

Main Features

- Supports Intel® Pentium® M/Celeron® M Processor for Both Socket and BGA Types
- Intel 852GM Chipset/400 MHz FSB
- Dual 10/100 Fast Ethernet LAN Ports
- USB 2.0 x 6 / VGA/ LVDS/ DVI/TV-out interface
- Three RS232 and one RS232/422/485 via DB44 connector
- One DB44 connector for external LVDS connection

Product Overview

EBC 573 is a member of the Embedded System Board family, which is specially designed for the NEXCOM NICE 3100 fanless system. The EBC 573 is also suitable for system integrators to design their own reliable, fanless, compact and low noise systems with powerful Pentium M/Celeron M Intel processor performance. Although the EBC 573 is not a standard 5.25" EBC board size, its small dimensions of 260 mm (10.23") x 180 mm (7.08"), edge I/O connectors, and single on-board DC to DC power circuit design using a single DC 12 V to 30 V power source, allows the system to be designed more efficiently with strong I/O support for an extremely compact solution for system box application requirements. Fewer cables and the internal DC power design help the system resist vibration and increase reliability as well.

The board comes with an external LVDS interface via a high density DB44 type connector that allows users to connect a LVDS panel by an external cable. The LCD backlight power is included in the pin configuration to eliminate the need for extra power source for the backlight inverter. Other features include 6 USB 2.0 ports, Dual Intel Gigabit Ethernet, TV-out and another Video interface for DVI connection, and four RS232 serial ports.

Specifications

CPU Support

- Intel Pentium M processor in 478-pin, Micro-FCPGA package (mPGA479M Socket) from 1.6 to 1.8 GHz with 1 MB or 2 MB L2 Cache
- Intel Celeron M processor in 478-pin, Micro-FCPGA package (mPGA479M Socket) from 1.3 to 1.5 GHz with 512 KB or 1 MB L2 cache
- Supports Low Voltage and Ultra Low Voltage Intel® Pentium M or Intel Celeron M processors in 479-ball, Micro-FCBGA packages
- Supports 400 MHz FSB CPU only

Main Memory

- Two 184-pin DIMM sockets support up to 2 GB un-buffered non-ECC DDR 200/266 SDRAM
- DDR 333/400 memory is also compatible but runs at 266 MHz

Chipset

- Intel® 852GM
- Intel® 82801DB (ICH4)

BIOS

- Award System BIOS
- 4 Mbit flash ROM

On-board LAN

- Intel® S82551ER x 2 (Non-RoHS version)
- Intel® S82551QM x 2 (RoHS version) to support PXE LAN Boot

Display

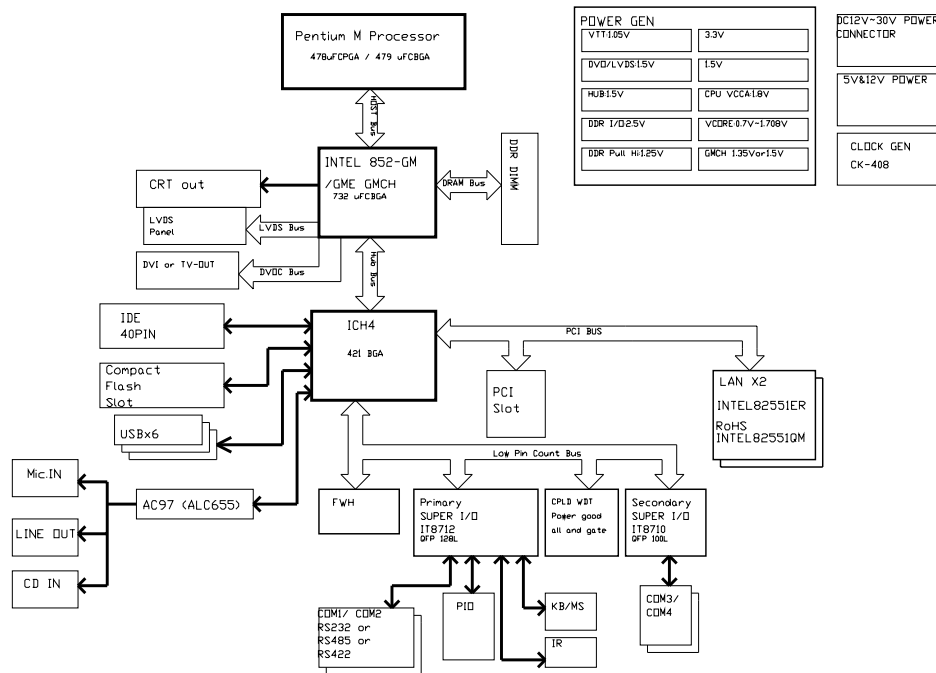
- Intel 852GM integrated graphics solution w/ Intel® Extreme Graphics 2 technology, Up to 64 MB of dynamic video memory allocation

- 350 MHz integrated 24-bit RAMDAC that can drive a standard progressive scan analog monitor with pixel resolution up to 1600 x 1200 at 85 Hz
- DB15 CRT VGA connector x 1
- LFP (local flat panel) LVDS interface
- Single pixel LVDS panel (18/24/36-bit) supports up to UXGA panel resolution (1600 x 1200)
- DB44 connector for external connection
- Chronitel CH7009 DVI and TV-out
- TV-out support graphic resolution up to 1024 x 768
- DVI Output up to UXGA resolution
- DVI 12-bit Interface 34-pin box header connector x 1
- RCA TV out & S-Video output
- TV-out connector is 7-pin Mini-Din,
- For S-Video TV-out interface with direct plug in,
- For the RCA type TV-out, this is through an optional cable that converts the 7-pin Mini-Din to a RCA TV connector

I/O Interface

- Supports standard 3.5" standard floppy drives by standard box header
- Printer Port: 2.0 mm 26-pin box header
- Serial Port: One DB 44-pin connector with one external cable to convert the 4 COM
- COM 2 supports RS 232/422/485, select by 1 x 10 Switch.
- COM4: Pin-9 reserved for 12 V or 5 V output (Set by Jumper)

Block Diagram



- On-board USB 2.0 ports x 6
- 4 ports on the rear come with RJ45 connector
- 2 ports reserved by JST connector near front panel (shared signals)
- One 6-pin Mini-Din for PS/2 Keyboard/Mouse
- Digital I/O: 4-bit TTL input, 4-bit TTL output (TTL level: 0 - 5 V)
- On-board pin header for IrDA Tx-Rx
- Reserved 3-pin fan connector x 3 (one for CPU and two for System)
- On-board buzzer
- Power/HDD LED Pin Header
- Reset Pin Header
- SM-bus, I2C Pin header
- Power on/off switch button

Watchdog Timer

- Watchdog timeout can be programmed by software from 1 second/min. to 128 Sec/min. (from GAL)

On-board RTC

- On-chip RTC with battery back up
- External Li-Ion battery x 1

System Monitor

- Monitoring of voltage, 3 x temperature and 3 x fans

Power Input

- On-board DC to DC converter
- Supports DC input voltage from +12 V to + 30 V DC
- Power Input connector: Mini-DIN 4-pin power connector
- One big 4 P power connector output (+5 V and +12 V) for external Drive (CD-ROM or HDD)
- On-board Power On/OFF Switch
- Reserved 2-pin JST for -12 V DC input
- Reserved ATX function for remote power on/off control

Dimensions

- 260 mm (10.23") x 180 mm (7.08")

Environment

- 0°C to 65°C
- -20°C to 85°C
- 5% to 95% non-condensing

Certifications

- CE approval
- FCC Class A

Ordering information

• EBC573 (P/N:1E00057300)

Embedded Board Supports Micro-FCPGA Intel Pentium M / Celeron M CPU (Supplied with CPU Cooler)
Intel 852GM Chipset with integrated VGA

USB 2.0/ Dual 82551ER LANs /TV-out /DVI /Audio /4 COMs/

• EBC573(LF) (P/N: 1E00057300X0) RoHS Compliant

Embedded Board Supports Micro-FCPGA Intel Pentium M / Celeron M CPU (Supplied with CPU Cooler)

Intel 852GM Chipset with integrated VGA

USB 2.0/ Dual 82551QM LANs /TV-out /DVI /Audio /4 COMs/

• EBC573FL-C65 (P/N: 1E00057303)

Embedded Board w/ Micro-FCBGA Celeron M 600 MHz,

512 KB L2 CPU on board, Heatsink included

Intel 852GM Chipset with integrated VGA

USB 2.0/ Dual 82551ER LANs /TV-out /DVI /Audio /4 COMs/

Wide Range Power Input +10 V DC to 30 V DC

Dual Independent Display Support (CRT + LVDS)

• EBC573FL(LF)-C65 (P/N: 1E00057303X0) RoHS Compliant

Embedded Board w/ Micro-FCBGA Celeron M 600 MHz,

512 KB L2 CPU on board, Heatsink included

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USB 2.0/ Dual 82551QM LANs /TV-out /DVI /Audio /4 COMs