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

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

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: 85Ω ± 10Ω

ENVIRONMENTAL

- Operating Temperature: -40°C to +85°C

SPECIFICATION

- Amphenol Product Specification: SFF-8654

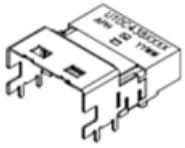
TARGET MARKETS/APPLICATIONS

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

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBER SELECTOR

RIGHT ANGLE SERIES



U10	C438	X	X	X	X

Type
R/A 38 pin 4x

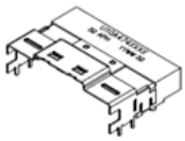
Plating
2=30µin
3=15µin

Shell Tail Length
0=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Shorting Bar (W or WO)
0=with shorting bar
1=w/o shorting bar

Packaging
T=T&R

Remarks	
1	Shorting bar is used to link GND pin together
2	Shorting bar=Resonance damping
3	With shorting bar=PCIE4/SAS4
4	W/O shorting bar=PCIE3/SAS3



U10	A474	X	X	X	X

Type
R/A 74 pin 8x

Plating
2=30µin
3=15µin

Shell Tail Length
0=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Shorting Bar (W or WO)
0=with shorting bar
1=w/o shorting bar

Packaging
T=T&R

Remarks	
1	Shorting bar is used to link GND pin together
2	Shorting bar=Resonance damping
3	With shorting bar=PCIE4/SAS4
4	W/O shorting bar=PCIE3/SAS3

U10	P0AB	X	X	X	01	X

Type
R/A 124 pin 16x

Plating
2=30µin
3=15µin

Shell Tail Length
0=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Shorting Bar (W or WO)
0=with shorting bar
1=w/o shorting bar

Fixed No.

Packaging
T=T&R

Remarks	
1	Shorting bar is used to link GND pin together
2	Shorting bar=Resonance damping
3	With shorting bar=PCIE4/SAS4
4	W/O shorting bar=PCIE3/SAS3

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VERTICAL SERIES

U10	BH74	X	X	X	01	X

Type
V/T 74 pin 8x

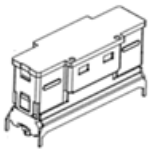
Plating
2=30µin
3=15µin

Shell Tail Length
2=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Resonance Damping (W or WO)
1=with resonance damping
0=w/o resonance damping

Fixed No.

Packaging
T=T&R



Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping =Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

U10	BH74	X	X	X	01	X

Type
V/T 74 pin 8x

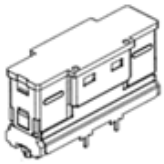
Plating
2=30µin
3=15µin

Shell Tail Length
0=1.5mm
7=2.2mm
8=3.0mm
9=4.2mm

Resonance Damping (W or WO)
0=with resonance damping
1=w/o resonance damping

Fixed No.

Packaging
T=T&R



Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping =Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

U10	DH38	X	X	X	02	X

Type
V/T 38 pin 4x

Plating
2=30µin
3=15µin

Shell Tail Length
2=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Resonance Damping (W or WO)
0=with resonance damping
1=w/o resonance damping

Fixed No.

Packaging
T=T&R

Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping =Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

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SlimSAS™ Connectors – U10 Series

U10	DH38	X	X	X	02	X

Type
V/T 38 pin 4x

Plating
2=30µin
3=15µin

Shell Tail Length
0=1.5mm
7=2.2mm
8=3.0mm
9=4.2mm

Shorting Bar (W or WO)
0=with resonance damping
1=w/o resonance damping

Fixed No.

Packaging
T=T&R

Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping =Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

LOW PROFILE SERIES

U10	F274	X	X	X	X

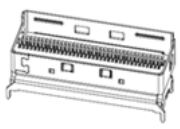
Type
LP 74 pin 8x

Plating
2=30µin
3=15µin

Shell Tail Length
2=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Resonance Damping (W or WO)
0=with resonance damping
1=w/o resonance damping

Packaging
T=T&R



Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping=Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

U10	E038	X	X	X	X

Type
LP 38 pin 4x

Plating
2=30µin
3=15µin

Shell Tail Length
2=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Resonance Damping (W or WO)
0=with resonance damping
1=w/o resonance damping

Packaging
T=T&R

Remarks

1	Resonance damping is used to link GND pin together
2	Resonance damping=Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

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SlimSAS™ Connectors – U10 Series

U10	N0AB	X	X	X	01	X

Type
LP 124 pin 16x

Plating
2=30µin
3=15µin

Shell Tail Length
2=1.5mm
4=2.2mm
5=3.0mm
6=4.2mm

Resonance Damping (W or WO)
0=with resonance damping
1=w/o resonance damping

Fixed No.

Packaging
T=T&R

Remarks	
1	Resonance damping is used to link GND pin together
2	Resonance damping=Shorting bar
3	With resonance damping=PCIE4/SAS4
4	W/O resonance damping=PCIE3/SAS3

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