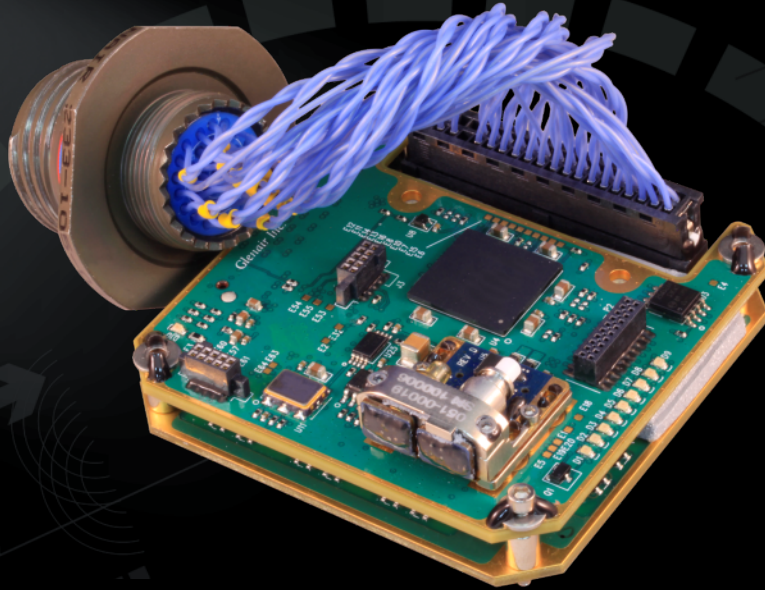


The widest range of  
mission-critical interconnect  
technologies in the world

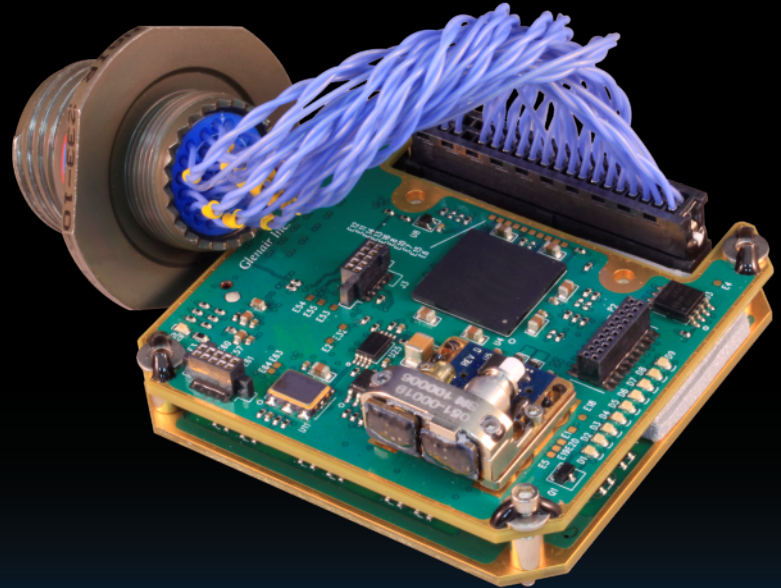


**Optical and Electrical PCBA Design and  
Development**

# PCBA Designs for Ruggedized Embedded Systems

Complete in-house optical and electrical PCBA design and development capability

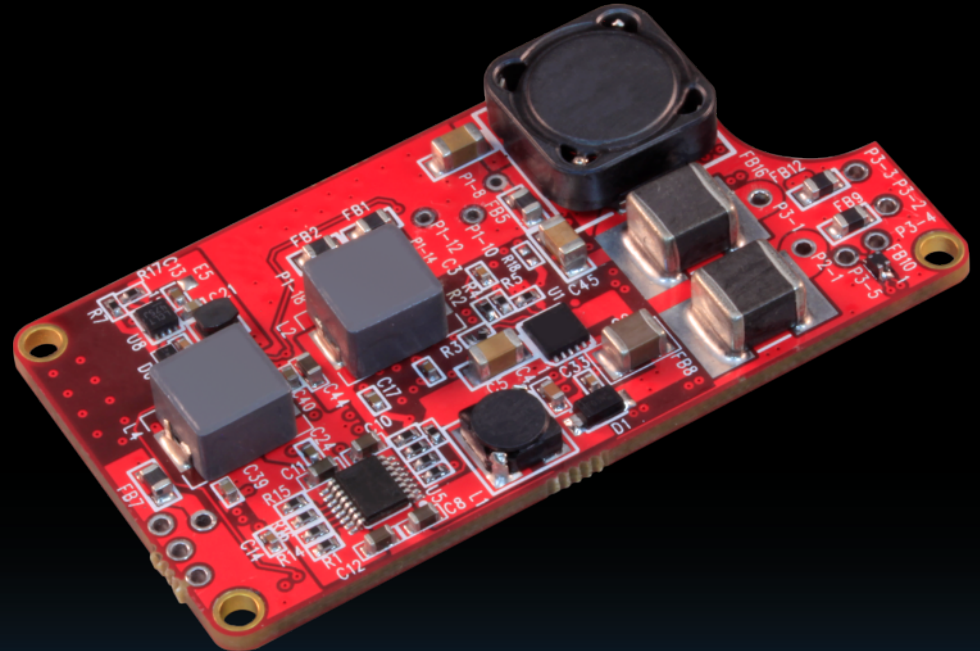
- The design and fabrication of printed circuit board assemblies is a critical in-house capability of Glenair's Ruggedized Electronics and Photonics Group
- These temperature, vibration, and shock tolerant PCBAs are key components in our broad range of turnkey electronic and photonic systems



# Embedded System Design Capabilities

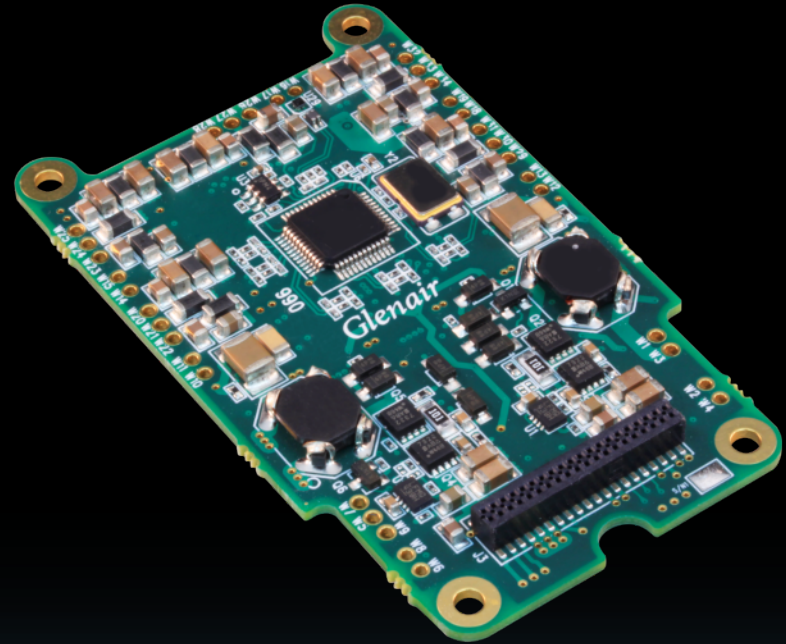
In-house capability allows Glenair to compete in the turnkey LRM / media converter side of photonics

- Digital design
- RF/Analog design
- Photonics design
- Mechanical packaging
- FPGA design (VHDL)
- Embedded SW design
- DFMA and DFT



# Stringent environmental, electromagnetic, and mechanical stress specifications:

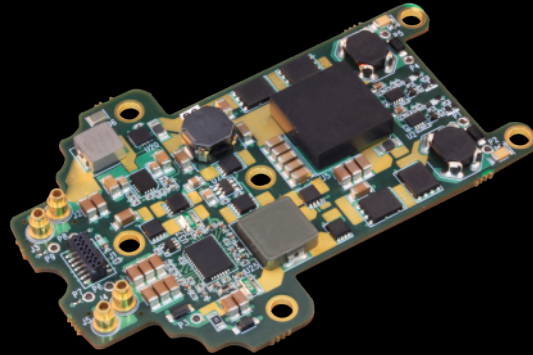
- MIL-STD-810G vibration and shock
- MIL-STD-461 electromagnetic shielding
- MIL-STD-1275 land vehicle power/EMI management
- MIL-STD 704 aircraft power/EMI management
- DO 160 commercial aerospace environmental, mechanical, and electromagnetic protection



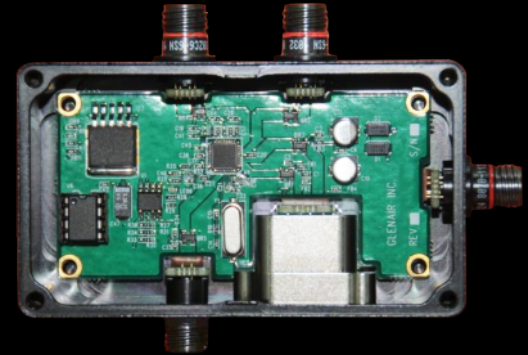
# Advanced Electronic Packaging Design for Size and Thermal Management



Accordian rigid flex printed circuit board design reduces size and footprint of Glenair photonic systems

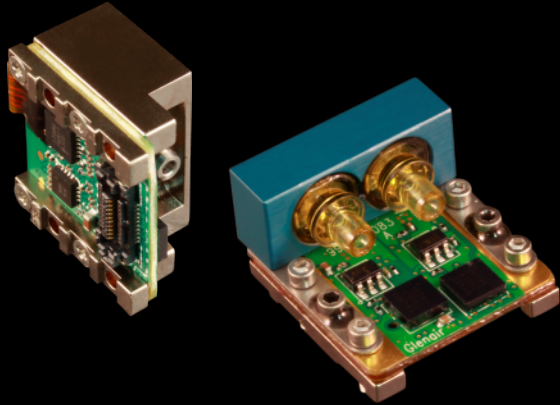


Ruggedized power distribution PCBA for use in STAR-PAN™ soldier system

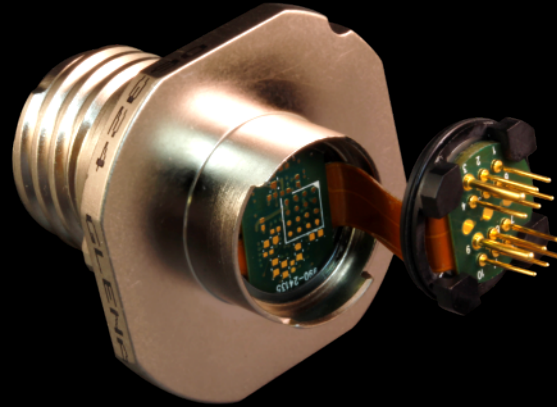


Soldier-worn data hub and power distribution board design with Series 80 Mighty Mouse interconnects

# Small Form-factor Board Designs used in Photonic Systems



Small form-factor PCB-mount transmitters and receivers (bi-directional unit shown on left)



2.5mm ELIO® Compatible D38999 Series III type photonic connector with integrated PCBA

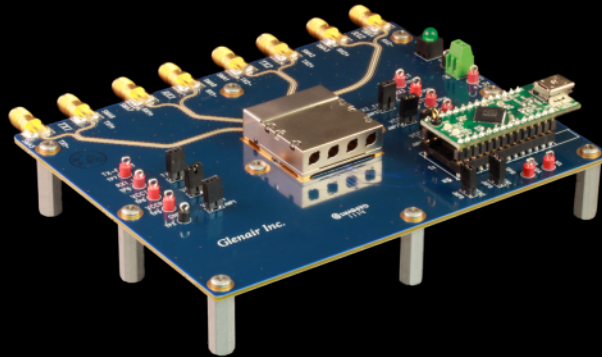


PCBA design for radio frequency-over-fiber links for SATCOM and RF signal distribution

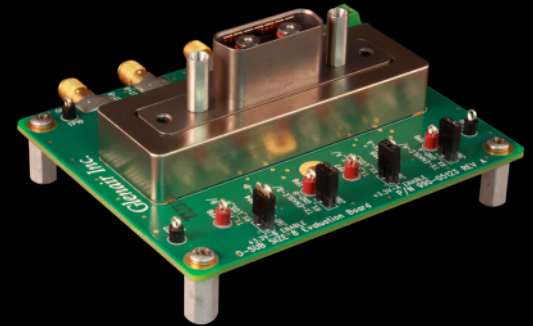
# Electronic and Opto-Electronic Evaluation Boards



MIL-DTL-38999 type 2.5mm  
Elio® compatible transceiver  
evaluation board

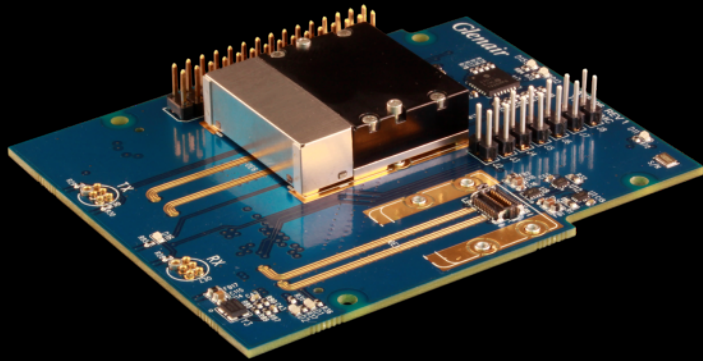


PCB-mount transceiver  
evaluation board



HiPer-D connector with size #8  
opto-electronic contacts  
evaluation board

# VITA 57, FPGA Mezzanine Card Based Development Boards



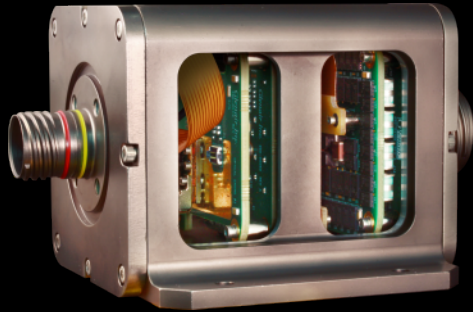
Ruggedized FMC connectivity PCBA for Ethernet, Fiber channel, and/or DVI, SMPTE video system applications



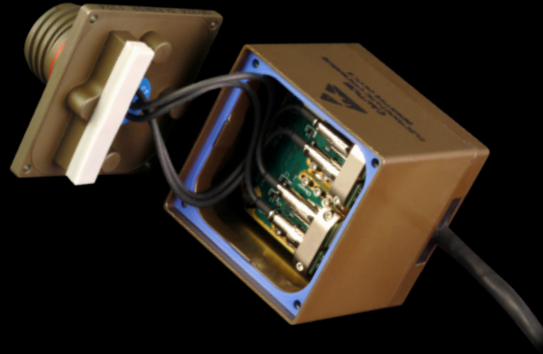
FPGA mezzanine card development board



# Embedded Electronic and Opto-Electronic PCBAs In Action



Copper-to-fiber aggregation media converter (cutaway view)



Small form-factor ruggedized opto-electronic media converter



Small form-factor opto-electronic media converter with field fault monitoring

The widest range of  
mission-critical interconnect  
technologies in the world



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Development**