



Mini Serial Attached SCSI (miniSAS) Internal Cable Assemblies

3M™ Mini Serial Attached SCSI (miniSAS) Internal Cable Assemblies Provide High Density Solutions for High Performance Storage Requirements

3M Mini Serial Attached SCSI (miniSAS) Internal Cable Assemblies provide for high speed transmission up to 6 Gbps. It is an ideal interconnect solution for the growing server and storage market. MiniSAS are designed to significantly reduce the cable size for storage systems currently using SAS 4-lane (4x or 4-lanes of data) and are being widely adopted for next-generation designs.

The 36-position internal miniSAS cable assemblies are available in custom lengths of up to one meter. They are also available in three standard sideband configurations. Customized sideband configurations are available upon request.

MiniSAS products are second generation SAS (Serial Attached SCSI) interconnects. First generation SAS connectors supported data rate up to 3.0 Gbps, miniSAS doubles that data rate to 6 Gbps per channel. While SAS supports single and 4-lane capability, miniSAS provides the 4-lane capability at greater densities. The increased system and communication speeds require an improved signal integrity design to preserve data loss integrity during transmission. Providing the electrical performance that meets the required characteristics is critical for these high speed applications.

MiniSAS was developed to support data rates at 6.0 Gbps in order to meet the ongoing industry requirement for higher speed and greater bandwidths, This data rate is achieved via the use of high speed differential signals. The 0.8 mm pitch connector provides increased I/O density with greater channel capabilities and requires less space on the PCB boards. One assembly is designed to support up to four channels of transmit and receive. Two levels of EMLB contacts support the hot plugging capability.

Technical Information

- SFF 8087 Standard
- Custom lengths up to one meter
- Three standard sideband configurations
- Custom sideband configurations possible
- RoHS Compliant*

***RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

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3M™ Mini Serial Attached SCSI (miniSAS)
Internal Cable Assembly

The 3M™ Mini Serial Attached SCSI (miniSAS) Internal Cable Assemblies mate to 3M™ MiniSAS Connectors which are available in vertical and right angle internal boardmount versions. These products conform to the SFF 8086 Standard. The SFF Standards covering miniSAS were developed to support the aggregation and cabling of SAS signals into a dense high speed 4-lane architecture, providing both internal and external configurations. Different sizes of the same connector are used for the internal and external versions. The connectors are surface mount, while the internal shield cages can be through-hole, kinked tails for through-hole, or surface mount. Internal connectors can be purchased as discrete parts, connector and shield, or as a “combo” part, where the connector and shell are joined together into a single piece.

Internal Products

3M Part Number	Configuration	Tech Sheet
8N36 series	36 Position, Internal Cable assembly	TS-2209
8A36-1XXX series	36 Position, Vertical SMT connector	TS-2218
8B36-1XXX series	36 Position, Vertical Internal Shell	TS-2218
8A36-2XXX series	36 Position Right Angle SMT connector	TS-2219
8B36-2XXX series	36 Position Right Angle Internal Shell	TS-2219
8AB36-2XXX	36 Position Right Angle Combo Connector	TS-2208
8AB36-1XXX	36 Position Vertical Combo Connector	TS-2207

Refer to 3M Interconnect Website for access to Tech Sheet and additional product details. www.3m.com/interconnects

3M Mini Serial Attached SCSI (miniSAS) Internal Cable Assemblies are part of your complete storage connector solution from 3M. You may also want to take a look at the 3M™ Serial Advanced Technology Attachment (SATA) Boardmount Connectors and Cable Assemblies, and the 3M™ Serial Attached SCSI (SAS) Connectors. We can provide customized solutions upon request. Please contact your local 3M Sales Representative.



3M™ Mini Serial Attached SCSI (miniSAS) Connectors

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Important Notice

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