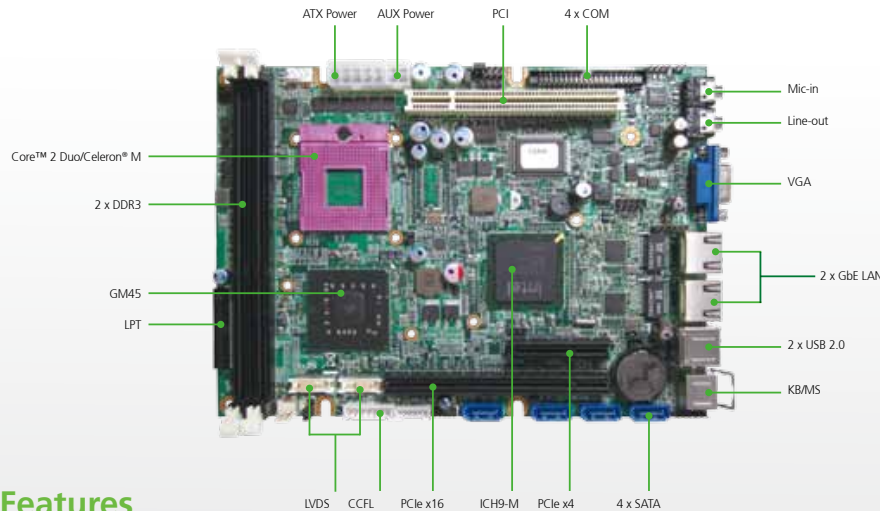


EBC 550

**5.25" Intel® Core™ 2 Quad/ Core™ 2 Duo/ Celeron® Embedded CPU Board
with Dual Display/ 1 x PCIe x16/ 1 x PCIe x4/ 1 x PCI/2 x GbE**



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

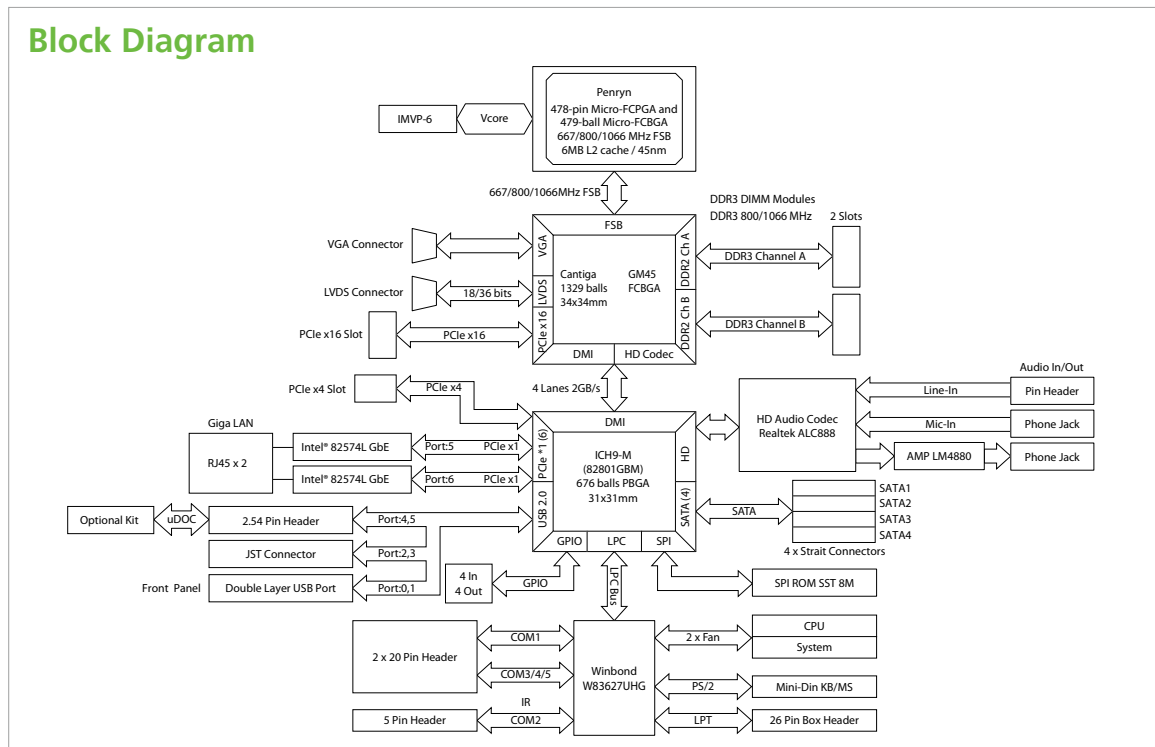
- 1 x PCIe x16
- 1 x PCIe x4
- 1 x PCI

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

www.nexcom.com

Block Diagram



- 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 and 2 fan speed monitor
- 5 voltage (+5V, Vcore, +12V, +3.3V, +1.5V)
- 2 temperatures (CPU, external temperature)
- 2 fan speed monitor (CPU, system)

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)

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660