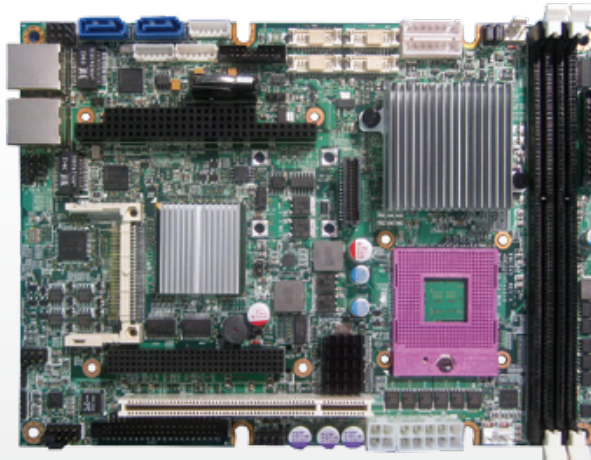




Main Features

- ♦ Support Intel® Core™ 2 Quad, Core™ 2 Duo, Celeron® Processor
- ♦ Intel® GM45 with GMA4500MHD Graphic Engine
- ♦ 2x 240-pin DDR3 DIMM socket, up to 8 GB non-ECC 1066 MHz DRAM
- ♦ 2x Intel® 82574L PCI Express Gigabit Ethernet
- ♦ 1x Realtek ALC888 HD CODEC
- ♦ 6x USB 2.0, 4x Serial port, 2x SATA
- ♦ 1x PCI Slot/ 1x PC / 104+ slot

Product Overview

The EBC 545 is a 5.25" form factor embedded utilizing Intel® Core™ 2 Quad, Core™ 2 Duo and Celeron® 575 Processor. EBC 545 features Intel® GM45 and ICH9-M chipsets, which supports DDR3 1066 MHz DRAM. The multi expansion features via PCI and PC/104+ for different application at your system device.

The EBC 545 embedded board supports a various operation systems such as Windows7 embedded, 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

- ♦ 2x 240-pin DDR3 DIMM Socket, up to 8GB non-ECC1066 MHz DRAM

Chipset

- ♦ Intel® GM45
- ♦ Intel® ICH9-M

BIOS

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

On-board LAN

- ♦ 2x Intel® 82574L PCI Express GbE
- ♦ Support PXE and Wake on LAN (When 5Vsb available) (LAN1 only)
- ♦ 2x RJ45 (180°/ 90° option)

Display

- ♦ Intel® GM45 integrated GMA4500MHD Graphic engine
- ♦ Analog VGA Interface:
One 2x 8.0mm box header
Resolution up to 1600 x 1200 at 85 Hz, 2048 x 1536 at 75Hz

LVDS1 Interface:

- 2x DF13 20-pin LVDS connector for internal connection support single (24bit) or dual pixel (48bit) LVDS panel

LVDS2 (Through SDVOB w/ CH7308B) Interface:

- 2x DF13 20-pin LVDS connector for internal connection support single (24bit) or dual pixel (48bit) LVDS panel

SDVO Interface (option, one 30-pin box header):

- EBK SDVO1 (SDVOC w/ CH7307C DVI transmitter w/ DVI-Single link output)

CCFL Interface: 2x CCFL for Panel Backlight Inverter

Composition:

- VGA + LVDS1
- VGA + DVI
- LVDS + DVI
- LVDS1 + LVDS2

Audio

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

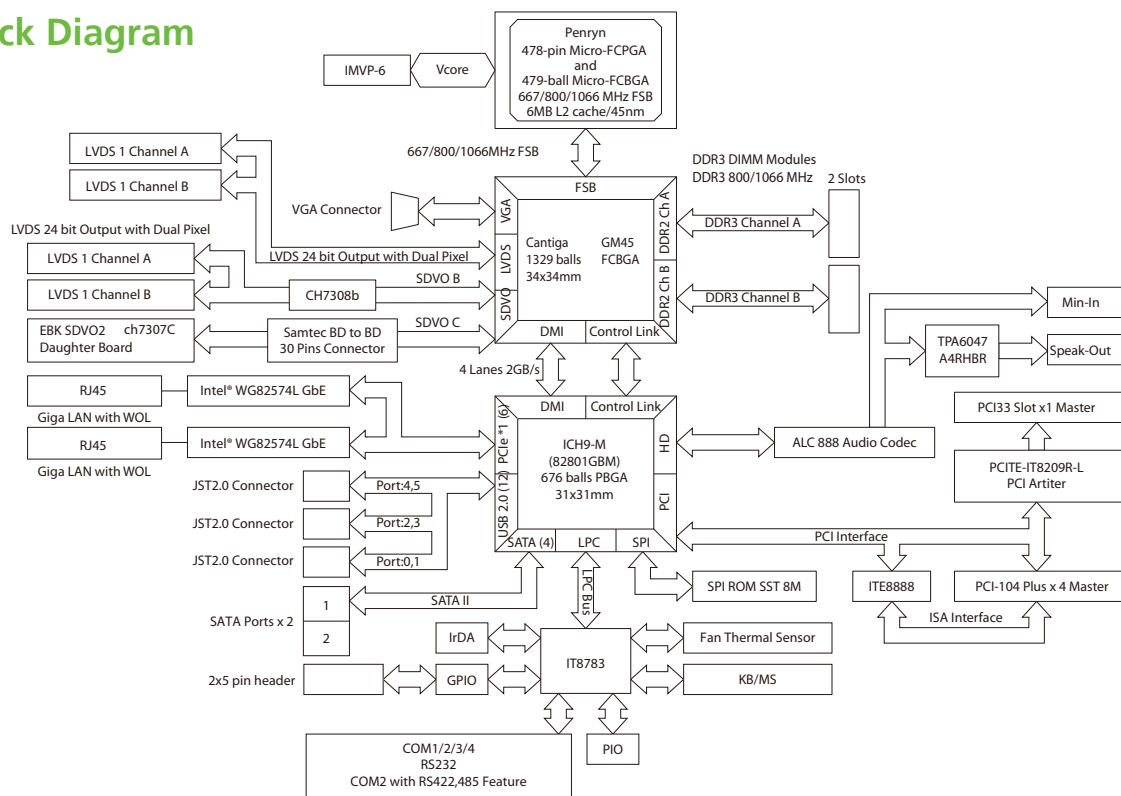
Expansion

- ♦ 1x PCI
- ♦ 1x PC/ 104+

I/O Interface

- ♦ Serial port: 3x COM support RS232 and 1x COM support RS232/422/485 (BIOS setting)

Block Diagram



- Parallel port: 1x 26-pin box header
- USB 2.0: 6x ports by JST connector x3
- 8x GPIO lines via header (GPI 0~3 and GPO0~3) TTL Level (0/ 5 V)
- 2x 2-pin 2.54mm header for Power LED/ HDD Active LED
- 1x 4-pin and 1 x 3-pin Fan connector
- 1x PS/2 KB/ MS via pin header
- On board Buzzer/ SMBus2.0 / Reset SW
- 1x 5-pin header for IrDA

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

- 2x SATA port
- 1x CF socket

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 Requirements

- Supports both AT and ATX Mode (default setting is ATX mode)
- ATX mode:
2x 5pin ATX power connector w/ +12V/ -12V/ +5V/ 5Vsb Power In
2x 2pin power connector +12V Power In
At ATX Mode, the BIOS setting is as follow:
POWER -SUPPLY TYPE: [ATX]
AUTO PWR-FAILURE RESUME: [ON]
- AT mode:
2x 5pin ATX power connector w/ +12V/ -12V/ +5V Power In
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"x 5.7")

Environment

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

Certifications

- CE approval
- FCC Class A

Ordering Information

• EBC 545 (P/N: 10E00054500X0)

5.25" Intel® Core™ 2 Quad, Core™ 2 Duo/ Celeron® Embedded CPU Board with Dual Display/ 1x PCI / 1x PC/ 104+/ 2x GbE

• EBKSDVO1 (P/N: 10E0SDVO100X0)

CH7307C daughter board w/ DVI-Single link for DVI output

• EBKSDVO2 (P/N: 10E0SDVO200X0)

CH7308B daughter board for LVDS output

• 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)