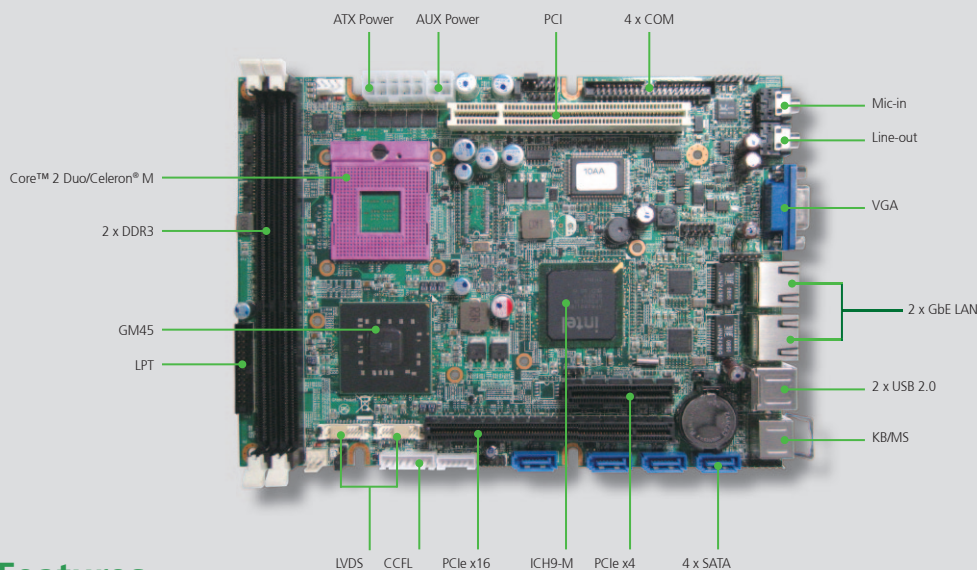




Main Features

- Support Intel® Core™ 2 Quad, Core™ 2 Duo, Celeron® Processor
- Intel® GM45 with GMA4500MHD Graphic Engine
- 2 x 240-pin DDR3 DIMM socket, up to 8GB non-ECC 1066 MHz DRAM
- 2 x Intel® 82574L PCI Express Gigabit Ethernet
- 1 x Realtek ALC888 HD CODEC
- 6 x USB 2.0, 4 x Serial port, 4 x SATA and 1 x Parallel port
- 1 x PCIe x16 Slot/1 x PCIe x4 Slot/1 x PCI slot

Product Overview

The EBC 550 is a 5.25" form factor embedded utilizing Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® 575 Processor. EBC 550 features Intel® GM45 and ICH9-M chipsets, which supports DDR3 1066 MHz DRAM. The multi expansion features via PCIe x16, PCIe x4 and PCI for different application at your system device.

The EBC 550 embedded board supports a various operation systems such as Windows XP embedded, Win CE and Linux.

Specifications

CPU Support

- Intel® Core™ 2 Quad (Q9100 2.26GHz) (non longevity CPU)
- Intel® Embedded Processor List (Intel® Longevity CPU):
- Intel® Core™ 2 Duo (T9400 2.53GHz)
- Intel® Celeron® 575 2.0GHz

Main Memory

- 2 x 240-pin DDR3 DIMM Socket, up to 8GB non-ECC 1066 MHz DRAM

Chipset

- Intel® GM45
- Intel® ICH9-M

BIOS

- Award System BIOS
- PnP and ACPI support
- 8M bits SPI ROM

On-board LAN

- 2 x Intel® 82574L PCI Express GbE
- Support PXE and Wake on LAN (When 5Vsb available) (LAN1, LAN2 both)
- 2 x RJ45 w/ LED

Display

- Intel® GM45 integrated GMA4500MHD Graphic engine

Audio

- Analog VGA Interface:
- 1 x DB15 port
- Resolution up to 1600x1200 at 85 Hz, 2048x1536 at 75Hz

LVDS Interface:

- 2 x DF13 20-pin LVDS connector for internal connection, supports Single (24bit) or dual pixel (48bit) LVDS panel, resolution up to 1600 x 1200

CCFL Interface:

- 1 x CCFL for Panel Backlight Inverter

Audio

- Realtek ALC888 HD CODEC
- 1 x Mic-in/1 x Line-out

Expansion

- 1 x PCIe x16
- 1 x PCIe x4
- 1 x PCI

I/O Interface

- Serial port: 4 x COM support RS232 only
- Parallel port: 1x 26-pin box header
- USB 2.0: 6 x ports, 2 x edge ports, 2 ports by JST, 1x pin header for uDOM
- 8 GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header

The diagram illustrates the layout of the Penryn Mini-ITX board, showing the central processor (Penryn) and its connections to various components. The Penryn processor is a 478-pin Micro-FCPGA and 479-ball Micro-FCBGA, featuring 667/800/1066 MHz FSB, 6MB L2 cache, and 45nm technology. It is connected to the Cantiga BIOS chip (1329 balls, FCBGA, 34x34mm) via a 667/800/1066 MHz FSB. The BIOS chip is also connected to the ICH9-M (82801GBM) southbridge chip (676 balls, PBGA, 31x31mm) via a 4 Lanes 2GB/s DMI. The ICH9-M chip is connected to the HD Audio Codec (Realtek ALC888) via a DMI. The audio codec is connected to the AMP LM4880 and the Pin Header (Line-In, Mic-In, Phone Jack). The ICH9-M chip is also connected to the SATA controller (SATA1, SATA2, SATA3, SATA4) via a SATA interface. The ICH9-M chip is connected to the USB 2.0 controller (USB 2.0) via a USB 2.0 interface. The USB 2.0 controller is connected to the Front Panel (2.54 Pin Header, JST Connector, Double Layer USB Port) via a USB 2.0 interface. The ICH9-M chip is connected to the Winbond W83627UHG Super I/O chip via a I²C Bus. The Winbond chip is connected to the COM1, COM2, COM3/4/5, and COM6 headers via a COM interface. The Winbond chip is also connected to the 3 x Fan, PS/2, Mini-Din KB/MS, and 26 Pin Box Header via a PS/2 interface. The ICH9-M chip is connected to the Intel® 82574L GbE network controller via a PCIe x1 interface. The Intel® 82574L GbE network controller is connected to the RJ45 x2 port via a RJ45 interface. The ICH9-M chip is connected to the IMVP-6 Vcore via a Vcore interface. The ICH9-M chip is connected to the DDR3 DIMM Modules (DDR3 800/1066 MHz) via a DDR3 interface. The ICH9-M chip is connected to the VGA Connector, LVDS Connector, and PCIe x16 Slot via a PCIe x16 interface. The ICH9-M chip is connected to the PCIe x4 Slot via a PCIe x4 interface. The ICH9-M chip is connected to the Optional Kit (uDOC) via a uDOC interface. The ICH9-M chip is connected to the 4 In 4 Out GPIO via a GPIO interface. The ICH9-M chip is connected to the SPI ROM SST 8M via a SPI interface. The ICH9-M chip is connected to the 4 x Strait Connectors via a SATA interface. The ICH9-M chip is connected to the 2 x 20 Pin Header via a COM1 interface. The ICH9-M chip is connected to the 5 Pin Header via a COM2 interface. The ICH9-M chip is connected to the 3 x Fan via a PS/2 interface. The ICH9-M chip is connected to the PS/2 via a PS/2 interface. The ICH9-M chip is connected to the Mini-Din KB/MS via a Mini-Din KB/MS interface. The ICH9-M chip is connected to the 26 Pin Box Header via a 26 Pin Box Header interface.

- | Part No. | Description |
|---------------|----------------------------|
| 60233USB59X00 | USB CABLE |
| 60233POW73X00 | POWER CABLE (2x10 To 2x5) |
| 60233MK202X00 | PS2 Y CABLE |
| 6023309402X00 | COM CABLE L: 300mm |
| 60233PRT15X00 | PRINT CABLE |
| 60233ATA17X00 | SATA CABLE |
| 60233POW22X00 | POWER CABLE (BIG 4P) |