

6U cPCI to PMC Active 64 Bit Carrier

Product Description:

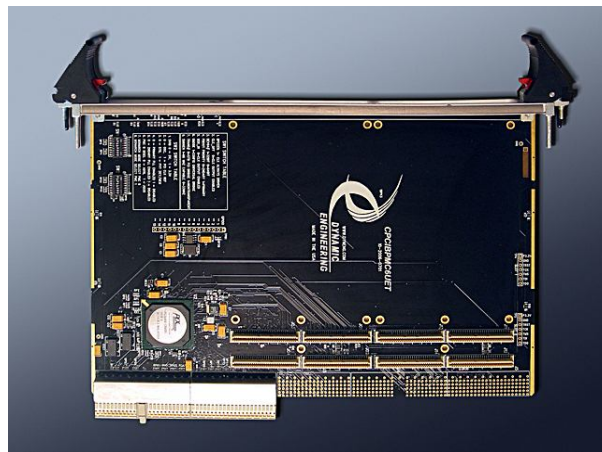
The cPCIBPMC6UET (6UcPCI to PMC) adapter / carrier converter card provides the ability to install a PMC cards into a standard cPCI slot. The cPCIBPMC6UET has two PMC card slots mounted to a universal voltage 6U 4HP cPCI card. The card is suitable for 32/64 with 33/ 66 MHz bus operation. The 6U card is wired for 64 bit PCI operation with pull-ups on the control lines to allow use in a 32 bit system. The PMC bezel connectors are mounted through the cPCI mounting bracket. The cPCIBPMC6UET is an extended temperature design with -40C to +85C operation standard. Conformal Coating is an option.

The PCI bus is interconnected to the PMC via 64 bit 66 MHz capable layout. The PMC device will determine the interface characteristics. The supplied dip-switch is used to control the bridge configuration. The user can select the clock rate, [33/66] on both buses and has access to the GPIO bits. PME and the Interrupt request lines are routed from the PMCs to the cPCI connector.

The PCI VIO is interconnected to the primary side of the bridge. The secondary side of the bridge has programmable VIO allowing 5V PMCs to be used in 3V systems and vice-versa. The voltage select pins are not installed on the cPCIBPMC6UET. The bridge will automatically adapt to the PCI bus reference voltage. Many PMCs are universal and can work with 3.3 or 5V cPCI backplanes. The secondary side has a shunt for the user to select 5V or 3V operation.

The cPCIBPMC6UET follows the PMC specs for maximum power consumption and heat dissipation. The power is routed from the cPCI to PMC connectors with mini-planes each of which is rated for more than the maximum PMC draws @ 3.3, 5, VIO, +12, -12.

The cPCIBPMC6U64ET has low internal power dissipation. The dissipation is a function of the frequency and load from the installed PMCs. The bridge uses 1W at 66 MHz and less at 33 MHz. The terminations contribute additional dissipation for a total of less than 1.2W at 66 MHz with a 64 bit implementation. Please add your PMC requirements to the 1.2W figure for total power utilized in the slot.



Top view of cPCIBPMC6UET PMC Carrier

Ordering

PCI_cPCIBPMC6UET

6U cPCI to PMC Carrier, active 64Bit, with front I/O



PCI PMC Carrier Specifications

Key Features

- Size - 6U 4HP cPCI
- PMC compatible slot - 2 PMC Slot provided.
- Clocks - cPCI bus can operate at 66 or 33 MHz. The PMC must be 66 MHz capable for 66 MHz operation to work properly. User switch to allow or disable 66 MHz. operation
- Access Width - Standard cPCI byte lanes supported for byte, word and long access dependent on installed PMC. 64 or 32 bit operation supported.
- Software Interface - PMC register definitions as defined by installed hardware. No software set-up required by cPCIBPMC.
- Interrupts - INTA, B, C, D routed to cPCI connector from PMC.
- Signal Conditioning - Secondary side PCI signals are routed and terminated IAW the PCI specification
- Power - +5, +3.3, +12, -12V, VIO supplied to PMC.
- Typ. PMC power - 7.5 W
- Max. PMC power - 25 W
- Max. Carrier power - 1.2W
- VIO - Bridge primary PCI IO Voltage is set by the PCI backplane. Secondary side VIO is programmable by the user.
- Thermal - The cPCIBPMC is a low power design with minimal heat dissipation for optimal PMC performance.
- IO Interface - Front Bezel IO supported at cPCI bracket. Partial Jn4 "user IO" supported [Ethernet and I2C] with interconnection to J2.
- LEDs – + 1.8V, +3V, +5V, +12V, -12V and Busmode 1 for both slots displayed on bezel.
- JTAG - JTAG header connected to PMC supplied. JTAG pin definitions are in the silkscreen.