

# 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



### TARGET MARKETS



### 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

## 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:  $85\Omega \pm 10\Omega$

### PACKAGING

- Tape & Reel

### SPECIFICATION

- Amphenol Product Specification: SFF-8654

### ENVIRONMENTAL

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

### APPROVALS AND CERTIFICATION

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

### TARGET MARKETS/APPLICATIONS

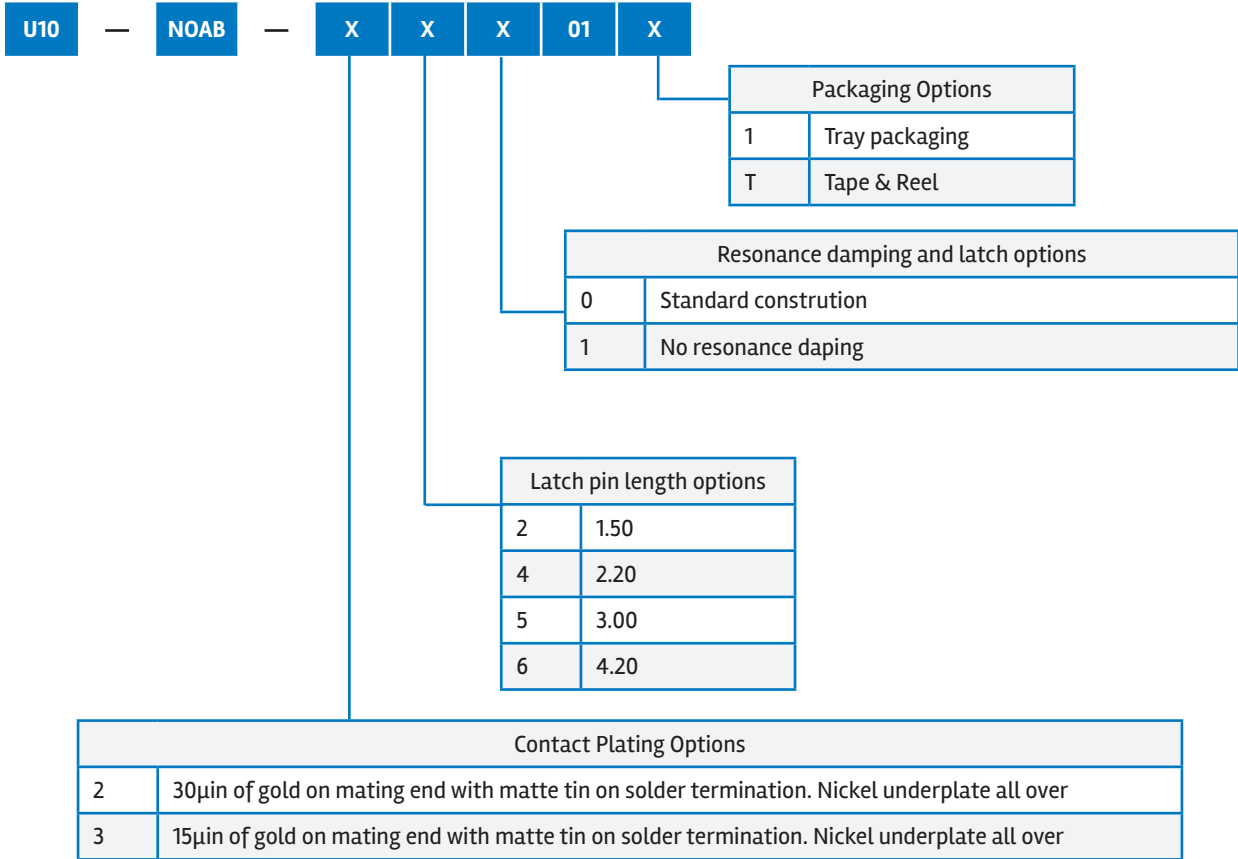


Data Center  
HBA (Host Bus Adapter) Servers  
RAIDS (Redundant Array of Individual Disks)  
Routers  
Switches  
Servers  
Storage Racks  
Storage Controllers

## PART NUMBER SELECTOR

U10	—	XXXX	—	X	X	XX
		Options				
		4X	E038			
		6X	Q038			
		8X	F274			
		12X	G274			
				Packaging Options		
				0T	Standard construction (24G) with Tape & Reel packaging	
				1T	No resonance damping feature (12G) with Tape & Reel packaging	
				Latch PTH PIN Length Options		
				2	1.50	
				4	2.20	
				5	3.00	
				6	4.20	
Contact Plating Options						
		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			

► SlimSAS™ Low Profile Connectors – U10 Series



CM10SLIMSASU10T19EA4

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