XPort3301

End of Life

Conduction- or Air-Cooled XMC with Dual 10GBASE-T 10 Gigabit Ethernet Interfaces   Please contact X-ES Sales

- ❯ Utilizes the Intel® X540 dual 10GbE controller

- ❯ x8 PCI Express 2.0 VITA 42.3 P15 interface

- ❯ Front panel or rear I/O

- ❯ Dual 10GBASE-T 10GbE front panel (RJ-45) interfaces

- ❯ Dual 10GBASE-T 10GbE rear (P16) interfaces

- ❯ Conduction- or air-cooled

- ❯ Linux drivers

- ❯ Wind River VxWorks drivers

- ❯ Microsoft Windows drivers

- ❯ IEEE 1588 support (optional)

XPort3301

The XPort3301 is a conduction- or air-cooled dual 10GBASE-T 10 Gigabit Ethernet XMC with front panel or rear I/O support. A x8 PCI Express 2.0 port is routed per VITA 42.3 to the P15 connector for interfacing with the host module.

Front panel I/O for the 10GBASE-T 10 Gigabit Ethernet interfaces is provided with up to two RJ-45 connectors. The XPort3301 supports rear 10GBASE-T I/O through the P16 connector and utilizes X12d I/O mapping per VITA 46.9. The module utilizes automatic negotiation down to 100BASE-TX and 1000BASE-T on both 10GBASE-T ports. The XPort3301 can also support IEEE 1588 and the use of an externally sourced clock reference, such as a 1PPS, for synchronization.

X-ES

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"Fast, Flexible, Customer-Focused Embedded Solutions"

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Ethernet Controller

- Intel® X540 dual 10GbE controller
- IEEE 1588 support (optional)
- SR-IOV support

Front Panel I/O Options

- Dual 10GBASE-T 10GbE interfaces (RJ-45)

Rear I/O Options

- Dual 10GBASE-T 10GbE interfaces (P16)
- X12d mapping per VITA 46.9
- Support for an external clock reference for IEEE 1588 synchronization (optional)

Configuration Options

- Single front panel (RJ-45) and single rear (P16 I/O) 10GBASE-T 10GbE ports (air-cooled only)
- Dual rear panel (P16 I/O) 10GBASE-T 10GbE ports (conduction- or air-cooled)
- Dual front panel (RJ-45) 10GBASE-T 10GbE ports (air-cooled only)

XMC VITA 42.3 PCIe

- x8 PCI Express 2.0 interface

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

Software Requirements

- Linux drivers
- Wind River VxWorks drivers
- Microsoft Windows drivers

Power Requirements

- Power will vary based on configuration and usage. Please consult factory.

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 †	-40 to +70°C ambient †	-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 g²/Hz (maximum), 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	Up to 95% non-condensing	Up to 95% non-condensing	Up to 95% non-condensing

† Contact factory for airflow rate details.