

High-Performance, High-Speed Differential Technologies Available Now From Glenair



High Speed Series 80 Mighty Mouse Connectors with Fluoropolymer PFA Insulators

The Series 80 *High Speed* Mighty Mouse is Glenair's latest entry in our world of *high-speed* interconnect solutions. The connector is equipped with special PFA (Fluoropolymer) insulators and is optimized for use with high-speed differential wire such as our 963-001 series cable. Five insert arrangements are offered with 4, 7, 10, 19 and 26 size #23 contacts. The high-density, small form factor connector is suited for applications where traditional military circular connectors are too large or too heavy, and where the demands for high bandwidth, balanced impedance performance are at their highest. Other Glenair *High Speed* Solutions include:

High-Bandwidth Fiber Optic Connectors, Cables, and Termini

From our QPL MIL-PRF-28876 fiber optic connectors to our MIL-DTL-38999 type solutions, Glenair produces advanced performance fiber optic interconnection systems for every military and commercial standard. Fiber optic connectors, termini and cabling deliver secure high speed data in applications that require superior insertion loss and high data throughput. Fiber optic interconnect systems offer exponentially larger bandwidth compared to standard electrical cabling. Glenair manufactures a solution for every branch of the military and every mission-critical commercial application. Series #16 AWG Mighty Mouse fiber optic solutions are also now available.



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High-Performance Shielded Contact Connectors

High-speed differential impedance contacts, such as those used in advanced digital communications applications, are another key specialty at Glenair. Our Twinax and Quadrax contacts are exactly engineered and manufactured using the best available materials and manufacturing processes. Conductive elements are gold-plated copper alloy. Dielectrics are high performance fluorocarbon. Most Glenair cylindrical connectors, including our D38999 type, can accommodate shielded contacts that deliver balanced impedance performance for application frequencies above 1GHz.

Field-Ready, Integrated RJ-45 and USB Connectors


































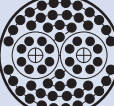
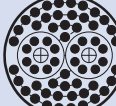





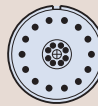



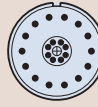
Glenair integrates commercial connection devices that traditionally deliver datalinks for high-speed protocols into standard MS type connector shells. We offer rugged field-ready circular connectors that enclose single and double RJ-45 or USB connectors. Users of these standard products need not worry about damaging delicate high bandwidth connections in harsh conditions when these connectors are deployed in place of standard, non-protected solutions. The MIL-DTL-5015 or MIL-DTL-26482 type connector shells provide impact resistance, ingress protection and positive coupling.



Dimensions in Inches (millimeters) are subject to change without notice.




Glenair connector and contact arrangements suitable for high-speed datalink applications

Protocol	Series 80 Mighty Mouse				SuperNine® 38999 Type			Series
	Series 801	Series 802, 803 and 804	Series 805	Series 806	MIL-STD-1560	El Ochito® / Quadrax	SpeedMaster™	Stand Insert
Up to: Cat 5e (1000BASE-T)	 8-13	 8-13	 10-13	 9-11	 11-35	 9G5 El Ochito - White	 11-1	 C-13
Up To: Cat 6A (10GBASE-T)	 8-1 El Ochito - White	Contact factory	 10-1 El Ochito - White	 10-1 El Ochito - White	Contact factory	 9G5 El Ochito - White	 11-1	Contact factory
USB 2.0	 6-4	 6-4	 8-4	 8-7	 9-35	 9G5 Quadrax	 11-1 (1 – 2 lines)	 A-5
USB 3.0	 8-1 El Ochito - Blue	N/A	 10-1 El Ochito - Blue	 10-1 El Ochito - Blue	N/A	 9G5 El Ochito - Blue	N/A	N/A
eSATA/SATA	 8-1 El Ochito - Red	N/A	 10-1 El Ochito - Red	 10-1 El Ochito - Red	N/A	 9G5 El Ochito - Red	N/A	N/A
DVI-D Single	 11-201 El Ochito - Red	AN/A	 13-201 El Ochito - Red	 14-20A El Ochito - Red	N/A	 13-14 El Ochito - Red	N/A	N/A
DVI-D Dual	 19-201 El Ochito - Red (2)	N/A	 21-201 El Ochito - Red (2)	 16-22 El Ochito - Red (2)	N/A	 19-4 El Ochito - Red (2)	N/A	N/A
HDMI 4k @60 FPS	 11-201 El Ochito - Red	N/A	 13-201 El Ochito - Red	 14-20A El Ochito - Red	N/A	 13-14 El Ochito - Red	N/A	N/A
Display Port 4k @60 FPS	 11-201 El Ochito - Red	N/A	 13-201 El Ochito - Red	 14-20A El Ochito - Red	N/A	 13-14 El Ochito - Red	N/A	N/A

Contact factory about El Ochito® insert arrangements

Glenair connector and contact arrangements suitable for high-speed datalink applications

Series 79™	Series 792™ HS	MIL-DTL-83513		Series 88 SuperFly®		Series 28 HiPer-D®		
Standard Inserts	El Ochito® / Quadrax	Standard Inserts	High-Speed Micro-D	Standard Inserts	SuperFly® Datalink	Standard Inserts	El Ochito® / Quadrax	SpeedMaster™
	 1P1 El Ochito - White	 15	 15	 C-10N	 882-001/002 El Ochito - White	 1H15	 1EA El Ochito - White	 2 (1 – 2 lines)
	 1P1 El Ochito - White	Contact factory	 15	Contact factory	 882-001/002 El Ochito - White	Contact factory	 1EA El Ochito - White	 2 (1 – 2 lines)
	 1P1 Quadrax	 9	 9	 C-2M2N or D2W2MN	 882-001/002 El Ochito - White (1 – 2 lines)	 1S9 (1 – 2 lines)	 1Q1 Quadrax (1 – 2 lines)	 2 (2 – 4 lines)
	 1P1 El Ochito - Blue	N/A	 15	N/A	 882-009/010 El Ochito - Blue	N/A	 1EB El Ochito - Blue	N/A
	 1P1 El Ochito - Red	N/A	 9	N/A	 882-023/024 El Ochito - Red	N/A	 1EC El Ochito - Red	N/A
	 2P2 El Ochito Red and White	N/A	 21	N/A	 882-019/020 El Ochito - Red	N/A	 2EC El Ochito - Red	N/A
	 3P3 El Ochito 2-Red, 1-White	N/A	 25	N/A	Contact factory	N/A	 3EF 2 El Ochito - Red 1 El Ochito - White	N/A
	 2P2 El Ochito Red and White	N/A	 21	N/A	 882-019/020 El Ochito - Red	N/A	 2EF El Ochito - Red	N/A
	 2P2 El Ochito Red and White	N/A	 21	N/A	 882-019/020 El Ochito - Red	N/A	 2EF El Ochito - Red	N/A

Contact factory about El Ochito® insert arrangements

Mighty Mouse High-Speed connectors: rugged environmental sealing and high-speed matched impedance electrical performance in an ultraminiature package



Glenair Series 80 Mighty Mouse connectors are the new industry standard for high-performance ultraminiature connectors. Now Glenair expands the Mighty Mouse line to include connectors optimized for high-speed matched impedance performance. The Mighty Mouse High-Speed product line features Fluoropolymer insulators for superior electrical performance in protocol-specific applications like eSATA and USB 2.0/3.0.

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MIGHTY MOUSE HIGH-SPEED



Series 80 Mighty Mouse
High Speed Connectors with
Fluoropolymer PFA Insulators

- For high-speed protocols: 10GBASE-T, USB 2.0
- Fluoropolymer PFA insulators for superior insertion loss and balanced impedance
- Series 801 double-start ACME thread and Series 804 push-pull quick disconnect connectors available
- Discrete components or overmolded cordsets

MIGHTY MOUSE WITH SIZE #8 QUADRAX AND DIFFERENTIAL TWINAX CONTACTS



Series 805 Mighty Mouse plug
with size 8 Quadrax contacts

- Differential Twinax contacts for 100 Ohm serial data transmission
- Quadrax contacts for 100BASE-T Ethernet
- Arrangements for 1, 2, 3, 4 or 5 snap-in, rear-release contacts
- Lightweight, low profile
- Available for Series 801 and 805 Mighty Mouse connectors

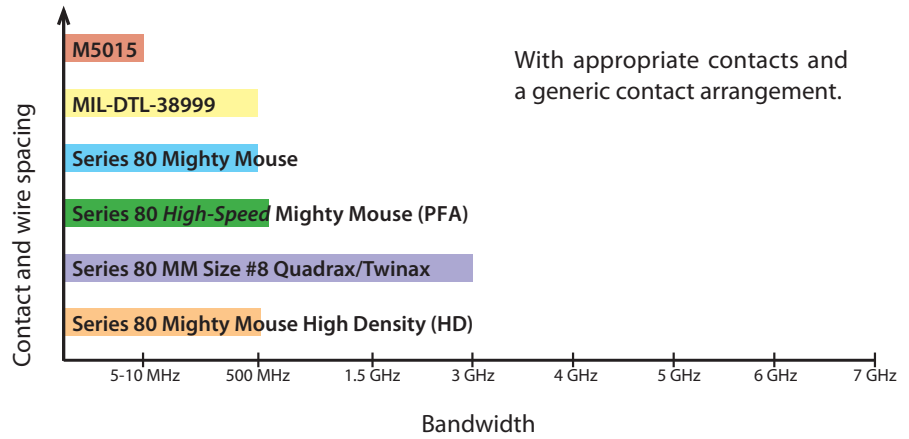
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Series 80 High Speed Mighty Mouse Connectors and Cables

Product Overview



This table compares contact and wire spacing and bandwidth performance in miniaturized interconnect applications. As contact density increases, the performance of the interconnect improves. Note the position of the High-Speed and Size #8 Mighty Mouse compared to standard Mighty Mouse.



Mighty Mouse High Speed Contact Arrangements				
Mating Face View of Pin Connector (Socket Connector Numbers are Reversed)				
6 - 4	6 - 7	7 - 10	9 - 19	10 - 26
Shell Size 6 4 Size #23 Contacts	Shell Size 6 7 Size #23 Contacts	Shell Size 7 10 Size #23 Contacts	Shell Size 9 19 Size #23 Contacts	Shell Size 10 26 Size #23 Contacts

Mighty Mouse #8 Quadrax / Differential Twinax Contact Arrangements					
Mating Face					
Series 801	Shell Size 8 1 Size #8 Contact	Shell Size 10 2 Size #8 Contacts	Shell Size 17 3 Size #8 Contacts	Shell Size 19 4 Size #8 Contacts	Shell Size 21 5 Size #8 Contacts
Series 805	Shell Size 10 1 Size #8 Contact	Shell Size 18 2 Size #8 Contacts	Shell Size 19 3 Size #8 Contacts	Shell Size 21 4 Size #8 Contacts	Shell Size 23 5 Size #8 Contacts

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