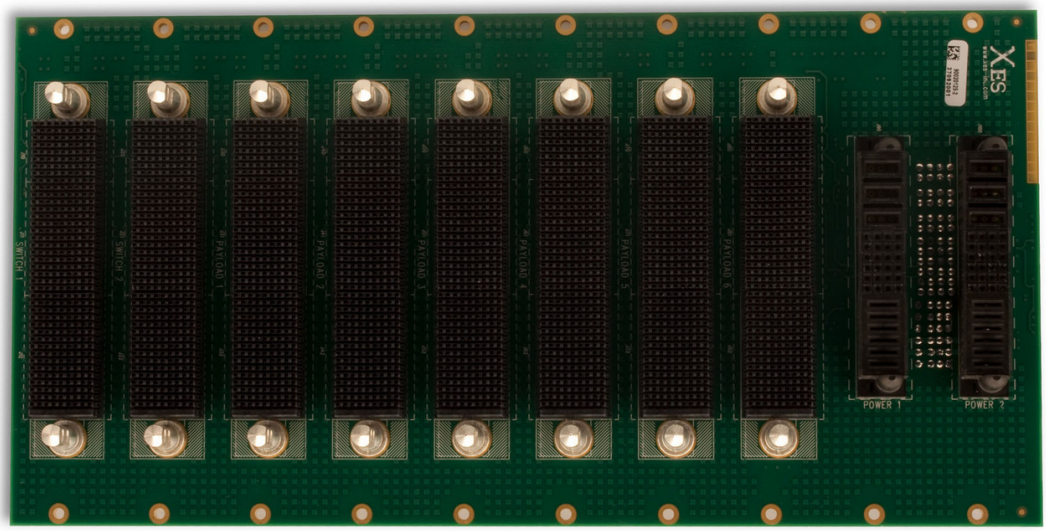
XTend4131

3U VPX Development Backplane with Centralized Switching and Leaf Node Support

- OpenVPX™-compliant
- Six 3U VPX payload slots
- One switch slot
- Redundant switch slot (optional)
- Two power supply slots
- Supports development DC-DC power supply
- Fat Pipe data plane with leaf node support
- Ultra Thin Pipe control plane in dual star topology
- VITA 46.10 RTM support for all payload and switch slots
- 1.0 in. pitch



XTend4131

The XTend4131 is a 3U VPX development backplane designed in accordance with OpenVPX™ system architecture specifications that supports one or two centralized switches. When one switch is used, the XTend4131 provides a single star centralized switching topology on the control plane and three fat pipes on the data plane. When two centralized switches are installed, the XTend4131 supports redundancy on the control plane with a dual star implementation. The XTend4131 supports an expansion plane leaf node connection for each slot connected to the centralized switch.

The XTend4131 provides VITA 46.10 RTM connectors for each payload slot and switch slot, and supports connectors for up to two parallel power supply slots. The XTend4131 also supports power sourced from a development DC-DC power supply.

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Payload Slots

- Six 3U VPX payload slots
- One or Two x4 Fat Pipes per slot (data/expansion plane)
- Two x1 Ultra Thin Pipes per slot (control plane)

Switch Slots

- Redundant switch configuration options available
- Three x4 Fat Pipes on primary slot (data plane)
- Six x1 Ultra Thin Pipes per slot (control plane)
- Supports XMC I/O from switch
- XChange3012-compatible

Power Slots

- Two power supply slots
- Supports development DC-DC power supply
- 12 V, 5 V, 3.3 V and ±12 V_AUX, 3.3 V_AUX
- Up to 50 W per slot (400 W max)

VITA 46.10 RTM

- VITA 46.10 RTM connectors on each payload and switch slot for rear I/O

Bandwidth

- Data plane routing supports up to 5 Gbaud transfer rates
- Control plane routing supports up to 5 Gbaud transfer rates
- Expansion plane routing supports up to 5 Gbaud transfer rates

Physical Dimensions

- 3U VPX form factor
- 129 mm x 258 mm

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1
- 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 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