

DP-cPCI-7497

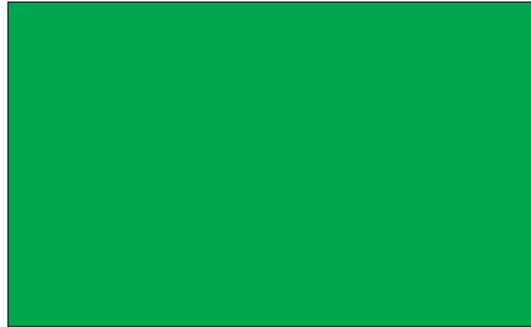
PCI Extender Card For cPCI Systems

KEY FEATURES AND BENEFITS

- 32 bit / 64 bit at 33 / 66 MHZ PCI/PCI-X BUS
- 2.5Gbps PCI Express per lane
- Standard cPCI board
- Compact design
- Low power consumption and dissipation
- 3U / 6U form factor support for fascia

APPLICATIONS

- cPCI - Remote chassis control
- cPCI - Host controller
- Distributed architecture systems



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DESCRIPTION

The DP-cPCI-7497 is highly flexible PCI Extender card, which can be used to extend PCI / PCI-X bus from one system to another system over an optical fiber medium upto 500m distance. A PCI-X to PCI-e Bridge is used to convert the PCI / PCI-X protocol to x4 PCI Express protocol operating at 2.5Gbps. The PCI-X to PCI-e Bridge is connected to four optical transceivers (x4 PCI- e link) which can transmit optical signals upto 2.5Gbps speed.

A x4 copper medium connection option in lieu of optical transceivers is also available.

The PCI Extender card is compatible with 32 / 64 bit and 33 / 66 MHz speed PCI / PCI-X signal. The DP-cPCI-7497 is implemented in a 3U cPCI form factor.

The DP-cPCI-7497 will act as an I / O card in the host chassis and extend the signals to the remote chassis where another DP-cPCI-7497 will be mounted in Slot 0 to receive the signals from the host chassis and transfer it the remote chassis.

DP-cPCI-7497 is also available in PCI / PMC form factors*. System designers can choose between PCI / cPCI / PMC form factors to interconnect between system types such as PCI, cPCI & VME etc.

PCI-X TO PCI EXPRESS BRIDGE

PCI / PCI-X to PCI Express Bridge is a high performance bridge that enables designers to migrate legacy PCI and PCI-X Bus interfaces to the advanced PCI Express. PCI / PCI-X to PCI Express Bridge is logically a two port device, one port is PCI / PCI-X bus operating at 33 / 66MHz speed and another port is PCI-Express (x4) operating at 2.5Gbps.

OPTICAL TRANSCEIVER

The board includes an Opto-transceiver to convert the PCI EXPRESS signal into optical signal. This optical signal is transmitted in a fiber optic link for long distance (up to 500m) with less attenuation. It is designed for Multi-mode fiber and operate at a nominal wavelength of 850nm.

GLUE LOGIC

DP-cPCI-7497 can be configured as Master or Slave, through glue Logic, along with some Resistor Mounting options. If the mode of operation is Master, the DP-cPCI-7497 will be mounted in the slot-0 and it will act as a processor in the remote chassis, where it will receive PCI-Express signal as input and convert it to PCI signals. If the mode of operation is Slave, then the DP-cPCI-7497 will be mounted in an I/O slot where it will receive PCI / PCI-x signals as input and convert it to PCI-e signals.

* Contact factory for ordering information

SPECIFICATIONS

PCI-X TO PCI EXPRESS BRIDGE

Four full duplex PCI express lanes operating at 2.5Gbps
 Transparent mode support
 Reverse and forward bridging
 Supports arbitration in master mode (Six REQ and GNT) can be enabled and disabled
 End-to-end CRC
 Automatic lane reversal

ENVIRONMENT Commercial and Rugged versions

MECHANICAL

Board 160mm(W) x 100mm(H) x 1.61mm(Thickness)

I/O INTERFACE

One, two or four optical transceivers on the front panel
 (Or) One x4 PCI-Express copper interface (Optional)

ORDERING INFORMATION

DP cPCI 7497 3 0 0 0

- 0 – Slave Mode
- 3 – Master Mode
- 0 – 3U Fascia
- 3 – 6U Fascia
- 0 – x4 Copper
- 3 – x1 Optical
- 6 – x2 Optical
- 9 – x4 Optical
- 3 – Commercial Version
- 6 – Rugged Version

CONNECTOR

Board Interface J1 Connector
 Field Interface Optical transceivers/copper medium Connectors

BLOCK DIAGRAM OF DP-cPCI-7497

