

# 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

### 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

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