

CPCI-6615 Portable CompactPCI Workstation

Self-Contained CompactPCI Portable Computer with 6-Slot Backplane

Features

- » Self-contained CompactPCI portable computer.
- » 6U x 24 HP CompactPCI card cage.
- » 6-slot cPCI backplane with H.110 CT bus and left-hand system slot. No rear transition.
- » One system slot, 5 peripheral slots.
- » Integrated 15-inch active matrix display.
- » Built-in optical and floppy disk drives.
- » Removable hard drive bay supports 3.5" ATA hard drives.
- » Fold-down keyboard with integrated pointing device.
- » 400-watt ATX power supply.

Self-contained Portable CompactPCI Solution

The CPCI-6615 is a compact, self-contained, CompactPCI portable computer. The system enclosure features a 6U card cage that includes a 6-slot CompactPCI backplane. The chassis features a 15-inch active matrix flat panel display, fold-down keyboard, touchpad mouse, hard drive bay, optical disc drive, floppy drive and 400-watt ATX power supply. The CPCI-6615 provides a totally integrated and cost-effective portable CompactPCI system ready to be deployed in industrial environments such as telecom field service and test applications. In addition, with its substantial expansion capabilities, the CPCI-6615 offers an infinite number of configurations, depending on the user's needs.

The chassis is made of high impact resistant plastic over an aluminum plate frame. Cooling is achieved via a 113 cfm intake fan on the bottom of the chassis. There is a durable, rubber-clad carrying handle on the top that makes carrying the system easy. A padded carrying case with wheels and telescopic handle is included for long-distance transportation of the system.

6-slot CompactPCI backplane

The CPCI-6615 backplane has a H.110 CT bus and features six CompactPCI slots. One slot is assigned to the CPU board and the other slots are for five peripheral boards. The backplane is designed to support commercial-off-the-shelf IDE and floppy drives. Two IDE connectors provide the control interface to the built-in CDROM, 3.5" hard drive in the removable bay, and additional IDE devices. And with a standard ATX power connector, the CPCI-6615 offers a cost-effective solution to a complete cPCI system.

Industry Standards Compliance

The CPCI-6615 complies with PICMG 2.1 hot-swap specification, providing full hot-swapping capability. The CompactPCI backplane complies with the following industry standards:

- CompactPCI™ Specification PICMG 2.0, R.3.0
- CompactPCI™ Hot Swap Specification PICMG 2.1, R2.0.
- CompactPCI™ Computer Telephony PICMG2.5, R1.0



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System Chassis Specifications

<i>Chassis Construction</i>	Portable Chassis Portable chassis constructed of flame retardant ABS plastic shell over an aluminum plate frame. Integrated flat panel display and fold-down keyboard. Rubber-clad carrying handle. Tilt-up feet under chassis and keyboard.	
<i>Slot Bay Dimensions</i>	6U x 24 HP card cage.	
<i>Integrated Display</i>	15" TFT LCD, 1024 x 768 optimum resolution.	Optional resistive touch screen.
<i>Keyboard</i>	Fold-down 108-key keyboard with positive tactile feedback key-switches. Integrated touchpad pointing device.	
<i>Dimensions</i>	15.7" (W) x 13.0" (H) x 9.0" (D).	
<i>Weight</i>	Approximately 25 lbs. with CPU board and hard drive.	

<i>PICMG Spec Compliance</i>	CompactPCI Backplane Specifications PICMG 2.0 Rev 3.0. PICMG 2.1 Rev 2.0. PICMG 2.5 Rev 1.0.	CompactPCI core specifications Hot-swap specifications Computer Telephony bus support
<i>Slots</i>	Six CompactPCI slots - one left-hand system slot, five peripheral slots.	
<i>Bus</i>	Up to 64-bit/66MHz PCI bus, H.110CT bus.	
<i>I/O Voltage</i>	3.3V/5V jumper selectable.	
<i>On-board I/O Connectors</i>	No Rear Transition. One ATX power supply connector, two IDE interface connectors, One floppy drive interface connector, one VGA interface connector, One USB interface connector, one serial interface (COM2) connector, Keyboard and mouse interface connectors.	

<i>Display</i>	LCD and Optional Touch Screen Specifications Active matrix TFT LCD, 15" (measured diagonally).	
<i>Resolution</i>	1024 x 768 (XGA) optimum resolution.	
<i>Brightness (cd/m²)</i>	400.	
<i>Touchscreen (optional)</i>	5-wire resistive touch screen.	

<i>Input AC</i>	Electrical and Power 100 ~ 240 V @ 50 ~ 60 Hz, full range (PFC).	
<i>Output</i>	400 watt ATX.	

<i>Temperature</i>	Environmental and Safety Operating 0~45°C (32~113 °F); non-operating -20~60°C (-4~140 °F)	
<i>Humidity (non-condensing)</i>	Operating: 20~90% @ 40°C; non-operating 10~95% @ 40°C.	
<i>Shock</i>	operating 10 G; non-operating 30 G.	
<i>Vibration</i>	(5-500 Hz): operating 1.0 Grms; non-operating 2.0 Grms	
<i>EMI/Safety</i>	CE, UL, FCC.	
<i>Reliability</i>	Backplane (MTBF) 800,000 hours, Power Supply (MTBF) 50,000 hours @ 25 °C (exclusive DC fan).	

CPCI-B3369 CompactPCI CPU Board

Intel® Pentium® M Blade

Features

- 1 PCI mezzanine card knockout.
- 2 VGA connector (DB-15).
- 3 Two USB 2.0 ports.
- 4 Serial port (COM1, RJ-45).
- 5 Ethernet port (10/100/1000 mbps, RJ-45).
- 6 Status indicator LEDs (hdd, power, reset, hot-swap).
- 7 CompactFlash socket.
- 8 PCI Mezzanine Card sockets.
- 9 IDE interface; hard drive tray for a 2.5" hard disk drive.
- 10 Passive CPU heatsink for u-FCPGA socket Intel Pentium M processor.



The CPCI-B3369 is a cost-effective CompactPCI single board computer (SBC) based on the Intel® Pentium® M processor. It is an ideal application blade for integration into the CPCI-6615 cPCI chassis for a high-performance and low-power consumption portable solution. It makes extensive use of Intel's latest I/O controller hub technology and provides 64-bit data buses throughput. The on-board dual Gigabit Ethernet controller is connected via a 64-bit/133 MHz PCI-X bus for maximum sustained packet throughput. In addition to a full array of industry standard I/O features including on-board 2.5" hard disk drive and two USB ports, the 3369C also provides one 64-bit/66 MHz PMC site for on-board I/O expansion making it ready to meet the most flexible and demanding I/O processing needs.

The 3369C can be used in either a system slot or peripheral slot, making it an ideal choice for applications requiring PICMG 2.16 Packet Switched Backplane support for Gigabit speed switched-fabric interconnection between blades. The board is designed in compliance with the PICMG 2.9 specification to cooperate with remote system and platform management modules.

The CPCI-B3369 supports Intel® Pentium® M 745 processor @ 2.0 GHz and Pentium® M processor @ 1.6GHz with the u-FCPGA package. The Intel Pentium M 745 processor has 2 MB L2 cache and Pentium M 1.6GHz processor has 1MB L2 cache providing high performance. With the support of a 400MHz front side bus, the CPCI-B3369 can fulfill customer's expectations of high-performance computing capability.

The CPCI-B3369 occupies only one-slot width. Its CPU heat sink was specially designed for the Intel® Pentium® M processor, enabling the CPCI-B3369 to operate without a cooling fan on the heat sink. It only needs external cooling air from the chassis fans for ventilation.

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CPU Controller Specifications

<i>Standards Compliance</i>	<i>Intel Pentium M Processor cPCI SBC Specifications</i> PICMG 2.0, R3.0 CompactPCI Specification. PICMG 2.1, R2.0 Hot-Swap Specification. PICMG 2.16, R1.0 Packet Switching Backplane Specification.
<i>Operating System Compatibility</i>	Windows 2000/NT 4.0/XP, Red Hat Linux 9.0, VxWorks.
<i>Processor</i>	Intel® Pentium® M processor (Socket 479), up to 2.0 GHz, 1 MB L2 Cache on 1.6 GHz CPU or 2 MB on 2.0 GHz CPU, Intel® E7501/ICH4 Chipset, Award 4 Mbit Flash BIOS (By request: Network booting/Console redirect), 400/533 MHz Front Side Bus.
<i>PCI BUS</i>	64-bit/133 MHz (PCI-X support).
<i>Memory</i>	DDR-200/266 SDRAM with ECC support, up to 2 GB max. capacity, On-board memory 512 MB/1 GB/2 GB (no user upgradable memory sockets).
<i>Graphics Controller</i>	ATI RageXL with 8 MB VRAM on board.
<i>LAN</i>	Front panel RJ-45 connector for 10/100/1000Base-TX ethernet LAN Intel® 82546GB (Dual GbE ports) controller
<i>EIDE Interface</i>	Dual channel Parallel ATA 33/66/100 interface, One IDE connector and space reserved for embedded 2.5" HDD.
<i>PCI-to-PCI Bridge</i>	Hint HB6 controller supporting system/drone mode capability, 64-bit/66 MHz bus.
<i>Front Panel I/O</i>	One PCI Mezzanine Card knockout, One DB-15 VGA connector, Two USB 2.0 connectors, One RJ-45 connector for serial port COM1, One RJ-45 connector for Gigabit LAN.
<i>Hardware Monitor</i>	Winbond W83782D controller monitoring CPU temperature, 3.3 V/5 V/12 V.
<i>Watchdog Timer Output</i>	Interrupt, system reset, NMI. Programmable interval 0 ~ 255 sec.
<i>PCI Mezzanine Card</i>	One PMC site with 64-bit/66 MHz PCI Mezzanine (IEEE1386.1) interface, +5 V/+3.3 V compliant signal.
<i>Solid State Storage</i>	One CompactFlash socket.

Environmental and Safety

<i>Temperature</i>	operating 0~55°C (32~131°F); non-operating -40~70°C (-40~158°F)
<i>Humidity (non-condensing)</i>	95 % @ 60°C.
<i>Shock</i>	Operating 20 G; non-operating 50 G.
<i>Vibration</i>	(5-500 Hz): operating 1.5 Grms; non-operating 2.0 Grms
<i>Altitude</i>	60m below sea level to 4000m above sea level.
<i>Airflow</i>	300 LFM = 1.54 m/s.