

GALLEON DUAL 40GBE XMC

Rugged Optical Modules

The Galleon Titan 40 Gigabit Ethernet XMC offers high-performance Ethernet for a wide range of applications. Based on the latest Intel XL710 40GbE Controller, the Titan 40GbE XMC supports IEEE 1588 Precision Time Protocol (PTP), making it suitable for time-critical applications. The XL710 offers the latest UDP, TCP, SCTP and IP checksum offload.

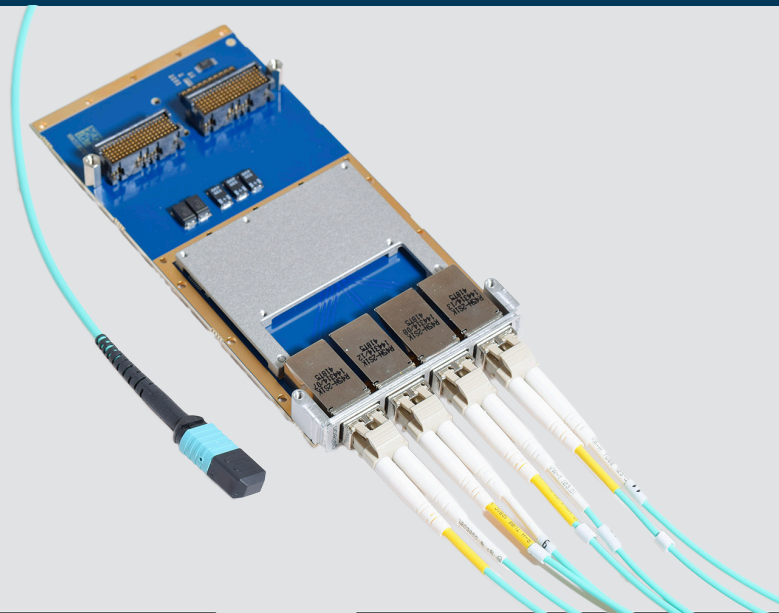
The board can be fitted with up to four rugged front panel modules or recessed rugged optical modules for easy in-box optical cabling in conduction-cooled environments using multi-mode fiber connections.

The Titan 40GbE XMC is available in both air-cooled and conduction-cooled variants to fit a wide range of single-board computers (SBCs) in CPCI, VME or VPX form factor. An x8 PCI Express Gen3 host interface capable of running 2.5GT/s, 5.0GT/s and 8.0GT/s ensures high bandwidth to the host.

An optional PCI Express card edge adapter offers easy integration in standard desktop systems for non-rugged applications and software development. The Titan 40GbE XMC board ships with both Linux and Windows software drivers.

Galleon Embedded Computing's quality management system is certified to Aerospace Standard AS/EN 9100 and ISO 9001.

TITAN 40 GIGABIT ETHERNET XMC



KEY FEATURES

- PCIe v3.0, x8 (8GT/s) host interface
- Intelligent offloads enable high network performance
- Rugged optical 40 Gigabit Ethernet interface
- Windows and Linux drivers

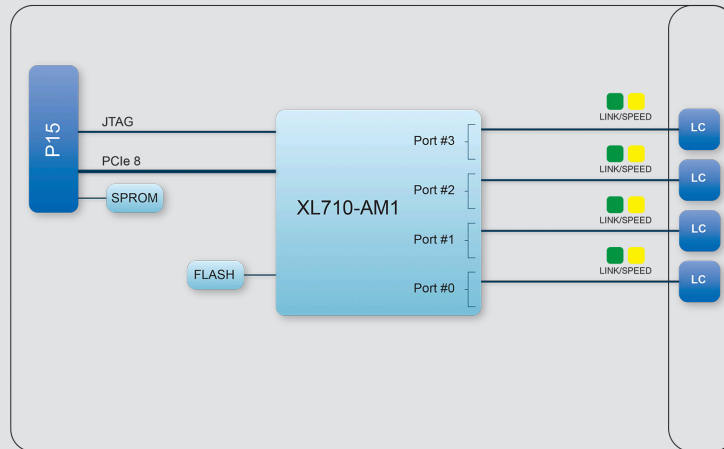
APPLICATIONS

- Server applications
- Network-attached storage devices
- Flight test
- High-speed sensor data recording and simulation
- Video over Ethernet data capture
- Geological survey and seismic

BENEFITS

- High performance
- Low power
- Air- and conduction-cooled

TECHNICAL SPECIFICATION



Ethernet Controller

- Intel FTXL710-AM1

Interfaces

- 40 Gigabit Ethernet
- 850nm MM transceiver*
- Front panel optical transceivers with LC connectors
- Optional recessed transceivers for easy internal optical cabling in conduction-cooled systems without front panel connections

Ethernet Capabilities

- UDP, TCP, SCTP, and IP checksum offload
- Up to 256 maximum VMDq VMs supported
- 1536 Tx and Rx queues per device
- Time Sync, PTP (IEEE 1588, 802.1as) support

Host Interface (XMC)

- PCIe v3.0, x8 (8GT/s)

Operating Temperature

- -40°C to +75°C rugged air cooled
- -40°C to +85°C rugged conduction cooled
- Conformal coating on all models

Humidity

- Up to 100%, condensing

Software

- Linux and Windows drivers

* Contact factory for single-mode fiber, or copper options

ABOUT GALLEON

Galleon Embedded Computing is an innovative leader in development of high-performance, high-quality storage solutions and small rugged data recorder systems, servers and NAS devices.

Galleon's offerings span from commercial grade products for benign environments to ruggedized conduction-cooled products for deployed systems in severe environments.

RELATED PRODUCTS

- Titan Quad GbE XMC
- Titan Quad 10GbE XMC
- Titan Dual 25GbE XMC
- Titan sFPDP XMC



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