

miniSAS HD

Internal and External Data Center Cabling

High-Speed Serial Mini-SAS HD

Lorom's Mini-SAS HD system provides a cost-effective, highspeed solution that meets the bandwidth requirements of current and future applications in servers and external storage systems.

Cable assemblies offered by LOROM exceed the Serial Attached SCSI (SAS) HD requirements for mini-multilane external systems standardized port port interfaces. Specially, our Mini-SAS HD products exceed the applicable requirements of the INCITS T10 SAS 3.0 & SAS 4.0 specification and conform to the mechanical requirements described in the SFF-8643 and SFF-8644 standard. The supported data rate per channel is 12 Gbps, 22.5Gbps and beyond.

Product Features & Benefits

- Broadband operation capabilities for data rate up to 90Gbps and beyond
- Both internal and external miniSAS HD cable assembly support SAS 3.0 & 4.0 specification
- Choice of 24, 26, 28 and 30awg EMAXX bulk cable
- Fully EEPROM memory map compliant
- Scalable 4X and 8X cable plug option
- Straight and right angle types cable plug option
- LOROM smart latch mechanism provides secure connection and optimize stacking
- Adaptive, strong EMI gasket and die-cast backshell assure proper EMI shielding
- Robust strain relief system isolates cable termination from mechanical stress
- Controlled wire management and termination process assures consistent high-speed electrical performance
- Fully compatible with SFF-8643 and SFF-8644 specification
- RoHS complaint

Target Markets & Applications

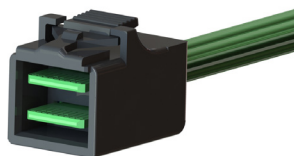
- Data Servers
- RAID Systems
- Storage Racks
- External Storage Systems
- SAS/SATA HBA interfaces Direct-attached Storage
- (DAS) Communications Switches

Industry Standards

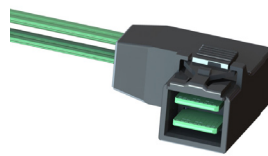
- SAS 3.0 & 4.0
- SFF-8643 and SFF-8644

Electrical Characteristics	
Differential Impedance:	100± 10 Ohms
Data Rate:	90Gbps and beyond
Current Rating:	Signal application only
Mechanical Characteristics	
Durability:	250 cycles, EIA364-23
Mating Force:	150N maximum, EIA 364-13
Unmating Force:	50N maximum, EIA 364-13
Latched Plug Pull Out Force:	75N minimum
Environmental Characteristics	
Temperature Life:	105°C for 240 hours, EIA 364-17, Method A
Cyclic Temperature and Humidity	24 cycles
	1 cycle - 25°C, 80%RH to 65°C, 50%RH to 25°C 80%, EIA 364-31 Method III
Thermal Shock	55°C to +85°C, 10 cycles, EIA 364-32 Method A, Test Condition 1

Lorom internal MiniSAS HD cable assemblies come with straight and right angle types cable plug option. The pictures below show some typical configurations. These cable assemblies can also be customized to meet special requirement from our customers.



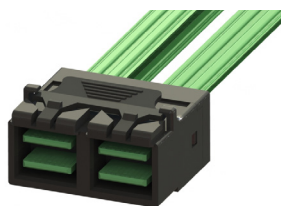
Straight, 4x



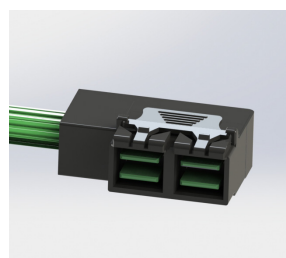
Left Angle, 4x



Down Angle, 4X



Straight, 8X



Left Angle, 8X



Down Angle, 8X

Lorom external MiniSAS HD cable assemblies come with 4X and 8X cable plug option.



4X



8X


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