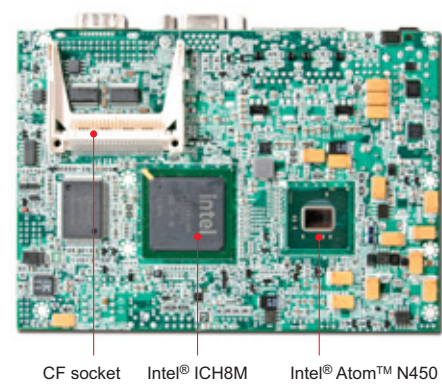
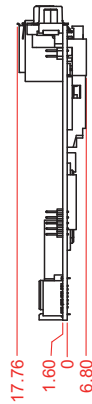
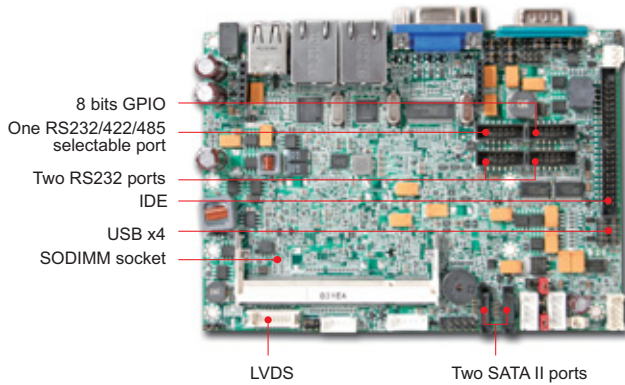


# PEB-2770/2780

3.5" Embedded size, based on Intel® 45nm Low Power Pineview processor with DDR2 SODIMM, dual display by VGA/LVDS, Dual GbE, Audio, COM and USB

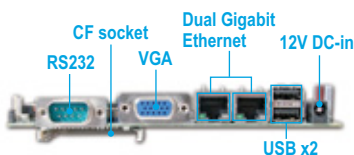


The PEB-2770/2780 takes advantage of the latest Intel® Atom™ technologies. It supports DDR2 SDRAM, dual gigabit ethernet and one expansion PCI Express x1 female header. Based on Intel® Atom™ solutions, the fanless PEB-2770/2780 executes high performance with low power dissipation. Therefore, it's applied to Panel PC, Kiosk, DS, Medical, Military and industrial automation.

## FEATURES

- Intel® Atom™ processor D510/N450 and ICH8M chipset
- MPEG2 Decode in HW; Dual independent display: VGA/18-bit LVDS
- Dual Gigabit Ethernet
- Customization (Extension card): BTB connector with PCIe x1 signal
- Storage: One SATA/One CompactFlash/Two SATA ports
- 12V DC input

## REAR/IO



## ORDERING GUIDE

<b>AB1-3588</b>	PEB-2770VG2A.Intel Pineview 1.66G D510 on Board without Thermal module.EBC.w/VGA/Dual GbE/COM/Audio/USB
<b>AB1-3589</b>	PEB-2780VG2A.Intel Pineview 1.66G N450 on Board without Thermal module.EBC.w/VGA/Dual GbE/COM/Audio/USB

## PACKING LIST

One PEB-2770/2780 Main Board
One Thermal Kit
One Installation CD
One SATA Cable
One ATX Power Cable

## GENERAL

Processor	- Intel® Atom™ Processor D510 (1.66Ghz, 13W)/N450 (1.66Ghz, 5.5W) with 1M/512K L2 Cache in FCBGA437 package - DMI: 2.5 GT/s - Supports Intel® Hyper-Threading Technology, Intel® 64 Architecture, SpeedStep® Technology (N450 only), Thermal Monitoring Technology (N450 only)
Chipset	Intel® ICH8M (2.4W) supports Intel® AHCI Technology.
BIOS	AMI Core 8 BIOS
Memory	Supports up to 2GB DDR2 667 MHz SDRAM on one 200-pin SODIMM socket
Storage Devices	- 2x SATA II supports 3.0Gb/s data transfer rate - 1x CompactFlash socket supports Ultra DMA100/66/33 MB/s - 1x IDE connector supports Ultra DMA100/66/33 MB/s
Watchdog Timer	Programmable via S/W from 1 sec. to 255 sec.
Hardware Monitoring	- Temperature (CPU & System) - Voltage (CPU Vcore, VBAT, 5VSB, 12V, 5V, 3.3V)
Expansion Interface	1x PCIExpressx1 female header (Gen 1, 2.5 GT/s)

## I/O INTERFACE

Super I/O	Winbond W83627UHG
Audio	- Intel® ICH8M built-in High Definition Audio up to 192-kHz 32-bit - Realtek ALC262-VC2-GR HDA codec, 5.1 channels - Audio on board header with Line-in, Line-out and Microphone
Ethernet	- Intel® WG82567V gigabit phy and 82583V Gigabit Ethernet controllers - 2x RJ45 connectors on rear I/O
Serial Port	- 1x RS232/422/485 port with DB9 connector on rear I/O - 2x RS232 with on board pin headers - 1x RS232/422/485 with on board pin header
USB	- 2x USB 2.0 ports on rear I/O - 4x USB 2.0 ports on board with pitch 2.0 header - 480 Mb/s bus comprehends the high-speed/full-speed/low-speed data ranges
Keyboard & Mouse	1x PS/2 Keyboard & Mouse on board header
GPIO	On board programmable 8-bit Digital I/Os

## DISPLAY

Graphic Controller	- Intel® D510/N450 integrated Generation 3.5/2.5 graphics, supports DX9 Graphics up to 400MHz/200MHz - Supports Intel® Dynamic Video Memory Technology (Intel® DVMT 3.0)
Display Interface	- LVDS: Single channel 18-bit LVDS, resolution up to 1366x768, 18bpp - CRT: One DB-15 connector on rear IO, resolution up to 2048 x 1536 (QXGA)

## Mechanical & Environment

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

