

MIL-AERO-GRADE
PARALLEL OPTIC
TRANSCEIVER
WITH COMPACT
FORM FACTOR

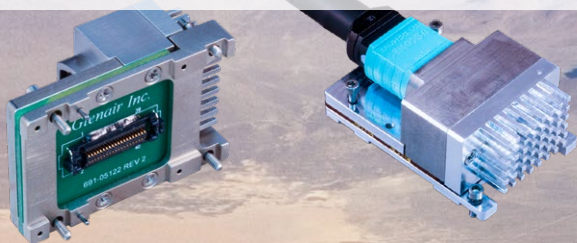


DataStar™ MIL-AERO

**Hermetically-sealed Quad
Parallel Optic Transceiver**
with up to 28 Gbps per
channel performance

NO LONGER ACTIVE FOR NEW DESIGN.

**CONSULT FACTORY FOR ALTERNATIVE MODULE
PART NUMBER**



Glenair DataStar™ MIL-AERO 4-Channel (8-fiber) PCB-mounted transceivers provide electro-optical conversion from -40°C to +85°C operating temperature in high shock and vibration environments. Modules may be configured for variable signal integrity requirements and for different data rates, up to 28 Gbps per fiber.

Signature optical alignment techniques ensure superior coupling for enhanced link margin. The compact form-factor mechanical design includes an internal microprocessor that provides automatic compensation of transceiver parameters over temperature. The optical transceiver engine has I2C interface capability, while the host board interface is a high-speed surface-mount electrical connector, with secure mechanical attachment.

- Compact package with internal microprocessor
- Secure PCB screw-mounting ensures excellent shock and vibration performance
- No-solder high-speed electrical PCB connector
- -40°C to +85°C operating case temperature
- 12-fiber MTP® connector socket
- Supports conduction or convection cooling
- Class 1M laser output power for higher link margin



Aerospace-Grade Parallel Optic Quad Transceiver with up to 28 Gbps per fiber

0500-3007



KEY TECHNICAL FEATURES



■ QSFP+ CML-Compatible

Electrical I/O signal levels

■ QSFP+ compatible Memory Map

■ Digital Monitoring

■ Class 1M Lasers with enhanced output power and sensitivity enable higher link margin than commercial products

■ ARINC 818, 100G Ethernet, FC 1x, 2x, 4x, 8x, 16x, 32x, sRIO, 10G BASE-SR, 40G BASE-SR4, 100GBASE-SR4 applications

■ Multiple FPGA protocols

■ 850nm InGaAs VCSEL lasers to support 28Gbps

■ GaAs PIN PD supports excellent Sensitivity to 28Gbps

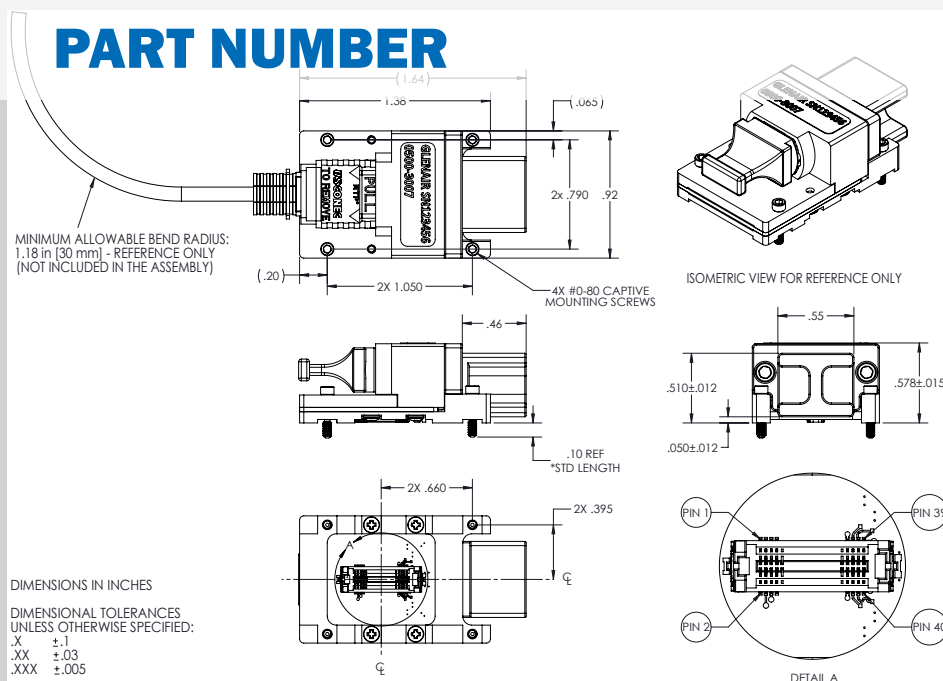
COMPLIANCE SPECIFICATIONS

Characteristic	Standard	Condition	Notes
Mechanical Shock, Operating	MIL-STD-810	Para. 516.6, proc. I, 650g. 0.9ms, x,y and z 10 pulses (5+ & 5-)	0.9 ms operating error-free after exposure to shock and random vibration, when using female MTP® cable assembly.
Mechanical Vibration	MIL-STD-810	Para. 514.6, 46g rms x, y, and z, 2 hours per axis	Random, operating error-free, when using female MTP® cable assembly.
ESD	ARINC 804-1 (MIL-STD-883H)	Method 3015.8, Class 1C	500V HBM (TBV)
Thermal Shock	MIL-STD-1344	Method 1002.2, Cond. B	10 cycles, 24 hours (TBV)
Eye Safety	CDRH and IEC-825	Class 1M Laser Product	DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS CLASS 1M LASER PRODUCT

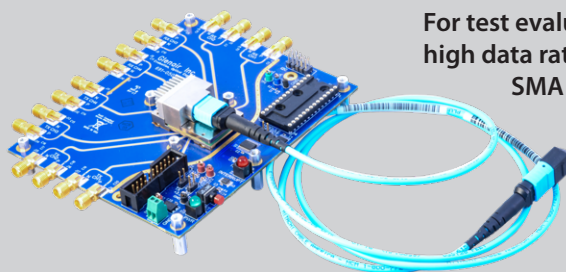
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0500-3007 EVALUATION BOARD



For test evaluation of 0500-3007 board-mount transceiver module. Designed for high data rate operation, supporting rates up to 28 Gbps. Board incorporates 16 SMA connectors to interface with high-speed 100 Ohm differential lines.

Transceiver device is powered through 3.3V and GND connections. FMC Evalboard also available.