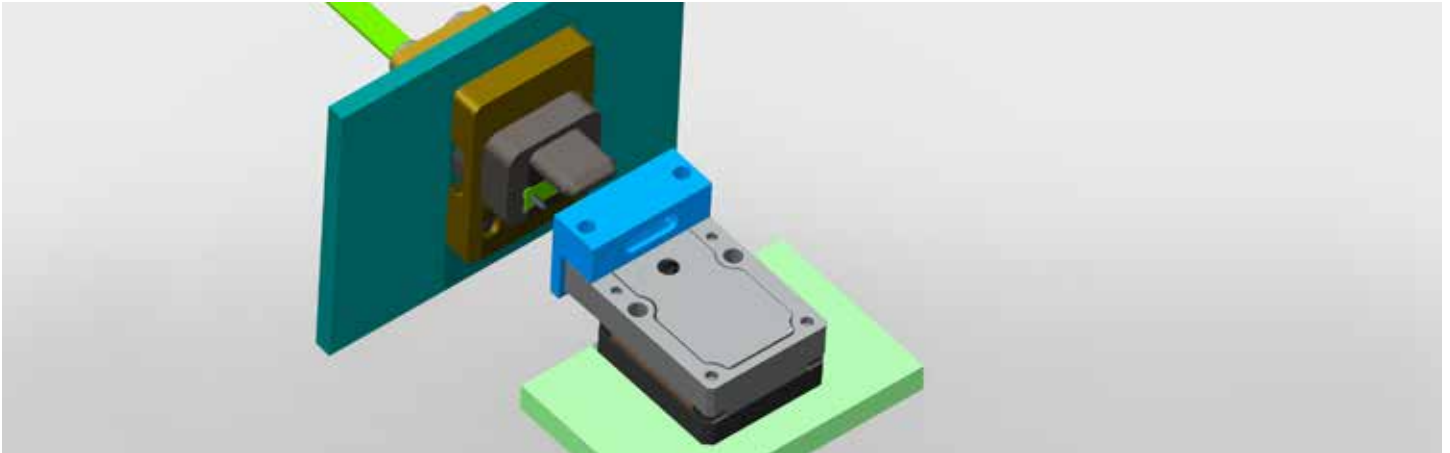


LIGHTCONEX™

BANDWIDTH UNLEASHED

PDS-281

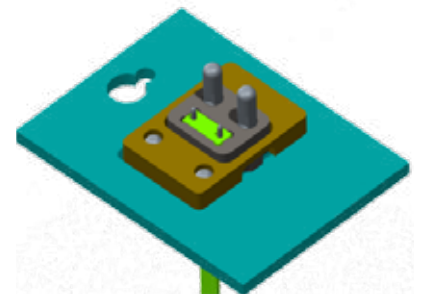
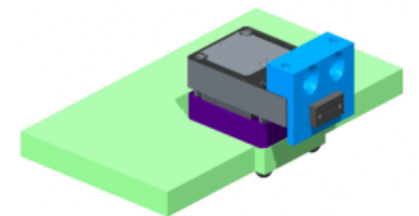
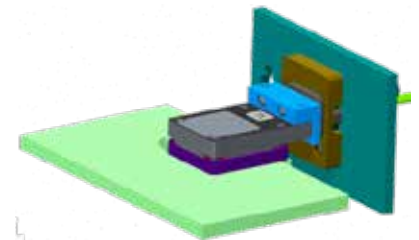


DESCRIPTION

Reflex Photonics and Amphenol Aerospace introduces LightConex™ blind mate optical interconnect for VPX embedded computers. LightConex™ integrates a 40Gbps optical transceiver into the module connector saving board space and eliminating cables. Next generation transceivers available in 2017 will deliver 300Gbps over 12 channels.

The low profile backplane connector is a drop in replacement for the standard Vita66.4 connector. It includes springs to ensure a solid MT to MT connection under extreme shock and vibration.

The low profile module connector (6.5mm) mounts to the board via an LGA connector to facilitate optics as an option. It is offered as a 4 channel transceiver, a 12 channel transmitter or a 12 channel receiver. All module connectors operate at 10Gbps per lane from -40° to +85°C at ultra-low bit error rates of 10-15. As well, the module connector includes equalizers and pre-emphasis to compensate trace impedance.



Module Connector Features:

- **Rugged:** MIL STD 883
- **Moisture resistant:** Sealed
- **Small (DXWXH):** 14 X 23 X 6 mm
- **Bandwidth:** 10 Gbps/ch
- **Temperature:** -40°C to +85°C
- **Reach:** 300m, multi-mode
- **BER:** 10-15
- **Lower power:** 1.2W
- **Data interface:** CML
- **Board Mount:** LGA
- **Configurations:**
4TRx, 12Tx, 12Rx, 12TRx (Q1/2017)

Backplane Connector Features:

- Vita66.4 drop in replacement
- Spring loaded MT
- Coarse and fine alignment
- Low Profile - 10mm

Applications:

- VPX Single Board Computers
- Phased Array Radars
- Single processing computer