



166/200/233MHz PENTIUM® MMX™ MOTHERBOARD WITH USB IN A CREDIT CARD SIZE PACKAGE



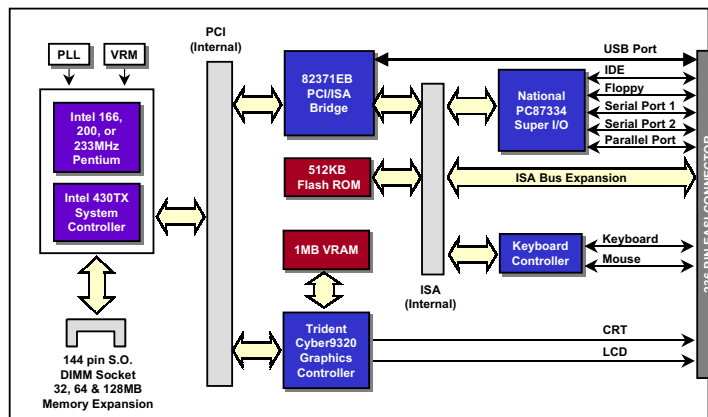
FEATURES

- Credit Card Size PC/AT Motherboard
- 166/200/233MHz Intel MMX Pentium Processor
- Memory capacity up to 128 MB EDO
- USB port
- “Thermal Throttling” to prevent overheating
- Withstands up to 15G Vibration, 50G Shock
- Optional low profile heat sink & fan
- PhoenixPICO BIOS™
- Runs MS-DOS, Windows® 95/98, CE, NT
- Supports major Real Time Operating Systems
- Complete set of PC/AT peripheral controllers
- SVGA/LCD PCI Graphics Controller w/1 MB VRAM
- ISA Expansion Bus
- High density 236-pin EASI I/O connector

DESCRIPTION

Cell Computing's P166, P200, and P233 Pentium CardPC with USB are the latest members in Cell's ultra compact PC micro-motherboard product line. Utilizing advanced packaging technology, Cell's P166, P200 and P233 CardPCs squeeze all the functions of a Pentium PC motherboard into a credit card sized package making them the world's smallest Pentium PCs. Since all core system components are contained within the CardPC, design complexity is dramatically reduced resulting in shorter time to market, lower development cost and reduced development risk.

The P166, P200, and P233 CardPCs respectively feature Intel 166MHz, 200MHz, and 233MHz low power Pentium processors with MMX technology. These CardPCs are ideal for embedded PC applications requiring Pentium MMX-level performance and graphics in a low power, extremely compact form factor. Like all Cell CardPCs, these models feature standard PC technology in a rugged, durable package. Typical applications for the Pentium CardPCs include ruggedized tablets and notebooks, portable test and measurement equipment, industrial controllers, portable medical devices, network appliances, and wearable computers.



P166, P200, and P233 USB CardPC Block Diagram

**P166/P200/P233 USB CARDPC SPECIFICATIONS**

ITEM	P166 CardPC	P200 CardPC	P233 CardPC	SALES INFORMATION
<b>CPU</b>	Pentium 166MHz w/ MMX	Pentium 200MHz w/ MMX	Pentium 233MHz w/MMX	Please consult your regional sales office for the most current design-in information or download documents from Cell's website.
<b>CHIPSET</b>	Intel 430TX	Intel 430TX	Intel 430TX	
<b>POWER</b>				
Power Supply	3.3 & 5V	3.3 & 5V	3.3 & 5V	Web: <a href="http://www.cellcomputing.com">www.cellcomputing.com</a> Email: <a href="mailto:sales@cellcomputing.com">sales@cellcomputing.com</a>
Operating – Observed Max <sup>1</sup>	6.6 W	7.2W	7.3W	
DOS Prompt	4.6W	4.8W	5.1W	
Windows 95 <sup>2</sup>	2.2W	2.3W	2.4W	
Suspend To RAM Mode	20mW	20mW	20mW	
<b>OPERATING TEMP</b>				<b>EASTERN REGIONAL SALES OFFICE</b>
Ambient (T <sub>A</sub> )	0-50°C	0-50°C	0-50°C	
Case (T <sub>C</sub> )	0-85°C	0-85°C	0-85°C	Tel: 781.933.7830 Fax: 781.933.6504
<b>MEMORY</b>				<b>CORPORATE SALES OFFICE</b>
DIMM	16, 32, 64, 128MB	16, 32, 64, 128MB	16, 32, 64, 128MB	
Flash ROM	512KB	512KB	512KB	
<b>DISPLAY</b>				2099 Gateway Place, Suite 750 San Jose, CA 95110-1017 Tel: 408.967.8800 Fax: 408.967.8801
Graphics Controller	Trident Cyber9320	Trident Cyber9320	Trident Cyber9320	
Bus Interface	PCI	PCI	PCI	
VRAM	1MB	1MB	1MB	
Max CRT Resolution	1024x768, 256 col.	1024x768, 256 col.	1024x768, 256 col.	
Max LCD Resolution	1024x768, 256 col.	1024x768, 256 col.	1024x768, 256 col.	Toll Free: 1-877-CARDPC1 (1-877-227-3721)
<b>PERIPHERAL I/O</b>				
Keyboard	Mitsubishi M38802	Mitsubishi M38802	Mitsubishi M38802	
FDD	National PC 87334	National PC 87334	National PC 87334	
IDE	National PC 87334	National PC 87334	National PC 87334	
Serial Port	National PC 87334	National PC 87334	National PC 87334	
Parallel Port	National PC 87334	National PC 87334	National PC 87334	
USB Port	N/A	N/A	Intel 82371EB	
<b>PHYSICAL</b>				<b>NOTES:</b>
Height (without fan/ with fan)	12.7mm / 21.5mm	12.7mm / 21.5mm	12.7mm / 21.5mm	
Footprint	54mm x 85.6mm	54mm x 85.6mm	54mm x 85.6mm	
Weight	55g	55g	55g	
<b>ENVIRONMENTAL</b>				
Storage Temperature	-20°C-85°C	-20°C-85°C	-20°C-85°C	1. Windows 95, 1024 x 768 resolution, APM off, nominal supply voltages +5%, running "Prime95" prime number generator application ver. 16.4.1, and 64MB DIMM modules installed. 2. Windows 95 with 640 x 480 resolution, 24 bit color, APM on and no applications running.
MTBF	100,000 hrs	100,000 hrs	100,000 hrs	
Vibration	15G	15G	15G	
Shock	50G	50G	50G	
Electrostatic Resistance	15kV, 100pF, 1.5kΩ	15kV, 100pF, 1.5kΩ	15kV, 100pF, 1.5kΩ	
Connector Insertion/Removal	1000 cycles	1000 cycles	1000 cycles	
DIMM Insertion/Removal	10 cycles	10 cycles	10 cycles	
Bend	2kg, one side, 1min	2kg, one side, 1min	2kg, one side, 1min	
Drop	75cm drop	75cm drop	75cm drop	
Twist	12.6kg/cm, 5minx5cyc	12.6kg/cm, 5minx5cyc	12.6kg/cm, 5minx5cyc	

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