LPC-0809

8" Multi-functional Touch Panel Computer

Quick Reference Guide

3rd Ed – 25 February 2019

Part No. E2017L890A2R

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.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTATLLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

A Message to the Customer

Avalue Customer Services

Each and every Avalue's product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new Avalue device is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name Avalue has come to be known.

Your satisfaction is our primary concern. Here is a guide to Avalue's customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

Technical Support

We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual; please visit our Web site at:

http://www.avalue.com.tw/

Content

1.3 System Specifications

Panel ⊙	
LCD size	8"
Display type	SVGA TFT
Resolution	800 x 600
Pixel pitch	0.0675mm(H) x 0.2025mm(V)
Luminance	500 cd/m²
Contrast ratio	500
Viewing angle	50(U), 70(D), 70(L), 70(R)
Response time	25 ms
Backlight	LED
Touch type	5 Wires resistive
Touch Light Transmission	80%
Touch interface	USB EETI
System ⊙	
Board	ECM-BYT
CPU	Onboard　Intel® Atom Quad-Core E3845 1.91GHz with integrated chipset
I/O Chipset	E/C IT8528E
Memory	One 204-pin DDR3L SODIMM Socket Supports Up to 8GB DDR3L 1333 SDRAM
SSD	One CompactFlash Type I/ II Socket
Expansion	1 x Mini PCIe (mSATA Supported)
Rear I/O ⊙	
Serial Port	1 x RS-232, 1 x RS-232 or Optional RS-422/485
Ethernet	Dual Intel® I211AT Gigabit LAN
WIFI	Optional USB WiFi 802.11 b/g
VGA	1 x DB-15
HDMI	1 x HDMI
Audio	Line out (Realtek ALC892)
USB	4 x USB (Rear 1 x USB 3.0)
Mechanical & Environment ⊙	
Color	Front panel Silver
Mounting	Rear panel Black
System Power Requirement	+12 V ~ +26 V
Power Adapter	Input: 100~240 Vac/ 50~60 Hz

LPC-0809

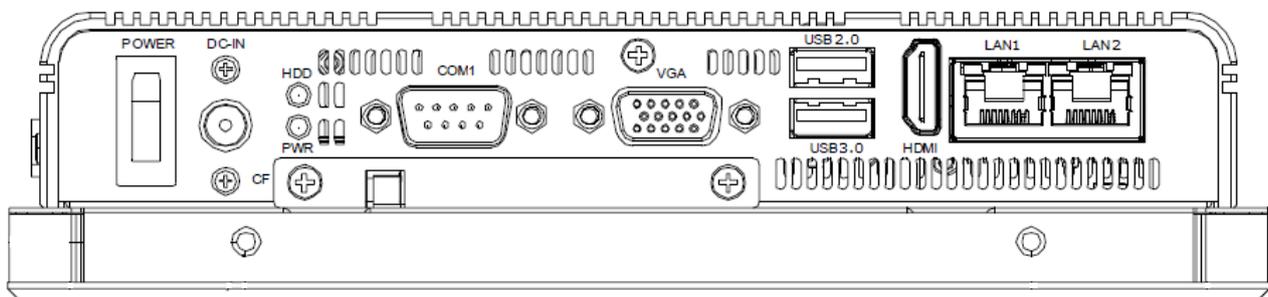|	Output: +12 Vdc / 5 A (60W)
Operating Temp.	0°C to 40°C
Storage Temp.	-20°C to 60°C
Relative Humidity	10% to 95% @ 40°C, non-condensing
Mounting	Wall/Stand/VESA 75 mm X 75 mm
Dimensions	202.5 x 159.5 x 46.5 mm
Weight	1.5 Kgs

Note: Specifications are subject to change without notice.

1.4 System Overview

1.4.1   Right View
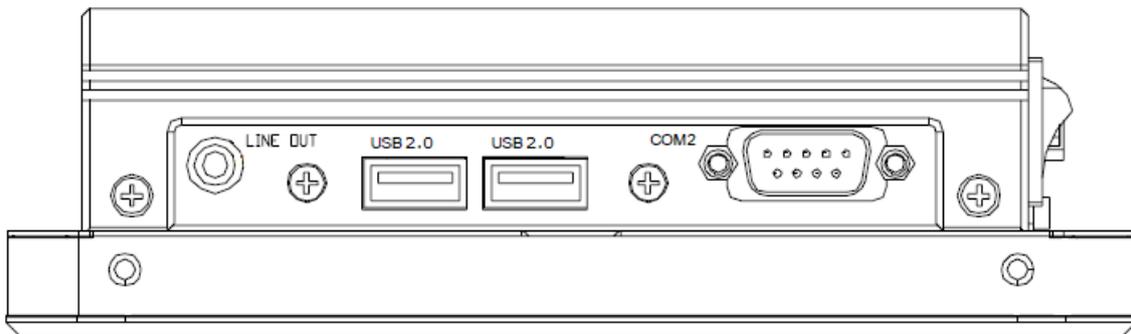
1.4.2   Bottom View

Connectors

Label	Function	Note
POWER	Power on button	
CF	CF Type I/II Socket with Ejector	
COM1/2	Serial port 1/2 connector	DB-9 male connector **Note**：COM1 support RS422/485 by BIOS setting
LINE OUT	Line-out audio jack	
USB	USB 3.0 connector x 1 USB 2.0 connector x 3	
LAN	RJ-45 Ethernet connector x 2	
HDMI	HDMI connector	
HDD	HDD indicator	
PWR	System power indicator	
VGA	VGA connector	
DC-IN	DC Power-in connector	

1.5 System Dimensions

WiFi antenna

MAX. DP=3.5mm
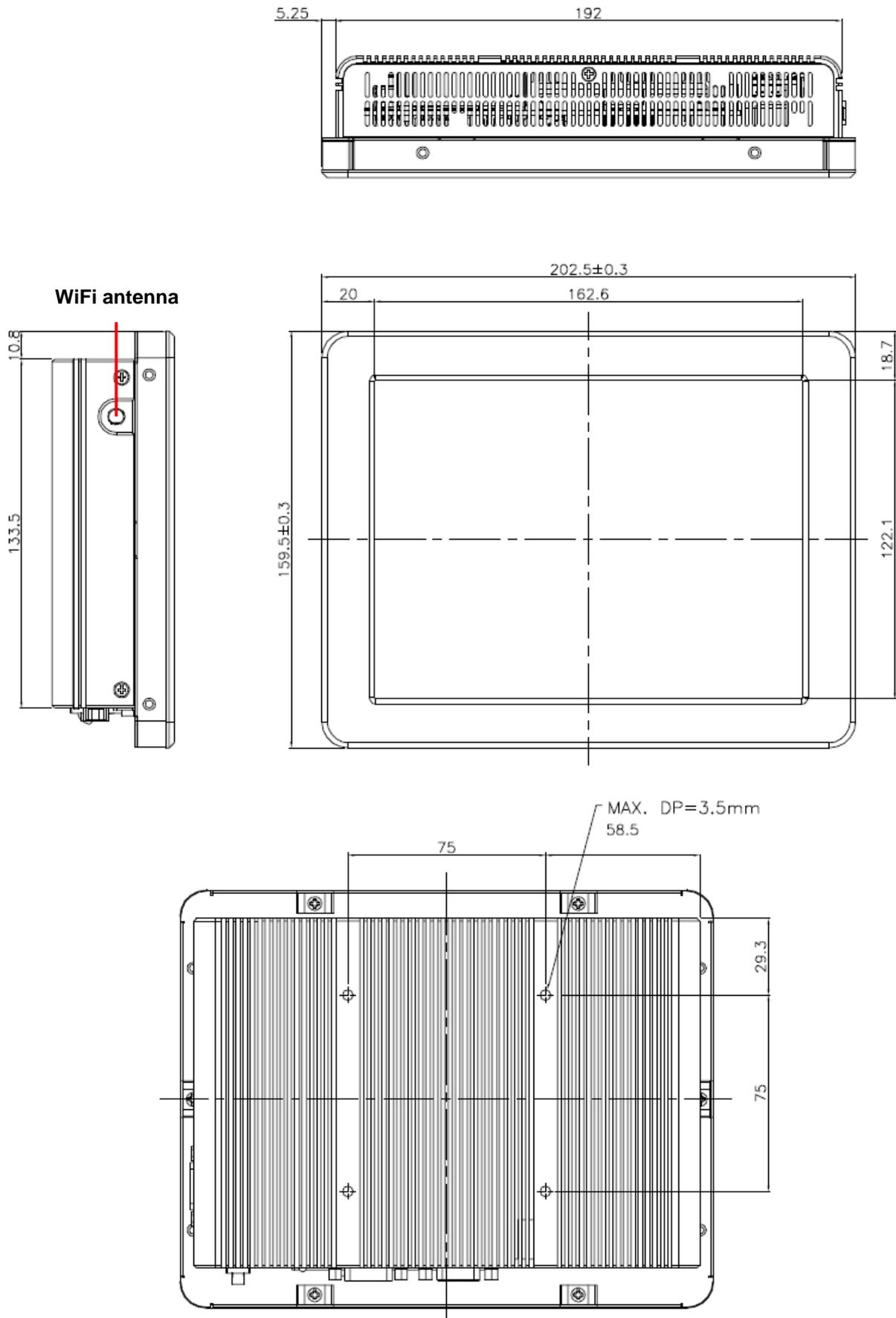
(Unit: mm)

2. Hardware Configuration

For advanced information, please refer to:

1- ECM-BYT User's Manual

Note: If you need more information, please visit our website:

http://www.avalue.com.tw

2.1 LPC-0809 connector mapping

2.1.1   Serial port 1 connector (COM1)
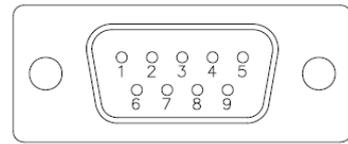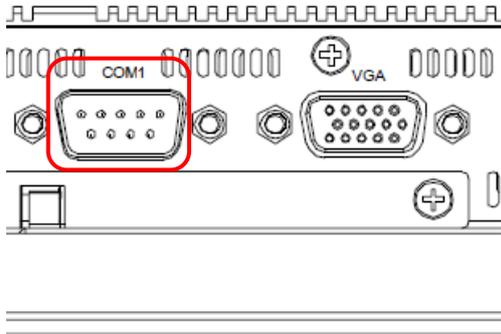
RS-232

Signal	PIN	PIN	Signal
DCD	1	6	DSR
RXD	2	7	RTS
TXD	3	8	CTS
DTR	4	9	RI
GND	5		

RS-422

Signal	PIN	PIN	Signal
TxD-	1	6	NC
RxD+	2	7	NC
TxD+	3	8	NC
RxD-	4	9	NC
GND	5		

RS-485

Signal	PIN	PIN	Signal
DATA-	1	6	NC
NC	2	7	NC
DATA+	3	8	NC
NC	4	9	NC
GND	5		

2.1.2 Serial port 2 connector (COM2)
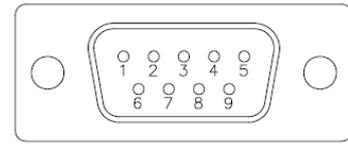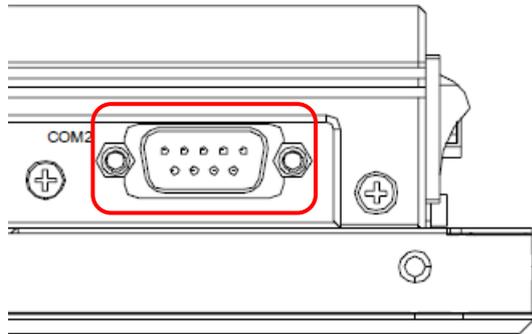
Signal	PIN	PIN	Signal
NDCD#	1	6	NDSR#
NRXD	2	7	NRTS#
NTXD	3	8	NCTS#
NDTR#	4	9	NRI#
GND	5		

2.1.3 VGA connector (VGA)
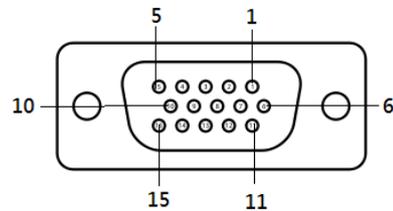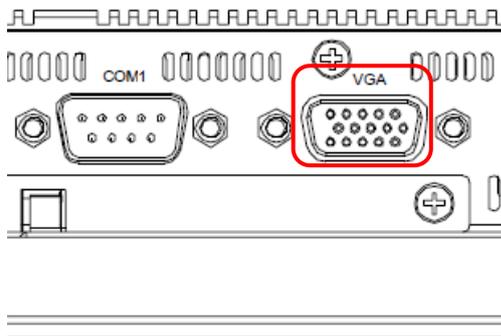
PIN	Signal	PIN	Signal	PIN	Signal
1	R	6	GND	11	NC
2	G	7	GND	12	DATA
3	B	8	GND	13	HSYNC
4	NC	9	+5V	14	VSYNC
5	GND	10	GND	15	CLK

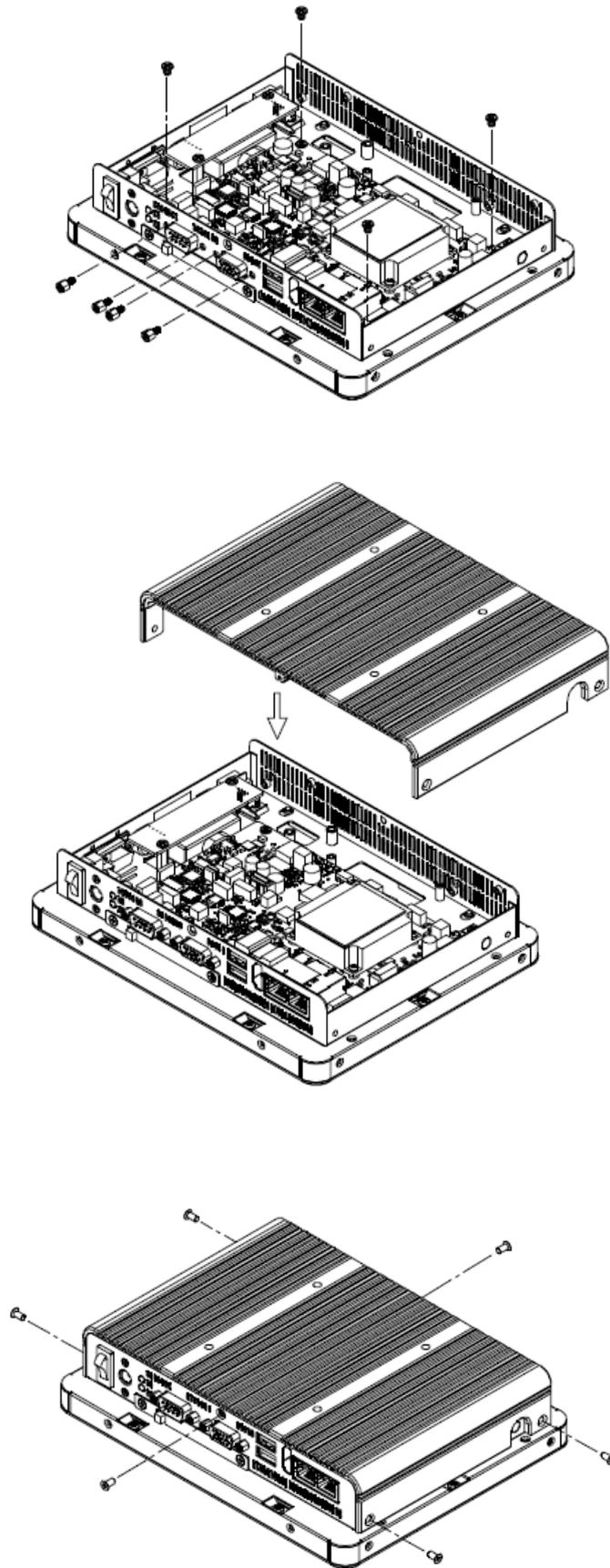## 2.2 Installing Memory
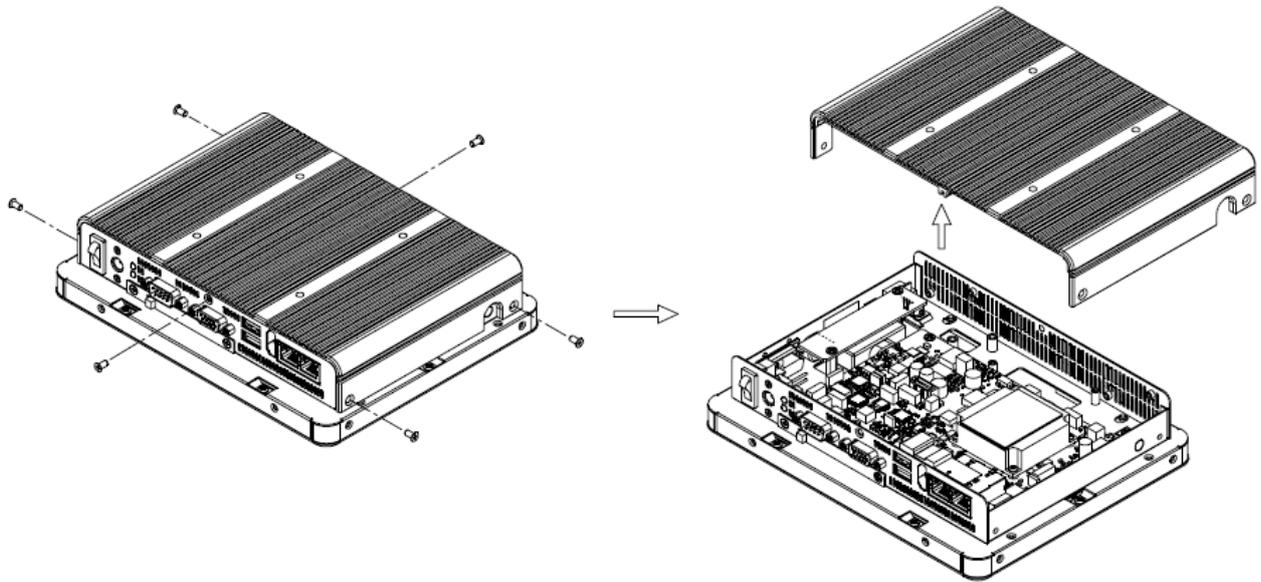
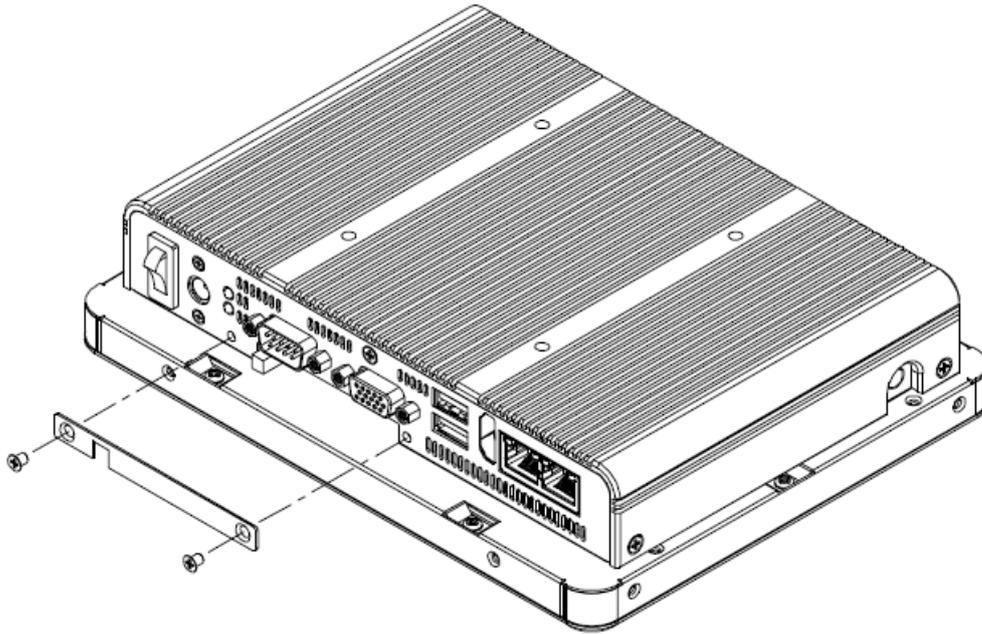**Step 1.** Unfasten 6 screws to remove the bottom chassis.
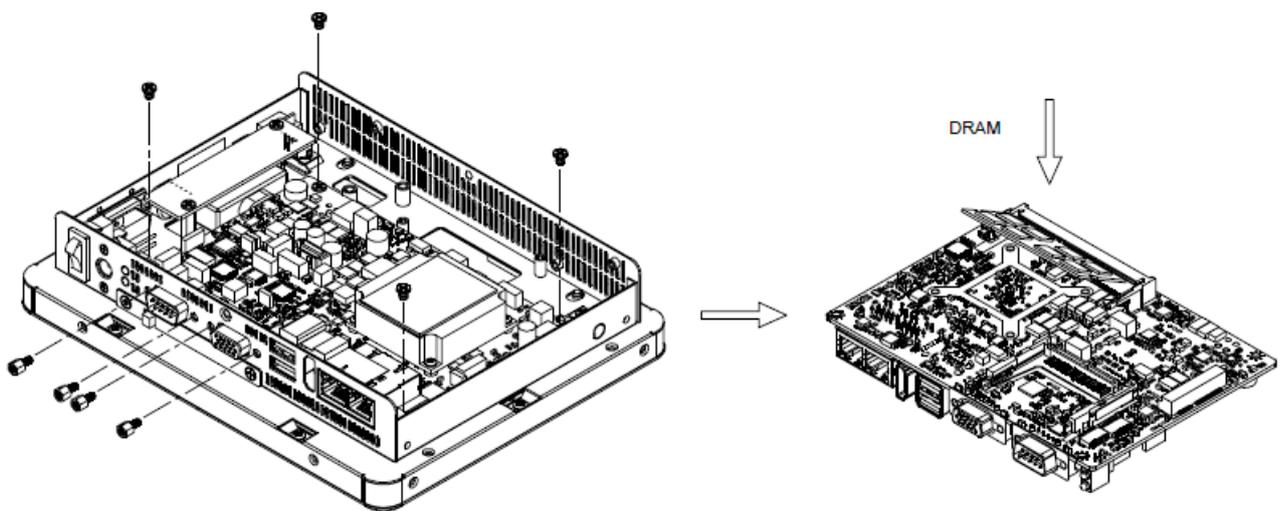
Step 2. Unlock 4 coppers from the rear I/O of VGA & COM ports.

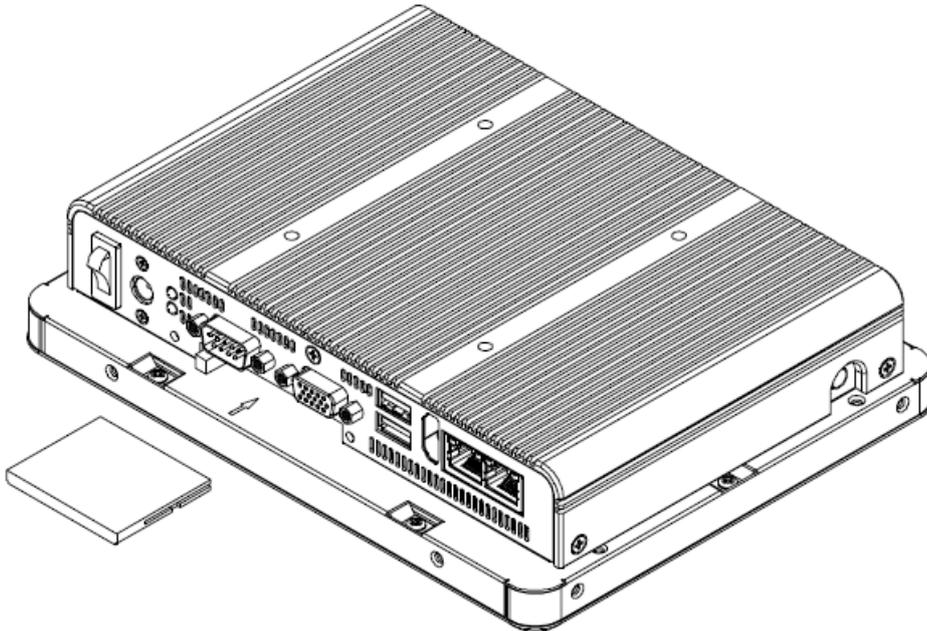**Step 3.** Release 4 screws to take off the board, and install the RAM module into the memory slot.

Step 4. Assemble the board and bottom chassis back as step 3 to step 1.

2.3 Installing CF Card

Step 1. Unlock 2 screws from the rear side of the panel PC as above.

Step 2. Put the CF card into the socket and fasten 2 screws back.