

SlimSAS™ Connectors – U10 Series

PROVEN, HIGH SPEED, NEXT-GENERATION SAS-4 INTERFACE

SlimSAS™ connectors address issues in next-generation storage devices such as bulk cable form factor restrictions and the introduction of multi-lane storage devices.

SlimSAS™ connector is a 0.60mm pitch interconnect system which offers superior signal integrity performance over standard Mini-SAS solutions.

- Designed for unshielded, internal or external I/O connectors
- Compliant with T10/Serial Attached SCSI (SAS-4) standard
- Supports many assembly options



FEATURES

- High density connector
- 0.60mm pitch, 4x, 6x, 8x, 12x configurations
- 8x SlimSAS solution consumes the same area as 4x Mini-SAS HD
- Supports internal and external I/O applications
- Small Form Factor
- High data rate
- Low profile packaging
- Meets SAS 4.0, 24Gb/s specification
- Resonance dampening feature
- Supports many assembly options

BENEFITS

- Low profile connector saves space
- Complete interconnect solution for different applications
- Performance targeted for next-gen SAS 4.0 and PCIe Gen 4
- Receptacle mates pluggable modules
- Supports desired high speed design
- Meets next-generation industry standards
- Customized signal integrity specification and support NVLink 25G
- Supports blade and mainstream server designs

TECHNICAL INFORMATION

MATERIAL

- Housing: Black color, LCP, Lead Free Solder Reflow Process Compatible Thermoplastic
- Contact Base Material: Phosphor Bronze
- Contact Normal Force: 50g nominal
- Plating Solder Tails: Matte tin or Gold flash options
- Plating Mating Tails: Gold
- Resonance Dampening Feature: Conductive Polymer

MECHANICAL PERFORMANCE

- Mating Force: 55.5 N max.
- Durability: 250 mating cycles min.
- Latch Retention Force: 50 N min.
- Insertion Force: 55.5 N
- Withdrawal Force: 49 N

APPROVALS AND CERTIFICATIONS

- UL 94V-0
- RoHS
- Halogen-free

PACKAGING

- Tape & Reel

ELECTRICAL PERFORMANCE

- Voltage Rating: 30VDC per contact max.
- Current Rating: 0.5A per contact max.
- Differential Impedance: $85 \Omega \pm 10 \Omega$

ENVIRONMENTAL

- Operating Temperature: -40°C to $+85^{\circ}\text{C}$

SPECIFICATION

- Amphenol Product Specification: SFF-8654

TARGET MARKETS/APPLICATIONS



Data Center
HBA (Host Bus Adapter) Servers
RAIDS (Redundant Array of Individual
Disks)
Routers
Switches
Servers
Storage Racks
Storage Controllers

PART NUMBER SELECTOR

U10	—	X	0	XX	—	X	X	X	T
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Style	
A	8X Right Angle
B	8X Vertical
C	4X Right Angle
D	4X Vertical
J	12X Right Angle
K	12X Vertical
L	6X Right Angle
M	6X Vertical

Impedance	
0	85Ω

Number of Positions	
38	28 Pins
74	74 Pins

Contact Plating	
2	30 μ" (0.76 μm) Gold Plating over Nickel
3	15 μ" (0.38 μm) Gold Plating over Nickel

Tape & Reel	
Option	
0	Standard
1	No Resonance Dampening
A	Offset Latch Pins

Latch Anchor Option	
0	Pin 1.5mm long, Right Angle
1	SMT
3	Latch
4	Pin 2.2mm long, Right Angle
5	Pin 3.0mm long, Right Angle
6	Pin 4.2mm long, Right Angle
0	Pin 1.5mm long, Pin inside footprint on Vertical
1	SMT
2	Pin 1.5mm long, Pin outside footprint on Vertical
3	No Latch
4	Pin 2.2mm long, Pin outside footprint on Vertical
5	Pin 3.0mm long, Pin outside footprint on Vertical
6	Pin 4.2mm long, Pin outside footprint on Vertical
7	Pin 2.2mm long, Pin inside footprint on Vertical
8	Pin 3.0mm long, Pin inside footprint on Vertical
9	Pin 4.2mm long, Pin inside footprint on Vertical