

# PPC 1725/1727 Series

Fanless 17" SXGA TFT Multifunctional Plastic Panel PC

## Quick Reference Guide

1<sup>st</sup> Ed – 19 March 2013

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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-1725/1727 Series 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/5A 60W



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

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## 1.3 System Specifications

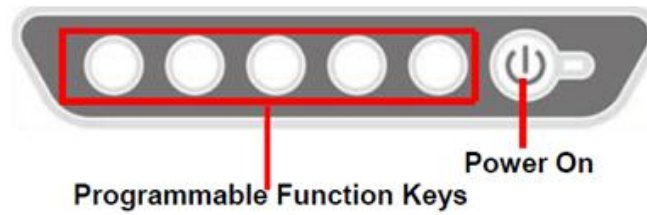
| Component                |                                                                                                          |                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Model                    | PPC-1725                                                                                                 | PPC-1727                                                                                                 |
| Mother Board             | EBM-PNV                                                                                                  | EBM-CDV                                                                                                  |
| CPU                      | Onboard Intel® Atom™ D525 Dual Core 1.8GHz CPU                                                           | Onboard Intel® Atom™ D2550 1.86GHz CPU                                                                   |
| CPU Cooler (Type)        | Fanless Heatsink                                                                                         | Fanless Heatsink                                                                                         |
| Memory                   | One 204-pin SODIMM Supports Up to 4GB DDR3 800MHz SDRAM                                                  | One 204-pin SODIMM Supports Up to 4GB DDR3 1066MHz SDRAM                                                 |
| Audio Chipset            | RealTek ALC888-VC2-GR                                                                                    | RealTek ALC892-GR                                                                                        |
| System Power Requirement | +12V ~ +28V DC Power Input                                                                               | +12V ~ +28V DC Power Input                                                                               |
| Adapter                  | Input: 100 ~ 250Vdc/ 47 ~ 63Hz<br>Output: 60W Adapter (12V @ 5A Adapter)                                 | Input: 100 ~ 250Vdc/ 47 ~ 63Hz<br>Output: 60W Adapter (12V @ 5A Adapter)                                 |
| Speaker                  | 8Ω 2W*2                                                                                                  | 8Ω 2W*2                                                                                                  |
| Camera                   | Optional 2.0M Pixel Camera with Microphone                                                               | Optional 2.0M Pixel Camera with Microphone                                                               |
| Wireless LAN             | Optional USB or Mini PCIe WiFi Module                                                                    | Optional USB or Mini PCIe WiFi Module                                                                    |
| Operating System         | Windows 7<br>Windows Embedded Standard 7<br>Windows Embedded POSReady 7<br>Windows 7 For Embedded System | Windows 7<br>Windows Embedded Standard 7<br>Windows Embedded POSReady 7<br>Windows 7 For Embedded System |
| Storage                  |                                                                                                          |                                                                                                          |
| Hard Disk Drive          | 2.5" HDD                                                                                                 | 2.5" HDD                                                                                                 |
| Solid State Drive        | 2.5" SSD                                                                                                 | 2.5" SSD                                                                                                 |
| Other Storage Device     | Type I/II CF                                                                                             | Type I/II CF                                                                                             |
| Panel                    |                                                                                                          |                                                                                                          |
| LCD Panel                | 17" SXGA TFT LCD 1280 x 1024                                                                             | 17" SXGA TFT LCD 1280 x 1024                                                                             |
| LCD Control Board        | Built-in                                                                                                 | Built-in                                                                                                 |
| B/L Inverter/Converter   | Built-in                                                                                                 | Built-in                                                                                                 |
| Touch Screen             | 5-wire Resistive                                                                                         | 5-wire Resistive                                                                                         |
| Touch Controller         | Onboard Touch EETI                                                                                       | Onboard Touch EETI                                                                                       |
| External I/O             |                                                                                                          |                                                                                                          |
| PS/2 KB & Mouse          | 1 x PS/2 KB & MS                                                                                         | 1 x PS/2 KB & MS                                                                                         |
| Serial Port              | 2 x COM D-sub 9 pin RS-232 (1 FOR                                                                        | 2 x COM D-sub 9 pin RS-232 (1 FOR                                                                        |

## Quick Reference Guide

|                              |                                             |                                             |
|------------------------------|---------------------------------------------|---------------------------------------------|
|                              | optional)                                   | optional)                                   |
| <b>USB Port</b>              | 3 x USB (1 for Optional)                    | 3 x USB (1 for Optional)                    |
| <b>Video Port</b>            | 1 x VGA D-sub 15 pin                        | 1 x HDMI                                    |
| <b>Audio Port</b>            | 1 x Line out                                | 1 x Line out                                |
| <b>LAN Port</b>              | 2 x RJ-45 (1 For Optional)                  | 2 x RJ-45 (1 For Optional)                  |
| <b>Mechanical</b>            |                                             |                                             |
| <b>Power Type</b>            | AT/ATX                                      | AT/ATX                                      |
| <b>Power Connector Type</b>  | Power switch                                | Power switch                                |
| <b>Dimension</b>             | 391.5mm x 364.5mm x 59mm                    | 391.5mm x 364.5mm x 59mm                    |
| <b>Weight</b>                | 5.9 Kgs                                     | 5.9 Kgs                                     |
| <b>Color</b>                 | White + Gray                                | White + Gray                                |
| <b>Fanless</b>               | Fanless                                     | Fanless                                     |
| <b>Reliability</b>           |                                             |                                             |
| <b>EMI Test</b>              | Class A                                     | Class B                                     |
| <b>Safety</b>                | CE FCC                                      | CE FCC                                      |
| <b>Operating Temperature</b> | 0°C ~ 40°C                                  | 0°C ~ 40°C                                  |
| <b>Operating Humidity</b>    | 0%~90% relative humidity,<br>non-condensing | 0%~90% relative humidity,<br>non-condensing |
| <b>Storage Temperature</b>   | -10~50°C                                    | -10~50°C                                    |

## 1.4 System Overview

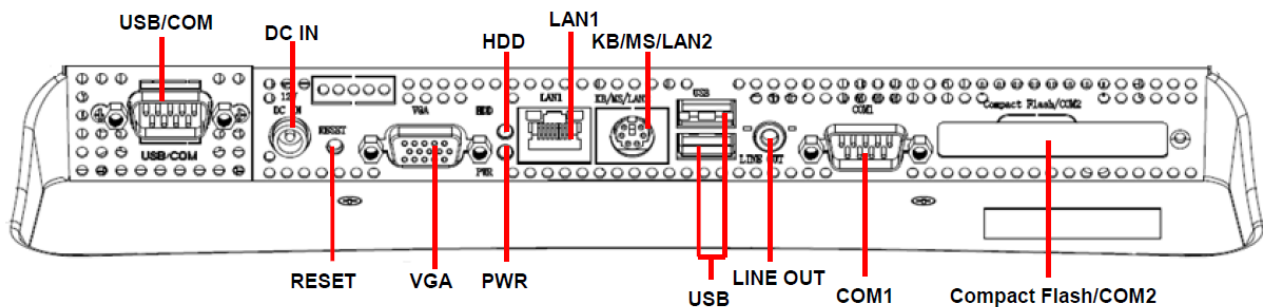
### 1.4.1 Front View



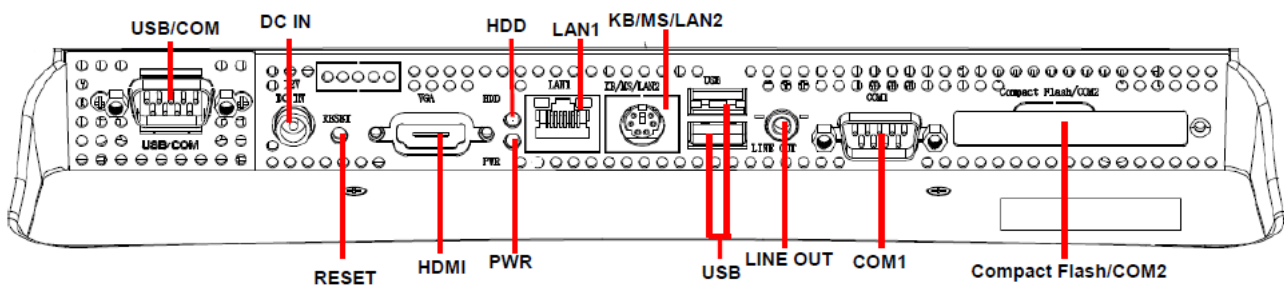
**Note:** The programmable function keys are available to be programmed by the user, and they are unable to work unless programmed.

### 1.4.2 Rear View

#### PPC-1725



#### PPC-1727

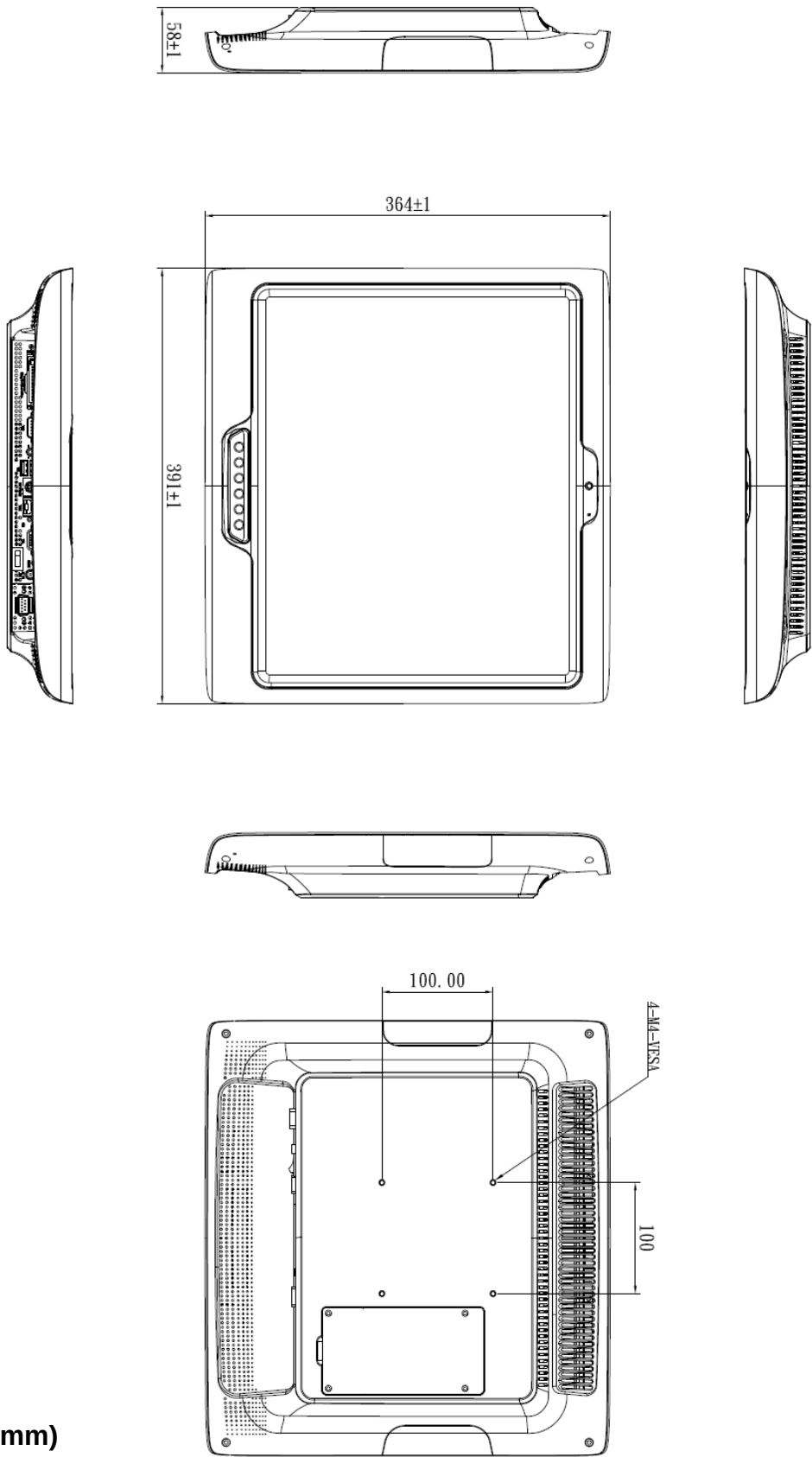


## Connectors

| Label              | Function                                       | Note                                  |
|--------------------|------------------------------------------------|---------------------------------------|
| USB/COM            | USB 2.0 connector<br>Serial port connector     | DB-9 male connector                   |
| COM1               | Serial port 1 connector                        | DB-9 male connector                   |
| Compact Flash/COM2 | CF Type I/II Socket with Ejector               | Optional for 2 <sup>nd</sup> COM port |
| DC IN              | DC Power-in connector                          |                                       |
| HDD                | HDD LED                                        |                                       |
| LAN1               | RJ-45 Ethernet connector 1                     |                                       |
| KB/MS/LAN2         | PS/2 connector<br>Optional 2 <sup>nd</sup> LAN |                                       |
| LINE OUT           | Line-out audio jack                            |                                       |
| PWR                | Power LED                                      |                                       |
| RESET              | Reset button                                   |                                       |
| USB                | USB 2.0 connector                              |                                       |
| VGA                | VGA connector                                  | only PPC-1725                         |
| HDMI               | HDMI connector                                 | only PPC-1727                         |

1.5 System Dimensions

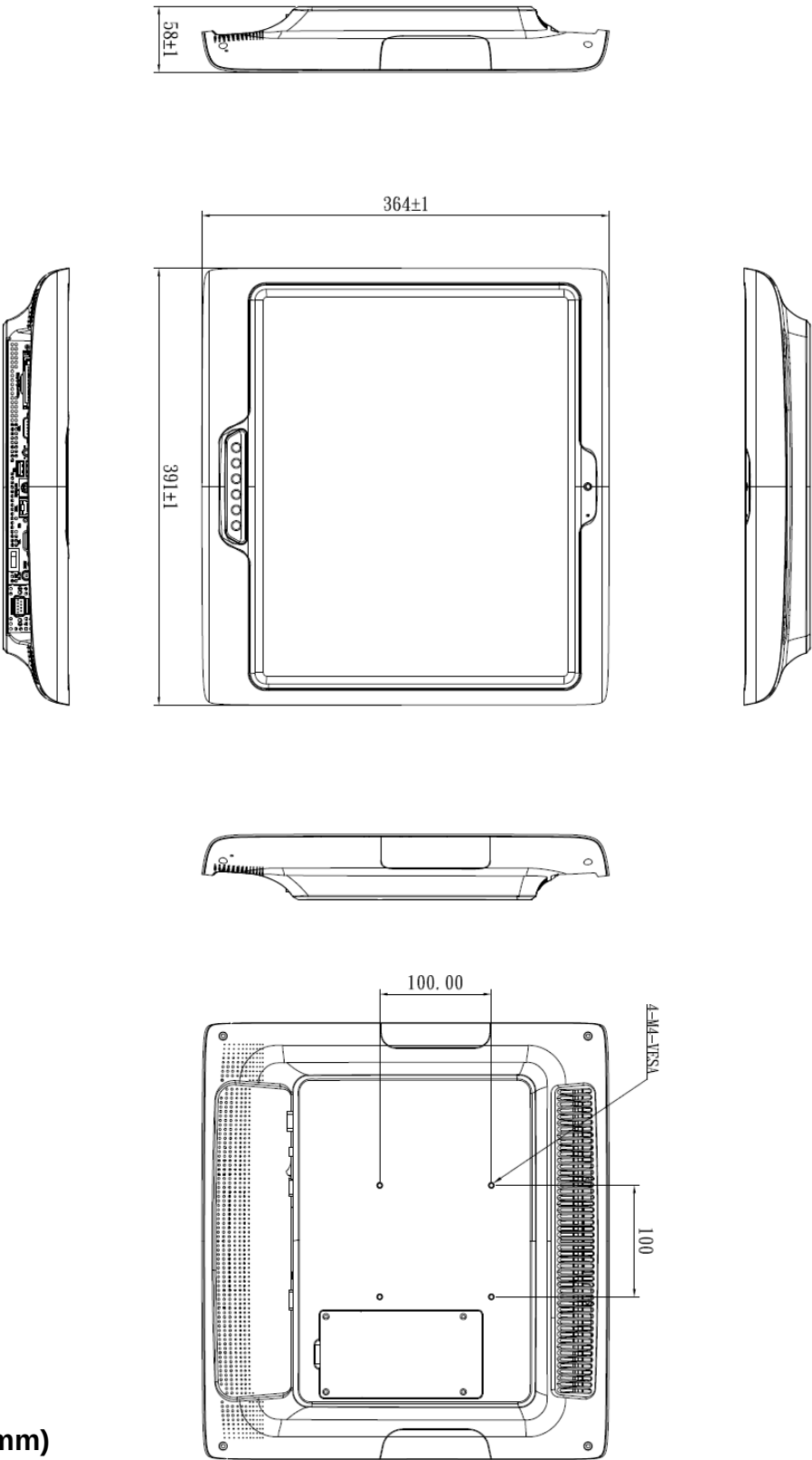
1.5.1 PPC-1725



(Unit: mm)



1.5.2 PPC-1727



(Unit: mm)

## 2. Hardware Configuration

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

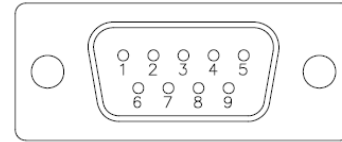
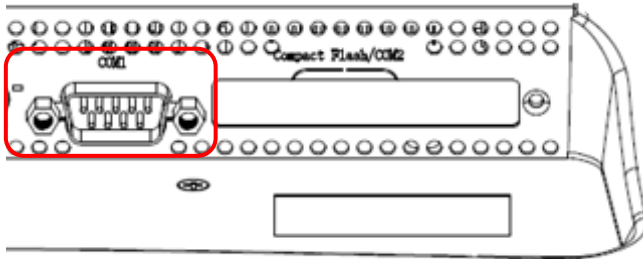


**Note:** If you need more information, please visit our website:

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

## 2.1 PPC-1725/1727 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     |

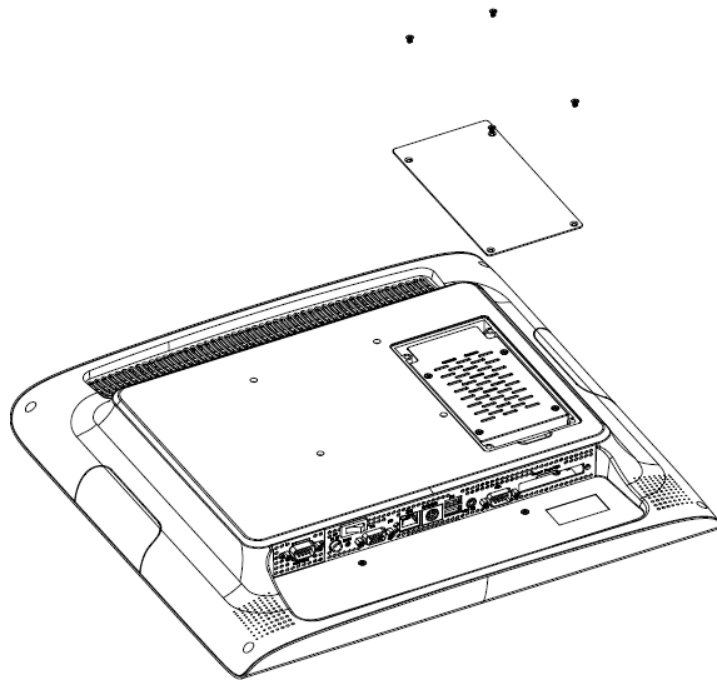
#### In RS-422 Mode

| 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

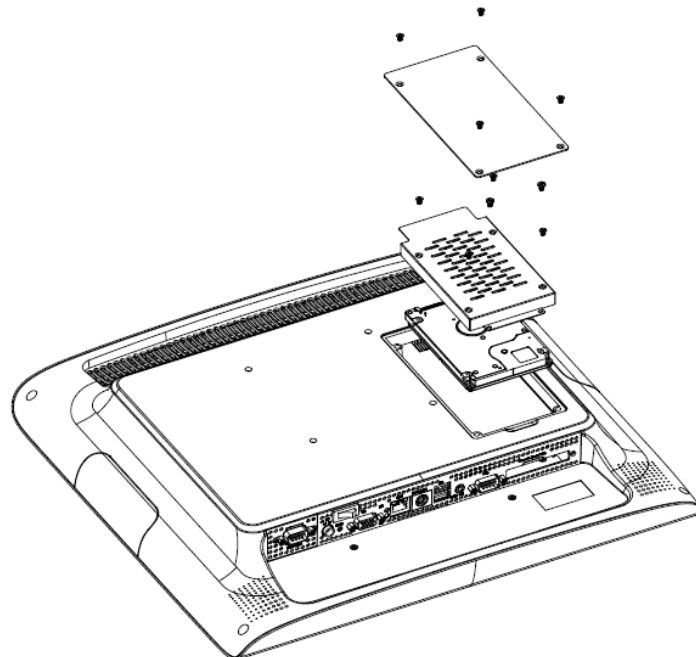
| Signal | PIN | PIN | Signal |
|--------|-----|-----|--------|
| DATA1- | 1   | 2   | NC     |
| DATA1+ | 3   | 4   | NC     |
| GND    | 5   | 6   | NC     |
| NC     | 7   | 8   | NC     |
| NC     | 9   |     | NC     |

## 2.2 Installing Hard Disk & Memory



**Step 1.** Unfasten 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.

