

Main Features

- Socket 478 Supports Intel® Pentium® 4/Pentium® 4-M/Celeron® up to 3.06 GHz+ with 400/533 MHz FSB
- Intel® 845GV Chipset
- 184-pin DDR DIMM x 2, Supports DDR 266/333 memory up to 2 GB
- Intel 82551 QM/82562EM 10/100 LAN x 3
- CompactFlash Socket

Product Overview

The EBC 575 is a 5.25" Socket 478 embedded board that supports Intel Pentium 4 or Pentium 4-M processors with 400/533 MHz FSB of various frequencies and L2 caches. The product incorporates Intel 82845GV and 82801DB (ICH4) chipsets. The Intel 82845GV supports unbuffered non-ECC DDR 266/333 memory up to 2 GB maximum and includes an integrated graphic controller with 64 MB VGA shared memory.

The low power consumption South Bridge ICH4 provides a PCI slot, parallel port, slim type floppy connector, 44-pin IDE connector, CompactFlash socket, and other versatile I/O ports, such as two serial ports, two USB 2.0 ports supported by a JST 6-pin connector, three 10/100 LAN ports, optional audio interface with the EBK AC'97 module and others. The EBC-575 Series' Pentium 4/Pentium 4-M processors offer high performance along with versatile display and I/O port configuration and can support the most demanding embedded applications.

Specifications

CPU Support

- Single mPGA478 ZIF socket
- Supports: Intel Pentium 4 processor up to 3.06 GHz with 400/533 MHz FSB, 512 KB L2 Cache
- Supports: Intel Pentium 4-M/Celeron processor up to 2.4 GHz with 400 MHz FSB

Main Memory

- Two 184-pin DIMM sockets, supports up to 2 GB maximum unbuffered non-ECC DDR 266/333 SDRAM
- Does not support double-sided x 16 DDR Chip DIMMs
- Does not support stacking type memory DIMMs

Chipset

- Intel® 845GV
- Intel® 82801DB (ICH4)
- Firmware Hub (FWH) 4 Mbit flash ROM x 1

BIOS

- Award System BIOS
- Plug & Play support
- ACPI 1.0 b compliant
- 4 Mbit flash ROM

On-board LAN

- Intel® 82551QM (PRO/100 Network Connection) x 2
- ICH4 integrated LAN Intel® 82562EM 10/100 Fast Ethernet x 1
- LAN connector: RJ45 with LED connector x 3

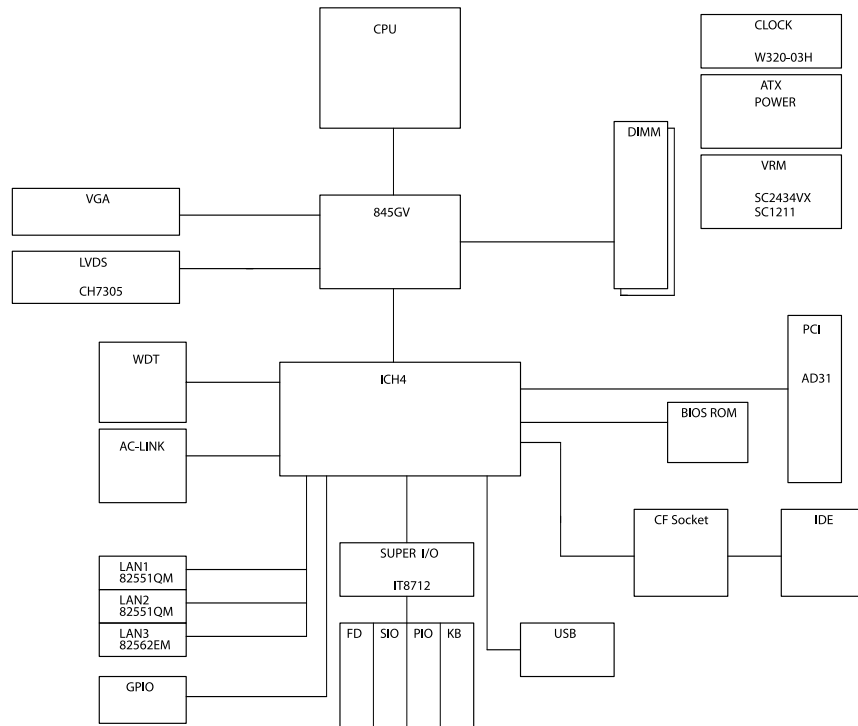
Display

- Intel® 845GV chipset with integrated graphics controller
- Full PC98 and PC99 compliant
- 64 MB VGA shared memory
- Hardware motion compensation assist for software MPEG/DVD decoding
- VGA: 15-pin D-sub connector x 1 (External 16-pin box header x 1)

I/O Interface

- Serial port x 2, with 2 x 16C550 UARTs (10-pin header x 1, D-sub connector x 1)
- USB 2.0 x 2 via one JST 2.0 mm 6-pin connector
- HDD: 44-pin connector x 1, Ultra ATA 100/66/33 support
- CompactFlash Socket x 1
- Parallel port: 26-pin connector x 1, bi-directional, EPP/ECP support
- Floppy: Slim type connector x 1
- PS/2 Keyboard/Mouse: 6-pin Mini-DIN connector x 1
- AC'97 audio output: 10-pin header x 1 (support optional EBKAC97)
- CD-in/Line-in/Speaker-out: 4-pin connector x 3
- Digital I/O: 4-bit TTL input, 4-bit TTL output
- On-board buzzer x 1
- SMBus 2.0 controller: JST 2.0 mm 2-pin connector x 1
- Reset Switch/IDE active LED/ATX power Switch: 2-pin header connector x 3
- AUX: 12 V power 4-pin connector x 1

Block Diagram



On-board RTC

- ♦ On-chip RTC with battery back up
- ♦ External Lithium battery x 1

IDE

- ♦ HDD: 44-pin connector x 1, Ultra ATA 100/66/33 support
- ♦ CompactFlash Socket x 1

System Monitor

- ♦ Derived from Super I/O ITE 8712F-A to support system voltage, fan speed, temperature monitoring

Power Input

- ♦ 20-pin ATX, 4-pin AUX power input connector

Power Requirements

- ♦ EBC 575 power consumption (ATX power) running HCT 95 on Windows 2000 server
- ♦ Measured with P4 3.06 GHz
- ♦ +12 V: 7.15 A
- ♦ +5 V: 3.1 A
- ♦ +3.3 V: 0.5 A
- ♦ +5 Vsb: 0.8 A
- ♦ Measure with P4-M 2.4 GHz
- ♦ +12 V: 3 A
- ♦ +5 V: 2.7 A
- ♦ +3.3 V: 0.5 A
- ♦ +5 Vsb: 0.1 A

Dimensions

- ♦ 203 mm (L) x 146 mm (W)

Environment

- ♦ Board Level operating temperature: 0°C to 60°C
- ♦ Storage temperature: -20°C to 80°C
- ♦ Relative humidity: 10% to 90% (Non-condensing)

Certifications

- ♦ CE approval
- ♦ FCC Class A

Ordering information

- ♦ **EBC 575 (P/N: 1E00057500)**
5.25" Intel Pentium 4/Celeron Embedded CPU board with VGA/LAN x 3
- ♦ **EBC 575 (LF) (P/N: 1E00057500X0)** RoHS Compliant
5.25" Intel Pentium 4/Celeron Embedded CPU board with VGA/LAN x 3