### COMMERCIAL Aerospace

# **PCB / Flex Circuit** Assemblies

**ADVANTAGES OF FLEX CIRCUITRY** FOR AEROSPACE APPLICATIONS



## PROVEN PERFORMANCE COMMERCIAL AEROSPACE

Types and kinds of assemblies for aircraft LRU applications

- Single-sided, double-sided, and multilayer flex circuitry
- Flex, rigid flex, and FR-4 board assemblies
- Through-hole and surface-mount connector terminations
- Integrated EMI / RFI shielding designs
- Long-length Fairway-Flex assemblies





#### Glenair flex circuit interconnect assemblies for commercial

aerospace applications are equipped with connectors, contacts, and termination designs exactingly aligned with the Federal Aviation Administration 14 CFR 25.1701 standard, ensuring the assemblies are suitable for use in avionics and other LRU equipment in each respective aircraft zone. Assemblies are optimized for reliable life-of-system performance in pressurized aircraft applications characterized by such stress factors as vibration, shock, temperature extremes, and rough handling. PCB assembly materials are RoHS, REACH, and DO-160 compliant.

TURNKEY CONNECTORIZED FLEX CIRCUIT ASSEMBLIES



Crimp-contact Series 79 family of precision-machined environmental rectangular connectors for standard signal, power, high-speed and RF



Series 23 "better than QPL" SuperNine environmental and hermetic circular suitable for use in both pressurized and non-pressurized aircraft zones



**Optimized for Harsh EWIS** Applications

**Micro miniature Series 80 Mighty Mouse** and Series 806 Mil-Aero environmental and hermetic connectors for aggressive size and weight reduction

Series 23 SuperNine and Micro-D flex assembly with discrete RF Coax lines for use in a Zone 2 avionics application



Unique Ethernet and USB flight deck multibranch flex assembly with panel sealing



#### IAW DO-160 Environmental Conditions

Flex Performance Specifications for Aircraft Zones 1, 2, and 8	
tress Factors	Applicable RTCA/DO-160 Requirements
	DO-160 Category S and H (Table 8-1)
	DO-160 Category A, Test Procedure 1
mperature	-65° to 95°C; DO-160 Category A3 (Table 4-1)
al	Sea level to 10kft; DO-160 Category A3 (Table 4-1)
iture	-55° to 85°C; DO-160 category A3 (Table 4-1) with Temperature change rate per DO-160 Category A (10 C min per minute)

#### Flex and Rigid Flex Assemblies









Point-to-point flex jumper for an aircraft power transmission application (Zone 1 fuselage)