# Mini SAS HD Interconnects



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### Mini SAS HD Interconnect Specifications/Applications

- ➤ Next generation External SAS (Serial Attached SCSI) input/output interconnect product family
  - compliant with SAS 2.1 (6Gbps per lane) industry standard
  - compatible with SAS 3.0 (12Gbps per lane) proposal
  - meets mechanical requirements of SFF-8644 (Mini Multilane 12 Gbps 8/4X Shielded Connector)
- > Data Communication Applications
  - Enterprise storage
  - High-performance computing
  - Networking
  - Data centers



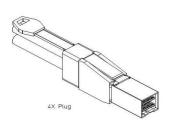


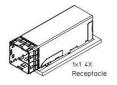
# Mini SAS HD Interconnect Pluggable Solutions

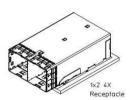
- Standard host board connector & cage assembly
- Scalable interface: 1x1, 1x2,1x4

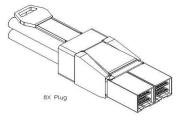


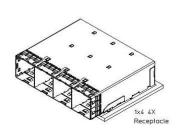
- Direct attach passive copper cable assembly with option for active
- Direct attach active optical cable assy
- Optical transceiver













#### Mini SAS HD Interconnect Product Features & Benefits

- > Reduced size of interconnect system increases linear board density
- ➤ Board connector compliant with released SAS 2.1 and proposed SAS 3.0 standards
  - SAS 2.1 product scalable up to 16 lanes at 6Gbps for 96G aggregate solution
  - SAS 3.0 product scalable up to 16 lanes at 12Gbps for 192G aggregate solution
- Multi-port functionality offers design flexibility
- Integrated connector and cage design
- > 4x and 8x cable plug options
- Keying for proper plug orientation



# Host Board Connector/Cage Assembly Features and part number chart

- Pre-assembled (one-piece) connector/cage assembly
- Press-fit termination, cage is screw mounted for additional retention
- > EMI gasketing at bezel opening
- Light pipe & heat sink optional





| Cage style       | TE Part No. |  |  |
|------------------|-------------|--|--|
| Single port (4X) | 2149027-1   |  |  |
| 2-ports (8X)     | 2149966-1   |  |  |
| 4-ports (16X)    | 2149375-1   |  |  |
| Single with LP   | 2198484-1   |  |  |
| 2-ports with LP  | 2198483-1   |  |  |
| 4-ports with LP  | 2180736-1   |  |  |



### Mini SAS HD Interconnect Cable plug features

- Scalable 4x and 8x cable plug options
- Hybrid cables for backward compatibility with legacy systems
- ➤ Improved latch design for reduced insertion force and increased retention
- ➤ Enhanced EMI skirt design eliminates elastomeric gasket
- ➤ 26, 28 and 30 AWG TurboTwin bulk cable
- > Full EEPROM memory map compliance





## Mini SAS HD Interconnect Cable Assembly Part Numbers

| Base P/N          | Description                  | AWG | Min Length | Max Length |
|-------------------|------------------------------|-----|------------|------------|
| 2202501-1 thru -8 | 4X to 4X Passive Mini SAS HD | 26  | 0.5m       | 7.0m       |
| 2202502-1 thru -6 | 4X to 4X Passive Mini SAS HD | 28  | 0.5m       | 5.0m       |
| 2202503-1 thru -4 | 4X to 4X Passive Mini SAS HD | 30  | 0.5m       | 3.0m       |
| 2202504-1 thru -8 | 8X to 8X Passive Mini SAS HD | 26  | 0.5m       | 7.0m       |
| 2202505-1 thru -6 | 8X to 8X Passive Mini SAS HD | 28  | 0.5m       | 5.0m       |
| 2202506-1 thru -4 | 8X to 8X Passive Mini SAS HD | 30  | 0.5m       | 3.0m       |
| 2202507-1 thru -8 | 4X HD to Standard Mini SAS   | 26  | 0.5m       | 7.0m       |
| 2202508-1 thru -6 | 4X HD to Standard Mini SAS   | 28  | 0.5m       | 5.0m       |
| 2202509-1 thru -4 | 4X HD to Standard Mini SAS   | 30  | 0.5m       | 3.0m       |

