

CMB-37E

**Mini Barebone system
Intel High Performance Platform**

Installation Guide

Edition 1.11
2017/10/17



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Chapter 1: Packing List

Chapter 2: Product Specification

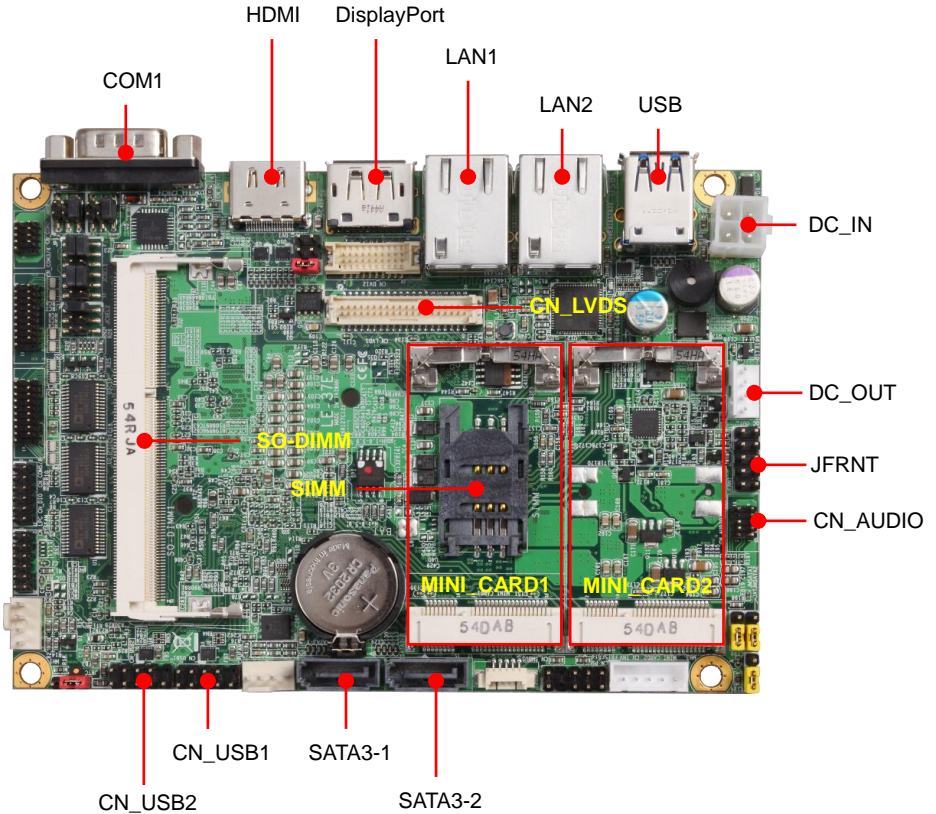
Chapter 3: Hardware Installation

Chapter 1 <Packing List>

- a.  CMB-37E Chassis x 1
(Including LE-37E Motherboard)
- b.  SATA Cable x 1
(OALSATA-90L12)
- c.  SATA Power Cable x 1
(OALSATA15-1PS)
- d.  Desk/Wall mount x 1 (pair)
- e.  VESA mount x 1 (Optional)
- f.  AC-DC Adapter x 1
(DSPD-084-12-VI)
- g.  CD Driver x 1

Chapter 2 <Product Specification>

2.1 <Motherboard Placement>



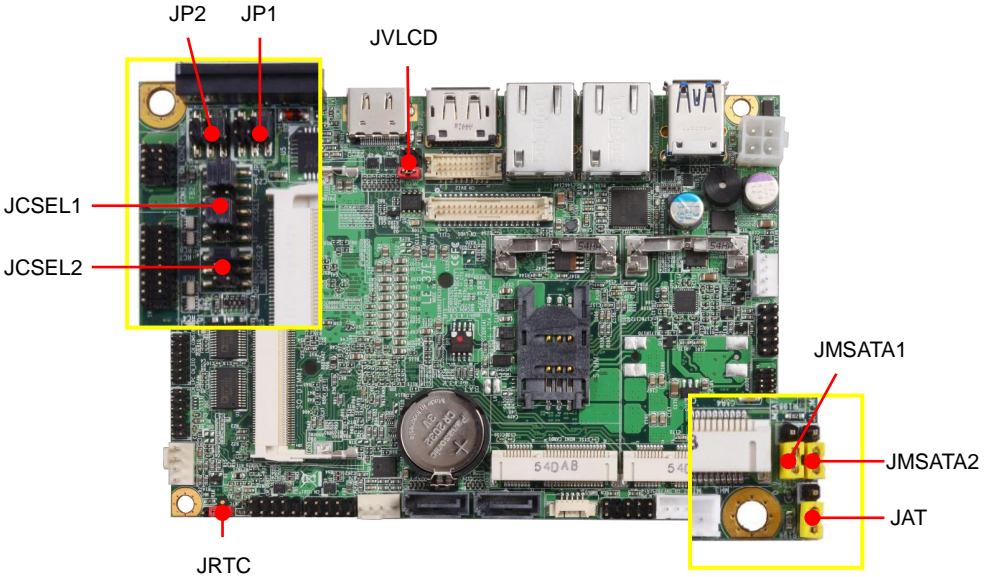
2.1.1 <Internal connectors list>

Connector	Function
SO-DIMM	204-pin DDR3L SO-DIMM slot
SATA3-1/2	7-pin Serial ATA3 connector
CN_AUDIO	5 x 2-pin audio pin header
CN_USB1/2	5 x 2-pin USB2.0 pin header
SIMM	6-pin SIM card slot
JFRNT	5 x 2-pin front panel switch/indicator pin header
MINI_CARD1/2	52-pin MiniPCle card slot
DC_OUT	4-pin SATA Power connector
DC_IN	4-pin ATX12V power connector

2.1.2 <External connectors list>

Connector	Function
COM1	DB9 connector
DisplayPort	DisplayPort connector
HDMI	HDMI connector
USB	2 x USB3.0 connector
LAN1	RJ45 connector
LAN2	RJ45 connector

2.2 <Jumper Location and Reference>



2.2.1 <Jumper list>

Jumper	Function
JAT	Power mode select
JRTC	CMOS Normal/Clear Setting
JVLCD	Panel Voltage Setting
JMSATA1/2	MiniCard1/2 mSATA Setting
JCSEL1/2	CN_COM2 RS232/422/485 select
JP1/2	COM1 and CN_COM2 9-pin setting

2.2.2 <Clear CMOS and Power on type selection>

JRTC: Clear CMOS data jumper

Jumper settings	Function
1-2	Clear CMOS
2-3	Normal (Default)

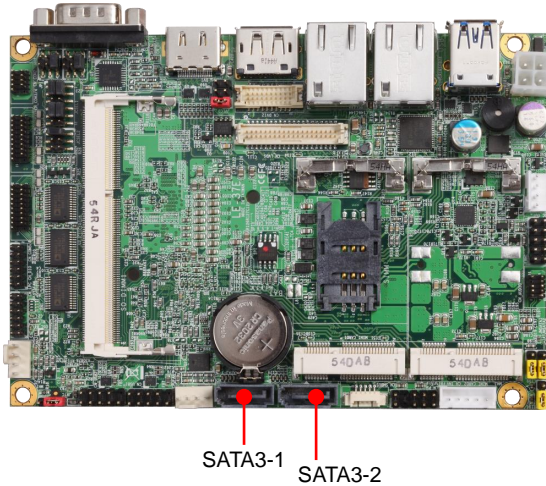
JAT: AT/ATX mode select jumper

Jumper settings	Function
1-2	AT mode
2-3	ATX mode (Default)

2.3 <Motherboard I/O interface>

2.3.1 <Serial ATA interface>

Support RAID0 and 1.

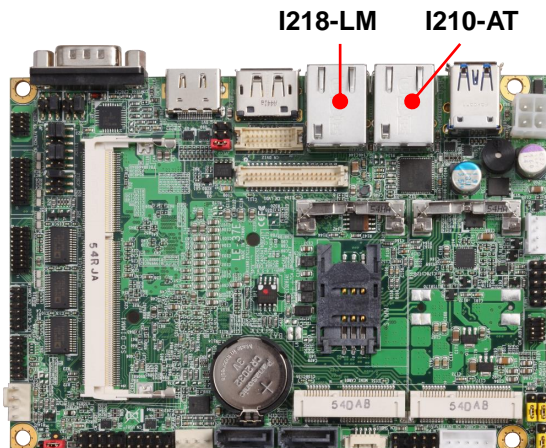


2.3.2 <Ethernet interface>

The board provide I210-AT and I218-LM Gigabit Ethernet which supports WOL on rear I/O.

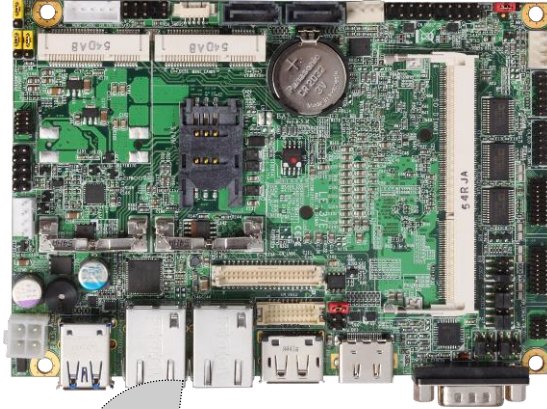
It supports Intel® AMT 10.0 feature.

(Note that the CPU must support vPro technology, ex: [i7-5650U](#))



2.3.3 <Display interface>

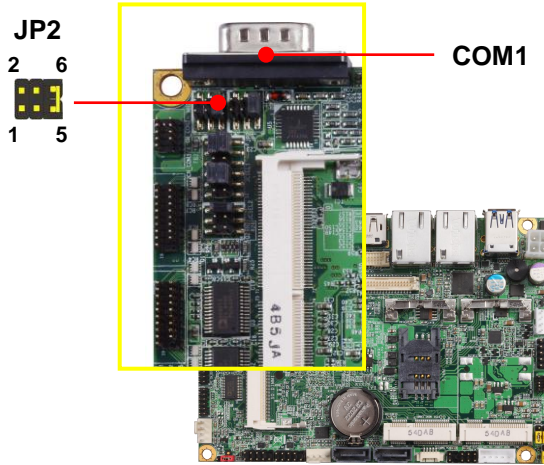
Based on the 5th/4th Gen CPU with built-in HD Graphics, the DisplayPort up to **3840x2160 @ 60Hz**, the HDMI resolution up to **2560x1600 @ 60Hz**



HDMI

DisplayPort

2.3.4 <Serial Port interface>



COM1: RS232 DB9 connector

Pin	Signal	Pin	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	Set by JP2	10	Key

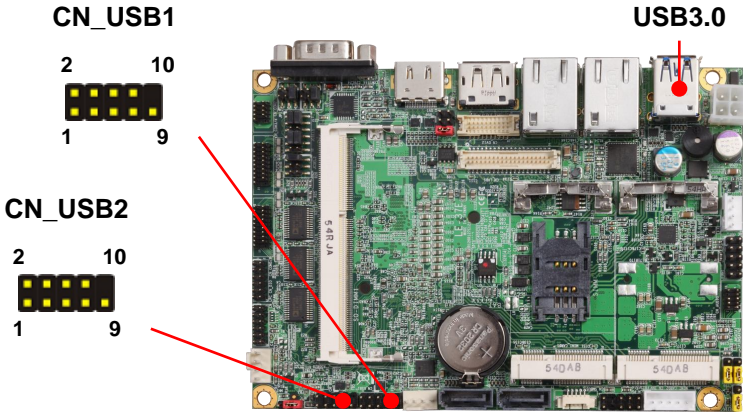
JP2: COM1 pin-9 setting

Jumper settings	Function
1-2	5V
3-4	12V
5-6	RI (Default)

Effective patterns of connection: 1-2 / 3-4 / 5-6

Other may cause damage

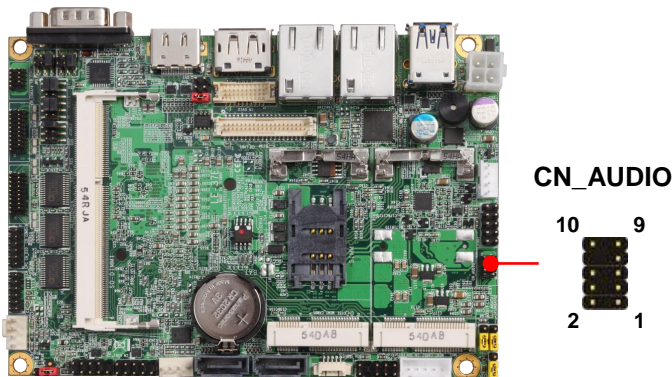
2.3.5 <USB interface>



CN_USB1/2: Front panel USB2.0 10-pin header (Pitch 2.54mm)

Pin	Signal	Pin	Signal
1	5VSB	2	5VSB
3	DATA0-	4	DATA1-
5	DATA0+	6	DATA1+
7	GND	8	GND
9	GND	10	Key

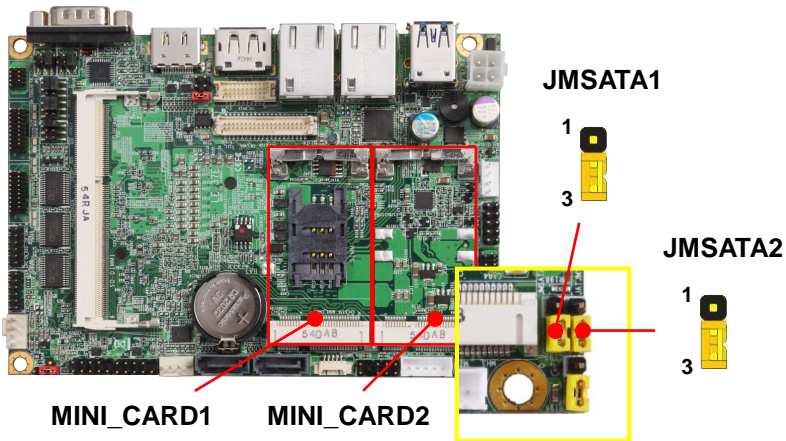
2.3.6 <Audio interface>



CN_AUDIO: Front panel audio 10-pin header (Pitch 1.27mm x 2.54mm)

Pin	Signal	Pin	Signal
1	MIC_L	2	GND
3	MIC_R	4	NC
5	FP_OUT_R	6	MIC_DETECT
7	SENSE	8	Key
9	FP_OUT_L	10	FP_OUT_DETECT

2.3.7 <Expansion slot>



MINI_CARD1/2 supports mSATA set by JMSATA1/2.

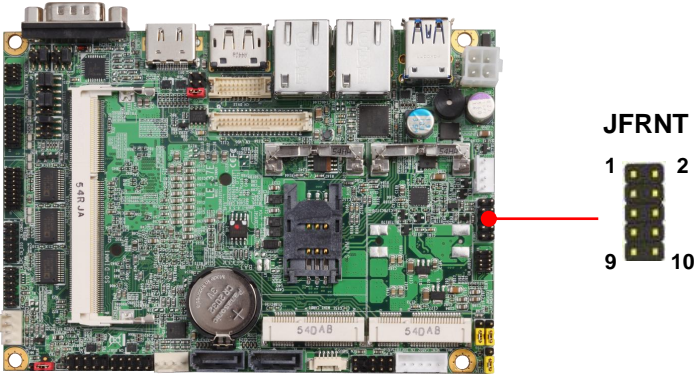
MINI_CARD1 supports SIM card to use 3G module.

JMSATA1/2: Setting MINI_CARD1/2 to support PCIe or mSATA

Jumper settings	Function
1-2	Support mSATA
2-3	Normal operation (Default Setting to PCIe)

Note: JMSATA1 for setting MINI_CARD1, JMSATA2 for setting MINI_CARD2

2.3.8 <Front panel switch and indicator>

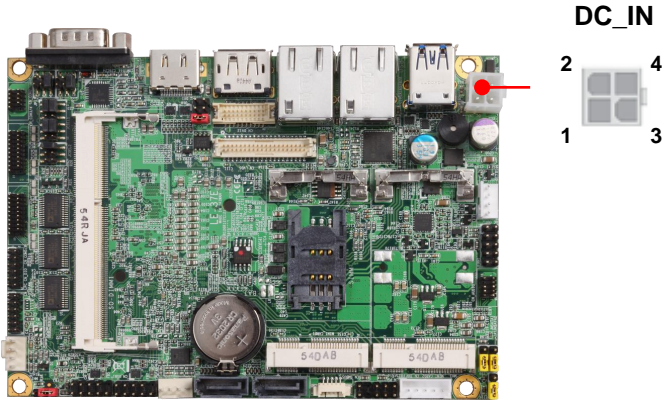


JFRNT: Front panel switch and indicator 14-pin header (Pitch 2.54mm)

Pin	Signal	Pin	Signal
1	Power_ON-	2	Power_ON+
3	Speaker-	4	Speaker+
5	HDD_LED-	6	HDD_LED+
7	Power_LED-	8	Power_LED+
9	Reset+	10	Reset-

2.4 <Power supply>

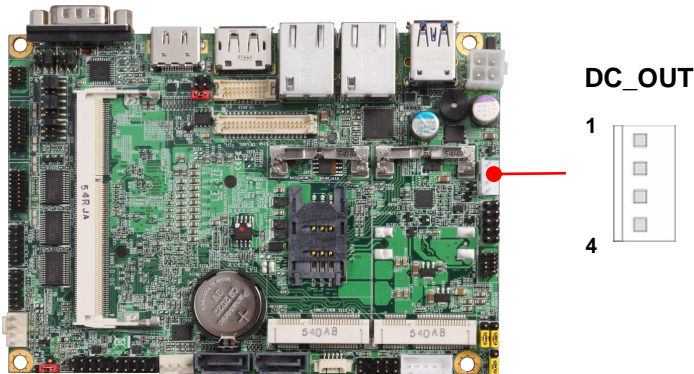
2.4.1 <Power input>



DC_IN: ATX12V 4-pin power connector

Pin	Signal	Pin	Signal
1	GND	2	GND
3	9~24V Power input	4	9~24V Power input

2.4.2 <Power output>

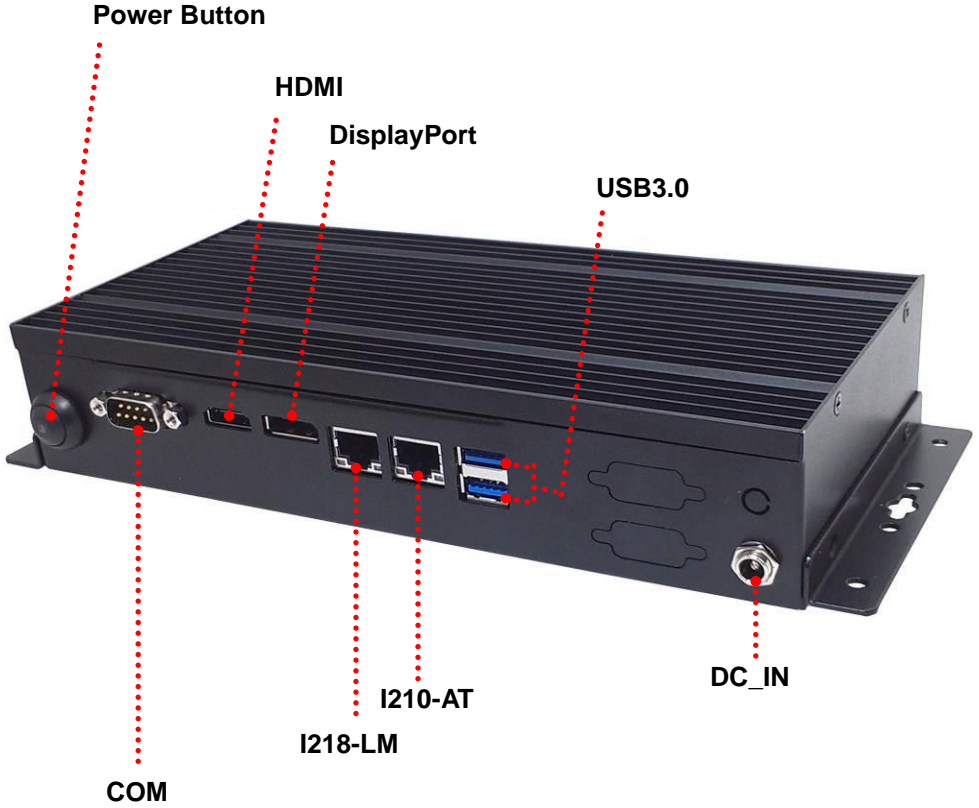


DC_OUT: SATA power 4-pin connector

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

2.5 <I/O Panel>**2.5.1 <Front>**

2.5.2 <Rear>



Chapter 3< Hardware Installation>

3.1<Chassis Setup Procedure>

(a.) Screw off the chassis by the indication as below picture.





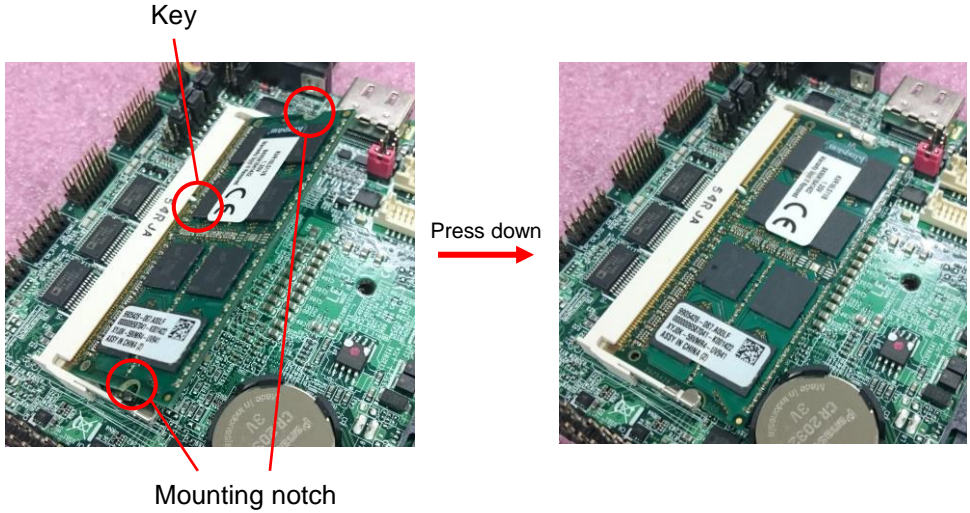
(b.) Push the Chassis shield outward and open it.



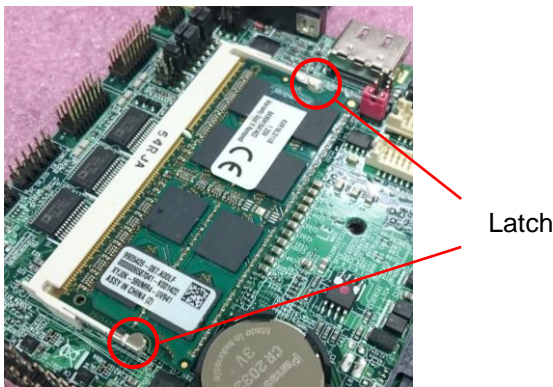
3.1.1 <Memory Setup>

In the process, the system must be powered off.

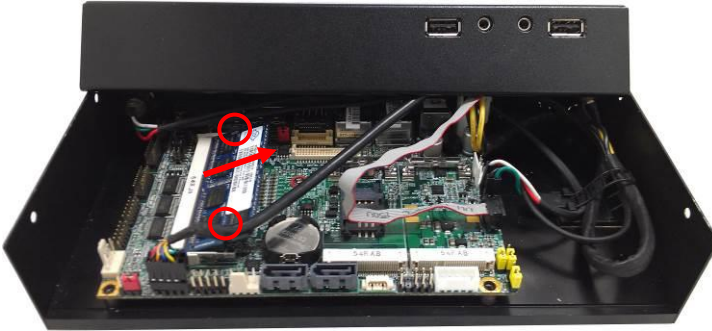
- Put the memory tilt into the slot. Note the Memory notch key aligned slot key.
- Then press down till lock into the mounting notch.



- To remove the memory, push outward on both sides of the latch.



1. Insert the DDRIII-L SO-DIMM module into the socket at 45 degree.



2. Press down the module with a click sound.

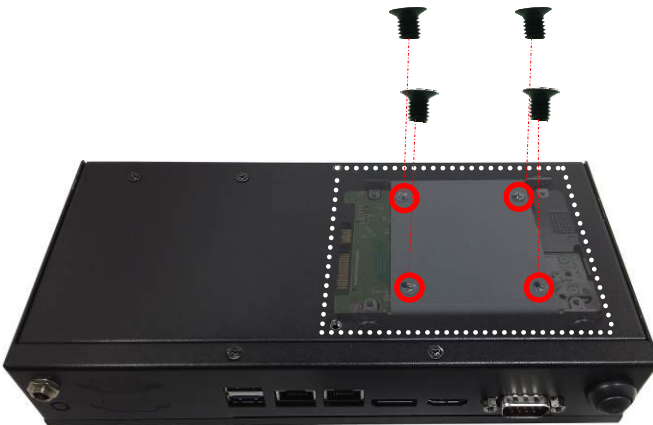


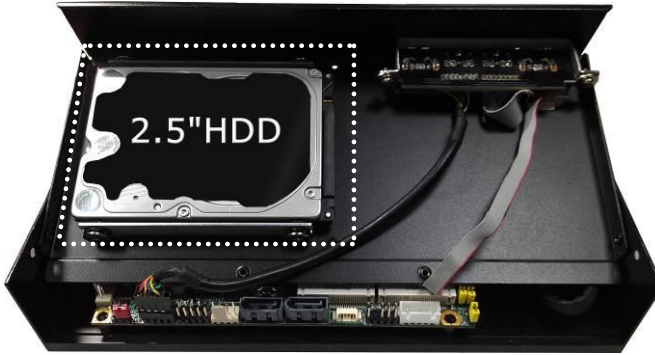
3.1.2<HDD Setup>

1. Put on the HDD driver into HDD holder then turn the HDD drive screws to tighten.



2. Screw on the HDD holder to the chassis bottom.

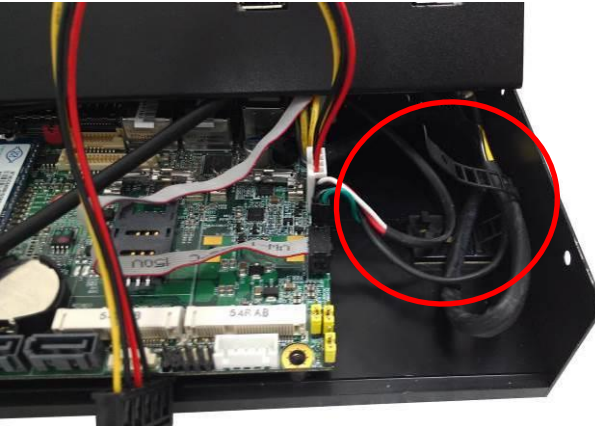




3. Connect SATA power cable to the motherboard.



3.1 Release the Cable Ties



3.2 Sort out the SATA power cable into the Cable Ties and bound the Cable Ties .



4. Connect SATA cable to the motherboard.



5. Connect SATA cable and SATA Power cable from motherboard to the HDD drive.



(c.) Put the Chassis shield back and screw on the chassis by the indication as below picture.





Appendix A <Install Desk/Wall mount>



(a.) Screw off the chassis by the indication as below picture.





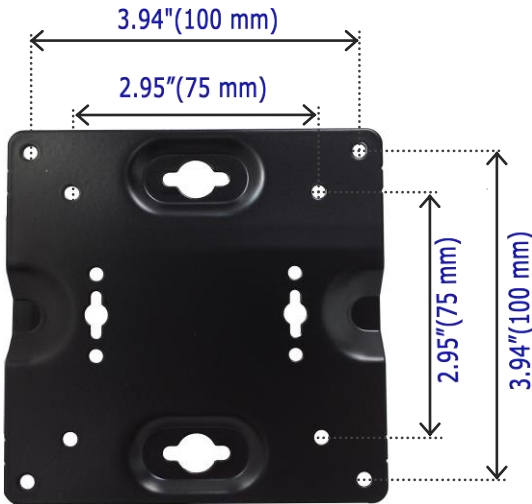
(b.) Screw on the rack mount by the indication as below picture.



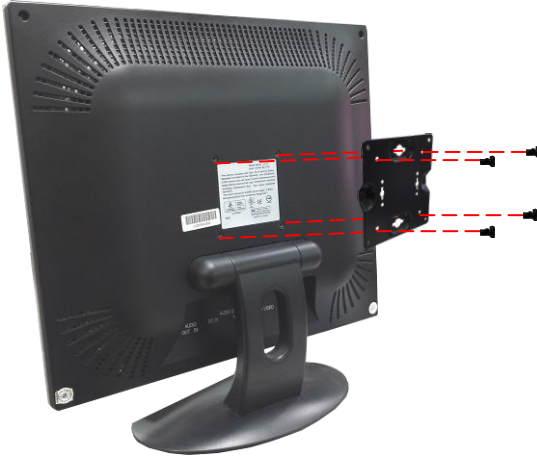


Appendix B <Install VESA mount>

VESA Mount with 75x75mm - 100x100mm mounting pattern



- (a.) Attach the VESA mount bracket to the back of monitor , and screw on the VESA mount like below picture .



(b.) Attach the two large screws to the bottom of the CMB-37E.



(c.) Insert the heads of the two screws on the CMB-37E , and into the holes on the VESA bracket and slide the chassis to stuck .



Perspective View



Contact information

Any advice or comment about our products and service, or anything we can help you please don't hesitate to contact with us. We will do our best to support you for your products, projects and business.

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