

# EMB-5740

## Quick Installation Guide



5.25" Embedded Multiple Ethernet EmBoard with Onboard Four Intel / RTL Gbit Ethernet VGA, SATA, Mini-PCI, CF Socket and Tiny-Bus Modular Expansion Solution

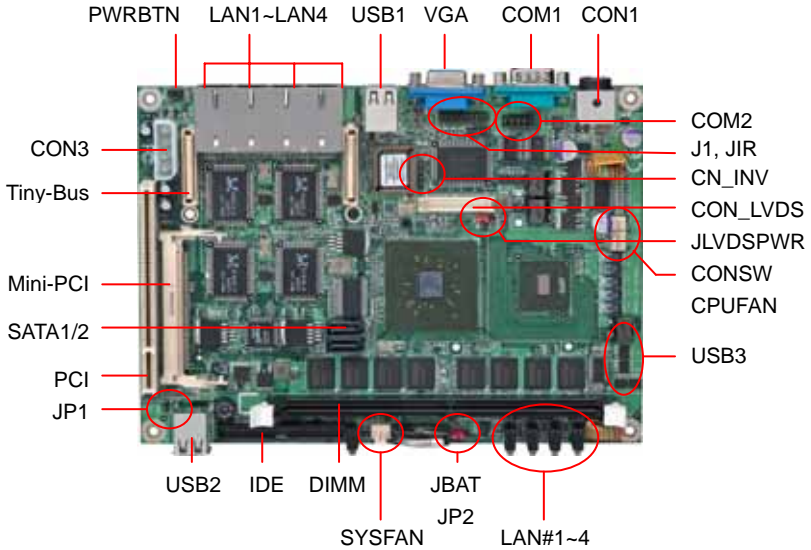
### Specification

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|                            |   |
|----------------------------|---|
| <b>Form Factor</b>         | 5.25" drive size with 203 x 146mm of dimension  |
| <b>CPU</b>                 | Onboard VIA C7-Eden 600MHz CPU with PadLock engine<br>Optional onboard VIA C7-Eden 400MHz to 1.2GHz and C7 1.0 / 1.5GHz CPU for OEM                     |
| <b>Memory</b>              | Onboard 512MB DDR2 SDRAM and one DDR2 DIMM socket<br>Total memory capacity up to 1.5GB DDR2 SDRAM   |
| <b>Chipset</b>             | VIA CX700 chipset   |
| <b>VGA</b>                 | VIA CX700 chipset built-in UniChrome Pro graphics core<br>External DB15 female connector on rear I/O panel  |
| <b>IDE Port</b>            | One 44-pin UltraATA100/133 IDE port (shared with CompactFlash socket)   |
| <b>SATA Port</b>           | Dual bootable SATA ports with optional RAID level 0 or 1  |
| <b>CompactFlash</b>        | One CompactFlash socket based on primary IDE channel  |
| <b>Ethernet</b>            | Onboard four optional Intel / RTL Gbit / Fast Ethernet interface<br>External four RJ45 connectors on rear I/O panel<br>Link / Active LED on front panel |
| <b>USB Port</b>            | Dual front and dual rear external Hi-Speed USB 2.0 ports  |
| <b>RS232 Port</b>          | One external and one internal RS-232 serial port  |
| <b>GPIO Port</b>           | 16-bit programmable GPIO port with 2x10-pin header connector  |
| <b>Expansive Interface</b> | One PCI slot, one Mini-PCI Socket and embedded Tiny-Bus Modular Expansion Solution with PCI-based interface   |
| <b>External I/O Port</b>   | Rear DC power jack, COM, VGA, 2 USB, four RJ45, power button<br>Front dual USB ports, power / access, Ethernet link / active LED                        |
| <b>Power Input</b>         | Single +12V DC power operating  |

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## Jumper and Connector Location



**Color Definition of Jumper Hat**

Red : Power or CMOS Setting

Yellow / Black : Function / Mode Setting

## Jumper Setting Quick Reference

Jumper : **JBAT**

Type : 2--pin 2.54-pitch header

| <b>JBAT</b> | <b>CMOS Setting</b>        |
|-------------|----------------------------|
| 1-2         | Normal Operating (Default) |
| 2-3         | Clear CMOS                 |

Default setting

Jumper : **JP1**

Type : 2-pin 2.0-pitch header

| <b>JP1</b> | <b>CompactFlash Master / Slave Mode Setting</b> |
|------------|---|
| Open       | Slave Mode (Default)                            |
| Short      | Master Mode                                     |

Default setting

Jumper : **JP2**

Type : 2-pin 2.0-pitch header

| <b>JP2</b> | <b>System Reset</b>        |
|------------|----------------------------|
| Open       | Normal Operating (Default) |
| Short      | System Reset               |

Default setting

Jumper : **JLVDSPW**

Type : 3-pin 2.54-pitch header

| <b>JLVDSPW</b> | <b>LVDS Panel Backlight Voltage Setting</b> |
|----------------|---|
| 1-2            | +5V (Default)                               |
| 2-3            | +3.3V (Default)                             |

Default setting

## Connector Quick Reference

### Internal Onboard Connector

| Connector | Function / Type                      |
|-----------|--------------------------------------|
| DIMM      | DDR2 SDRAM DIMM slot                 |
| MINIPCI   | 124-pin Mini-PCI Type-III socket     |
| IDE1      | 44-pin pitch 2.00mm IDE port         |
| CFD       | CompactFlash socket (on back size)   |
| CON_LVDS  | 40-pin LVDS connector                |
| J1        | 20-pin GPIO connector                |
| COM2      | 10-pin RS-232 Serial Port            |
| SATA1/2   | Dual SATA Connector                  |
| JIR       | IrDA Connector                       |
| CN_INV    | LCD inverter power connector         |
| CON3      | 4-pin power output connector         |
| CPUFAN    | 3-pin +12V CPU fan connector         |
| SYSFAN    | 3-pin +12V System fan connector      |
| CONSW     | 2-pin AT mode power switch connector |
| PCI       | 32-bit / 33MHz PCI Slot              |

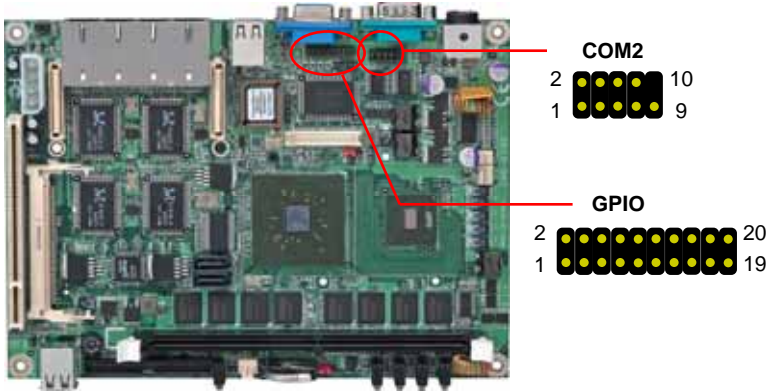
### External Connector on Rear Panel

| Connector   | Function                            |
|-------------|-------------------------------------|
| CON1        | 4-pin DC power jack                 |
| COM1        | DB9 male serial port connector      |
| VGA         | DB15 female VGA connector           |
| USB1        | Dual USB connector                  |
| LAN1 ~ LAN4 | RJ45 Gbit / Fast Ethernet connector |
| PWRBTN      | Power switch (ATX mode)             |

### External Connector / LED on Front Panel

| Connector | Function                   |
|-----------|----------------------------|
| LANLED1~4 | Ethernet Link / Active LED |
| PWERBLD   | Power / Access LED         |
| USB2      | Dual USB connector         |

## Onboard COM & GPIO Port



Connector: **COM2**

Type: 10-pin (2 x 5) pitch 2.54mm box header

| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1   | DCD         | 2   | RXD         |
| 3   | TXD         | 4   | DTR         |
| 5   | Ground      | 6   | DSR         |
| 7   | RTS         | 8   | CTS         |
| 9   | RI          | 10  | N/C         |

Connector: **J1**

Type: 20-pin (2 x 10) pitch 2.00mm header for GPIO Ports

| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1   | +5V         | 2   | +5V         |
| 3   | GP30        | 4   | GP31        |
| 5   | GP32        | 6   | GP33        |
| 7   | GP34        | 8   | GP35        |
| 9   | GP36        | 10  | GP37        |
| 11  | GP40        | 12  | GP41        |
| 13  | GP42        | 14  | GP43        |
| 15  | GP44        | 16  | GP45        |
| 17  | GP46        | 18  | GP47        |
| 19  | Ground      | 20  | Ground      |

## DC Power Input Connector

