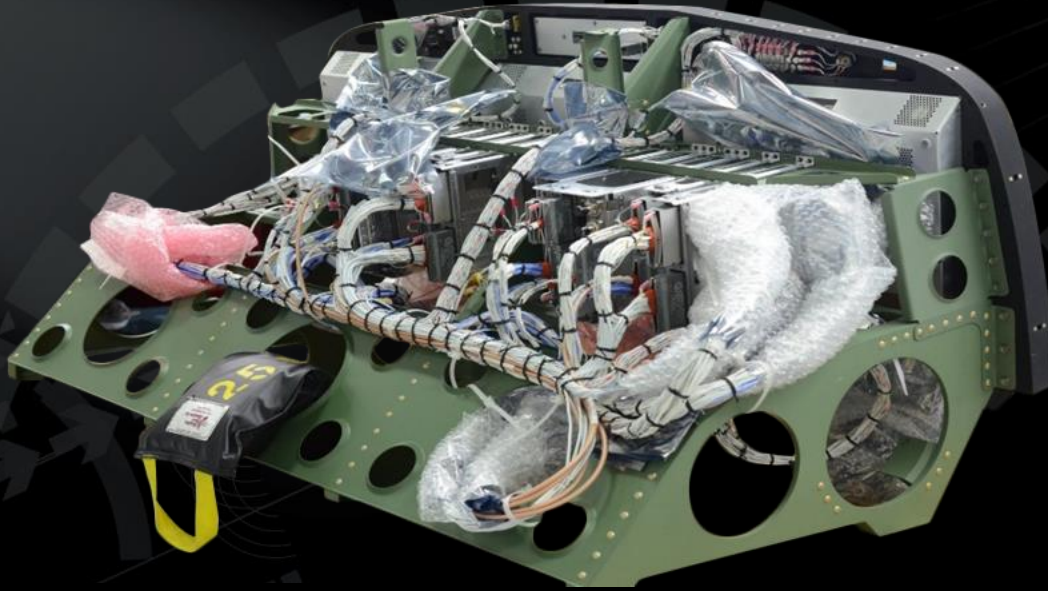


The widest range of
mission-critical interconnect
technologies in the world



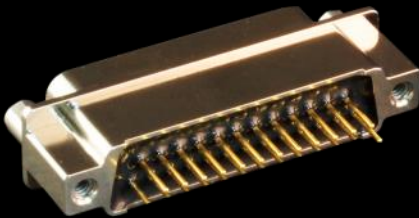
**Electrical Wire Interconnect Systems,
Electronic Box Builds, and Integrated Assemblies**

Capability Overview

- 1 Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing
- 2 Electronic Box Builds Supported by SolidWorks Design and Prototyping
- 3 Turnkey Integration of Harness Technologies, Boxes, and Mechanisms
- 4 Validation Testing and Qualification

In-House Manufacture Mission-Critical Connectors

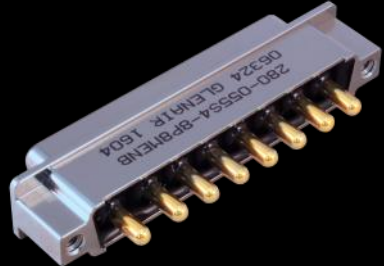
Rectangular



HiPer-D 24308
straight



HiPer-D 24308
right angle



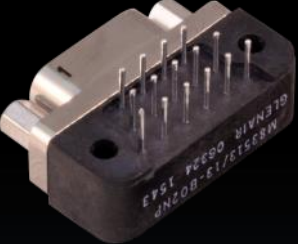
HiPer-D Combo
straight



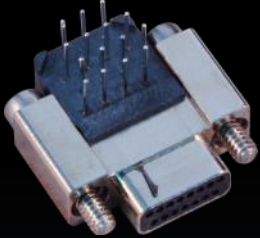
HiPer-D Combo
right angle



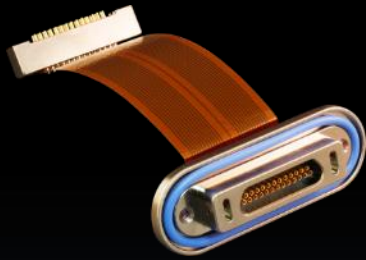
Series 79
Micro-Crimp



MWDM
Micro-D



Series 89
Nanominiature



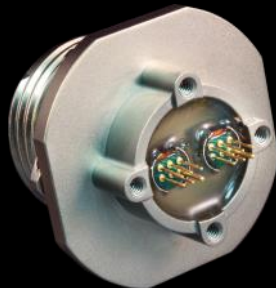
AlphaLink

In-House Manufacture Mission-Critical Connectors

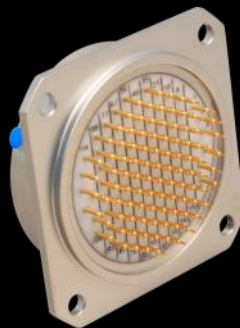
Circular



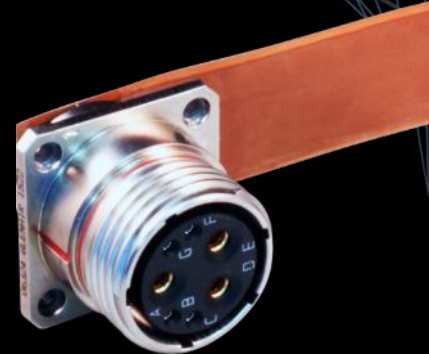
SuperNine
COTS



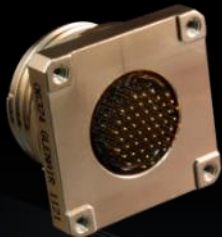
SuperNine
Special



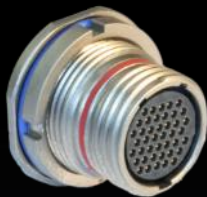
MIL-DTL-38999
QPL Hermetic



Series 970
PowerTrip



Series 80 and 811
Mighty Mouse



Series 88
SuperFly



SuperSeal
RJ45/USB



Nanominature
Circular



Wire Harness Design and Fabrication





Certified to Industry Standards
Solder/Crimp Termination

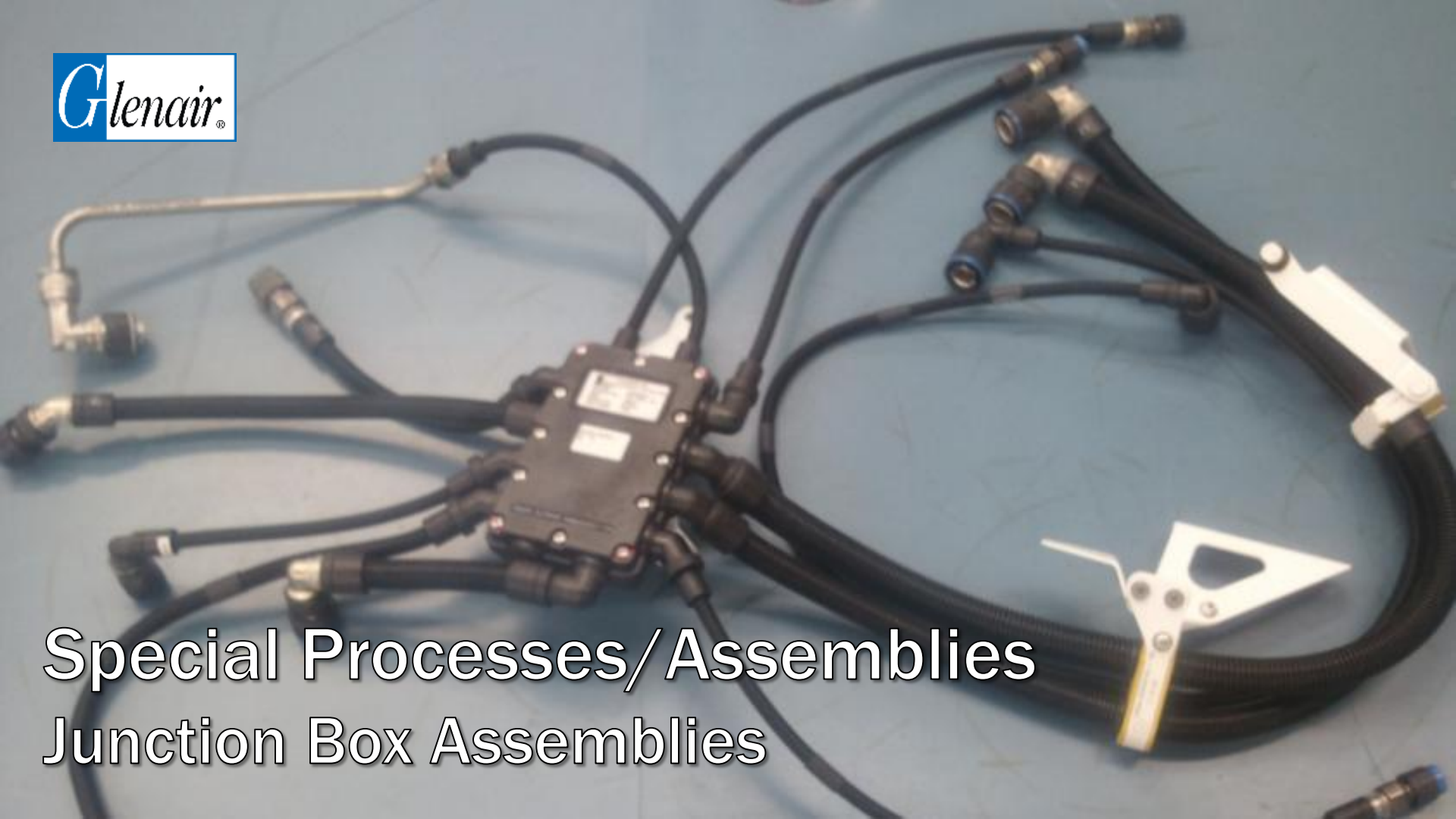


Complex Cable Assemblies: 3D Design and Assembly





Cable Protection/Wire Management



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



Why Choose Board or Flex Assemblies?

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

Capability Overview

1

Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing

2

Electronic Box Builds Supported by SolidWorks Design and Prototyping

3

Turnkey Integration of Harness Technologies, Boxes, and Mechanisms

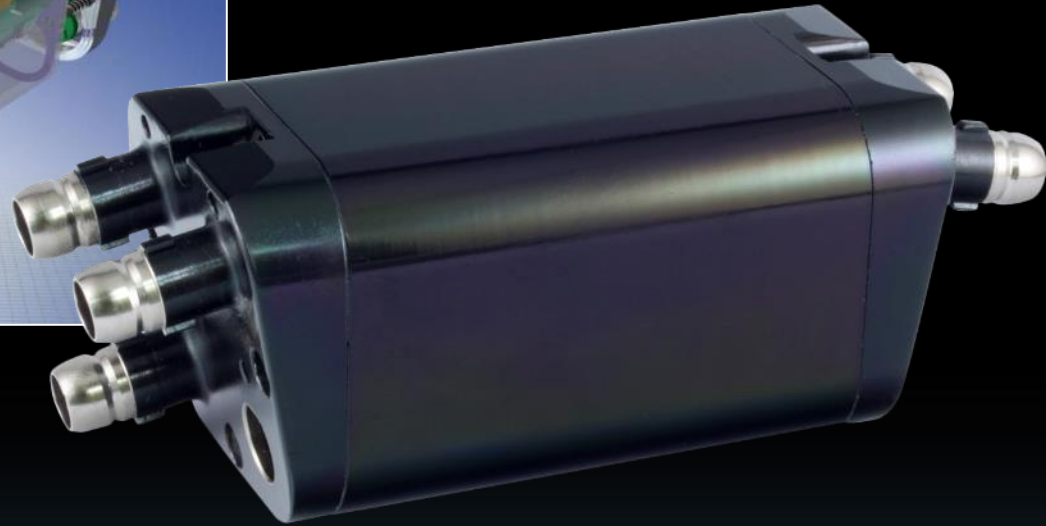
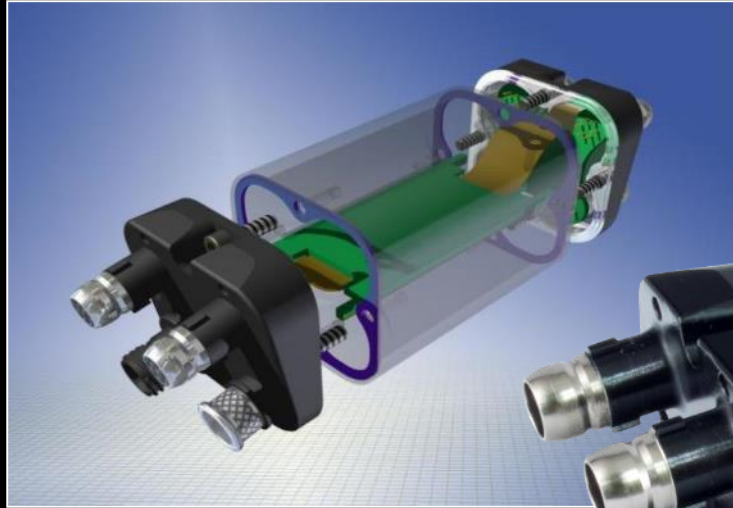
4

Validation Testing and Qualification

Wired Command/Communications Modules



Innovative Cans for Component Consolidation



Small Connectorized Boxes



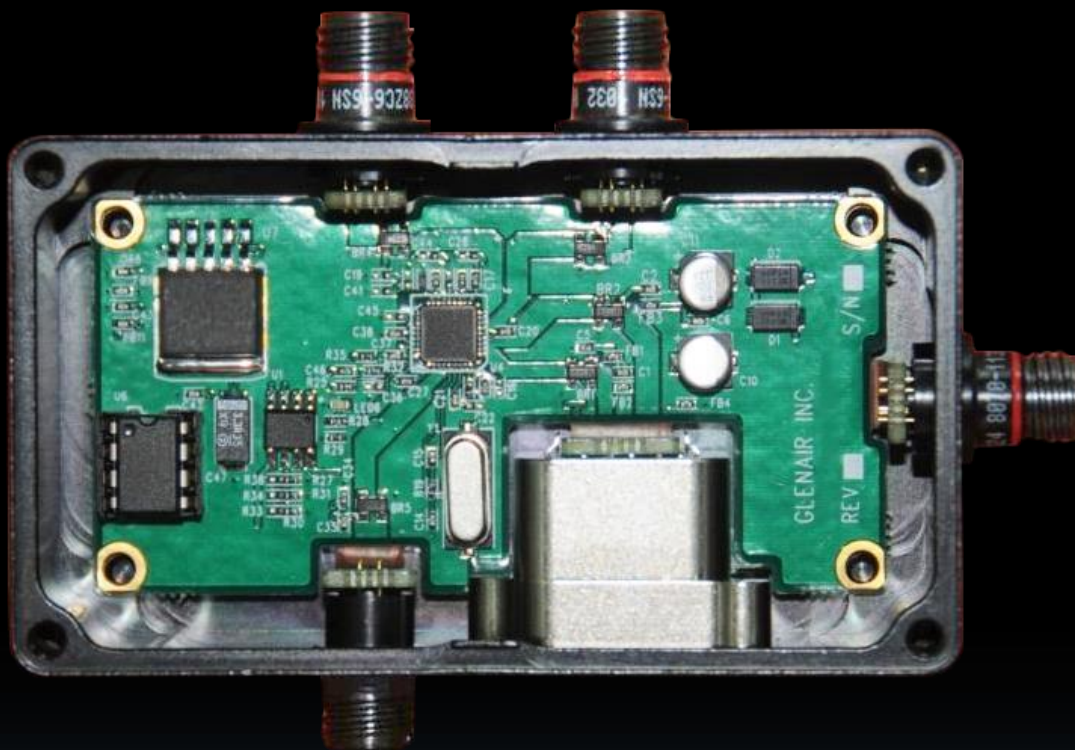
Copper-to-Fiber Transceiver Assembly



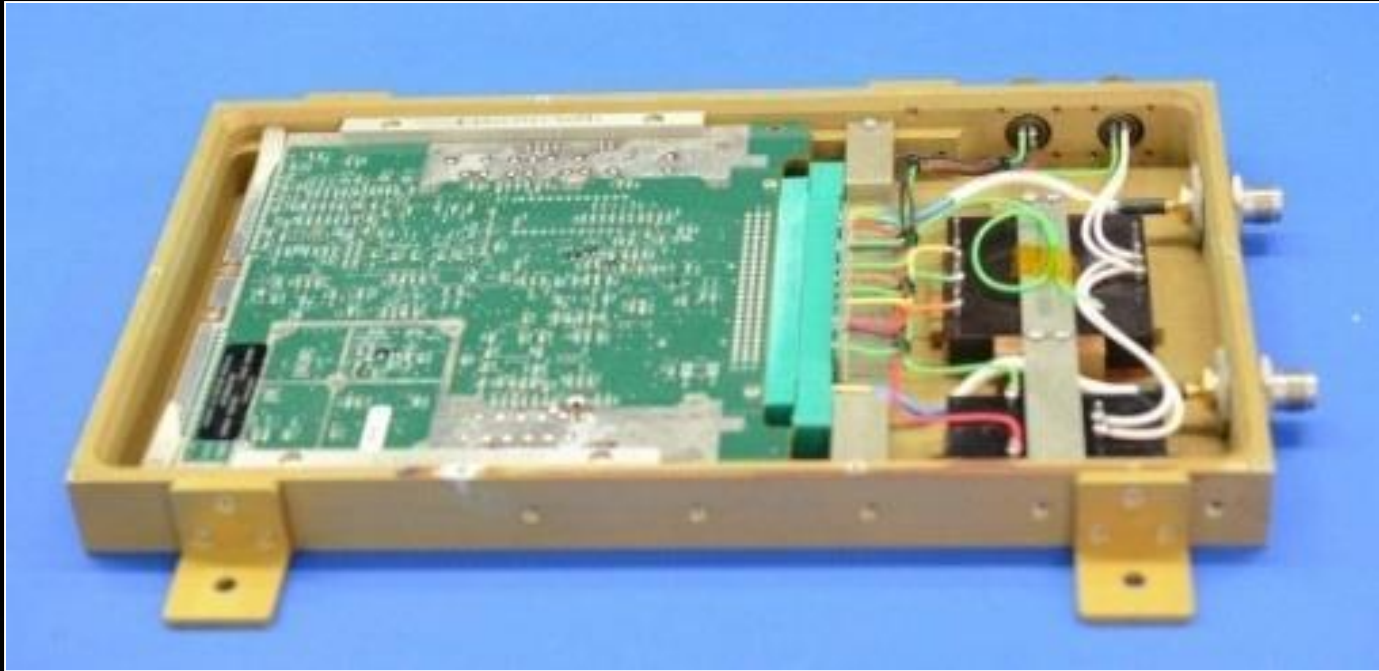
Opto-Electronic Transceiver and Signal Aggregation Unit



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



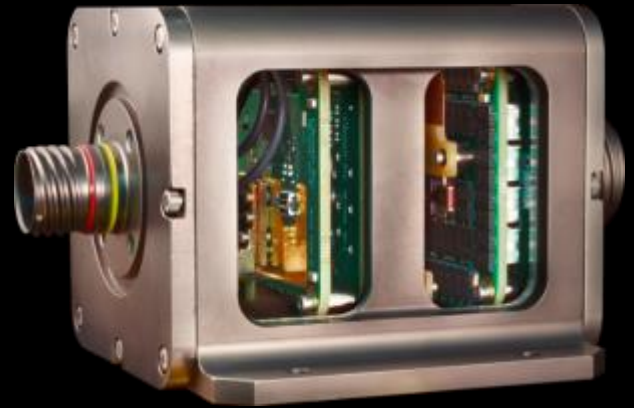
Small form-factor
inline media
converter

Video Media Converters



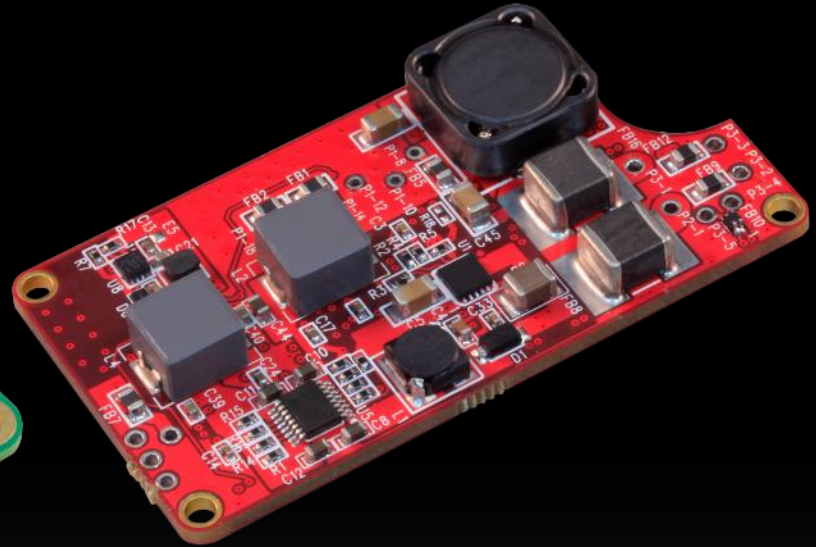
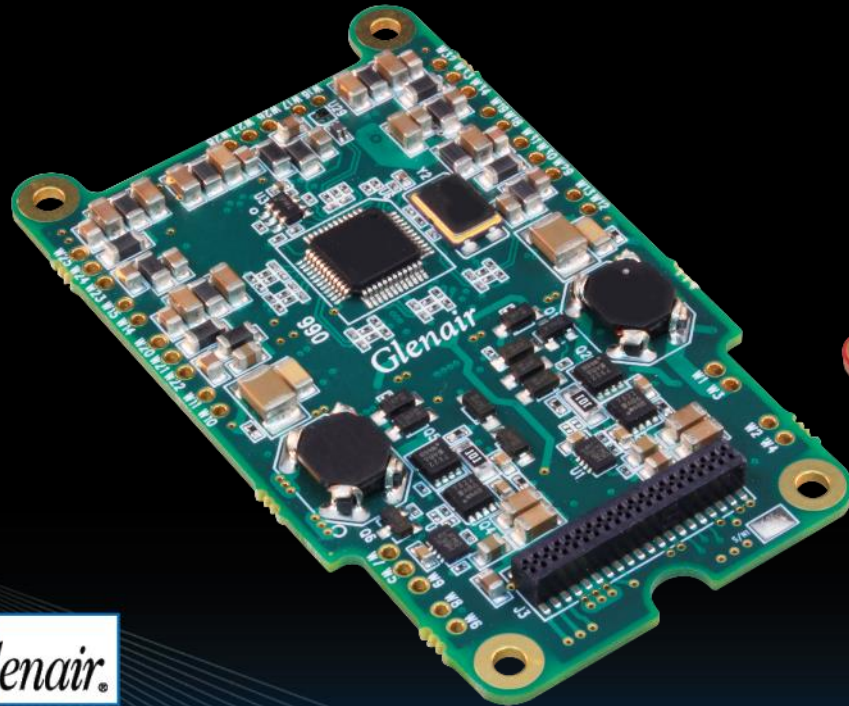
Custom and competitor-compatible form factors

Mil-Aero Signal Aggregators



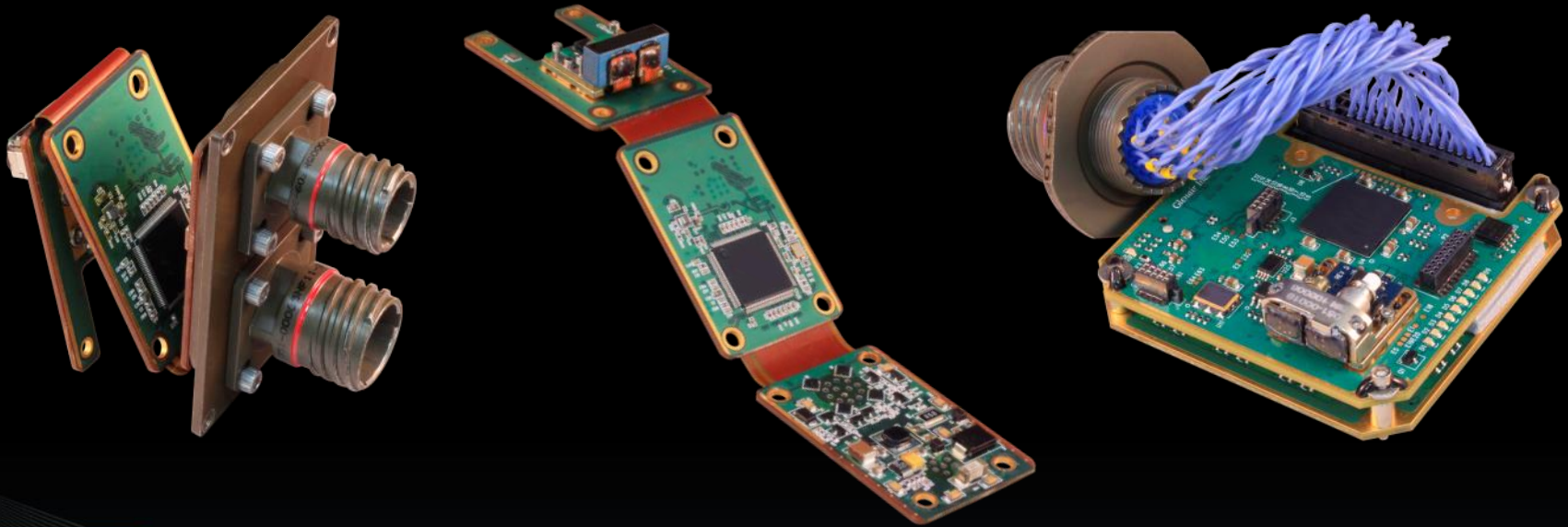
Wide range of custom designs for various applications

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

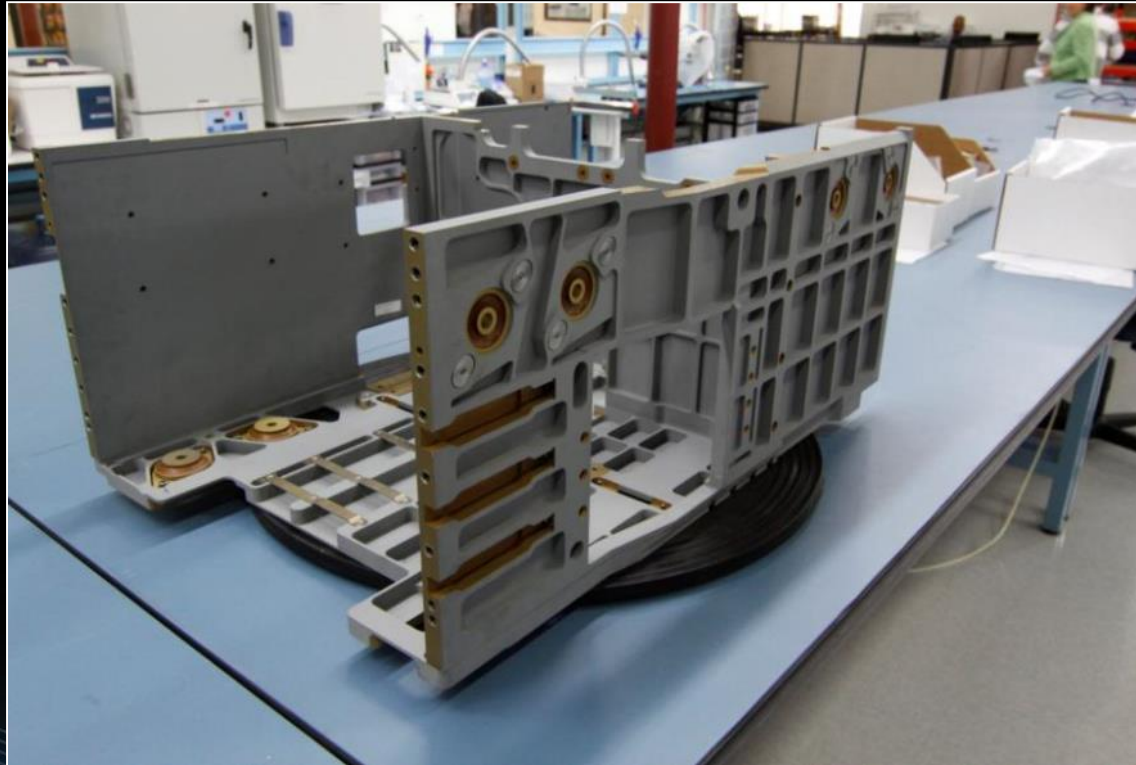


Enabling Technology: Electrical and Optical PCBAs

Complete in-house design and fabrication



Enabling Technology: Precision Machining

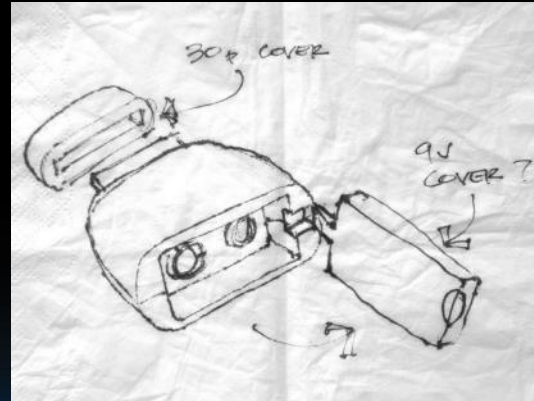
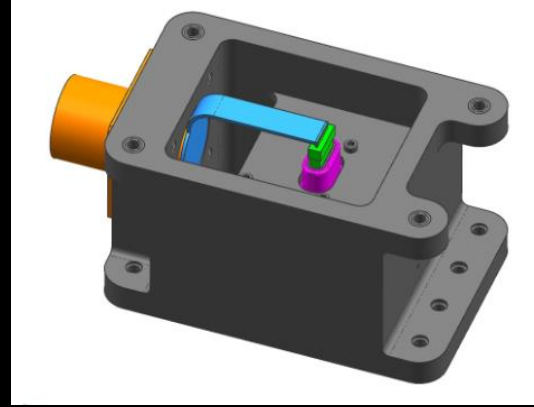


Example: Complex Electronic Box Build with Glenair Machined Enclosure



Design and Modeling Expertise

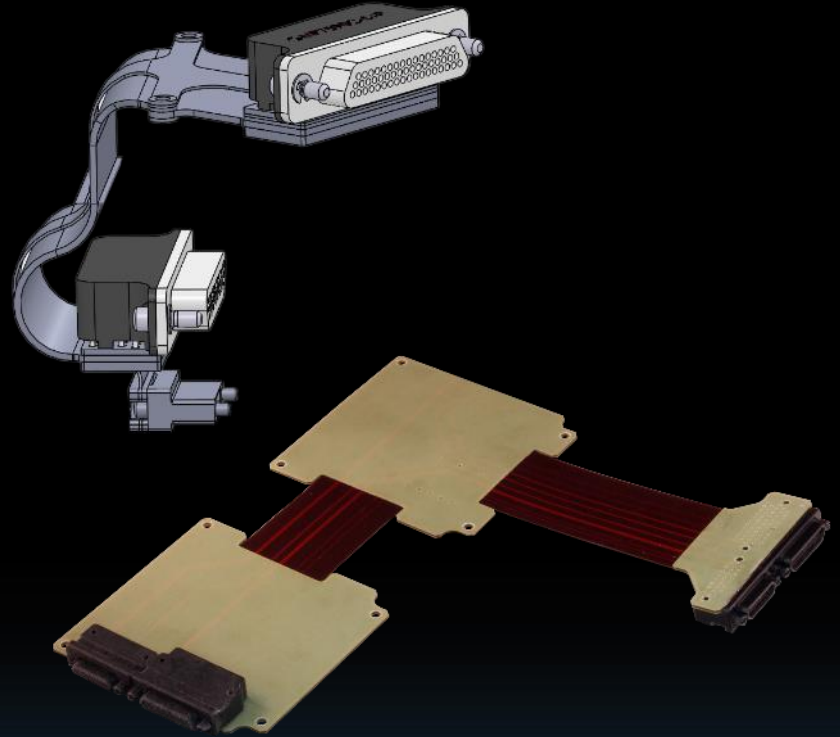
- Customer Supplied 3-D file to determine “keep out areas”
- “Napkin Sketch” with rough idea of routing
- Customer Supplied 2-D DXF



Modeling and Rapid Prototyping

3-D SolidWorks modeling, “Paper Doll” physical mockups

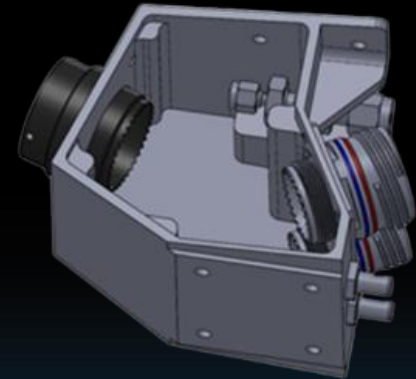
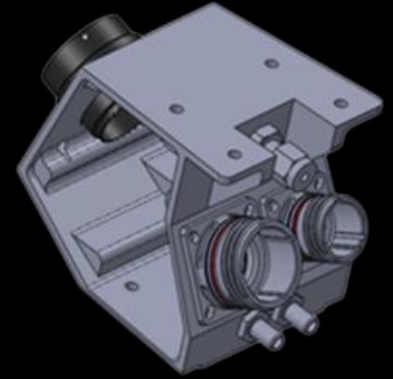
- 3-D representation of flex assemblies using SolidWorks
- 3-D printed “Paper doll” outline mockups for physical assembly fit checks with copper clad Kapton to simulate actual flexibility
- Incorporation of customer-supplied wiring diagram and chassis information in laser-cut mechanical samples



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

1

Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing

2

Electronic Box Builds Supported by SolidWorks Design and Prototyping

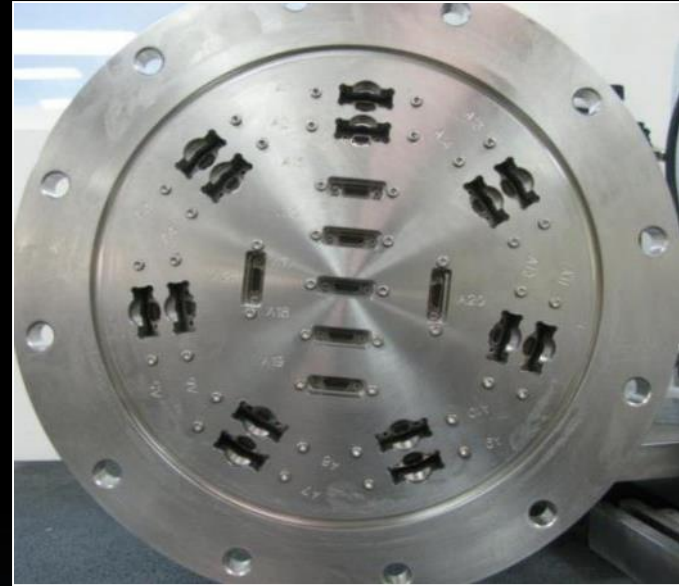
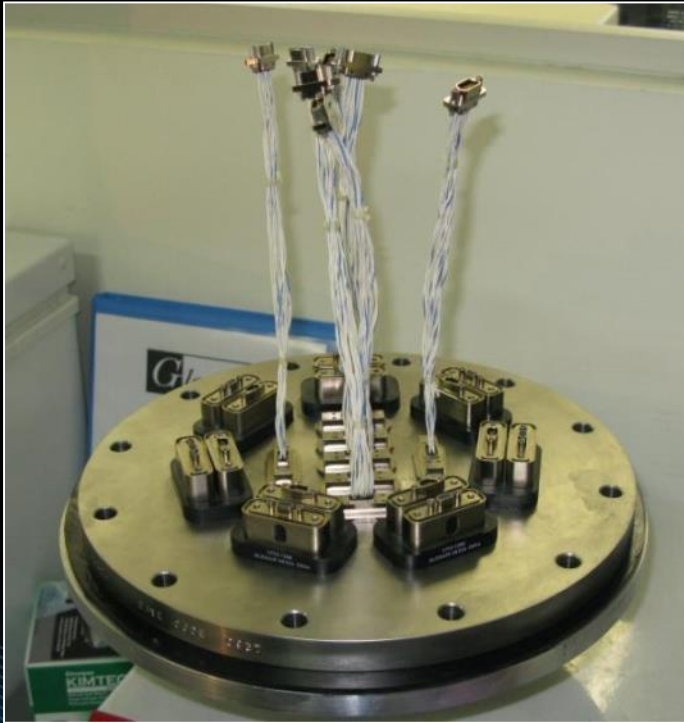
3

Turnkey Integration of Harness Technologies, Boxes, and Mechanisms

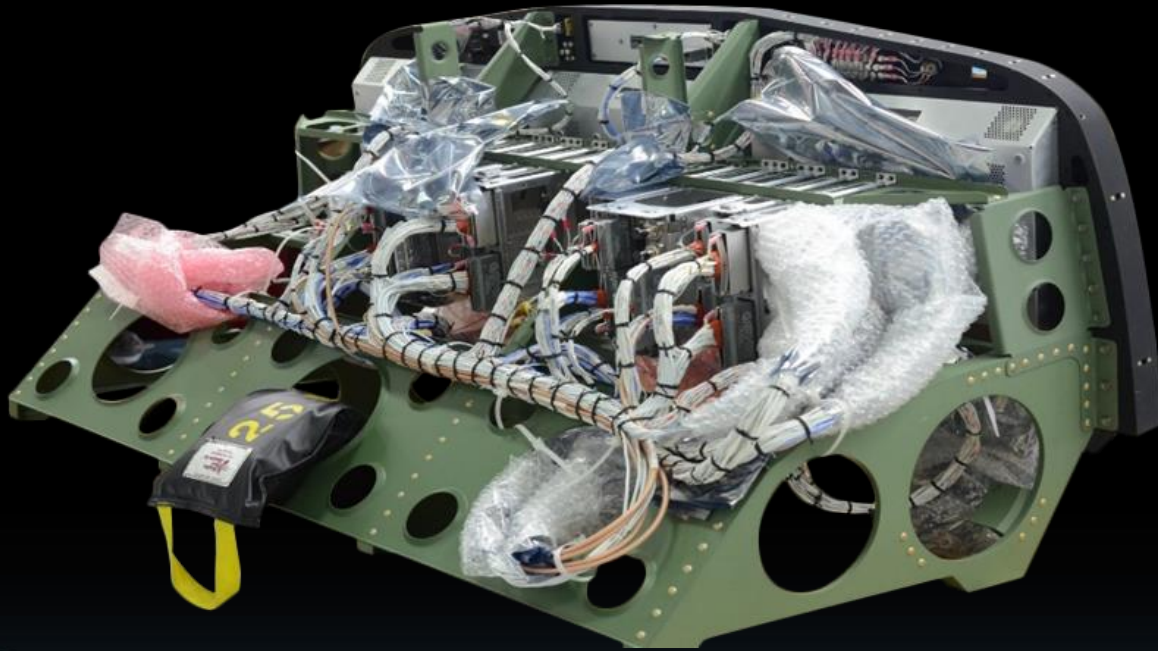
4

Validation Testing and Qualification

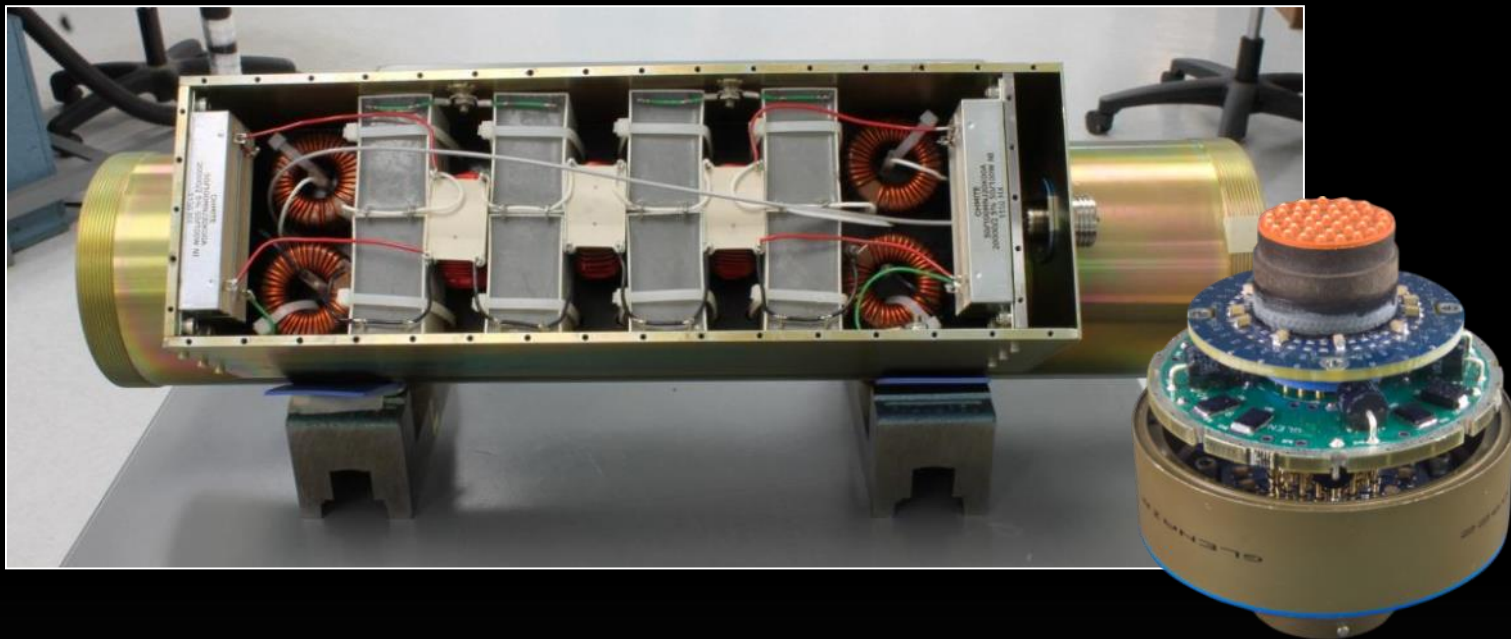
Example of Integrated Connector Machining / Packaging



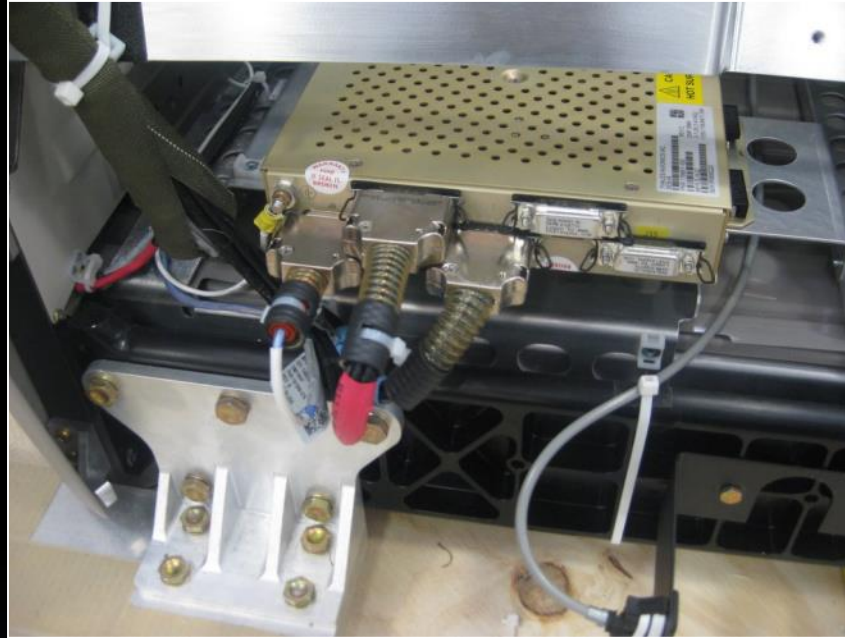
Example of Highly Complex Integrated Assembly



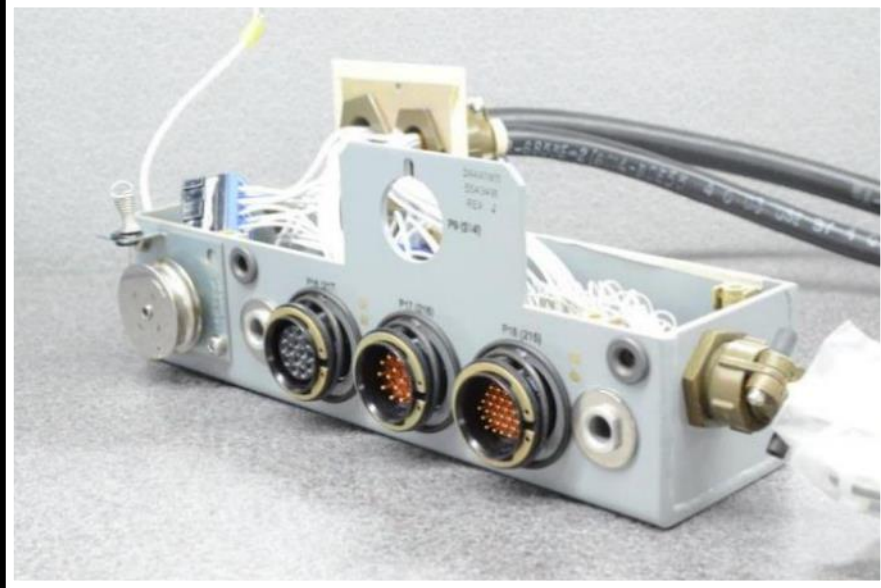
Example of Wired EMP Chassis Integration



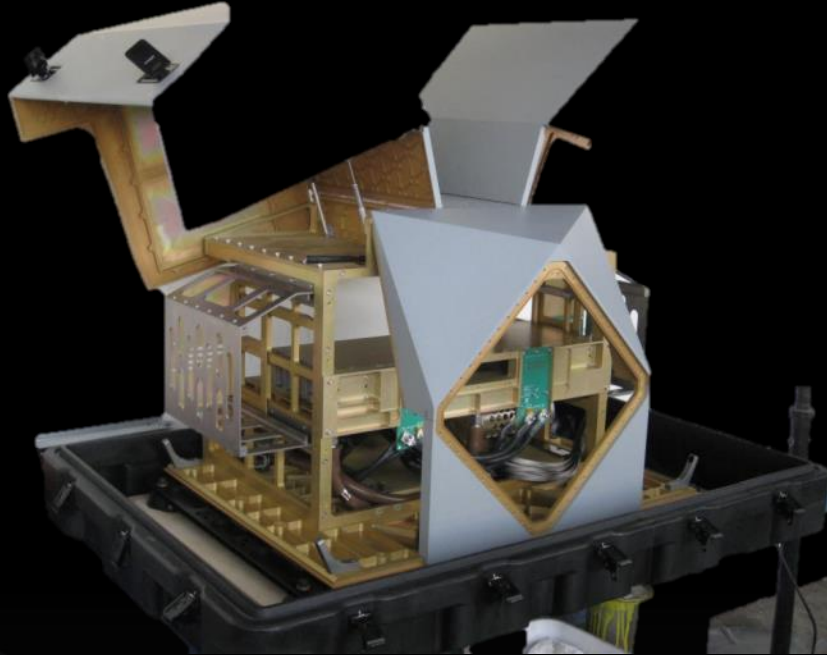
Example of IFE Assembly



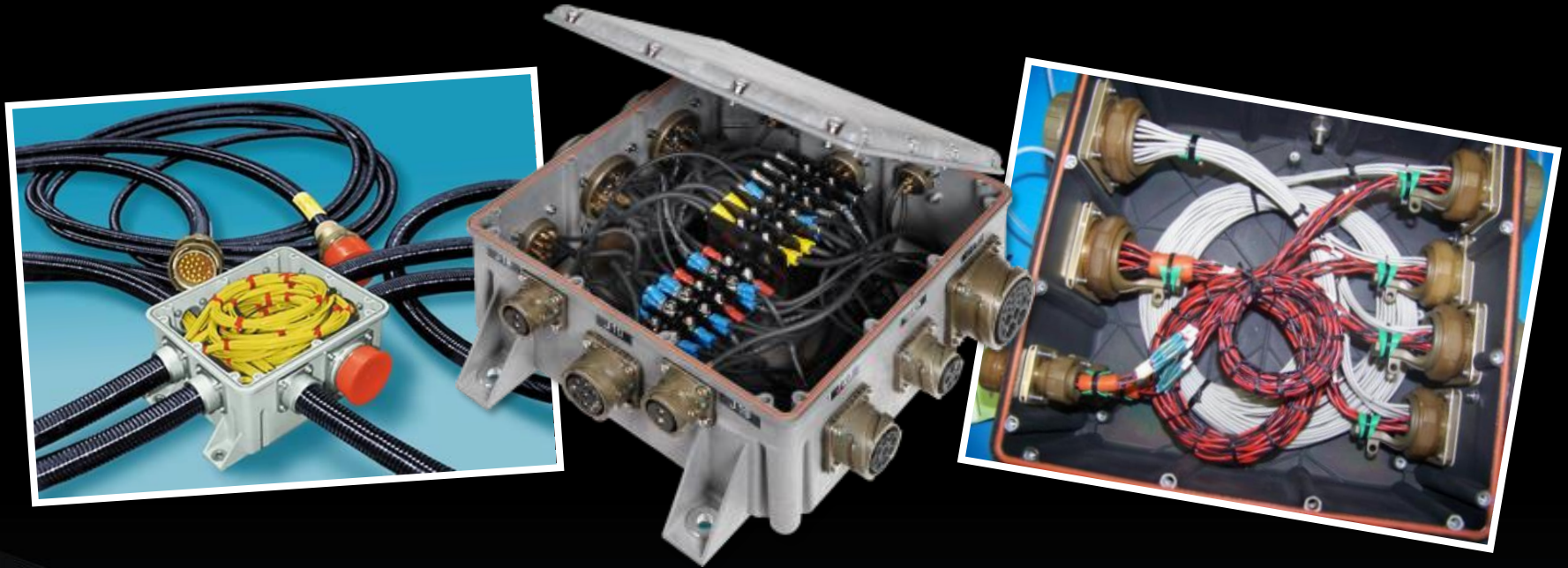
Example of Wired Chassis



Example of Military / Defense Platforms



Examples of Wired Composite Enclosure Assemblies



Example of Wired Composite Enclosure Assembly



Capability Overview

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Turnkey Connector Manufacture and Interconnect Cable / Flex Harnessing

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Electronic Box Builds Supported by SolidWorks Design and Prototyping

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Turnkey Integration of Harness Technologies, Boxes, and Mechanisms

4

Validation Testing and Qualification

Electrical, Environmental and Mechanical Testing and Qualification Capabilities

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



Types of products:

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





Certified to Industry Standards
Testing and Inspection

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

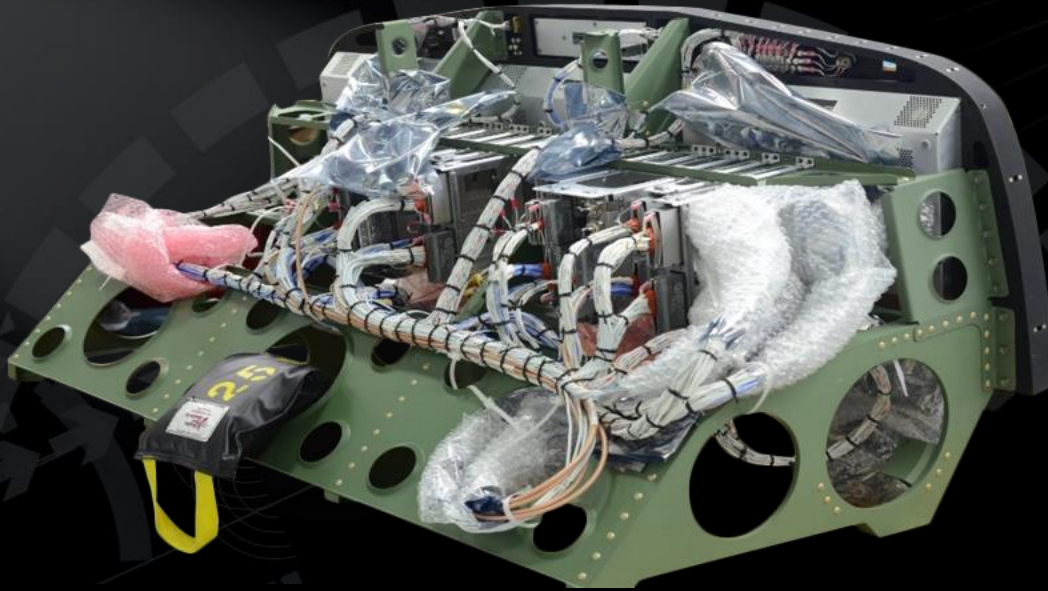
Fast turnaround on EMI/RFI filter connectors



Ruggedized Electronics and Photonics Lab



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



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