XMC Carrier/Adapter

8-Lane XMC-to-PCI Express Adapter w/ VITA 61 Connectors

Technobox P/N 4821 is a passive 8 lane PCI express to XMC carrier which permits the use of XMC cards in PCI express 8 lane or 16 lane motherboard edge card slots. A variant P/N 4822 provides a 4 lane PCI express edge card interface and P/N 4823 provides a 1 lane PCI express edge card interface.

P/N 4821 and variants use the VITA 42 XMC connector, but otherwise are identical to P/N 7764 and its' variants which use the VITA 61 XMC connector.

Technobox P/N 4821 also provides user access to all the signals on the XMC P16 connectors via 2 64 pin headers JU1 and JU2. The P16 differential pairs are routed to JU1/JU2 so that twisted pair ribbon cables can be used.

General purpose I/O on PN4 is not supported, if PN4 I/O signals are required consider the Technobox P/N 5933 family of products.

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

The signals unique to the XMC standard such as GA[2..0], MVMRO and ROOT0 are supported by DIP switch settings.
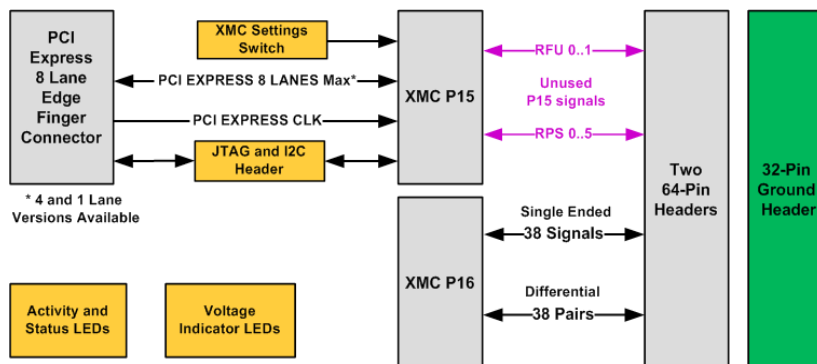
The JTAG and I2C signals from the XMC connector and the PCI express edge card connector are brought out to headers for user access.
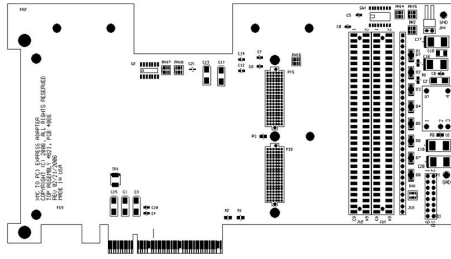
A high quality 2.5 mm thick machined aluminum panel, with a 0.5 mm chamfered edge, is provided on the PCI board bracket. This mimics the mechanics of an XMC installed on a VME board
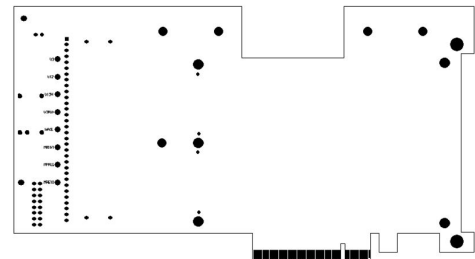
7764

- Adapts an XMC card to PCIe Slot
- Supports up 8 PCI Express Lanes
- 2.5 Gb/s per Lane in each Direction
- Status LEDs Show XMC & PCIe Status & Activity
- XMC Signals from P16 are Accessible via Two 64-pin Headers
- Headers Provide Access to JTAG & I2C Signals
- Provides 12 Volts Only
- VITA 61 (XMC 2.0) Type Connectors
- Also Offered w/ VITA 42 Connectors See P/N 4821
- Optional Fan Assembly to Augment Cooling
- RoHS-compatible
- Lead-free

Block diagram showing PCI Express 8 Lane Edge Finger Connector connected to XMC Settings Switch, PCI EXPRESS 8 LANES Max*, PCI EXPRESS CLK, JTAG and I2C Header, XMC P15, XMC P16, RFU 0..1, Unused P15 signals, RPS 0..5, Single Ended 38 Signals, Differential 38 Pairs, Two 64-Pin Headers, 32-Pin Ground Header, Activity and Status LEDs, Voltage Indicator LEDs. *4 and 1 Lane Versions Available

Technobox®, inc.

COMPONENT PLACEMENT VIEW - SIDE #1

COMPONENT PLACEMENT VIEW - SIDE #2

or other host environments and allows the XMC bezel to be firmly positioned on the board.

An optional fan assembly (P/N 4936) is available that fits over one or two carriers and provides substantial forced-air cooling of high-power XMC modules.

Note that VPWR on the Technobox P/N 4821 family of products is fixed at +12V, if +5V VPWR is a requirement consider the Technobox P/N5933 family of products.

SPECIFICATIONS

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

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

Altitude: Not Specified or Characterized. Typical similar equipment is at 15,000 ft.

Humidity (Operating/Storage): 5% to 95% non-condensing.

Vibration: Not specified or characterized

MTBF: Available on request

Typical Power Dissipation: TBD

Power Supplies Required: +3.3V, +12V

PCI Express Environment: +3.3V, +12V

ORDERING INFORMATION

7764: 8X PCI express XMC carrier, P16 I/O

7768: 4X PCI express XMC carrier, P16 I/O

7769: 1X PCI express XMC carrier, P16 I/O

Technobox®, inc.