## FEATURES AND BENEFITS

### 5GHZ 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<sup>TM</sup> requirements. This I/O system has also been adopted by several other standards or MSA groups in addition to InfiniBand<sup>TM</sup>, noted below. LaneLink<sup>TM</sup> is a 100ohm cable to board I/O system optimized for differential signaling at 2.5Gbps per pair. The Molex design features superior mechanical reliability and an extensive range of options including latching and jackscrews versions.

A new feature to both 4x options is the addition of a landing area for automated Pick and Place.

Features	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 place thickness accommodated	
High level of pin to PCB compliancy	Helps coplanarity
• Extended crush PCB alignment posts	• Eases alignment of connector to board
• Jackscrew option complies with SFF-847	0



0.50mm (.020") Pitch LaneLink™ 4x Latch Receptacle 91803 Jackscrew Receptacle 91804 Latch Receptacle



## **SPECIFICATIONS**

#### **Specifications**

#### Reference Information

Packaging: Tray Mates With: 91525 to 91635; 91629 to 91659 Designed In: Millimeters

#### Electrical

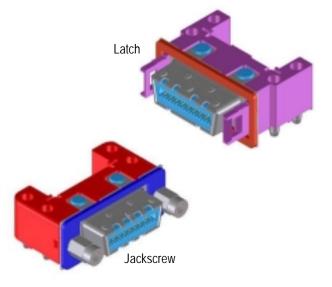
Voltage: 30V AC max Current: 0.5A max Contact Resistance: 80 mOhms Dielectric Withstanding Voltage: 300V AC Insulation Resistance: 1000 MOhms

#### 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

### Physical

Housing: LCP, UL 94V-0 Contact: Phosphor Bronze Plating: Contact Area – Gold over Palladium Nickel Solder Tail Area – Tin/Lead Underplating -- Nickel PCB Thickness: 1.60mm (.063"), 2.40mm (.094"), 4.00mm (.157") Operating Temperature: -20 to 60 degrees Celsius



# **APPLICATIONS**

### 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



0.50mm (.020") Pitch LaneLink<sup>™</sup> 4x Latch **Receptacle** 91803 Jackscrew **Receptacle** 91804 Latch Receptacle

Server



Switch

Order No. Tray Packaging	Order No. Tape & Reel	Version	Rear Mounts	Solder Posts	Panel Mount
91803-0410	91803-8410	4x Jackscrew	No	No	No
91803-0412	91803-8412	4x Jackscrew	Yes	No	No
91803-0414	91803-8414	4x Jackscrew	No	2	No
91803-0416	91803-8416	4x Jackscrew	Yes	4	No
91804-0410	91804-8410	4x Latch	No	No	No
91804-0412	91804-8412	4x Latch	Yes	No	No
91804-0414	91804-8414	4x Latch	Yes	No	Yes
91804-0416	91804-8416	4x Latch	No	No	Yes
91804-0450	91804-8450	4x Latch	No	2	No
91804-0452	91804-8452	4x Latch	Yes	4	No
91804-0454	91804-8454	4x Latch	Yes	4	Yes
91804-0456	91804-8456	4x Latch	No	2	Yes



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