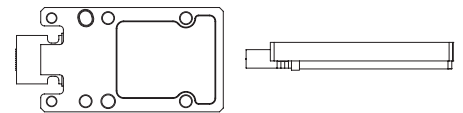
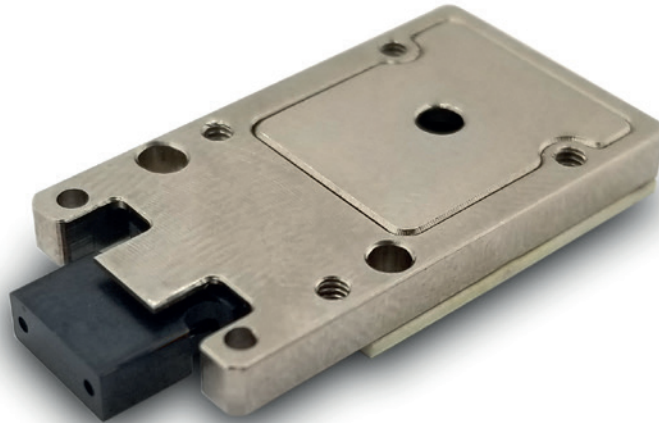


REFLEXPHOTONICS®

The most rugged high-performance embedded parallel optics.



Real size for SpaceABLE28 SL 100G.

**Radiation
resistant**

SpaceABLE28 SL 100G Radiation-resistant optical transceivers

Key advantages

- **Performance:** up to 28 Gbps/lane from -40°C to 85°C
- **Small:** As low as 4.5 mm high (module and interposer)
- **Rugged:** withstand radiation doses >100 krad (Si) and qualified per MIL-STD 883 shock and vibration.
- **Expected life:** up to 20 years
- **Cold start temperature:** -55°C
- **BER:** As low as 10^{-12}
- **Sensitivity:** -9 dBm
- **Low power consumption:** 120 mW/lane (<10 pJ per bit)

SpaceABLE28 SL product summary

The SpaceABLE28™ SL radiation resistant transceivers are engineered to withstand radiation doses >100 krad (Si). The SpaceABLE28 SL embedded optical modules are rugged devices offering high bandwidth (greater than 100 Gbps, full duplex) in a chip-size package.

Furthermore, all our devices are tested following ECSS process and lot acceptance testing, and component pre-screening is done for every batch of transceivers sold for this application

Configurations

- 4TRX (100G, full duplex) **NEW!**
- 12TX (300G), in development
- 12RX (300G), in development

Applications

- High-throughput communication satellites
- LEO satellite constellations
- GEO satellites
- High I/O density, high BW communication links

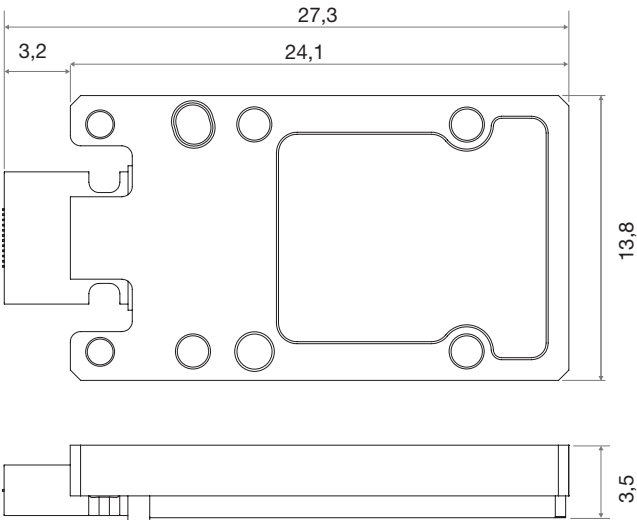
THE **Light** on Board® Company

100G SpaceABLE28 SL features

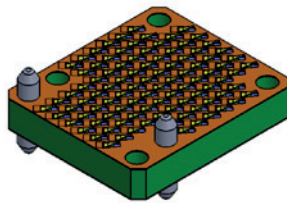
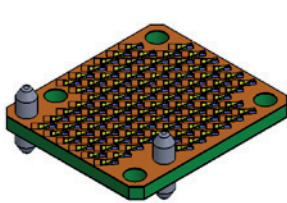
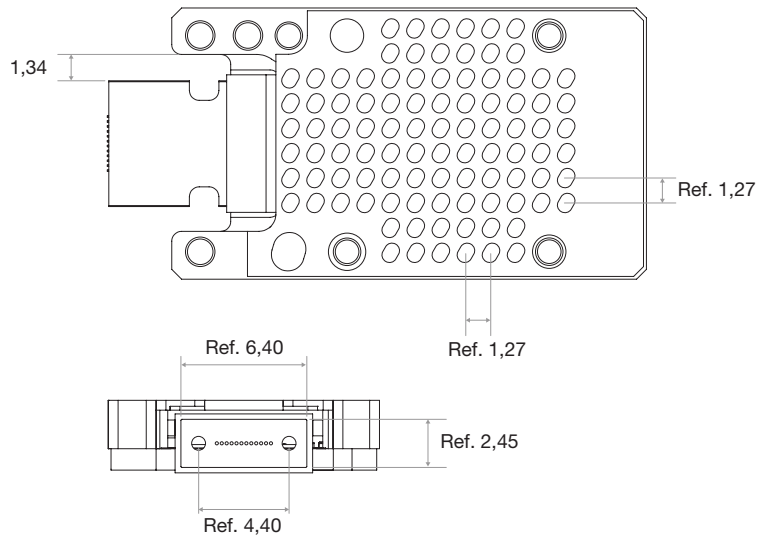
- 4 TX plus 4 RX lane per device (100G, full duplex)
- Multimode 850 nm wavelength laser
- Up to 100 m reach on OM3 ribbon fiber
- Standard MT parallel fiber connector
- LGA connector board mount
- RoHS
- Monitoring: LOS, RSSI, temperature etc.
- Available in industrial (-40°C to 85°C) grade temperature range

The **SpaceABLE28 SL** modules are tested under heavy ions, protons, and Cobalt 60 electrons sources.

- **Heavy-ion tested** (Single Event Effect & Latch-up (SEE and SEL)).
- **Cobalt 60 electron source** tested (MIL-STD-883G, method 1019.7) Total Ionizing Dose (TID).
- **High and low energy protons** tested (Total Non-Ionizing Dose (TNID)).



Drawing of SpaceABLE28 SL 100G



LGA interposers are available in different heights.

SpaceABLE28 SL ordering information

Part Number	Product Description	Lanes	Bandwidth (Gbps/lane)	Sensitivity (dBm)	Mounting	Operating Temperature (°C)
SLX04P528532101	SpaceABLE28 SL 4TRX transmit/receive	4+4	28	-9	LGA	-40 to 100

ACCESSORIES

415-00012	2.74 mm 96-positions nLGA interposer kit (Interposer + screws)
415-00015	1 mm 96-positions nLGA interposer kit (Interposer + screws)

THE **Light** on Board® Company

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Reflex Photonics is certified to ISO 9001

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