

# RadiSys® EPC®-200

Mobile Pentium® II CompactPCI\* Embedded Computer



## System Overview

The EPC®-200 is designed for the demanding and high-performance CompactPCI® marketplace. It features 10BaseT and 100BaseTX Ethernet communications, a fast SCSI II controller, an EIDE controller and SVGA video, plus the most comprehensive set of front panel interfaces on the market. These features combine to make the EPC-200 the indispensable choice for any high-performance CompactPCI system.

The EPC-200 utilizes the 132MB/s PCI local bus for both on-board and CompactPCI I/O. The DEC 21150 PCI-PCI bridge chip is the interface between the on-board PCI bus and the CompactPCI bus and extends the number of supported CompactPCI peripheral slots to seven.

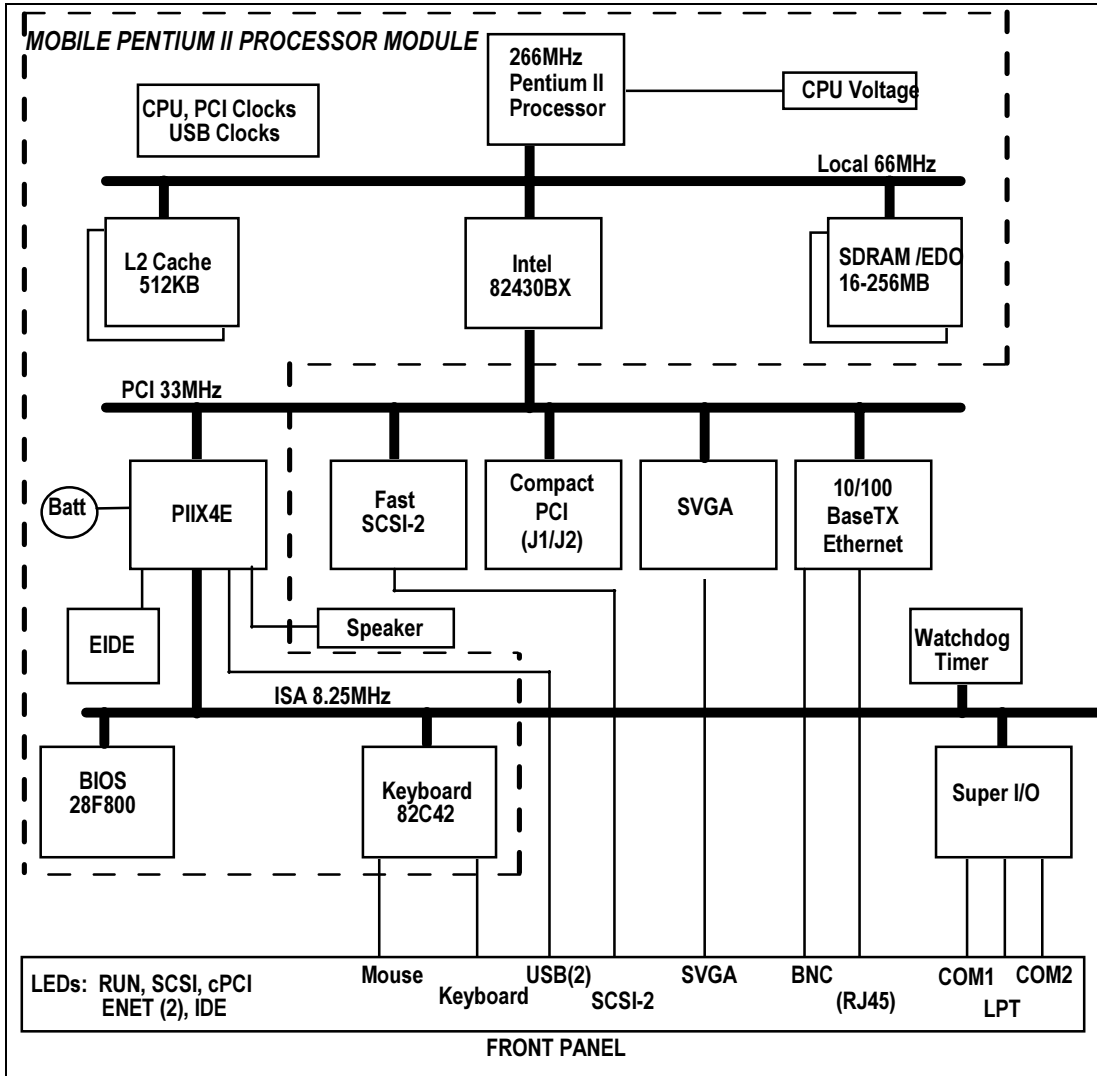
The EPC-200 is specifically targeted to run Windows NT® 4.0, and has passed the Windows NT hardware compatibility tests.

The EPC-200 exemplifies high integration, reliability and performance. Its modular design allows further customization for a perfect fit solution to meet specific customer requirements.

## Feature Summary

- High performance 266MHz Intel Mobile Pentium® II processor in mini-cartridge format on embedded processor module
- 512KB secondary (L2) cache
- Supports up to seven 3U/6U CompactPCI peripheral slots via DEC 21150 PCI-PCI bridge chip
- Two 144-pin SODIMM sockets support up to 256MB DRAM
- SVGA module based on the Cirrus Logic CL-GD5446
- 10/100BaseTX Ethernet controller on board with front panel RJ-45 and BNC connectors
- Fast SCSI II controller on board with front panel connector
- Two EIDE channels drive four devices through on-board headers
- Optional on-board 2.5" ATA EIDE hard disk
- Two USB ports via front panel
- IEEE 1284 ECP/EPP parallel port, two serial RS-232 ports with front panel connectors
- Programmable watchdog timer
- PS/2 style keyboard/mouse connectors on front panel
- On-board speaker
- Full 32-bit CompactPCI interface with J1 and J2 connectors
- Real-time clock with on-board battery
- Floppy support via on-board header
- Windows NT 4.0 Support
- Passed Windows NT hardware compatibility tests

EPC-200 Block Diagram



**SPECIFICATIONS**

<b>FEATURE</b>	<b>FUNCTION</b>	<b>DESCRIPTION</b>
Board Style		CompactPCI, Eurocard Size "B"
CPU		266MHz Mobile Pentium II processor
Cache		512KB L2 cache using synchronous pipeline burst SRAM
PCI Chipset		Intel 430BX PCIset
System Memory	Capacity	8 to 256MB via two, 144-pin SODIMM SDRAM/EDO modules
	Size	60ns or 70ns 4MB, 8MB, 16MB, 32MB, or 64MB, 3.3V SODIMMs
System BIOS	BIOS Type	Phoenix BIOS with 1024KB flash and battery backed CMOS RAM
	Special Features	PC95 and PCI 2.1 compliant; Windows 95 ready Plug and Play; APM 1.2; IDE drive autoconfigure; multilingual support
Integrated PCI IDE	Number of Devices	Two independent channels, four IDE devices, PCI 2.1 compliant
	On-Board IDE Drive	Optional on-board 2.5" IDE hard drive option uses primary channel
	Connectors	Two powered 44-pin headers (primary, secondary)
	Modes	1, 2, 3, 4
Integrated Super I/O	Controller	SMC 37C665IR
	Serial Ports	Async, RS-232C, 9-pin 16C550 compatible with send/receive 16-byte FIFOs; meets electrical specification of EIA/TIA-232-E and EIA/TIA-574-E
	Parallel	Bi-directional IEEE-1284-1994 compatible; Centronics-compatible, 25-pin, ECP, EPP
	Floppy Controller	34-pin header on-board; 2.88MB, 765A compatible
	Keyboard Controller	8042-compatible
RTC	Real Time Clock	Accurate to $\pm 13$ minutes/yr
	Battery	Field replaceable 3.0V, 200mAH CR2032 lithium battery
Ethernet	10/100BaseTX and 10Base2	Digital 21143 for 10/100Mbit Ethernet
SCSI II	Fast SCSI II	8-bit fast SCSI II interface provided by AMD 53C974A. 10MB synchronous and 7MB asynchronous; 50-pin standard connector on front panel
SVGA Graphics Module	Form Factor	PMC-style module
	Resolution	640 x 480/1280 x 1024
	Chip Set	Cirrus Logic CL-GD5446
Connectors, Front Panel	Serial	Two RS-232 DTE serial ports (COM1 and COM2) with 9-pin male D-sub connector
	Parallel	One 25-pin D-sub connector
	Keyboard/Mouse	Two IBM PS-2 style 6-pin mini DIN connector
	USB	Two Universal Serial Bus connectors
	Ethernet	One RJ-45 Ethernet connector and one BNC connector
	SVGA	One 15-pin SVGA-style connector
	SCSI II	Standard SCSI connector (female)
Connector, Headers		Floppy, Enhanced IDE (2)
Watchdog Timer		A retriggerable one-shot WDT with a programmable reset interval ranging from 128 milliseconds to 8.2 seconds
Environment	Operating Temperature	EPC200-266 $\Rightarrow$ TBD°C - TBD°C
Power Requirement	Typical w/ SVGA, 32MB Memory	EPC200-266 $\Rightarrow$ TBD A @ 3.3V DC
		All $\Rightarrow$ TBD A @ 5V DC
		All $\Rightarrow$ <TBD mA @ 12V DC

**ORDER CODES**

**EPC200-266** 266MHz Pentium II processor, 32MB, SVGA, IDE HDD on board



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