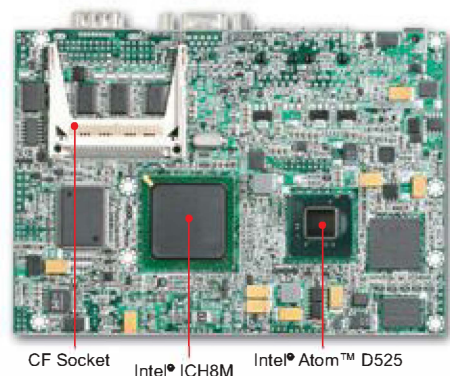
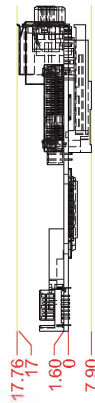
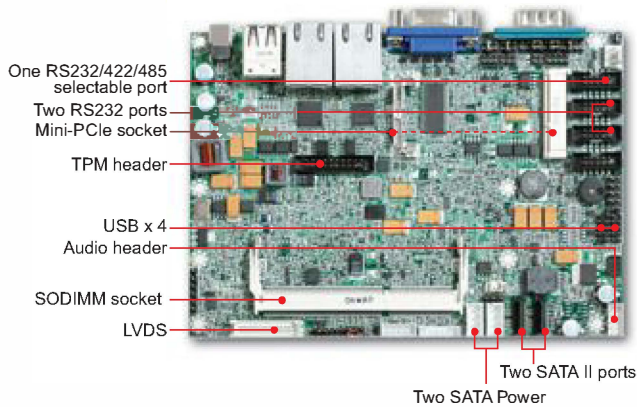


# PEB-2771/2781

3.5" Embedded size, based on Intel® 45nm Low Power Pineview processor with DDR3 SODIMM, dual display by VGA/LVDS, Dual GbE, Audio, COM and USB

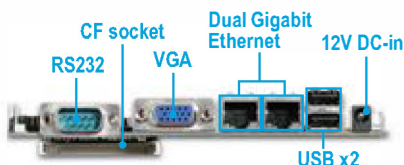


The PEB-2771/2781 takes advantage of the latest Intel® Atom™ technologies. It supports DDR3 SDRAM, dual gigabit ethernet and one expansion Mini PCI Express x1 socket. Based on Intel® Atom™ solutions, the fanless PEB-2771/2781 executes high performance with low power dissipation. Therefore, it's applied to Panel PC, Kiosk, DS, Medical, Military and industrial automation.

## FEATURES

- Intel® Atom™ processor D525 and ICH8M chipset
- One 204-pin SODIMM supports DDR3 800MHz SDRAM up to 2GB (PEB-2781 support DDR3 667MHz SDRAM)
- Dual independent display: VGA/24-bit LVDS
- Dual Gigabit Ethernet
- Storage: One Compact Flash/Two SATA ports
- 12V DC input
- One Mini-PCle socket

## REAR/I/O



## ORDERING GUIDE

|                 |  |
|-----------------|--|
| <b>AB1-3563</b> | <b>PEB-2771VG2ATM</b><br>Intel® Pineview 1.8G D525 on Board.EBC.w/DDR3/VGA/Dual GbE/COM/Audio/USB  |
| <b>AB1-3564</b> | <b>PEB-2781VG2ATM</b><br>Intel® Pineview 1.66G N455 on Board.EBC.w/DDR3/VGA/Dual GbE/COM/Audio/USB |

## PACKING LIST

|                              |
|------------------------------|
| One PEB-2771/2781 Main Board |
| One Thermal Kit              |
| One Installation CD          |
| One SATA Cable               |
| One ATX Power Cable          |

## GENERAL

|                            |  |
|----------------------------|--|
| <b>Processor</b>           | - Intel® Atom™ Processor D525 (1 80Ghz, 13W)/N455 (1.66Ghz, 6.5W) with 1M/512K L2 Cache in FCBGA559 package<br>- DMI: 2.5 GT/s<br>- Supports Intel® Hyper-Threading Technology, Intel® 64 Architecture, SpeedStep® Technology (N455 only), Thermal Monitoring Technology (N455 only) |
| <b>Chipset</b>             | Intel® ICH8M (2.4W) supports Intel® AHCI Technology  |
| <b>BIOS</b>                | AMI Core 8 BIOS  |
| <b>Memory</b>              | - PEB-2771 support up to 2G DDR3 800 MHz SDRAM on one 204-pin SODIMM socket<br>- PEB-2781 support up to 2G DDR3 667 MHz SDRAM on one 204-pin SODIMM socket   |
| <b>Storage Devices</b>     | - 2x SATA II support 3.0Gb/s data transfer rate<br>- 1x CompactFlash socket supports Ultra DMA100/66/33 MB/s   |
| <b>Watchdog Timer</b>      | Programmable via S/W from 1 sec. to 255 sec.   |
| <b>Hardware Monitoring</b> | - Temperature (CPU & System)<br>- Voltage (CPU Vcore, VBAT, 5VSB, 12V, 5V, 3.3V)   |
| <b>Expansion Interface</b> | 1x Mini PCIeExpress x1 socket (Gen 1, 2.5 GT/s)  |

## I/O INTERFACE

|                             |   |
|-----------------------------|---|
| <b>Super I/O</b>            | Winbond W83627UHG   |
| <b>Audio</b>                | - Intel® ICH8M built-in High Definition Audio up to 192-kHz 32-bit<br>- Realtek ALC892-GR HDA codec, 7.1+2 channels<br>- Audio on board header with Line-out and Mic-in |
| <b>Ethernet</b>             | - Intel® WG82567V gigabit phy and 82583V Gigabit Ethernet controllers<br>- 2x RJ45 connectors on rear I/O   |
| <b>Serial Port</b>          | - 1x RS232/422/485 port with DB9 connector on rear I/O<br>- 2x RS232 with on board pin headers<br>- 1x RS232/422/485 with on board pin header                           |
| <b>USB</b>                  | - 2x USB 2.0 ports on rear I/O<br>- 4x USB 2.0 ports on board with pitch 2.0 header<br>- 480 Mb/s bus comprehends the high-speed/full-speed/low-speed data ranges       |
| <b>Keyboard &amp; Mouse</b> | 1x PS/2 Keyboard & Mouse on board header  |
| <b>GPIO</b>                 | On board programmable 8-bit Digital I/Os  |

## DISPLAY

|                           |   |
|---------------------------|---|
| <b>Graphic Controller</b> | - Intel® ICH8M Integrated GMA 3150 Graphics supports full hardware acceleration of video decode standards MPEG-2<br>- Supports Intel® Dynamic Video Memory Technology (Intel® DVM T 4.0)<br>- XILINX XC3S200AN LVDS Transmitter |
| <b>Display Interface</b>  | - LVDS: Dual channel 24-bit LVDS<br>- VGA: One DB-15 connector on rear I/O, resolution up to 2048 x 1536 (QXGA)   |

## Mechanical & Environment

|                     |  |
|---------------------|--|
| <b>Dimension</b>    | 146(L) x 102(W)mm; 5.75"(L) x 4.02"(W)   |
| <b>Power Supply</b> | DC-12V input   |
| <b>Environment</b>  | - Operation Temperature: 0°C to 60°C<br>- Storage Temperature: -20°C to 80°C<br>- Relative Humidity: 5% to 95%, non-condensing |
| <b>MTBF</b>         | Over 120,000 hours at 40°C   |

