

# LaneLink™ Dual Data Rate (DDR) InfiniBand\* Cable Assemblies

74595 4x

# LaneLink DDR InfiniBand cable assemblies increase system speeds while improving signal quality and lowering overall costs

Increased industry requirements for greater system performance and scalability led to the development of the Dual Data Rate (DDR) specification by the InfiniBand technology group. Molex's DDR assemblies provide system speeds up to 40 Gbps over 8 differential cable pairs (4x).

Molex's DDR InfiniBand cable assemblies provide improved cable signal integrity versus standard 4x InfiniBand cables (Series 74506). A new paddlecard offers improved signal integrity over the previous edge card connector and paddlecard design. In addition, reduced costs are achieved due to decreased assembly time. Superior cable assembly

quality is achieved through improved manufacturing methods and by reducing Electro Magnetic Interference (EMI) emissions.

Molex offers a total DDR solution by providing the DDR industry-standard interface with 4x connector options. Recommended 4x PCB receptacles are the LaneLink latching version, series 91804 or the LaneLink jackscrew version, series 91803. For additional information on Molex's InfiniBand product offerings, visit: www.molex.com/infiniband.html. For a complete listing of Molex's LaneLink products, visit: www.molex.com/product/io/lanelink.html.



Left-to-right: DDR InfiniBand cable assembly (Series 74595), 4x LaneLink receptacle (Series 91804)

#### **Features and Benefits**

- New paddlecard design replaces PCB straddlemount connector to provide improved signal integrity versus standard 4x InfiniBand cable assemblies (Series 74506) and lower overall assembly cost
- Re-designed, die-cast back shell provides overall EMI protection and reduces EMI emissions on sides of plug
- Improved method of cable-braid capture at the cable-plug exit ensures lower EMI emissions on rear of plug compared to standard 4x InfiniBand cables
- Multiple latching versions available: squeeze, lanyard and jackscrew provides greater flexibility in system design and cable routing
- Data rates up to 5 Gbps per pair doubles standard 4x InfiniBand data rates and provides up to 40 Gbps data rate for the total DDR system

## **SPECIFICATIONS**

#### **Reference Information**

Packaging: Bag and Box Mates With: 91803, 91804 Designed In: Millimeters

### Electrical

Voltage: 30V AC per contact Current: 0.5A per contact Contact Resistance: 80 ohms

# Mechanical - Latching

Mating Force: 55.50N (12.47 lb) Unmating Force: 49.0N (11.01 lb)

Durability: 250 cycles

# **Physical**

Housing: Zinc die cast

Operating Temperature: -20 to +85°C



4x Lanyard and Squeeze-style latch (Series 74595) 4x Jackscrew style latch - available upon request 12x Squeeze-style latch (Series 111000) - available Q4 2009

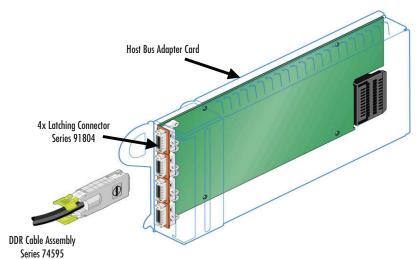


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Server Storage Applications

- SAN (Storage Area Network) switches, routers, servers and storage racks
- RAID (Redundant Array of Integrated Discs) devices



## **ORDERING INFORMATION**

| Order No.  | Lanes | Length          | Cable AWG | Latch Style |
|------------|-------|-----------------|-----------|-------------|
| 74595-1005 | 4     | 0.50m (1.64ft)  | 30        | Squeeze     |
| 74595-1010 |       | 1.00m (3.28ft)  |           |             |
| 74595-1020 |       | 2.00m (6.56ft)  |           |             |
| 74595-1030 |       | 3.00m (9.84ft)  |           |             |
| 74595-1050 |       | 5.00m (16.40ft) | 28        |             |
| 74595-1070 |       | 7.00m (22.97ft) | 24        |             |
| 74595-5005 | 4     | 0.50m (1.64ft)  | 30        | Lanyard     |
| 74595-5010 |       | 1.00m (3.28ft)  |           |             |
| 74595-5020 |       | 2.00m (6.56ft)  |           |             |
| 74595-5030 |       | 3.00m (9.84ft)  |           |             |
| 74595-5050 |       | 5.00m (16.40ft) | 28        |             |
| 74595-5070 |       | 7.00m (22.97ft) | 24        |             |

Per the DDR spec, standard lengths are available up to 12 meters. Contact Molex Customer Service for lengths not shown above.

# www.molex.com/product/io/lanelink.html

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<sup>\*</sup>InfiniBand is a trademark of the InfiniBand Trade Association