

FPC-1707/17L08

/21W07/21W08

17"/21"W TFT Touch Panel PC

Quick Reference Guide

1st Ed –22 May 2017

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Part No. E2017FP07A1R

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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.

1.2 Packing List

- 1 x FPC-1707/17L08/21W07/21W08 Touch 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
 - Chipset drivers
- Other major components include the followings:
 - 60W/84W adapter(For FPC-1707/21W07 only) and power cord



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

1.3 System Specifications

Panel		
	FPC-1707	FPC-21W07
LCD Size	17", 4:3	21.5"
Display Type	SXGA	Full HD
Resolution	1280 x 1024	1920 x 1080
Pixel pitch	0.264mm (H) x 0.264mm (V)	0.248mm (H) x 0.248mm (V)
Luminance	250 cd/m²	
Contrast ratio	1000	3000
Viewing angle	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response time	5 ms	18 ms
Backlight	LED	
Touch Type	5 Wires resistive	
Touch Light Transmission	80 %	
Touch Controller	USB touch (EETI)	
System		
SBC	EMX-CDV	
Processor	Intel® Atom™ D2550 2-Core 1.86GHz processor	
System Chipset	Intel® ICH10-R Chipset	
I/O Chipset	Fintek F81214	
System Memory	2 x 204-Pin DDR3 800MHz SO-DIMM up to 4GB or 204-Pin DDR3 1066MHz SO-DIMM	
Watchdog Timer	H/W Reset: 1sec.~255sec. and 1sec. or 1min./step	
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control	
Expansion		
Expansion	1 x Mini PCIe 1 x Mini PCIe Supports mSATA	
Storage		
EMI Test	1 x 2.5" Drive Bay	
I/O		
USB	5 x USB 2.0	
Com Port	1 x RS-232/422/485 3 x RS-232	
Other	1 x WiFi	
Display		

Chipset	Intel® Cedarview Integrated Graphics Supports dual display	
Resolution	VGA: Max. resolution 2048 x 1536 @60Hz HDMI: Max. resolution 1920 x 1200 @60Hz LVDS: Max. resolution 1920 x 1080 @60Hz	
Audio		
Chipset	Realtek ALC269 Supports 5.1-CH	
Audio Interface	Mic-In, Line-In and Line-Out	
Speaker Output	2 x 2W	
Ethernet		
Chipset	2 x Realtek 8111E	
Ethernet Interface	10/100/1000 Base-Tx GbE compatible	
Lan Port	2 x RJ-45	
Power Requirement		
Power Connector	Lockable DC Jack	
Power Requirement	+12V	
Power Type	AT/ATX (ATX is default setting)	
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz	
Mechanical & Environmental		
System Fan	Fan	
Construction - Front	Black	
Construction - Rear	Black	
Dimension	387.5 X 346 X 76.6 mm	526 X 346.5 X 80.4 mm
Weight	6.14 Kgs	7.32 Kgs
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
Storage Temperature	-10°C ~ 50°C (14°F ~ 122°F)	
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing	
Vibration Test	With SSD/mSATA : 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis	
Mounting	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm	
Shock Test	With CF/SSD : 10Grms, IEC 60068-2-27, Half Sine, 11ms	

Panel		
	FPC-17L08	FPC-21W08
LCD Size	17", 4:3	21.5"
Display Type	SXGA	Full HD
Resolution	1280 x 1024	1920 x 1080
Pixel pitch	0.264mm (H) x 0.264mm (V)	0.248mm (H) x 0.248mm (V)
Luminance	250 cd/m²	250 cd/m²
Contrast ratio	1000	3000
Viewing angle	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response time	5 ms	18 ms
Backlight	LED	
Touch Type	5 Wires resistive	
Touch Light Transmission	80 %	
Touch Controller	USB touch (EETI)	
System		
SBC	EMX-Q87	
Processor	4th Gen Intel® Core™ i3-4330TE 2-Core 2.4GHz processor 4th Gen Intel® Core™ i5-4570TE 2-Core 2.7GHz processor	
System Chipset	Intel® Q87 Chipset	
I/O Chipset	Nuvoton NTC6106D	
System Memory	2 x 204-Pin DDR3 1333MHz SO-DIMM or 204-Pin DDR3 1600MHz SO-DIMM	
Expansion		
Expansion	1 x Mini PCIe Supports mSATA	
Storage		
EMI Test	1 x 2.5" Drive Bay	
I/O		
USB	4 x USB 3.0 1 x USB 2.0	
Com Port	1 x RS-232/422/485 2 x RS-232	
Other	1 x WiFi	
Display		
Chipset	Intel® Q87 Chipset Integrated Supports triple display	
Resolution	DP: Max. resolution 3840 x 2160 @60Hz LVDS: Max. resolution 1920 x 1200 @60Hz VGA: Max. resolution 1920 x 1200 @60Hz HDMI: Max. resolution 1920 x 1080 @60Hz	
Audio		

Chipset	Realtek ALC892 Supports 5.1-CH	
Audio Interface	Mic-In, Line-In and Line-Out	
Speaker Output	2 x 2W	
Ethernet		
Chipset	1 x Intel® I211AT 1 x Intel® I217LM	
Ethernet Interface	10/100/1000 Base-Tx GbE compatible	
Lan Port	2 x RJ-45	
Power Requirement		
ACPI	Single Power ATX Support S0, S1, S3, S4, S5 ACPI 3.0 Compliant	
Power Type	AT/ATX (ATX is default setting)	
Mechanical & Environmental		
System Fan	Fan	
Construction - Front	Black	
Construction - Rear	Black	
Dimension	387.5 X 346 X 76.6 mm	526 X 346.5 X 80.4 mm
Weight	6.14 Kgs	7.32 Kgs
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
Storage Temperature	-10°C ~ 50°C (14°F ~ 122°F)	
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing	
Vibration Test	With SSD/mSATA : 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis	
Mounting	Wall / Stand / VESA 75mm x 75mm, 100mm x 100mm	
Shock Test	With CF/SSD : 10Grms, IEC 60068-2-27, Half Sine, 11ms	

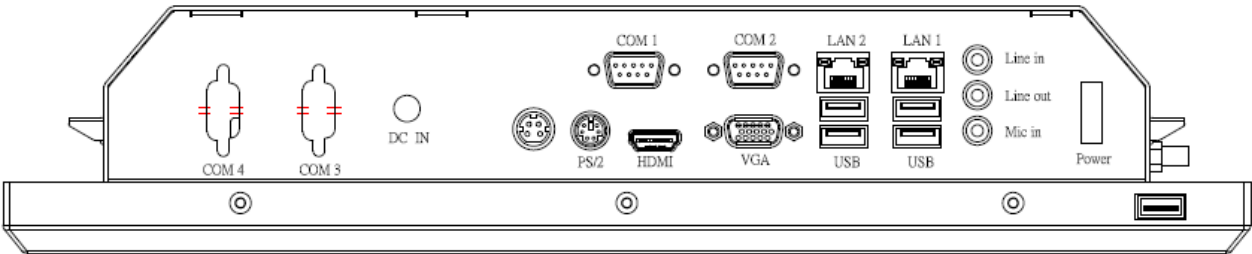


Note: Specifications are subject to change without notice.

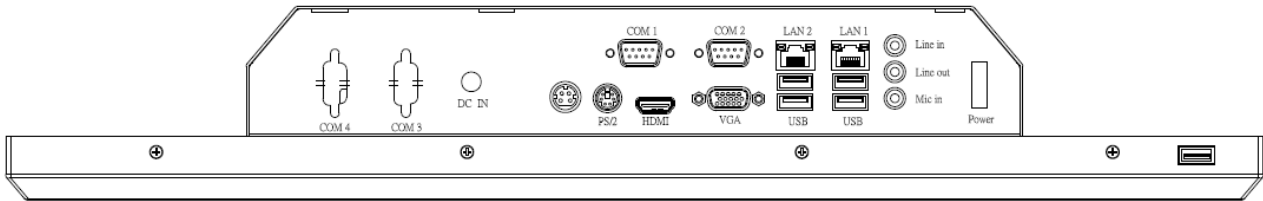
1.4 System Overview

1.4.1 Rear View

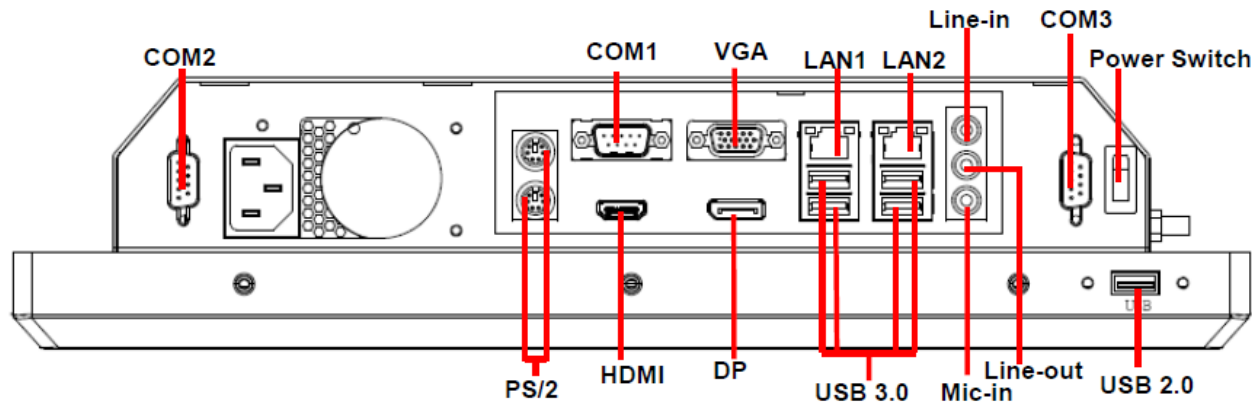
FPC-1707



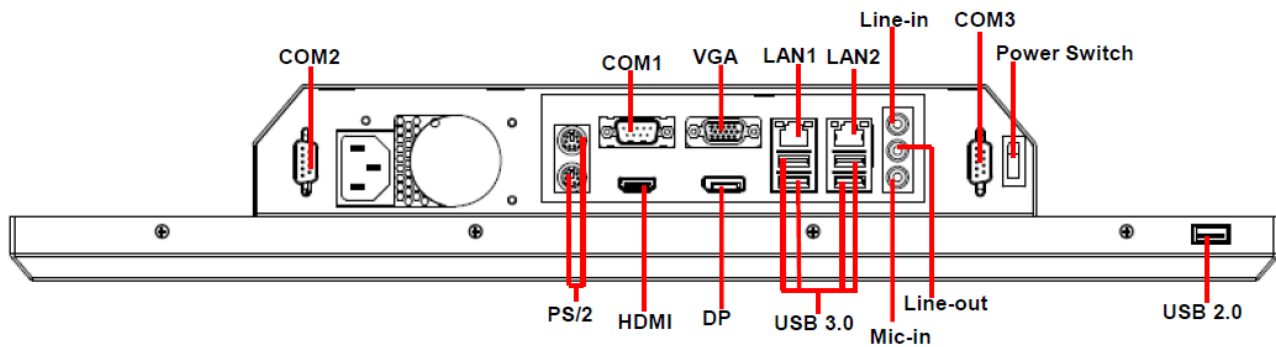
FPC-21W07



FPC-17L08



FPC-21W08



FPC-1707/21W07**Connectors**

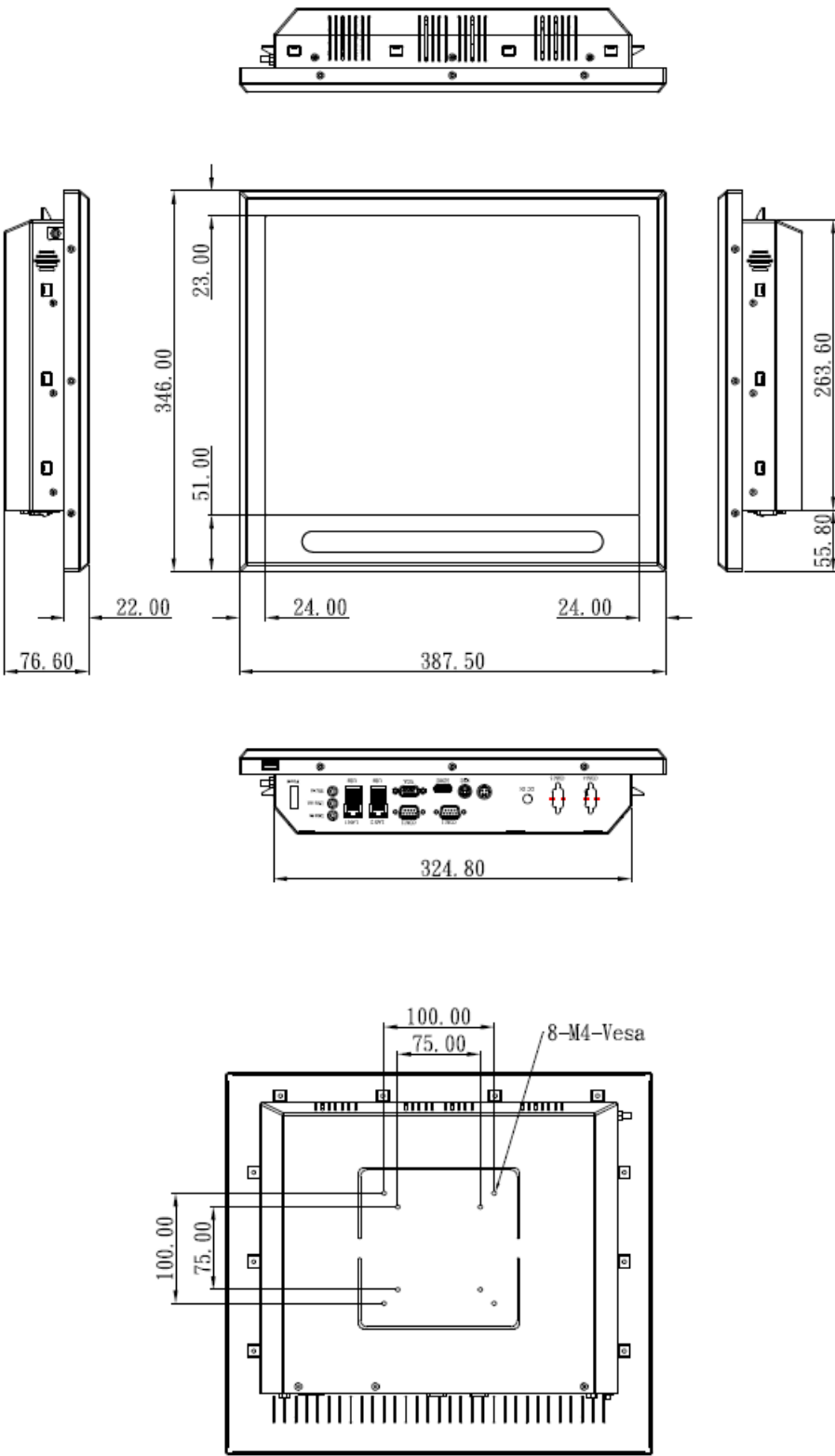
Label	Function	Note
COM1~4	Serial port connector 1~4	DB-9 male connector
HDMI	HDMI connector	
VGA	VGA connector	DB-15 female connector
PS/2	PS/2 connector	
LAN1/2	RJ-45 Ethernet 1/2	
Line-in	Line-in audio jack	
Line-out	Line-out audio jack	
Mic-in	Microphone-in audio jack	
Power Switch	System power switch	
USB	5 x USB 2.0 connector	
DC-IN	DC power-in connector	

FPC-17L08/21W08**Connectors**

Label	Function	Note
COM1~3	Serial port connector 1~3	DB-9 male connector
HDMI	HDMI connector	
VGA	VGA connector	DB-15 female connector
PS/2	PS/2 connector	
LAN1/2	RJ-45 Ethernet 1/2	
Line-in	Line-in audio jack	
Line-out	Line-out audio jack	
Mic-in	Microphone-in audio jack	
Power Switch	System power switch	
USB	4 x USB 3.0 connector 1 x USB 2.0 connector	
DP	DP connector	

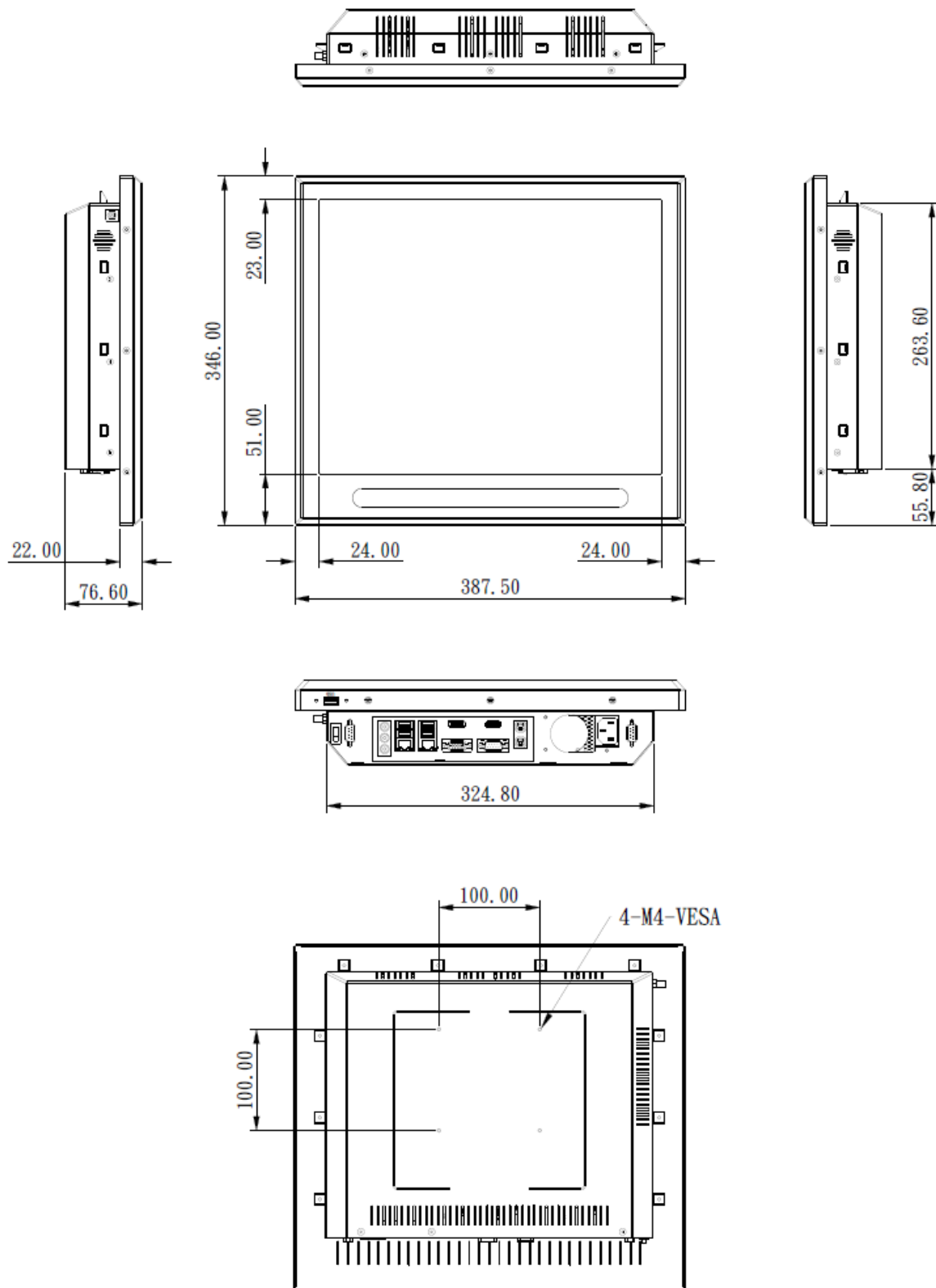
1.5 System Dimensions

1.5.1 FPC-1707



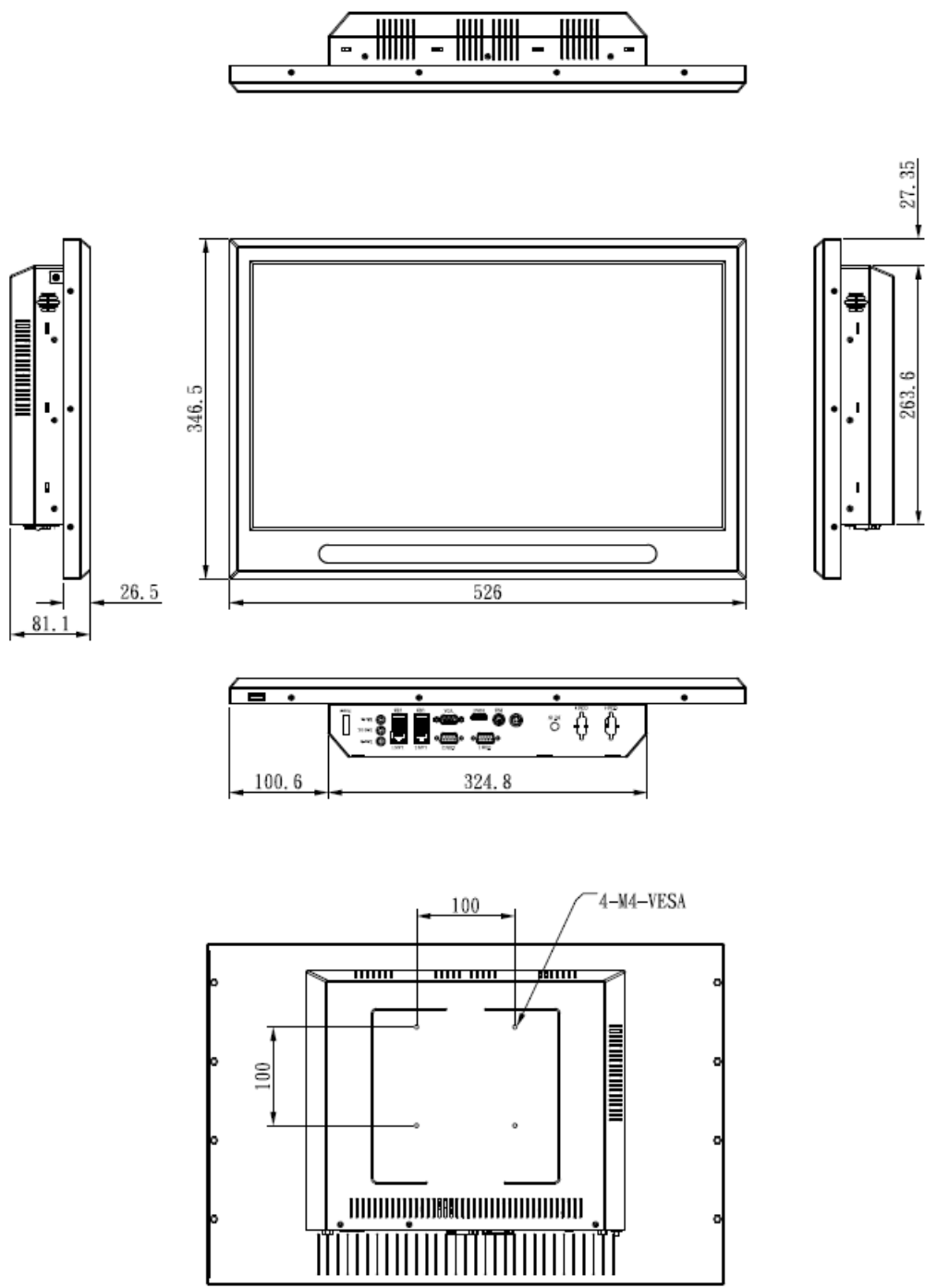
(Unit: mm)

1.5.2 FPC-17L08



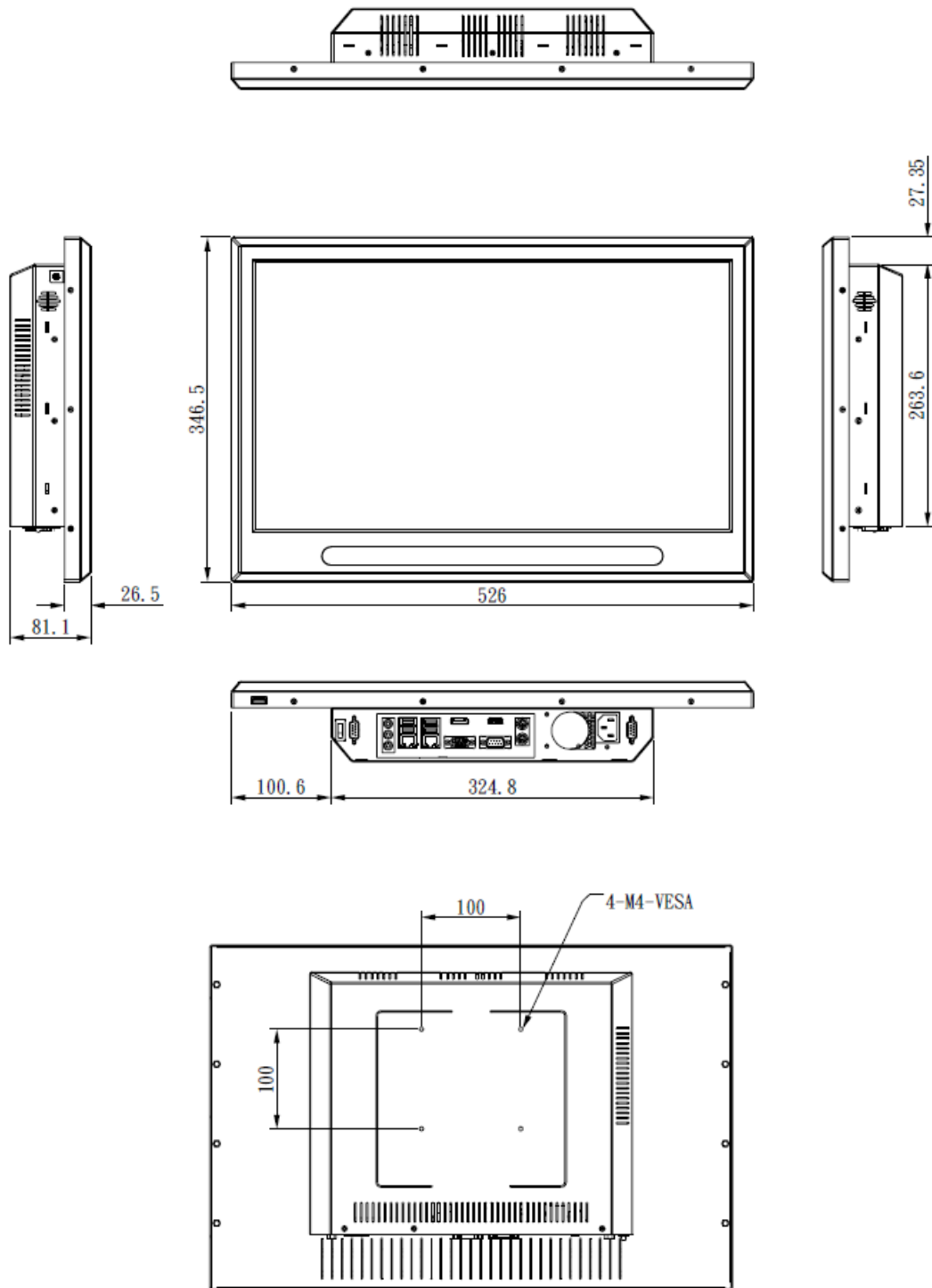
(Unit: mm)

1.5.3 FPC-21W07



(Unit: mm)

1.5.4 FPC-21W08



(Unit: mm)

2. Hardware Configuration

For advanced information, please refer to:

- 1- EMX-CDV and EMX-Q87 User's Manual

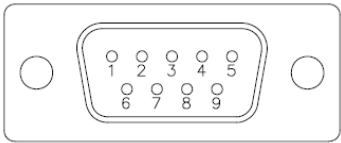
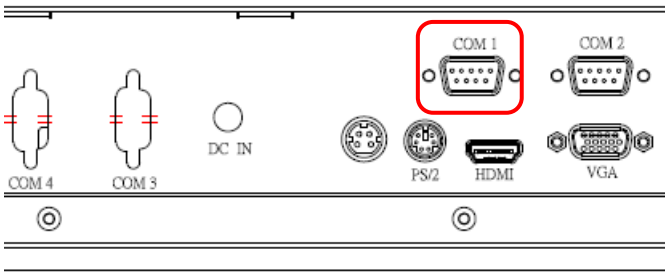


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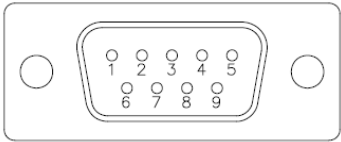
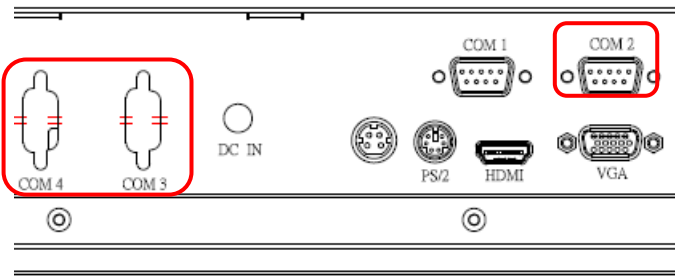
2.1 FPC-1707/21W07 connector mapping

2.1.1 Serial Port connector 1(COM1)



Pin	RS-232	RS-485	RS-422
1	DCD	TXD-	TXD-
2	RXD	TXD+	TXD+
3	TXD		RXD+
4	DTR		RXD-
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS		
9	RI		

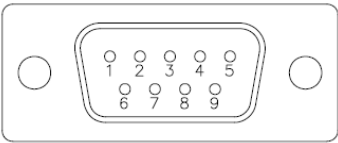
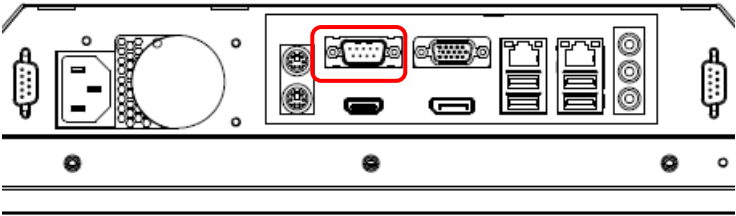
2.1.2 Serial Port connector 2~4 (COM2~4)



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

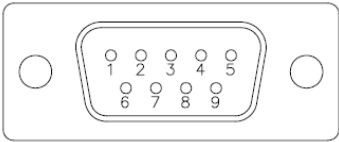
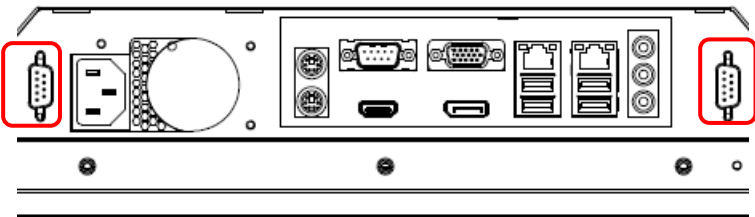
2.2 FPC-17L08/21W08 connector mapping

2.2.1 Serial Port connector 1(COM1)



Pin	RS-232	RS-485	RS-422
1	DCD	TXD-	TXD-
2	RXD	TXD+	TXD+
3	TXD		RXD+
4	DTR		RXD-
5	GND	GND	GND
6	DSR		
7	RTS		
8	CTS		
9	RI		

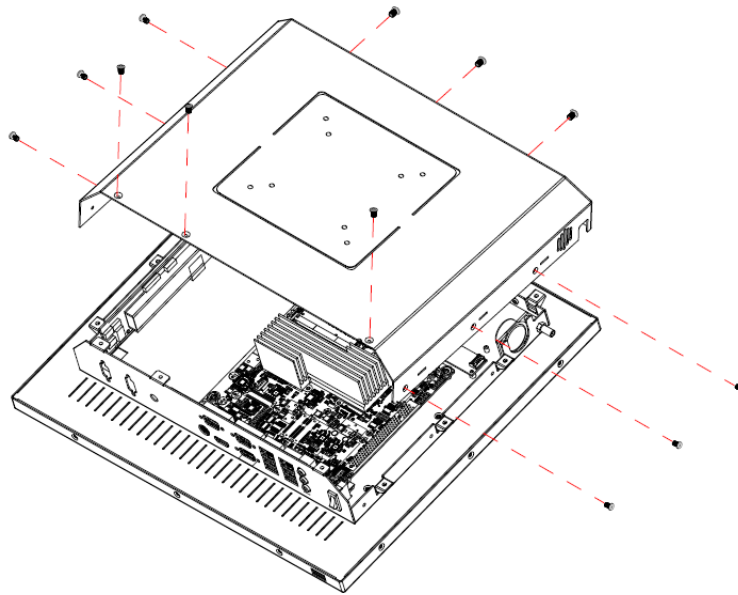
2.2.2 Serial Port connector 2~3 (COM2~3)



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

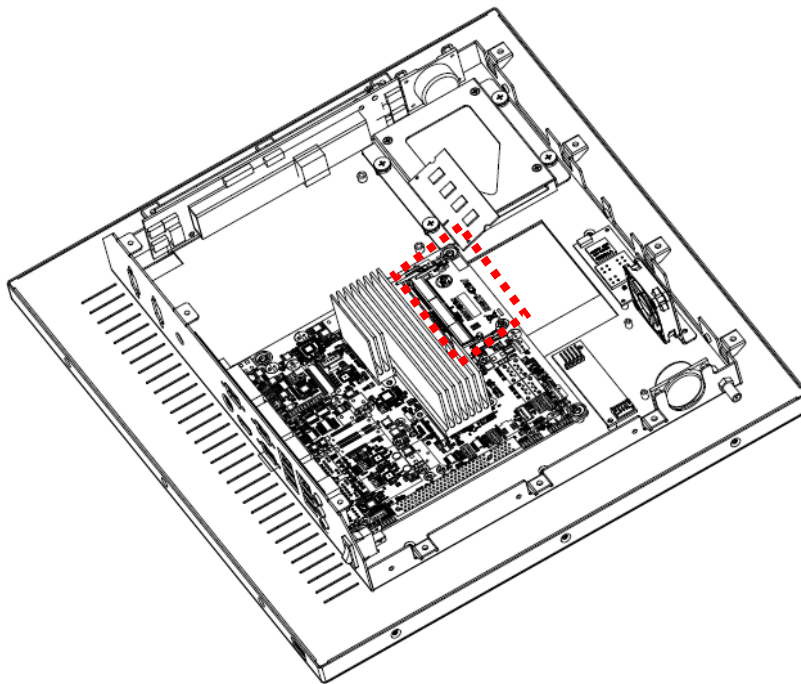
2.3 Installing Hard Disk & Memory

WARNING: Make sure the power is completely cut off before opening the device.
Remove 12 screws as indicated below to open the back of the chassis.

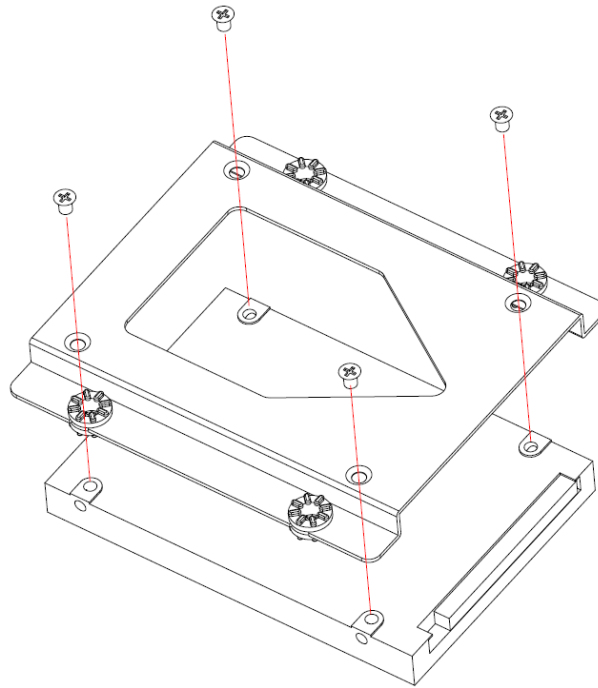


2.3.1 Install Memory

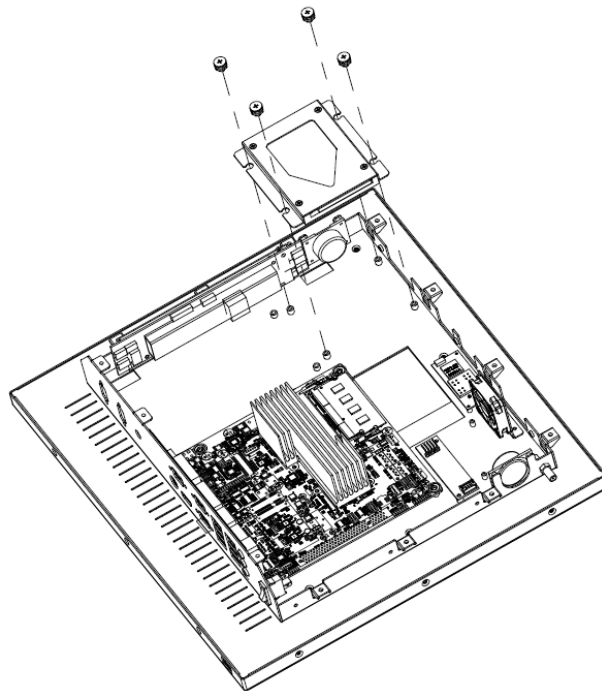
Step 1. Insert the SODIMM into the memory socket.



2.3.2 Install HDD



Step 1. Attach the HDD bracket to the 2.5" SATA HDD by means of 4 screws as shown above, and then connect HDD data and power cables.



Step 2. Position the HDD bracket & 2.5" SATA HDD assembly into the chassis and lock with 4 screws as indicated above.

