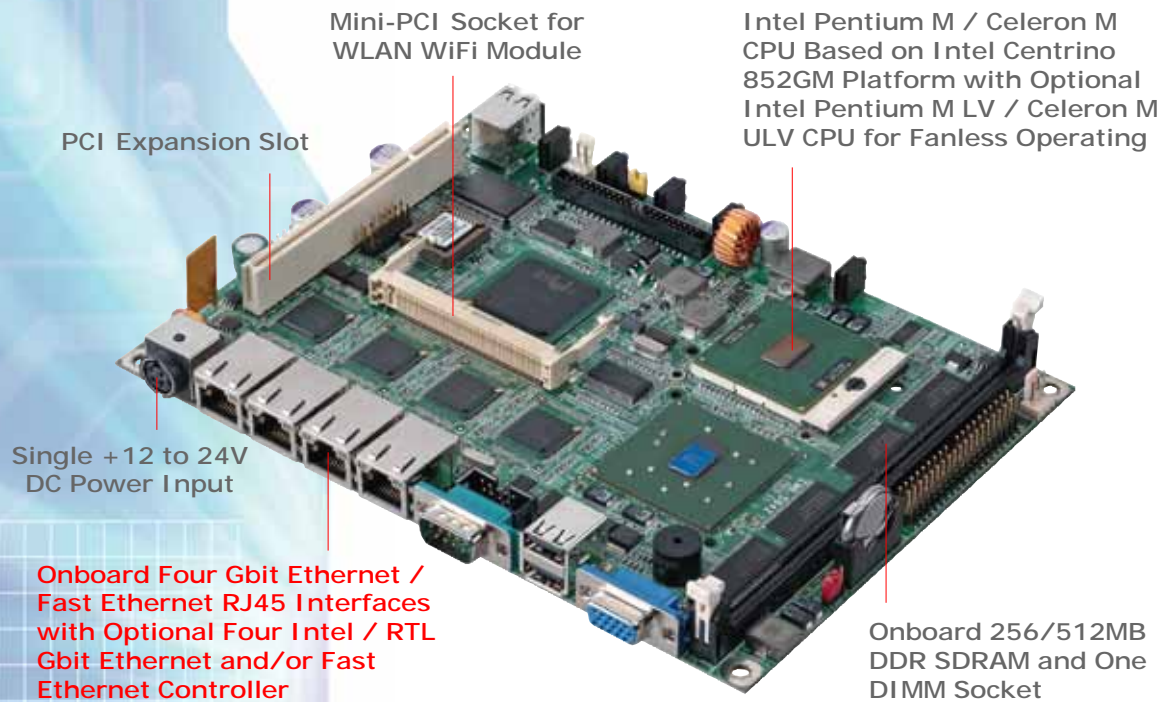


# EMB-5842

## Intel Pentium M Multi-Ethernet EmBoard



The Liantec EMB-5842 is an all-in-one industrial embedded motherboard based on the 5.25-inch drive size EBX form factor and Intel Centrino™ mobile computing platform with Intel Pentium M / Celeron M CPU and 82852GM GMCH / ICH4 chipset, features the onboard 512MB DDR SDRAM and four optional Intel / RTL Gbit Ethernet / Fast Ethernet, mini-PCI and CompactFlash socket. With the Intel mobile Pentium M / Celeron M technology and onboard integrated multiple Ethernet interfaces, the EMB-5842 meets the demand of firewall, VPN and other industrial networking applications based on the Small Form Factor (SFF) x86-based computing solution.

### Key Features

- Intel embedded mobile Pentium M / Celeron M platform with Intel embedded 852GM GMCH and ICH4 platform, supports Intel mobile uFC-PGA Pentium M / Celeron M CPU and onboard mounted embedded uFC-BGA Pentium M LV / Celeron M ULV CPU for fanless operating.
- Onboard optional 256 / 512 MB DDR SDRAM and one DDR DIMM socket. Total memory capacity supports up to 1.5GB DDR SDRAM.
- Intel 852GM GMCH built-in Extreme Graphics 2 VGA core.
- **Onboard four optional Intel / RTL Gbit Ethernet / Fast Ethernet interfaces.**
- One PCI slot and one mini-PCI socket with shared bus master PCI interface.
- Onboard CompactFlash socket for bootable / IDE-based solid state flash disk.
- 4 external Hi-Speed USB 2.0 ports with 2 front and 2 rear access USB ports.
- Single +12 to 24V DC power operating with external power jack.
- Compact, slim type and fanless barebone solutions are available.



# EMB-5842

## 5.25" Drive-size Intel Pentium M EmBoard with Onboard 256 / 512MB DDR SDRAM Four Gbit Ethernet, Mini-PCI, CF Socket Single 12 ~ 24V DC Power Operating



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### Form Factor

5.25-inch drive size EBX form factor at 203 x 146 mm

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### CPU

Intel mobile Pentium M / Celeron M CPU at 533/400 MHz FSB with uFC-PGA package on m478 CPU socket  
Optional Intel ULV Celeron M 600MHz for fanless operating  
Customized Intel LV Pentium M / ULV Celeron M CPU for OEM

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### Memory

Onboard 256 / 512 MB DDR SDRAM  
One DDR DIMM socket supports 1GB DDR SDRAM  
Total memory capacity up to 1.5 GB DDR SDRAM

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### Chipset

Intel embedded mobile 852GM GMCH and ICH4 chipset

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### Watchdog Timer

Programmable system reset watchdog timer

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### PCI Enhanced IDE Port

44-pin primary and 40-pin secondary UltraATA100 IDE ports

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### Solid State Flash Disk Interface

#### CompactFlash Card Socket

Onboard CompactFlash socket supports CompactFlash Card (CFC) with PIO mode 4 / Multi-Word mode 2  
Default setted as secondary IDE channel at master mode  
Bootable, driver free IDE / ATAPI based flash disk  
Flash memory capacity up to 32GB (and beyond)

#### DiskOnModule (DOM) Flash Disk

Onboard IDE ports support DiskOnModule (DOM) flash disk  
44-/40-pin DiskOnModule at PIO mode 4 / Multi-Word mode 2  
Bootable, driver free IDE / ATAPI based flash disk  
Flash memory capacity up to 8GB (and beyond)

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### Expansion Bus Interface (PCI and Mini-PCI)

One PCI slot and one mini-PCI socket shared PCI bus master

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### Video Interface

Intel mobile 852GM GMCH built-in Extreme Graphics 2 core  
External DB15 female connector for VGA on rear I/O panel

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### Hi-Speed USB 2.0 and Multi-I/O Port

External 2 front and 2 rear, internal 2 Hi-Speed USB 2.0 ports  
One external and one internal RS232 COM port

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### Ethernet Interface

Onboard four 10/100/1000BASE-TX Ethernet interface  
Optional Intel / RTL Gigabit Ethernet and Fast Ethernet as :  
\* **EMB-5842SN4** with Intel 82541PI Gbit Ethernet controller  
\* **EMB-5842SR4** with RTL8110SC Gbit Ethernet controller  
\* **EMB-5842SM4** with Intel 82551QM Fast Ethernet controller  
\* **EMB-5842SL4** with RTL8100L Fast Ethernet controller  
External four RJ45 connectors on rear I/O panel  
External link / active LEDs on front panel

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### External I/O Port and Indicated LED

#### Rear I/O Panel

4-pin DC power jack (optional internal 4-pin power wafer)  
Four RJ45 Ethernet  
RS232 COM port  
Dual Hi-Speed USB 2.0 ports  
DB15 female VGA port

#### Front I/O Panel

2 Hi-Speed USB 2.0 ports  
Four Ethernet link / active LED  
Power / access LED

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### Environment

Power Requirement: single +12 to 24V DC power operating  
Board Dimension: 203 x 146 mm (L x W)  
Operation Temperature: 0 ~ 60°C (32 ~ 140°F)

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### Ordering Code

#### EMB-5842SN4-512

5.25" Drive-size Intel Pentium M / Celeron M EmBoard with Onboard 512MB DDR SDRAM, Four Intel Gbit Ethernet VGA, Mini-PCI and CompactFlash Socket

#### EMB-5842SR4-512

Same as EMB-5842SN4-512 but with Four RTL Gbit Ethernet

#### EMB-5842SM4-512

Same as EMB-5842SN4-512 but with Four Intel Fast Ethernet

#### EMB-5842CZM4-512

Same as EMB-5842SN4-512 but with Four Intel Fast Ethernet and Onboard Intel Celeron M ULV 600MHz Fanless CPU

#### EMB-5842-OEM

Customized EMB-5842 EmBoard with Board-mounted Intel Fanless Pentium M LV / Celeron M ULV CPU, DDR SDRAM, Optional Ethernet Configuration and Functions.

Please visit the website of <http://www.liantec.com> for the further information.