

PPC-2127

21.5" Intel® Atom™ Processor D2550 Fanless Plastic
Chassis Touch Panel PC

Quick Reference Guide

1st Ed – 10 March 2016

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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 UNDESIRE 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.

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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.

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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.avalu.com.tw/>

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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 PPC-2127 Panel PC
- 1 x CD/DVD-ROM contains the followings:
 - Ethernet drivers and utilities
 - VGA drivers and utilities
 - Audio drivers and utilities
 - Wi-Fi drivers and utilities
 - Touch controller drivers and utilities
 - Chipset drivers and utilities
- 1 x packing set includes the followings:
 - 1 x power cord
 - 1 x AC/DC adapter 12V/7A 84W



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

1.3 System Specifications

Component	
Mother Board	EBM-CDV
CPU	Onboard Intel® Atom™ D2550 1.86GHz CPU
CPU Cooler (Type)	Fanless Heatsink
Memory	One 204-pin SODIMM Supports Up to 4GB DDR3 1066MHz SDRAM
Audio Codec	RealTek ALC892-GR Audio Codec
Power Supply	External power adapter
Adapter	FSP084-DMAA1
Speaker	8Ω 2W*2
Camera	Optional ACC-NBCAM-006 with Mic
Wireless LAN	Optional MiniPCle ABOCOM WM5201
Operating System	Windows 7 Windows Embedded Standard 7 Windows Embedded POSReady 7 Windows 7 For Embedded System
Storage	
Hard Disk Drive	2.5" HDD
Solid State Drive	2.5" SSD
Other Storage Device	Type I/II CF
Panel	
LCD Panel	21.5" SXGA TFT LCD 1920*1080 AUO T215HVN01.0
B/L Inverter/Converter	LED Driving board ADB-2850-60 V2.4
Touch Screen	T216S-5RB005N-0A28R0-200PH
Touch Controller	EETI ETP-CP-S458XRU
External I/O	
PS/2 KB & Mouse	1 x PS/2 KB & MS
Serial Port	2 x COM D-sub 9 pin (1 For Optional)
USB Port	4 x USB2.0 (2 For Optional)
Video Port	1 x HDMI
Audio Port	1 x Line out (RealTek ALC892-GR)
LAN Port	2 x Intel® 82574L PCIe Gigabit Ethernet (1 For Optional)
Wireless LAN Antenna	PCB Antenna 2.4/5.0GHz-IPEX Ø1.13mm (Optional)
Expansion Slots	1 x MiniPCle Slot
Mechanical	
Power Type	AT/ATX
Power Connector	Lockable DC plug

PPC-2127

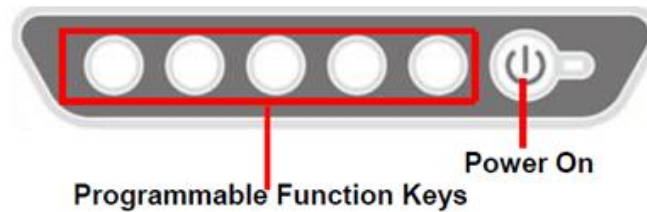
Type	
Dimension	542mm x 382mm x 63mm
Weight	8.5 Kgs
Color	White + Gray
Fanless	Fanless
Reliability	
EMI Test	Class B
Safety	CE / FCC
Operating Temperature	0°C ~ 40°C
Operating Humidity	10% to 95% @ 40°C, Non-condensing
Storage Temperature	-10°C ~ 50°C



Note: Specifications are subject to change without notice.

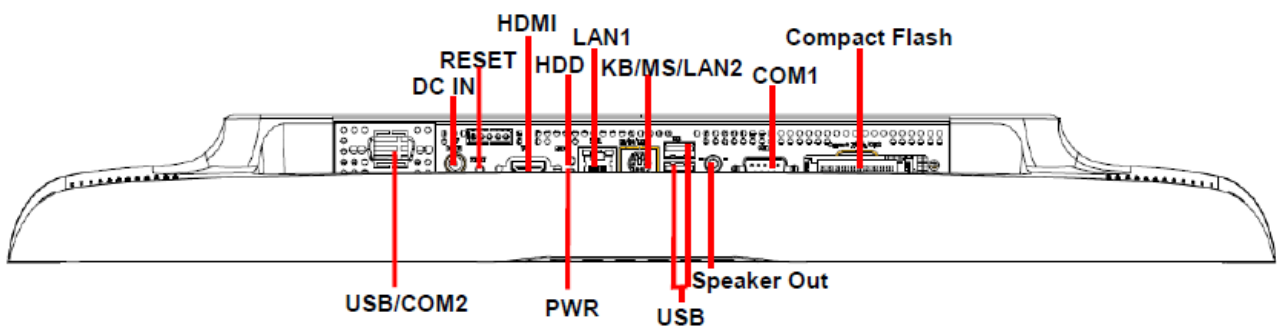
1.4 System Overview

1.4.1 Front View



Note: The programmable function keys are available to be programmed by the user, and they are unable to work unless programmed.

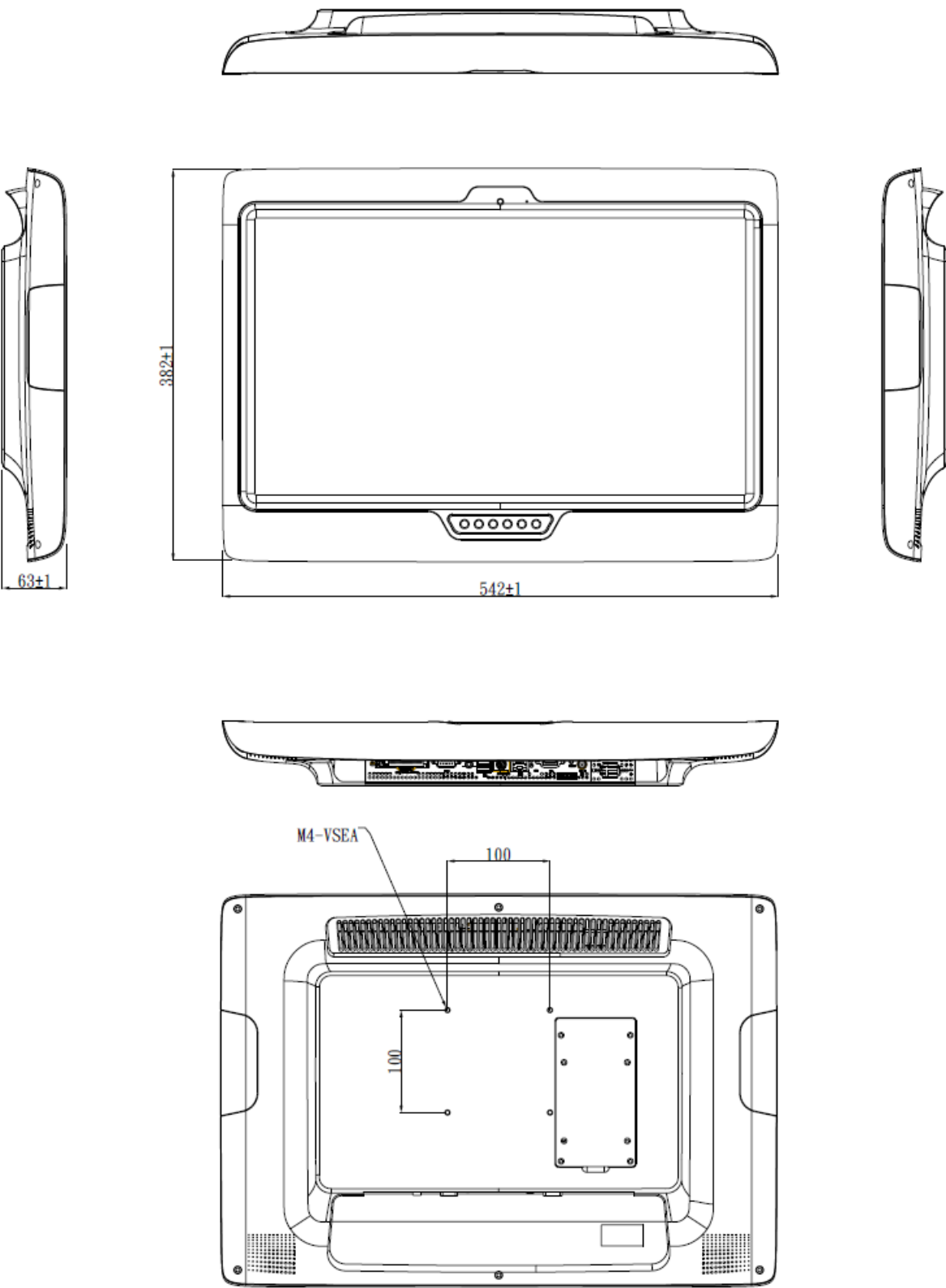
1.4.2 Rear View



Connectors

Label	Function	Note
COM1	External Serial port 1 connector	DB-9 male connector
Compact Flash	CF Type I/II Socket with Ejector	
USB/COM2	2 x USB2.0 connector Serial port connector	DB-9 male connector
USB	2 x USB2.0 connector	
DC IN	DC Power-in connector	
HDD	HDD LED	
LAN1/2	RJ-45 Ethernet connector 1/2	
PWR	Power LED	
RESET	Reset button	
Speaker Out	Speaker Out audio jack	
HDMI	HDMI connector	

1.5 System Dimensions



(Unit: mm)

2. Hardware Configuration

- Please refer to EBM-CDV Quick Installation Guide or User's Manual.

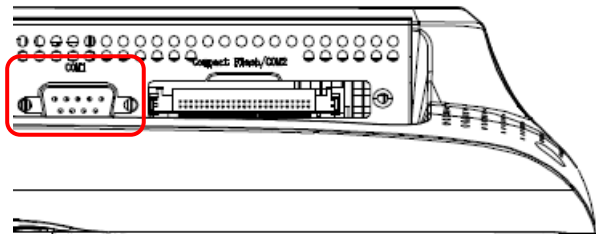


Note: If you need more information, please visit our website:

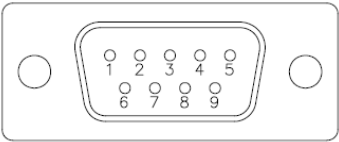
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2.1 PPC-2127 connector mapping

2.1.1 External Serial port 1 connector (COM1)



Note:
COM1 RS-232/422/485 mode select by SW1 (RS-232 is default).



RS-232

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

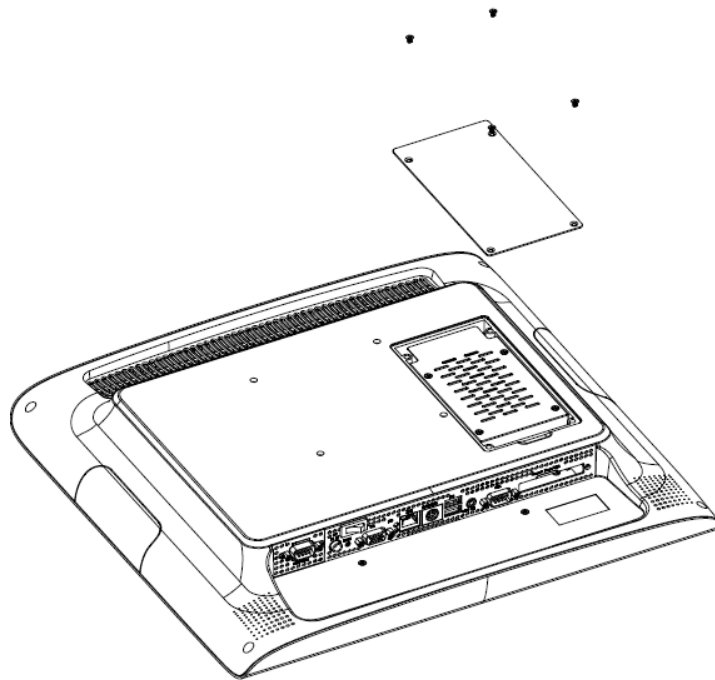
RS-422

Signal	PIN	PIN	Signal
TX1-	1	6	NC
RX1+	2	7	NC
TX1+	3	8	NC
RX1-	4	9	NC
GND	5		

RS-485

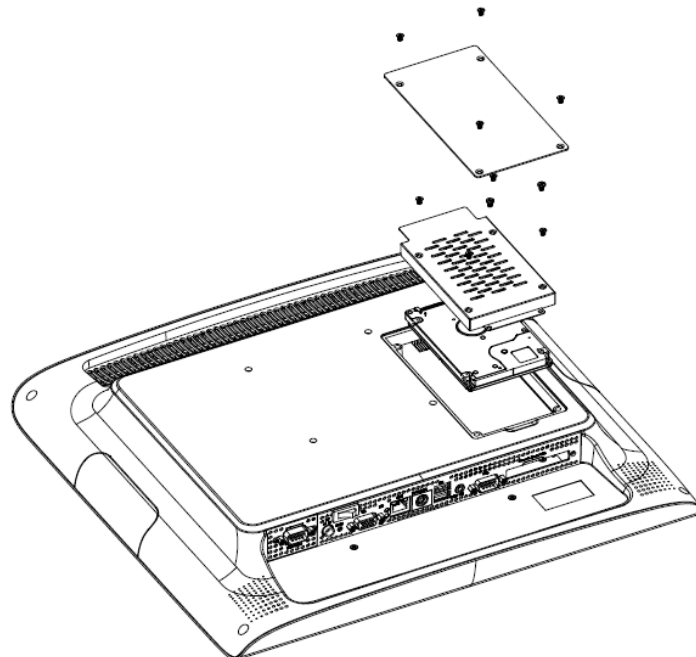
Signal	PIN	PIN	Signal
TX1-	1	6	NC
NC	2	7	NC
TX1+	3	8	NC
NC	4	9	NC
GND	5		

2.2 Installing Hard Disk



Step 1. Unfasten 4 screws from the rear middle side of your panel.

Step 2. Remove the HDD service window.



Step 3. Slide HDD into its bracket until properly seated.

Step 4. Secure HDD by means of 4 screws.

