



# Harsh-Environment PCB-Mount Transceivers, Transmitters and Receivers

## PRODUCT SELECTION GUIDE



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HIGH-SHOCK, HIGH-VIBRATION

# PCB-Mount Opto-Electronics

Connectorized, high-density, board-mount transceivers built for rugged vibration and shock applications up to 10Gbps

Glenair PCB mount transceivers are ruggedized harsh-environment equivalents to SFP transceivers but with mechanical design suited to the harsh temperature and vibration environments found in Military, Aerospace and Other applications. PCB mount optical transceivers support optional Digital Monitoring Interface (DMI) features in accordance with SFF 8472. The Transceiver is comprised of a transmitter section and a receiver section that reside on a common package and interface with a host board through a high-speed electrical connector.

- Smallest footprint available
- Passed jet fighter and space launch shock and vibration testing
- No soldering required
- CML 100 Ohm differential input and output
- -40°C to +85°C operating temperature range—extended temperature ranges available

<p>GC fiber optic connector retained with mounting screws to withstand high vibration and shock</p>	<p>PCB-mount opto-electronics feature Samtec high-speed surface-mount connectors</p>	<p>Dual-transceiver, Quad-Transmitter and Quad-Receiver form factor with ARINC 801 contacts</p>	<p>Evaluation boards for all PCB mount transceiver configurations are available</p>

### General Purpose Applications:

High-Speed Digital balanced signals (i.e. 4B/5B, 8B/10B, 62B/64B etc)  
Fast Ethernet, Gigabit Ethernet, 10G Ethernet Fiber Channel (1X, 2X, 4X, 8X), ARINC 818, AFDX, SFPDP, Serial Rapid I/O (sRIO)

### Video Applications

DVI, ARINC 818, SMPTE (SDI, HD-SDI, 3G-SDI)

Part Number	Description	Data Rate (Gbps)	Wavelength (nm)	Laser Type	Number of Transmitters	Number of Receivers	Number of Fibers	Fiber Type	General Purpose Video (DVI, ARINC 818)	Video SMPTE HD-SDI	Video SMPTE 3G-SDI	Distance
050-315	PCB Mount OE Transceiver 5G, MMF	0.1-5	850	VCSEL	1	1	2	MMF	Y	Y	N	1m-500m
050-316	PCB Mount OE Dual-Transmitter 5G, MMF	0.1-5	850	VCSEL	2	0	2	MMF	Y	Y	N	1m-500m
050-317	PCB Mount OE Dual-Receiver 5G, MMF	0.1-5	850	N/A	0	2	2	MMF	Y	Y	N	1m-500m
050-318	PCB Mount OE Transceiver, 4G, SMF	0.1-4.25	1310	FP	1	1	2	SMF	Y	Y	N	1m-10km
050-319	PCB Mount OE Dual Transmitter, 1310nm FP, 4G, SMF	0.1-4.25	1310	FP	2	0	2	SMF	Y	Y	N	1m-10km
050-320	PCB Mount OE Dual Receiver, 1310nm, 4G, SMF	0.1-4.25	1310	N/A	0	2	2	SMF	Y	Y	N	1m-10km
050-321	PCB Mount OE Transceiver, 1300nm LED, 200M, MMF	0.05-2	1300	LED	1	1	2	MMF	Y	N	N	2km
050-322	PCB mount 10Gbps XVR, 1310nm FP, 2km, SMF	5-10.5	1310	FP	1	1	2	SMF	Y	Y	N	1m-2km
050-324	PCB Mount OE Transceiver, 1310nm DFB, 4G, SMF	0.1-4.25	1310	DFB	1	1	2	SMF	Y	Y	N	1m-40km
050-325	PCB Mount OE Dual Transmitter, 1310nm DFB, 4G, SMF	0.1-4.25	1310	DFB	2	0	2	SMF	Y	Y	N	1m-40km
050-326	PCB Mount OE Dual Receiver, 1310nm DFB, 4G, SMF	0.1-4.25	1310	N/A	0	2	2	SMF	Y	Y	N	1m-40km
050-327	PCB mount 10Gbps SR Serial XVR, 850nm, MMF	5-10.5	850	VCSEL	1	1	2	MMF	Y	Y	N	1m-400m
050-328	PCB mount 10Gbps XVR, 1310nm DFB, 10km	5-10.5	1310	DFB	1	1	2	SMF	Y	Y	N	1m-10km
050-331	PCB Mount OE Dual-Transmitter SMPTE 3G-SDI	2.97	850	VCSEL	2	0	2	MMF	N	N	Y	1m-1km
050-332	PCB Mount OE Dual-Receiver SMPTE 3G-SDI	2.97	850	N/A	0	2	2	MMF	N	N	Y	1m-1km
050-333	PCB Mount OE Dual-Transceiver 5G MMF, ARINC 801	0.1-5	850	VCSEL	2	2	4	MMF	Y	Y	N	1m-500m
050-336	PCB Mount OE Quad-Transmitter 5G MMF, ARINC 801	0.1-5	850	VCSEL	4	0	4	MMF	Y	Y	N	1m-500m
050-337	PCB Mount OE Quad-Receiver 5G MMF, ARINC 801	0.1-5	850	N/A	0	4	4	MMF	Y	Y	N	1m-500m
050-339	PCB Mount OE Dual-Transceiver, 10G MMF, ARINC 801	0.1-5	850	VCSEL	2	2	4	MMF	Y	Y	N	1m-400m
050-340	SINGLE FIBER Bidirectional Transceiver, 2.5G, SMF	0.1-2.5	1310/ 1550	FP/FP	1	1	1	SMF	Y	Y	N	1m-2km
050-341	SINGLE FIBER Bidirectional Transceiver, 10G, SMF	5-10.5	1310/ 1550	DFB/DFB	1	1	1	SMF	Y	Y	N	1m-10km
050-342	CWDM Transceiver, 2.5G, SMF	0.1-2.5	CWDM	DFB	1	1	2	SMF	Y	Y	N	1m-20km
050-343	CWDM Transceiver, 10G, SMF	5-10.5	CWDM	DFB	1	1	2	SMF	Y	Y	N	1m-10km

Evaluation Boards		
Part No.	Description	for testing Part Number(s)
050-329	EVALUATION BOARD supporting Board Mount Transceivers, 1-10Gbps	050-315, 050-318, 050-321, 050-324
050-330	EVALUATION BOARD supporting Board Mount Dual Transmitters and Board Mount dual Receivers	050-316, 050-317, 050-319, 050-320, 050-325, 050-326, 050-331, 050-332
050-334	EVALUATION BOARD supporting PCB Mount Dual-Transceiver 050-333+	050-333
050-338	EVALUATION BOARD	050-336, 050-337
050-344	FMC Connectivity Card	All Glenair PCB Mount Components

Accessories		
Part No.	Description	Details
FA02454	Fiber Optic jumper cable, GC	Singlemode or multimode connects transceiver to mil/aero connector
FA03286	Fiber Optic jumper cable, ARINC 801	Singlemode or multimode connects transceiver to mil/aero connector
059-0007	PCB Threaded Insert	Simplifies installation of PCB transceivers