EBC 575

5.25" Intel® Pentium® 4 or Pentium® 4-M Embedded CPU Board with Triple LAN/LVDS/CF

- IDE Interface
- 18/24/36/48 bit Dual channel (LVDS) interface
- PCI Interface
- 184-pin DDR DIMM x 2
- 845GV
- RJ 45 LAN Port
- VGA
- VGA Pin Header
- PIO
- PS/2 KB & Mouse
- 26-pin FDD/Slim type
- KB/Mouse Pin Header
- COM1
- COM2
- USB
- Intel® Pentium® 4/4-M Celeron® CPU Socket 478
- ATX(4-pin connector)
- Standard ATX Connector

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**
- **2 x 184-pin DDR DIMM, Supports DDR 266/333 memory up to 2 GB**
- **3 x Intel® 82551 QM/82562EM 10/100 LAN**
- **CompactFlash Socket**

Product Overview

The 5.25" form factor of EBC 575 embedded board with socket 478 that supports Intel® Pentium® 4 or Pentium® 4-M processors with 400/533 MHz FSB and various L2 cache. The EBC 575 incorporates Intel® 82845GV and 82801DB (ICH4) chipsets. The Intel® 82845GV supports un-buffered non-ECC DDR 266/333 memory up to 2 GB maximum and 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 with 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

- 2 x 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)
- 1 x Firmware Hub (FWH) 4 Mbit flash ROM

BIOS

- Award System BIOS
- Plug & Play support

- ACPI 1.0 b compliant
- 4 Mbit flash ROM

On-board LAN

- 2 x Intel® 82551QM (PRO/100 Network Connection), 1 x ICH4 integrated LAN Int
- 3 x LAN connector: RJ45 with LED

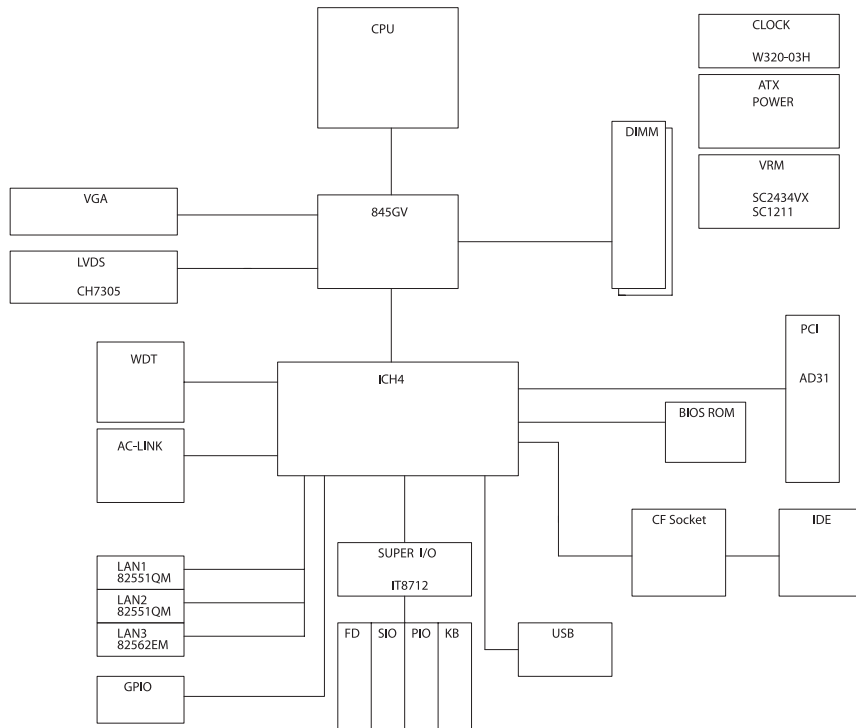### Display

- 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: 1 x 15-pin D-sub connector (2x8-pin box header)

I/O Interface

- Serial port: 2 ports, with one 2x5 pin header, one D-sub connector
- USB 2.0: 2 ports, with 1x6 JST (2.0 mm)
- HDD: 1 x 44-pin connector, support Ultra ATA 33/66/100
- CF: 1 x CompactFlash Socket
- Parallel port: 1 port, with 2x13-pin box header, bi-directional, EPP/ECP support
- Floppy: 1 x slim type connector

Block Diagram

- PS/2 Keyboard/Mouse: 1 x 6-pin Mini-DIN connector
- AC'97 audio output: 1 x 10-pin header (support optional EBKAC97)
- CD-in / Line-in / Speaker-out: 3 x 4-pin connector
- Digital I/O: 4-bit TTL input, 4-bit TTL output
- On-board buzzer / SMBus 2.0 controller
- Reset Switch / IDE active LED / ATX power Switch: 3 x 2-pin header connector
- AUX: 1 x 12 V power 4-pin connector

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

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

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
- 5.25" form factor
  203 mm (L) x 146 mm (W) (7.9" x 5.7")

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

NEXCOM

Embedded CPU Boards

We reserve the right to change specifications and product descriptions at any time without prior notice.

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