

Main Features

- ◆ Support Intel® Atom™ N270 1.6GHz processor with 533 MHz FSB
- ◆ Intel® 945GSE integrated 3D graphics engine GMA950 chipset with CRT and LVDS display
- ◆ 1 x 200-pin SO-DIMM socket, up to 2GB single channel non-ECC 400/533 MHz DDR2 memory
- ◆ Realtek RTL8111C-GR PCI Express Gigabit Ethernet x 1
- ◆ Realtek ALC888 Audio CODEC x 1
- ◆ USB 2.0 x 6, Serial port x 4, SATA x 1 and parallel port x 1
- ◆ Compact Flash Socket x 1/PCI 104 Interface x 1

Product Overview

The EBC 340 is a 3.5" embedded board with an on-board Intel® Atom™ N270 1.6GHz processor with 512 KB L2 cache by 533 MHz FSB. The EBC 340 features Intel® 945GSE and ICH7-M chipsets, which supports DDR2 400/533 memory along with integrated GMA950 graphics for large display application to support independent CRT and LVDS interface. The EBC 340 embedded board supports a various operation systems such as Windows XP embedded, Win CE and Linux.

Specifications

CPU Support

- ◆ Support Intel® Atom™ N270 1.6GHz processor with 533MHz FSB

Main Memory

- ◆ 1 x 200-pin SO-DIMM socket, up to 2GB non-ECC 400/533 DDR2 memory

Chipset

- ◆ Intel® 82945GSE Graphic Controller Hub (GMCH)
- ◆ Intel® 82801 GBM ICH7 Mobile (ICH7-M)

BIOS

- ◆ Award system BIOS
- ◆ Plug & Play support
- ◆ Advanced Power Management
- ◆ Advanced Configuration & Power Interface
- ◆ 8M bits SPI ROM

On-board LAN

- ◆ 1 x Realtek RTL8111C-GR PCI Express Gigabit Ethernet
- ◆ Support Boot From LAN (PXE)
- ◆ 1 x RJ45 with LED

Display

- ◆ Intel® 945GSE integrated 3D graphics engine, based on IntelGMA950 architecture, delivers sophisticated graphics for large display application, dual independent display support, at graphics core speeds up to 166MHz, provides a wealth of options for high-resolution displays

- ◆ Analog VGA interface:
1 x DB15 VGA port
Resolution up to 1600x1200 at 85 Hz, 2048x1536 at 75Hz
- ◆ LVDS interface:
Support 18-bit single channel LVDS, resolution up to 1600 x 1200
- ◆ CCFL interface:
1 x CCFL for LCD Panel Backlight Inverter

Audio

- ◆ Realtek ALC888 CODEC for High Definition
- ◆ 1 x Mic-in and 1 x Line-out Phone Jack

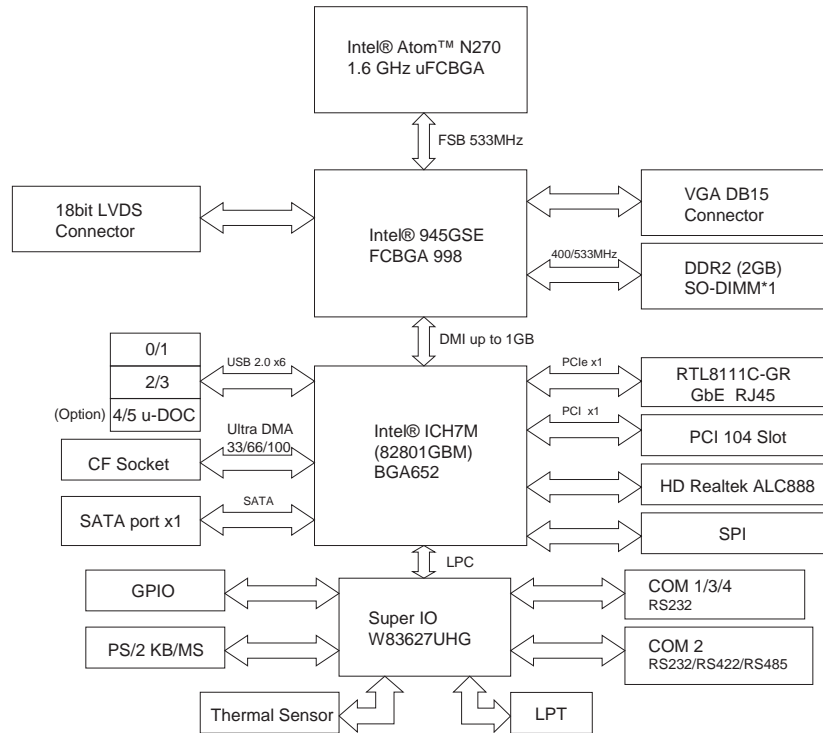
Expansion

- ◆ 1 x PCI 104 slot

I/O Interface

- ◆ Serial port: 4 port, One DB9 Connector and Three 2x5 2.0mm box header serial, COM2 supports RS232/RS422/RS485
- ◆ Parallel port: 1 x 26-pin box header
- ◆ USB 2.0: 6 ports, 2 ports edge connector, 2 ports by 2.0mm JST connector (2.0mm pin header option)
- ◆ 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 3-pin fan connector (for CPU)
- ◆ 1 x DB15 VGA connector
- ◆ 1 x Keyboard/Mouse pin header
- ◆ On board Buzzer/SMBus2.0/Reset SW

Block Diagram



Watchdog Timer

- Watchdog timeout can be programmable by Software from 1 second to 255 seconds and from 1 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

Storage

- 1 x SATA port
- 1 x CF socket
- 1 x uDOC (option)

System Monitor

- Monitoring of 4 voltages and 2 temperatures
- 4 Voltage (Vcore, +12V, +3.3V, +1.5V)
- 2 Temperatures (CPU, System)

On-board RTC

- On-chip RTC with battery backup
- 1 x External Li-Ion battery

Power Input

- Support AT mode only
- Support AT and ATX power supply
- 6-pin power connector for +5V/+12V power in
- 3-pin Jst connector with PS_ON# directly connected to GND for ATX power supply (Without power on push button function)

Power Requirements

Power requirement	+5 V	+12 V
Full-Loading Mode	1.26	0.66
Idle Mode	1.15	0.5
Standby Mode	0.86	0.41

Dimensions

- 3.5" form factor/146mm (L) x 105mm (W) (5.7"x4.1")

Environment

- Operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

- **EBC 340 (P/N: 10E00034000X0)** RoHS Compliant
Low power Embedded Board with Intel® Atom™ N270 processor and based on Intel® 945GSE 3D graphics engine GMA950 w/ VGA/LVDS/6 x USB2.0/4 x COMs/1 x PCIe Gigabit LAN/1 x parallel port/1 x PCI 104 interface

Packing List

Part No.	Description
60233USB59X00	USB CABLE
60233PW145X00	POWER CABLE
60233ATA17X00	SATA CABLE
6023309101X00	COM PORT CABLE
60233PRT10X00	PRINT CABLE
60233PS203X00	PS/2 CABLE