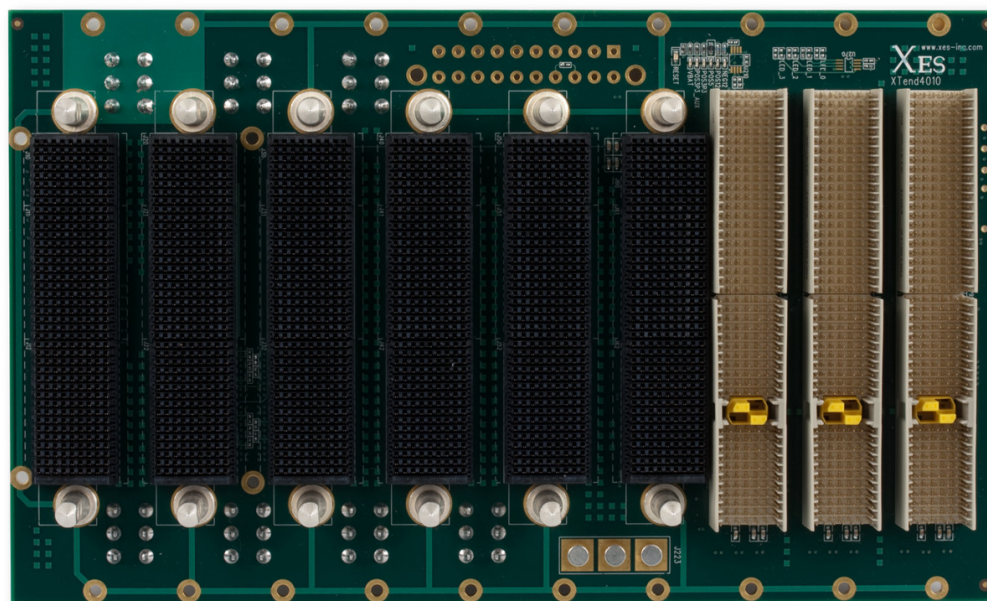


# X-Tend4010

**Not Recommended  
for New Designs**

## Nine-Slot 3U VPX/cPCI Hybrid Backplane

- ▶ Four VPX slots
- ▶ Three CompactPCI peripheral slots
- ▶ One PCI bridge/switch slot
- ▶ x4 PCI Express switch when used with the XChange3010
- ▶ One redundant x2 switch slot
- ▶ Redundant Gigabit Ethernet switches when used with the XChange3011
- ▶ One development/debug I/O connector (optional)
- ▶ One ATX power connector (optional)
- ▶ Selectable +5 V/+3.3 V CompactPCI VIO Power
- ▶ Any of the four VPX slots, or a PMC/XMC on the XChange3010, may be configured as system controller



### XTend4010

The XTend4010 3U hybrid system supports four VPX slots, three CompactPCI slots, a Gigabit Ethernet switch slot, and a fabric/bridge slot. System designers can take advantage of this feature by either using it as a development platform for migrating from CompactPCI to the VITA 46 (VPX) standard, or a fully deployable system capable of supporting legacy CompactPCI devices.

Four VPX slots are provided in this system. Each VPX slot has a direct connection to adjacent VPX slots, as well as the fabric/bridge slot. The fabric/bridge slot provides high-speed switching for the VPX backplane, as well as a PCI bridge to communicate with the CompactPCI bus segment.

Three 3U CompactPCI slots are provided. The PCI bus is capable of operating at 33 or 66 MHz and is 32 bits wide.

# X-ES

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**VPX Slots**

- Star fabric topology (A fabric)
- Ring fabric topology (B/C fabrics)
- Four x4 PCIe links when used with the XChange3010

**CompactPCI**

- Three CompactPCI peripheral slots
- 32-bit PCI bus
- 33 MHz or 66 MHz frequency operation

**Ethernet**

- Two redundant Gigabit Ethernet switch fabrics provided when used with the XChange3011

**Serial**

- One serial port from each of the four VPX slots may be accessed in a rugged fashion via a front panel connector on the XChange3011

**XIt4010 Debug Card**

- One USB port from each of the four VPX slots may be accessed via an XIt4010 debug card
- One serial port from each of the four VPX slots may be accessed via an XIt4010 debug card
- One Gigabit Ethernet port providing access to each of the two Gigabit Ethernet fabrics may be accessed via an XIt4010 debug card

**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

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 g <sup>2</sup> /Hz, 5 to 2000 Hz	0.04 g <sup>2</sup> /Hz (maximum), 5 to 2000 Hz	0.1 g <sup>2</sup> /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

