

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
- ◆ 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

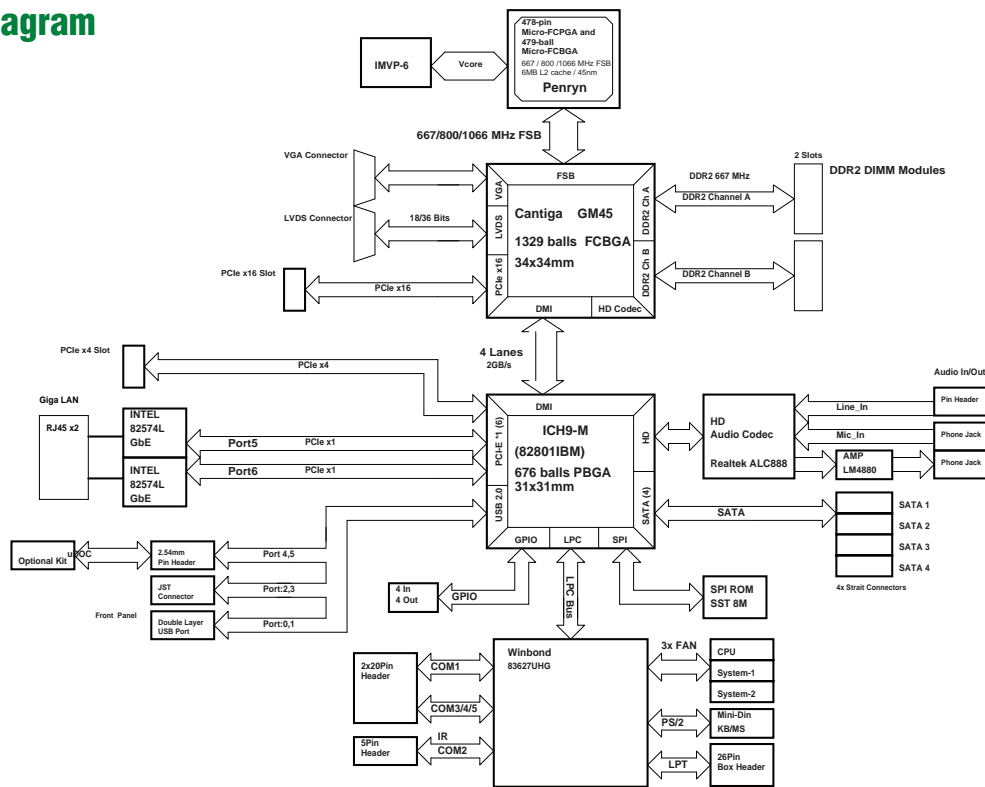
Audio

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

Expansion

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

Block Diagram



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
- 1 x 4-pin and 1 x 3-pin Fan connector
- 1 x PS/2 KB/MS Jack
- On board Buzzer/SMBus2.0/Reset SW
- 1 x DB15 VGA port

Watchdog Timer

- WDT can be programmable by Software from 1 sec to 255 sec and from 1 min to 255 minutes (Tolerance 15% at 25°C)

Storage

- 4 x SATA port

System Monitor

- Monitoring of 5 voltages and 2 temperatures
- 5 Voltage (+5V, Vcore, +12V, +3.3V, +1.5V)
- 2 Temperatures (CPU, External Temperature)

Power Supply

- Supports both AT and ATX Mode (default setting is AT mode)
- ATX mode:
 - 2x5pin ATX power connector w/ +12V/-12V/+5V/5Vsb Power In for EBC550
 - 2x2pin power connector +12V Power In for PCIe x16 Card
 - At ATX Mode, the BIOS setting is as follow:
 - POWER -SUPPLY TYPE: [ATX]
 - AUTO PWR-FAILURE RESUME: [ON]
- AT mode:
 - 2x5pin ATX power connector w/ +12V/-12V/+5V Power In for EBC550
 - No Power On push Button, Software Shutdown function and LAN remote wake up

Dimensions

- 5.25" form factor/203mm (L) x 146mm (W) (7.9"x5.7")

Environment

- Operation Temp: 0°C to 60°C
- Storage Temp: -20°C to 85°C
- Humidity: 10% - 90%, non condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

• EBC 550 (P/N: 10E00055000X0) RoHS Compliant

5.25" Embedded Board supporting Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® Processors w/ Dual display/6 x USB2.0/4 x COMs/2 x PCIe GbE/1 x PCIe x16/1 x PCIe x4/1 x PCI

• Packing List

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)