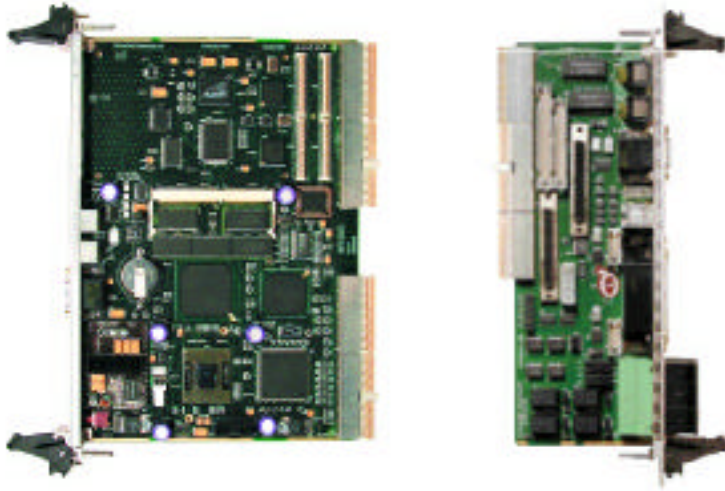# CompactPCI Single Board Computer   CPC8610

- **Embedded Intel Pentium III BGA2 Processor up to 700 MHz**
- **Intel 440BX Chipset with 100MHz FSB**
- **32-bit / 33MHz PCI Bus**
- **Up to 256 MB of SDRAM**
- **PCI Video**
- **Dual PCI 10/100 Base-TX Ethernet**
- **PCI Enhanced Ultra ATA IDE Controller**
- **2 Floppy, 2 Serial, and 1 Parallel Port**
- **Rear USB Port**
- **System Monitor**

SPECIFICATIONS:

PROCESSOR
INTEL Embedded Pentium III (BGA2) with support for 100MHz front side bus speeds.

MEMORY
1 bank of 72 bit (144 pin) SODIMM, up to 128MB of SDRAM, with ECC Support

CACHE
16KB L1, 128KB L2 integrated on-die

PCI BUS SPEED
32 Bit / 33MHz PCI Bus Speed

BIOS
DTI Enhanced PHOENIX BIOS, Plug-n-Play compliant

PCI IDE
EIDE support, PIO modes 0 to 4, bootable CD-ROM using rear panel I/O CPI606

PCI ETHERNET
Dual 10/100 Base-T auto-negotiating Intel 82559 Controllers

PCI VIDEO
C&T 69000 with 2MB integrated video memory using rear panel I/O CPI606

USB
UHCI compatible host controller port support for rear USB port using rear panel I/O CPI606.

PMC SITE
Support for one PCI Mezzanie Site

REAL TIME CLOCK
Includes 114 bytes CMOS RAM with long life battery

MEMORY
The CPC8610 supports up to 128MB of system memory using one standard 144-pin PC-100 SDRAM SODIMM. The BIOS automatically sizes and configures the memory for optimal performance.

CACHE
In addition to the 16KB of primary (L1) cache, a 128KB secondary (L2) on-die cache is integrated into the Embedded Pentium III (BGA2) processor

COMPACT PCI BUS
The CPC8610 provides direct support for up to 7, expansion CompactPCI slots. Each of these slots provide support for PCI mastering devices.
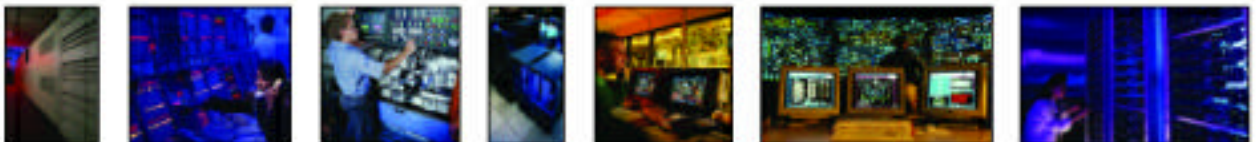
SYSTEM MONITOR
The CPC8610 includes LM87 hardware system monitor. This System Monitor monitors CPU temperatures and CPU fan speeds. The System Monitor also monitors all the system critical voltages

I/O
All CPC8610 I/O connections are routed to the P4 and P5 connectors for connection to DTI's rearpanel I/O board, the CPI606.

PHYSICAL
6U size board (160mm x 233.35mm), 4HP. Support for rear-panel I/O connections using DTI's CPI606 rear-panel I/O module.
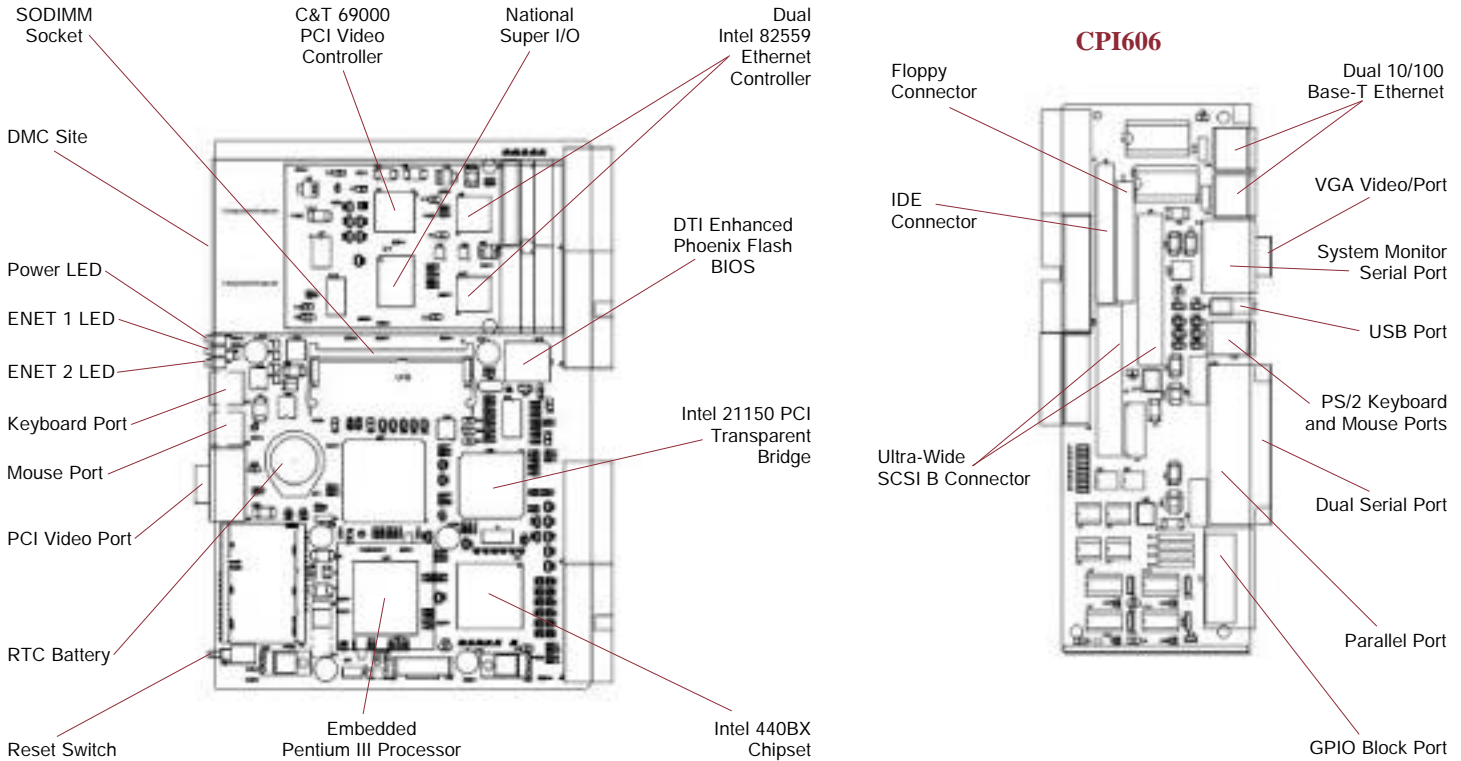

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Labels (CPC8610 board):
- SODIMM Socket
- C&T 69000 PCI Video Controller
- National Super I/O
- Dual Intel 82559 Ethernet Controller
- DMC Site
- Power LED
- ENET 1 LED
- ENET 2 LED
- Keyboard Port
- Mouse Port
- PCI Video Port
- RTC Battery
- Reset Switch
- Embedded Pentium III Processor
- DTI Enhanced Phoenix Flash BIOS
- Intel 21150 PCI Transparent Bridge
- Intel 440BX Chipset

Labels (CPI606 board):
- CPI606
- Floppy Connector
- IDE Connector
- Ultra-Wide SCSI B Connector
- Dual 10/100 Base-T Ethernet
- VGA Video/Port
- System Monitor Serial Port
- USB Port
- PS/2 Keyboard and Mouse Ports
- Dual Serial Port
- Parallel Port
- GPIO Block Port

CPC8610

The CPC8610 is a single board computer designed to fit into a single cPCI system slot. The CPC8610 features the latest Intel CPU, the Embedded Pentium III (BGA2), in a CompactPCI form factor. The CPC8610 is based on Intel's 440BX chipset. One standard 144-pin SODIMM socket is provided to support up to 128MB of system memory. DIMM sizes from 1MB x 72 to 32MB x 72 are supported, giving a memory range from 8MB to 128MB. SDRAM memory is supported. Single-bit error correction (ECC) is available using standard parity SODIMMs.

Dual Intel 82559 Ethernet controllers are integrated onboard. This PCI ethernet interface provides a fully auto-negotiating 10 Base-T / 100 Base-TX connection over standard UTP-5 data grade twisted-pair cable up to 100 meters in length. Support is provided for full duplex operation, allowing effective data rates to reach 20 Mbps and 200 Mbps, respectively.

The CPC8610 also features National LM87 for monitoring of system critical variables like voltage, temperature, and CPU fan operation.

A PCI EIDE controller on the CPC8610 gives excellent performance with all high speed IDE drives and also supports 32-bit access, LBA mode, and bootable CD-ROM's.

The CPC8610 incorporates a single PMC Site. The PMC Site is used for adding additional peripheral interfaces to the CPC8610. The PMC Site is connected to the host PCI Bus and operates at 32 Bit / 33 MHz. Standard ISA bus periphals like a PS/2 keyboard/mouse controller, Real Time Clock, floppy controller, RS-232 serial ports, ECP/EPP parallel port and field upgradable Flash BIOS are also integrated onto the CPC8610.

The CPC8610 provides enhanced 3D graphics performance by utilizing a C&T 69000 video controller. The video controller provides desktop graphics with full feature high end performance up to extended VGA mode.

The CPC8610 is designed for operation in CompactPCI passive backplane systems. For completely cableless chassis, all CPC8610 I/O connections are routed to the P4 and P5 connectors for connection to DTI's rear-panel I/O board, the CPI606. DTI offers several CompactPCI backplane choices. Call factory for details.

For more information or to order, please contact us.