MIL / AERO

MISSION-CRITICAL
**INTERCONNECT
SOLUTIONS**

Glenair®

Glenair
SIGNATURE SERIES

High-Speed Mil-Aero Interconnect Solutions

Electrical · Optical · RF / Microwave
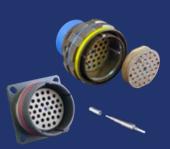
JANUARY 2025

WHAT IS A HIGH-SPEED DATALINK?

All the interconnect ecosystems presented in this catalog are true high-speed, high data rate solutions suitable for use with digital datalink protocols such as Gigabit Ethernet, HDMI, DisplayPort, SATA, and others. Glenair is unique in the industry in providing fully-integrated, turnkey solutions—electrical, optical, and coaxial (RF)—built 100% from component parts produced in-house. From aerospace-grade electrical connectors and contacts, to low-loss harsh-environment fiber optic cables, and high-frequency RF solutions, Glenair delivers one-stop shopping with fast turnaround, no MOQs, and outstanding product quality.

GLENAIR SIGNATURE HIGH-SPEED, HIGH-DATARATE OPTICAL INTERCONNECT SYSTEMS

SuperNine MIL-DTL-38999 Series III type: the go-to military/aerospace fiber optic interconnect solution

ARINC 801 genderless size #16 rear-release termini with Glenair signature SuperNine packaging

Glenair High Density (GHD) size #18 genderless termini system for reduced size and weight

Series 806 Mil-Aero: the ultimate harsh-environment micro-miniature butt-joint fiber optic interconnect system

Rugged MT fiber optics: the highest-reliability, highest-density fiber optic connection system

NAVSEA and Underwater / Oil & Gas: M28876 US Navy-qualified, SeaKing high-pressure open-face, Pierside, and NGCON

Glenair Front Release (GFR): the Glenair signature solution for rapid integration of fiber optics into virtually any connector package

Rugged Field and Expanded Beam fiber optics: Eye-Beam Power, Eye-Beam GMA, Eye-Beam GLT, and GFOCA

GLENAIR SIGNATURE RF / MICROWAVE CABLES, CONNECTORS, AND MULTIPORT HOUSINGS

SuperNine RF advanced-performance "better-than-QPL" D38999 series with drop-in high-frequency RF contacts

Series 806 RF Mil-Aero rugged, shielded, micro-miniature multi-port connectors with high shock-and-vibe performance

Series 79 RF advanced-performance, precision-machined multi-port rectangular connectors

GMMD modular Micro-D RF: highest-density multi-coax prewired pigtail plug/receptacle assemblies and inside-the-box jumpers

SpeedLine™
High-Speed Protocol Cables

Glenair supplies a wide range of high-speed shielded twisted pair cabling for use with El Ochito®, VersaLink™, SpeedMaster™, and other of our shielded high-speed connector and contact technologies. High flexibility and high-density reduced-weight cable designs are a specialty. Glenair offers turnkey Cat 8 Ethernet, SuperSpeed USB 3.0, HDMI, SATA, and other solutions for today's most mission-critical application platforms.

Glenair SpeedLine cables are optimized for signal integrity, weight savings, flexibility, and durability. In addition, these aerospace and space-grade cables have been optimized for ease of termination and across-the-board compatibility with our broad range of high-speed contact modules and connectors.

SpeedLine™ high-speed cable assemblies such as this VersaLink cordset for DisplayPort 2.0 and USB 4 are supplied as turnkey tested solutions, ready for immediate use

- **Cat 8 Ethernet, SuperSpeed USB 3.0, HDMI, SATA, and other solutions for mission-critical applications**
- **Individual foil shielding around each data pair for reduced crosstalk and attenuation**
- **Up to 200°C high-temperature-rated cable**
- **Skydrol resistant, RoHS compliant versions**
- **Ethernet versions meet ANSI/TIA 568-C.2 Category 6A requirement up to 262 feet/80 meters**
- **Low-skew SuperSpeed USB data pairs have individual braided shields**
- **LSZH jacketing options including Duralectric Light and polyurethane**

SpeedLine™ high-speed protocol cables: shielded differential data-pair cables for high-datarate Ethernet, USB, SATA, PCIe, DisplayPort, and HDMI protocols

963-069-26

- 100 Ohm #26 AWG flat pair shielded cable for use with VersaLink™ connectors
- Performance up to 18 GHz
- -65 to +200 °C rated operating temperature
- FEP jacket, FEP insulation
- Dual shields: Aluminized Kapton tape and #44 AWG silver-plated copper

963-066-24

- 100 Ohm #24 AWG 4-pair shielded cable for use with El Ochito contacts
- Performance up to 10 Gigabit Ethernet
- -65 to +200 °C rated operating temperature
- FEP jacket, FEP insulation with PTFE tape wrap
- Outer shield: #40 AWG silver-plated copper

Glenair signature SpeedLine high-speed protocol cables are designed for direct application and use with VersaLink™, SpeedMaster™, El Ochito®, and other of our lightweight, small form-factor high-speed protocol connectors.
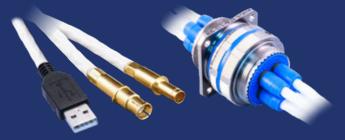
Glenair Signature SpeedLine™ Cables, Shielded Contacts, and Connectors: a complete ecosystem of interconnect technologies for high-speed protocol applications in rugged aerospace-grade systems

Glenair supplies a complete ecosystem of military/aerospace-grade interconnect technology in support of every popular high-speed protocol. Downselect typically begins with protocol identification in accordance with application data rate requirements and standards. For each high-speed protocol, Glenair can supply an exactingly-designed, tested, and qualified SpeedLine™ differential data cable, shielded high-speed contact insert, and a signature range of ruggedized, environmentally-sealed connector housings.

SPEEDLINE HIGH-SPEED PROTOCOL CABLE ASSEMBLIES

Glenair SpeedLine high-speed cable assemblies for VersaLink™ include factory-terminated pigtails and double-ended jumpers as well as turnkey Series 806 Mil-Aero and Series 794 Micro-Crimp high-density solutions

Glenair SpeedLine high-speed cable assemblies for El Ochito® include single- and double-ended jumpers, commercial protocol connector jumpers, and integrated Series 806 Mil-Aero, SuperNine®, and Series 792 Micro-Crimp

SPEEDLINE-COMPATIBLE HIGH-SPEED DIFFERENTIAL-PAIR SHIELDED CONTACTS

Size #8 differential twinax contacts

Size #8 quadrax contacts

Size #8 El Ochito octaxial

Size #8 SpeedMaster octaxial

VersaLink differential twinax

SPEEDLINE COMPATIBLE GLENAIR SIGNATURE HIGH-SPEED CONNECTORS

Series 806 Mil-Aero high-speed El Ochito micro miniature

SuperNine MIL-DTL-38999 "Better than QPL" high-speed El Ochito

Speed-Master™ modular 10G+ Ethernet (shown in SuperNine®packaging)

Series 792 Micro-Crimp precision-machined high-speed El Ochito

SpeedLine™ — High-Speed Protocol Cables

Signature Connector Series	Series 806 Mil-Aero / Mighty Mouse				SuperNine® D38999 Type	
Protocol	816 El Ochito	806 El Ochito	806 VersaLink	824 SpeedMaster	233 El Ochito	233 SpeedMaster
Ethernet up to 10GBase-T Cat 6A	10-1 - El Ochito White	10-1 - El Ochito White	11-4V	824-010	9G5 - El Ochito White	11-1
SpeedLine Cables	963-066-26 963-066-24	963-066-26 963-066-24	963-068-26 twisted 963-069-26 flat	963-066-26 963-066-24	963-066-26 963-066-24	963-066-26 963-066-24
Ethernet up to 40GBase-T Cat 8	10-1 - El Ochito White	10-1 - El Ochito White	11-4V	N/A	9G5 - El Ochito White	N/A
SpeedLine Cables	963-066-26 963-066-24	963-066-26 963-066-24	963-068-26 twisted 963-069-26 flat		963-066-26 963-066-24	
SpaceWire	10-1 - El Ochito White	10-1 - El Ochito White	11-4V	824-010	9G5 - El Ochito White	11-1
SpeedLine Cables	963-089-26 963-089-24	963-089-26 963-089-24	963-068-26 twisted 963-069-26 flat	963-089-26 963-089-24	963-089-26 963-089-24	963-089-26 963-089-24
USB 3.2 Gen 1x1 * USB 3.2 Gen 2x1 Type A, B, uB	10-1-El Ochito Blue	10-1-El Ochito Blue	11-2V9*	N/A	9G5-El Ochito Blue	N/A
SpeedLine Cables	963-077-26	963-077-26	963-068-26 twisted 963-069-26 flat		963-077-26	
USB 3.2 Gen 2x1 USB 3.2 Gen 2x1 USB 3.2 Gen 2x2 USB4 Gen 2x2 USB4 Gen 3x2 Type C	N/A	N/A	14-4V15	N/A	N/A	N/A
SpeedLine Cables			963-068-26 twisted 963-069-26 flat			

Series 79™ Micro-Crimp			Micro-D			SuperFly® Datalink
792 El Ochito	794 VersaLink	7925 SpeedMaster™	GHSM Micro-D	GHS4-M VersaLink	GMMD	882 SuperFly DataLink
A-1W1 - El Ochito White	F-4V or P-4V		15E	4-0 (Shell Size 25)	4T (Shell Size 15)	882-001/002 White
963-066-26 **963-066-24**	**963-068-26 twisted** **963-069-26 flat**	**963-066-26** **963-066-24**	**963-057-28**	**963-068-26 twisted** **963-069-26 flat**	**963-065-30**	**963-066-26** **963-066-24**
A-1W1 - El Ochito White	F-4V or P-4V		15E	4-0 (Shell Size 25)	4T (Shell Size 15)	882-001/002 White
963-066-26 **963-066-24**	**963-068-26 twisted** **963-069-26 flat**		**963-057-28**	**963-068-26 twisted** **963-069-26 flat**	**963-065-30**	**963-066-26** **963-066-24**
A-1W1 - El Ochito White	F-4V or P-4V		9	4-0 (Shell Size 25)	4T (Shell Size 15)	882-001/002 White
963-089-26 **963-089-24**	**963-068-26 twisted** **963-069-26 flat**	**963-089-26** **963-089-24**	**963-057-28**	**963-068-26 twisted** **963-069-26 flat**	**963-065-30**	**963-089-26** **963-089-24**
A-1W1- El Ochito Blue	D-2V4*		15U*	2-9* (Shell Size 25)	2T9* (Shell Size 21)	882-009/010 Blue
963-077-26	**963-068-26 twisted** **963-069-26 flat**		**963-057-28**	**963-068-26 twisted** **963-069-26 flat**	**963-065-30**	**963-077-26**
N/A	G-4V12		N/A	4-15 (Shell Size 51-2)	N/A	N/A
	963-068-26 twisted **963-069-26 flat**			**963-068-26 twisted** **963-069-26 flat**		

SpeedLine™
High-Speed Protocol Cables

Signature Connector Series	Series 806 Mil-Aero / Mighty Mouse				SuperNine® D38999 Type	
Protocol	816 El Ochito	806 El Ochito	806 VersaLink	824 SpeedMaster	233 El Ochito	233 SpeedMaster
HDMI up to 2.0 * up to HDMI 2.1	14-20A - El Ochito Red	14-20A - El Ochito Red	14-4V15*	N/A	13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted / 963-069-26 flat		963-127-3	
DisplayPort up to 1.4 * up to DisplayPort 2.0	14-20A - El Ochito Red	14-20A - El Ochito Red	14-4V15*	N/A	13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted / 963-069-26 flat		963-127-3	
DVI Single	14-20A - El Ochito Red	14-20A - El Ochito Red	14-4V15	N/A	13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted / 963-069-26 flat		963-127-3	
DVI Dual	16-22 - El Ochito Red (2)	16-22 - El Ochito Red (2)	18-8V31	N/A	19-17 - El Ochito Red (2)	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted / 963-069-26 flat		963-127-3	
eSATA SATA 3.0	10-1 - El Ochito Red	10-1 - El Ochito Red	9-2V	N/A	9G5 - El Ochito Red	N/A
SpeedLine Cables	963-072-24	963-072-24	963-068-26 twisted / 963-069-26 flat		963-072-24	

| Series 79™ Micro-Crimp			Micro-D			SuperFly® Datalink
792 El Ochito	794 VersaLink	7925 SpeedMaster	GHSM Micro-D	GHS4-M VersaLink	GMMD	882 SuperFly DataLink
B-23W1 - El Ochito Red	G-4V12*	N/A	21*	4-15* (Shell Size 51-2)	4T9 (Shell Size 31)	882-019/020 Red
963-127-3	**963-068-26 twisted 963-069-26 flat**		**963-057-28**	**963-068-26 twisted 963-069-26 flat**	**963-065-30**	**963-127-3**
B-23W1 - El Ochito Red	G-4V12*	N/A	21	4-15* (Shell Size 51-2)	4T9 (Shell Size 31)	882-019/020 Red
963-127-3	**963-068-26 twisted 963-069-26 flat**		**963-057-28**	**963-068-26 twisted 963-069-26 flat**	**963-065-30**	**963-066-26 963-066-24**
B-23W1 - El Ochito Red	G-4V12	N/A	21	3-9 (Shell Size 37)	4T9 (Shell Size 31)	882-019/020 Red
963-127-3	**963-068-26 twisted 963-069-26 flat**		**963-057-28**	**963-068-26 twisted 963-069-26 flat**	**963-065-30**	**963-066-26 963-066-24**
C-24W2 - El Ochito Red (2)	H-6V16	N/A	25	8-9 (Shell Size 67)	8T15 (Shell Size 51-2)	N/A
963-127-3	**963-068-26 twisted 963-069-26 flat**		**963-057-28**	**963-068-26 twisted 963-069-26 flat**	**963-065-30**	
A-1W1 - El Ochito Red	B-2V	N/A	9	2-0 (Shell Size 15)	2T (Shell Size 9)	882-023/024 Red
963-072-24	**963-068-26 twisted 963-069-26 flat**		**963-057-28**	**963-068-26 twisted 963-069-26 flat**	**963-065-30**	**963-072-24**
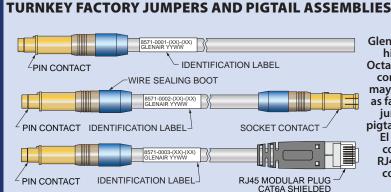
El Ochito®

High-speed **octaxial contacts** for Ethernet, SuperSpeed USB and multi-gigabit datalinks

Series 792 with El Ochito octaxial contacts

High speed, harsh environment El Ochito® octaxial contacts save size and weight in avionics, weapons systems, satellites, radars, and communications equipment.

- CAT8 40GBASE-T Ethernet, SuperSpeed USB, and multi-gigabit shielded pairs
- Universal drop-in for keyed size #8 connector cavities
- Data-pair isolation for optimal signal integrity
- Crimp or threaded shield termination contact types
- Snap-in, rear release
- Environmentally sealed
- Aerospace-grade cable assemblies
- 50% cable / contact reduction compared to Quadrax

TURNKEY FACTORY JUMPERS AND PIGTAIL ASSEMBLIES

8571-0001-(XX)-(XX)
GLENAIR YYWW
PIN CONTACT
IDENTIFICATION LABEL

WIRE SEALING BOOT
8571-0002-(XX)-(XX)
GLENAIR YYWW
PIN CONTACT   IDENTIFICATION LABEL
SOCKET CONTACT

8571-0003-(XX)-(XX)
GLENAIR YYWW
PIN CONTACT   IDENTIFICATION LABEL
RJ45 MODULAR PLUG
CAT6A SHIELDED

Glenair signature high-speed Octaxial El Ochito contact series may be specified as factory-wired jumpers and pigtails, including El Ochito-to-commercial RJ45 and USB connectors.

El Ochito® Contacts

Protocols, exploded views of
Type I and Type II contacts

Glenair

El Ochito® White

1000BASE-T, 10GBase-T, 40GBASE-T
El Ochito® White octaxial contacts provide 40GbE (when used with Cat 8 cable) in a single size #8 contact cavity (compared to two Quadrax) for 100BASE-T solutions.
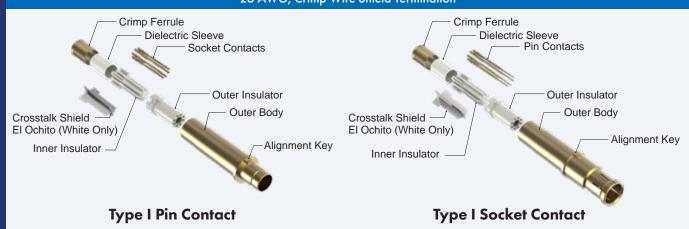
El Ochito® Blue

SuperSpeed USB
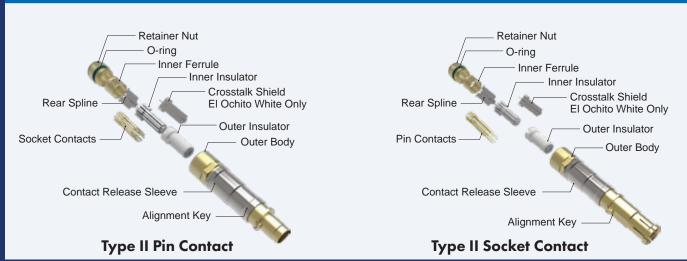*Low-dielectric material. 90 ohms.* El Ochito® Blue octaxial contacts provide an aerospace-grade solution for SuperSpeed USB 3.0

El Ochito® Red

HDMI, DisplayPort 1.4, SATA
Low-dielectric material. Up to 10 Gbps per pair. 100 ohms. El Ochito® Red octaxial contacts provide an aerospace-grade solution for multi-gigabit data rates.

El Ochito® White Type I Contacts, Non-Serviceable
26 AWG, Crimp Wire Shield Termination

Type I Pin Contact

Type I Socket Contact

El Ochito® Type II Contacts, Serviceable
24-26 AWG, Threaded Wire Shield Termination, Integral Contact Release Sleeve

Type II Pin Contact

Type II Socket Contact

SpeedLine™
High-Speed Protocol Cables

SUPERFLY DATALINK

The **Nano Miniature** 10G Ethernet, USB 3.0, and DisplayPort connector with El Ochito® octaxial contact technology
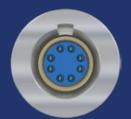
High speed, harsh environment SuperFly® Datalink connectors—with shielded El Ochito® octaxial contacts for 10Gb Ethernet, SuperSpeed USB, and high datarate video display protocols—deliver outstanding signal integrity and save significant size and weight compared to Quadrax.

SuperFly Datalink White
Up to 40G Ethernet

SuperFly Datalink Blue
SuperSpeed USB

SuperFly Datalink Red
HDMI, DisplayPort 1.4, and SATA

- Ultra-small size
- Shielded Octaxial contacts
- Up to 5 Gbps
- 10Gb Ethernet and SuperSpeed USB
- New Red insert for high-speed video, consult factory for layouts
- Environmentally protected
- Factory-terminated cables or discrete contacts and cables for customer assembly

SuperFly® Datalink

The high-speed nano miniature connector for harsh environments

CONNECTOR CONFIGURATIONS

Quick -disconnect "push-pull" versions are ideal for tactical gear. Threaded-coupling versions are intended for aircraft and space-grade applications where secure mating is a requirement.

Quick Disconnect

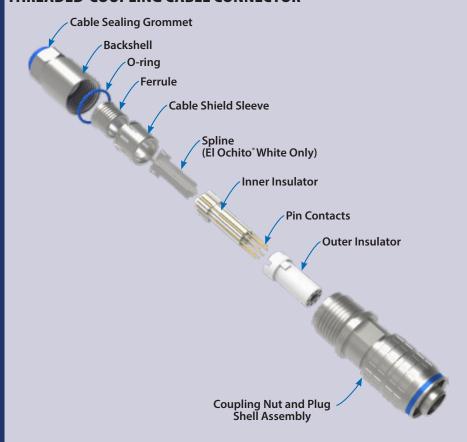**Threaded Coupling**

Straight PC Tails

Right Angle PC Tails

Conformal-coating-compliant panel mount connectors

PUSH-PULL QUICK-DISCONNECT

Latching EMI Spring   O-ring Interface Seal

882-001
Plug Connector

882-002
Receptacle Connector

Push-pull SuperFly Datalink receptacle connectors feature a canted coil spring for secure mating and excellent EMI protection. A fluorosilicone O-ring provides watertight sealing when mated.

THREADED-COUPLING CABLE CONNECTOR

Cable Sealing Grommet

Backshell

O-ring

Ferrule

Cable Shield Sleeve

Spline
(El Ochito® White Only)

Inner Insulator

Pin Contacts

Outer Insulator

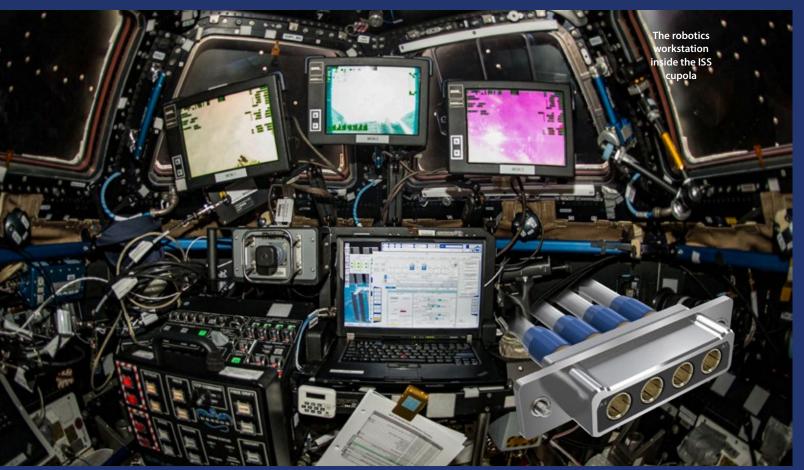Coupling Nut and Plug
Shell Assembly

Cable connectors feature gold-plated crimp contacts, precision insulators, integral backshell, sealing grommet and machined shells. Cable connectors are available as unassembled kits or ready-to-use factory-terminated cordsets.

SERIES
792™
SEVEN
NINETY-TWO

The next-generation micro miniature rectangular connector with El Ochito contacts for high-speed aerospace applications

The robotics workstation inside the ISS cupola

The Series 792 connector brings high-speed data-rate performance to the Glenair Series 79 rectangular family. Size 8 cavities accept standard Quadrax or El Ochito® shielded octaxial contacts making it a perfect choice for radars, weapons systems, mission computers and displays, communications gear, and more.

El Ochito®

- **High-speed Ethernet, USB 3.0, HDMI, and DisplayPort**
- **Industry-leading SpeedLine high-speed data link cable assemblies**
- **PCB-mount and cable**
- **Scoop-proof interface**
- **12 arrangements, 6 shell sizes, from 1 to 9 way**
- **Precision-machined dual-lobe polarized shells**
- **Integrated EMI shielding and grounding**
- **Blind mate environmental**

GLENAIR 06234 0219

Glenair®

The next-generation micro miniature rectangular for high-speed aerospace applications
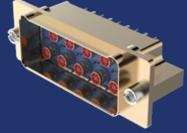
DESCRIPTION	REQUIREMENT	PROCEDURE / NOTES
Operating temperature	-65° to +175°C	EIA-364-32 Test Condition IV
Current rating	1.5 Amps (datalink contacts) 5 Amps (Size #23 contacts)	Datalink contacts tested: El Ochito® White
DWV (sea level)	750 VAC (Size #23 contacts) 1000 VAC (datalink contacts)	EIA-364-20
Insulation resistance	5000 MΩ minimum	EIA-364-21
Contact resistance, 25°C	55 millivolt maximum	EIA-364-06, 1.0 A test current, #24 AWG wire

DESCRIPTION	REQUIREMENT	PROCEDURE / NOTES
Shell-to-shell resistance	2.5 millivolt maximum	EIA-364-83
Shielding effectiveness	Frequency Attenuation dB 100 75 1000 50 3000 44 6000 38 10000 35	EIA-364-66
Ingress protection	IP67 rating	IEC-60529

Twinax, Quadrax and El Ochito®
Connectors are available in three configurations: twinax for a single high-speed wire pair, quadrax for two data pairs, and El Ochito® for four.

Up to 9 data ports
The Series 792 Size F with nine ports is the largest connector in the series and is the only two row version. Sizes A – E, with one to five ports, are single row.

PCB Connectors
Series 792 PCB connectors have straight or right angle PC tails. Contacts are non-removable and are epoxy sealed.

Panel Mount
Panel mount connectors have O-ring and threaded mounting holes for easy installation and are available with guide pins and float mounts.

Cable Connectors
High-speed shielded contacts snap into Series 792 cable connectors and are easily removed with a standard plastic tool.

El Ochito® Contacts and Jumpers
El Ochito® octaxial contacts and jumpers supplied for Ethernet, SuperSpeed USB, HDMI, DisplayPort, SATA and other multi-gigabit protocols.

El Ochito® octaxial contacts are intended for harsh environment military and aerospace data networks, and provide up to 50% total weight savings and 20 times faster data rates compared to legacy quadrax-based solutions.

El Ochito® White
GbE 10GbE

El Ochito® Blue
USB 3.0

El Ochito® Red
HDMI, SATA, DisplayPort

- ■ **Snap-in, rear release octaxial contact for use with aerospace-grade high-speed cable**
- ■ **Environmentally protected**
- ■ **Support for all major high-speed datalink protocols**
- ■ **Significant size and weight savings compared to quadrax**

Series 806 with El Ochito® contact arrangements

Contact Key

El Ochito® Size #8 Octaxial — Size #22HD

Insert Arrangement	10-1	14-20A		16-2	16-22	
No. of Contacts	1x #8	1x #8	19x #22HD	2x #8	2x #8	20x #22HD

Contact Key

El Ochito® Size #8 Octaxial — Size #22HD

Insert Arrangement	18-3	18-21		20-4	20-28	
No. of Contacts	3x #8	3x #8	18x #22HD	4x #8	4x #8	24x #22HD

Contact Key

El Ochito® Size #8 Octaxial — Size #22HD

Insert Arrangement	22-5	22-44		24-8	24-97	
No. of Contacts	5x #8	4x #8	40x #22HD	8x #8	4x #8	93x #22HD

Polarizing Positions

Position	A°	B°	C°	D°
A	105	140	215	265
B	102	170	248	305
C	80	150	230	295
D	68	140	205	275
E	64	155	234	304
F	72	120	200	298

RECOMMENDED BACKSHELLS

320V*030 • 440V*233 • 620VS090
440VS232 • 443V*042

FEATURES

• Triple-start stub ACME mating thread
• El Ochito® Octaxial and hybrid high density #22HD arrangements for reduced size / weight and high-speed performance
• Aerospace-grade materials, construction, and performance

CONNECTOR CONSTRUCTION

• Shell and coupling nut: aluminum or stainless steel
• Contacts: copper alloy, gold plating
• Wire grommet: fluorosilicone
• Dielectric inserts: high grade rigid dielectric
• Peripheral seal: fluorosilicone
• Ground spring: copper alloy, nickel plating
• Contact retention clips: copper alloy
• Ratchet springs: stainless steel, passivated
• Retainer rings: stainless steel, passivated
• Clinch nuts: stainless steel, passivated

High-Speed SuperNine® MIL-DTL-38999

Glenair®

With El Ochito® octaxial contacts and industry-standard coax, differential twinax, and quadrax contacts

Square-flange receptacle with hybrid signal / El Ochito arrangement

Plug with 500 mating-cycle ratcheted coupling technology

Square-Flange Receptacle with metric clinch nut mounting

Jam-Nut Receptacle with PC tail termination and threaded standoffs

Size #8 Shielded Contact Quick Reference Guide					
Contact Type	Glenair P/N		AWG	Cable Type	Application Notes
Coax	Pin: 852-007 Socket: 852-006	Coax 50 ohm (M39029/59 & /60)	22 - 28	M17/95-RG180	Analog radio frequency or microwave applications
	Pin: 852-056-01 & -02 Socket: 852-057-01 & 02	75 ohm	26	**-01**: V73263, V75268, V76261, **-02**: M17/94-RG179	
Differential Twinax	Pin: 853-014-05 Socket: 853-013-05		24	M17/176-00002	1553 Databus/ Differential Signal
El Ochito® Octaxial	Pin: 858-003, Type I • Socket: 858-004, Type I	El Ochito® White	26 - 28	963-033-26	1G/40G BaseT Ethernet
	Pin: 858-005, Type II • Socket: 858-006, Type II	El Ochito® White	24 - 26	963-033-24	
	Pin: 858-028, Type I • Socket: 858-029, Type I	El Ochito® Blue	26 - 28	963-110	USB 3.0
	Pin: 858-030-01, Type I • Socket: 858-031, Type I	El Ochito® Red	26 - 28	Varies	SATA, HDMI, Display Port
Quadrax	Pin: 854-001 Socket: 854-002		22 - 26	Varies	10/BASE-T Ethernet
Triax/ Concentric Twinax	Pin: 853-003 Socket: 853-004		22 - 28	M17/176-00002	1553 Databus

Size 8 High-Speed Insert Arrangements		
Shell Size	#8	Shell Size - Insert Arr.
9	1	9G5
11	1	11-1
17	2	17-75
19	4	19-4
21	4	21-75
23	5	23-5
23	6	23-6
25	8	25-8
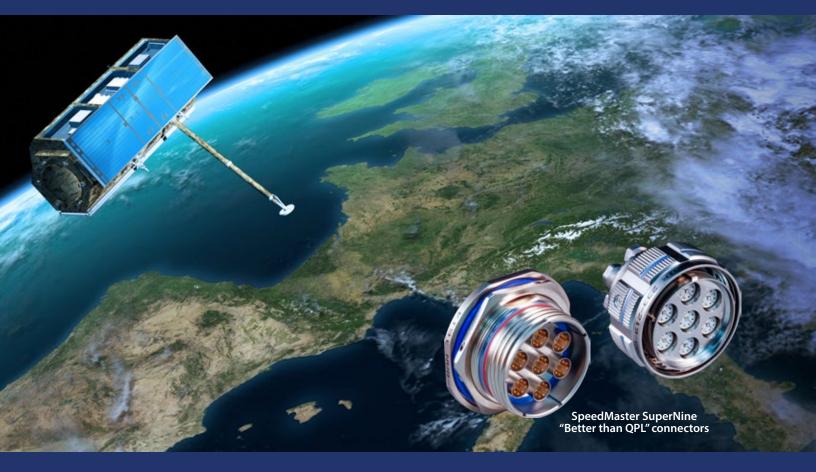
Combo High-Speed Insert Arrangements*							
	Number of Contacts						Shell Size -
Shell Size	#23	#22D	#20	#16	#12	#8	Insert Arr.
13	14					1	13-14
17		38		2		1	17-2
17					2	2	17-22
17		8				2	17-60
19		10	1	4		2	19-17
19		14				4	19-18
25		97				2	25-7
25		36				6	25-17
25			10	13	4	3	25-20
25			16		5	4	25-26
25		22	3	11	2	3	25-41
25			40	4		2	25-46

SPEEDMASTER™

High-speed **10G Ethernet** connection system for Glenair SuperNine, Mighty Mouse, and Series 79 connectors

SpeedMaster SuperNine
"Better than QPL" connectors
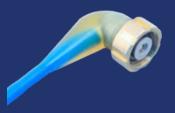
SpeedMaster™ is a dedicated size #22D crimp-contact module and insert package for SuperNine®, Mighty Mouse, and Series 79 connectors. Optimized for high-speed Cat 6A Ethernet, the SpeedMaster™ 10G system offers industry-leading NEXT, return loss, and insertion loss performance

- Utilizes aerospace industry standard #22D contacts, tools, and widely available Ethernet flight cable
- Significant weight reduction compared to Quadrax solutions (reduces cable requirement by half)

SpeedMaster Mighty Mouse Locking Push/Pull Connectors

Pressure-rated overmolded subsea cable assembly

Series 7925 advanced-performance rectangular

SuperNine SpeedMaster with hybrid contact arrrangement

SpeedMaster™ High-Speed 10G Connection System

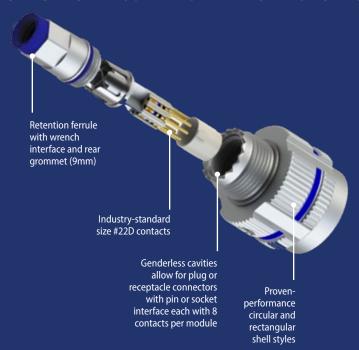## For Glenair SuperNine, Mighty Mouse, and Series 79 connectors

SPEEDMASTER 10G NEXT-GENERATION HIGH-SPEED CONNECTION SYSTEM

Retention ferrule with wrench interface and rear grommet (9mm)

Industry-standard size #22D contacts

Genderless cavities allow for plug or receptacle connectors with pin or socket interface each with 8 contacts per module

Proven-performance circular and rectangular shell styles

The SpeedMaster Difference

Each SpeedMaster module consists of 4 pairs of pins or sockets incorporating industry-standard size 22D contacts. Each module is individually shielded within the shell and retained in place with a threaded ferrule. Module cavities are genderless, allowing pin or socket interface for plugs or receptacles. SpeedMaster contacts are available as a drop-in high-speed 10G Ethernet solution in 3 connector packages: Small form-factor Mighty Mouse Series 824 locking push/pull, Series 7925 advanced-performance rectangular, and "Better than QPL" SuperNine D38999 Series III type connectors. SpeedMaster modules are easily removable and repairable to reduce network downtime.

SpeedMaster 10G modular inserts are available for Series 23 SuperNine – 38999, Series 80 Mighty Mouse – Locking Push / Pull and Series 7925 high-performance scoop-proof rectangular connectors.
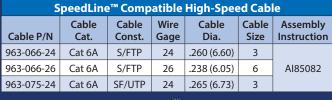
The SpeedMaster 10G is optimized for high-speed Ethernet performance and incorporates standard M39029 #22D contacts isolated for superior NEXT, return loss and insertion loss performance.

SpeedMaster Glass-Sealed Hermetic: Fully qualified to MIL-DTL-38999 Series III environmental and mechanical specifications. 10^{-7} Helium leak rate. Outstanding high-speed performance. Bulkhead feed-thru shown.

SpeedLine™ Compatible High-Speed Cable						
Cable P/N	Cable Cat.	Cable Const.	Wire Gage	Cable Dia.	Cable Size	Assembly Instruction
963-066-24	Cat 6A	S/FTP	24	.260 (6.60)	3	
963-066-26	Cat 6A	S/FTP	26	.238 (6.05)	6	AI85082
963-075-24	Cat 6A	SF/UTP	24	.265 (6.73)	3	

SpeedLine™ High-Speed Protocol Cables

Manufactured and tested in-house for optimal high-speed performance

Glenair series ITH connectors with Ethernet-ready Octobyte™ contacts are available for harsh-environment mass transit applications that depend on sealed environmental (IP67) connector performance. Octobyte contacts, packaged in ruggedized ITH reverse-bayonet connectors, deliver both dedicated Ethernet datalink as well as mixed serial databus and power for high-speed data applications. Octobyte contacts are vibration resistant and designed to work with Ethernet cables from CAT 5 to CAT 7A, MVB-WTB, and RG58 Coax. Reverse-bayonet ITH series connectors with Octobyte™ contacts are easy and fast to assemble and deliver reliable locking performance in severe vibration and shock 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**

Tested for compliance IAW EN50173-1 standards for CAT5E and CAT7.
Proven performance in numerous rail applications (consult factory for references).

© 2025 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324

OCTOBYTE™
The faster ruggedized Ethernet interconnect solution

For industrial and rail Ethernet applications

OCTOBYTE CONTACTS FOR ETHERNET CAT 5 · CAT 6 · CAT 7 · COAX · MVB-WBT

CAT 5 · CAT 5E · CAT 6 · CAT 6A   RG58   CAT 6A · CAT 7 · CAT 7A   MVB - WTB

SERIES ITH CONNECTORS FOR OCTOBYTE CONTACTS

Reverse bayonet-lock connectors with rugged environmental performance – the perfect Octobyte packaging solution

Dozens of contact arrangements available including hybrid Octobyte, power, and signal.

- ■ Rugged MIL-DTL-5015 type design with fast reverse bayonet coupling
- ■ Rigid dielectric inserts with contact retention clips
- ■ Positive lock technology provides reliable vibration and shock resistance
- ■ Proven performance in even the most rugged applications
- ■ Conforms to the European VG 95234 standard, French (NFF 61030) and British (BS 6853) electrical standards and EEC compliance directives
- ■ Threaded coupling version available, contact factory for ordering information

Available flop-lid protective cover

RadGrip rubber-covered coupling nuts available in a wide range of colors including safety red.

Ethernet-ready Octobyte solutions for rail and transit applications are available as discrete contacts, packaged in rugged reverse-bayonet ITH series connectors, or as turnkey inside-the-box or environmental cable assemblies, tested and ready for immediate use.

SuperSeal High-Speed
Ruggedized connectors and cables

RJ45 · USB · HDMI · DisplayPort

SUPERSPEED USB 3.0 CONNECTOR STYLES

Cable plug

Wall mount receptacle with metric clinch nuts

Wall mount receptacle with slotted holes

Jam nut mount Receptacle

SUPERSEAL TERMINATION OPTIONS

Solder Cup

PC tail

Crimp Contact
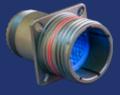
Jack-to-Jack

EMI Filtered

Quadrax

MIL-STD-1560 Arrangements

Turnkey Cordsets

High-Speed Protocols and Characteristics					
	Data Rate	Sealing		Distance (max.)	Operating Temperature*
USB 3.0 (Type A)	5 Gbps			10 ft	-40°C to +85°C
USB 3.2 Gen 2 (Type C)	10 Gbps			9 ft	-40°C to +85°C
DisplayPort 1.4	32.4 Gbps	IP67 unmated, IP68 mated.		6 ft *	-40°C to +85°C
HDMI 2.0	18 Gbps			20 ft*	-40°C to +85°C
RJ45 Cat 6A	10Gbps			328 ft	-40°C to +120°C
Consult Glenair for longer length or higher-temperature requirements.					

SUPERSEAL DRIVE-THRU

- **Converts commercially-available cabled USB, RJ45, and HDMI connectors into sealed D38999 type connectors**
- **Fast and easy assembly saves time and labor**
- **IP67 unmated / IP68 mated sealing**

VersaLink™

High-speed twinax "zero crosstalk" contact, cable, and connector technology

VersaLink Micro-D turnkey prewired assemblies
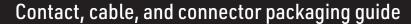
Innovative differential twinax crimp contacts with highest available bandwidth—up to 28Gbps each—in rugged mil-aero circular and rectangular connector packaging. Hybrid insert arrangements support both standard signal as well as high-speed differential data.

VersaLink pin and socket crimp contacts sold separately. Save assembly time and labor with pre-wired, 100% tested VersaLink single-ended pigtails and cable assemblies, supplied with cable grommet follower if applicable.

- Shielded differential data-pair solution for Ethernet, USB, SATA, PCIe, DisplayPort, and HDMI protocols
- Higher speed and density than standard mil-spec style twinax designs—up to 28 Gbps
- Aggressively shielded pairs result in virtually zero crosstalk
- Hybrid contact layouts with standard signal pins
- Optimized for use with Glenair SpeedLine™ 100 Ohm flat pair shielded cable

VersaLink Contact Technology

VersaLink Twinax contact technology supports high-speed serial data protocols including USB 3.1 Gen2, USB-C, SATA, PCIe, DisplayPort, and HDMI. Crimp-contact twinax modules are sold separately for ready packaging in Glenair signature circular and rectangular connectors.

Series 806 VersaLink Connectors

Glenair Signature Series 806 Mil-Aero connectors with VersaLink contacts feature advanced electrical, mechanical and environmental performance plus reduced size and weight compared to D38999. Rapid-advance ratcheted coupling optimizes fast and reliable mating and demating.

Series 794 VersaLink Connectors

The 794 rectangular series is designed for avionics and other high-datarate aerospace applications that require optimal contact and connector density. Dual-lobe scoop-proof shells prevent mating damage and optional polarizing keys prevent mis-mating issues. Rugged environmental design with robust EMC performance, ideal for blind-mate applications.

Micro-D VersaLink Connectors

Ultra miniature Micro-D connectors with High-Speed VersaLink contacts offer the industry's highest speed and density compared to conventional mil-spec style twinax solutions. Hybrid arrangements with VersaLink contact modules and standard Micro-D contacts available for signal and power applications. Series is intermountable with standard Micro-D panel cutout dimensions.
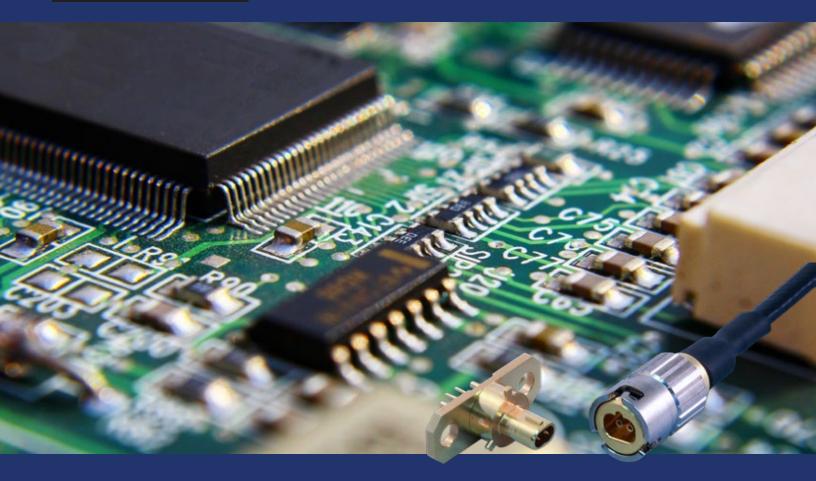
VersaLink Bridge Board Level Connectors

The Glenair VersaLink Bridge is a high-density, micro-form factor twinax connector / jumper assembly used to bridge the gap between point A and point B on the board with better signal integrity than native board traces. VersaLink Bridge is equally capable at reducing insertion loss and signal latencies for data traffic between an ASIC and the I/O.

VersaLink™
BRIDGE

VersaLink Bridge: 100 Ohm connectors and jumpers for high-speed board applications

VersaLink Bridge: bypass high-loss board traces with a low insertion-loss and low signal-latency point-to-point Twinax jumper

High-speed data transmission from one PCB to another, from one side of a backplane to another, or even from one side of a complex embedded system to another, is frequently accomplished by routing high-speed traces on a dedicated high-speed signal layer. This is a complex assignment—fraught with potential for impedance discontinuities and unacceptable insertion loss—as traces must navigate difficult and/or long routing paths around via columns and other board irregularities. The Glenair VersaLink Bridge is a high-density, micro-form factor twinax connector / jumper assembly used to bridge the gap between point A and point B on the board (such as between two SML integrated circuit chips) with better signal integrity than native board traces can ever deliver. VersaLink Bridge is equally capable of dramatically reducing insertion loss and signal latencies for data traffic between an ASIC and the I/O.

Right-angle bayonet-lock version for high shock and vibe applications

VERSALINK BRIDGE FEATURES

- **Small footprint, high-density solution**
- **Versatile solder-mount or screw-mount board termination**
- **100 Ohm differential Twinax**
- **Push-pull mating or bayonet-lock for high vibration and shock applications**
- **Keyed polarization prevents mis-mating**
- **Low insertion loss and low signal latencies for high datarate board transmissions**
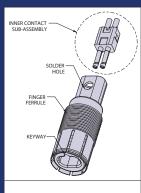
VersaLink™ Bridge
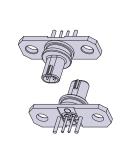
Differential Twinax "bypass" connector and jumper assemblies

AVAILABLE CONFIGURATIONS: QUICK-DISCONNECT
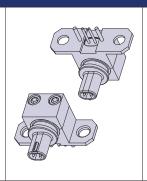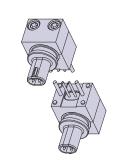
Quick-disconnect plug	QDC Jack board pin straight screw mount	QDC Jack board pin straight solder mount	QDC Jack board pin right-angle screw mount	QDC Jack board pin right-angle solder mount
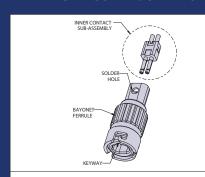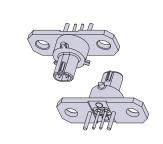
---
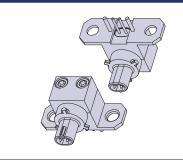
AVAILABLE CONFIGURATIONS: BAYONET-LOCK

Bayonet-lock plug	Bayonet-lock Jack board pin straight screw mount	Bayonet-lock Jack board pin straight screw mount

---

Recommended Cable for Plug Connectors

Cable P/N	Cable Construction	Wire Gauge	Impedance	Max. Overall Size
963-043-26	Twinax In-Line	26	100 Ω	.121" X .076"

MATERIALS AND FINISHES

Contacts: Copper alloy / gold
Insulators: Superior rigid dielectric
Body: Copper alloy / gold
Ferrules (plugs): Copper alloy / electroless nickel
Spring (plugs): Music wire

ELECTRICAL PARAMETERS
(for Board Connectors)

Impedance: 100 Ohms
DWV: 500 RMS
IR: 5000 Megaohms min. at 200 VDC

Reduced size and weight: A side-by-side comparison of a standard SMA coax connector (left) and VersaLink.

VersaLink Bridge components may be ordered separately or as turnkey point-to-point cordsets, consult factory.

MICRO-D
High-Speed

The smallest and lightest aerospace-grade, high-speed Micro-D connector Solution

Prewired cordset with overbraiding for abrasion protection

The High-Speed Micro-D uses an impedance optimized open pin field for high-density signal routing flexibility. 1 Amp pre-wired cable and PCB solutions deliver up to 15 Gbps performance per differential pair. Auxiliary EMC ground springs on plugs ensure data integrity and low attenuation performance.

High-Speed Micro-D connectors and cables are optimized for multi-gigabit digital datalink protocols including USB 3.0, 10GbE, Camera Link, and PCIe 3.0. The high-performance, aerospace-grade connector series features machined-shell packaging, low-attenuation contact spacing, low-κ PPS dielectric insulators, and Glenair shock- and vibe-resistant Nano TwistPin contacts.

- ■ **Pre-wired factory pigtails, cordsets, and PCB connectors**
- ■ **Unique contact isolation and spacing for optimal high-speed performance up to 15 Gbps**
- ■ **Supports maximum #28 AWG wire**
- ■ **Low-κ dielectric insulator combined with optimized contact size and spacing**
- ■ **Precision-machined shells with gold or nickel plating**
- ■ **1 Amp TwistPin contacts for optimal performance in harsh vibration, shock, and high-temperature environments**

© 2025 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324

High-Speed Micro-D
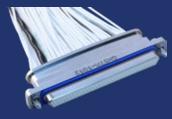
The miniature high-speed connector with mil-spec pedigree connector and contact packaging
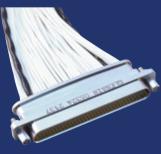
SUPPORTED HIGH-SPEED PROTOCOLS

Shell sizes and contact arrangements optimized for today's popular high-speed protocols
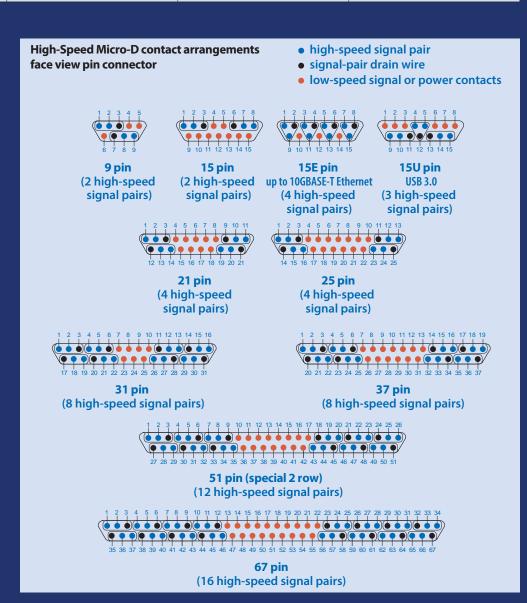
21	21	25	21
Display Port 1.2	HDMI 2.0	DVI-D Dual	DVI-D Single
15	15	15	31
SATA Gen 1, 2, and 3	USB 3.0 SuperSpeed	Up to: Cat 6A (10GBASE-T Ethernet)	Camera Link

PREWIRED PIGTAIL AND BACK-TO-BACK CABLES

High-Speed Micro-D contact arrangements face view pin connector

● high-speed signal pair
● signal-pair drain wire
● low-speed signal or power contacts

9 pin
(2 high-speed signal pairs)

15 pin
(2 high-speed signal pairs)

15E pin
up to 10GBASE-T Ethernet
(4 high-speed signal pairs)

15U pin
USB 3.0
(3 high-speed signal pairs)

21 pin
(4 high-speed signal pairs)

25 pin
(4 high-speed signal pairs)

31 pin
(8 high-speed signal pairs)

37 pin
(8 high-speed signal pairs)

51 pin (special 2 row)
(12 high-speed signal pairs)

67 pin
(16 high-speed signal pairs)

Turnkey, prewired plug and receptacle cable connectors are available as single-ended pigtails or back-to-back cable assemblies with pin or socket contacts per customer requirements. Shielded twisted pair (STP) wiring for differential data pairs is supplied in either 100 or 90 Ohms with a selection of jacketing and color. Discrete hookup wires may be specified in #28 or #30 gauge. Variable lengths of the assembly may be specified in 1 inch increments.

GMMD

The **modular Micro-D** differential twinax / RF coax high-speed solution

GMMD: an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it the most versatile Micro-D rectangular in the industry. GMMD leverages Glenair Signature Micro and Nano TwistPin contact inserts, as well as ultra small form-factor differential twinax modules delivering 18 Gb/second per pair and RF to 20 GHz. GMMD is supplied as factory-terminated pigtails, point-to-point jumpers, and SMT receptacles for easy PCB mounting.

■ **Low crosstalk, high bandwidth twinax modules for 18Gb/s per pair and RF up to 20GHz**

■ **Cable and 90° PCB configurations for matched 100 Ohm differential impedance performance from I/O to board**

■ **SMT receptacles for easy PCB mounting**

■ **Combo layouts include twinax, 50 and 75Ω coax, mixed signal and power**

■ **TwistPin contacts for low resistance and high shock and vibe performance**

■ **Standard Micro-D shell sizes and hardware**

Glenair Signature Twinax contact modules (left) are fully shielded for outstanding cross-talk isolation and signal integrity. Standard Micro-D TwistPin contact modules deliver reliable performance IAW MIL-PRF-83513.

Glenair®

GMMD DISCRETE CONNECTORS AND PIGTAIL / JUMPER ASSEMBLIES

| Horizontal PCB-mount twinax and combo twinax receptacles | Vertical PCB-mount twinax and combo twinax plug and receptacles | Twinax and combo twinax jumpers and pigtails | Horizontal PCB-mount coax and combo coax receptacles | Coax and combo coax jumpers and pigtails |

GMMD TWINAX AND COMBO TWINAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

Contact Arrangement	2T	4T	2T9	2T15	4T9
Shell Size	9	15	21	25	31
No. / type of contacts	2 Twinax	4 Twinax	2 Twinax, 9 #24	2 Twinax, 15 #24	4 Twinax, 9#24
Example applications	SpFi	10GbE, 2xSATA, SpW, 2xSpFi	USB 3.1, SATA + power		HDMI, DP, DVI, 10GbE + power

Contact Arrangement	5T9	8T	4T15	8T15	4T31	12T
Shell Size	31	31	37	51-2	51-2	51-2
No. / type of contacts	5 Twinax, 9 #24	8 Twinax	4 Twinax, 15 #24	8 Twinax, 15 #24	4 Twinax, 31 #24	12 Twinax
Example applications	DP incl. Aux channels	2x10GbE		DP or HDMI + USB 3.1, dual DVI		

Contact Arrangement	12T15	6T37	8T31	16T
Shell Size	67	67	67	67
No. / type of contacts	12 Twinax, 15 #24	6 Twinax, 37 #24	8 Twinax, 31 #24	16 Twinax
Example applications				4x10GbE

GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

Contact Arrangement	2C	4C	6C
Shell Size	9	21	25
No. / type of contacts	2 X 50Ω Coax	4X 50Ω Coax	6X 50Ω Coax

Contact Arrangement	8C	16C
Shell Size	37	67
No. / type of contacts	8 X 50Ω Coax	16X 50Ω Coax

Contact Arrangement	2C9	1V9	2V9	4V
Shell Size	21	21	31	21
No. / type of contacts	2X 50Ω Coax, 9 X #24	1 X 75Ω Coax, 9 X #24	2 X 75Ω Coax, 9 X #24	4 X 75Ω Coax

FIBER 👑 KING
FIBER OPTIC CABLES

Glenair is the worldwide leader in military, aerospace, and harsh-environment fiber optic interconnect assemblies. We manufacture every element in-house, from low-loss simplex, duplex, and multi-line fiber optic cables, to precision termini, military and aerospace-grade connectors, backshells, and tools. Glenair FiberKing fiber optic cables are optimized for reliable, durable performance in military and commercial aviation, space, harsh-environment oil and gas, and multi-termination (MT ribbon) assemblies.

FIBERKING FIBER OPTIC CABLES

- Lightweight, tight bend-radius fiber optic cable for 10Gb+ avionic networks
- Vibration, radiation, and temperature-resistant space-grade F/O designs
- Ultra harsh-environment (high-pressure, high-temp, water-blocking) oil & gas industry fiber optic cable assemblies
- Ruggedized fiber optic ribbon cable for multi-fiber termination (MT) applications

Flight-Grade Mil-Aero (MA) Simplex Fiber Optic Cables
for Glenair SuperNine and GFR Connectors, Termini, and Accessories

THE FIBERKING MIL-AERO (MA) ECOSYSTEM

The FiberKing Mil-Aero (MA) Ecosystem is a complete flight-grade fiber optic interconnect solution for demanding military and commercial aerospace applications. This complete 10Gb+ low-loss fiber optic solution includes single- and multimode stepped and graded-index cables in simplex, duplex, and multi-line configurations. Glenair SuperNine and Glenair Front Release (GFR) fiber optic connectors are Glenair's signature offerings for high-speed, high datarate avionic networks. Cables and connectors are qualified to strict aviation industry standards for vibration, shock, moisture, and LSZH, and are rated to maximum optical loss (dB / km) at 850 nm $\leq$ 5.0 and at 1300 nm $\leq$ 3.0. Multimode cables are OM4 graded-index. Singlemode cables are OS1 stepped-index.

ABOUT MIL-DTL-38999 SERIES III TYPE FIBER OPTICS

Glenair's complete line of multi-channel MIL-DTL-38999 Series III Type fiber optic products includes qualified size 16 MIL-PRF-29504 /4 and /5 precision ceramic termini, and commercial large-core and jewel size 16 termini, as well as high-density size 20 termini. The tight-tolerance design provides repeatable, reliable optical performance. Connectors, backshells, and accessories IAW MIL-DTL-38999 Series III (Glenair SuperNine®) are available in metal and composite versions.

FIBERKING SIMPLEX, DUPLEX, AND MULTI-LINE CABLE LAYOUTS FOR GLENAIR SUPERNINE®

9-1 - 1 #16 termini	11-2 - 2 #16 termini	13-4 - 4 #16 termini	15-5 - 5 #16 termini	15-97 - 4 #16 / 8#20

17-8 - 8 #16 termini	19-11 - 11 #16 termini	21-16 - 16 #16 termini

23-21 - 21 #16 termini	25-29 - 29 #16 termini	25-37 - 37 #16 termini

ABOUT GLENAIR FRONT RELEASE (GFR) FIBER OPTICS

Glenair Front Release (GFR) fiber optic connectors and termini perform at insertion loss levels equivalent to MIL-PRF-29504 termini. GFR termini feature integrated O-ring sealing and retention clips for easy termination, insertion, and removal into precision-machined connector shells. GFR for flight-grade applications is supplied in Micro-D and D-Subminiature form-factors, and is optimized for plug-and-play use with Glenair FiberKing Mil-Aero (MA) low-loss fiber optic cables. Micro-D configurations are available in 1–8 channel configurations, D-Subminiature form-factor GFRs are available in 4–12 channel designs. Both series meet aviation industry standards for vibration, shock, and temperature, and combined with FiberKing MA OM4 multimode cable deliver reliable, low-loss performance up to 40 Gb/s at 850 nm.

FIBER 👑 KING
FIBER OPTIC CABLES

Glenair manufactures every popular mission-critical fiber optic interconnect system including MIL-DTL-38999 type, MIL-DTL-64266 NGCON, MIL-PRF-28876, and ARINC 801. Our fiber optic cable assembly team can integrate these ruggedized, military grade fiber optic technologies into turnkey cable and harness assemblies—terminated, tested, and ready for immediate use. And because Glenair manufactures its own military/aerospace grade fiber optic cable in-house, customers are assured both optimal quality and fastest time to market.

Hybrid environmental overmolded fiber optic / electrical cable assembly, MIL-DTL-38999 type with 29504/4 and /5 QPL termini

Hybrid optical / electrical assembly for weight reduction in a high-speed datalink application

Harsh environment overmolded MIL-DTL-38999 Series III type composite

High-density Next-Generation (NGCON) fiber optic harness assembly

Specialized MT ribbon fiber low-profile molded breakout capabilities

Cable reels and field-deployment technologies for both Glenair GFOCA and Eye-Beam™ GMA fiber optic systems

GFOCA I/O-to-board assembly with overbraiding for mechanical protection

Inside-the-box MIL-DTL-38999 type I/O connector to board cable harness

Turnkey Fiber Optic Cables and Harnesses

Built in-house in Glenair's total vertical integration fiber optic division with Glenair high-performance FiberKing fiber optic cables

Hybrid MIL-DTL-38999 Series III type fiber optic / electrical cable junction box

Harsh environment repairable MIL-DTL-38999 Series III type with FiberCon backshell to prevent fiber media damage

Field-deployable hermaphroditic GFOCA fiber optic cable assembly

Fiber optic multibranch assembly with flexible conduit wire protection and integrated cable storage bay

Point-to-point fiber optic cable with integrated strain relief

High-speed video fiber optic switch and cable junction box assembly

Turnkey Optical Flex circuit assembly with rugged MT ferrule terminations

Rugged Fiber Optic CONNECTORS

SuperNine® tight-tolerance MIL-DTL-38999 Sr. III fiber optic connection System

The high-performance MIL-DTL-38999 type fiber optic interconnect system with qualified MIL-PRF-29504/4 and /5 termini, successfully deployed in hundreds of commercial and military aerospace and other rugged applications—from F-16 upgrade systems to the revolutionary F-35 Joint Strike Fighter.

Terminated and tested point-to-point and multibranch D38999 type fiber optic cable assemblies

- Composite, aluminum and stainless steel shells available
- Qualified size #16 MIL-PRF-29504 /4 and /5 precision ceramic termini
- Singlemode and multimode fiber, from 9/125 to 1000 microns
- Ultra-low insertion loss, <.50dB typical
- From 2 to 37 Termini
- Plug and In-Line, Jam Nut and Square Flange Receptacles
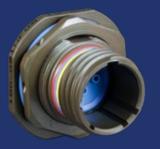- Patented MIL-DTL-38999 fiber optic test probes and adapters

ABOUT MIL-DTL-38999 SERIES III TYPE FIBER OPTICS

Glenair's complete line of multi-channel MIL-DTL-38999 Series III Type fiber optic products includes qualified size 16 MIL-PRF-29504 /4 and /5 precision ceramic termini, and commercial large-core and jewel size 16 termini, as well as high-density size 20 termini. Tight-tolerance fiber optic connectors, backshells, and accessories IAW MIL-DTL-38999 Series III (Glenair SuperNine®) are available in metal and composite versions.

| Plug | In-Line Receptacle | Jam-Nut Receptacle | Panel-Mount Receptacle |

Glenair M29504/04 and /05 QPL termini are in stock and ready for immediate, same-day shipment

Large-core and jewel size #16 termini

- Glenair SuperNine 180-091 series IAW MIL-DTL-38999 Series III connectors, designed and optimized for use with optical termini
- Ultra-tight tolerance shell and cavity dimensions for precise axial alignment
- Wider master key dimension on plug connector for improved cavity alignment
- Ultra-lightweight composite thermoplastic connector solutions plus lightweight aluminum, rugged stainless steel and marine bronze
- Qualified size #16 MIL-PRF-29504 pin-socket precision ceramic termini
- Insert arrangements from 2 to 37 ways
- Advanced RoHS-compliant finish solutions
- IP68 in mated condition (10 meters, two hours)

MATERIAL AND FINISH

Code	Material	Finish Description
MA	Aluminum	Electroless Nickel, Matte
ME		Electroless Nickel
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZN		Zinc-Nickel, Olive Drab
ZNU		Zinc-Nickel, Black
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
MS	Stainless Steel	Electroless Nickel
ZL		Electro-Deposited Nickel
Z1		Passivate
AB	Marine Bronze	No Plating

MIL-PRF-29504/04 AND /05 FIBER OPTIC TERMINI PERFORMANCE SPECIFICATIONS

Test Type	Performance Requirement
Optical Insertion Loss, Multimode (MM) *	0.35 dB Typical (50/125 and 62.5/125), restricted launch
Optical Insertion Loss, Singlemode (SM) *	0.30 dB Typical (9/125)
Optical Return Loss	Better than -40 dB - PC Polish Better than -50 dB - Enhanced PC Polish
Discontinuity, Vibration	MM: 0.5 dB or more for 50 µs or more SM: 0.5 dB or more for 50 µs or more
Discontinuity, Shock	MM: 0.5 dB or more for 50 µs or more SM: 0.5 dB or more for 100 ms or more
Operating Temperature	-55°C to +165°C (dependent on epoxy and cable)
Temperature (Thermal) Shock	-55°C to +165°C, 5 Cycles
Temperature Life	+165°C, 1000 hours
Mating Durability	500 cycles (cleaning after 100 matings)
Vibration - Sinusoidal	60.0 Grms at ambient temperature. Monitored for Discontinuity.
Vibration - Random at Temperature	41.7 Grms at 125°C. Monitored for Discontinuity.
Vibration - Random at Ambient	49.5 Grms at ambient temperature. Monitored for Discontinuity.
Mechanical Shock (High Impact)	Per MIL-DTL-901, grade A, type B, class I. Monitored for Discontinuity.
Mechanical Shock (Half-Sine Pulse)	300 G Peak over 3ms duration. Monitored for Discontinuity.

* Optical Insertion Loss values when tested in Tight Toleranced Connectors

Rugged Fiber Optic CONNECTORS

Ultra-Low dB Loss ARINC 801 fiber optic termini with SuperNine connector packaging

ARINC 801 is a keyed genderless fiber optic terminus used in a broad range of aerospace connector packages including ARINC 801, ARINC 600, and other circular and rectangular series. The Glenair solution includes features from our "Better than QPL" SuperNine® connector with improved axial alignment, vibration and shock resistance, and low dB loss performance. Loose structure and tight structure cable types are supported.

- ■ Keyed, genderless terminus design eliminates pin and socket complexity and supports both PC and APC applications
- ■ Rear-release size #16 termini (1.25mm ferrule)
- ■ Singlemode (1310 and 1550 nm) as well as multimode (850 and 1300 nm)
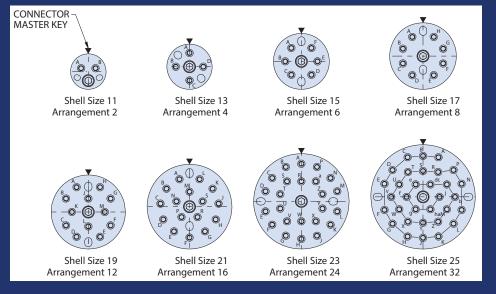- ■ Mechanical and environmental performance in accordance with ARINC 801
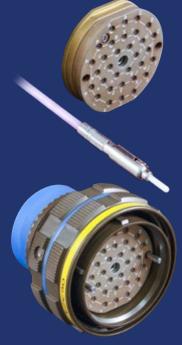
ABOUT ARINC 801

ARINC 801 is an industry-standard terminus design for use in various form-factor aerospace connectors. Terminus features include Ø1.25mm precision zirconia ceramic ferrules and alignment sleeves, as well as a keyed body for angle polished (APC) end face termination. Connector features include removable alignment sleeve retainer and guide pins. Glenair offers singlemode (UPC and APC) as well as multimode (PC) options with familiar LC ferrule type termination. Terminus configurations available for use with loose and tight structure cable. A complete range of insert arrangements from 2 to 32 channels are available in accordance with ARINC 801. Glenair can provide connector packaging in virtually any supported format from ARINC 600 to EN4644. Our catalog solution incorporates "Better-than-QPL" MIL-DTL-38999 Series III type SuperNine® connector features (i.e. anti-decoupling and key polarization options).

Series 180-159 ARINC 801 Performance Specifications	
Test Description	**Performance Requirements/Specifications**
Insertion Loss	Multimode (PC): 0.30 dB typical at 850/1300nm
	Singlemode (UPC): 0.30 dB typical at 1310/1550nm
Return Loss	Multimode (PC): Better than 20 dB
	Singlemode (UPC): Better than 40 dB
	Singlemode (APC): Better than 65 dB
Operating Temperature	-55°C to +165°C (cable/epoxy dependent)
Storage Temperature	-40°C to +85°C (cable/epoxy dependent)
Mating Durability	500 cycles, per TIA/EIA-455-21
Vibration	23.1g RMS, 8 hrs/axis, per TIA/EIA-455-11, Test Condition VI-G
Mechanical Shock (half-sine pulse)	300g Peak for 3ms, 3 shocks/axis in each direction, per TIA/EIA-455-14, Test Condition D
Thermal Cycling	-55°C to +125°C, 50 cycles, per TIA/EIA-455-3, Test Condition C-4 (cable/epoxy dependent)
Temperature Life	+125°C for 1000 hrs, per TIA/EIA-455-4 (cable/epoxy dependent)
Humidity, Steady State	+40°C for 240 hrs, 90% RH, per TIA/EIA-455-5, Method A, Test Condition B
Humidity, Temperature Cycling	-25°C to +65°C, 10 cycles for 24 hrs, 90% RH, per TIA/EIA-455-5, Method B7a (cable/epoxy dependent)

ARINC 801 INSERT ARRANGEMENTS

MATERIAL AND FINISH		
Code	**Material**	**Finish Description**
ME	Aluminum Alloy	Electroless Nickel
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZN		Zinc-Nickel, Olive Drab
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
MS	Stainless Steel	Electroless Nickel
ZL		Electro-Deposited Nickel
Z1		Passivate
AB	Marine Bronze	No Plating

Shell Size 11 Arrangement 2 · Shell Size 13 Arrangement 4 · Shell Size 15 Arrangement 6 · Shell Size 17 Arrangement 8 · Shell Size 19 Arrangement 12 · Shell Size 21 Arrangement 16 · Shell Size 23 Arrangement 24 · Shell Size 25 Arrangement 32

Glenair High Density (GHD): Double the Density of Standard Mil-Spec Fiber Optic Designs

The system of choice for military and commercial air and space applications with aggressive size and weight requirements. Outstanding optical and environmental performance with nearly double the density of standard mil-spec, butt-joint solutions. Glenair High Density (GHD) is a complete fiber optic system with termini, connectors, cable and conduit assemblies, test probe adapters, tools, and more.

GHD plug connector with alignment sleeve retainer, and square flange receptacle. Termini available in keyed and non-keyed styles.

- **Innovative #18 (1.25mm ferrule) front-release genderless termini accommodate 900μ to 2.0mm jacketed fiber**
- **M85045/16 cable accommodation**
- **Composite, aluminum, or stainless steel shells with MIL-DTL-38999 mating and accessory threads**
- **Single key termini for APC polish available**
- **Better optical performance than D38999 with nearly double the density**
- **Precision alignment sleeve retainer with integrated guide pins**

Glenair High-Density (GHD)
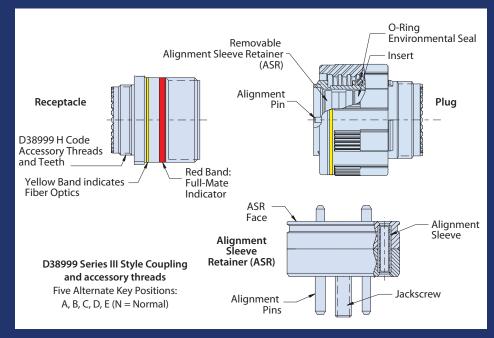
![Glenair logo]

ABOUT GLENAIR HIGH DENSITY (GHD)

The GHD fiber optic connection system is a D38999 workalike designed for applications that require higher-density fiber optic insert arrangements with the same outstanding optical and environmental performance as MIL-DTL-38999. The GHD system accommodates a broad range of singlemode and multimode fiber media and offers insertion loss values less than 0.5dB (typical loss for Glenair termini is 0.3 dB). Dense cavity spacing is achieved with an innovative Size 18 genderless front-release terminus design that provides nearly double the density as the standard M28876 and D38999 fiber optic connector series. The GHD system is also available with APC Angle Polish to reduce unwanted back reflection. A removable Alignment Sleeve Retainer (ASR) makes for easy fiber optic cleaning and maintenance in plug connectors. GHD is a complete system that includes keyed and unkeyed termini, a complete range of connector configurations, backshells, accessories, test probe adapters, tools, and more.

GLENAIR HIGH DENSITY (GHD) FEATURES

MATERIAL AND FINISH

Code	Material	Finish Description
M	Aluminum Alloy	Electroless Nickel
MA		Electroless Nickel, Matte
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZNU		Zinc-Nickel, Black
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
ZL	Stainless Steel	Electro-Deposited Nickel
Z1		Passivate
AB	Marine Bronze	No Plating

Receptacle

D38999 H Code Accessory Threads and Teeth

Yellow Band indicates Fiber Optics

Red Band: Full-Mate Indicator

Removable Alignment Sleeve Retainer (ASR)

Alignment Pin

O-Ring Environmental Seal

Insert

Plug

ASR Face

Alignment Sleeve Retainer (ASR)

Alignment Sleeve

Alignment Pins

Jackscrew

D38999 Series III Style Coupling and accessory threads
Five Alternate Key Positions:
A, B, C, D, E (N = Normal)

COMPATIBLE D38999 SERIES III FIBER OPTIC BACKSHELLS AND ACCESSORIES

440-030 Straight Backshell

189-016 Self-Locking Banding Backshell with Strain Relief

189-037 Self-Locking Banding Backshell with Bend Restrictor

377-014 Self-Locking Convoluted Tubing Adapter, Composite

189-038 Composite Adapter for Helical Convoluted Tubing

Rugged Fiber Optic CONNECTORS

Series 806 Mil-Aero:
Micro D38999 Type Packaging, High-Density Size #20HD PC Termini

Innovative fiber optic / electrical connector design meets key performance benchmarks for harsh vibration, shock, and environmental settings in rigid conformance with MIL-DTL-38999 Series III—but at nearly half the size and weight.

SAVE SIZE AND WEIGHT WITH SERIES 806 CONNECTORS

Series 806 Mil-Aero smallest shell (size 8) .500 in. mating threads 3 Size #20HD electrical or optical contacts / termini

MIL-DTL-38999 smallest shell (size 11) .750 in. mating threads 2 Size #16 electrical or optical contacts / termini

- ■ **Next-generation small form factor aerospace-grade circular connector**
- ■ **High density 20HD fiber termini arrangements**
- ■ **Designed for harsh application environments such as military and commercial aircraft**
- ■ **Outstanding environmental, electrical, optical, and mechanical performance**
- ■ **Integrated anti-decoupling technology**
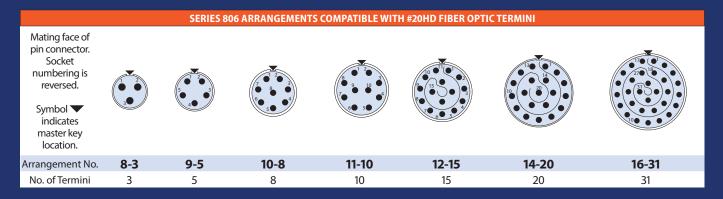- ■ **High performance ceramic ferrule rear-release termini design**

ABOUT SERIES 806 MIL-AERO FIBER OPTIC

Glenair manufactures and supplies mil-qualified termini for use in MIL-DTL-38999 Series III type connectors including Glenair SuperNine, ARINC 801, and Glenair High Density (GHD). The Series 806 Mil-Aero is our highest density connector series built IAW D38999 Series III specifications—including vibration, shock, and high-altitude immersion. In fact, the Series 806 conforms to every MIL-DTL-38999 Series III standard requirement, but does so in a micro miniature reduced size and weight format, which now includes fiber optic configurations with size 20HD pin and socket termini. These ultra high density fiber optic termini are snap-in, rear release designs featuring precision ceramic ferrules and alignment sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multimode and 9/125 singlemode fiber. Connectors are available with accessory thread or band shield termination porch for easy termination of optical media Kevlar strength member or EMI shielding (hybrid applications).

SERIES 806 ARRANGEMENTS COMPATIBLE WITH #20HD FIBER OPTIC TERMINI							
Mating face of pin connector. Socket numbering is reversed. Symbol ▼ indicates master key location.							
Arrangement No.	8-3	9-5	10-8	11-10	12-15	14-20	16-31
No. of Termini	3	5	8	10	15	20	31

PLUG AND RECEPTACLES AVAILABLE WITH ACCESSORY THREADS OR SHIELD TERMINATION PORCH

Cable Plug   **Square-Flange Receptacle**   **Jam-nut Receptacle**   **In-Line Receptacle**

20HD FIBER OPTIC TERMINI FOR SERIES 806 MIL-AERO CONNECTORS

Single or multimode. Ceramic ferrule. 0.5 dB loss. Size 20HD fiber optic termini are compatible with Series 806 connectors with size 20HD contact arrangements. These snap-in, rear release termini feature precision ceramic ferrules and alignment sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multimode and 9/125 singlemode fiber.
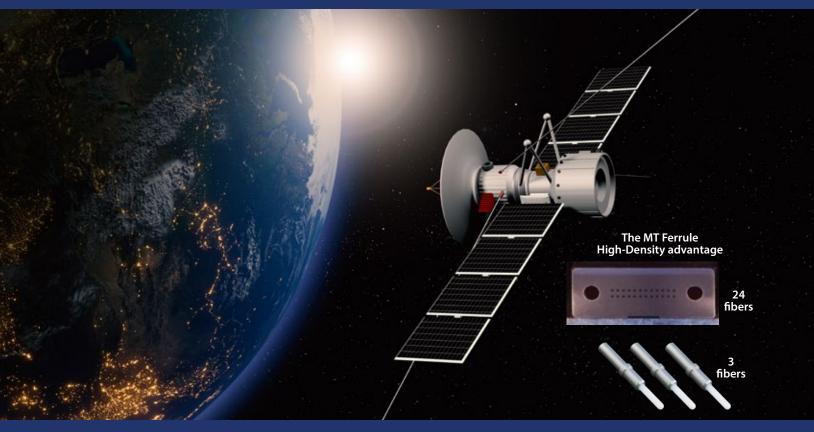
MATERIAL/FINISH
- Ferrule, alignment sleeve: zirconia ceramic
- Body, shroud: copper/nickel/zinc alloy
- Spring (socket, not shown): SST/passivated
- Protective cover (socket): BeCu alloy/nickel plated

HOW-TO-ORDER 20HD FIBER OPTIC TERMINI FOR SERIES 806 CONNECTORS				
Termini Type	Optical Fiber Type	Part Number	ØA Ferrule Hole	Fiber Size Core/Cladding
Pin	Singlemode	**181-134-1255**	125.5 microns	9/125
Pin	Multimode	**181-134-126**	126.0 microns	50/125, 62.5/125
Socket	Singlemode	**181-135-1255**	125.5 microns	9/125
Socket	Multimode	**181-135-126**	126.0 microns	50/125, 62.5/125

Rugged Fiber Optic
CONNECTORS

Rugged High-Density PRIZM® MT Expanded Beam and MT Elite PC Fiber Optic Systems

The MT Ferrule
High-Density advantage

24 fibers

3 fibers

Easy-to-use, harsh environment, super high-density PRIZM® MT expanded-beam fiber optic assemblies in Glenair ruggedized I/O and backplane connector packaging

- Glenair is qualified by US Conec to terminate one- and two-row PRIZM® MT ferrules for both ribbon and round fiber optic cable
- Available as turnkey, factory-terminated PRIZM® MT expanded beam assemblies—fully ruggedized for harsh air and space applications
- Highest-density fiber optic solution with reliable, repeatable optical performance
- Outstanding stability under shock and vibration conditions
- PRIZM® MT provides outstanding tolerance to debris contamination

ALSO AVAILABLE: MT ELITE® PHYSICAL CONTACT SINGLEMODE AND MULTIMODE CONNECTOR AND CABLE SOLUTIONS

© 2025 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324

Glenair US and UK are qualified by **US Conec** to terminate 1 and 2 row PRIZM® MT and ferrules for ribbon and round cable fiber

ABOUT MT FERRULE FIBER OPTICS

PRIZM® MT is a monolithic optical fiber ferrule that integrates microlenses and mechanical alignment features into a single component. The design provides low insertion loss and return loss for up to 32 fibers and is optimally resistant to debris contamination. Glenair supplies the PRIZM MT ferrule in factory-terminated cable assemblies for both inside-the-box as well as environmental point-to-point applications. Ruggedized aerospace-grade I/O and backplane connectors are also available for use with standard MT Elite® physical contact (PC) ferrules. MT Elite compatible connectors and ferrule kits are ordered separately for complete convenience in the implementation of both singlemode and multimode fiber optic datalinks.

SUPERNINE MT CONNECTOR CONFIGURATIONS

| Cable Plug | In-Line Receptacle | Jam-Nut Receptacle | Panel-Mount Receptacles |

SERIES 79 MT CONNECTOR CONFIGURATIONS

Plugs and receptacles with integrated banding porch, retaining plates, or EMI gasket for ribbon or round fiber media supporting both MT Elite® and PRIZM® MT ferrules.
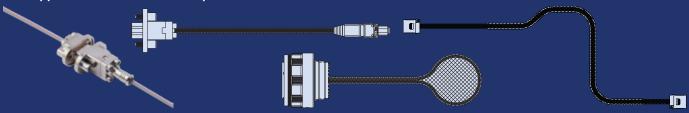
VITA 66 STYLE MT CONNECTORS

VITA 66.1 and 66.4 format. Discrete backplane connectors and MT ferrule assemblies.

CATALOG FAST-TURNAROUND "ASAP" MT OPTICAL FLEX JUMPERS AND CABLE ASSEMBLIES

Glenair supplies—as a commercial off-the-shelf product—point-to-point optical flex jumpers with MT Elite and PRIZM MT optical ferrules. Available configurations include simple MT-to-MTP jumpers in straight or curved profiles, circular and rectangular I/O connectors with MT optical fiber pigtails, as well as special optical loop assemblies. A complete range of multimode and singlemode fiber in popular sizes, plus radiation-hardened fiber for earth orbit applications. Series 79- and SuperNine-to-MT ribbon fiber breakout cable assemblies are also available.

Rugged Fiber Optic CONNECTORS

NAVSEA and Underwater Oil & Gas Industry Fiber Optic Interconnect Systems

NAVSEA and commercial oil & gas industry qualified topside and subsea connectors. MIL-PRF-28876 and MIL-PRF-29504 /14 and /15 Navy F/O systems. Glenair signature SeaKing high-pressure, open-face subsea fiber optics. NGCON next-generation fiber optic system.

- M28876 connectors qualified to the complete requirements of MIL-PRF-28876
- All shell sizes and insert arrangements, including 2, 4, 6, 8, 18 and 31 channel layouts
- Qualified MIL-PRF-29504/14 and /15 pin and socket termini and /03 dummy terminus
- Glenair signature SeaKing underwater fiber optic connectors for oil and gas applications
- MIL-PRF-64266 (NGCON) next-generation shipboard / aerospace fiber optics

NAVSEA-qualified 28876 connectors and 29504 termini

Emerging NAVSEA next-gen NGCON fiber optics

10K PSI open-face SeaKing underwater fiber optics

© 2025 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324

SeaKing™

QPL qualified

ABOUT GLENAIR NAVSEA AND UNDERWATER / OIL & GAS FIBER OPTIC INTERCONNECT SYSTEMS

Qualified MIL-PRF-29504/14 and /15 termini and MIL-PRF-28876 connectors and backshells are ready for deployment in shipboard and submarine applications. NGCON MIL-PRF-62466 is a new rear-release fiber optic system designed for naval and airframe applications. SeaKing is a harsh-environment underwater 10K PSI open-face fiber optic system.

QUALIFIED AND GLENAIR COMMERCIAL MIL-PRF-28876 FIBER OPTIC CONNECTORS AND MIL-PRF-29504 TERMINI—NAVY APPROVED, IN STOCK, AND READY FOR IMMEDIATE SHIPMENT

Qualified QPL-29504 pin, socket, and dummy termini

Qualified M28876 environmental fiber optic connectors

Qualified M28876 backshells and accessories

Turnkey environmental and inside-the-box assemblies

NGCON MIL-PRF-64266 NEXT-GENERATION FIBER OPTIC INTERCONNECT SYSTEM AND PIERSIDE FIBER OPTIC CONNECTORS IAW NAVSEA 737971 / 737972

Rear-release genderless termini IAW M29504

High-density receptacles and plugs with removable Alignment Sleeve Retainers for easy cleaning

Turnkey environmental and inside-the-box assemblies

SEAKING™ FIBER OPTIC 10K PSI OPEN-FACE PRESSURE RATED FIBER OPTIC CONNECTORS, CABLES AND JUMPERS

Environmental overmolded fiber optic jumpers

Pressure-balanced oil-filled (PBOF) high-pressure fiber optic assemblies

BCR or FCR F/O pigtail assemblies for I/O-to-board module applications

Glenair Front Release
Fiber Optic Connection System: the Fast Road to F/O Integration

The Glenair Front Release (GFR) system allows for rapid connector integration of optical media by placing retention and environmental sealing components directly on the termini. GFR enables fast design and development of unique fiber optic connector shell packages without costly tooling and engineering.

- **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**
- **Supports cylindrical and rectangular connectors**
- **Connector shells available in aluminum and stainless steel**

GFR fiber optic termini integration in micro miniature rectangular and circular connector packaging

MATERIAL/FINISH		
Code	Material	Finish
C	Aluminum Alloy	Anodize, Black
M		Electroless Nickel
NF		Cadmium, Olive Drab over Electroless Nickel
ZN		Zinc-Nickel, Olive Drab, Over Electroless Nickel
Z1	Stainless Steel	Passivate

ABOUT GLENAIR FRONT RELEASE (GFR)

Glenair Front Release (GFR) fiber optic termini perform at insertion loss levels equivalent to the MIL-PRF-29504 termini designed for use in high-performance fiber optic systems such as MIL-DTL-38999 and MIL-PRF-28876. The GFR termini, however, feature integrated O-ring sealing and retention clips, making them suitable for easy integration into machined connector cavities in virtually any form-factor connector. This approach has enabled Glenair to integrate optical media—with ruggedized, low dB loss performance—in Micro-D, D-Subminiature, and any number of custom connector shells, both rectangular and cylindrical. Contact the factory for availability and application engineering assistance for both standard and custom GFR fiber optic applications.

GFR FRONT-RELEASE TERMINI WITH INTEGRATED O-RING SEALING AND RETENTION CLIPS

Single O-Ring Design (Standard)

Single O-Ring Design (Standard)

Dual O-Ring Design

Dual O-Ring Design

Socket Termini

Pin Termini

Dummy Terminus

MICRO-D FORM-FACTOR GFR CONNECTORS

Support from one to eight GFR termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with integral alignment pins for optimum optical fiber alignment and low dB data loss performance. Available in aluminum and stainless steel. Termini sold separately. Support for single- and dual-O-ring termini. Panel cutouts IAW MIL-DTL-83513.

D-SUBMINIATURE FORM-FACTOR GFR CONNECTORS

Support from four to twelve GFR termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with integral alignment pins for optimum optical fiber alignment and low dB data loss performance. Available in aluminum and stainless steel with standard jackpost hardware included. Termini sold separately. Support for single- and dual-O-ring termini. Panel cutouts IAW MIL-DTL-24308.

MICRO-MINIATURE CIRCULAR GFR CONNECTORS

Support from two to twelve GFR pin or socket termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with O-ring environmental seal. Back-end threads and teeth accept Glenair Mighty Mouse accessories. Available in aluminum and stainless steel. Termini sold separately. Support for single- and dual-O-ring termini.
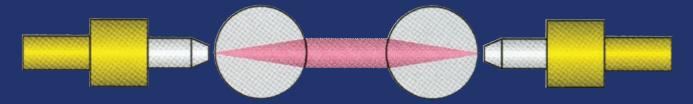
Eye-Beam GLT, Eye-Beam GMA, and **Eye-Beam Power,** Plus Rugged Field (PC) **GFOCA** D83526

Glenair's rugged, low-maintenance F/O solutions include GFOCA, an hermaphroditic battlefield fiber optic system

Commonly used in harsh environmental applications such as directed energy weapons, long-run battlefield communications, and Free Space Optical applications, Glenair Expanded Beam fiber optics virtually eliminate field maintenance and cleaning difficulties, with low dB-loss mating system performance rated to 1000-2000 cycles depending on fiber media selection.

EXPANDED BEAM TECHNOLOGY

Expanded Beam connectors utilize a sealed lens to expand the emitting beam of light from the fiber media making connections less sensitive to alignment and contaminants. The expanded beam enters an air gap between connectors and is then refocused back into the fiber of the mating half. Sealed expanded beam assemblies are ideally suited for environmental applications where optical connectors are subject to repeated mating and unmating cycles. Easy to clean, terminate, and insensitive to contamination.

© 2025 Glenair, Inc • 1211 Air Way, Glendale, CA 91201 • 818-247-6000 • www.glenair.com • U.S. CAGE code 06324

EXPANDED-BEAM AND RUGGED FIELD
Eye-Beam and GFOCA Fiber Optics

Glenair®

ABOUT GLENAIR RUGGED FIELD AND EXPANDED-BEAM FIBER OPTICS

Eye-Beam GLT, Eye-Beam GMA, and Eye-Beam Power are optimized for reliable, low-maintenance performance in ground and air applications. Eye-Beam GLT is a grin-lens termini solution, Eye-Beam GMA is a workalike for the popular HMA hermaphroditic connector system, and Eye-Beam Power is a ruggedized, optical power terminus design for directed energy and Free Space Optical applications. GFOCA hermaphroditic F/O interconnects are built IAW MIL-DTL-83526 and equipped with MIL-PRF-29504/16 type termini. GFOCA is Glenair's most ruggedized field-deployable fiber optic platforms.

INNOVATIVE EYE-BEAM GLT EXPANDED BEAM TERMINI DELIVER OPTIMAL PERFORMANCE IN HARSH ENVIRONMENTS

- All the benefits of an expanded beam connection system built into a versatile fiber optic terminus
- Factory-terminated Eye-Beam® GLT termini easily integrated into any connector package
- Innovative expanded beam lens terminus expands signal 27X from a standard 9.3 micron fiber core
- Revolutionary design delivers low dB loss performance (1.5 dB multimode, 2.0 dB singlemode untuned) while reducing maintenance, inspection and test costs
- Ultra-high precision ceramic sleeves and custom designed terminus bodies ensure axial alignment

MIL-DTL-83526 HMA TYPE EYE-BEAM GMA BALL-LENS EXPANDED-BEAM FIBER OPTICS

- Field-deployable system for both indoor and outdoor applications
- Beam expansion dramatically reduces loss due to contamination
- Large ball lens facilitates easy cleaning
- Fully intermateable with all MIL-DTL-83526 /20 and /21 compliant connectors
- 2 and 4-channel insert arrangements
- Singlemode and multimode versions, plus broad support for a wide range of standard and tactical military cables

EYE-BEAM POWER RUGGED, HIGH-POWER FIBER OPTICS FOR DIRECTED ENERGY AND FSO APPLICATIONS

- Size #8 drop-in expanded-beam optical contact
- Powerful 20W and higher optical contact ideally suited for directed energy applications
- Compatible with 1064nm polarization-maintaining fiber with a 0.5 dB typical insertion loss
- Low temperature rise at peak power
- Signature assembly process optimizes optical alignment for mission-critical reliability

HARSH-ENVIRONMENT, FIELD-DEPLOYABLE GFOCA FIBER OPTIC CONNECTION SYSTEM

- Low insertion loss genderless termini
- 2.5 mm dia ceramic ferrules and alignment sleeves
- 4 channel singlemode and multimode configurations
- Designed to meet the requirements of MIL-PRF-29504/16 and MIL-DTL-83526 military specifications
- Discrete components or complete cable-on-reel solutions available

Fiber Optic Termination, Inspection, Cleaning, and Troubleshooting **Tools** and **Custom Kits**

Our fiber optic termination, inspection, and cleaning kits—available in custom configurations from both our US and UK F/O operations—allow lab and field technicians to perform reliable assembly, inspection, and cleaning of fiber optic systems. Glenair termination kits are equipped with all the necessary tools—polishing pucks, jacket strippers, shears, scribes, dry-action cleaning tools, test probes and adapters, and more—everything required for ongoing termination and test of fiber optic systems.

- **Comprehensive tooling for all Glenair fiber optic interconnect systems**
- **Discrete tools and bespoke kits. Everything from pin and socket polishing tools to jacket strippers, shears, scribes, inspection probes, and cleaning apparatus**
- **Inspection and testing instructions offer solutions to optical test and measurement**
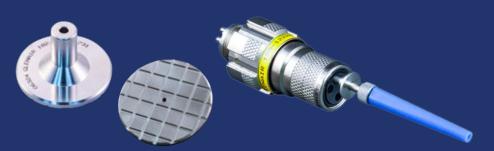
Termination, Inspection, and Troubleshooting

Glenair®

THE RIGHT FIBER OPTIC TOOL FOR THE JOB

Fiber optic connectors are designed to be connected and disconnected many times without affecting the optical performance of the fiber circuit. Optimal performance can be achieved by following the correct process for termination of the fiber line—a task which requires the use of highly-specialized tooling. Glenair's extensive experience in building fiber optic interconnect cables enables us to select the right tools for each step in the termination and assembly process, as well as optimal tooling for inspection, test, and cleaning. Our Fiber Optic Termination and Test Probe Kits allow field technicians the convenience of completing final termination of precision termini on site for easy and efficient cable routing and installation. Polishing tools are also sold separately for factory use or as replacement parts in field termination kits. Other specialty tools such as hand-held inspection monitors, dry- and wet-action cleaning tools are also available.

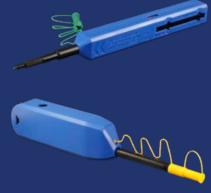Polishing pucks

Test probes and adapters

Fiber optic test probe and adapter kits

Video bore scope inspection kits

Hand-held inspection monitor

Dry-action cleaning tools

GLENAIR FIBER OPTIC INSPECTION AND TESTING VIDEO INSTRUCTION

For more information on Glenair's patented Fiber Optic Test Probe and Connector Adapter System and complete video instruction, visit www.glenair.com or our YouTube channel at www.youtube.com/@Glenair. Other Glenair fiber optic video instruction covering such topics as fiber optic cleaning and testing, termini insertion and removal, cable preparation and assembly are also available on the site.

BLUMARK RF
COAX CABLES

**COMING SOON:
VITA 67.3 RF ASSEMBLIES**

Fully-customizable SMPM and SMPS assemblies: connectors, shells, cables, and accessories

Glenair is one of just a few interconnect manufacturers that can supply turnkey RF transmission line assemblies—fully connectorized and ready for immediate use—built 100% in-house with Glenair component parts. Glenair high-frequency RF assemblies are typically used in line-replaceable units and chassis that are part of an RF data transmission chain. The rugged, environmental construction of Glenair multi-port RF connector shells and contacts, combined with our high-reliability BluMark RF coax cables, makes these turnkey transmission line solutions ideal for mission-critical air, sea, land, and space applications with exacting size, weight, and frequency requirements.

BLUMARK RF
COAX CABLES

GLENAIR TURNKEY RF ASSEMBLIES ARE BUILT WITH AEROSPACE-GRADE 50 OHM LOW-LOSS COAX CABLES

Size 047 40 GHz	Size 086 40 GHz	Size 130 40 GHz	Size 160 40 GHz	Size 200 26.5 GHz	Size 235 26.5 GHz	Size 300 18 GHz

Double-Shielded • Low phase-change Fluoropolymer Dielectric • FEP Jacket

Triple-Shielded • Low-Loss PTFE Tape Wrapped Dielectric • FEP Jacket

RF and Microwave Transmission Assemblies

With Glenair signature multi-port connectors, low-loss cables, and high-frequency contacts

BLUMARK RF™ COAX CABLES

BluMark RF 50 Ohm Coax Cables are available in seven size categories. These high-frequency, low-loss, flexible cables are suitable for radar and other aerospace applications as well as laboratory test equipment. Jacket options include FEP and radiation-resistant space-grade ETFE. Triple-shielded high-performance cables have expanded PTFE dielectric core for low loss up to 40 GHz. Application selection is based on compatibility with a particular RF / microwave connector type and size, as well as flexibility, EMI screening, weight considerations, temperature tolerance, and altitude.

962-032-200

50 ohm size 200 (.204" diameter, .051" conductor) 26.5 GHz max. frequency low-attenuation cable

-55 to +200 °C rated operating temperature

FEP jacket, expanded PTFE dielectric, solid SPC center conductor

Triple-shielded: Tape/foil/braid shield layers with >90 dB shield effectiveness

962-032-160

50 ohm size 160 (.161" diameter, .036" conductor) 40 GHz max. frequency low-attenuation cable

-55 to +200 °C rated operating temperature

FEP jacket, expanded PTFE dielectric, solid SPC center conductor

Triple-shielded: Tape/foil/braid shield layers with >95 dB shield effectiveness

962-032-130

50 ohm size 130 (.131" diameter, .029" conductor) 40 GHz max. frequency low-attenuation cable

-55 to +200 °C rated operating temperature

FEP jacket, expanded PTFE dielectric, solid SPC center conductor

Triple-shielded: Tape/foil/braid shield layers with >90 dB shield effectiveness

962-025-086

50 ohm size 086 (.104" diameter, .020" conductor) 40 GHz max. frequency low-attenuation cable

-65 to +165 °C rated operating temperature

FEP jacket, LPCF dielectric, solid SPC center conductor Double-shielded: Tape/braid shield layers

962-025-047

50 ohm size 047 (.056" diameter, .011" conductor) 70 GHz max. frequency low-attenuation cable

-65 to +165 °C rated operating temperature

FEP jacket, LPCF dielectric, solid SPC center conductor Double-shielded: Tape/braid shield layers
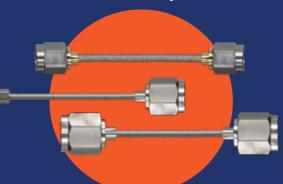
50 OHM COAX RF JUMPERS

Series GRF02 50 Ohm Coax Cable "Jumpers" are COTS, cut-to-length cable assemblies with pre-installed connectors at both ends. Turnkey RF jumpers offer excellent flexibility with a bend radius of 6mm or 1/4 in.

AEROSPACE-GRADE RUGGEDIZED RF, MICROWAVE, AND mmWAVE COAXIAL CABLE ASSEMBLIES

BLUMARK RF
COAX CABLES
™

50 Ohm Flexible RF Cable Jumpers

RF Connector Accessories

SMA 086, SMA 141, SMA-N 141, N-N 141

Multi-Port C RF Assemblies: Ha Rugged Enviro

Dummy Receptacles and Protective Covers

Precision-Grade RF Connector Adapters

Single-Channel RF Connectors for Multi-Port Shell Configurations sizes #8, #12, #16

TNC-SMA, N-SMA, SMA-SMA, SMP-SMA, 2.92-SMA, BNC-SMA

G-Link RF

G-LinkRF: 18 GHz RF BMB-to-SMA contact adapters

**Mil/Aero-Grade
Flexible RF Cables**

**047, 086, 160, 200, 235,
300, 450**

**Configuration
and-Formable (left),
onmental (right)**

Glenair®

**Glenair GMMD
Modular Micro-D**

GM
MD

**Micro Miniature Board
and I/O-to-Board
Hybrid Coax Connectors**

**Rugged, Shielded, Vibration-
Resistant Mil-Aero Grade
Multi-Port RF Shells**

**Single-Channel RF Connectors for
Multi-Port Shell Configurations
sizes #8, #12, #16**

G-LinkRF

**G-LinkRF: 18 GHz RF
BMB-to-SMA contact adapters**

**SuperNine, Mighty Mouse,
Series 806 RF, and Series 795 RF
Multi-Port RF Connector Shells**

SuperNine RF multiport connectors

SUPERNINE RF CONNECTOR SELECTION GUIDE

233-290-G6
Plug, EMI Spring
(Socket Contacts)

233-290-00
Wall-Mount Receptacle
(Pin Contacts)

233-290-05
In-Line Receptacle
(Pin Contacts)

233-290-07
Jam Nut Receptacle
(Pin Contacts)

233-290-CS
Wall Mount Receptacle,
Standard Clinch Nuts
(Pin Contacts)

233-290-CM
Wall Mount Receptacle,
Metric Clinch Nuts (Pin
Contacts)

233-290-HS
Wall Mount Receptacle,
Standard Helicoils (Pin
Contacts)

233-290-HM
Wall Mount Receptacle,
Metric Helicoils (Pin
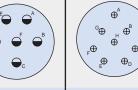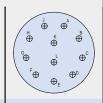Contacts)

SHELL SIZE / CONTACT LAYOUT

11RF1	11RF2	13RF4	15RF5	17RF6	17RF8	19RF11
Shell Sz. 11 • 1 #8 contact	Shell Sz. 11 • 2 #16 contacts	Shell Sz. 13 • 4 #16 contacts	Shell Sz. 15 • 5 #16 contacts	Shell Sz. 17 • 6 #12 contacts	Shell Sz. 17 • 8 #16 contacts	Shell Sz. 19 • 11 #16 contacts
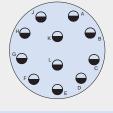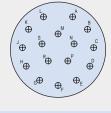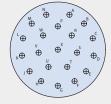
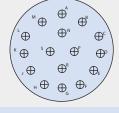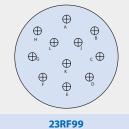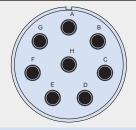| 21RF11	21RF16	23RF21	23RF97	23RF99
Shell Size 21 • 11 #12 contacts	Shell Size 21 • 16 #16 contacts	Shell Size 21 • 21 #16 contacts	Shell Size 23 • 16 #16 contacts	Shell Size 23 • 11 #16 contacts
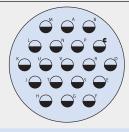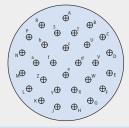
25RF8	25RF19	25RF29
Shell Size 25 • 8 #8 contacts	Shell Size 25 • 19 #12 contacts	Shell Size 25 • 29 #16 contacts

RF

Series 806 RF Mil-Aero
multiport micro circular for RF, Microwave, and mmWave applications

Series 806 RF connectors are micro miniature circulars with true MIL-DTL-38999 Series III-level performance including high altitude immersion, DWV, and shock and vibe resistance. Precision-machined aluminum or stainless steel shells, fluorosilicone grommets, and auxiliary shielding delivers space-grade environmental, mechanical, and electrical performance. Eighteen contact layouts, eleven shell sizes, with support for #8 BMB, #12 SMPM, or #16 SMPS contacts. RF frequency from DC–65 GHz. G-LinkRF contacts save time and reduce labor.

- ■ **Mil-spec performance, micro miniature package**
- ■ **Space-grade TRL of 9**
- ■ **Eighteen layouts for size #8, #12, or #16 RF contacts (sold separately)**
- ■ **Rugged aluminum or stainless steel shells**
- ■ **Environmentally-sealed**
- ■ **Scoop-proof mating interface**
- ■ **EMI spring on plugs for low shell-to-shell resistance**
- ■ **Snap-in, rear-release contacts**
- ■ **Hermetic versions and extended backshells available**

Save time and improve reliability. Series 806 RF connectors are optimized for use with 26.5 GHz G-Link RF contacts with integral female SMA adapter for attaching SMA plug directly to the contact.

G-LinkRF

SERIES 806 RF CONNECTOR SELECTION GUIDE

806-072
Cable Plug
(Socket Contacts)

806-073
Wall-Mount Receptacle
(Pin Contacts)

806-079
In-Line Receptacle
(Pin Contacts)

806-080
Jam Nut Receptacle
(Pin Contacts)

806-083-02
Hermetic Bulkhead Feedthru,
Panel Mount

806-083-07
Hermetic Bulkhead Feedthru,
Jam Nut Mount

806-083-13
Hermetic Bulkhead Feedthru,
Weld Mount

SERIES 806 SIZE 8 RF CONTACT ARRANGEMENTS

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

Arrangement No.	10R1	16R2	18R3	20R4	22R5	24R8

SERIES 806 SIZE 12 RF CONTACT ARRANGEMENTS

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

Arrangement No.	9R1	12R2	14R3	16R4	16R7	18R8

SERIES 806 SIZE 16 RF CONTACT ARRANGEMENTS

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

Arrangement No.	8R1	10R2	11R4	12R5	14R7	16R12

RF

Series 795 aerospace-grade multiport rectangular Coax connector for RF, Microwave, and mmWave applications

The Glenair Series 795 is a multiport aerospace-grade coax connector designed for use with snap-in and removable size #8, #12, and #16 coax contacts from DC to 65 GHz frequency. Environmentally protected and EMI shielded for harsh application environments. Series 795 high-density multiport connectors are designed for use with Glenair BMB-style and other high-frequency coax contacts. These contacts accept high performance low-loss flexible cable, also supplied by Glenair.

- Size #8, #12, and #16 coax contact arrangements
- Single and double row high-density configurations
- Scoop-proof design with dual-lobe polarization for reliable mate and demate
- Precision-machined aluminum alloy shell with common ground plane
- Environmentally-protected with fluorosilicone face seal and rear grommet
- Shielded for EMI protection
- Available extended-length backshells

Series 795 connectors are optimized for use with 26.5 GHz **G-Link RF** contacts with integral female SMA adapter for attaching SMA plug directly to the contact.

G-Link RF

SERIES 795 RF CONNECTOR SELECTION GUIDE			
Cable Plugs, Socket Contacts	Cable Receptacles, Pin Contacts	Panel Mount Plugs, Socket Contacts	Panel Mount Receptacles, Pin Contacts
795-001S (#8 BMB Contacts)	**795-002P** (#8 BMB Contacts)	**795-003S** (#8 BMB Contacts)	**795-004P** (#8 BMB Contacts)
795-005S (#12 SMPM Contacts)	**795-006P** (#12 SMPM Contacts)	**795-007S** (#12 SMPM Contacts)	**795-008P** (#12 SMPM Contacts)
795-009S (#16 SMPS Contacts)	**795-010P** (#16 SMPS Contacts)	**795-011S** (#16 SMPS Contacts)	**795-012P** (#16 SMPS Contacts)

INSERT ARRANGEMENTS FOR SIZE #8 BMB TYPE RF CONTACTS						
1-2	**1-3**	**1-4**	**1-5**	**2-5**	**2-7**	**2-9**
1 row, 2 contacts	1 row, 3 contacts	1 row, 4 contacts	1 row, 5 contacts	2 row, 5 contacts	2 row, 7 contacts	2 row, 9 contacts

INSERT ARRANGEMENTS FOR SIZE #12 SMPM TYPE RF CONTACTS						
1-3	**1-5**	**1-6**	**2-5**	**2-7**	**2-9**	**2-11**
1 row, 3 contacts	1 row, 5 contacts	1 row, 6 contacts	2 row, 5 contacts	2 row, 7 contacts	2 row, 8 contacts	2 row, 11 contacts

INSERT ARRANGEMENTS FOR SIZE #16 SMPS TYPE RF CONTACTS								
1-2	**1-3**	**1-5**	**1-7**	**1-9**	**2-5**	**2-9**	**2-13**	**2-17**
1 row, 2 contacts	1 row, 3 contacts	1 row, 5 contacts	1 row, 7 contacts	1 row, 9 contacts	2 row, 5 contacts	2 row, 9 contacts	2 row, 13 contacts	2 row, 17 contacts

RF

GMMD Modular Micro-D differential twinax / RF coax solution

The Series GMMD is an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. It is one of the smallest ruggedized multiport RF coax connectors available on the market today.
The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it extremely versatile. Coax versions are supplied in prewired pigtail plug and receptacle assemblies. Coax insert arrangements support up to 16 discrete lines of 50 Ohm coax.

- Modular mixed signal RF/ low speed solutions
- Micro miniature form-factor for optimized SWaP
- Shell packaging and contact technology IAW MIL-DTL-83513
- Pigtails, back-to-back cables, and surface-mount SMT PCB versions
- 50Ω on 3.18mm pitch for combo arrangements
- 50Ω on 2.54 pitch for coax-only arrangements
- Shield isolated from connector shell
- PCB edge-launched for optimized 20GHz high-bandwidth performance

Edge-mount PCB versions support launching up to 20 GHz frequency signals from the board, and are compatible with RG-178 Coax, flexible and semi rigid 047, RG-179 and semi rigid 75Ω cables

GMMD RF coax connectors

HORIZONTAL PCB-MOUNT COAX AND COMBO COAX RECEPTACLES

-HRE Horizontal edge-
launched receptacle
-HRPE Horizontal panel-sealed
edge launched receptacle

PCB edge-launched versions of Series GMMD connectors are optimized for 20 GHz high-bandwidth performance. The micro miniature form-factor interconnects are supplied in 50 Ohm versions on 3.18mm pitch for combo arrangements, and 2.54mm pitch for coax-only arrangements. Shielded element is isolated from connector shell. Mating interface Compatible with RG-178, semi-rigid and flexible 047 cables for 50Ω / RG-179 and semi-rigid cables for 75Ω

COAX AND COMBO COAX JUMPERS AND PIGTAILS

-FP Cable plug connectors
-FPE Cable plug environmental
connectors
-FR Cable receptacle connectors
-FRP Rear panel-mount cable
receptacle connectors

Factory-terminated back-to-back and single-ended GMMD Coax cable assemblies provide a turnkey solution for easy on-site installation. Assemblies are supplied with GMMD plug or receptacle as required with a choice of any coax or combo contact arrangement. Environmental seal options are available for plug connectors. 50Ω and 75Ω Coax cable may be ordered in flexible or semi-rigid configurations as follows:

- **-C = 50**Ω RG178
- **-D = 50**Ω 047 Semi-Rigid
- **-E = 50**Ω 047 Flexible
- **-V = 75Ω RG179**
- **-W = 75Ω Semi-Rigid**

Integral backshells, hardware, and wire exit direction all supplied as standard catalog configurations.

COAX AND COMBO COAX CABLE ASSEMBLY CONNECTOR SELECTION GUIDE

GMMD-FP	GMMD-FPE	GMMD-FR	GMMD-FRP
Cable Plug	Cable Plug, Environmental	Cable Receptacle	Rear Panel Mount Cable Receptacle

GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

Contact Arrangement	2C	4C	6C
Shell Size	9	21	25
No. / type of contacts	2 X 50Ω Coax	4X 50Ω Coax	6X 50Ω Coax

Contact Arrangement	8C	16C
Shell Size	37	67
No. / type of contacts	8 X 50Ω Coax	16X 50Ω Coax

Contact Arrangement	2C9	1V9	2V9	4V
Shell Size	21	21	31	21
No. / type of contacts	2X 50Ω Coax, 9 X #24	1 X 75Ω Coax, 9 X #24	2 X 75Ω Coax, 9 X #24	4 X 75Ω Coax

GLENAIR GLENDALE:
Complete vertical integration of manufacturing resources— at home in Southern California since 1956

Glenair operates the largest high-reliability interconnect manufacturing operation in the United States, allowing us to fully support our broad range of land, sea, air, and space customers.

Glenair SoCal's most important asset: highly technical staff, fully empowered with all the right facilities and operation resources.

SAME-DAY SHIPMENT STOCKING

Immediate availability for high-demand connectors and tooling.

HARNESS ASSEMBLIES

for Micro-D, Nanominiature, and fiber optic connectors and cable assemblies.

IN-HOUSE TESTING CAPABILITIES

Glenair UK operates an independently accredited BS9000:CECC:IECQ test lab for internal and third-party product development / design verification and connector qualification including pure air standards.

Glenair UK complex integrated system for an exoatmospheric application with custom machined connectors and complex cabling

GLENAIR UK:
Mission-critical connectors
and assemblies for UK and
European markets with
a special focus on micro
and Nanominiature flexi
assemblies

GLENAIR ITALIA:
Manufacturing harsh-environment military, nuclear, and aerospace interconnect technologies for power, high-speed Ethernet, and hermetic seal applications.

HIGH-CAPACITY CNC MACHINING CENTERS
Allow Glenair BLQ to provide lightning-fast turnaround on small and custom orders as well as large production runs, all with superior surface finishes and better part quality.

ADVANCED HERMETIC SEAL AND CONNECTOR PLATING CAPABILITIES
Space-compliant gold and nickel plating performed in-house. Hermetic seal connector fabrication with performance levels to 1×10^{-7} helium leak rates.

TOTAL VERTICAL INTEGRATION
Includes In-house rubber and thermoplastic injection molding.

IN-HOUSE TEST LAB
With capabilities for both high-voltage as well as high-speed signal product qualification. Credentials include ISO 17025 and others.

GLENAIR SALEM:

Our space systems business unit in Salem, Germany, includes ample production space for precision machining and assembly, 300 m² ISO 8 and ISO 6 clean rooms, an ISO 5 flow chamber (certified to ESD Standard 61340-5-1), with accommodation for large mock-up and integration projects.

CLEAN ROOM ASSEMBLY
With both environmental filtering and electrostatic discharge protection.

SPACE-GRADE HARNESS FABRICATION AND INTEGRATION
In-house or at customer facility.

ELECTRO-MECHANICAL
Fabrication of space-grade interconnect technologies including HDRM (release nut) mechanisms.

Glenair®

3D Parts Models
3dparts.glenair.com

MISSION-CRITICAL
INTERCONNECT SOLUTIONS

Glenair, Inc.
1211 Air Way • Glendale, California • 91201-2497
Telephone: 818-247-6000 • Fax: 818-500-9912
sales@glenair.com • **www.glenair.com**

Glenair East
20 Sterling Drive
Wallingford, CT
06492

Telephone:
203-741-1115
Fax:
203-741-0053
sales@glenair.com

Glenair UK Ltd
40 Lower Oakham Way
Oakham Business Park
Mansfield, Notts
NG18 5BY England

Telephone:
+44-1623-638100
sales@glenair.co.uk

Glenair Microway Systems
7000 North Lawndale Avenue
Lincolnwood, IL
60712

Telephone:
847-679-8833
Fax:
847-679-8849

Glenair Nordic AB
Gustav III:s Boulevard 42
SE-169 27 Solna
Sweden

Telephone:
+46-8-50550000
sales@glenair.se

Glenair GmbH
Schaberweg 28
61348 Bad Homburg
Germany

Telephone:
06172 / 68 16 0
Fax:
06172 / 68 16 90
info@glenair.de

Glenair Iberica S.L.
Av. De Manoteras, 24 – 2º
28050 Madrid
Spain

Telephone:
+34 915 562 687
sales@glenair.es

Glenair Italia S.p.A.
Via Del Lavoro, 7
40057 Quarto Inferiore –
Granarolo dell'Emilia
Bologna, Italy

Telephone:
+39-051-782811
Fax:
+39-051-782259
info@glenair.it

Glenair France SARL
7, Avenue Parmentier
Immeuble Central Parc #2
31200 Toulouse
France

Telephone:
+33-5-34-40-97-40
Fax:
+33-5-61-47-86-10
sales@glenair.fr

Glenair Korea
6-21Tapsil-ro 58beon-gil
Giheung-gu, Yongin-si
Gyeonggi-do
Republic of Korea

Telephone:
+82-07-5067-2437
Fax:
+82-504-375-4549
sales@glenair.kr

Glenair Japan
40F, Nagoya Lucent Tower,
6-1, Ushijima-cho,
Nishi-ku, Nagoya, 451-6040
Japan

Telephone:
+81-52-569-2521
Fax:
+81-52-569-2523
sales@glenair.jp