

## Mini-SAS HD

### 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 include eight sideband signals per 4X port, 1x4 configuration for up to 192Gb/s 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. The Mini-SAS HD connector system has a 2-row, right angle connector with data rates reaching 32Gb/s per channel, which can meet SAS-4 and PCIe® Gen 4/5 application.



#### TARGET MARKETS



#### FEATURES

- SMT connector enables 32Gb/s per channel transmission
- Pressfit cage/connector combo enables 24Gb/s per channel transmission
- x4 / x8 / x16 availability for both pressfit Combo and SMT version
- Advanced internal ground features provide improved crosstalk performance
- RoHS compliant

#### BENEFITS

- Support PCIe® G 4/G 5 and SAS4 application
- Same footprint and same fit for both 12Gb/S and 24Gb/s pressfit solutions
- Allows for use of different cable solutions
- Better signal integrity (SI) performance
- Environment friendly

## TECHNICAL INFORMATION

### MATERIAL

- Housing: Black color, Glass reinforced, Lead Free Solder Reflow Process Compatible Thermo Plastic
- Contacts Base Material: Phosphor Bronze
- Plating Solder Tails: Matte Tin or Gold flash options
- Plating Mating Area: Gold

### ELECTRICAL PERFORMANCE

- Operating Voltage: 30VDC per contact
- Operating Current: 0.5A per contact
- Differential Impedance:  $100\Omega \pm 10\Omega$

### MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 62N max.
- Contact Normal Force: 50g min.
- PCB Thickness (Cage): 3.00mm (0.118in) min.
- Unmating Force (Cage): 30N max.

### ENVIRONMENTAL

- Operating and (Storage) Temperature Range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- RoHS & Halogen-free

### TOOLING INFORMATION

- Configurations: 1X1, 1X2, 1X4

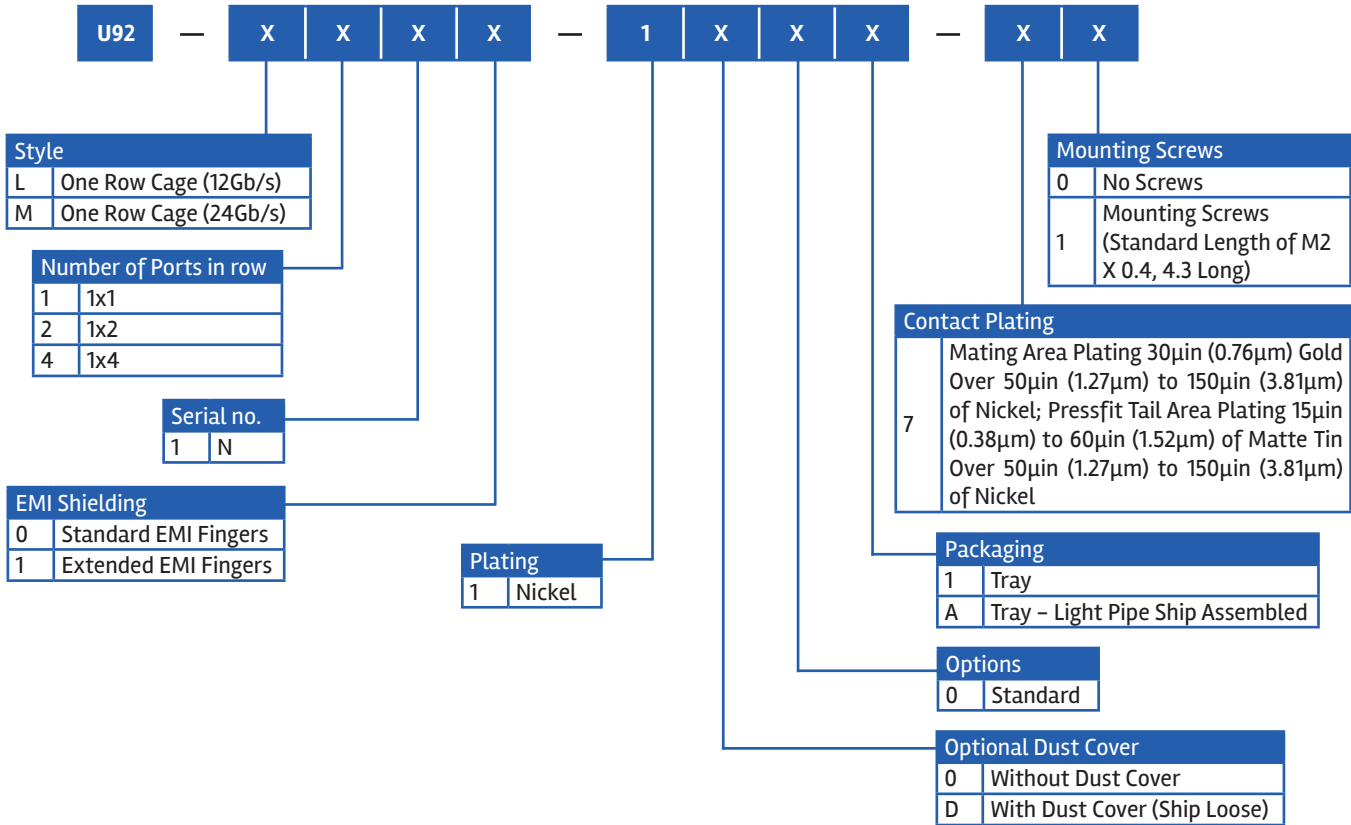
### TARGET MARKETS/APPLICATIONS



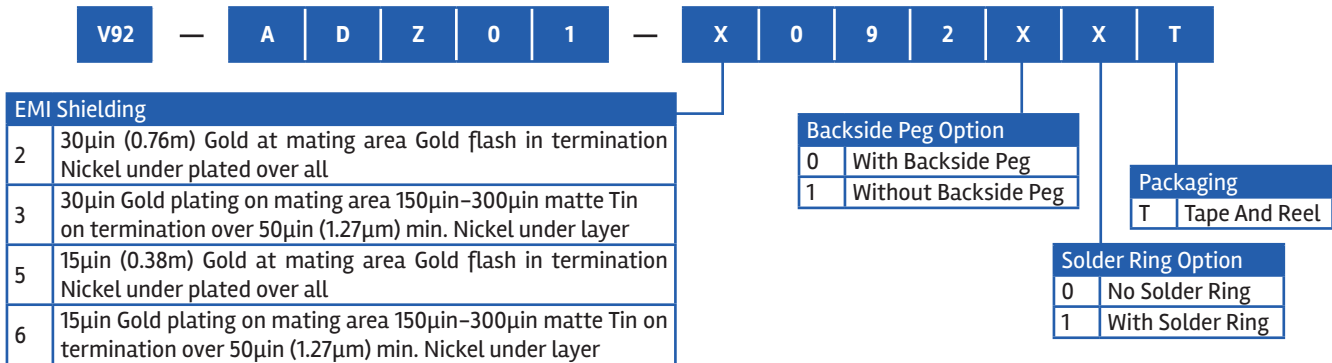
Blade Server  
Patch Panels  
RAID  
Rack-mount Server  
Router  
Servers  
Storage Rack  
Workstation

# PART NUMBER SELECTOR

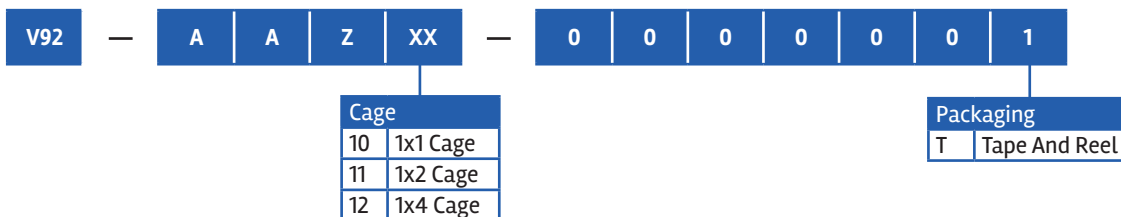
## Mini-SAS HD Combo (Cage/Connector)



## Mini-SAS HD SMT 92Ω Connector



## Mini-SAS HD Cage



HS10MSASHD0623EA4