

Serial-Attached SCSI (SAS) 4.0 Connectors

CONNECTORS FOR HIGH SPEED STORAGE SERVERS

SAS 4.0 connectors for next-generation servers with 24Gb/s speeds. The 29-position receptacle and plug connectors feature hot-plugging and blind-mating, connector misalignment compensation, and a PCB retention mechanism for robust SMT attachment. The connectors are SATA compliant and meet a wide range of vertical and right angle configurations for usage across server and storage equipment, HDDs, HDD carriers and SSDs.

- Compatible with SFF8681 specification
- Foot print backward compatible to 12G, 6G and 3G SAS connectors
- Staggered contact lengths for hot plugging applications
- Vertical receptacle is available in SMT, PF and hybrid
- Header is available in right angle and vertical orientation
- Supports both SAS and SATA drives



TARGET MARKETS



FEATURES

- Supports both SAS and SATA drives
- Staggered contact lengths
- Vertical backplane receptacles come with wide-base housing options
- Stamped clips act as connector retainers for robust PCB attachment
- Molded guideposts help mating halves to self-align by providing angled lead-ins
- Vertical receptacles are available in SMT, PF (Press-fit), and hybrid terminations
- Headers are available in right angle and vertical orientation
- Supports interposer cards / paddle cards
- Wide range of vertical and right angle configurations

BENEFITS

- Addresses the needs of both mission critical and bulk storage applications
- Provides sequential contact mating for hot plugging
- Provides added stability
- Provide additional mechanical strength after soldering
- Compensates for connector misalignment
- Allow engineers to choose the apt termination for their designs
- Facilitates in controlling, monitoring, and upgrading the HDD system
- Configured for multiple applications like server and storage equipment, HDDs, HDD carriers and SSDs

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TECHNICAL INFORMATION

MATERIAL

- Terminal: Copper alloy
- Housing: High-temperature thermoplastic (UL 94V-0), black

ELECTRICAL PERFORMANCE

- Current Rating: 1.5A DC per contact
- Voltage Rating: 30V max.

MECHANICAL PERFORMANCE

- Mating Force: 50N max.
- Unmating Force: 5N min.

ENVIRONMENTAL

- Humidity: EIA 364-31, Method II, test condition A
- Temperature Life: EIA 364-17, test condition III, method A
- Thermal Shock: EIA 364-32, test condition I

APPROVALS & CERTIFICATION

- UL

SPECIFICATIONS

- Amphenol Product Specification: GS-12-282

PACKAGING

- Tape and Reel
- Tray

TARGET MARKETS/APPLICATIONS



Processor and Storage Blade
Mezzanine Card



HDD
HDD Carrier
SSD
External Storage System
Interposer Card
Server
Storage Server
Processor and Storage Blade



Embedded System Board
Surveillance Camera
Security

PART NUMBERS

Connector	Performance	Orientation	Termination Type	Part Numbers
Receptacle	24Gb/s	Vertical	Widebase	10142501-XXX
Receptacle	24Gb/s	Vertical	Standard	10142500-XXX
Receptacle	24Gb/s	Vertical	Hybrid	10142502-XXX
Receptacle	24Gb/s	Vertical	Press-fit	10142499-XXX
Header	24Gb/s	Vertical	SMT	SAS4M313003XXX
Header	24Gb/s	Right angle	SMT	SAS4M213002XXX
Header	24Gb/s	Right angle	SMT	10143025-XXX

SS10SAS400819EA4