

5 GHZ Bi-directional 4 Lane I/O Connector System with Superior Mechanical Reliability

The Molex 4 Lane I/O connectors incorporate an industry compatible mating interface compliant with InfiniBand™ requirements. This I/O system has also been adopted by several other standards or MSA groups in addition to InfiniBand™, noted below. LaneLink™ is a 100 ohm cable to board I/O system optimized for differential signaling at 2.5 Gbps per pair. The Molex design features superior mechanical reliability and an extensive range of options including Latching and Jackscrews versions.

A recent feature to both 4x options is the addition of a landing area for automated Pick and Place. EMI shielding has now been improved by adding a rear EMI shield to reduce EMC/EMI leakages.


Features / Receptacle
Benefits

- | | |
|---|--|
| ■ Die cast frame with unitary latch posts and screw attach to PCB | ■ Provides the best available strain relief of cable to socket and isolates cable loads from SMT tails |
| ■ Optional top mount attach of die cast frame to chassis | ■ Additional strain relief |
| ■ Dedicated pick and place landing area | ■ Allows use of standard pick and place nozzles |
| ■ Solder post options (2 or 4 posts) | ■ Replaces need for screw down |
| ■ Various PCB thickness accommodated | ■ Allows customer to use various PCB options |
| ■ High level of pin to PCB compliance | ■ Helps coplanarity |
| ■ Extended crush pin alignment posts | ■ Eases alignment of connector to board |
| ■ Jackscrew option complies with SFF-8470 | |

SPECIFICATIONS
Reference Information

Packaging: Tray, Tape and Reel

Mates With:

91804 to 91635;

91803 to 91659;

91789 to 91803 or 91804

Designed In: Millimeters

Mechanical

Contact Retention to Housing: 5N (1.12 lb) min

Mating Force: 55.5N (12.33 lb) max for 4x; 73N (16.37 lb) max for 12x

Unmating Force: 7.0N (1.57 lb) min for 4x; 10.5N (2.35 lb) min for 12x; 49.0N (10.99 lb) max for 4x; 59.0N (13.23 lb) min for 12x

Durability: 250 cycles

Electrical

Voltage: 30 V AC max

Current: 0.5 A max

Contact Resistance: 80 milliohms

Dielectric Withstanding Voltage: 300 V AC

Insulation Resistance: 1000 Megohms

Physical

Housing: LCP, UL 94V-0

Contact: Phosphor Bronze

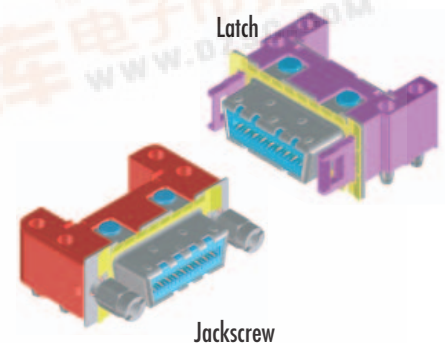
Plating: Contact Area — Gold over Palladium Nickel

Solder Tail Area — Tin

Underplating — Nickel

PCB Thickness: 1.60 mm (.063"), 2.40 mm (.094"), 4.00 mm (.157")

Operating Temperature: -20 to 60 °C



**91803 Jackscrew Receptacle
91804 Latch Receptacle
91789 EMI Rear Shield**
Markets and Applications

- Telecommunication and Data:
 - SAN (Storage Area Network) switches
 - RAID devices

- Industry Standard organisations:
 - 4x and 12x InfiniBand
 - 10 Gigabit Ethernet
 - 10 Gigabit Fiber Channel
 - 4x Serial ATA (Jackscrew)
 - 4x Serial Attach SCSI (Jackscrew)

- Specific Applications include:
 - Servers
 - Switches
 - Computers
 - Storage Devices
 - Internetworking Equipment

Server


ORDERING INFORMATION

Order No. Tray Packaging	Order No. Tape & Reel	Version	Rear Mounts	Solder Posts	Panel Mount
91803-0411	91803-8411	4x Jackscrew	No	No	No
91803-0413	91803-8413	4x Jackscrew	Yes	No	No
91803-0415	91803-8415	4x Jackscrew	No	2	No
91803-0417	91803-8417	4x Jackscrew	Yes	4	No
91804-0411	91804-8411	4x Latch	No	No	No
91804-0413	91804-8413	4x Latch	Yes	No	No
91804-0415	91804-8415	4x Latch	Yes	No	Yes
91804-0417	91804-8417	4x Latch	No	No	Yes
91804-0451	91804-8451	4x Latch	No	2	No
91804-0453	91804-8453	4x Latch	Yes	4	No
91804-0455	91804-8455	4x Latch	Yes	4	Yes
91804-0457	91804-8457	4x Latch	No	2	Yes
91789-0001	4X Rear EMI Shield (Optional)				

Foam gasket option also available.
Optional EMI rear shield (91789), Latch locking panel (91532)
and Jackscrew standoffs (91619) ordered separately.
Contact your local sales office

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