LPC-17 Series

Fanless 17” SXGA TFT
Multifunctional Touch Panel PC

Quick Reference Guide

2nd Ed – 19 November 2013

Part No. E2017LP17A1R

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 INSTALLED 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.

Notice

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into body, or (b) support or sustain life and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

A Message to the Customer

Avalue Customer Services

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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.

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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/

Contents

1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.
Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

1.2 Packing List

- 1 x LPC 17" Series Panel PC
- 1 x DVD-ROM contains the followings:
  - User's Manual (this manual in PDF file)
  - Ethernet driver and utilities
  - VGA drivers and utilities
  - Audio drivers and utilities
  - WiFi drivers and utilities
  - Touch controller drivers and utilities
  - Chipset drivers and utilities
- 1 x Power Adapter
- 4 x VESA mounting screws

If any of the above items is damaged or missing, contact your retailer.

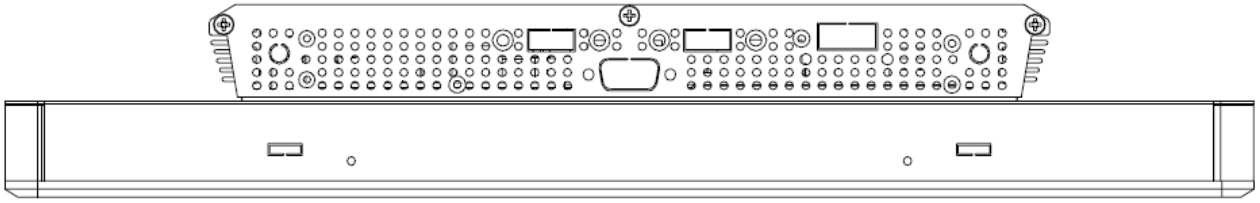
1.3 System Specifications

Panel			
Model	**LPC-1705**	**LPC-1707**	**LPC-17A4**
LCD size	17”, 4:3		
Display type	SXGA TFT		
Resolution	1280 x 1024		
Pixel Pitch	0.264mm (H) x 0.264mm (V)		
Luminance	350cd/m2		
Contrast ratio	800		
Viewing angle	80 (U), 80 (D), 85 (L), 85 (R)		
Response time	30 ms		
Backlight	LED		
Touch screen	5-wire Resistive		
Light transmission	80%		
Touch interface	USB		
System			
Board	EBM-PNV	EBM-CDV	EBM-A50M
CPU	Onboard Intel® Atom™ D525 Dual Core 1.8GHz CPU	Onboard Intel® Atom™ D2550 1.86GHz CPU	Onboard AMD eOntario T40E 1.0GHz CPU
System Chipset	Intel® ICH8-M	Intel® NM10 Chipset	AMD A50M Chipset
I/O Chip	Nuvoton W83627DHG-P	E/C IT8518E	Nuvoton W83627DHG-P
System Memory	Onboard 1GB SDRAM and One 204-pin SODIMM Supports Up to 3GB DDR3 800MHz SDRAM	One 204-pin SODIMM Supports Up to 4GB DDR3 1066MHz SDRAM	Onboard 2GB 1066MHz DDR3 and One 204-pin SODIMM Supports Up to 4GB DDR3 1066MHz
SSD	One CF Socket by IDE Secondary Slave Channel Supports Type I/II Compact Flash Card	One CF Socket by IDE Secondary Slave Channel Supports Type I/II Compact Flash Card	One CF Socket by IDE Secondary Slave Channel Supports Type I/II Compact Flash Card
Hard Driver Bay	One 2.5” SATA HDD	One 2.5” SATA HDD	One 2.5” SATA HDD
Watchdog Timer	Reset: 1sec. ~ 255min. and 1sec. or 1min./step	Reset: 1sec. ~ 255min. and 1sec. or 1min./step	Reset: 1sec. ~ 255min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring System Temperature, Voltage, and Cooling Fan Status with Auto Throttling Control	Monitoring System Temperature, Voltage, and Cooling Fan Status with Auto Throttling Control	Monitoring System Temperature, Voltage, and Cooling Fan Status with Auto Throttling Control
Expansion	2 x Mini PCIe Slot	1 x Mini PCIe Slot, Optional Supports mSATA	2 x Mini PCIe Slot, Optional Supports mSATA
Rear Panel I/O			
Serial Port	1xRS-232/422/485 (default RS-232, RS-422/485 setting by jumper) Optional 2nd COM		
Ethernet	1 x RJ-45 (Intel® 82574L	1 x RJ-45 (Intel® 82574L	2 x RJ-45 (Dual Realtek

	Gigabit Ethernet, Optional Dual 82574L Gigabit Ethernet)	Gigabit Ethernet, Optional Dual 82574L Gigabit Ethernet)	RTL8111E Gigabit Ethernet)
VGA	1 x DB-15	1 x HDMI	1 x HDMI
Audio	Line-out (Realtek ALC888 Supports 5.1-CH Audio)	Line-out (Realtek ALC892 Supports 5.1-CH Audio)	Line-out (Realtek ALC892 Supports 5.1-CH Audio)
USB	2 x USB 2.0 (Optional Extra 2 x USB)		
Mouse & K/B	1 x PS/2 KB & MS	1 x PS/2 KB & MS	N/A
Speaker	2 x 1W Speaker		
Environment & Mechanical			
Color	Front Silver & Rear Panel Black		
Mounting	Wall/ Stand/ VESA 75mm x 75mm and 100mm x 100mm		
System Power Requirement	+12 ~ +26V DC Power Input	+12 ~ +26V DC Power Input	+12 ~ +26V DC Power Input
Power Adapter	Input: 100 ~ 250VAC/ 47 ~ 63Hz Output: 60W Adapter (12V @ 5A Adapter)		
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)		
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)		
Relative Humidity	5% ~ 90% Relative Humidity, Non-condensing		
Dimensions (W x D x H)	382mm x 320mm x 58.8mm		
Weight	5.2Kgs		

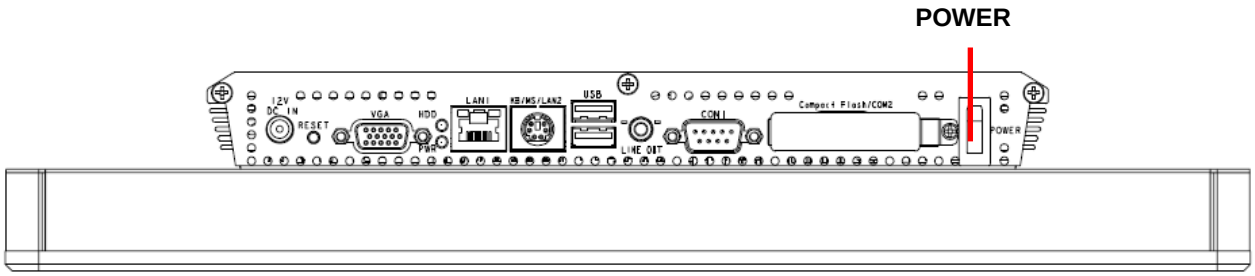
1.4 System Overview

1.4.1 Front View

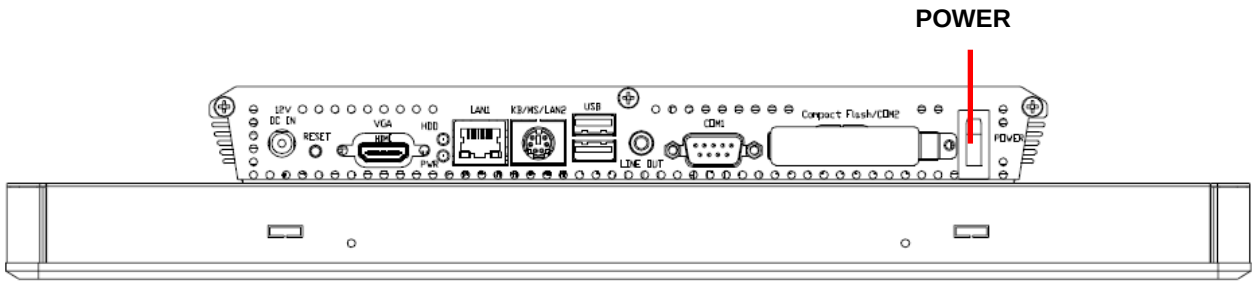


1.4.2 Rear View

LPC-1705



LPC-1707/LPC-17A4

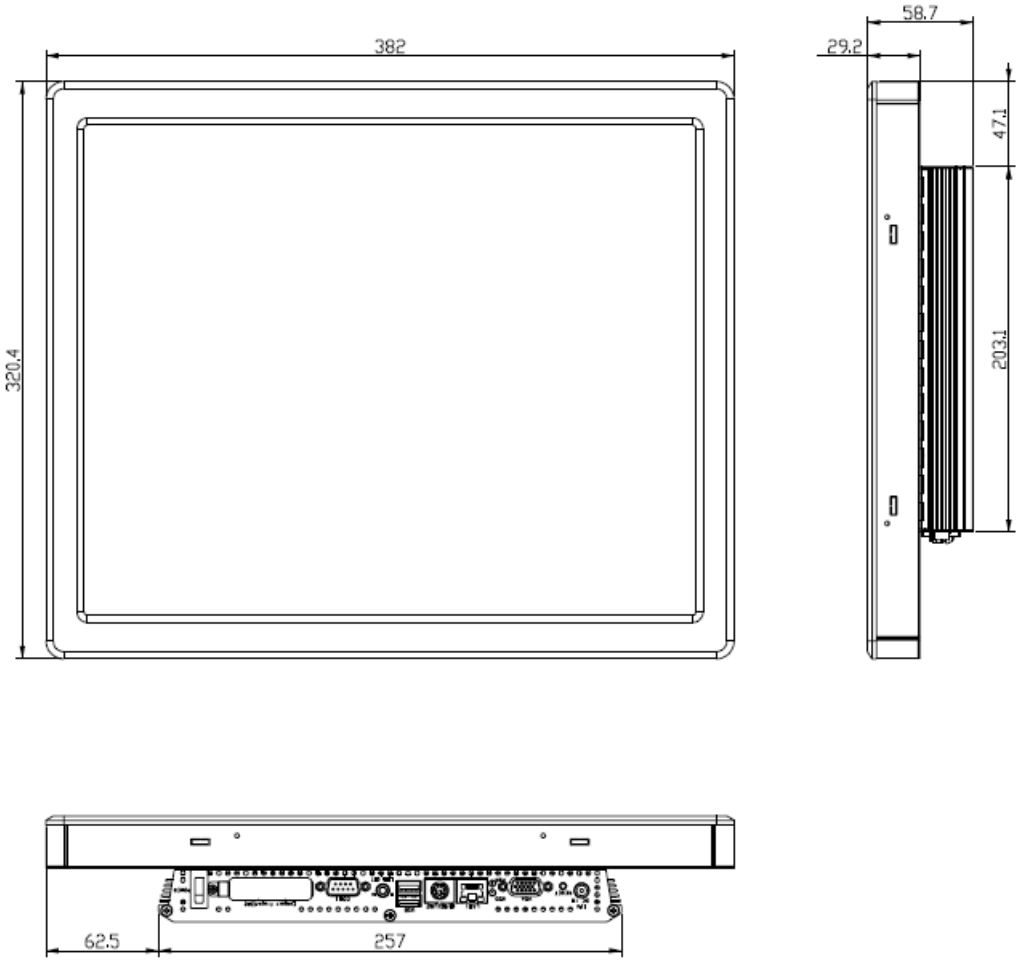


Connectors

Label	Function	Note
POWER	Power on button	
Compact Flash/COM2	CF Type I/II Socket with Ejector	Optional for 2nd COM port
COM1	Serial port 1 connector	DB-9 male connector
LINE OUT	Line-out audio jack	
USB	2 x USB 2.0 connector	Dock USB
LAN1	RJ-45 Ethernet connector 1	
KB/MS	LPC-1705/1707 -- PS/2 connector	
(LAN2)	LPC-17A4 -- LAN2	
HDD	HDD indicator	
PWR	System power indicator	
VGA/HDMI	CRT connector/HDMI connector	
RESET	Reset button	
DC-IN	DC Power-in connector	

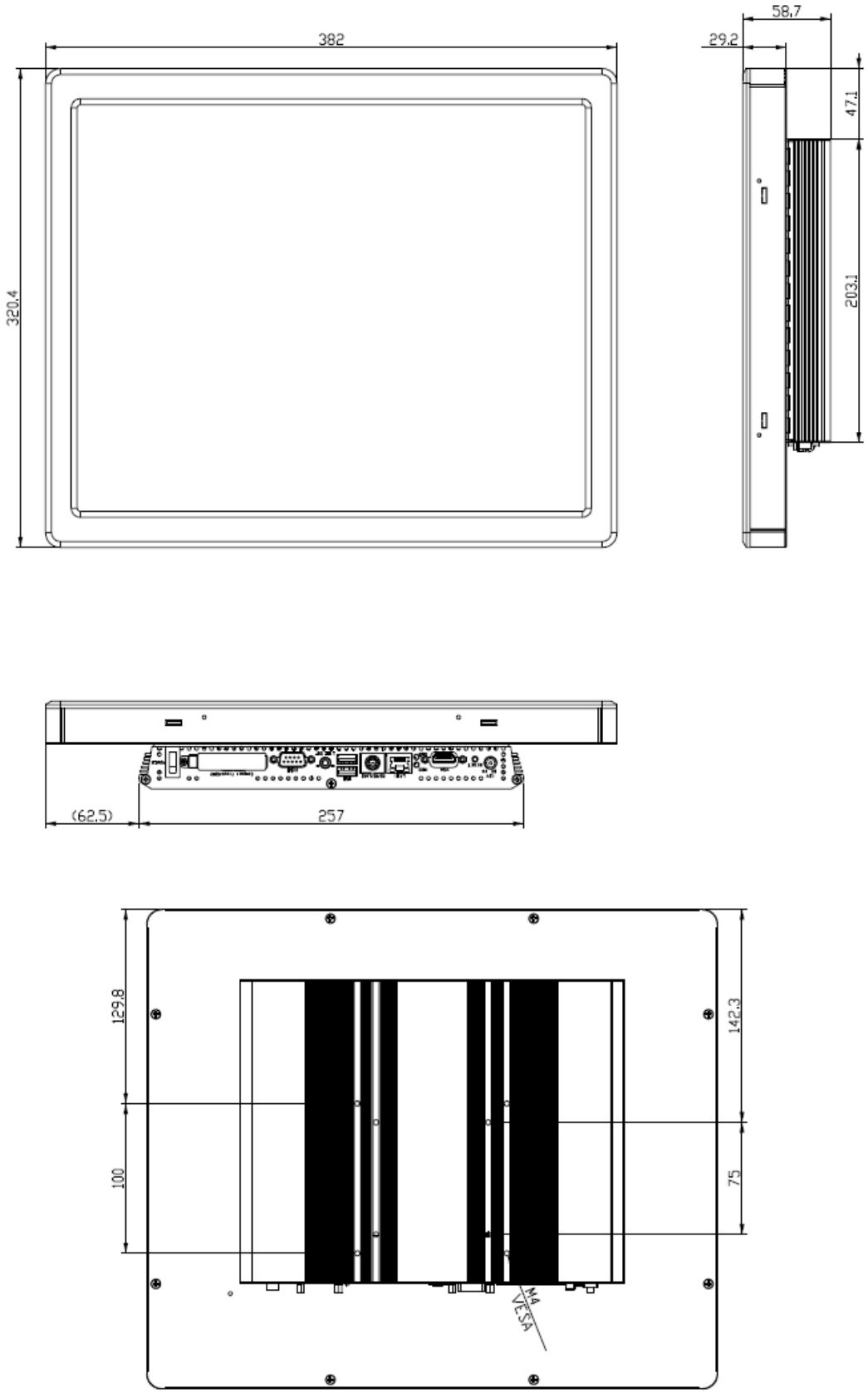
1.5 System Dimensions

1.5.1 LPC-1705 Front and Rear side



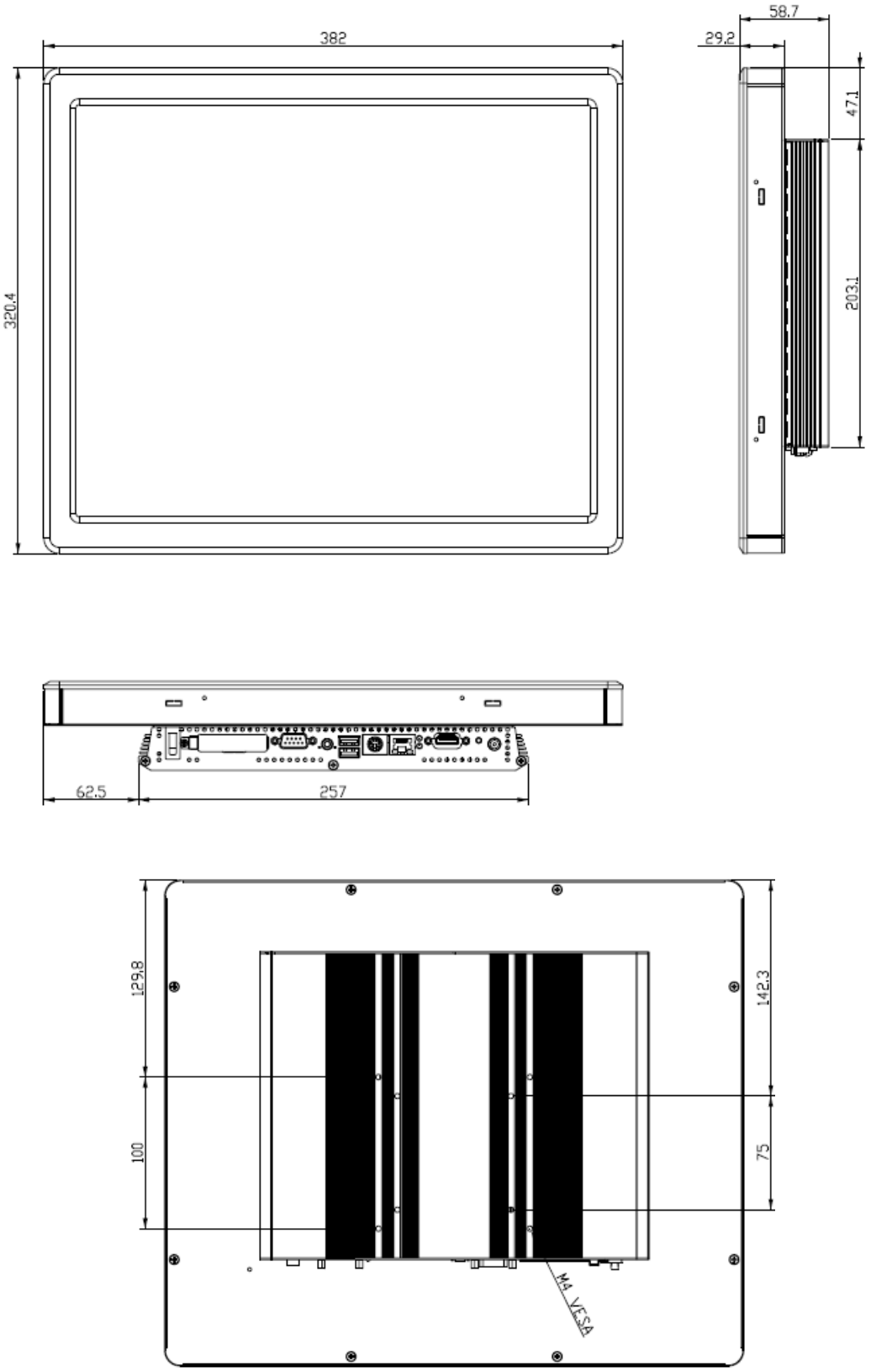
(Unit: mm)

1.5.2 LPC-1707 Front and Rear side



(Unit: mm)

1.5.3 LPC-17A4 Front and Rear side



(Unit: mm)

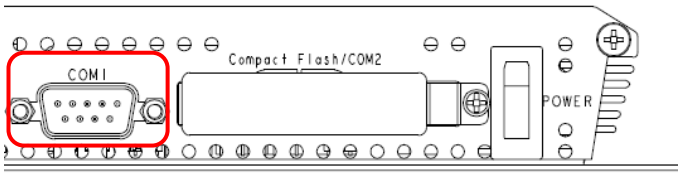
2. Hardware Configuration

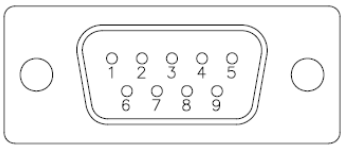
Note: If you need more information, please visit our website:

http://www.avalue.com.tw

2.1 LPC 17 Series connector mapping

2.1.1 Serial Port 1 connector (COM1)





In RS-232 Mode

Signal	PIN	PIN	Signal
DCD1	1	2	RxD1
TxD1	3	4	DTR1
GND	5	6	DSR1
RTS1	7	8	CTS1
RI1	9		NC

In RS-422 Mode

Signal	PIN	PIN	Signal
TxD1-	1	2	RxD1+
TxD1+	3	4	RxD1-
GND	5	6	NC
NC	7	8	NC
NC	9		NC

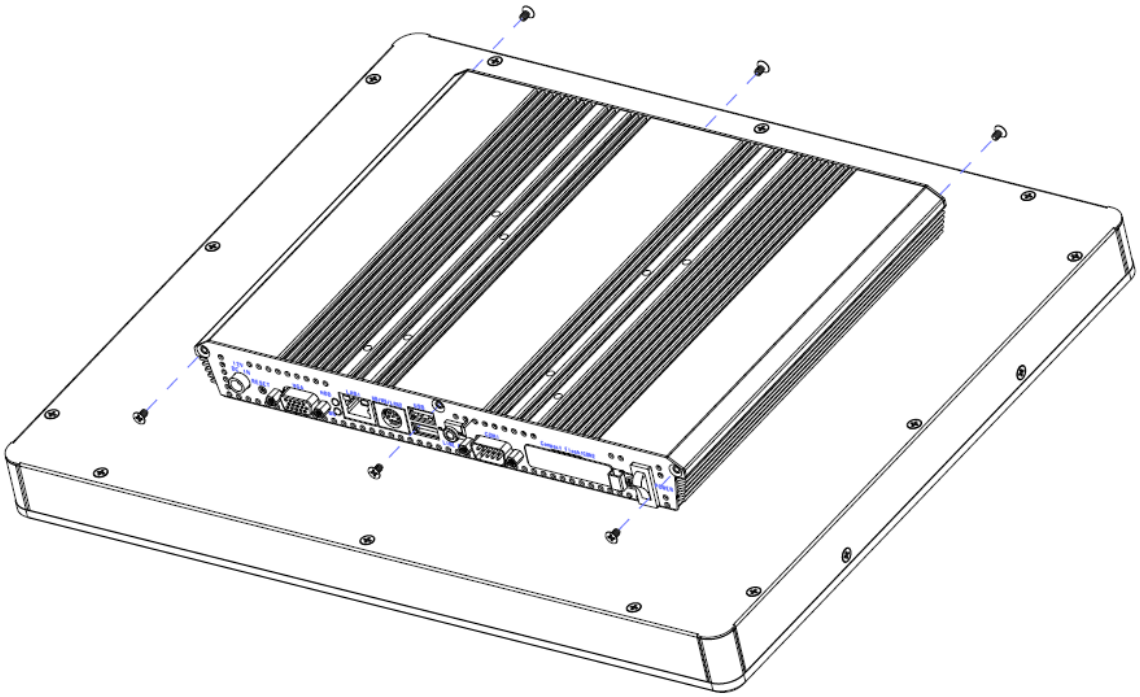
In RS-485 Mode

Signal	PIN	PIN	Signal
DATA1-	1	2	NC
DATA1+	3	4	NC
GND	5	6	NC
NC	7	8	NC
NC	9		NC

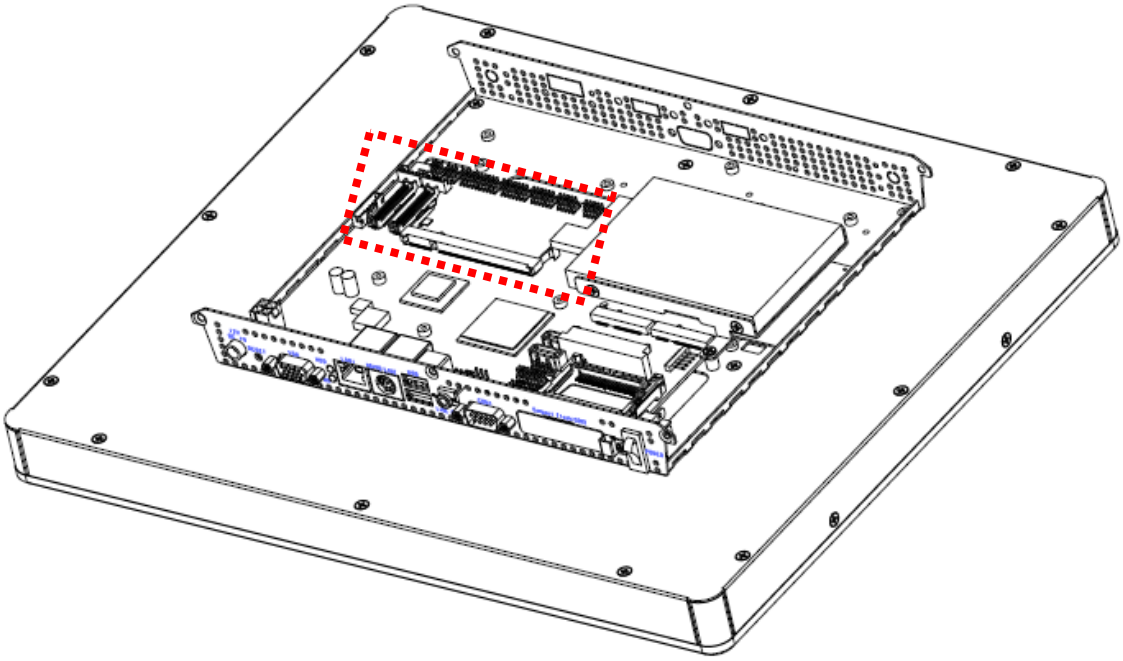
-

2.2 Installing Hard Disk & Memory

Step 1. Unfasten 6 screws from the case. Then take off the top chassis.



Step 2. Insert the SODIMM into the memory socket.



Step 3. Insert the HDD into the Drive Bay. Remember to place the HDD down to the bottom exactly in order to screw the device tightly.