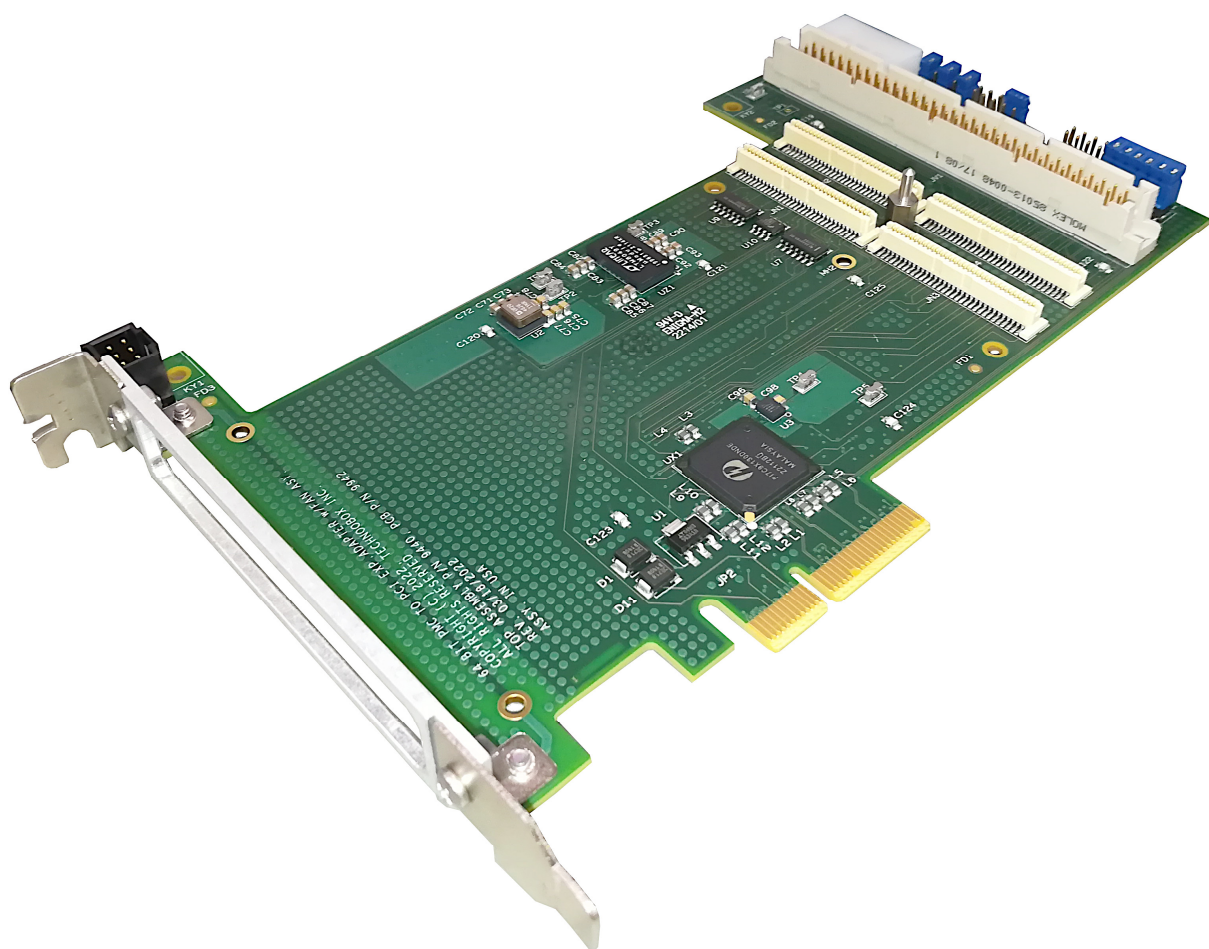


Datasheet P/N 9940 & P/N 10156

PCI Express to PMC Adapter



Technobox[®], inc.

www.technobox.com

Introduction

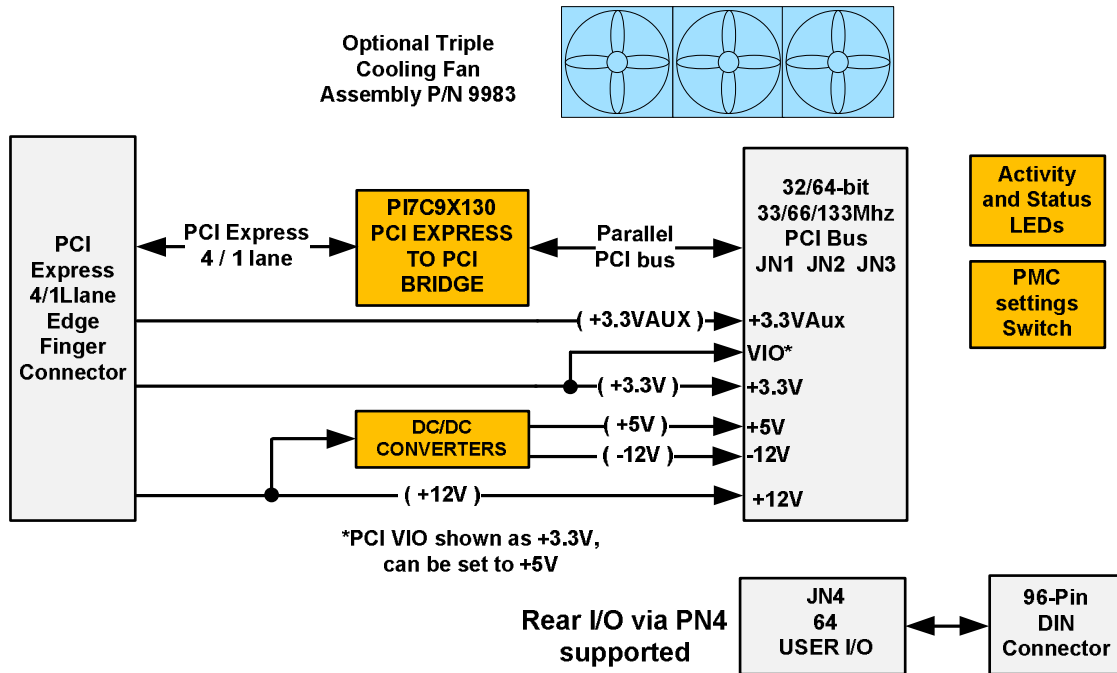


Figure 1 PMC-X to PCI Express adapter block diagram

The 9940 and 10156 carrier cards allow use of a PMC in a PCI express edge card slot. The product features a PI7C9X130 bridge chip four lane Gen. 1 PCI express primary side and a PCI/PCI-X secondary side.

The 1 lane P/N 10156 fits in 1, 4, 8 and 16 lane PCI Express slots. The 4 lane Technobox P/N 9940 fits in 4, 8 and 16 lane PCI Express slots.

The 10156 is a replacement for the one lane P/N 4749, but since 10156 is 5V PCI signaling compatible it is also a suitable replacement for P/N 5243.

The PCI/PCI-X secondary side operates at 33, 66, 100 or 133 MHz in 64 or 32 bit bus width mode.

For rear I/O applications the 64 user rear I/O signals on the PMC PN4 connector are available at the A and C rows of a 96-pin DIN connector.

An optional triple fan assembly (P/N 9983) is available that fits over two PMC-to-PCI express adapters and provides substantial forced-air cooling of high-power PMC modules.

This bridged adapter needs no additional software support since the PCI drivers are included in all major operating systems. Software support for the PMC in use is provided by the PMC supplier or in the case of generic functions is likely also supported by the operating system.

This product works with 3V or 5V PCI signaling PMC cards, by moving a voltage key and jumper.

Several activity LEDs give an indication of key PCI and PCI express signals and voltages.

The XCAP and M66EN signals are supported by jumper population to force operation at non-X or lower PCI clock frequencies.

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

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 VME bus board or other host environments and allows the PMC bezel to be firmly positioned on the board.

Features

- PCI bus: 25, 33, 50, 66 MHz, 32 or 64 bit
- PCI-X bus: 50, 66, 100, 133 MHz, 32 or 64 bit
- PCI signaling voltage +3.3V or +5V
- 4 PCI express lanes P/N 9940
- 1 PCI express lane P/N 10156
- Fits in 1, 4, 8 or 16 lane PCI express edge card connectors
- PI7C9X130 Bridge chip
- Conforms to PCI Express standard board size
- PN4 rear IO support
- Machined PCI standard front panel accommodates PMC front panel
- Optional triple cooling fan available P/N 9983
- P/N 10156 is a replacement for P/N 5243
- +5V tolerant PCI signaling
- ROHS compliant

Specifications

| | |
|-------------------------------------|---|
| Temperature (Operating): | -40 to +85 degrees C |
| Temperature (Storage): | -50 to +100 degrees C |
| Altitude: | Not Specified or Characterized. Typical similar equip. is at 15,000 ft. |
| Humidity(Operating/Storage): | 5% to 95% non-condensing. |
| Vibration: | Not specified or Characterized. |
| Shock: | Not specified or Characterized. |
| MTBF: | Available on request. |
| Weight: | 110 grams |
| Voltages Required PMC: | As required per PMC mounted |
| PCI Signaling: | 3.3V, 5V |
| Voltages Required PCI exp: | +12V,+3.3V. Tol: +/-5% |
| Amperage, no PMC: | Pretest estimate, +12V 0.320 amps, +3.3V 0.256 amps |
| PMC 5V amperage: | Pretest estimate, 2.0 amps at 85 deg. C. |
| PMC 3.3V amperage: | Pretest estimate, 3.0 amps at 85 deg. C. |
| PMC -12V amperage: | Pretest estimate, 1.0 amps at 85 deg. C. |
| PMC +12V amperage: | Pretest estimate, 1.0 amps at 85 deg. C. |

Optional Fan Assembly

An optional P/N 9983 Triple Fan Assembly is available to provide forced air cooling to a single carrier card or a pair of carrier cards and the PMC mezzanine cards.

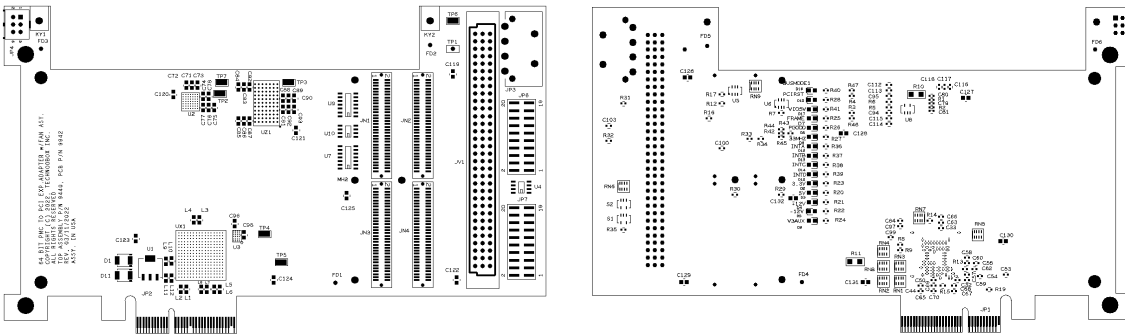


Figure 2 Top and Bottom Views