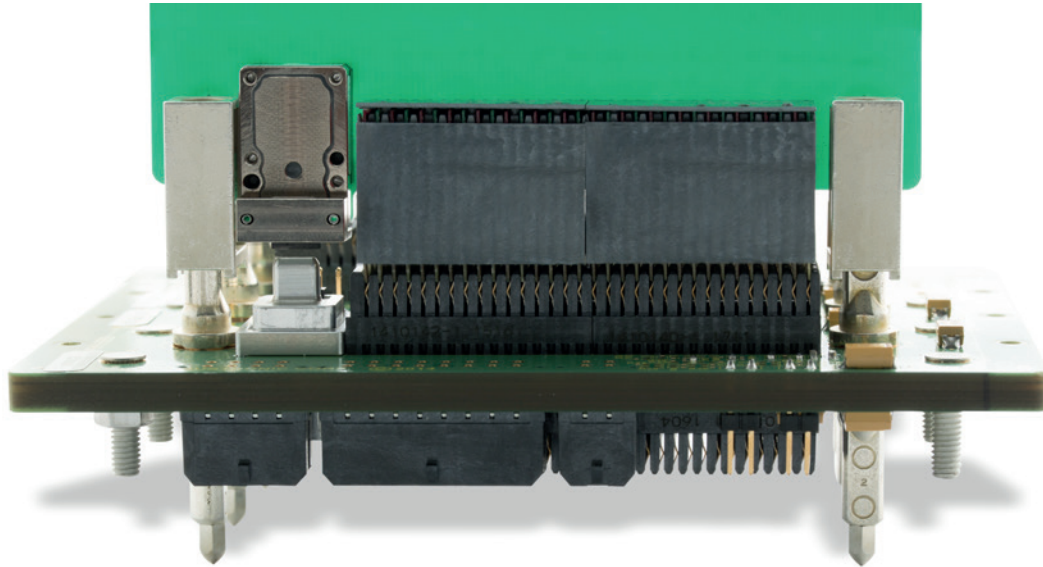


REFLEXPHOTONICS®

LightCONEX28 LC rugged VPX blind mate optical interconnect.



LightCONEX28 LC 100G

Key advantages

- **Performance:** up to 28 Gbps/lane from $-40\text{ }^{\circ}\text{C}$ to $85\text{ }^{\circ}\text{C}$
- **Standards:** VITA 66.5 standard (forthcoming)
- **Maintenance:** Supports two-level maintenance
- **Integration:** Board-edge mount
- **Reach:** 100 m over OM3 fiber
- **BER:** As low as 10^{-9}
- **Sensitivity:** -9 dBm
- **Low power consumption:** 120 mW/lane ($<10\text{ pJ}$ per bit).
- Includes equalizers and pre-emphasis to compensate trace impedance.

Configurations

- 4TRX (100G, full duplex) **NEW!**

Applications

- VPX single board computers
- All digital AESA radars
- High I/O density, high BW communication links
- ISR embedded systems

LightCONEX28 LC product summary

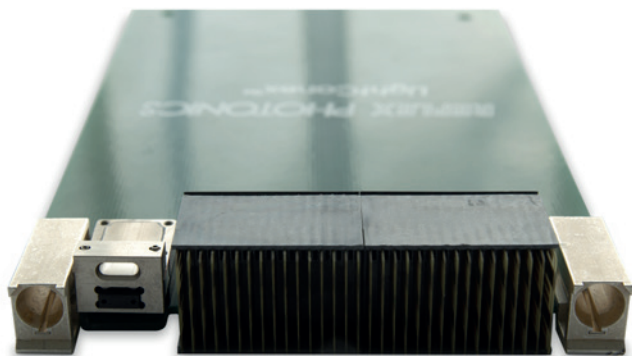
The *LightCONEX28*™ LC revolutionary active blind mate optical interconnect for VPX systems, consists of a plug-in module connector and a backplane connector compatible with the forthcoming VITA 66.5 standard. A *LightCONEX28* LC optical transceiver is directly integrated into the plug-in module connector, saving board space and eliminating fiber cable handling. The backplane connector is VITA 66.4 backplane cut-out compatible and includes springs to ensure a secure MT to MT mating connection under extreme shock and vibration conditions.

The *LightCONEX28* LC is offered with a (4+4)-lane transceiver in industrial operating temperature. Each lane operates at up to 28 Gbps.

THE *Light* on Board® Company

Plug-in module connector features

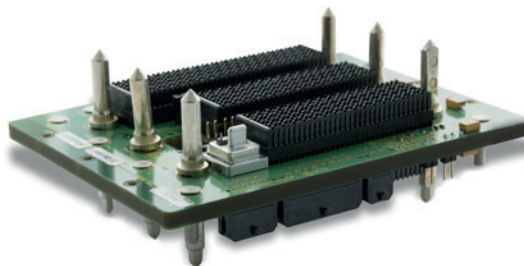
- **Compact transceiver (LxWxH):**
26 mm × 14 mm × 3.5 mm
- **Bandwidth:** 28 Gbps/lane
- **Temperature:** -40 °C to 85 °C
- **Reach:** 100 m, OM3 fiber
- **BER:** as low as 10⁻⁹
- **Low power consumption:** 1.5 W
- **Data interface:** CML
- **Board Mount:** LGA connector



LightCONEX28 4+4-lane active module on a 3U VPX board.

Backplane connector features

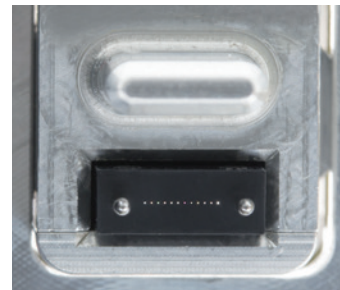
- VITA 66.4 backplane cut-out compatible
- Spring-loaded MT ferrule
- Coarse and fine mating alignment
- Compatible with 12-lane OM3 or OM4 fiber ribbon cable



ELMA 3U VPX backplane with LightCONEX28 LC backplane connector.



Close-up of the LightCONEX28 LC 4+4-lane plug-in module connector.



Close-up of the LightCONEX28 LC 4+4-lane backplane connector.

LightCONEX28 LC ordering information

Part Number	Product Description	Lanes	Bandwidth (Gbps/lane)	Sensitivity (dBm)	BER	Mounting	Operating Temperature (°C)
LCX04P428532101	LightCONEX28 LC 4TRX transmit/receive	4+4	28	-9	E ⁻⁹	RoHS LGA	-40 to 85

ACCESSORIES

415-00012	2.74 mm 96-positions nLGA interposer kit (Interposer + screws)
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THE *Light* on Board[®] Company

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