

# molex® 0.50mm (.020") Pitch LaneLink™ 4x and 12x Cable Assemblies

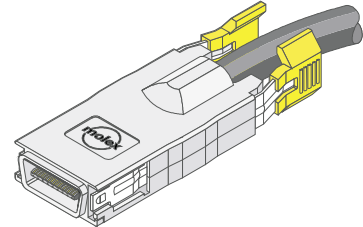
**LaneLink™ assemblies feature user friendly squeeze-to-release latch to guarantee proper mating**

LaneLink cable assemblies meet the new InfiniBand\* architecture, which is an approach to I/O technology that was created by the industry's top computer manufacturers to address the need for greater scalability, reliability, availability and performance in and around servers. The technology will be used to connect servers with remote storage and networking devices, as well as other servers, through host-channel adapters (HCAs) and target-channel adapters (TCAs).

The InfiniBand specification grew out of the merger of two earlier groups, Next-Generation I/O and Future I/O, to become one of the enablers for industry-standard server networks. It is designed to support bandwidths well beyond today's prevailing I/O technologies and will run at 2.5Gbps in a single-directional link. Scaling in bandwidth and frequency is achieved in links of 1 bit, 4 bit and 12 bit bidirectional connections (1X, 4X and 12X). The Molex design adds desirable features, solving issues existing with competitive product. This I/O system has been adapted by several other standards or MSA groups in addition to InfiniBand.

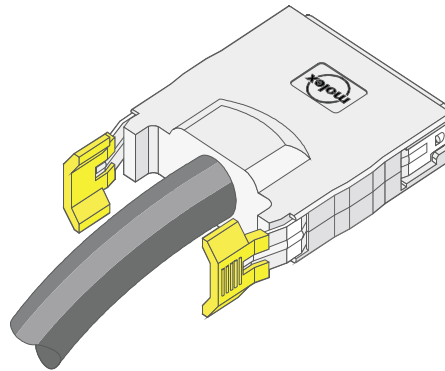
\*InfiniBand is a registered trademark of the InfiniBand Trade Association

**4x – 74506**  
**12x – 74509**



## Features and Benefits

- Squeeze-to-release latch provides user with friendly, positive latch/unlatch from the PCB connector
- Molex offers a total InfiniBand solution that provides an industry standard compatible interface with 4x (91525) and 12x (91629) connectors
- Lengths up to 20m are possible with equalization and pre-emphasis (10m standard InfiniBand)
- Greater system flexibility is available with either latch or jackscrew connector and plug designs
- High performance production test rack provides 100% testing to XAUI and InfiniBand industry standards
- Standard 4x interface mates with XenPak (74734) and XPAK (74732) copper transceivers



## SPECIFICATIONS

### Reference Information

Mates With: 91525-XXXX (latch)  
91629-XXXX (jackscrew)

Designed In: Millimeters

### Electrical

Voltage: 30V AC/contact

Current: 0.5A/contact

Contact Resistance: 80ohms

Dielectric Withstanding Voltage: 300V/min DC

Insulation Resistance: 10<sup>3</sup> M Ohms minimum between adjacent contacts

### Mechanical

Mating Force: 55.5N

Unmating Force: 49.0N

Durability: 250 cycles

### Physical

Housing: Zinc die cast

Contact: Gold flash over Nickel plating

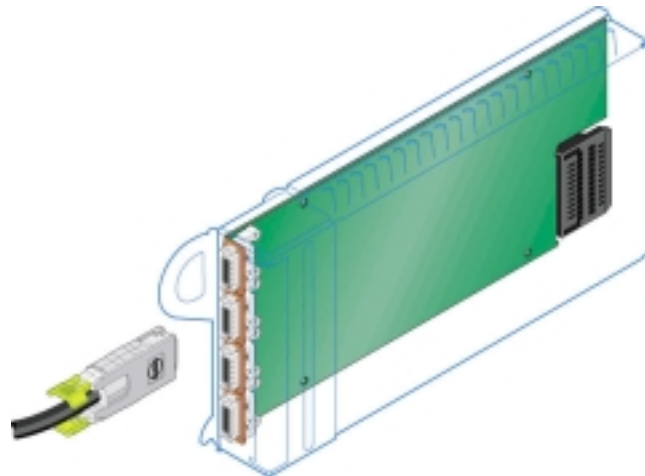
Plating: Contact Area –Nickel

Solder Tail Area –Nickel allover

Underplating – Gold flash over

Paladium Nickel

Operating Temperature: -20 + 85°C



## APPLICATIONS

- Server storage applications:
  - SAN (Storage Area Network) switches, routers and servers, storage racks
  - RAID (Random Array of Integrated Discs) devices
- Industry Standard organizations:
  - 4x and 12x InfiniBand
  - 10 Gigabit Ethernet
  - 10 Gigabit Fibre Channel
  - 4x Serial ATA
  - 4x Serial Attach SCSI

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## ORDERING INFORMATION

| Order No.  | Description                   |
|------------|-------------------------------|
| 74506-XXXX | LaneLink 4x Cable Assemblies  |
| 74509-XXXX | LaneLink 12x Cable Assemblies |

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