molex®

0.50mm (.020") Pitch LaneLink™ 10GBASE-CX4 Cable Assemblies
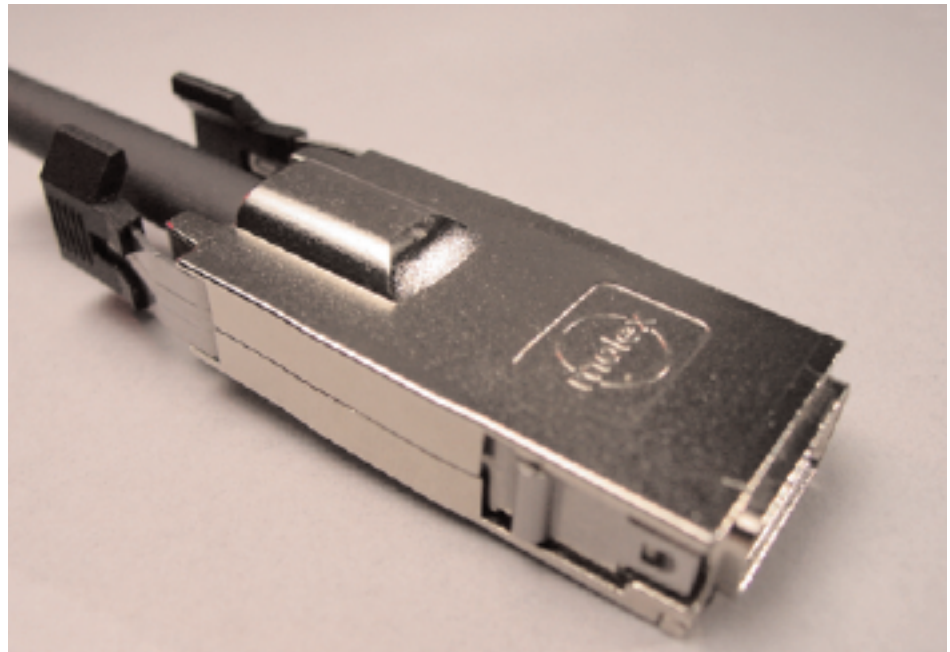
74526

10GBASE-CX4 LaneLink Cable Assemblies Connect Servers or Switches Over Short Distances

Molex's superior design and engineering, along with state-of-the-art manufacturing, combine to provide a solution for all 10GBASE-CX4 applications. The 10 Gigabit Ethernet (10 GbE) Alliance was organized to facilitate and accelerate the introduction of 10GbE into the networking market. The main factor driving 10GbE is the increase in internet and intranet traffic. Factors contributing to this growth include increases in the number of network connections, increases in the connection speed of each end-station, and an increase in web- hosting and application-hosting traffic.

LaneLink CX4 cable assemblies are designed and engineered to meet the architecture set forth by IEEE 802.3. The 802.3ak design uses four transmitters and four receivers operating differentially over a bundle of thin twin-axial cables to transmit 2.5 Gbps each, as opposed to transmitting 10 Gbps over a single copper link. This requires four differential pairs in each direction, totaling eight twin-axial channels per assembly.

This I/O system has been adapted by several other standards or MSA groups in addition to CX4, noted below in the 'Regional Markets, Applications and Typical Customers' section.

For more information on CX4, visit the website at: www.ieee802.org/3/10GBCX4/.

Features and Benefits

- Squeeze-to-release latch provides user with easy-to-use positive latch and unlatch system from the PCB connector
- Molex offers a total 4X system solution providing industry standard interfaces with LaneLink 4X connectors (91525 Series), XENPAK modules (74734 Series), XPAK modules (74732 Series) and X2 copper transceivers (74735 Series)
- Designed to allow customers to use pre-emphasis on the board level silicon (customer needs to modify their board for the signal to achieve optimum length) to provide cable length in excess of 15 meters
- High performance production test rack provides 100% eye-pattern testing

SPECIFICATIONS

Reference Information
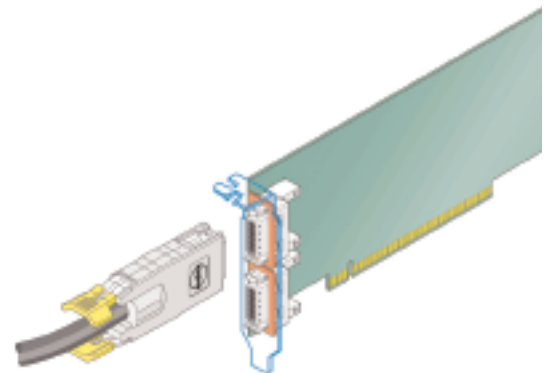Mates With: 91525-XXXX (latch)
Designed In: Millimeters

Electrical
Voltage: 30V AC per contact
Current: 0.5A per contact
Contact Resistance: 80Ω
Dielectric Withstanding Voltage: 300V/minimum DC
Insulation Resistance: 10,000MΩ 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 to + 85°C

■ Gigabit Ethernet Applications:
- Enterprise, core and edge networking
- Switches, servers and routers

■ Industry Standard Organizations:
- 4X and 12X InfiniBand*
- 10 Gigabit Ethernet
- 10 Gigabit Fibre Channel
- 4X SATA2
- 4X Serial Attach SCSI (SAS)

Complementary Products

■ 4X and 12X Connectors (9125, 91629, 91635, 91659, 92903)

■ XENPAK Modules (74734)

■ XPAK Modules (74732)

■ X2 Copper Transceivers (74735)

ORDERING INFORMATION

Order No.	Wire Size	Cable Length
74526-1001	28	0.5m (1.64 ft.)
74526-1002	28	1.0m (3.28 ft.)
74526-1003	28	2.0m (6.56 ft.)
74526-1004	28	3.0m (9.84 ft.)
74526-1005	28	5.0m (16.40 ft.)
74526-1008	28	9.0m (29.53 ft.)
74526-1006	26	10.0m (32.81 ft.)
74526-1010	26	12.0m (39.37 ft.)
74526-1009	26	14.0m (45.93 ft.)
74526-1007	24	15.0m (49.21 ft.)

*InfiniBand is a registered trademark of the InfiniBand Trade Association