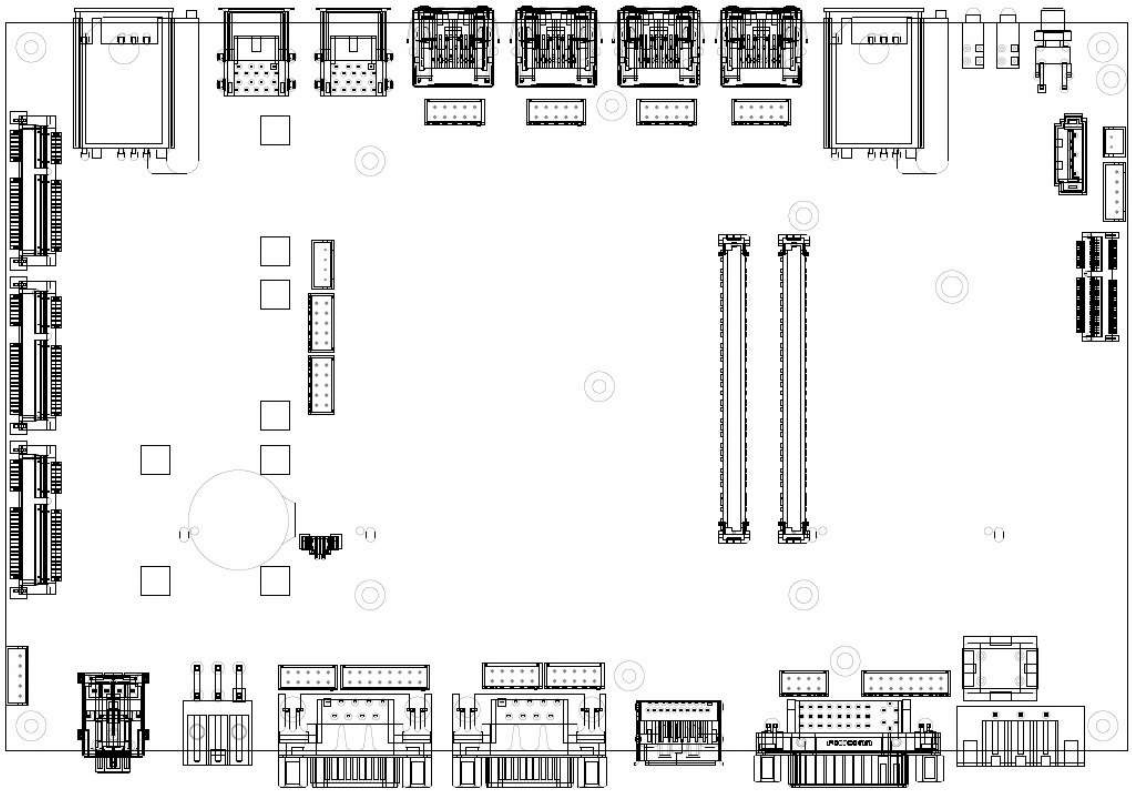
Connector size	18 Pin
Connector type	USB3.0 Type A
Connector location	**USB1**

Connector pin definition

Pin	Signal	Pin	Signal
1	5VSB	2	USB_0N
3	USB_0P	4	GND

5	USB3_SSRX_0N	6	USB3_SSRX_0P
7	GND	8	USB3_SSTX_0N
9	USB3_SSTX_0P	10	5VSB
11	USB_1N	12	USB_1P
13	GND	14	USB3_SSRX_1N
15	USB3_SSRX_1P	16	GND
17	USB3_SSTX_1N	18	USB3_SSTX_1P

Connector map



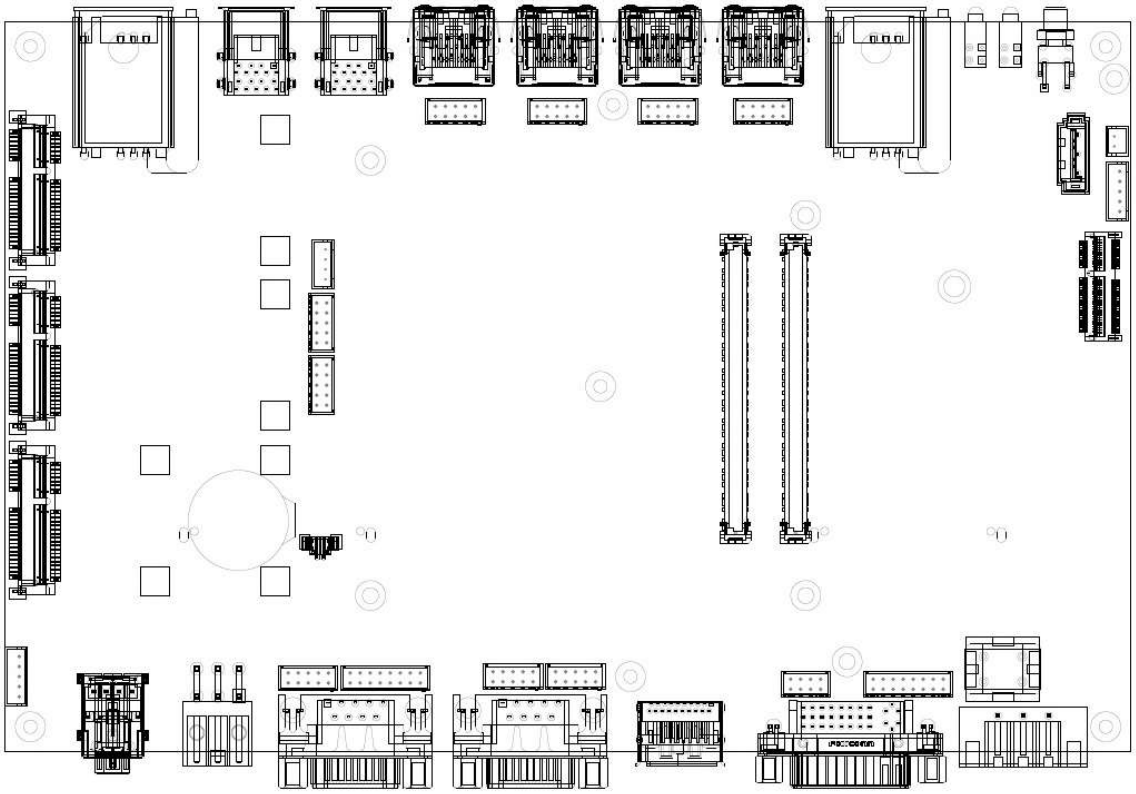
3.7 USB3.0 Connector (USB2)

Connector size	18 Pin
Connector type	USB3.0 Type A
Connector location	**USB2**

Connector pin definition

Pin	Signal	Pin	Signal
1	5VSB	2	USB_2N
3	USB_2P	4	GND
5	USB3_SSRX_2N	6	USB3_SSRX_2P
7	GND	8	USB3_SSTX_2N
9	USB3_SSTX_2P	10	5VSB
11	USB_3N	12	USB_3P
13	GND	14	USB3_SSRX_3N
15	USB3_SSRX_3P	16	GND
17	USB3_SSTX_3N	18	USB3_SSTX_3P

Connector map



3.8 PWROUT Connector

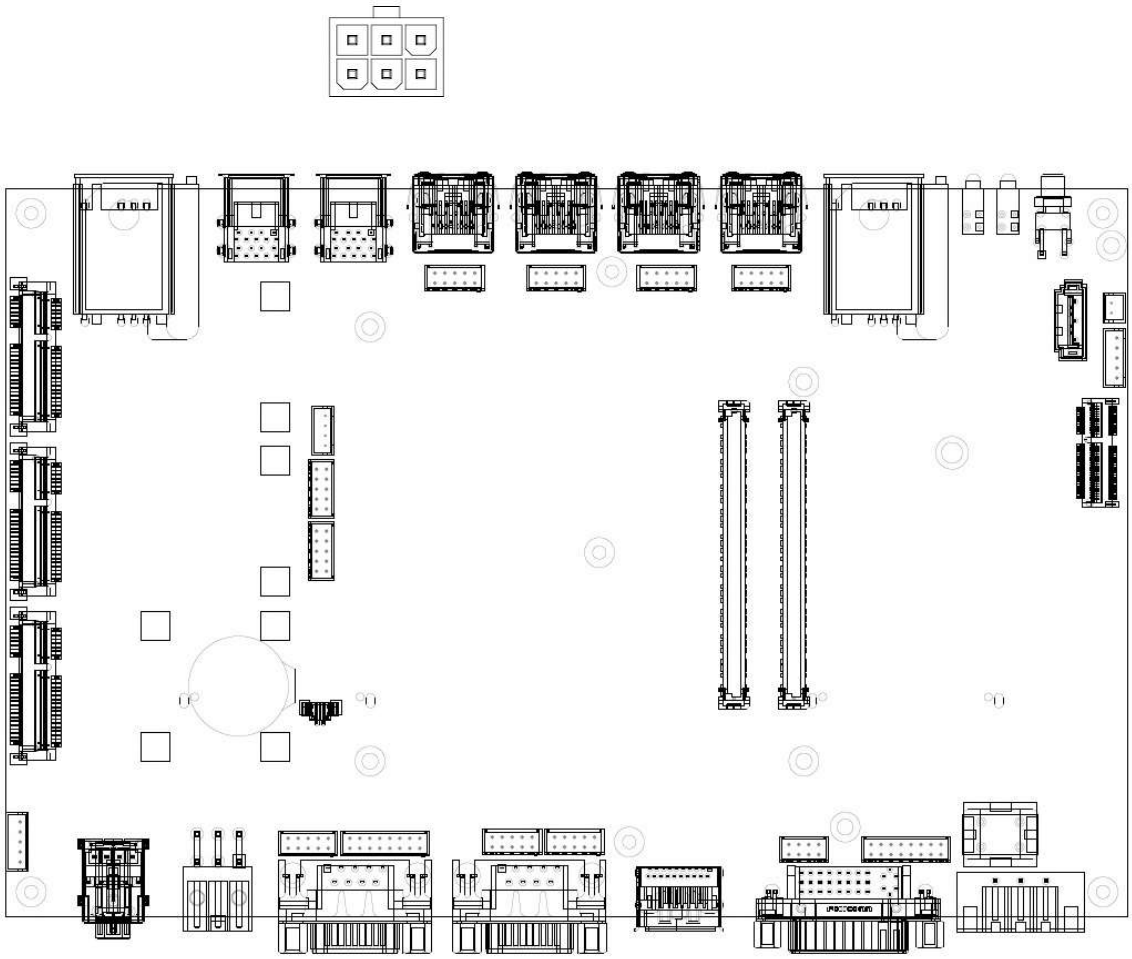
Connector size	2 X 3 = 6 Pin
Connector type	ATX06PTR1-L_90D

Connector location: **PWROUT1**

Connector pin definition:

Pin	Signal	Pin	Signal
1	+12V	2	+12V
3	D-IN1	4	GND
5	GND	6	D-IN2

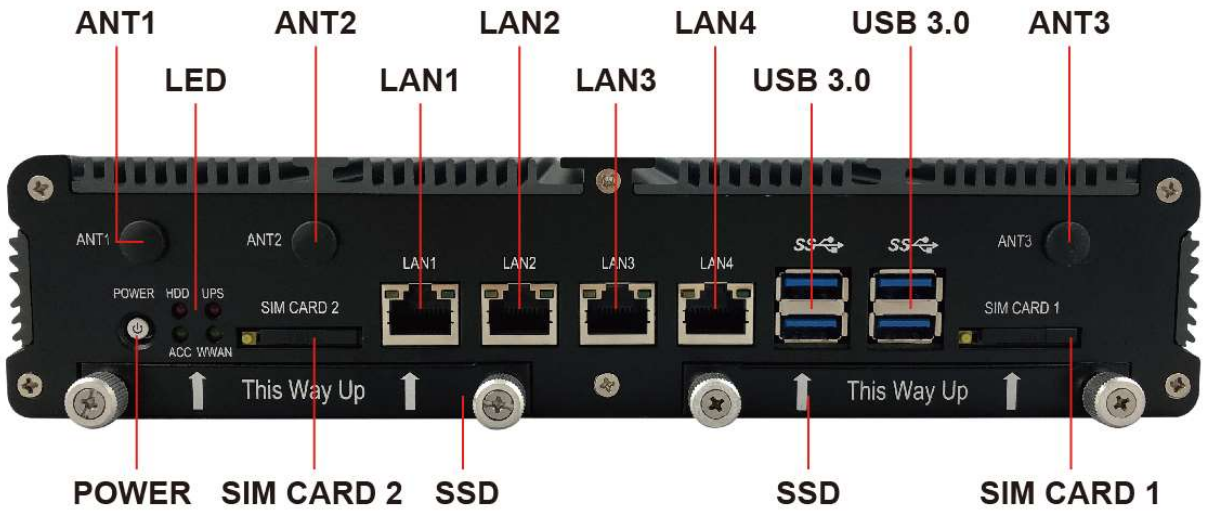
Connector map

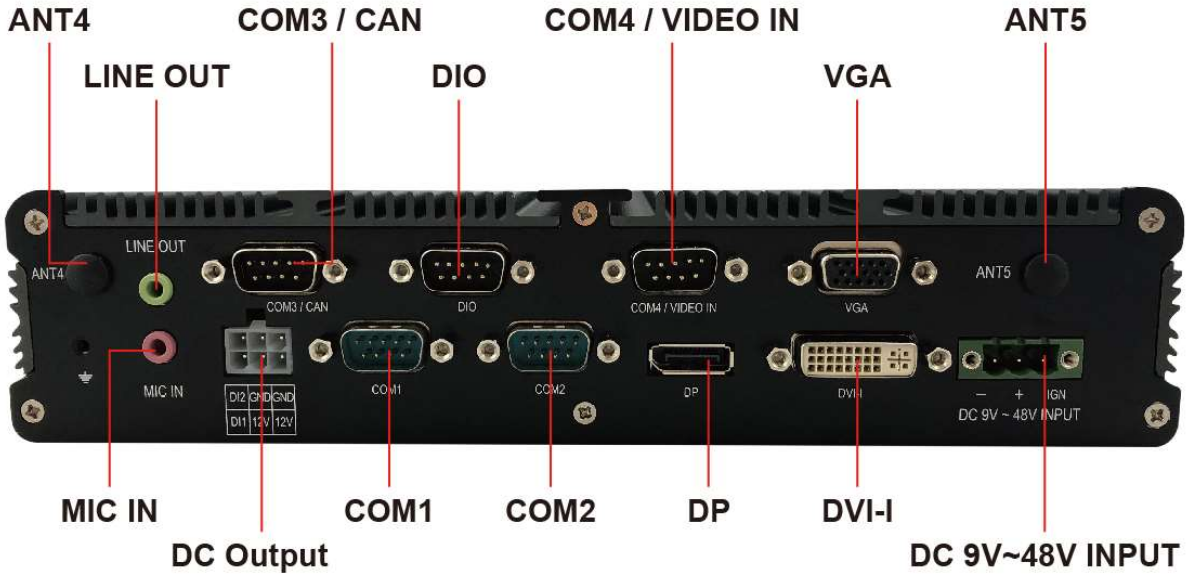


4.0
SYSTEM INSTALLATION

4.0 SYSTEM INSTALLATION

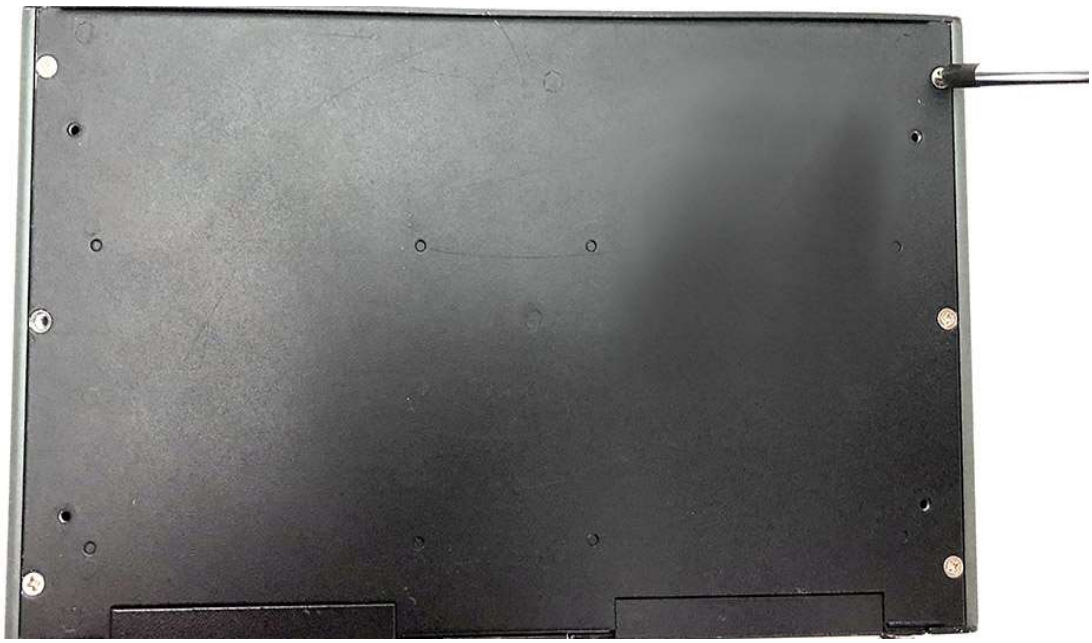
4.1 System Introduction





4.2 Opening Chassis

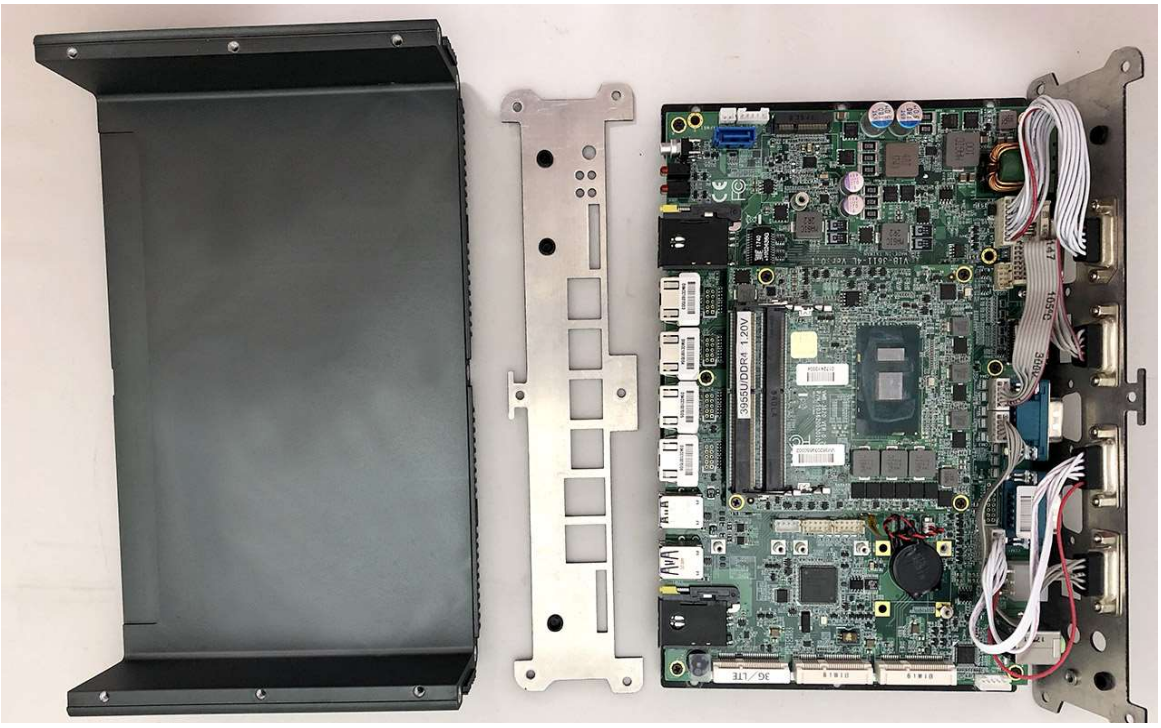
Step1. Unscrew the six screws of the Back Cover as shown in the picture.



Step2. Unscrew the six screws of the Front Panel as shown in the picture.

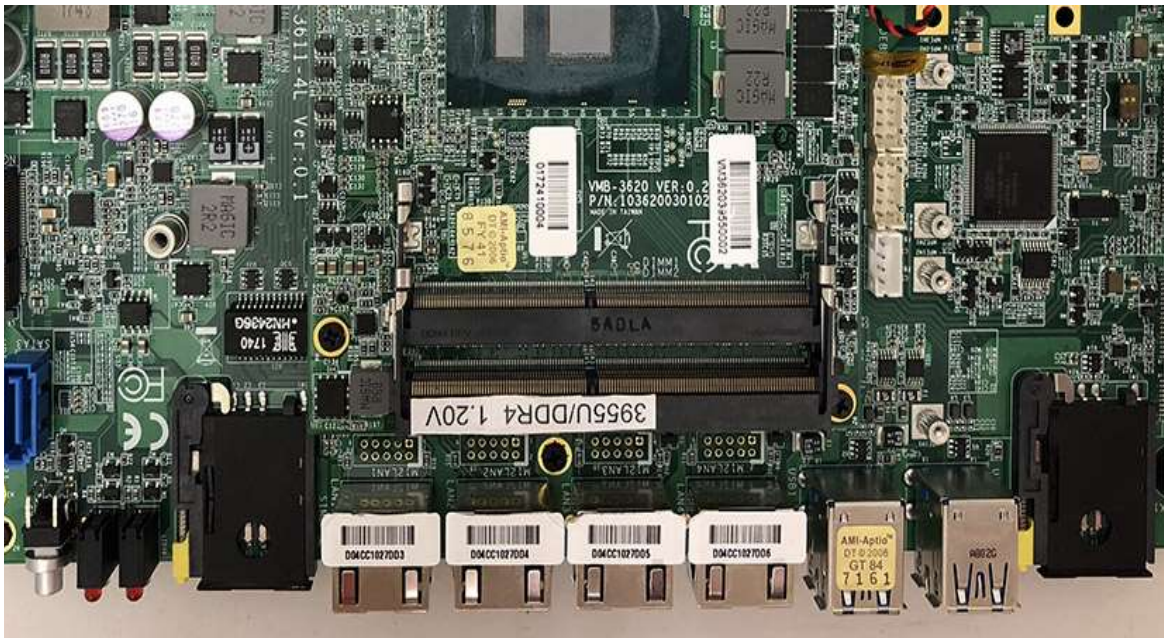
Step3. Unscrew the six screws of the Rear Panel as shown in the picture.

Step4. Open Top Cover as shown in the picture.



4.3 Installing Memory

Step1. Put Memory on this place as shown in the picture.

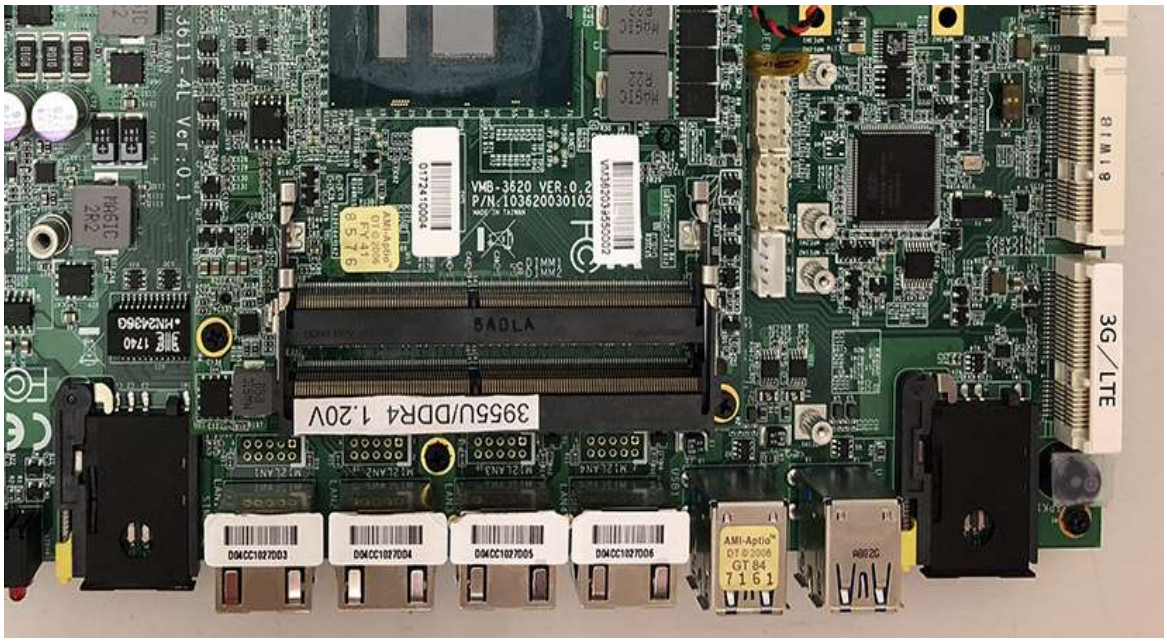


Step2. Hold the Memory with its notch aligned with the Memory socket of the board and insert it at a 30-degree angle into the socket as shown in the picture.

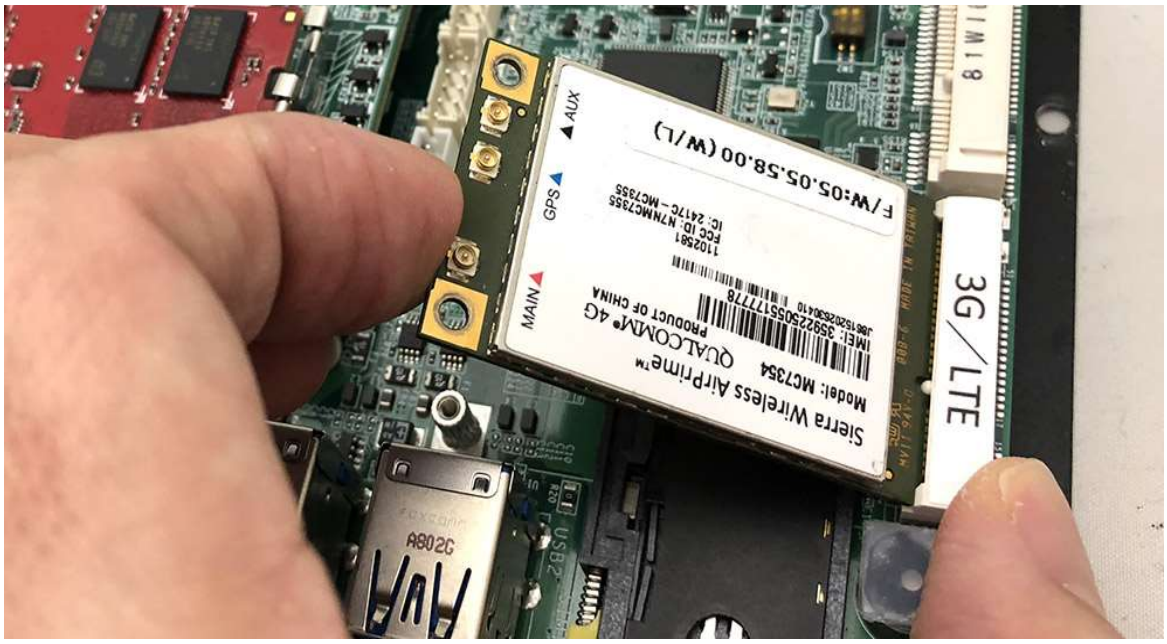
Step3. Press down on the Memory so that the tabs of the socket lock on both sides of the module as shown in the picture.

4.4 Installing MINI PCIe Expansion Card (PCIe 1, 3G/LTE Module only)

Step 1. Put MINI PCIe Expansion Card on this place as shown in the picture.

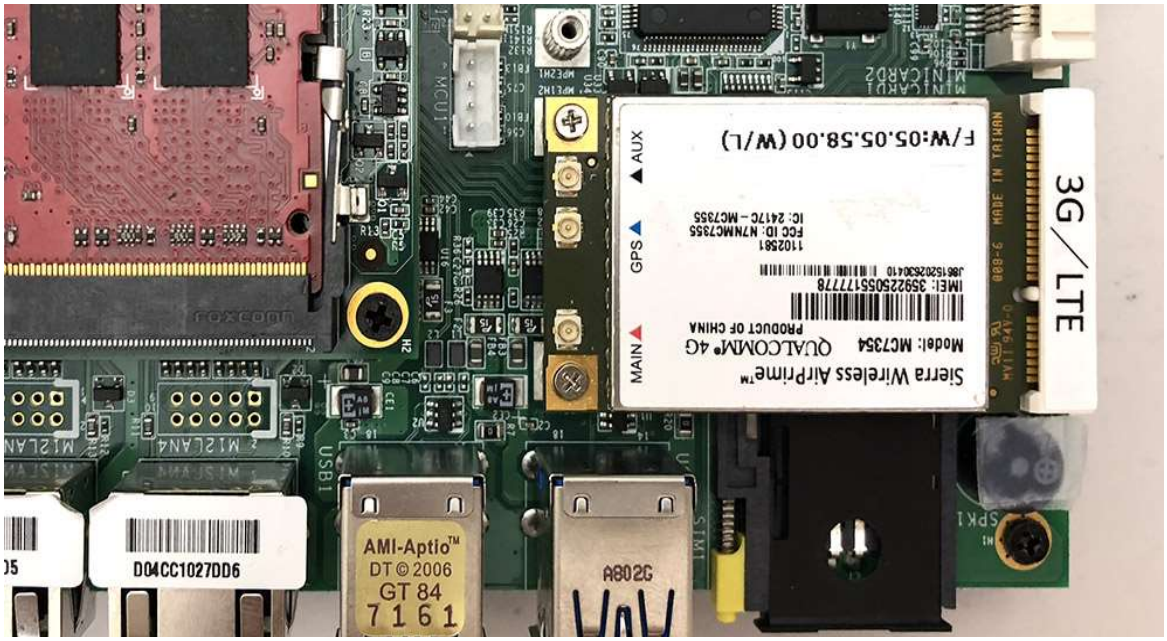


Step 2. Hold the Module with its notch aligned with the socket of the board and insert it at a 30 degree angle into the socket as shown in the picture.



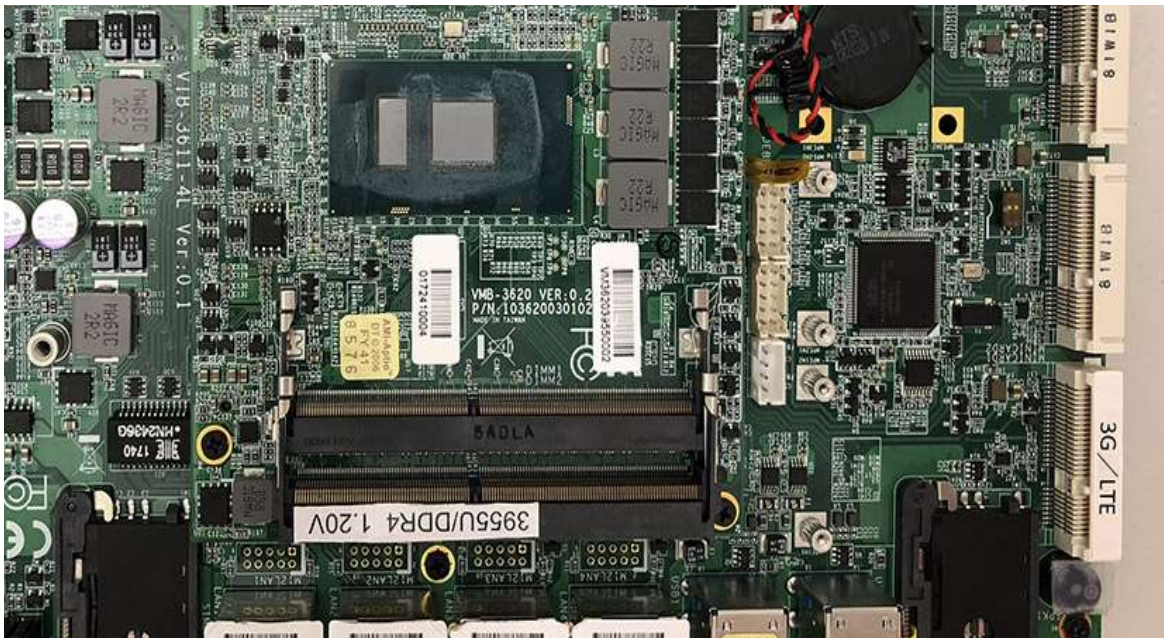
Step 3. Screw two screws to the holder as shown in the picture.

Step 4. Done as shown in the picture.

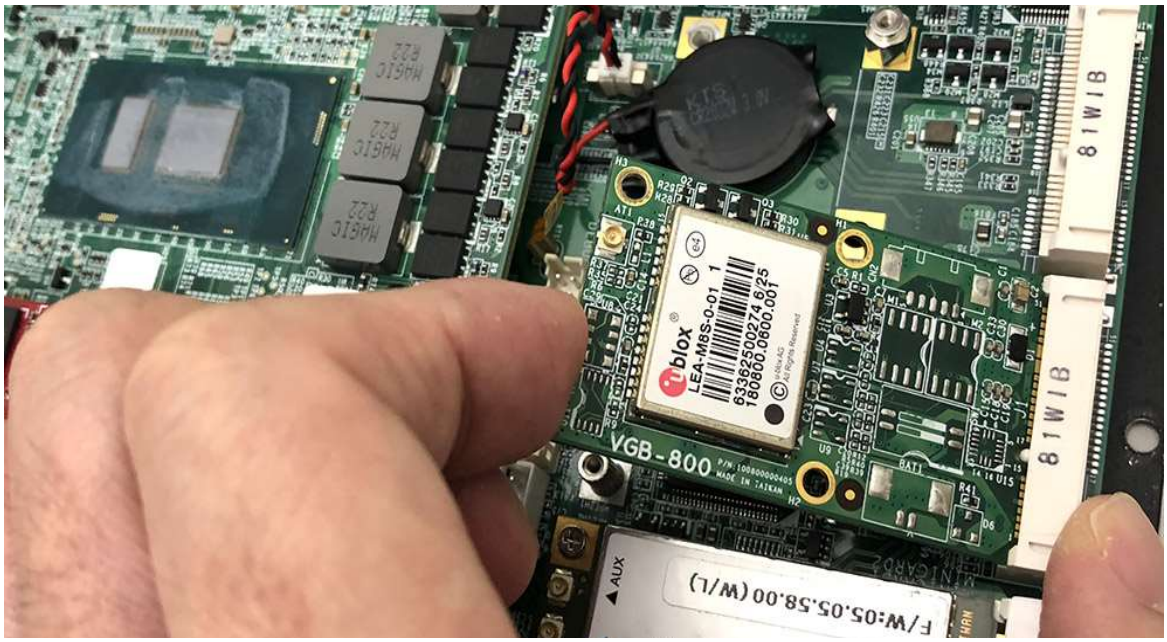


4.5 Installing MINI PCIe Expansion Card (PCIe 2)

Step 1. Put MINI PCIe Expansion Card on this place as shown in the picture.



Step 2. Hold the Module with its notch aligned with the socket of the board and insert it at a 30 degree angle into the socket as shown in the picture.



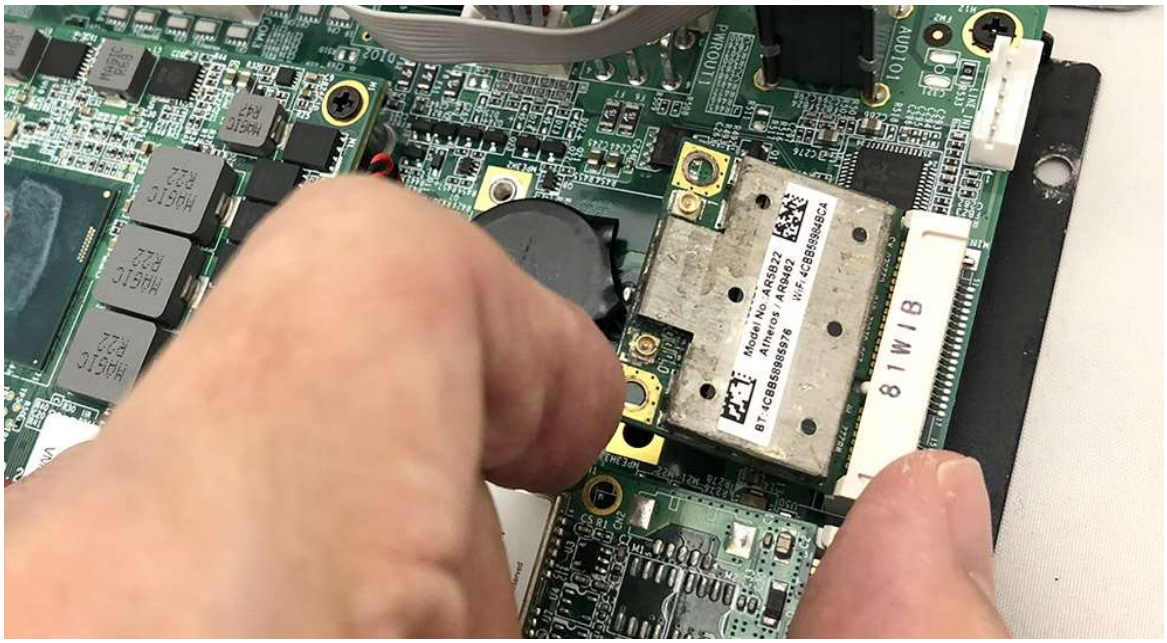
Step 3. Screw one screw to the holder as shown in the picture.

Step 4. Done as shown in the picture.

4.6 Installing MINI PCIe Expansion Card (PCIe 3)

Step 1. Put MINI PCIe Expansion Card on this place as shown in the picture.

Step 2. Hold the Module with its notch aligned with the socket of the board and insert it at a 30 degree angle into the socket as shown in the picture.



Step 3. Screwvone screw to the holder as shown in the picture.

Step 4. Done as shown in the picture.

4.7 Installing M.2 Module

Step 2. Put M.2 Card on this place as shown in the picture.

Step 2. Hold the Module with its notch aligned with the socket of the board and insert it at a 30 degree angle into the socket as shown in the picture.

Step 3. Screw one screw to the holder as shown in the picture.

Step 4. Done as shown in the picture.

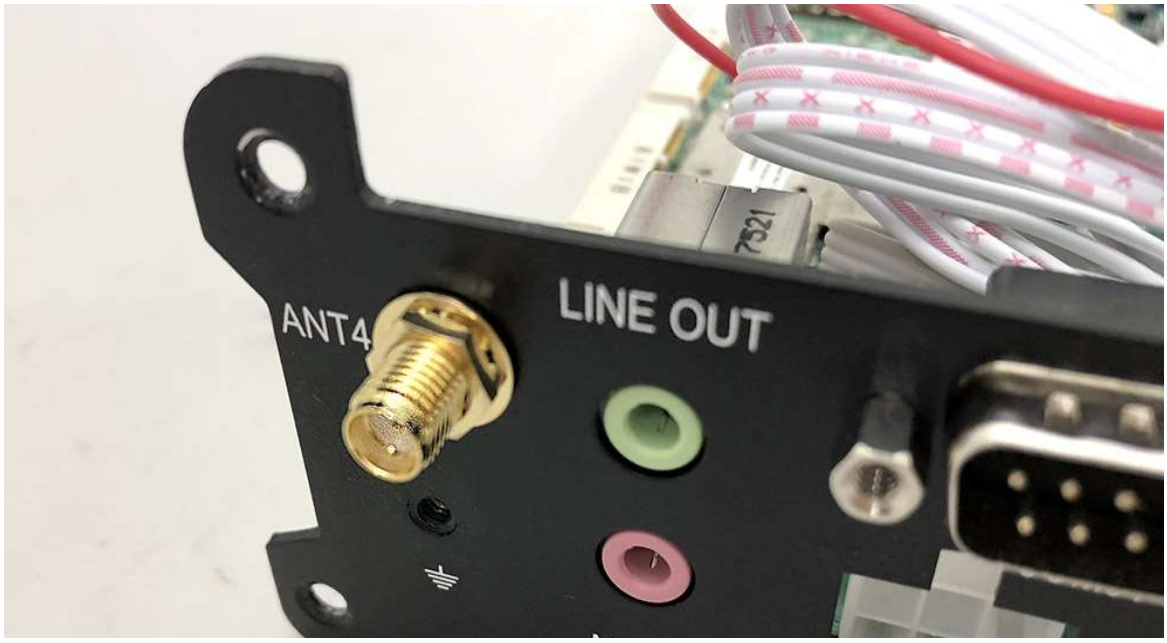
4.8 Installing Internal Antenna Cable

Step 1. Take the SMA Connector and Plug into IO Panel as shown in the picture.

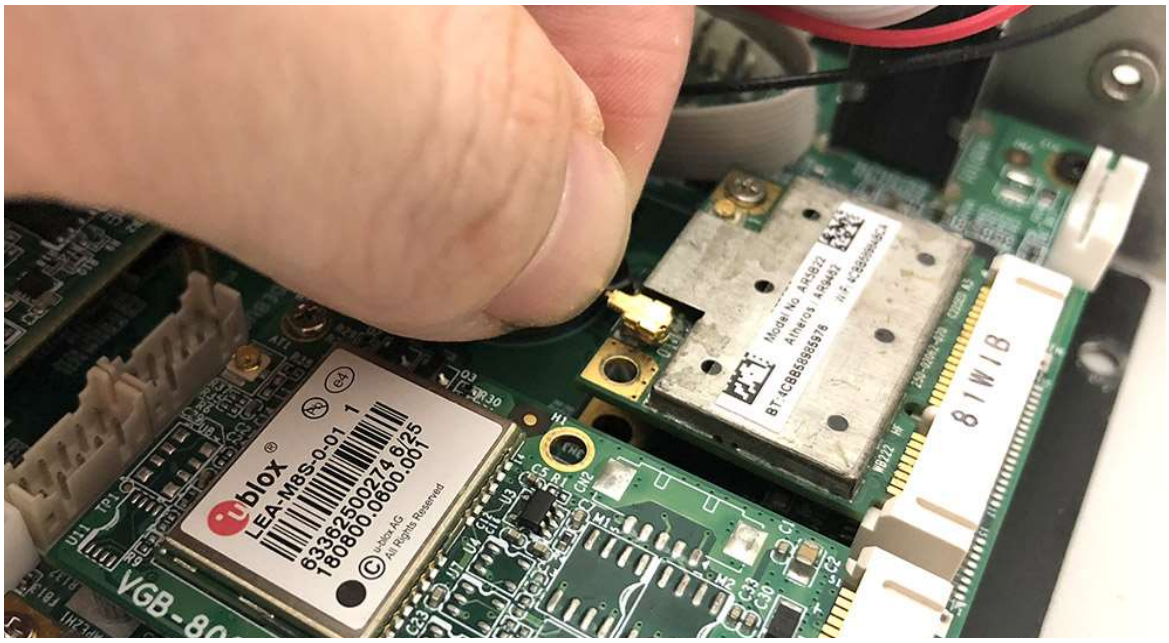
Step 2. Put the Washer into the SMA Connector as shown in the picture.

Step 3. Put the Oring to SMA Connector and tighten as shown in the picture.

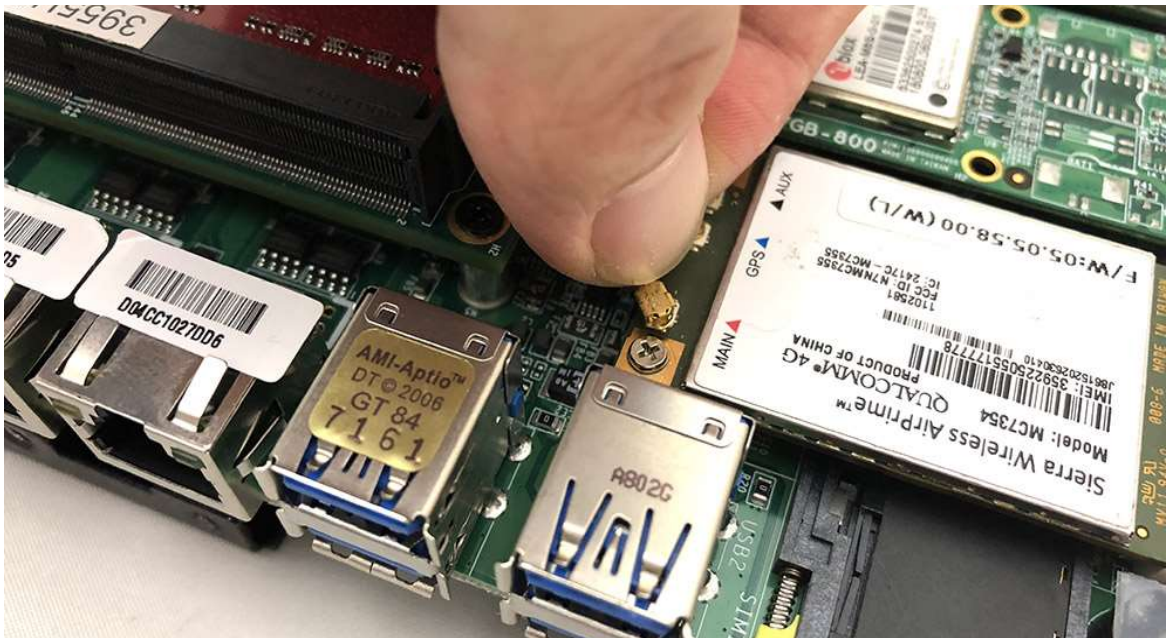
Step 4. Done as shown in the picture.



Step 5. Take the Ipex Connector and press on the wifi module asshown in the picture.



Step 6. Take the Ipex Connector and press on the 3G module as shown in the picture.



Step 7. Take the Ipex Connector and press on the GPS module as shown in the picture.

4.9 Installing SIM Card

Step 1. Use thin stick to push the button as shown in the picture.

Step 2. Take the holder away from front panel as shown in the picture.

Step 3. Put your SIM Card into the holder as shown in the picture.

Step 4. Take the SIM card holder and Insert it into the socket as shown in the picture.

Attention:
Please cut the main power when you insert the SIM.
Caution :
The SIM card will be not detected.

4.10 Installing HDD

Step 1. Put the HDD into HDD Holder as shown in the picture.

Step 2. Screw two screws on both side as shown in the picture.

Step 3. Push the HDD Holder into the socket as shown in the picture.

Step 4. Fully insert the HDD Holder into the socket until a “click” is heard as shown in the picture.

Step 5. Tighten to Storage Bracket screws as shown in the picture.

Step 4. Done as shown in the picture.

5.0
SYSTEM RESOURCE

5.0 SYSTEM RESOURCE

5.1 Ignition Power Management Quick Guide

Startup/shutdown conditions from the IGNITION signal:

- IGNITION startup signal must be valid during 3 sec. (anti-noise protection).
- IGNITION shutdown – IGNITION signal must be inactive during 3 Sec, then PIC controller initiate Power Button signal (**OS must be set to shut down from the Power Button**). It generate Main Button shutdown event and then goes to complete power off.

Typically the system can start only from IGNITION signal, because startup PIC controller is disconnected from the power source.

The system can be switched off from:

- Power IGNITION OFF signal.
- ACPI OS shutdown
- Power Button – generate ACPI event (OS dependent).

Power Ignition Startup Procedure

Power Ignition Shutdown Procedure

Power Management

- Power-off delay time is selectable by Software to disable and enable in 0-255 minutes
- Ignition On/Off status detectable by SW
- If the ignition is off and the system is still on after 3 Sec, FleetPC-8-i7C will shut down automatically.
- If the ignition is turned on again and the power-off delay is in progress, FleetPC-8-i7C will cancel the delay function and will continue to operate normally.
- If the ignition is turned on again and the power-off delay ended, FleetPC-8-i7C will shut down completely will power-on again automatically.

6.0
BIOS

6.0 BIOS

6.1 Enter The BIOS

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press (DEL) key to enter Setup.

Press DEL to enter SETUP

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Important

- The items under each BIOS category described in this chapter are under continuous update for better system performance. Therefore, the description may be slightly different from the latest BIOS and should be held for reference only.
- Upon boot-up, the 1st line appearing after the memory count is the BIOS version. It is usually in the format.

FleetPC-8-i7C Mainboard V1.0 073109 where :

1st digit refers to BIOS maker as A = AMI, W = AWARD, and P = PHOENIX

2nd - 5th digit refers to the model number.

6th digit refers to the chipset as I = Intel, N = NVIDIA, A = AMD and V = VIA.

7th - 8th digit refers to the customer as MS = all standard customers.

V1.0 refers to the BIOS was released.

073109 refers to the date this BIOS was released.

Control Keys

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press (DEL) key to enter Setup.

<↑>	Move to the previous item
<↓>	Move to the next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Enter>	Select the item
<Esc>	Jumps to the Exit menu or returns to the main menu from a submenu
<+/PU>	Increase the numeric value or make changes
<-/PD>	Decrease the numeric value or make changes
<F1>	General Help
<F3>	Load Optimized Defaults
<F4>	Save all the CMOS changes and exit

Getting Help

After entering the Setup menu, the first menu you will see is the Main Menu.

Main Menu

The main menu lists the setup functions you can make changes to. You can use the arrow keys (↑↓) to select the item. The on-line description of the highlighted setup function is displayed at the bottom of the screen.

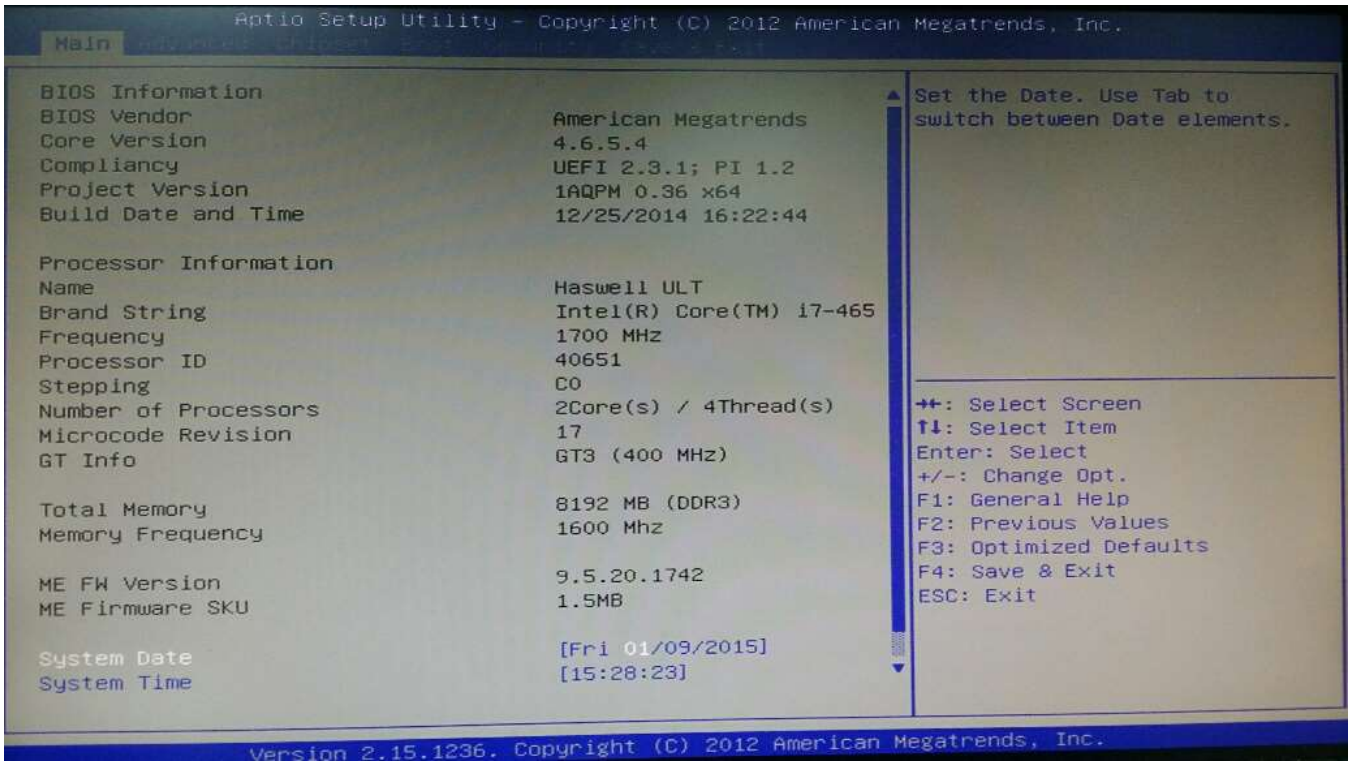
Sub-Menu

If you find a right pointer symbol (as shown in the right view) appears to the left of certain fields that means a sub-menu can be launched from this field. A sub-menu contains additional options for a field parameter. You can use arrow keys (↑↓) to highlight the field and press <Enter> to call up the sub-menu. Then you can use the control keys to enter values and move from field to field within a sub-menu. If you want to return to the main menu, just press the <Esc >.

General Help <F1>

The BIOS setup program provides a General Help screen. You can call up this screen from any menu by simply pressing <F1>. The Help screen lists the appropriate keys to use and the possible selections for the highlighted item. Press <Esc> to exit the Help screen.

6.2 Main



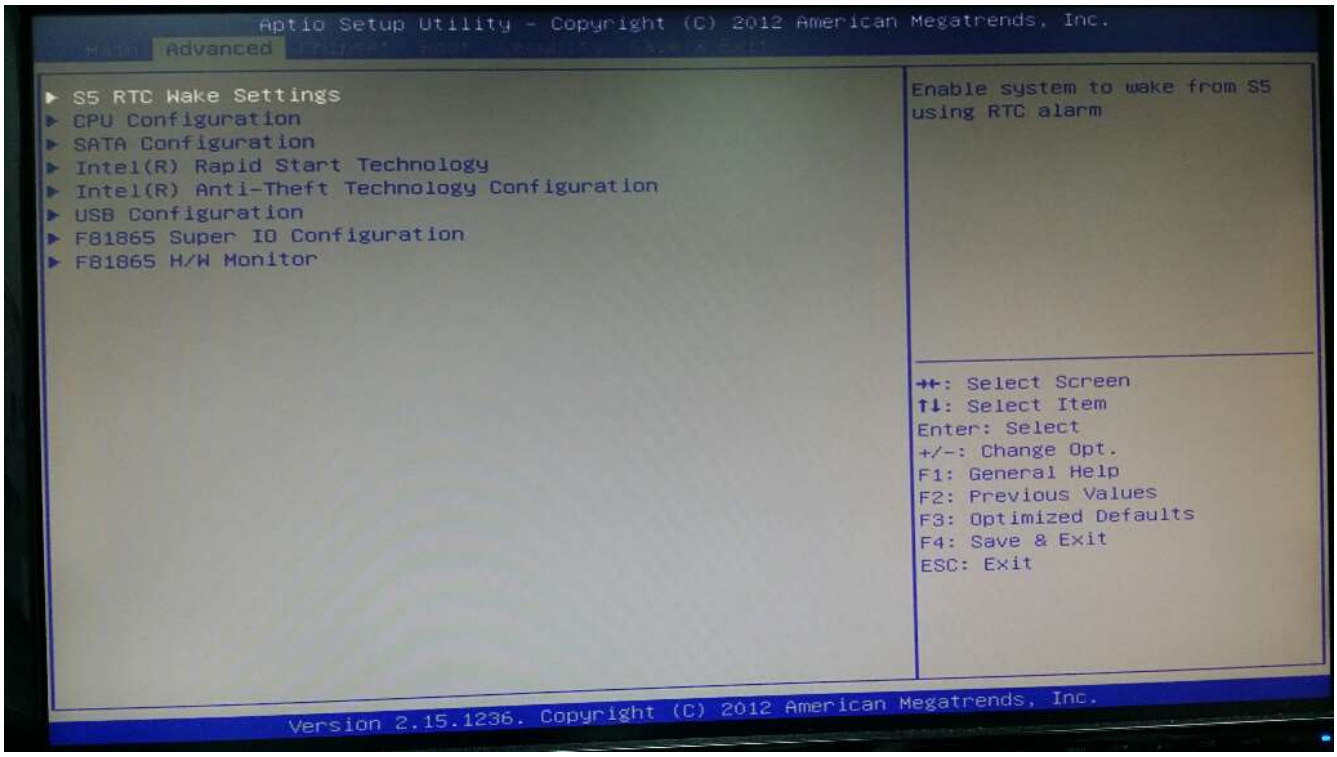
» System Date

This setting allows you to set the system Date. The time format is <Day> <Month> <Date> <Year>.

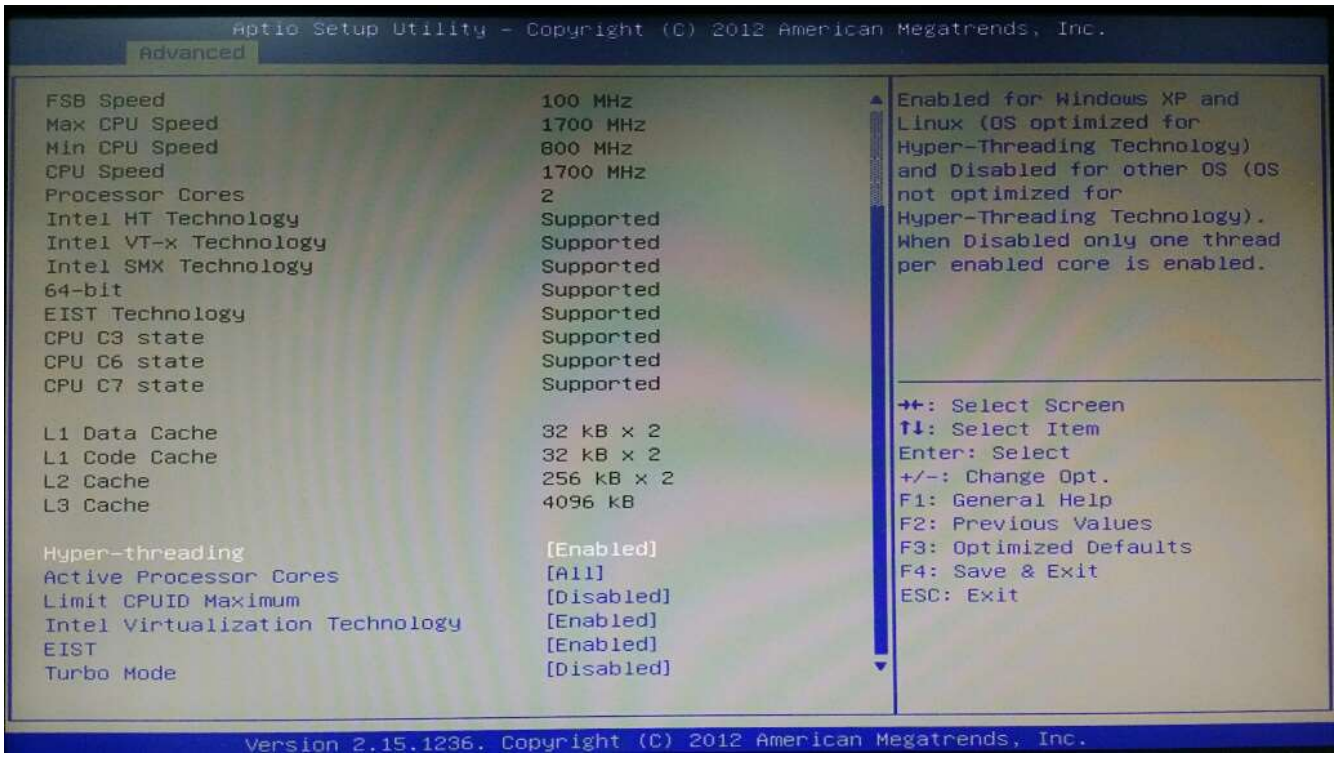
» System Time

This setting allows you to set the system time. The time format is <Hour> <Minute> <Second>.

6.3 Advanced



CPU Configuration



» Limit CPUID Maximum

The CPUID instruction of some newer CPUs will return a value greater than 3. The default is Disabled because this problem does not exist in the Windows series operating systems. If you are using an operating system other than Windows, this problem may occur. To avoid this problem, enable this field to limit the return value to 3 or less than 3.

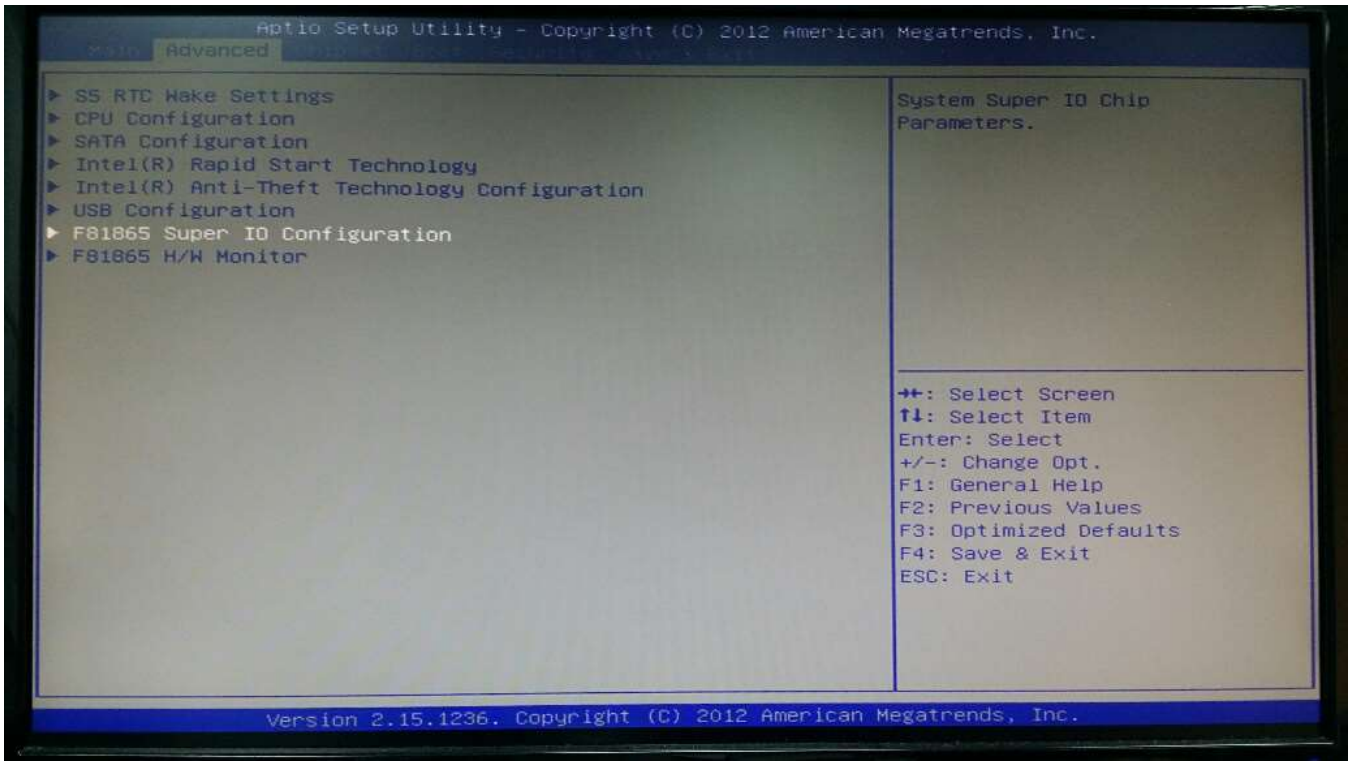
» Intel Virtualization Technology

When this field is set to Enabled, the VMM can utilize the additional hardware capabilities provided by Vanderpool Technology.

» EIST

This field is used to enable or disable the Intel Enhanced SpeedStep Technology

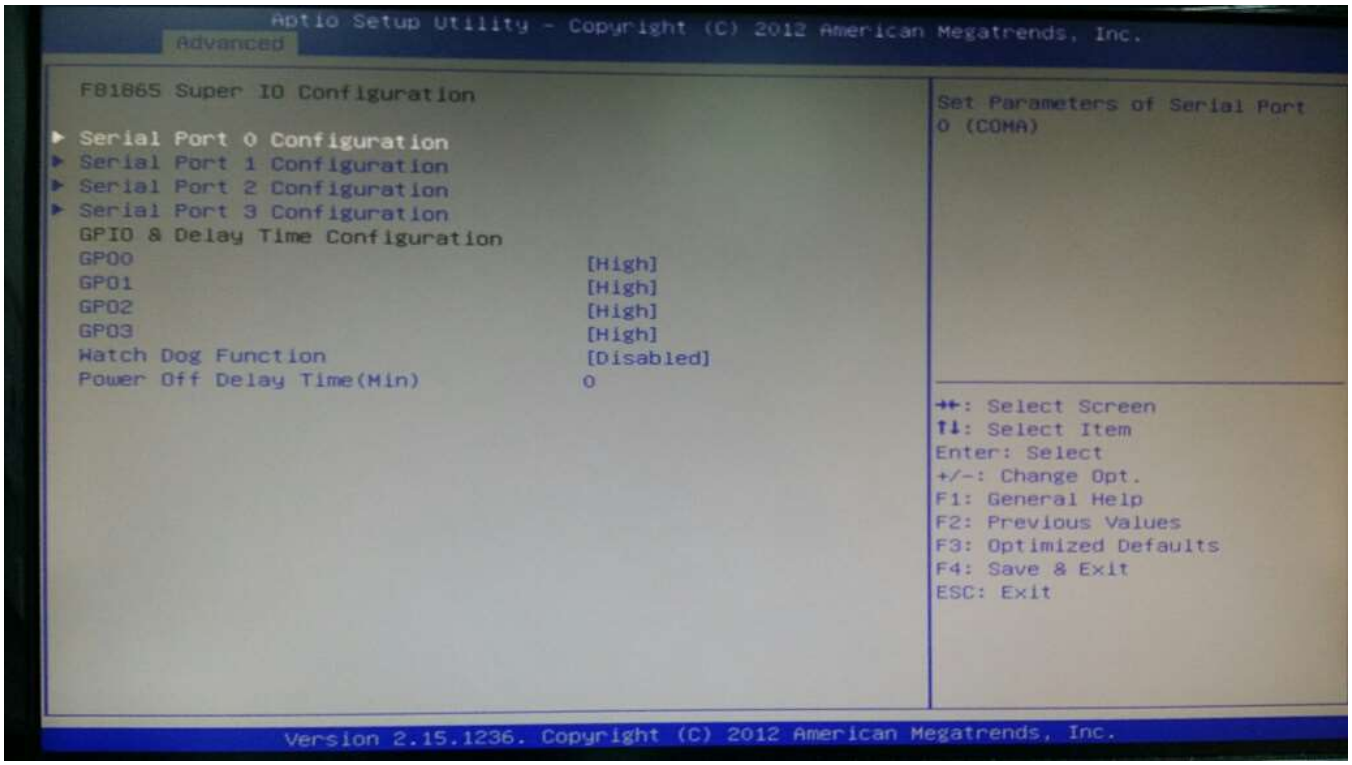
Super IO Configuration

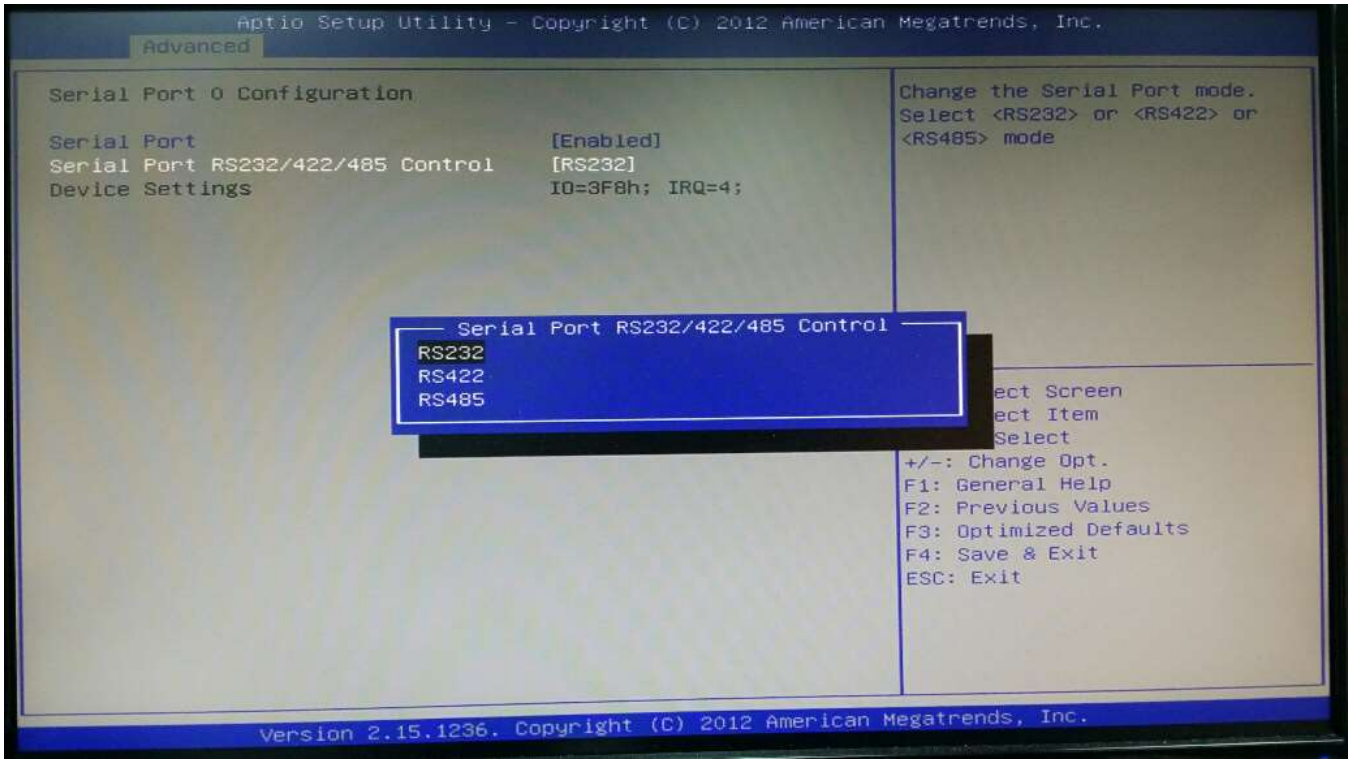


» Serial Port 0/1/2/3 Enable or Disable

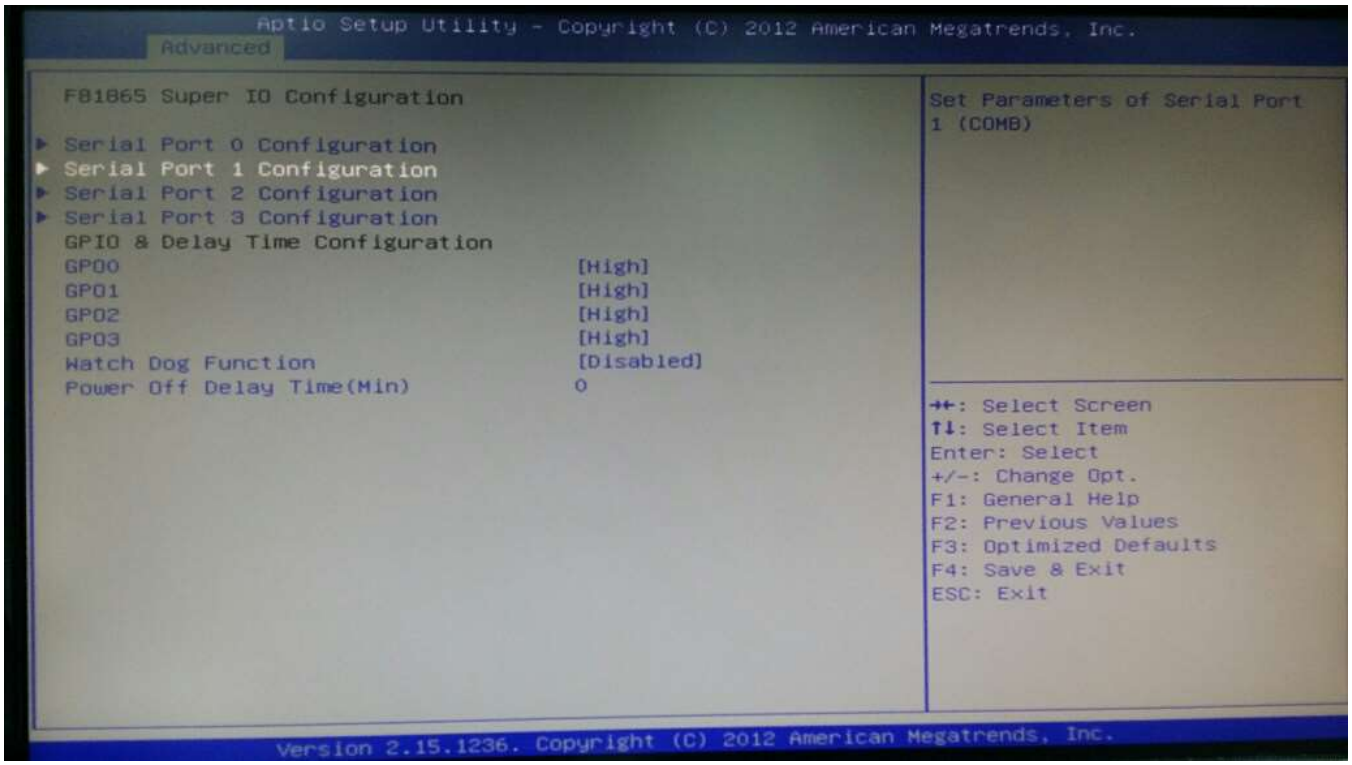
Select an Enable or Disable for the specified serial ports.

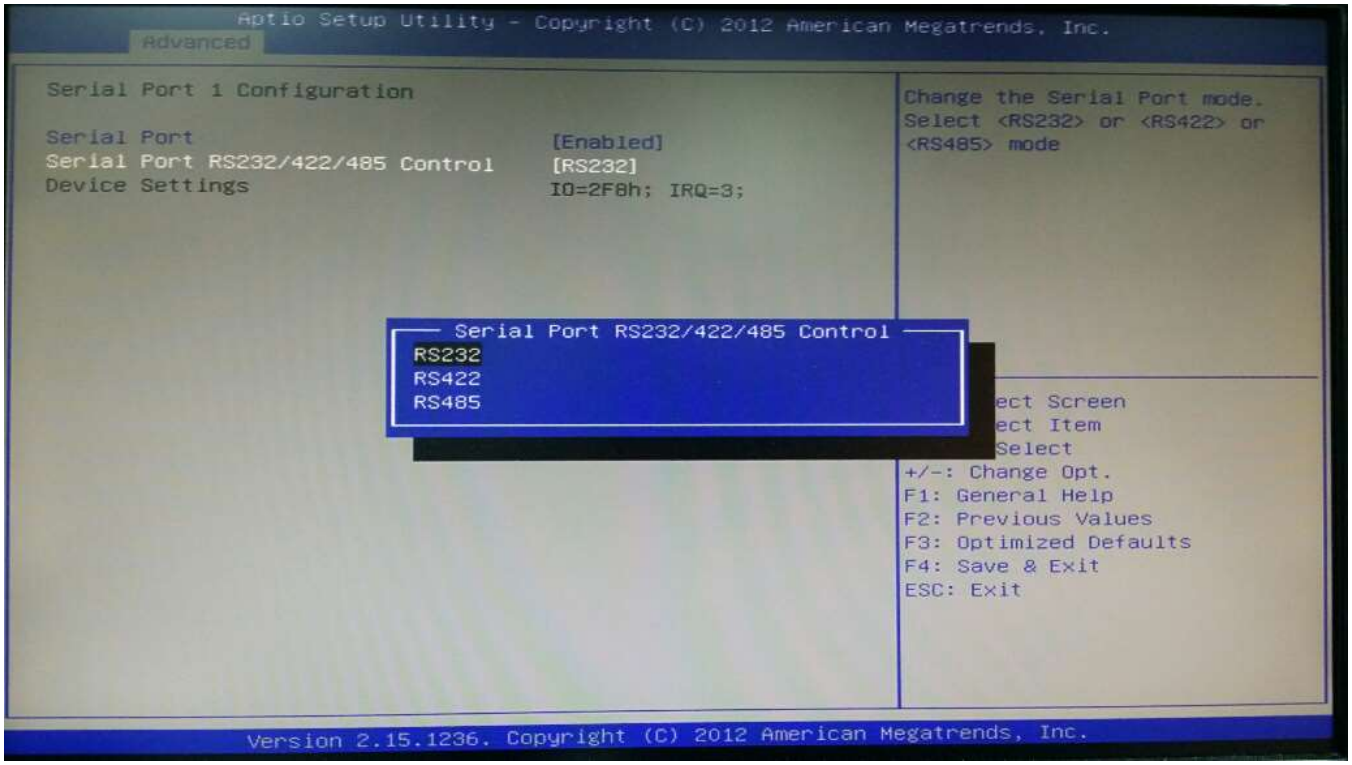
» COM1 RS232/485 Select



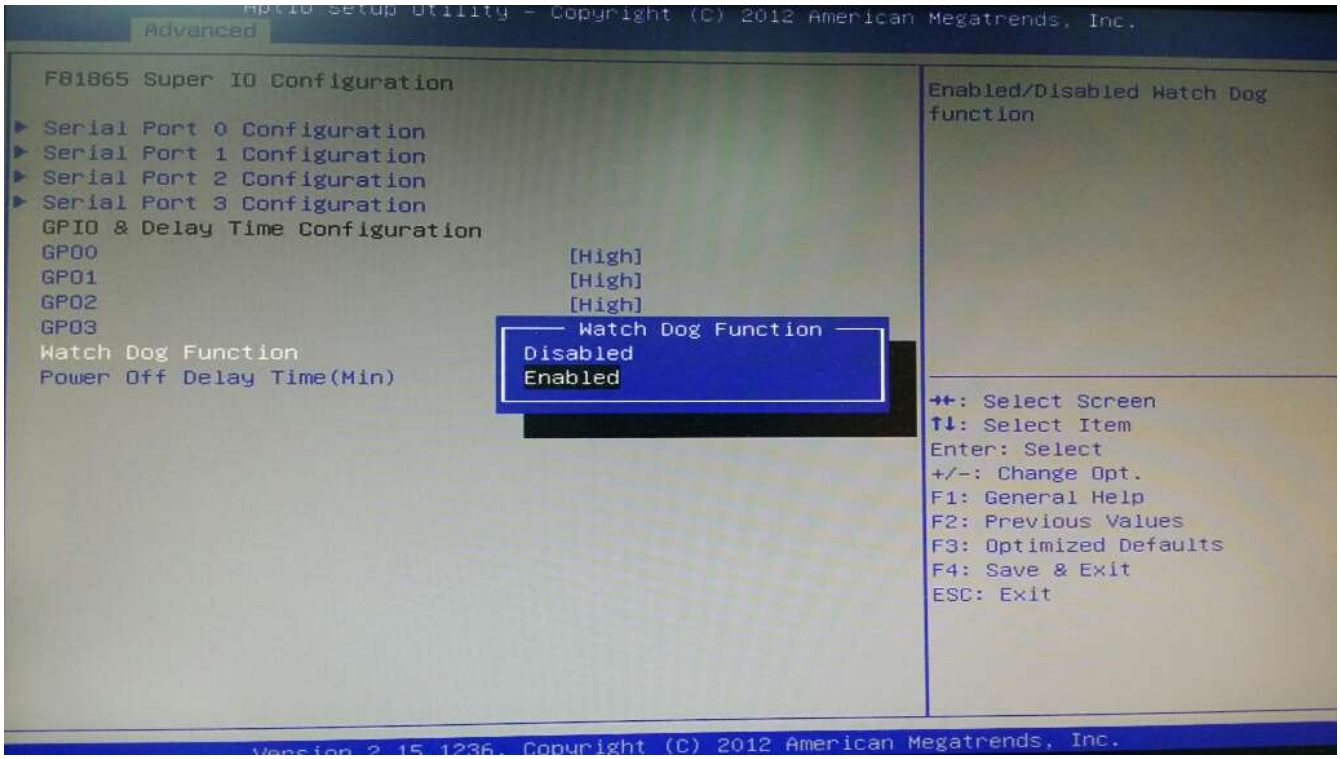


» COM2 RS232/485 Select

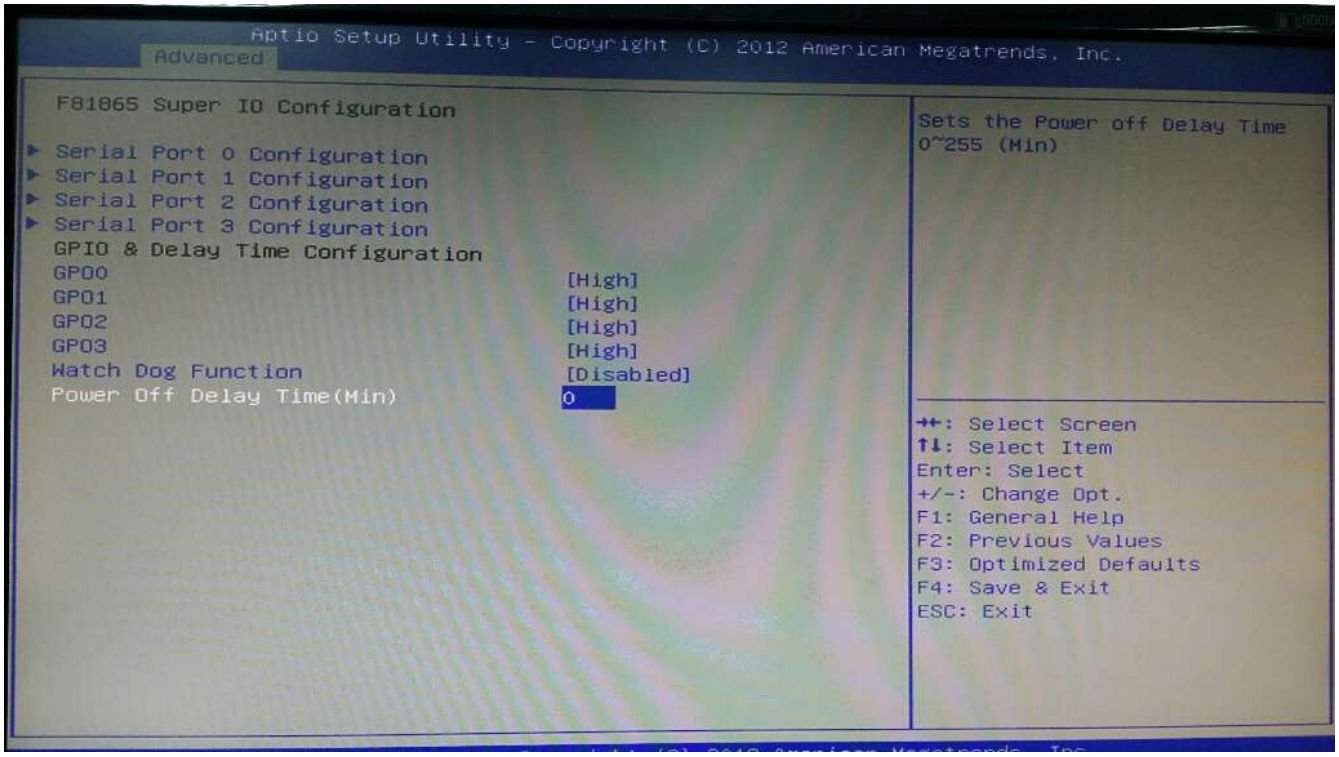




» Watch Dog Function



» GPIO Configuration – Power off delay time setting 0-255

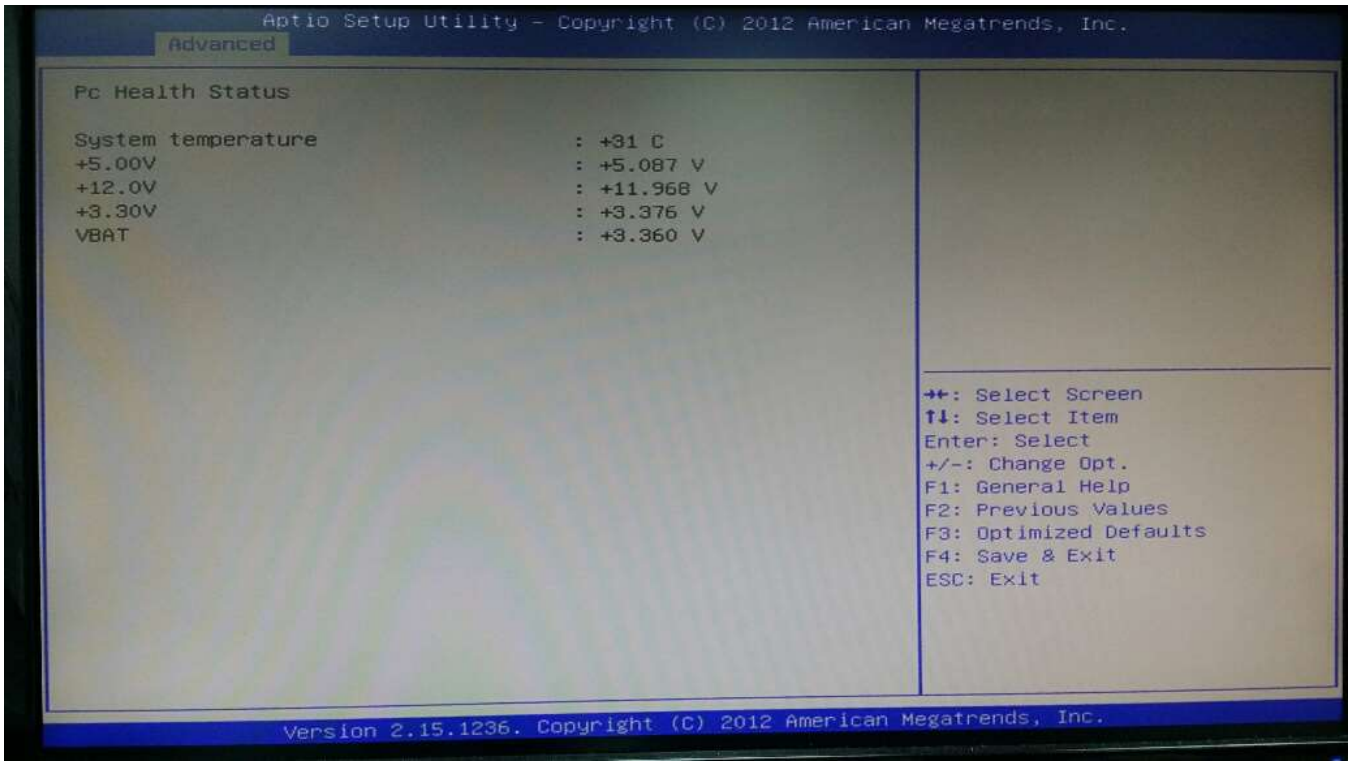


» GPO 0/ 1/ 2/ 3/ Data

These settings configure special GPIO data.

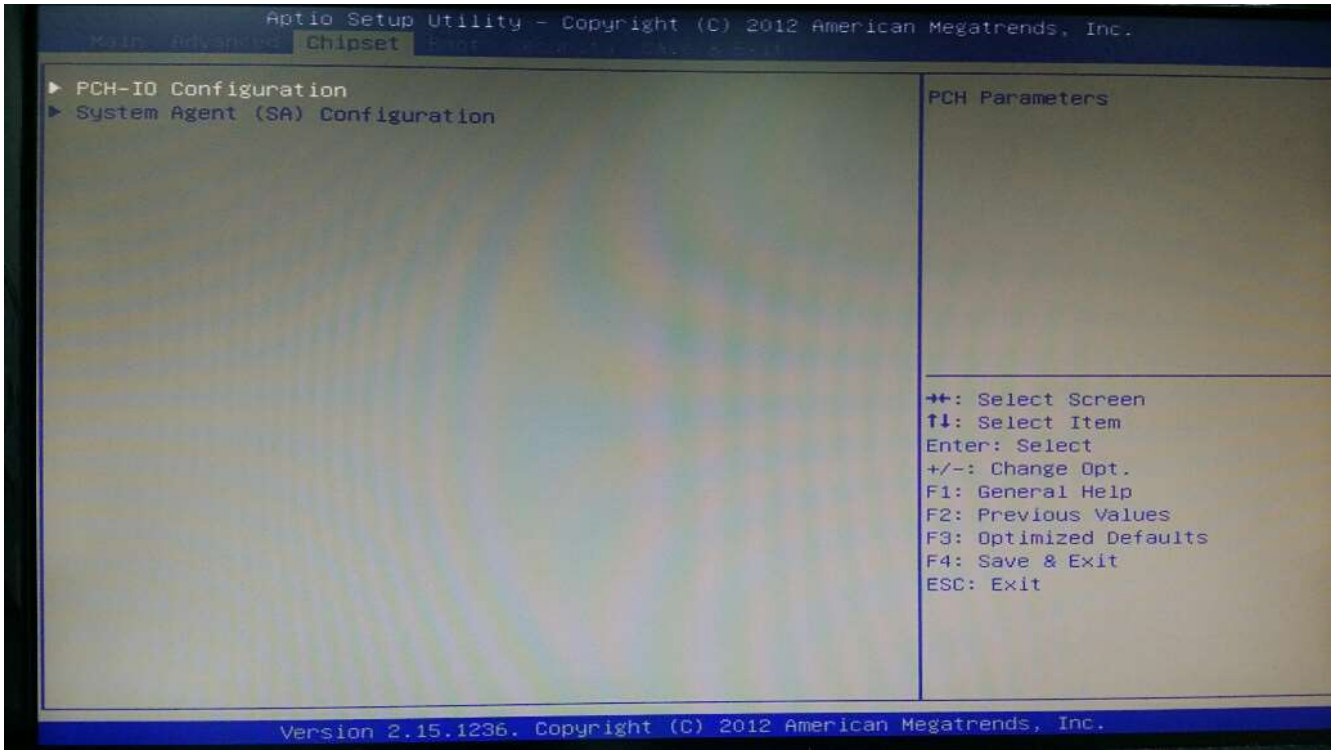
Hardware Health Configuration

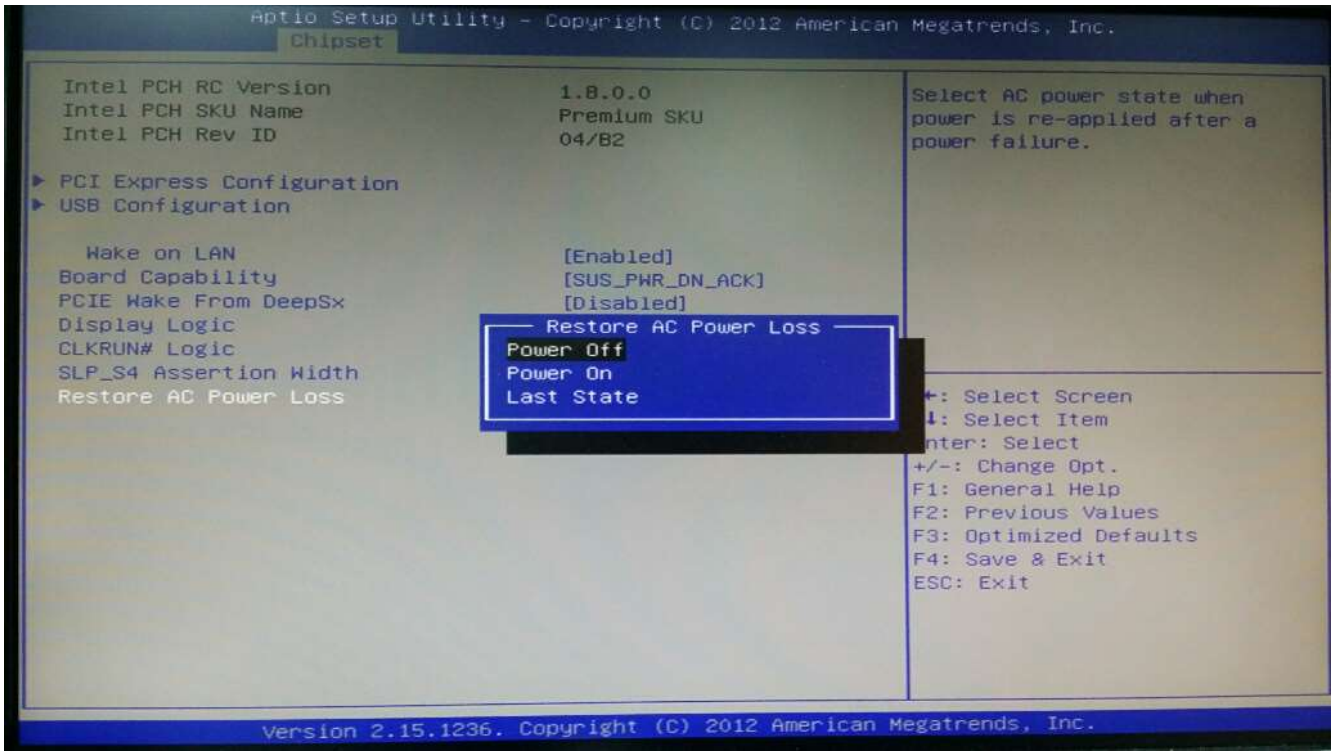
These items display the current status of all monitored hardware devices/components such as voltages, temperatures and all fans' speeds.



6.4 Chipset

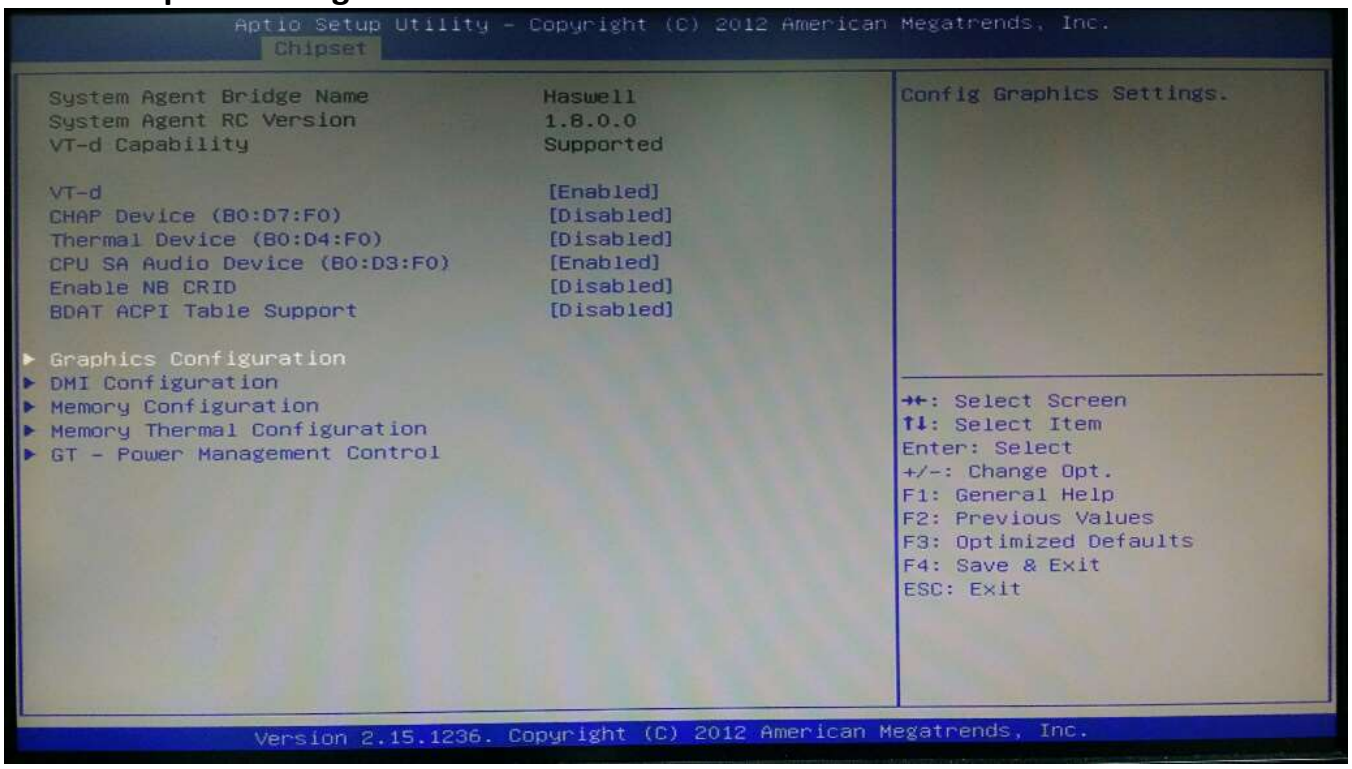
PCH-IO Configuration – Restore AC Power Loss

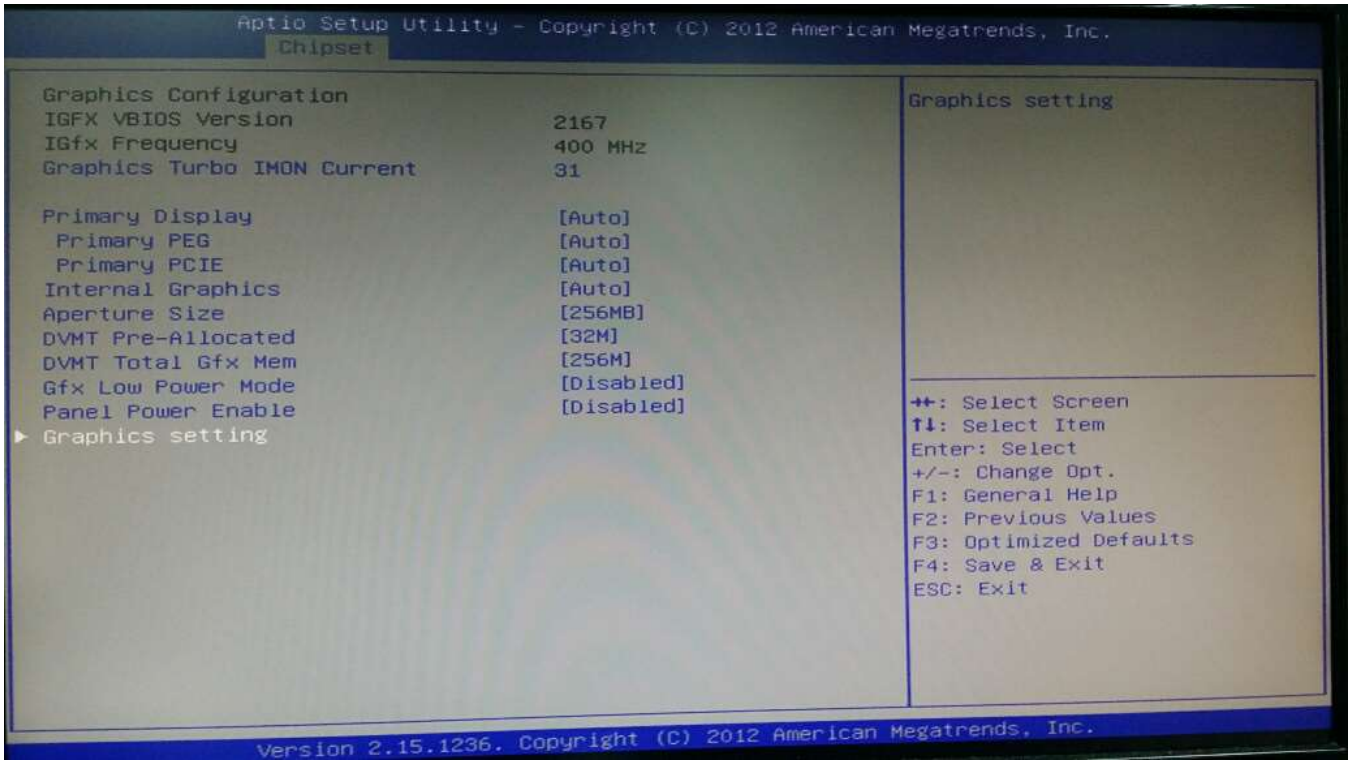


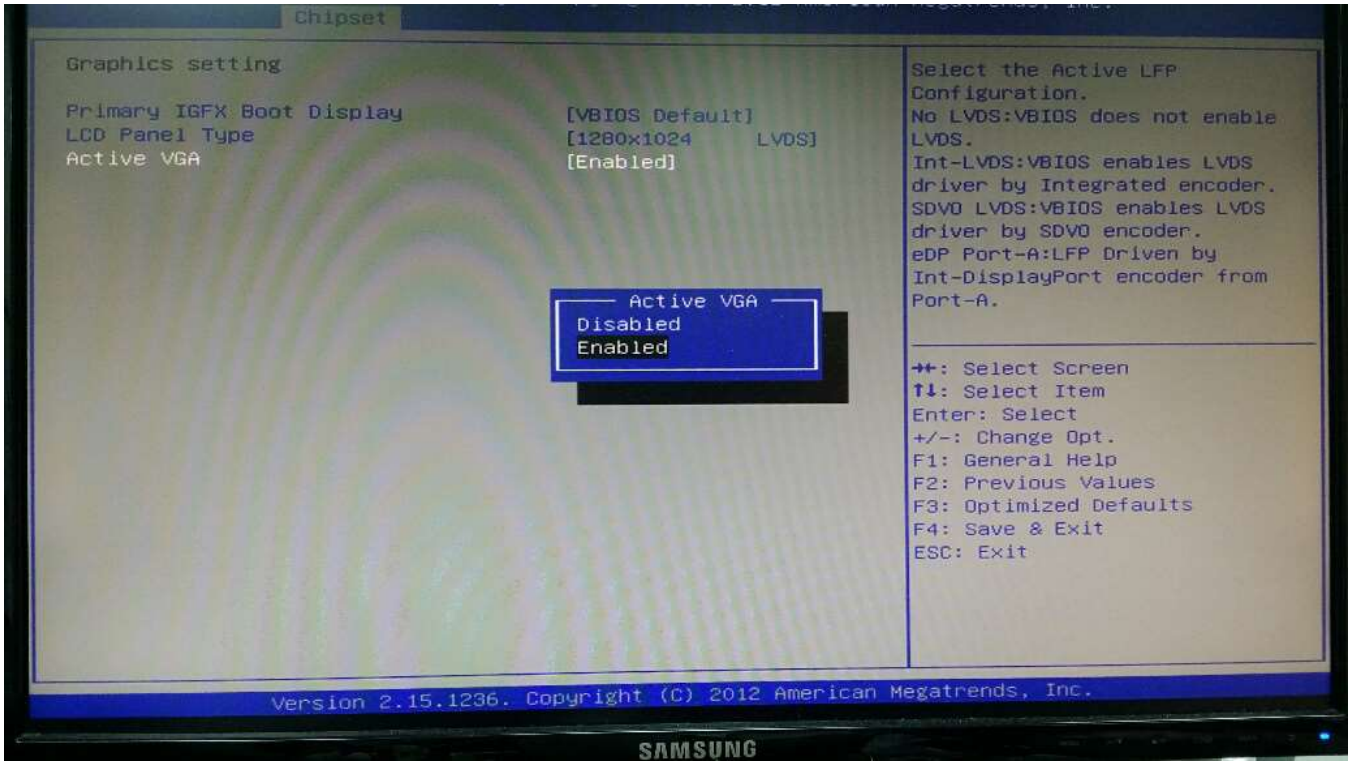


System Agent (SA) Configuration

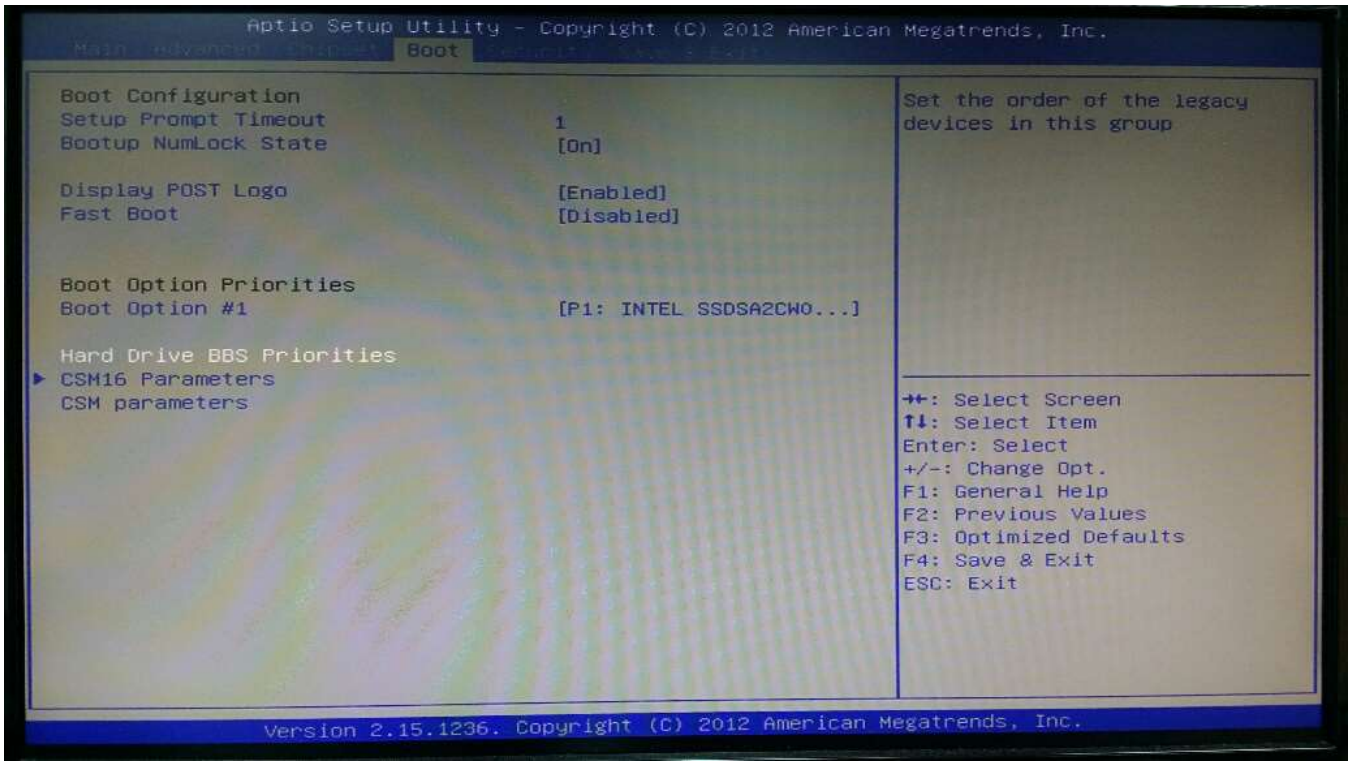
» Graphics Configuration






Chipset
Graphics setting
Primary IGFX Boot Display [VBIOS Default]
LCD Panel Type [1280x1024 LVDS]
Active VGA [Enabled]
Active VGA
Disabled
Enabled
Select the Active LFP Configuration.
No LVDS:VBIOS does not enable LVDS.
Int-LVDS:VBIOS enables LVDS driver by Integrated encoder.
SDVO LVDS:VBIOS enables LVDS driver by SDVO encoder.
eDP Port-A:LFP Driven by Int-DisplayPort encoder from Port-A.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.15.1236. Copyright (C) 2012 American Megatrends, Inc.
SAMSUNG

6.5 Boot

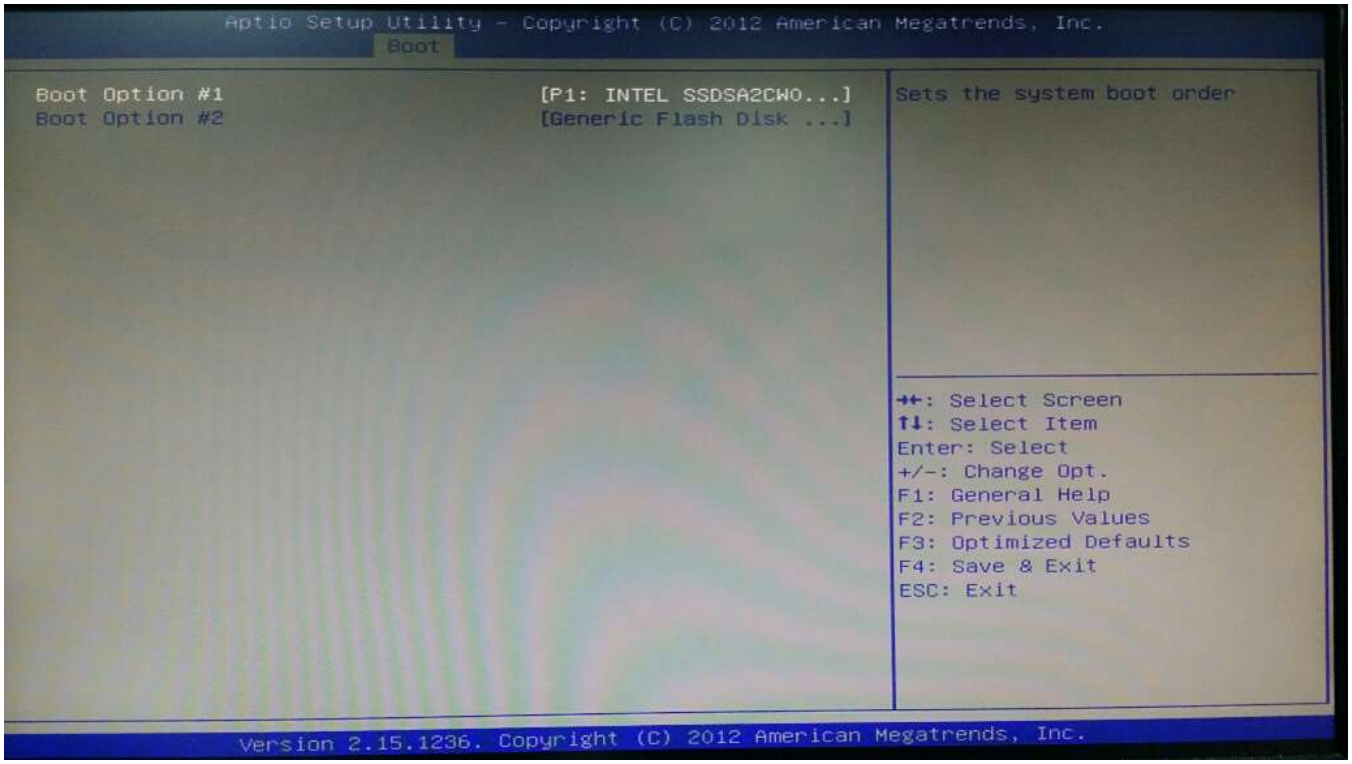


» 1st/2nd/3rd Boot Device

The items allow you to set the sequence of boot devices where BIOS attempts to load the disk operating system.

» Try Other Boot Devices

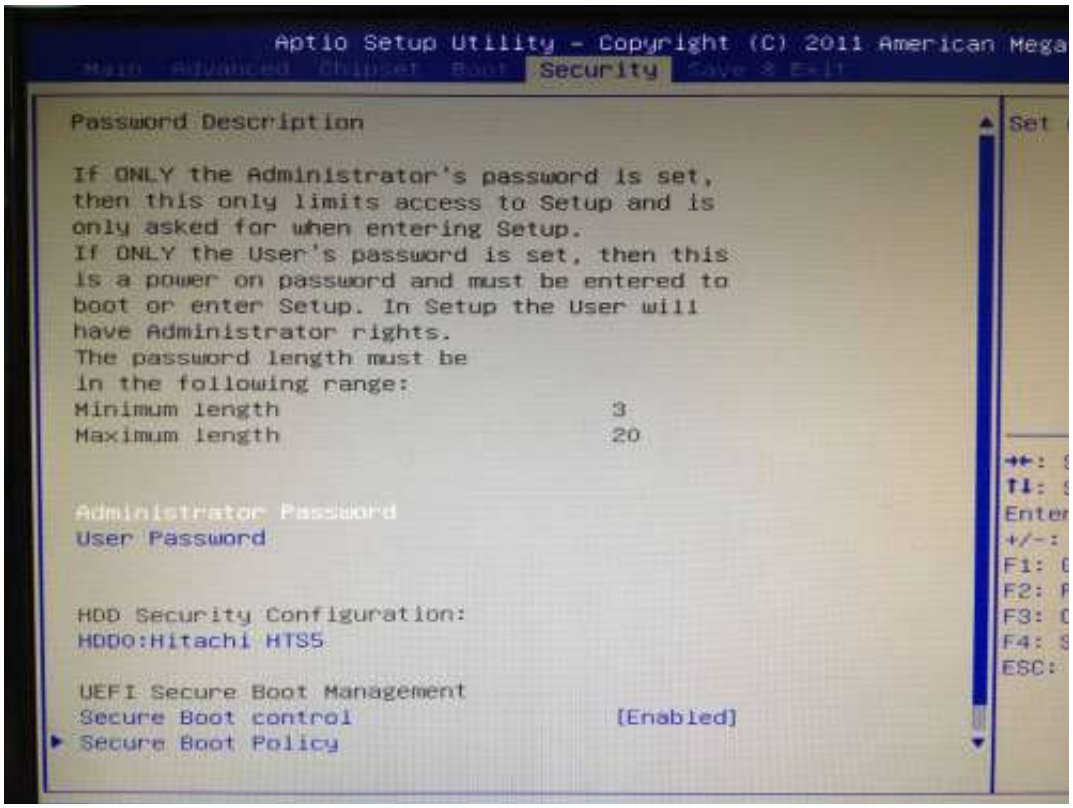
Setting the option to [Enabled] allows the system to try to boot from other device if the system fail to boot from the 1st/2nd/3rd boot device.



» Hard Disk Drives, CD/DVD Drives, USB Drives

These settings allow you to set the boot sequence of the specified devices.

6.6 Security



» Administrator Password

Administrator Password controls access to the BIOS Setup utility. These settings allow you to set or change the administrator password.

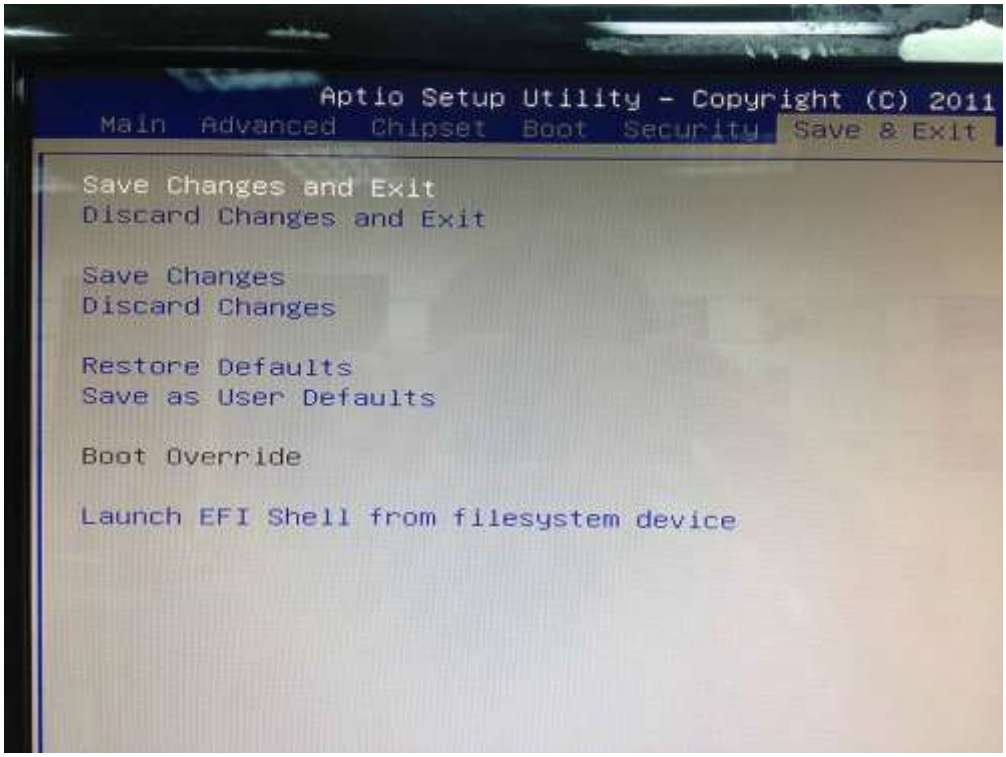
» User Password

User Password controls access to the system at boot. These settings allow you to set or change the user password.

» Boot Sector Virus Protection

This function protects the BIOS from accidental corruption by unauthorized users or computer viruses. When enabled, the BIOS data cannot be changed when attempting to update the BIOS with a Flash utility. To successfully update the BIOS, you will need to disable this Flash Protection function.

6.7 Exit



» Save Changes and Exit
Save changes to CMOS and exit the Setup Utility.

» Discard Changes and Exit
Abandon all changes and exit the Setup Utility.

» Discard Changes
Abandon all changes and continue with the Setup Utility.

» Load Optimal Defaults
Use this menu to load the default values set by the mainboard manufacturer specifically for optimal performance of the mainboard.

» Load Failsafe Defaults
Use this menu to load the default values set by the BIOS vendor for stable system performance

7.0
PACKING LIST

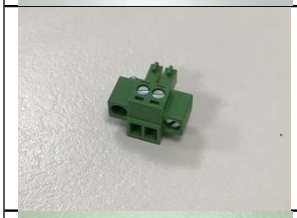
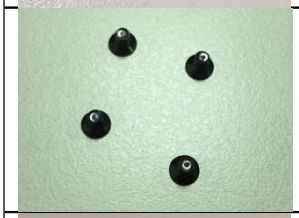
7.0 PACKING LIST

7.1 Packing List

System

Item	Part Number	Module Name
1	763611030004	FleetPC-8-i7C-C1
2	763611030003	FleetPC-8-i7C-i3
3	763611030002	FleetPC-8-i7C-i5
4	763611030001	FleetPC-8-i7C(-i7) [Standard]

Accessory

Picture	Part Number	Module Name	Q'ty
	370832001100	FleetPC-8 Mount Bracket	2
	326910027661	Cabling MC421-350-02G F 90D	1
	351103040250	Screw F Type M3*4L ISO BK	8
	417290370250	HDD-RUBBER FOR H=7 mm	2