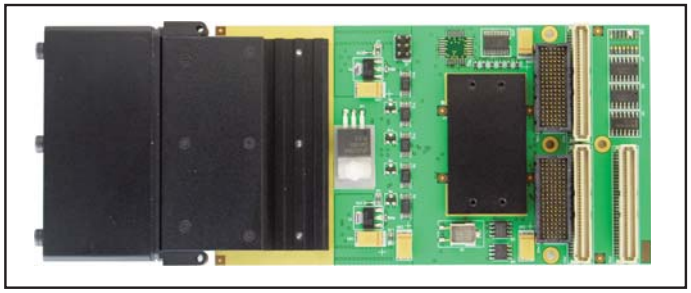
# Dual 10 Gigabit Ethernet XMC Adapter

The Dual 10 Gigabit Ethernet XMC (PCI-Express Mezzanine Card) Adapter provides dual 10 Gigabit Ethernet communications links over multimode fibre optic media. It is well suited for ultra high-speed communications links in mission-critical, real-time systems and is ideal for bandwidth-intensive networked applications such as the streaming of multiple high-definition digital video feeds.

The adapter design complies with the XMC specification (ANSI/VITA 42.3-2006) and is available in ruggedised, industrial and commercial versions.



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## Architecture

The Dual 10 Gigabit Ethernet XMC Adapter uses a low power intelligent ASIC for the control of both 10 Gigabit Ethernet MACs (Media Access Controllers). The ASIC removes protocol processing overhead from the host system, thus providing higher nett data throughput.

Interfacing on the host carrier side is done via the Single Board Computer's (SBC) PCI-Express system bus which is an efficient, high bandwidth peripheral interconnect medium.

## I/O Media Interface

The adapter utilises frontpanel XFP (10 Gigabit Small Form Factor Pluggable) transceivers to connect externally via multimode fibre optic media.

The XFP transceivers are housed in a rugged, thermally conductive aluminium cage which conforms to the mechanical specifications set forth in the XMC specification. The aluminium cage is designed to minimize radiated EMI (Electromagnetic Interference). XFP transceivers are hot-pluggable and can easily be replaced in the field.

## Features

- Dual 10 Gigabit Ethernet channels
- Low power ASIC design for enhanced performance and host CPU offload
- Channel data throughput of up to 1 GByte/s
- Backward-compatible with 10/100/1000 Base-T networks
- PCI-Express host XMC interface
- Operating system software driver support for :
  - WindRiver VxWorks V6.x
  - Windows Vista, XP and Server 2003
  - Linux
  - SUN Solaris