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

NEW

TARGET MARKETS

FEATURES	BENEFITS
▪ High density connector	▪ Low profile connector saves space
▪ 0.60mm pitch, 4x, 6x, 8x, 12x configurations	▪ Complete interconnect solution for different applications
▪ 8x SlimSAS solution consumes the same area as 4x Mini-SAS HD	▪ Performance targeted for next-gen SAS 4.0 and PCIe Gen 4
▪ Supports internal and external I/O applications	▪ Receptacle mates pluggable modules
▪ Small Form Factor ▪ High data rate ▪ Low profile packaging	▪ Supports desired high speed design
▪ Meets SAS 4.0, 24Gb/s specification	▪ Meets next-generation industry standards
▪ Resonance dampening feature	▪ Customized signal integrity specification and support NVLink 25G
▪ Supports many assembly options	▪ 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 Ω ± 10 Ω

ENVIRONMENTAL

- Operating Temperature: –40°C to +85°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	X	XX	X	X	X	XX	T

SlimSAS Receptacle

Tape & Reel

Style	
A	X8 Right Angle
B	X8 Vertical
C	X4 Right Angle
D	X4 Vertical
E	X4 Vertical Low Profile
F	X8 Vertical Low Profile
G	X12 Vertical Low Profile
J	X12 Right Angle
K	X12 Vertical

Impedance	
0	85Ω
4	85Ω enhancement (Right Angle)

Number of Positions	
38	38 Pos
74	74 Pos

Contact Plating	
2	30 µ" Gold Plating over Nickel
3	15 µ" Gold Plating over Nickel

Latch Anchor Metal Shell Option	
0	Pin 1.5mm long, Right Angle
1	SMT
3	No latch metal shell
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
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

Option	
0	Standard (except U10BH74*)
0	No Resonance Dampening for U10BH74*
1	No Resonance Dampening (except U10BH74*)
1	Resonance Dampening for U10BH74*

Sequence Number	
Blank	PN assigned
01	74 Pos
02	38 Pos

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