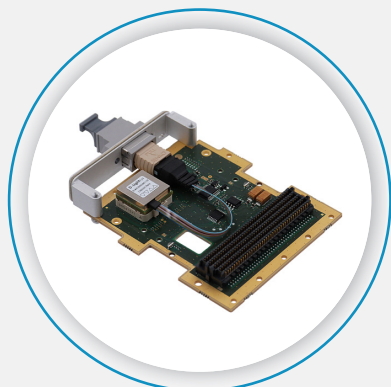
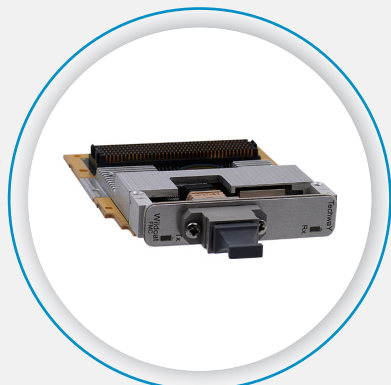


WildcatFMC BOARD

Optical High-speed and
High-density Interface for
Ruggedized FPGA Board



Expand the I/O capabilities of your FPGA board with high-speed and high-density optical links without redesign. The TechwaY WildcatFMC board provides all the benefits of D-Lightsys® transceivers on a VITA FMC compliant plug-in device.

In order to improve signal-processing performance, FPGA (Field-Programmable Gate Array) became a key component during the last few years. Embedded on complex but well-defined motherboard architecture, FPGA is the Swiss army knife for processing many different signals in video systems, radars or mission computers. The new paradigm for modern FPGA is extreme high-speed I/O, which requires optical links.

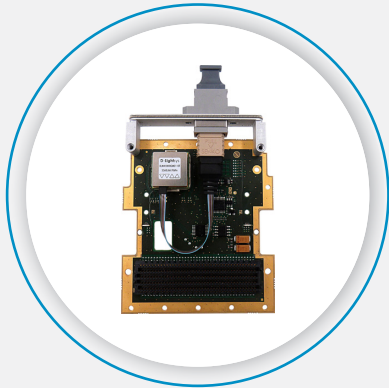
WildcatFMC enhances the modularity of the FPGA board equipped with mezzanine VITA 57 site by providing a plug-in and turn-key multi-channel optical interface. The FPGA board can achieve high-speed I/O for applications requesting massive data-transfer without long and expansive redesign.

The core of the WildcatFMC board is made of 10+ G range D-Lightsys® optical transceivers, running up to 12 Gbps. The ultra-compact package of these components fits the FMC standard form factor even for boards handling 24 optical channels. WildcatFMC is designed to meet the military and aerospace environmental constraints and is qualified to fulfill the MIL standard specs.

SEVERAL VERSIONS ARE AVAILABLE

- 4 and 12 full duplex channels
- 24 Rx and 24 Tx channels per board

Optical disconnect is provided on the FMC front panel through one or two MTP connectors, or through our C-MTitan quick disconnect, depending on the configuration.



Scalability of signal-processing electronic systems is a key factor in maintaining the benefits from current state-of-the-art technologies, particularly the latest high-speed I/O capabilities of the FPGAs. WildcatFMC provides system designers with a plug-in solution that handles high-speed, multi-channel optical I/O interface for demanding applications.

TECHWAY WILDCATFMC BOARDS

- WildcatFMC-4_10
 - 4 duplex optical links
- WildcatFMC-12_12
 - 12 duplex optical links
- WildcatFMC-24Tx_12
 - 24Tx optical links
- WildcatFMC-24Rx_12
 - 24Rx optical links

The 4-channel board complies with FMC (VITA 57.1) standards. The 12 and 24 channel ones comply with the FMC+(VITA 57.4). The WildcatFMC solutions can be provided with both air or conduction cooled configuration. The WildcatFMC boards are designed and qualified to comply with VITA and MIL rugged standards.

FEATURES & BENEFITS

- Up to 24 optical links
- VITA 57.1 and 57.4 compliant
- Front panel optical disconnect
- Air or conduction cooled
- D-Lightsys® technology inside
- Optical upgrade on legacy system
- Easy-to-integrate
- Cost-effective solution vs new hardware design
- For prototype, demonstrators production

APPLICATIONS

- Legacy system upgrade
- RADAR/SONAR
- Electronic warfare
- Video broadcast and switching