molex® 0.50mm (.020") Pitch
LaneLink™ 4X Cable Assemblies

74527 SAS
74530 SATA I/O

LaneLink™ assemblies feature sturdy jack-screw hardware to guarantee secure mating

The new 4X Serial Attached SCSI (SAS) and Serial ATA (SATA) cable assemblies are the latest addition to Molex's extensive LaneLink product line. Molex's superior design and engineering along with state-of-the-art manufacturing combine to provide a solution for all external, 4X SAS and SATA Input/Output (I/O) applications.
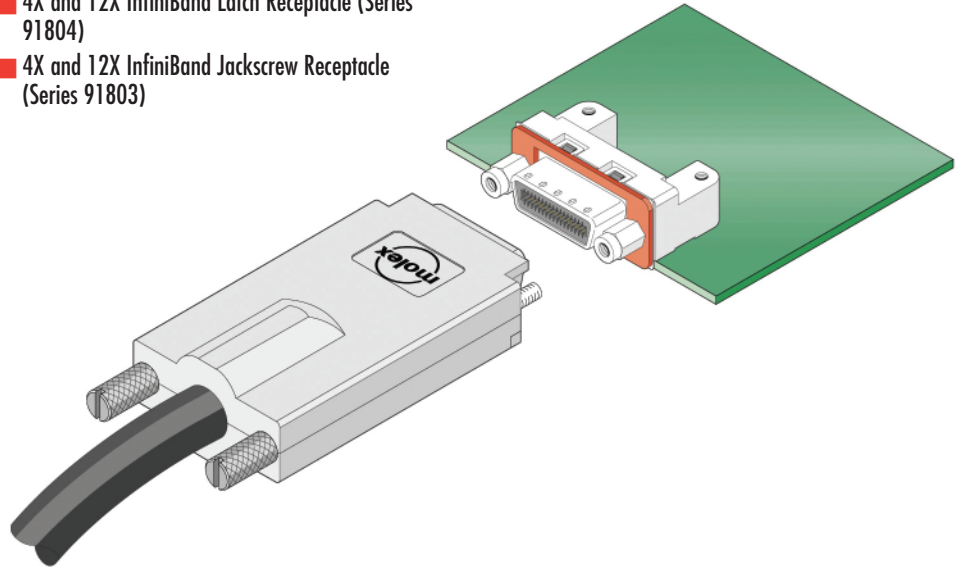
LaneLink 4X SAS and SATA I/O cable assemblies are designed and engineered to meet the architecture set forth by the T10 SCSI specification. The standard specifies a high-speed, point-to-point technology, initially designed to operate at speeds up to 3 Gbps, with a roadmap to operate at 12 Gbps. Customer protocol requirements determine which assembly is used, as both designs are identical.

With storage requirements escalating and becoming more complex, factors such as larger capacity, greater density, security, scalability and accessibility are more critical than ever. Enterprise solutions are recognizing increasing pressure for substantial capacity, performance, lower failure rates and greater choice of components. SAS and SATA I/O solutions meet these demands while providing the highest performance available.

Molex is an active member of the SCSI and SATA trade associations. LaneLink 4X assemblies have been accepted by multiple standards groups, or Multi-Source Agreement (MSA) groups, including the T10 SCSI specification, SAS, SATA I/O, 4X and 12X InfiniBand*, 10 Gigabit Ethernet and 10 Gigabit Fibre Channel.

These 4X SAS and SATA I/O assemblies complement the broad line of Molex's LaneLink offerings. The following list details Molex's extensive LaneLink product line:

- 4X InfiniBand Latch Cable Assembly (Series 74506)
- 4X 10GBASE-CX4 Latch Cable Assembly (Series 74526)
- 4X and 12X InfiniBand Latch Receptacle (Series 91804)
- 4X and 12X InfiniBand Jackscrew Receptacle (Series 91803)

SAS (series 74527) cable assembly mating to 4X jackscrew receptacle (series 91803)

Features and Benefits

- Sturdy jackscrew hardware provides user with guaranteed mating with the PCB connector
- Molex offers a total system solution providing an industry standard compatible interface with 4X mating connectors

- High performance production test rack provides 100% eye pattern testing to SAS and SATA I/O standards
- Break-out cables (SAS to SATA) provide an external-to-internal connection

- LaneLink assemblies are SFF-8470 compliant to meet industry specifications

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SPECIFICATIONS

Reference Information
Mates With: 91803-XXXX (jackscrew)
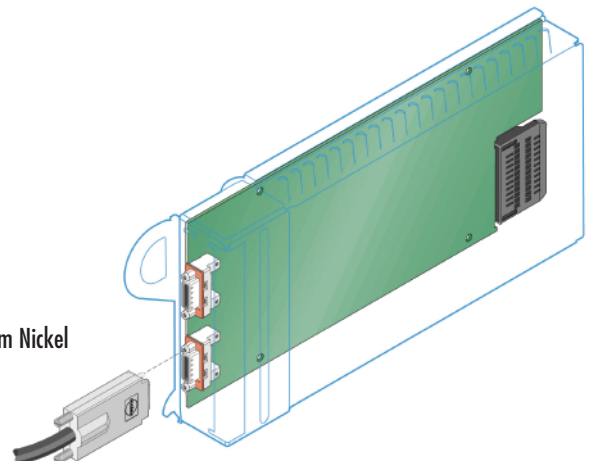Designed In: Millimeters

Electrical
Voltage: 30V AC per contact
Current: 0.5A per contact
Contact Resistance: 80 ohms
Dielectric Withstanding Voltage: 300V min. DC
Insulation Resistance: 1000 Megohms minimum
    between adjacent contacts

Mechanical
Mating Force: 55.5N (12.36 lbf.)
Unmating Force: 49.0N (11.02 lbf.)
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
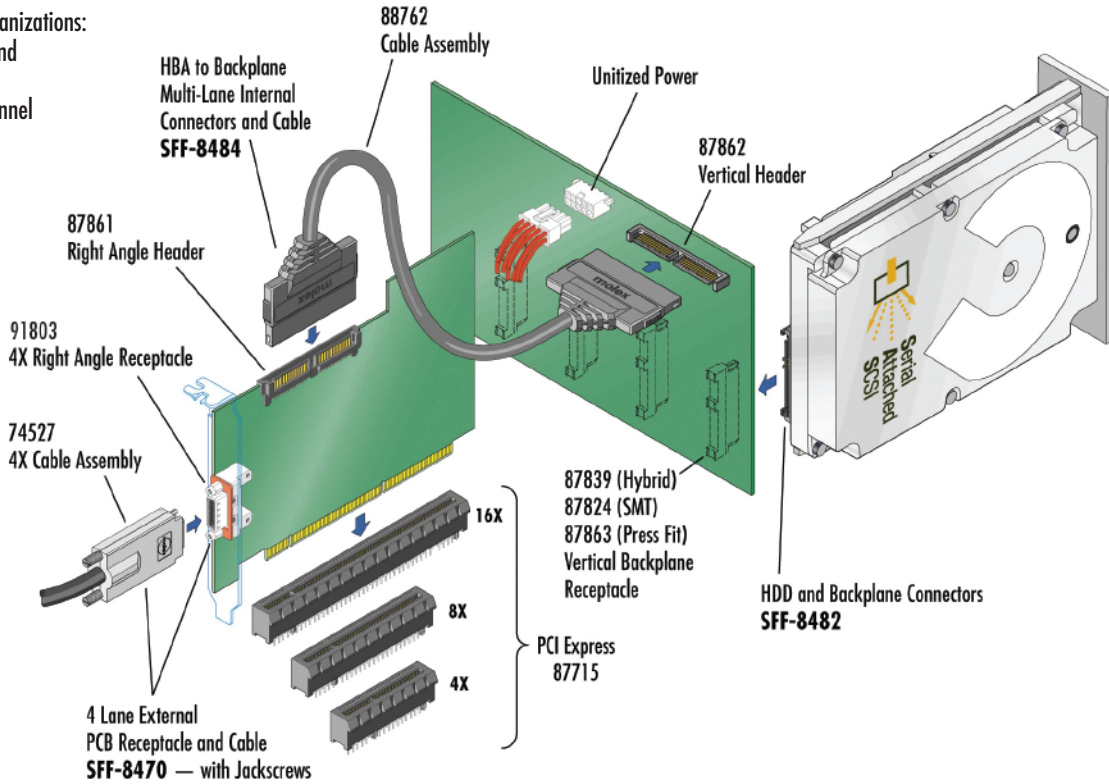Operating Temperature: -20 to + 85°C

molex®

0.50mm (.020") Pitch
LaneLink™ 4X Cable Assemblies

74527 SAS
74530 SATA I/O

■ Server storage applications
- Network Interface Cards (NIC) and Host Bus
  Adapters (HBA), routers and servers, storage racks
- Redundant Array of Integrated Discs (RAID) devices

■ Industry standard organizations:
- 4X and 12X InfiniBand
- 10 Gigabit Ethernet
- 10 Gigabit Fibre Channel
- T10 SCSI/SAS
- T13 SATA
- SFF Committee

88762
Cable Assembly

HBA to Backplane
Multi-Lane Internal
Connectors and Cable
SFF-8484

Unitized Power

87862
Vertical Header

87861
Right Angle Header

91803
4X Right Angle Receptacle

74527
4X Cable Assembly

87839 (Hybrid)
87824 (SMT)
87863 (Press Fit)
Vertical Backplane
Receptacle

HDD and Backplane Connectors
SFF-8482

16X

8X

4X

PCI Express
87715

4 Lane External
PCB Receptacle and Cable
SFF-8470 — with Jackscrews

Complete end-to-end solution available from Molex; controller card to backplane to SAS or SATA drive

ORDERING INFORMATION

SAS Cable Assemblies (74527)

Order No.	Wire Size	Cable Length	Specification
74527-3001		0.50m (1.64')	
74527-3002	28 AWG	1.00m (3.28')	
74527-3004		3.00m (9.84')	SAS
74527-3006	26 AWG	5.00m (16.40')	
74527-3008	24 AWG	7.00m (22.97')	

SATA I/O Cable Assemblies (74530)

Order No.	Wire Size	Cable Length	Specification
74530-0001		0.50m (1.64')	
74530-0002	28awg	1.00m (3.28')	
74530-0003		3.00m (9.84')	SATA I/O cables
74530-0004	26awg	5.00m (16.40')	
74530-0005	24awg	7.00m (22.97')	

Visit our Web site at http://www.molex.com/product/io/lanelink.html