

PMC Carrier/Adapter

PMC-to-PCI Express Adapter

The P/N 5243 carrier card allows use of a 32 bit PMC in a PCI express edge card slot.

A PEX8112 transparent bridge IC interfaces the PCI express primary side and a PCI secondary side.

The PCI secondary side operates at 33 or 66MHz 32 bit.

The PCI secondary side can be configured for 3V or 5V by moving a jumper and voltage peg.

The product will work in 1 lane, 4 lane, 8 lane or 16 lane PCI Express slots. But will only provide 1 lane bandwidth in slots wider than 1 lane.

The PCI express primary side of the bridge is fixed at 2.5 Giga bits per seconds per lane in each direction. Each lane is composed of a 2.5GHz transmit and a 2.5GHz receive channel.

An optional fan assembly (P/N 4936) is available that can be used

with two or one PCI express adapter boards and provides substantial forced-air cooling of high-power PMC modules.

This bridged adapter needs no additional software support since PCI Express is backward compatible with PCI software. Software support for the PMC in use is provided by the PMC supplier.

One status LED located at the edge of the board indicates PCI express Lane 0 ok.

The BUSMODE[4..2] inputs to the PMC is set to 001 indicating use of the PCI bus for the PMC connectors.

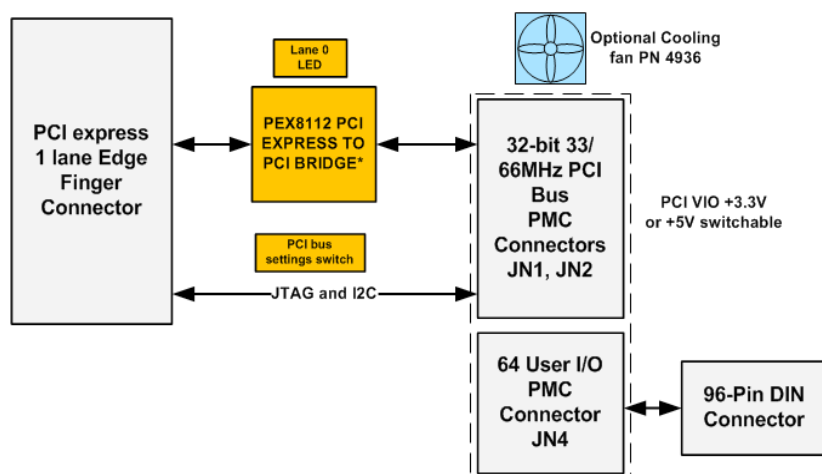
The JTAG signals from the PCI bus and the PCI express bus are brought out to headers allowing users the option of connecting the two JTAG ports.

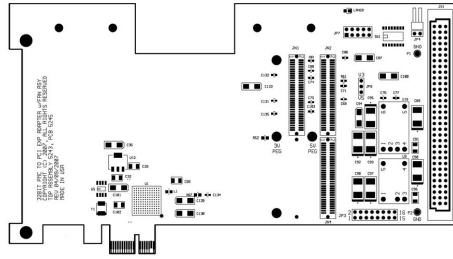
The -12V and +5V for the PMC are generated by high efficiency DC/DC



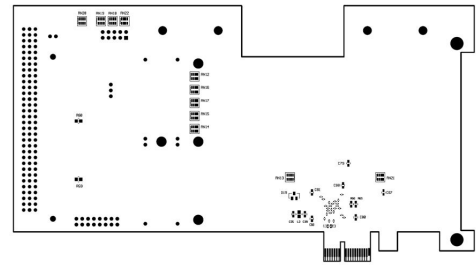
5243

- Adapts PMC to PCI Express 1 Lane Slot
- PLX8112 Bridge
- Supports PCI (33/66MHz) 32 Bit, 3V or 5V Signaling
- Rear I/O Support
- LED Indicator for PCI Express Lane OK
- Optional Fan Assembly for Additional Cooling
- RoHS-compatible
- Lead-free





COMPONENT PLACEMENT VIEW - SIDE #1



COMPONENT PLACEMENT VIEW - SIDE #2

converters from the PCI express bus +12V.

This board has been carefully designed to minimize signal lengths on the 2.5GHz LVDS PCI Express bus. Four impedance-controlled signal layers and four power planes

(2xGND, 3.3V, and V1.0) are employed to minimize transmission line effects.

A high quality 2.5 mm thick machined aluminum panel, with a 0.5 mm chamfered edge, is provided on the PCI board bracket.

This mimics the mechanics of a PMC installed on a VMEbus board or other host environments and allows the PMC bezel to be firmly positioned on the board.

SPECIFICATIONS

PCI Bus: 33 or 66 MHz, 32 bit

PCI Signaling: 3.3V or 5V

Power Required: +3.3V and +12V, provided by the PCI express motherboard

Temperature (Operating): -40 to +85 degrees C

Temperature (Storage): -55 to +100 degrees C

Environment (Temperature): 5 to 95% non-condensation

Environment (Humidity): Not characterized or tested

Environment (Shock): Not characterized or tested

MTBF: Available on request

Size: PCB measures 4.376" x 7.875" maximum envelope. Conforms to PCI exp standard

ORDERING INFORMATION

5243: PMC to PCI Express Adapter - 1 Lane

4936: Optional Fan Assembly for PMC & XMC Adapters Standard (Upward) Airflow Configuration

