

Main Features

- ◆ On-board Intel® Celeron® M 600 MHz Processor with 512 KB L2 Cache
- ◆ Intel® 852GM and ICH4 Chipset
- ◆ On-board 256 MB DDR Memory
- ◆ Realtek RTL 8110SC Gigabit Ethernet Controller
- ◆ Audio with Speaker-out, Line-in and Mic-in
- ◆ Supports LVDS/ 6 x USB 2.0

Product Overview

The EBC 300 is a 3.5" embedded board with an on-board Intel® Celeron® M 600 MHz processor with 512 KB L2 cache or socket Pentium M/celeron M with 400 MHz FSB. The EBC 300 features Intel® 852GM and ICH4 chipsets, which supports DDR 200/266 memory, along with integrated graphics with 64 MB shared memory to support CRT and LVDS function.

The South Bridge ICH4 provides a 44-pin IDE connector, CompactFlash socket, two serial ports, six USB 2.0 ports, one Gigabit Ethernet LAN port, and an audio interface. The EBC 300 is a great solution featuring a low power consumption processor with versatile display and numerous I/O port support.

Specifications

CPU Support

- ◆ Supports Intel® Celeron® M 600 MHz processor with 512 KB L2 cache and 400 MHz FSB
- ◆ Support for Intel® Pentium® M processor or Intel® Celeron® M processor in 478-pin, Micro-FCPGA package (mPGA479M Socket)

Main Memory

- ◆ On-board 256 MB Non-ECC DDR SDRAM memory

Chipset

- ◆ Intel® 852GM 400 MHz
- ◆ Intel® ICH4

BIOS

- ◆ Award system BIOS
- ◆ ACPI: Only supports Software Shutdown by 5 Vsb Provided (S0 /S5 only)
- ◆ Advanced Power Management support
- ◆ 4 Mbit flash ROM
- ◆ Supports Pentium M Speed Step (Customized by Nexcom)
- ◆ Supports Automatic Power On Function

On-board LAN

- ◆ Realtek RTL 8110SC Gigabit Ethernet Controller
- ◆ 1 x RJ45 with LED
- ◆ Supports PXE LAN boot ROM for Ethernet Boot up
- ◆ Supports Wake on LAN (When 5 Vsb power available)

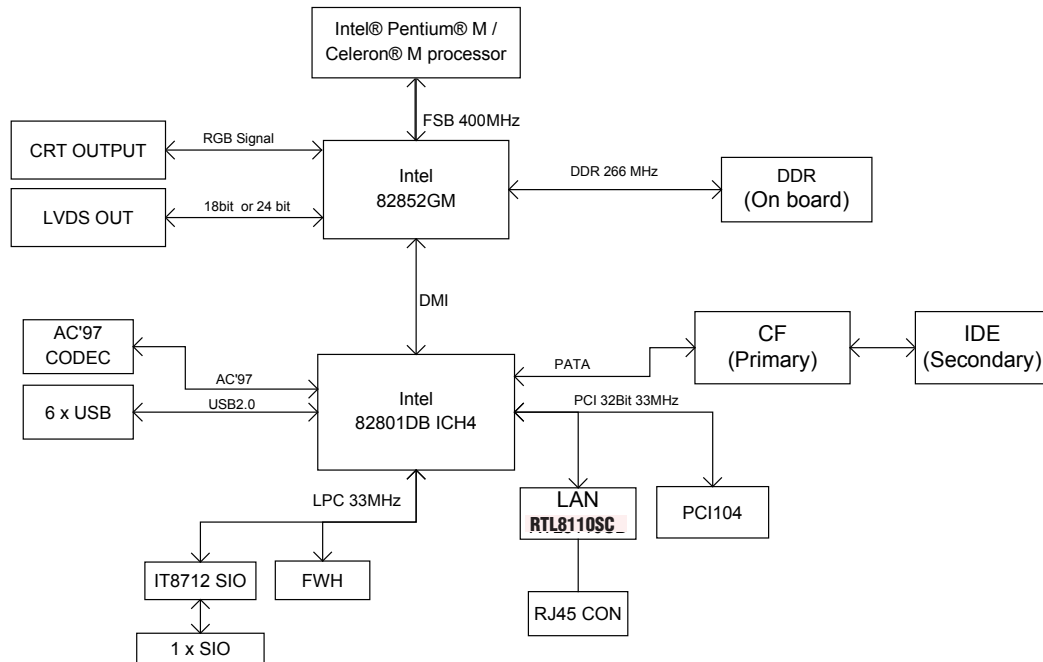
Display

- ◆ Intel® 852GM integrated graphics solution w/ Intel Extreme Graphics 2 technology
- ◆ Up to 64 MB of dynamic video memory allocation
- ◆ 350 MHz integrated 24-bit RAMDAC that can drive a standard progressive scan analog monitor with pixel resolutions up to 1600 x 1200 at 85 Hz, 2048 x 536 at 75 Hz
- ◆ 1 x DB15 VGA connector
- ◆ LVDS: LFP (Local flat panel) LVDS interface/Single pixel LVDS panel support up to UXGA panel resolution (1600 x 1200) / DF13-20DP, 2 x 20-pin connector for LVDS panel output

I/O Interface

- ◆ Serial port: 1 port, with 16 C550 UARTs, 1 x DB-9 Connector
- ◆ USB 2.0: 6 ports, with two direct output, four from 1x6 JST
- ◆ On-board 3-pin header for I2C, one pin for GND
- ◆ On-board 2-pin header for Reset switch

Block Diagram



- 8 GPIO lines via header (GPI 0 ~ 3 and GP00 ~ 3) TTL Level (0/5 V)
- On-board Power LED and HDD Active LED Pin Header
- Reserved 1 x 3-pin fan connector (for CPU)
- 1 x PCI 104 connector

On-board RTC

- On-chip RTC with battery back up
- 1 x External Li-Ion battery
- The battery socket is in flat direction.
- Tolerance less than 2 sec (24 hours) under 25°C environment

Storage

- CF: 1x Internal CompactFlash socket
- Support One Type I & II Compact Flash Card (Primary Master)
- IDE: 1 x 44-pin IDE connector

System Monitor

- Derived from Super I/O to support system voltage, fan speed, temperature monitoring

Power Input

- Supports both AT and ATX Mode (Factory default setting is AT mode)

CPU: P-M 1.7 G	+12 V	+5 V
Memory: On board DDR 256 MB		
Full-Loading Mode (A)	0.2 A	6.2 A
Light loading Mode (A)	0.2 A	2.5 A

NOTE:

1. Full Loading: Utilize CPU 100% with Burn-in test running
2. Light Loading: Utilize CPU loading below 5% without data or application running.

Dimensions

- 3.5" form factor
- 146 mm (L) x 105 mm (W) (5.7" x 4.1")

Environment

- Operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 85°C
- Relative humidity: Operating 10% to 90%, non-condensing; Non-operating 5% to 95%, non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

- **EBC 300-C65-256M (P/N: 10E00030004X0)** RoHS Compliant Low Power Embedded Board with Celeron® M 600 MHz 512 KB L2 on-board with VGA/ LVDS/ Audio/ COM/ USB 2.0 / Gigabit LAN
- **EBC 300-SKT-256M (P/N: 10E00030003X0)** RoHS Compliant Low Power Embedded Board with Pentium® M / Celeron® M CPU Socket with VGA/ LVDS/ Audio/ COM/ USB 2.0 / Gigabit LAN