

# Mini-SAS HD

## Product Description

Mini-SAS High Density receptacle is the next generation SAS system; the SAS 2.1 standard meets SAS-3 next generation speed and density requirements that provides faster data transmission and more bandwidth for end users. The low-profile system provides 4X and 8X cable-plug options, and the external I/O connectors includes eight sideband signals per 4X port, 1x4 configuration for up to 192 Gbps of total bandwidth. Mini-SAS HD is designed to save space with its increased density and reduced size as compared to the Mini-SAS 2.0 while following complacency with the standard. Mini-SAS HD connector system has a 2-row, right angle connector with data rates reaching 12 Gbps per channel. Mini-SAS HD can up to 24Gps per channel and can meet SAS-4 and PCIe Gen4/5.

Applications			SFF Supported Standards
RAID	Router/Switch	Blade server	Connector Cage Combo SFF-8614
Workstations	Patch panels	Servers	
Rack-mount server	Routers	Storage rack	

Product Specifications - Mini-SAS HD			
CONNECTOR		CAGE	
<b>Materials Specifications</b>			
<b>Housing</b>	Black color, Glass reinforced , Lead Free Solder Reflow, Process Compatible Thermo Plastic	<b>PCB Thickness</b>	3.00 mm (0.118in.) min.
<b>Contacts Base Material</b>	Phosphor Bronze		
<b>Contact Normal Force</b>	50 grams Minimum		
<b>Plating Press-Fit Area</b>	Matte tin or Gold flash options		
<b>Plating Mating Area</b>	Gold		
<b>Operating Temperature</b>	-40°C to +85°C		
<b>Electrical Specifications</b>			
<b>Operating Voltage</b>	30 VDC per contact		
<b>Operating Current</b>	0.5 A per contact		
<b>Differential impedance</b>	100 Ω +/- 10 Ω		
<b>Mechanical Specifications</b>			
<b>Mating Force</b>	62 N max.	<b>Unmating Force</b>	30 N max.
<b>Durability</b>	250 mating cycles		
<b>Options</b>			
<b>Packaging</b>	Tray		
<b>Configurations</b>	1X1, 1X2, 1X4		
<b>Environmental Specifications Options</b>			
<b>RoHS</b>	Yes		
<b>Halogen Free</b>	Yes		
<b>Flammability Rating</b>	UL 94V-0		



# Ordering Information

## Mini-SAS HD Combo (Cage/Connector)

U92	X	X	X	X	1	X	X	X	X	X		
<b>U92</b>	<b>SERIES DESIGNATION</b>									<b>MOUNTING SCREWS</b>	X	
<b>A</b>	<b>STYLE</b> A - One Row Cage 0° M - Single level 0° (24 Gbps)									<b>0</b> - No Screws <b>1</b> - Mounting Screws (Standard Length of M2 X 0,4, 4,3 Long)		
<b>X</b>	<b>NUMBER OF PORTS IN ROW</b> 1 - 1x1 2 - 1x2 4 - 1x4									<b>CONTACT PLATING</b> <b>3</b> - Mating Area Plating 30 μ" (0.76 μm) Gold Over 50 μ" (1.27 μm) to 150 μ" (3.81 μm) of Nickel; Press-Fit Tail Area Plating 15 μ" (0.38 μm) to 60 μ" (1.52 μm) of Matte Tin Over 50 μ" (1.27 μm) to 150 μ" (3.81 μm) of Nickel <b>7</b> - Same As "3"; But with Enhanced Chicklet	X	
<b>X</b>	<b>HEAT SINK OPTION</b> 1 - No Heat Sink and No Clip									<b>PACKAGING</b> <b>1</b> - Tray <b>T</b> - Tape & Reel <b>A</b> - Tray - Heat Sink & Clip or Light Pipe Ship Assembled	X	
<b>X</b>	<b>EMI SHIELDING</b> <b>0</b> - Standard EMI Fingers <b>1</b> - Extended EMI Fingers									<b>LIGHT PIPE OPTION</b> <b>0</b> - No Light Pipe <b>2</b> - 2 Round Light Pipes per port, on Top of the Cage	X	
											<b>OPTIONAL DUST COVER</b> <b>0</b> - Without Dust Cover <b>D</b> - With Dust Cover (Ship Loose)	X
											<b>PLATING</b> <b>1</b> - Nickel	1



### Order Information:

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For more information consult factory or visit [amphenol-highspeed.com](http://amphenol-highspeed.com)

Product Applications; List represents common uses for the product but is not limited to these uses.

