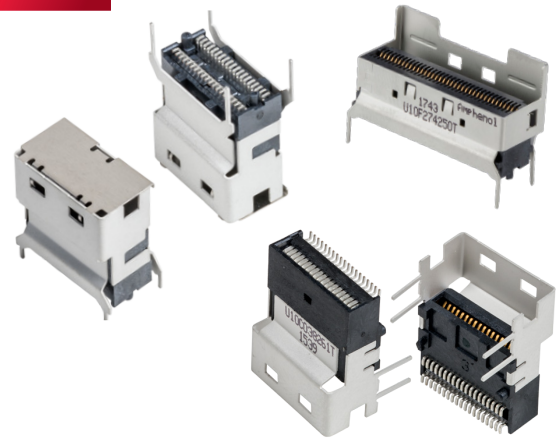# SlimSAS™ Connectors – U10 Series

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

- 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 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

SlimSAS™ Connectors – U10 Series

PART NUMBER SELECTOR

U10	X	X	XX	X	X	X	XX	T

SlimSAS Receptacle → U10

Tape & Reel → T

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

Sequence Number

Blank	PN assigned
01	74 Pos
02	38 Pos

Impedance

0	85Ω
4	85Ω enhancement (Right Angle)

Option

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

Number of Positions

38	38 Pos
74	74 Pos

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

Contact Plating

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

CMIOSLIMSAS0718EA4

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Amphenol](#):

U10E038240T U10E038250T U10E038260T U10DH3822002T U10DH3822102T U10DH3824002T
U10DH3825002T U10DH3826002T U10DH3832002T U10DH3832102T U10DH3835102T U10E038340T
U10E038350T U10DH3820001T U10DH3827001T U10DH3827101T U10DH3828001T U10DH3830001T
U10DH3830101T U10DH3837101T U10KH7426001T U10BH7422001T U10BH7422101T U10BH7424101T
U10BH7425001T U10BH7425101T U10BH7432001T U10BH7432101T U10BH7434101T U10BH7435001T
U10BH7426001T U10BH7426101T U10BH7427001T U10BH7428001T U10BH7430001T U10BH7430101T
U10BH7420001T U10A474350T U10A474341T U10A474241T U10A474250T U10A474301T U10A474201T
U10A474340T U10A474361T U10A474240T U10A474261T U10A474251T U10A474260T U10A474300T
U10A474351T U10A474360T U10A474200T U10C438350T U10C438351T U10C438360T U10C438260T
U10C438201T U10C438340T U10C438300T U10C438251T U10C438200T U10C438261T U10C438240T
U10C438301T U10C438341T U10C438241T U10C438250T U10C438361T U10BH7421101T U10DH3821001T
U10DH3831101T U10P0AB20001T U10P0AB20101T U10P0AB30001T U10J474242T U10J474252T U10J474352T
U10KH7425001T U10E038220T U10E038320T U10F274260T U10KH7422002T U10BH7424101W
U10N0AB22001T U10BH7435101T U10DH3836002T U10N0AB34001T U10BH7424001T U10A474250W
U10DH3820101T U10DH3825102T U10G274250T U10BH7434001T U10N0AB24001T U10DH3824102T
U10G274240T U10BH7431001T U10N0AB26001T U10F274221T