

Amphenol ICC

SlimSAS[™] Low Profile Connectors – U10 Series

PROVEN, HIGH SPEED, VERY LOW PROFILE NEXT GENERATION SAS 4.0/PCIe[®] 4.0 INTERFACE

In order to provide higher speed and smaller size solution on networking equipment and server, Amphenol ICC has developed SlimSAS[™] low profile connector which is used in application of UPI1.0, 11.2GT/s, 24Gb/s SAS signal or 16GT/s PCIe[®] signal.

With 0.60mm contact pitch, Low Profile (LP) SlimSAS[™] solutions are smaller than mainstream connectors in current market to save space in end devices. LP SlimSAS[™] was also called SlimSAS[™] LP. These products have robust metal shell on receptacle on board and latch on plug to provide reliable connection.

- Mating height (connector+cable plug): 1.45mm
- Designed for unshielded, internal or external I/O connectors
- Compliant with Intel UPI 1.0, T10/serial attached SCSI (SAS 4.0) and PCIe[®] 4.0 standard EMI shielding
- Supports many assembly options



FEATURES

- Very low profile
- 0.60mm pitch, 4x, 6x, 8x, 12x configurations
- Supports UPI1.0 11.2GT/s, 25 Gb/s signal rate (56G PAM4), SAS 4.0 24Gb/s and PCIe[®] 4.0 16GT/s per lane
- Supports internal and external I/O applications
- Small Form Factor, high data rate and low profile packaging
- Meets SAS 4.0, 24Gb/s specification
- Resonance dampening feature
- Supports many assembly options

BENEFITS

- Saves board space
- Complete interconnect solution for different applications
- Performance targeted for next-generation SAS 4.0 and PCIe[®] 4.0
- Receptacle mates pluggable modules
- Supports high speed design
- Meets next-generation industry standards
- Customized signal integrity specification and support NVLink 25G
- Supports blade and mainstream server designs

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

ELECTRICAL PERFORMANCE

- Voltage Rating: 30V DC per contact max.
- Current Rating: 0.5A per contact max.
- Differential Impedance: 85 Ω ± 10 Ω

PACKAGING

Tape & Reel

SPECIFICATION

• Amphenol Product Specification: SFF-8654

ENVIRONMENTAL

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

APPROVALS AND CERTIFICATION

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

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

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	Options									Packaging Options	
	4X	E038						0T	Standard construc	ction (24G) with Tape & Reel packaging	
	6X	Q038						1T	No resonance dam	nping feature (12G) with Tape & Reel pack	kaging
	8X F274							1		1	
	12X	12X G274			Lat	atch PTH PIN Length Options					
							2	1.50			
							4	2.20			
							5	3.00			
							6	4.20			
_										-	
Contact Plating Options											
4	2	30µin of gold on mating end with matte tin on solder termination. Nickel underplate all over									

3 15µin of gold on mating end with matte tin on solder termination. Nickel underplate all over

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Disclaimer

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

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contact rating options									
2	30μ in of gold on mating end with matte tin on solder termination. Nickel underplate all over								
3	15 μ in of gold on mating end with matte tin on solder termination. Nickel underplate all over								

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Disclaimer