XChange3010

End of Life (EOL)

Four-Port VPX PCI Express Switch with Bridging to cPCI on a 3U VPX Module

Please contact X-ES Sales

- 3U VPX switch
- Ruggedized Enhanced Design Implementation (REDI)
- Conduction or air cooling
- Four VPX x4 PCI Express interfaces
- Supports three cPCI peripheral cards when used with the XTend4010
- Supports four cPCI peripheral cards if appropriate backplane is used and no PrPMC is placed
- Any XMC/PrPMC card may be used as a system controller
- Supports 5 V/3.3 V PCI VIO power

XChange3010

The XChange3010 is a conduction- or air-cooled 3U VPX-REDI module that provides a means of bridging from a serial PCI Express VPX fabric and parallel 32-bit PCI bus. This allows a system designer to migrate to VPX processor cards or other modern VPX devices without forcing the redesign of existing CompactPCI peripheral cards.

The PCI Express switch may be configured so that any one of the four VPX ports, the XMC site, or the PCI bus is the root complex.

X-ES
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...Always Fast

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VPX

- Provides the switch for a star PCI Express fabric

cPCI

- Supports three CompactPCI peripheral slots when used on the XTend4010
- Supports four CompactPCI peripheral slots if no PrPMC is placed and is used with the appropriate backplane
- 32-bit wide PCI bus
- 33/66 MHz frequency operation

Ethernet

- Two 10/100BASE-T Ethernet lanes may be routed from either the XMC or the PMC site

Serial

- Serial I/O may be routed to either the XMC or the PMC site

Physical Characteristics

- 3U cPCI form factor
- Dimensions: 100 mm x 160 mm, 10 mm stacking height

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1, 3, 5
- Conformal coating available as an ordering option

Power Requirements

- 3.3 V, 0.6 A, 2 W
- 5 V, 1.24 A, 6.2 W

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C (maximum)
Vibration	0.002 g^2/Hz (maximum), 5 to 2000 Hz	0.04 g^2/Hz (maximum), 5 to 2000 Hz	0.1 g^2/Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing