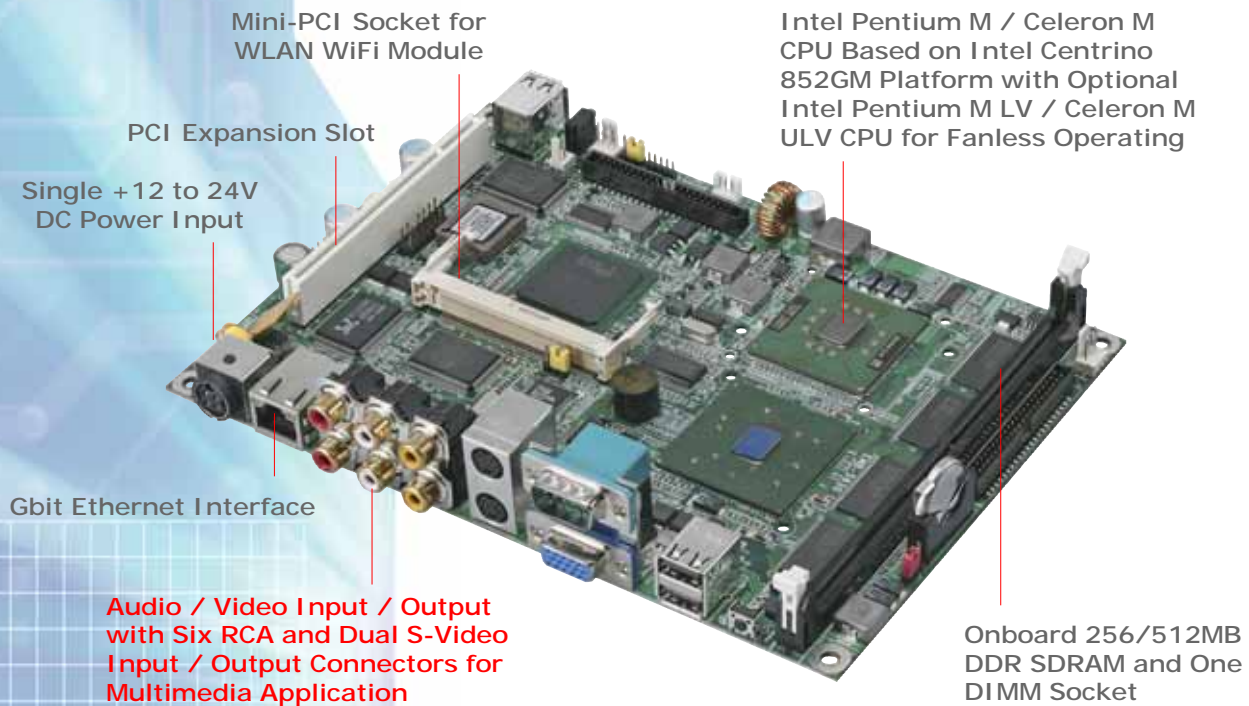


# EMB-5830

## Intel Pentium M Multimedia EmBoard



The Liantec EMB-5830 is an all-in-one industrial embedded multimedia motherboard based on the 5.25-inch drive size EBX form factor, Intel Pentium M / Celeron M CPU and 82852GM GMCH / ICH4 chipset, features the onboard 512MB DDR SDRAM, Gbit Ethernet or Fast Ethernet, mini-PCI and CompactFlash socket and audio / video input / output RCA and S-Video multimedia interfaces. With Intel mobile Pentium M / Celeron M technology and onboard integrated Audio / Video input / output multimedia interface, the EMB-5830 meets the demand of PC-based audio / video multimedia applications including digital signage, media server, STB and other industrial multimedia applications based on the Small Form Factor (SFF) x86-based computing solution.

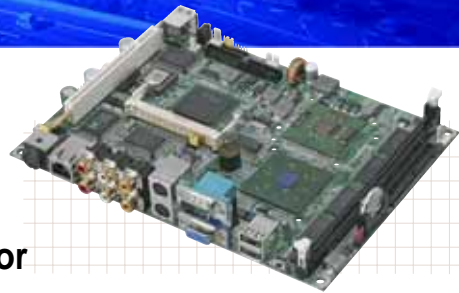
### Key Features

- 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 Gbit Ethernet, USB 2.0, mini-PCI and CompactFlash socket.
- External audio / video input / output RCA and S-Video multimedia interfaces.
- Single +12 to 24V DC power operating with external power jack.
- Compact, slim type and fanless barebone solutions are available.



# EMB-5830

## 5.25" Drive-size Multimedia EmBoard with Intel Pentium M CPU, 512MB SDRAM Gbit Ethernet, USB 2.0, Mini-PCI, CF Socket and Audio / Video Input / Output RCA Connector



### Form Factor

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

### CPU

Intel mobile uFC-PGA 478 Pentium M / Celeron M CPU  
Optional Intel ULV Celeron M 600MHz for fanless operating  
Customized Intel LV Pentium M / ULV Celeron M CPU for OEM

### Memory

Onboard 256 / 512 MB DDR SDRAM and one DIMM socket  
Total memory capacity up to 1.5 GB DDR SDRAM

### Chipset

Intel embedded mobile 852GM GMCH and ICH4 chipset

### Watchdog Timer

Programmable system reset watchdog timer

### PCI Enhanced IDE Port

Dual 44-pin primary / secondary UltraATA100 IDE port  
Supports dual 44-pin DiskOnModule (DOM) flash disk

### CompactFlash Interface

Onboard CompactFlash socket supports CompactFlash Card (CFC) with PIO mode 4 / Multi-Word mode 2  
Default setted as secondary IDE channel at master mode

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

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

### Multimedia Audio/Video In/Out Interface

#### CRT Video Output Interface

Intel 825GM GMCH built-in graphics core  
External DB15 female VGA connector

#### TV Video Output Interface

Onboard CH7011 TV-out encoder with NTSC / PAL mode  
External RCA (yellow) and S-Video video-out connectors

#### TV Video Input Interface

Onboard PCI BT878A video capture interface  
External RCA (yellow) and S-Video video-in connectors

#### Audio Input / Output Interface

Intel ICH4 chipset with ACL655 AC97 3D audio codec  
External 4 RCA (red/white) for audio-in R/L and audio-out R/L

#### External Multimedia RCA Connector

6 RCA array for audio-in/out R/L and TV-in/out interfaces

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

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

### Ethernet Interface

Onboard Intel / RTL Gbit Ethernet / Fast Ethernet interface  
External RJ45 connector with LED on rear I/O panel

### External I/O Port and Indicated LED

#### Rear I/O Panel

4-pin DC power jack (optional internal 4-pin power wafer)  
RJ45 Ethernet connector  
Audio / Video Input / Output 6 x RCA connectors  
S-Video Input / Output connectors  
VGA and RS232 COM port  
Dual Hi-Speed USB 2.0 ports  
ATX-type power switch

#### Front I/O Panel

2 Hi-Speed USB 2.0 ports  
Power / access LED

### 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)

### Ordering Code

#### EMB-5830S-P

5.25" Drive-size Intel Pentium M / Celeron M EmBoard  
with VGA, Gbit Ethernet, Mini-PCI and CompactFlash Socket  
Audio / Video Input / Output RCA and S-Video Connectors

#### EMB-5830S-512

Same as EMB-5830S-P but with Onboard 512MB SDRAM

#### EMB-5830CZ-512

Same as EMB-5830S-512 but with Onboard Intel Celeron M  
ULV 600MHz / 512KB CPU (Fanless)

#### EMB-5830PM738-512

Same as EMB-5830S-512 but with Onboard Intel Pentium M  
LV 738 1.4GHz / 2MB CPU (Fanless Operating)

#### EMB-5830-OEM

Customized EMB-5830 EmBoard with Board-mounted Intel  
Fanless Pentium M LV / Celeron M ULV CPU, DDR SDRAM,  
Optional Multimedia Configuration and Functions.

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