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



Electrical Wire Interconnect Systems, Electronic Box Builds, and Integrated Assemblies

Capability Overview

1

2

3

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Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing

Electronic Box Builds Supported by SolidWorks Design and Prototyping

Turnkey Integration of Harness Technologies, Boxes, and Mechanisms

Validation Testing and Qualification



In-House Manufacture Mission-Critical Connectors Rectangular



HiPer-D 24308 straight



HiPer-D 24308 right angle



HiPer-D Combo straight



HiPer-D Combo right angle



Series 79 Micro-Crimp



MWDM Micro-D



Series 89 Nanominiature



AlphaLink

In-House Manufacture Mission-Critical Connectors Circular



SuperNine COTS



Series 80 and 811 Mighty Mouse



SuperNine Special



Series 88 SuperFly



MIL-DTL-38999 QPL Hermetic



SuperSeal RJ45/USB



Series 970 PowerTrip



Nanominiature Circular

Wire Harness Design and Fabrication

ASS .

Glenair.

Certified to Industry Standards Solder/Crimp Termination

flenair.



Complex Cable Assemblies: 3D Design and Assembly



15 ALE

Cable Protection/Wire Management

WE KED 3.



Special Processes/Assemblies Junction Box Assemblies

Flex Alternative to Wiring

- Lower total installed cost
- Reduced size/weight
- Easier termination and installation of multiple connectors
- Wiring errors virtually eliminated







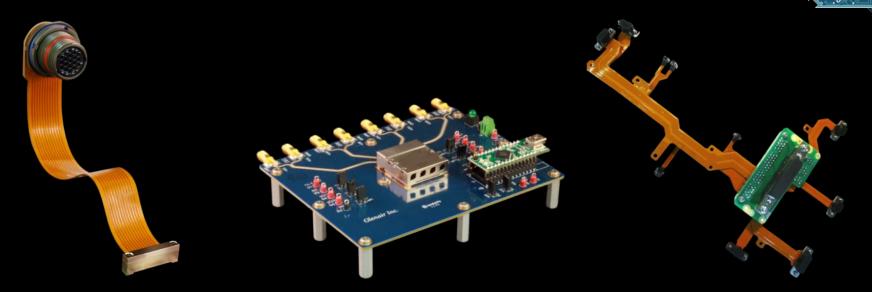
Flex assembly vs. round wire assemblies

- 1. Less weight and bulk
- 2. Virtually eliminates wiring errors
- 3. Total installed cost is less
- 4. Tightly assembled electronic packages
- 5. Dynamic (Flex in application)
- 6. Direct in 3 different axes





Glenair Flex Assembly Design Types



The Flex Assembly The Rigid Board Assembly The Rigid Flex Assembly



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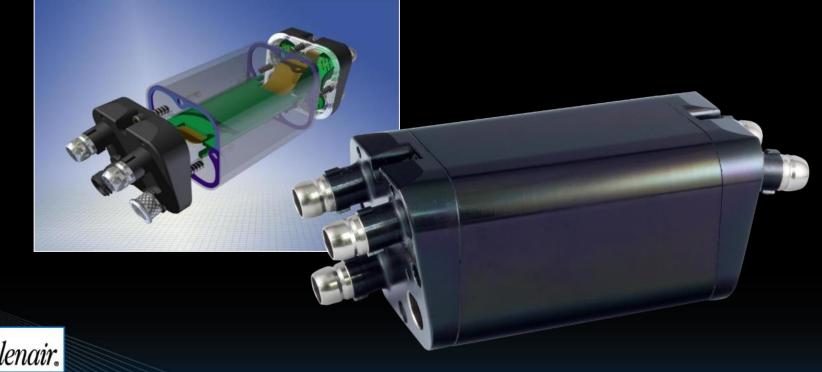


Wired Command/Communications Modules





Innovative Cans for Component Consolidation



Small Connectorized Boxes





Copper-to-Fiber Transciever Assembly



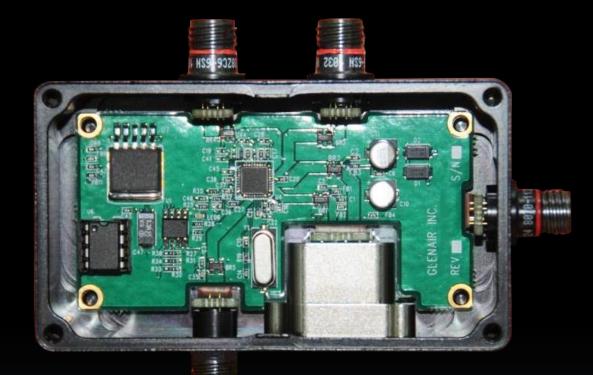


Opto-Electronic Transceiver and Signal Aggregation Unit



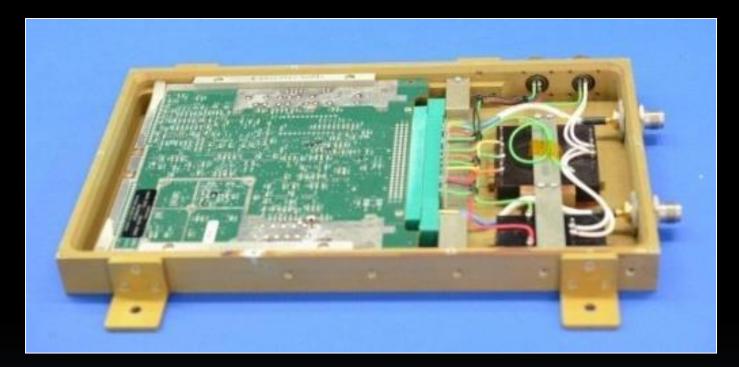


Custom Enclosures for Integrated Circuits





Wired Enclosure Circuit Integration





Ethernet Media Converters (Copper-to-Fiber)







Small Form Factor media converter

Lightning-strike hardened media converter Small form-factor inline media converter



Video Media Converters



Custom and competitor-compatible form factors



Mil-Aero Signal Aggregators



Wide range of custom designs for various applications

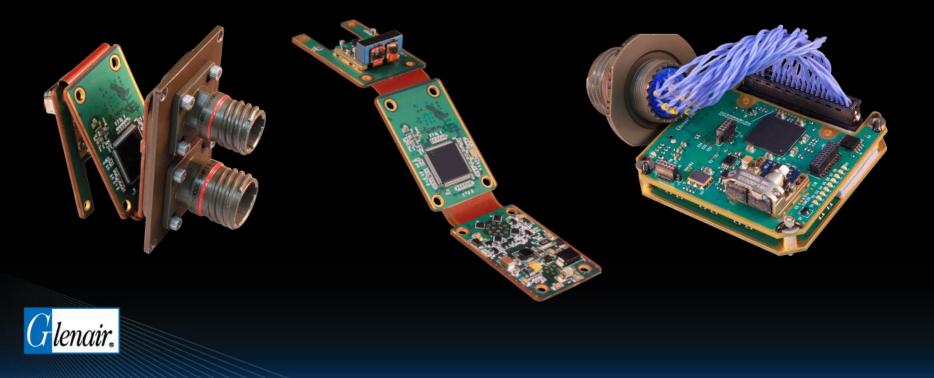


Enabling Technology: In-House Printed Circuit Board Design and Fabrication



Enabling Technology: Electrical and Optical PCBAs

Complete in-house design and fabrication



Enabling Technology: Precision Machining





Example: Complex Electronic Box Build with Glenair Machined Enclosure

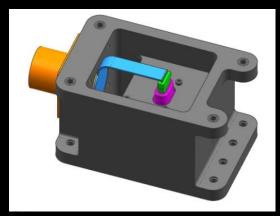


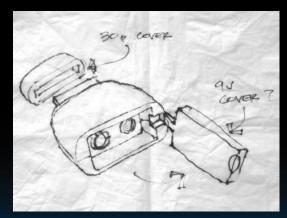




Design and Modeling Expertise

- Customer Supplied 3-D file to determine "keep out areas"
- "Napkin Sketch" with rough idea of routing
- Customer Supplied 2-D DXF







Modeling and Rapid Prototyping

3-D SolidWorks modeling, "Paper Doll" physical mockups

- 3-D representation of flex assemblies using SolidWorks
- 3-D printed "Paper doll" outline mockups for physical assembly fit checks with copper clad Kapton to simulate actual flexibility
- Incorporation of customer-supplied wiring diagram and chassis information in laser-cut mechanical samples

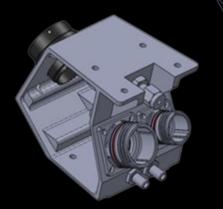




SolidWorks 3-D Prototyping

"Virtual" connector modifications

- Customer-supplied Step file of box with panel cutouts
- Glenair-supplied 3-D model of connector flange modifications







Capability Overview

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Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing

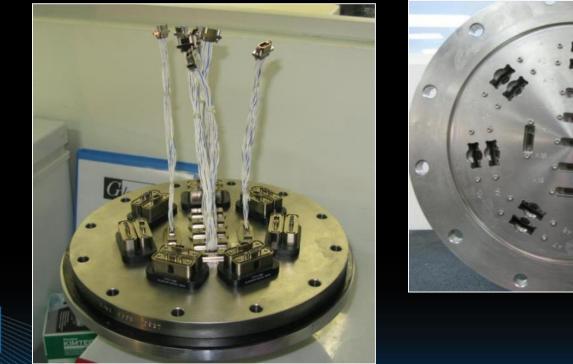
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Validation Testing and Qualification

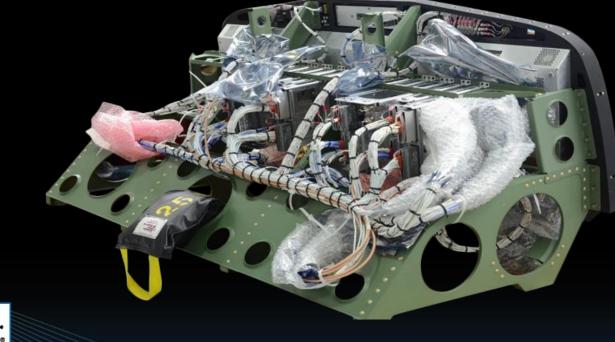


Example of Integrated Connector Machining / Packaging



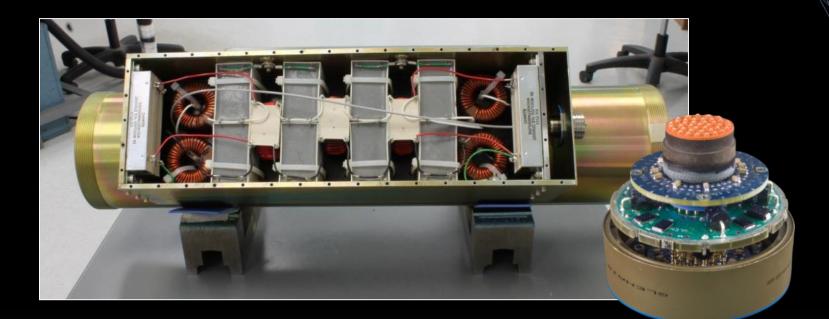


Example of Highly Complex Integrated Assembly





Example of Wired EMP Chassis Integration



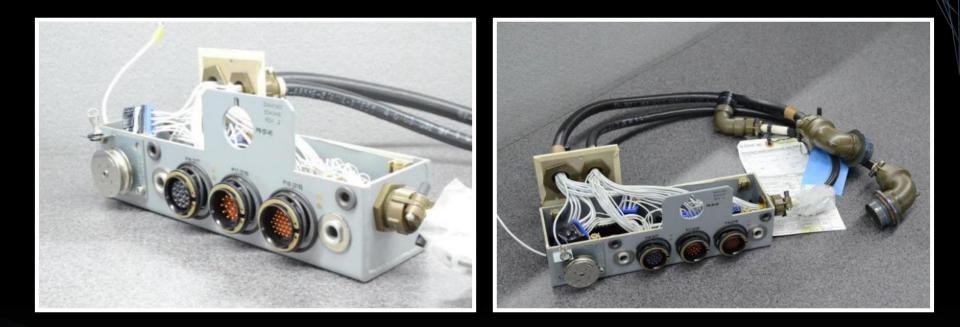


Example of IFE Assembly





Example of Wired Chassis





Example of Military / Defense Platforms









Examples of Wired Composite Enclosure Assemblies





Example of Wired Composite Enclosure Assembly





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Validation Testing and Qualification



Electrical, Environmental and Mechanical Testing and Qualification Capabilities

ISO 17025 approved, redundant capabilities in US, UK, and Italy

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Types of products:

Connectors, Circuits, Resistors, Switches, Relays, Transformers, electrical Harnesses, Fiber Optics

Certified to Industry Standards Testing and Inspection

Glenair.

Certified Clean Room Facilities

- Used for clean assemblies:
 - Lasers
 - Space and Satellite
- ISO Class 8 -100,000 PPM
- Currently 6 workstations
- ESD safe multifunctional





Hydrostatic Test Lab

Subsea / marine interconnect testing facility





Filter Array Clean Room and Ceramic Lab Fast turnaround on EMI/RFI filter connectors







Ruggedized Electronics and Photonics Lab





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



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