

MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

High-Speed Interconnect Solutions

Rugged Electrical, Optical, and Hybrid Solutions for Mission-Critical Aerospace and Defense Applications

Signature High-Speed Datalink

Contacts and Insert Modules

- El Ochito
- SpeedMaster
- SuperSeal
- VersaLink
- High-Speed Micro-D


SPEEDMASTER

El
Ochito



El Ocho[®] High-Density Octaxial Contact

Our premier solution: Drop-in Size 8 octaxial contacts with outstanding high-speed signal integrity – now for both AWG#26 and AWG#24 wire!

- Market leader for Mil-Aero high-speed Ethernet
- 4 differential contact pairs, 90/100 Ohm Impedance
- Patented cross-talk isolation technology
- Snap-in, rear release, for keyed size 8 contact cavities
- Integrated removal tool
- Repairable contact
- Compatible with most current data protocols



El Ocho[®] Two Contact Types

Type I

- 26 AWG wire only
- Permanent crimp wire shield termination (non-serviceable)
- Uses standard Size #8 contact insertion / removal tools

Type II

- 24 – 26 AWG wire
- Threaded wire shield termination (serviceable)
- Integral contact release sleeve

El Ochito® Performance-Tested Wire and Cable

Aerospace-grade wire for optimal protocol performance

El Ochito White (1000 and 10G BASE-T Ethernet)

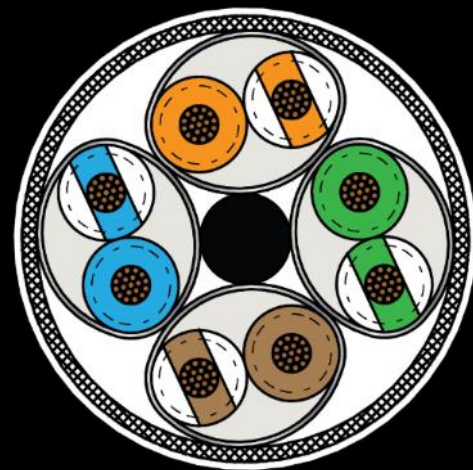
- #24 AWG and #26 AWG PIC and Gore 100 Ohm twisted pair wire
- Catalog P/N 963-033, 963-003

El Ochito Blue (SuperSpeed USB 3.0/3.1 Gen1)

- #26 AWG Glenair 90 Ohm abrasion-resistant / high-temp twisted pair
- Catalog P/N 963-110, 963-118

El Ochito Red (HDMI / DisplayPort / SATA)

- #26 AWG Glenair 100 Ohm high-temperature twisted pair
- Catalog P/N 963-127



El Ochito Connectors



- Ultra low profile circular connectors for single El Ochito assemblies



- Size and weight savings over 38999 while meeting every performance requirement



- 38999 style connectors, offers the most size 8 insert arrangements of any Glenair connector



- Rectangular connectors with all the mechanical features of 791 now with size 8 inserts



Our most innovative and high-performance EI Ochito package solution

- Ultra small size
- Up to 5Gbps
- 10GbE and SuperSpeed USB
- PCB or cable termination
- Threaded or QCD
- Environmentally protected
- Aerospace-grade performance

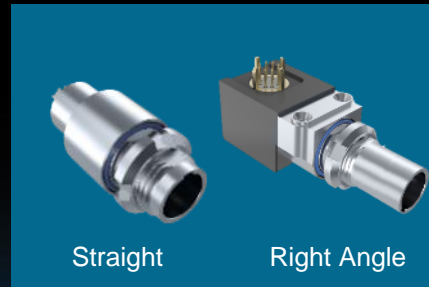
Push-Pull



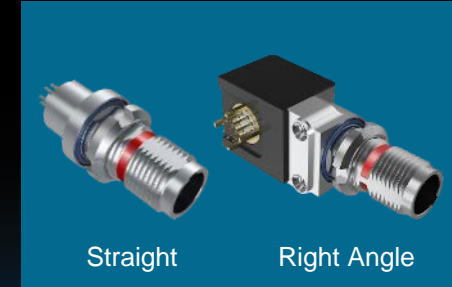
Threaded



Push-Pull



Threaded



El Ochito® Series 806 Mil-Aero



Advanced-performance micro-miniature IAW D38999

- High-speed Ethernet, USB 3.0, HDMI, and DisplayPort
- Next-generation small form factor aerospace-grade circular connector
- Upgraded environmental, electrical and mechanical performance
- Integrated anti-decoupling technology
- High-Speed El Ochito® and hybrid #22HD contact arrangements



“Better than QPL” MIL-DTL-38999 high-speed solution

- Tooled and ready-to-ship high-speed and hybrid insert arrangement connectors for size #8 El Ochito shielded contacts
- Arrangements for #8, #12, and #16 Coax, Twinax, and Quadrax also available
- Supported applications: 10/100/1G/10G BASE-T Ethernet, HDMI, DisplayPort, SATA, USB 3.0 , 1553 databus and general RF or differential data transmission
- PC tail and crimp contact configurations



El Ochito® Series 792

The next-generation mil-aero rectangular for high-speed datalink applications

- Next-generation rear-release blind-mate rectangular
- Insert arrangements for 1 – 9 El Ochito® contacts, combo inserts accommodate #23 signal and/or power contacts
- Polarization key and ground spring options available
- Dual-lobe, scoop-proof interface



SERIES

792

SEVEN
NINETY-TWO

El Ocho[®] Catalog Cable Assemblies

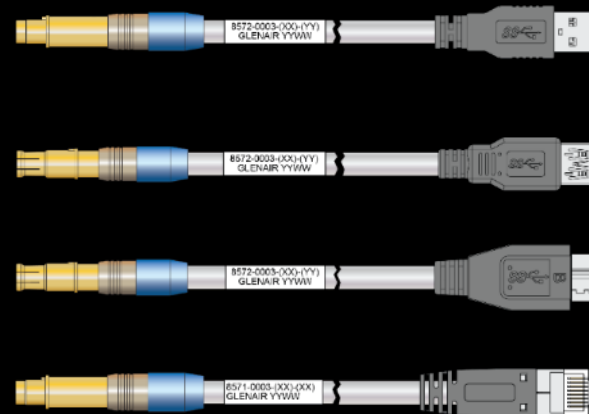
Single-ended




Point-to-point



Ocho-to-COTS



For 10G CAT 6A Ethernet



Threaded shield ferrule with wrench

Circular and rectangular connector packaging

Industry standard
size #22 contacts



Octobyte 4/8 Pole Interconnect System

The faster ruggedized 4/8 pole interconnect system for Ethernet data applications

- For harsh-environment transit, industrial, or marine/subsea applications
- RF Coax applications (RG58 and RG59U cables)
- High-speed interconnect solution for audio, video, and digital displays
- Qualified for use in safety systems, sensors, detection devices, and control panels
- Tested in accordance with: ISO F0 STP: CAT 7A
EN50173-1 F600-STP: CAT 7 EN50173-1 D STP: CAT 5E



SuperSeal® RJ45 and USB Field Connectors



Improved environmental sealing, grounding, and a broader range of wire termination options for RJ45 and USB — now for SuperSpeed 3.0



- New SuperSpeed USB 3.0 protocol support
- Superior sealing — IP67 unmated — for complete system protection against water, sand and dust
- Highly durable SuperSeal insert design, provides enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, PC tail and cable assemblies

SuperSeal Growing Family



MIL-DTL-38999 Type



Mighty Mouse 801, 804, 805




Series IPT (26482) Type



MIL-DTL-28840 Type



 Super ITS – RJ45 (5015) Type



HDMI 2.0



USB 3.0 Repeater



Display Port



USB Memory Keys



SuperSeal™

DriveThru

- High Speed protocols, custom & combination
 - Ethernet, USB 2.0, USB 3.0, USB-C, HDMI, Display Port, DVI
- Ease of assembly
- No need to cut the cable for installation
- Alternative to plug coupler and plug crimp removable versions
 - Shorter connector assembly
 - Replaces 2 electrical connections with 1

233-358 (USB 3.0)



233-368 (HDMI)



233-388 (Type C)



VersaLink: Ultra High-Density Twinax



**Signature Twinax contact module optimized for high-bandwidth
USB 3.1 gen 2, USB-C, SATA, PCIe, Display Port and HDMI**

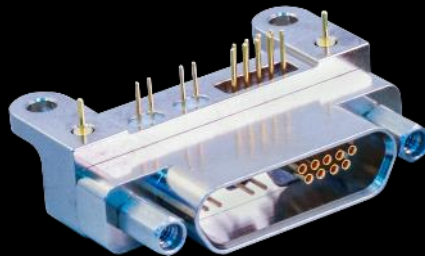
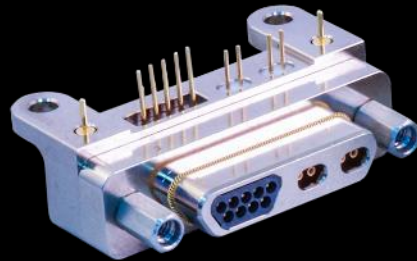
- Higher speed and density than mil-spec style Twinax
- Space-efficient, high-density contact module
- Requires dedicated VersaLink connector inserts
 - Series 794, Micro-D, Mighty Mouse 806 and SuperFly
- Individually shielded pairs results in virtually no cross talk
- VersaLink Bridge configuration for replacing high-loss board traces



VersaLink Connector Options



- Straight board mount
- 90° board mount
- Wired pigtails or back-to-back



VersaLink Bridge



Bypass high-loss board traces with low insertion loss / low latency jumpers

- Quick disconnect
- Bayonet-lock
- Point-to-point cordsets



High-Speed Micro-D



Miniaturized Micro-D Connector / TwistPin contact solution with 10+ Gb/sec. performance per differential pair

- Pre-wired factory cordsets and PCB connectors
- Unique contact isolation and spacing for optimal high-speed performance
- Standard layouts support maximum #28 AWG wire



High-Speed Micro-D

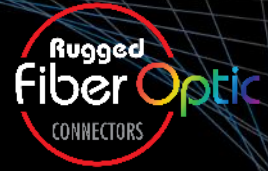


Smallest and lightest aerospace-grade high-speed connector solution

- Ultra-low dielectric material combined with optimized contact size and spacing
- Auxiliary EMC ground spring on plug
- Hybrid contact solutions available with 3 amp and 1 amp TwistPin contacts (perfect for USB 3.0 SuperSpeed applications)



MIL-DTL-38999 Series III Type Tight-Tolerance Fiber Optic Connection System



Glenair mil-qualified 29504/4 and /5 termini

- Available materials range from composite thermoplastic to stainless steel
- Shell sizes range from 11 to 25, and the corresponding cavity counts from 2 to 37 channels
- Same Day inventory for connectors and termini



Glenair High Density (GHD) Fiber Optic Connection System

Nearly double the density of M28876 and D38999

- Genderless, front release termini
- Ø1.25mm precision ceramic ferrule and alignment sleeve
- Precision guide pin mating
- Removable alignment sleeve module
- PC and APC polish terminus options
- Complete environmental sealing
- Equal optical performance to D38999
- M85045/16 cable support



GHD Keyed Terminus
(APC)

GFR: Glenair Front Release Fiber Optic Connection System

Unique terminus design for rapid integration

- Precision size 16 pin-socket front release termini with integrated retention clip
- Singlemode and multimode for all popular fiber sizes
- Typical insertion loss less than 0.5 dB
- Cylindrical and rectangular connectors
- Connector shells available in aluminum and stainless steel



SuperNine MT

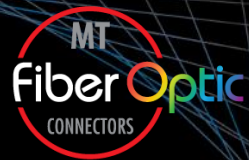


**Ultra high-density, multiple termination (MT)
commercial interconnect in a ruggedized mil-aero package**

- IP 67 environmental performance (IP 68 available) mated
- Precision alignment keys and pins
- MIL-STD-810F shock and vibe
- 85°C high temperature tolerance
- 500 mating cycles



SuperNine MT: Fully Qualified and Available



SIZE 11
Up to 24 channels



SIZE 15
Up to 72 channels



**Expanded-Beam
MT Ferrule**



SIZE 13
Up to 48 channels



SIZE 17
Up to 96 channels



Series 79 MT Ultraminiature: the Mission-Critical Ruggedized MT Fiber Optic Rectangular

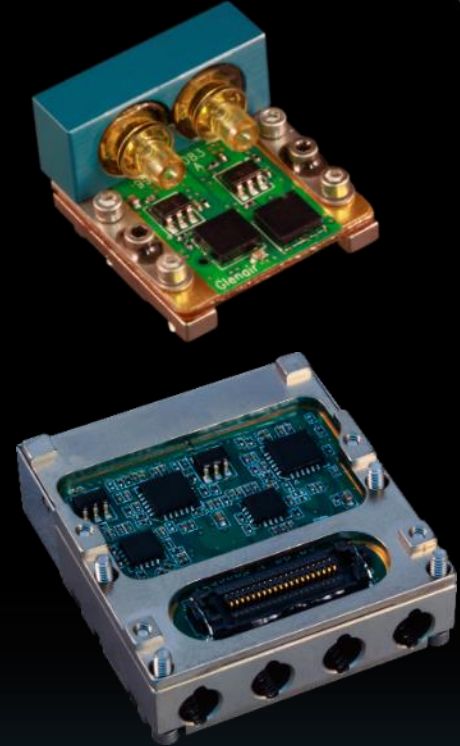


- Small form-factor, high-density mil-aero solution designed for “inside the box” applications
 - Parallel optics, optical backplanes, missile systems, heads-up displays, etc.
- Single-ferrule version available soon, dual and quad in development



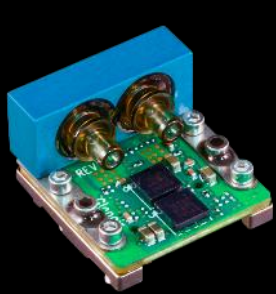
Ruggedized, PC Board Mount Photonic Transceivers

- Small form factor
- Hardened for mission-critical applications
- Range of different data rates, wavelengths, laser types etc.
- For use with fast Ethernet, Gigabit Ethernet, Fibre Channel and other protocols
- High-resolution video and data server markets



Available 5Gbps Radiation-Tolerant Transceivers

Heavy ion, proton, and gamma radiation tested devices
(consult factory for exact tests and results)



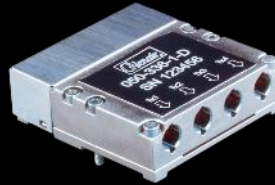
050-360
Dual
Transmitter



050-361
Dual
Receiver



050-362
Transceiver



050-363
Quad
Transmitter



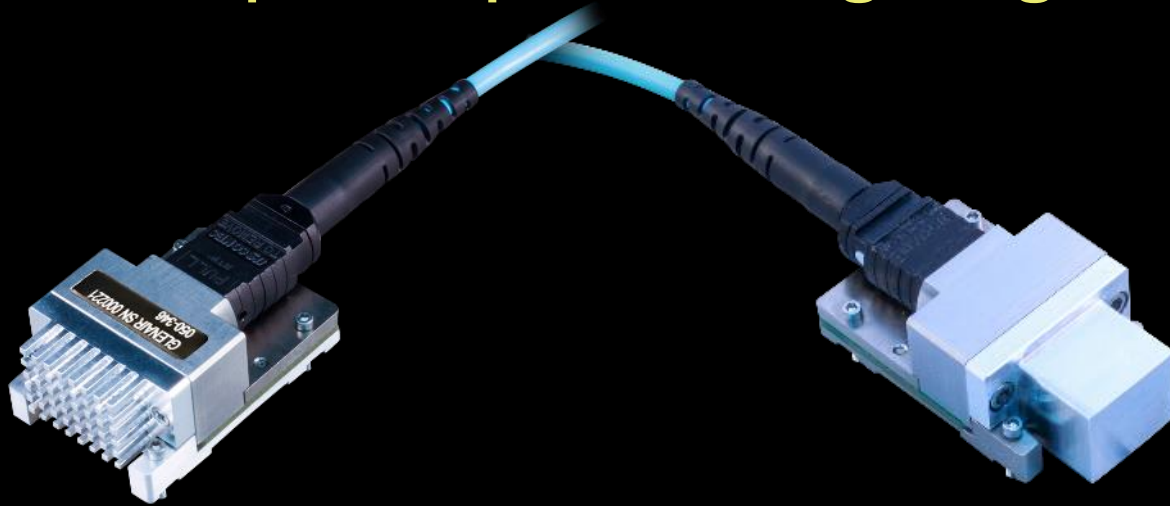
050-364
Quad
Receiver



050-385
Dual
Transceiver

New Heat Management Designs

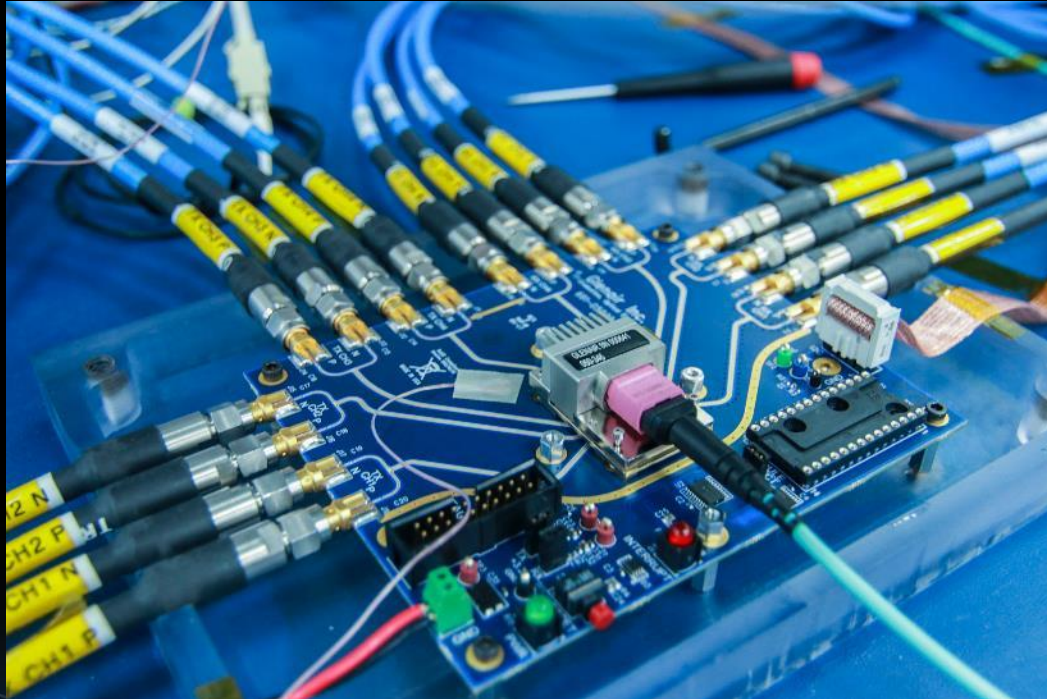
Absence of air in space requires cooling design change



Convection Cooling
(Aerospace)

Conduction Cooling
(Space)

Parallel Photonic Devices Reduce Cable Complexity and Mass



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



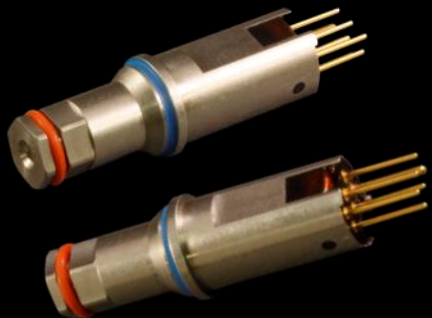
Custom and competitor-compatible form factors

Mil-Aero High-Speed Ethernet Switches



Size #8 Cavity Opto-Electronic Contacts / Adapters

For high-speed signal/video applications such as Gigabit Ethernet, DVI, SMPTE 3G, HD-SDI etc.



050-301

1.25mm ARINC 801



050-307

2.5mm ELIO®



050-367

1.25mm LuxCis®

Industry-Standard Connector / Converter Packages with Glenair Opto-electronic Transmit / Receive Contacts



MIL-DTL-38999 Series III



ARINC 801



HiPer-D M24308
intermateable

Summary of Glenair Opto-Electronic Technologies



PCB-Mount Transceivers



Opto-Electronic
Contacts and
Connectors



Ethernet
Media
Converters



Video
Media
Converters



Signal
Aggregators



Ethernet
Switches

MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

High-Speed Interconnect Solutions

Rugged Electrical, Optical, and Hybrid Solutions for Mission-Critical Aerospace and Defense Applications

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Glenair:

233-358MEG6-15NH