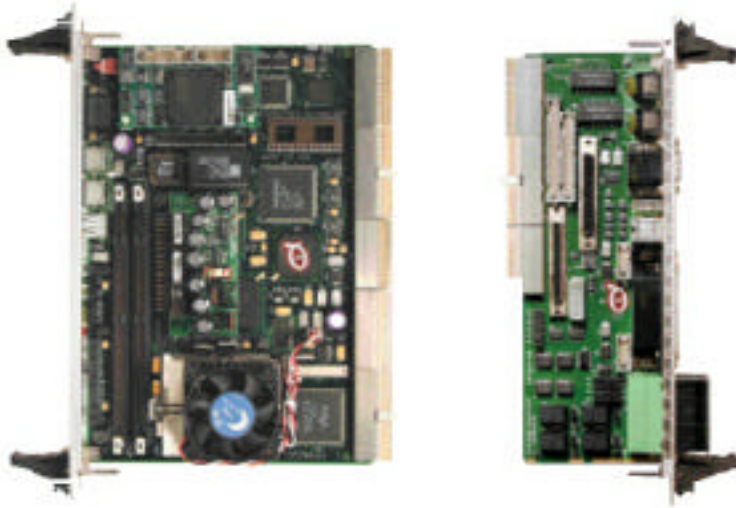


# CompactPCI Single Board Computer

## CPC8640



- Intel Celeron Processor up to 733 MHz
- Intel 440BX Chipset with 66MHz FSB
- 32-bit / 33MHz PCI Bus
- Up to 512MB of SDRAM
- PCI Video
- PCI 10/100 Base-T Ethernet
- PCI EIDE
- Flash Disk Support
- PCI Ultra-wide SCSI
- 2 Floppy, 2 Serial, 1 Parallel, and 2 USB Ports
- System Monitor

### SPECIFICATIONS:

#### PROCESSOR

INTEL Celeron (PPGA) with 66MHz CPU Bus

#### MEMORY

2 banks of 72 bit (168 pin) DIMMs, up to 512MB SDRAM

#### CACHE

16KB L1, 128KB L2 integrated in CPU

#### PCI BUS SPEED

33 MHz

#### BIOS

DTI Enhanced Phoenix BIOS, Plug-n-Play compliant

#### PCI IDE

EIDE support, PIO modes 0 to 4, bootable CD-ROM

#### PCI SCSI

Adaptec AIC-7880 Ultra/Wide

#### PCI ETHERNET

10/100 BASE-T auto-negotiating Intel 82559

#### PCI VIDEO

C&T 69000 with 2MB Integrated Video Memory

#### USB

UHCI compatible host controller w/2 ports

#### FLASH DISK

ISA Solid State Drive up to 72MB

#### REALTIME CLOCK

Includes 114 bytes CMOS RAM with long life battery

#### PHYSICAL

6U size board (160mm x 233.35mm)

Support for rear-panel I/O connections using DTI's CPI606 rear-panel I/O module

#### POWER

TBD

#### MEMORY

The CPC8640 supports up to 512MB of system memory using two standard 168-pin DIMMs. SDRAM memory is supported. The BIOS automatically sizes and configures for optimal performance.

#### CACHE

In addition to the 16KB of primary (L1) cache, a 128KB secondary (L2) cache is integrated into the Celeron processor.

#### COMPACT PCI BUS

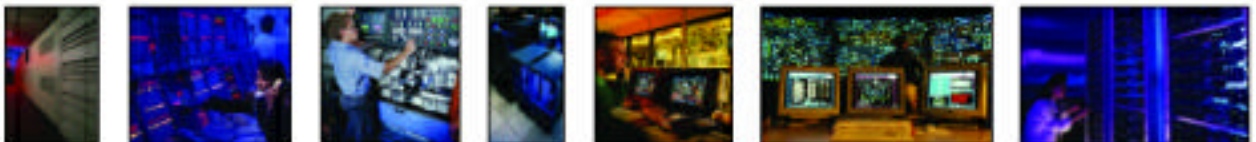
The CPC8640 provides direct support for up to 7 expansion CompactPCI slots. Each of these slots provide support for PCI mastering devices.

#### SYSTEM MONITOR

The CPC8640 includes DTI's standard CompactPCI System Monitor. This System Monitor monitors CPU temperatures and chassis fan speeds. User software can also be controlled through the use of the System Monitor's watchdog timer. The System Monitor also features external fan/switch monitoring, alarm reporting, two stage watch-dog timer, and a dedicated serial port for remote communication through a modem or CPU-CPU connection.

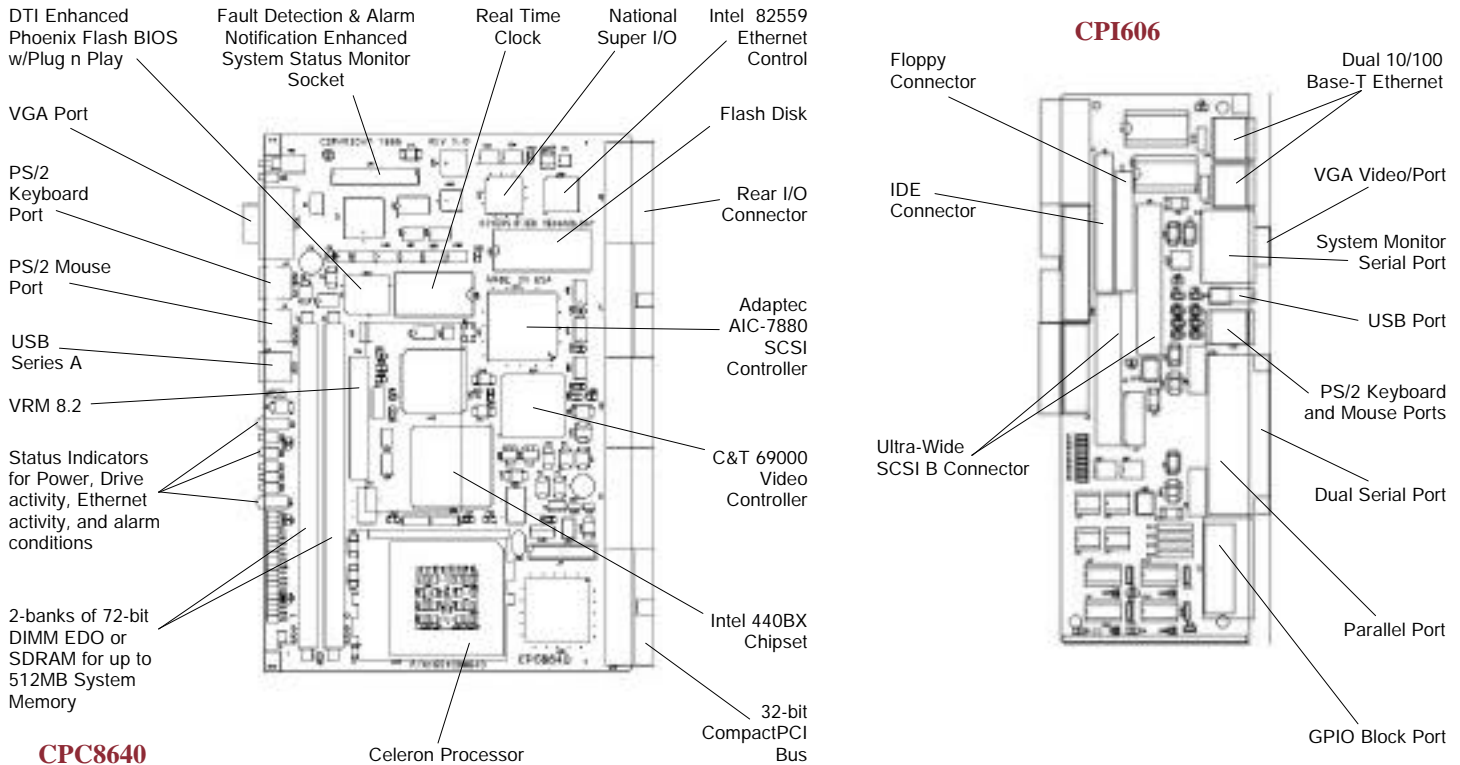
#### I/O

All CPC8640 I/O connections are routed to the P4 and P5 connectors for connection to DTI's rearpanel I/O board, the CPI606.



# CPC8640

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The CPC8640 features the latest Intel CPU, the Celeron, in a CPU CompactPCI form factor. The CPC8640 is based on Intel's 440BX chipset. Two standard 168-pin DIMM sockets are provided to support up to 512MB of system memory. DIMM sizes from 1MB x 72 to 32MB x 72 are supported, giving a memory range from 8MB to 512MB. SDRAM memory is supported. Single-bit error correction (ECC) is available using standard parity DIMMs.

Integrated onboard is Intel's 82559 Ethernet controller. 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 CPC8640 also features DTI's standard System Monitor for monitoring of system critical variables like voltage, temperature, fan operation and a watchdog timer. A dedicated serial port is included allowing the System Monitor to transfer data and diagnos-

tic information through a modem or a CPU-CPU connection.

A PCI EIDE controller on the CPC8640 gives excellent performance with all high speed IDE drives and also supports 32-bit access, LBA mode, and bootable CD-ROM's. Standard ISA bus peripherals 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 CPC8640.

The CPC8640 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.

A high performance Ultra-Wide SCSI controller is provided on the CPC8640. Both 8-bit (narrow) and 16-bit (wide) SCSI devices are supported. Double-speed ultra operation is supported, allowing data rates to reach 40 MB/S. The SCSI interface is based on the Adaptec's industry standard AIC-7880 PCI SCSI controller

An onboard flash disk is also provided. Once enabled, this device acts like a hard drive and uses standard OS partitioning, formatting and copying utilities, without cables and external devices. This allows the CPC8640 to boot to OS without any floppy or hard drive connected to the system.

The CPC8640 is designed for operation in CompactPCI passive backplane systems. For completely cableless chassis, all CPC8640 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.



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