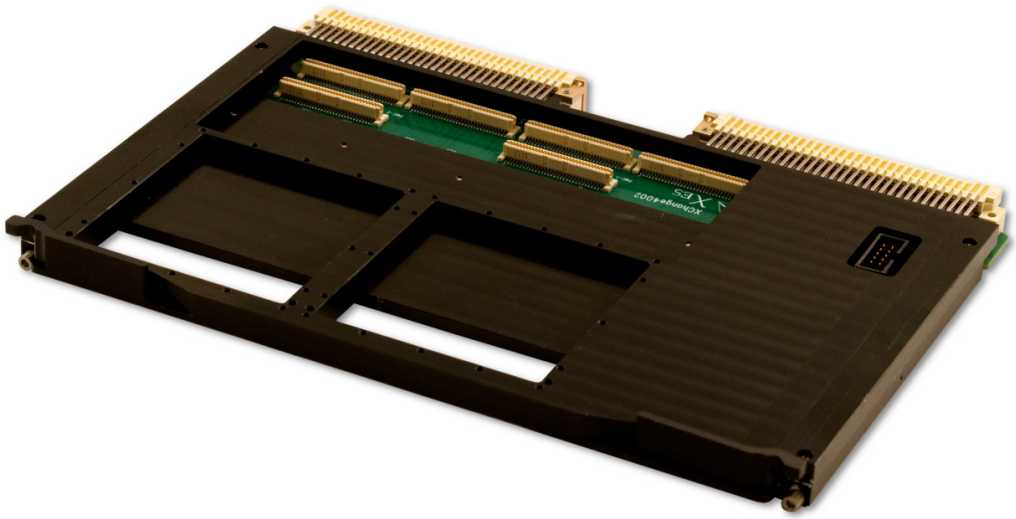
XChange4002

Conduction- or Air-Cooled 6U VME PMC Carrier Card

- 6U VME64x, supporting VME64, VME64x, and 2eSST
- Two PCI Mezzanine Card (PMC) sites
- XMC support (optional)
- Conduction or air cooling
- 32-bit local PCI bus
- 33/66 MHz PCI operation
- 32 pins of P14 I/O from each PMC site to P2
- FPGA-based VME interface



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The XChange4002 is a versatile conduction- or air-cooled 6U VME64x dual-PMC carrier card. With PCI support between the two PMC slots and the VME64x 2eSST bridge, the XChange4002 is ideal for applications requiring the flexibility that PMC modules offer.

The XChange4002 implements its VME64x interface using an FPGA device for maximum product longevity and field upgradeability. The XChange4002 includes a local +3.3 V power supply, so backplane +3.3 V is not required. 32 pins of P14 I/O from each PMC site are routed to the P2 connector per VME-P2-a,c (ANSI/VITA 35-2000).

X-ES Extreme Engineering Solutions

...Always Fast

Extreme Engineering Solutions
3225 Deming Way, Suite 120 • Middleton, WI 53562
Phone: 608.833.1155 • Fax: 608.827.6171
sales@xes-inc.com • http://www.xes-inc.com

VME

- VME64 (ANSI/VITA 1-1994 R2002)
- VME64x (ANSI/VITA 1.1-1997 R2003)
- 2eSST (ANSI/VITA 1.5-2003)
- FPGA-based bridge implementation

PCI

- 32-bit, 33/66 MHz conventional PCI to PMC sites

PMC I/O

- 32 pins of P14 I/O from each PMC site to P2 per VME-P2-a,c (ANSI/VITA 35-2000)

PCIe

- x1 PCIe to PCIe-to-PCI bridge
- x4 PCIe to XMC site (optional; root complex or endpoint mode)

Physical Characteristics

- 6U VME form factor
- Dimensions: 233.35 mm x 160 mm
- 10 mm mezzanine stacking height

Environmental Requirements

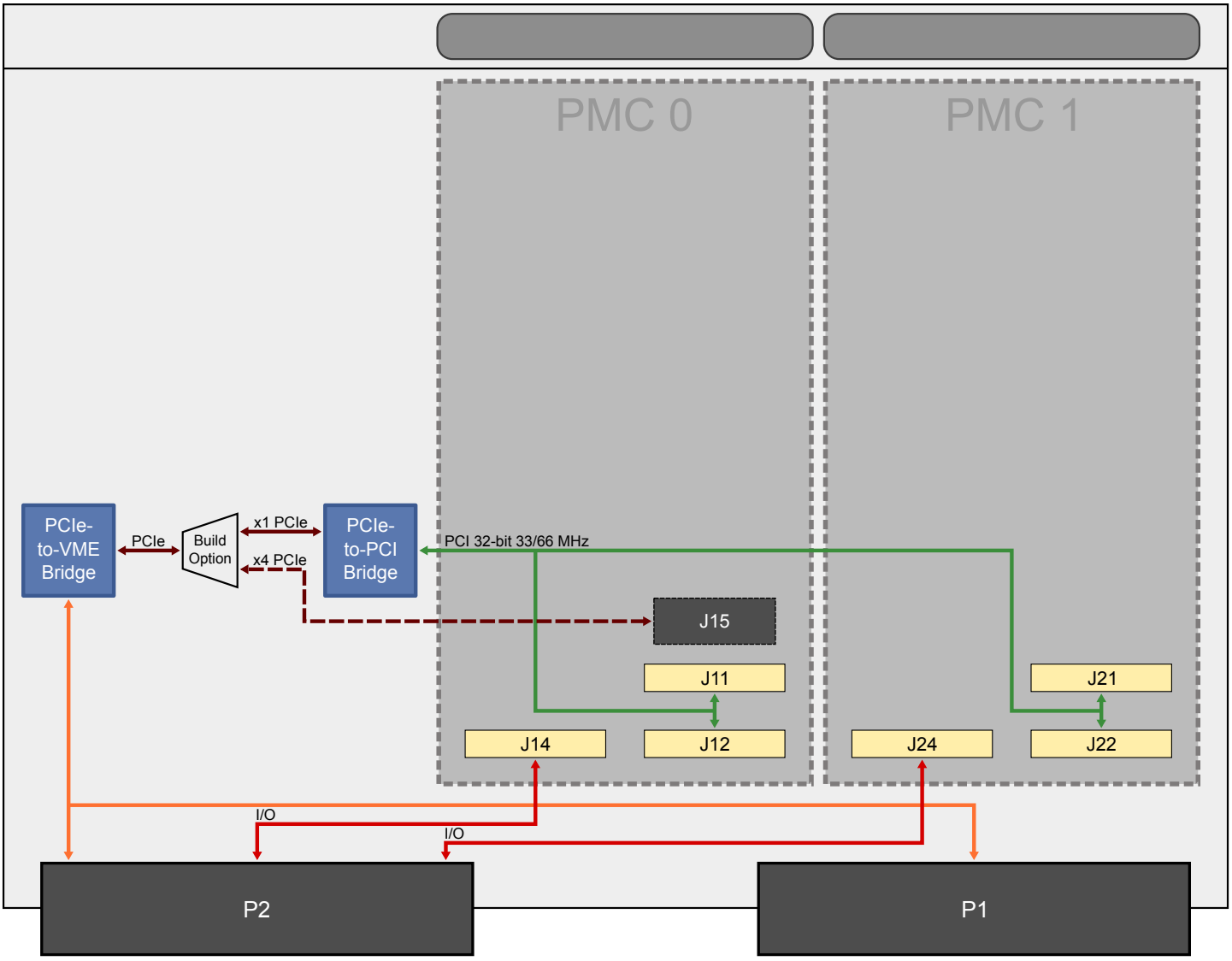
Contact factory for appropriate board configuration based on environmental requirements.

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

Power Requirements

- 5 V, 0.75 A, 3.75 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 ambient
Vibration	0.002 g²/Hz, 5 to 2000 Hz	0.04 g²/Hz (maximum), 5 to 2000 Hz	0.1 g²/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



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