GALLEON DUAL 25GBE XMC
Rugged Optical Modules

The Galleon Titan Dual 25Gigabit Ethernet XMC offers high-performance Ethernet for a wide range of applications. Based on the latest Intel XXV710 25GbE Controller, the Titan Dual channel 25GbE XMC supports IEEE 1588 Precision Time Protocol (PTP), making it suitable for time-critical applications. The XXV710 offers the latest UDP, TCP, SCTP and IP checksum offload.

The board can be fitted with up to two rugged front panel modules or recessed rugged optical modules for easy in-box optical cabling in conduction-cooled environments using multi-mode fiber connections.
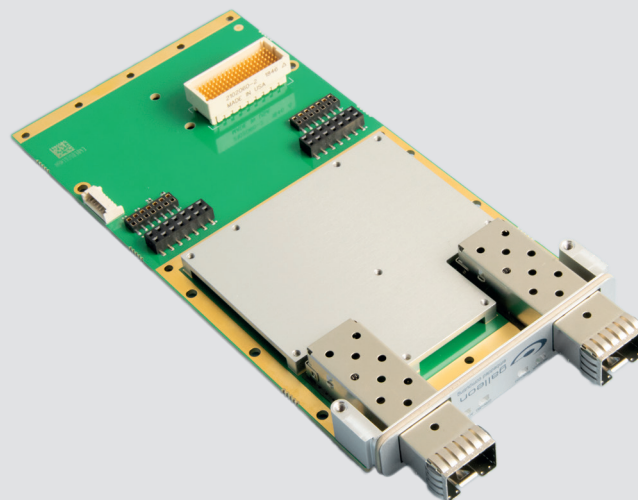
The Titan Dual 25GbE XMC is available in both air-cooled and conduction-cooled variants to fit a wide range of single-board computers (SBCs) in CPCI, VME or VPX form factor. An x8 PCI Express Gen3 host interface capable of running 2.5GT/s, 5.0GT/s and 8.0GT/s ensures high bandwidth to the host.

An optional PCI Express card edge adapter offers easy integration in standard desktop systems for non-rugged applications and software development. The Titan Dual Gigabit Ethernet 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 DUAL 25GIBABIT ETHERNET XMC

FIPS 140-2 Inside

KEY FEATURES

- 2 channel optical 10/25GbE
- PCIe v3.0, x8 (8GT/s) host interface
- Excellent small packet performance
- Intelligent offloads enable high network performance
- Rugged optical duplex 25Gigabit Ethernet interfaces
- Air- and conduction-cooled variants
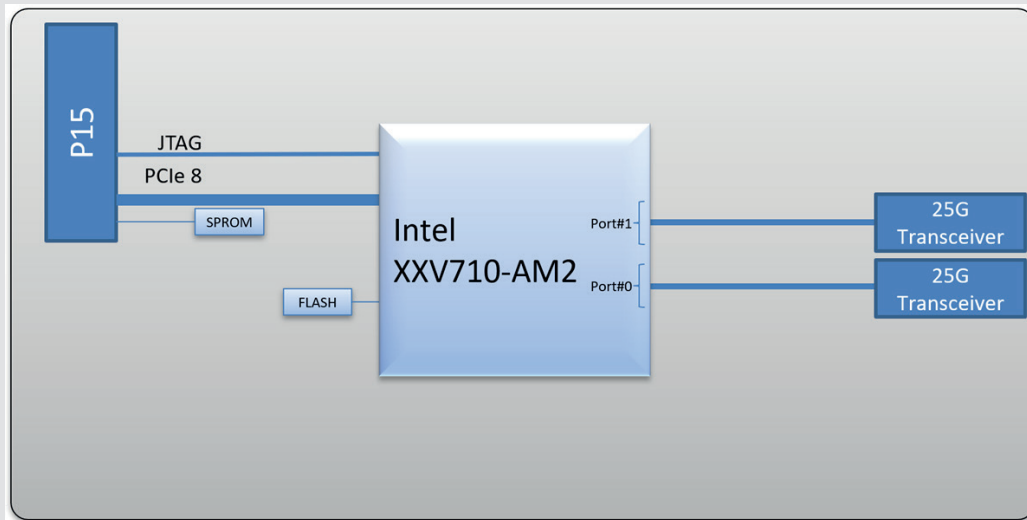- Windows and Linux drivers

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

Ethernet Controller
- Intel FTXXV710-AM2

Interfaces
- 2x channels
- 10/25Gigabit Ethernet
- 850nm MM transceiver*
- Front panel duplex optical modules with LC connectors
- Optional recessed modules 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
- TBD rugged air-cooled
- TBD rugged conduction-cooled

Shock and Vibration
- Tested to MIL-STD-810

Altitude
- -1500 to 40 000 ft (standard)**
- -1500 to 60 000 ft (extended temp.)**

EMI/RFI
- Tested to MIL-STD-461

Humidity
- Up to 100%, condensing

Size, Weight & Power
- Weight: TBD (configuration dependent)
- Power, 2 optical channels active: (TBD)

Software
- Linux and Windows drivers

* Contact factory for single-mode fiber, or copper options
** Contact factory for high altitude 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 10GbE XMC
- Titan sFPDP XMC
- Titan FPGA Processing XMC
- Galleon Extended Warranty and Support

galleon
embedded computing

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