

050-329

PRODUCT BRIEF

GLENAIR PCB MOUNT TRANSCEIVER EVALUATION BOARD FOR GLENAIR PCB MOUNT OPTICAL TRANSCEIVERS

REV	DESCRIPTION	DATE	APPROVED
А	Initial Release	03/04/2016	SZ
В	Updated PDB Layout top	10/23/2015	SZ
С	Per DCN 61038;Updated Datasheet to new format with ECCN; Added option for 62um MMF cable	07/19/2016	GC, SZ
D	Per DCN 63527; Remove ECCN Information	01/19/2017	RAS, GC
E	Per DCN64107; Add new Evalboard picture	03/02/2017	RAS/GC
F	Per DCN64905; Add new p/n's to what evalboard can test	04/28/2017	RAS/GC

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050-329 PRODUCT BRIEF Evaluation Board For Glenair PCB Mount Optical Transceivers





The 050-329 Evaluation boards can be used to evaluate multiple types of Glenair PCB Mount Optical transceivers (UUT). The evaluation board has been designed for high data rate operation and incorporates 4 SMA connectors that interface with high speed 100 ohm differential lines which can support testing products up to 10Gbps data rates for both multi-mode and single mode applications.

The evaluation board is designed as an interface to allow evaluation of the Optical Transmitter and the Optical receiver on the board mount transceiver module. Devices are powered through the 3.3V and GND connections.

For the transmitter, Fault condition (TX-Fault) can be monitored via a test point and the Transmitter disable (TX-Disable) can be controlled via a Jumper.

For the receiver, loss of signal (LOS) state can be monitored via a test point.

KEY FEATURES/BENEFITS

- Supports large variety of Optical tranceivers suitable for Harsh Environment (Wide temperature ranges and Extremely High Vibration)
 - o 1 Gbps to 10 Gbps

APPLICATIONS

- As an evaluation tool for Glenair Opto-electronic modules which are suited to Harsh Environment Applications such as: Airborne, Tactical Military, Oil and Gas, Railway and Shipboard
 - Ethernet, Fibre Channel, 1x, 2x, 4x, 8x, SFPDP, Aurora
 - Video (DVI, SMPTE, ARINC818, etc)



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050-329 PRODUCT BRIEF

Evaluation Board



For Glenair PCB Mount Optical Transceivers

What is included with 050-329:

- The <u>050-329-**MMF**-EVALBOARD</u> kit includes the following:
 - Evaluation board PCBA 990-05044
 - o 050-329 Datasheet
 - \circ 2 fiber optic MMF test jumper cables (1-2m, 50 μ m/125 μ m, GC connector to LC connector)
 - 1 LC to LC adapter

050-329-MMF-EVALBOARD	USED TO TEST THE FOLLOWING:			
	050-315 (850nm VCSEL MMF XCVR, 0.1-5 Gbps)			
	050-321 (1300nm LED MMF XCVR, 0.052 Gbps)			
	050-327 (850nm VCSEL MMF XCVR, 5-10 Gbps)			
	050-348 (850nm VCSEL MMF EMI Shielded XCVR, 0.1-5 Gbps)			
	050-389 (850nm VCSEL MMF SMPTE XCVR, 2.97 Gbps)			

- The <u>050-329-MMF62-EVALBOARD</u> kit includes the following:
 - Evaluation board PCBA 990-05044
 - o 050-329 Datasheet
 - 2 fiber optic MMF test jumper cables (1-2m, 62µm/125µm, GC connector to LC connector)
 1 LC to LC adapter

050-329-MMF62-EVALBOARD	USED TO TEST THE FOLLOWING:				
	050-315 (850nm VCSEL MMF XCVR, 0.1-5 Gbps)				
	050-321 (1300nm LED MMF XCVR, 0.052 Gbps)				
	050-327 (850nm VCSEL MMF XCVR, 5-10 Gbps)				
	050-348 (850nm VCSEL MMF EMI Shielded XCVR, 0.1-5 Gbps)				
	050-389 (850nm VCSEL MMF SMPTE XCVR, 2.97 Gbps)				

- The <u>050-329-**SMF**-EVALBOARD</u> kit includes the following:
 - Evaluation board PCBA
 - o 050-329 Datasheet
 - $\circ~~2$ fiber optic SMF test jumper cables (1-2m, SMF 9 μm /125 μm , GC connector to LC connector)
 - \circ $\,$ 1 LC to LC adapter $\,$

050-329-SMF-EVALBOARD	USED TO TEST THE FOLLOWING:
	050-318 (1310 nm FP SMF XCVR, 0.1-1.25 Gbps)
	050-324 (1310 nm DFB SMF XCVR, 0.1-4.25 Gbps)
	050-328 (1310 nm DFB SMF XCVR, 5-10.5 Gbps)
	050-340 (1310/1550 nm FP/FP SMF XCVR, 0.1-1.25 Gbps)
	050-341 (1270/1330 nm DFB/DFB SMF XCVR, 10 Gbps)
	050-342 (CWDM DFB SMF XCVR, 0.1-2.5 Gbps)
	050-343 (CWDM DFB SMF XCVR, 5-10.5 Gbps)
	050-352 (1310 nm FP SMF XCVR, 0.05-0.2 Gbps)
	050-354 (1310 nm FP SMF XCVR, 2.5-5 Gbps)
	050-379 (CWDM DFB SMF XCVR, 1.5 Gbps)
	050-393 (CWDM DFB SMF XCVR, 1.5 Mbps)

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Evaluation Board



For Glenair PCB Mount Optical Transceivers

Opto-Electronic Devices and additional Test cables sold separately: Many options can be supported.

- Glenair PCB Mount devices Selection Guide
 - o http://www.glenair.com/opto_electronic/b.htm
- Fiber Optic Test cables as required:
 - o MMF & SMF test cables can be configured to support all Glenair Opto-electronic components
 - o FA03216: http://www.glenair.com/opto_electronic/pdf/b/fa03216.pdf

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