

# QSFP-DD

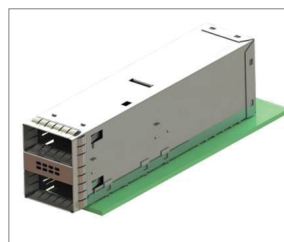
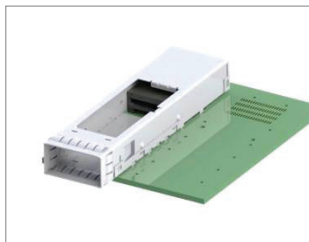
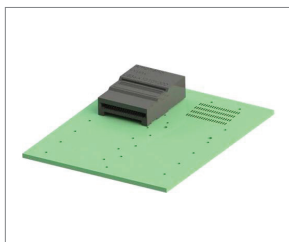
## Product Description

The QSFP-DD interconnect system is comprised of a 76-position, 0.8mm pitch connector built for use in high speed serial applications. Each port supports up to 400 Gbps in aggregate over an 8 x 50 Gbps electrical interface. The cage and connector design provides backwards compatibility to QSFP28 modules which can be inserted into a QSFP-DD port and connected to 4 of the 8 electrical channels. It is one of the industry's leading multi-lane pluggable form factors used across Ethernet, Fibre Channel and InfiniBand.

Applications	
Data Servers	SAN, NIC cards
Router/Switches	HBA'S
Hubs	

SFF Supported Standards
<b>QSFP-DD</b>
Connector INF-8628

Product Specifications - QSFP-DD			
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>	1.44 mm MIN for single mounted. (1xN)
<b>Contacts Base Material</b>	Phosphor Bronze	<b>Belly to Belly</b>	2.85 mm MIN for 1xN.
<b>Plating Solder Tails</b>	Matte tin		
<b>Plating Mating Area</b>	Gold		
<b>Resonance Dampening Feature</b>	Conductive Polymer		
<b>Operating &amp; Storage Temperature</b>	-40° 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>	90 N Maximum	<b>Unmating Force</b>	50 N Maximum
<b>Durability</b>	100 mating cycles	<b>Insertion Force to PCB</b>	780 N for 1 port 1000 N for 2 Ports 1700 N for 4 Ports 2400 N for 6 Ports
<b>Options</b>			
<b>Packaging</b>	Tape and Reel	<b>Packaging</b>	Tray
<b>EMI Options</b>	Spring Fingers		
<b>Cage Mounting</b>	Thru Bezel		
<b>Configurations</b>	1XN (N=1,2,3,4,5,6) 2XN (N=1,2)		
<b>Environmental Specifications</b>			
<b>RoHS</b>	Yes		
<b>Halogen Free</b>	Yes		
<b>Flammability Rating</b>	UL 94V-0		



# Ordering Information

**QSFP-DD (Connector)** UE36 A X X X 5 X X X X X

UE36	<b>SERIES DESIGNATION</b>		
E	<b>STYLE</b>	A - 1 X N SMT connector	
X	<b>NUMBER OF PORTS IN ROW</b>	1 - NX1	
X	<b>EMI TYPE</b>	0 - Standard	
X	<b>TERMINATION</b>	2 - SMT 4 - SMT with solder anchors	
X	<b>LIGHT PIPE OPTION</b>	0 - STANDARD, NO LIGHT PIPE	
	<b>PACKAGING</b>	1 - Tray Package	X
	<b>HEAT SINK HEIGHT</b>	0 - STANDARD/NONE	X
	<b>HEAT SINK</b>	0 - STANDARD/NONE	X
	<b>CAGE PLATING</b>	0 - STANDARD	X
	<b>PLATING FOR MATING CONTACT</b>	0 - Standard3 - 0.76µm (30µin) GOLD MATING 3 - 30 µin gold on mating surfaces, 120-300 µin matte tin 6 - 15 µin gold on mating surfaces, 120-300 µin matte tin	X

**QSFP-DD Cages** UE36 B X X X 0 X X X XX X

UE36	<b>SERIES DESIGNATION</b>		
E	<b>STYLE</b>	B - 1 X N press fit cage D - 1 x N press fit cage with mylar tape	
X	<b>NUMBER OF PORTS IN ROW</b>	1 - 2X1 2 - 2X2	
X	<b>EMI TYPE</b>	0 - Standard 6 - SPRING FINGER	
X	<b>TERMINATION</b>	5 - All press fit pins, no rear pins 6 - All press fit pins, one rear pin for 1 x 1	
X	<b>LIGHT PIPE OPTION</b>	0 - STANDARD, NO LIGHT PIPE 1 - SINGLE BARREL LIGHT PIPE, ROUND OUTLET 2 - DUAL BARREL LIGHT PIPE, ROUND OUTLET 4 - QUAD BARREL LIGHT PIPE, ROUND OUTLET 8 - EIGHT BARREL LIGHT PIPE, ROUND OUTLET	
X	<b>VENTING</b>	0 - STANDARD - NO INDICATORS, LARGE VENT HOLES	
	<b>PACKAGING</b>	1 - Tray Package	X
	<b>HEAT SINK</b>	00 - STANDARD/NONE 01 - No Heat Sink, With Clip A2 - With Square Pin Style Heat Sink(H=4.2mm; Pci Height ) A3 - With Square Pin Style Heat Sink(H=6.5mm; San Height ) A4 - With Square Pin Style Heat Sink(H=13.5mm; Tall Height ) A5 - With Square Pin Style Heat Sink(H=4.5mm; Special Height )	XX
	<b>CAGE PLATING</b>	2 - NICKEL 3 - Matte Tin (HT Nickel Under Layer for Solder Pins) 6 - Nickel-Silver Copper	X
	<b>PLATING FOR MATING CONTACT</b>	0 - Standard	X

**Stacked QSFP-DD** UE36 E X X X 5 X X X XX X

UE36	<b>SERIES DESIGNATION</b>		
E	<b>STYLE</b>	E - 2XN PRESS FIT COMBO F - 2XN Extended PRESS FIT COMBO	
X	<b>NUMBER OF PORTS IN ROW</b>	1 - 2X1 2 - 2X2	
X	<b>EMI TYPE</b>	0 - Standard 6 - SPRING FINGER	
X	<b>TERMINATION</b>	2 - All Press Fit	
X	<b>LIGHT PIPE OPTION</b>	0 - STANDARD, NO LIGHT PIPE	
X	<b>VENTING</b>	0 - STANDARD - NO INDICATORS, LARGE VENT HOLES	
	<b>PACKAGING</b>	1 - Tray Package	X
	<b>HEAT SINK</b>	00 - STANDARD/NONE 01 - No heat sink, with QSFP PAD opening 03 - No heat sink, with QSFP-DD opening BA - Fin Style Front to Back,Standard Fin Size and QTY, QSFP-DD PAD, Nickel (H = 4.2m , W = X, L = Standard), (2 Bar or Dual 2 Bar Clip) BB - Fin Style Front to Back,Standard Fin Size and QTY, QSFP-DD PAD, Nickel (H = 6.5m , W = X, L = Standard), (2 Bar or Dual 2 Bar Clip) BC - Fin Style Front to Back,Standard Fin Size and QTY, QSFP-DD PAD, Nickel (H = 13.5m , W = X, L = Standard), (2 Bar or Dual 2 Bar Clip)	XX
	<b>CAGE PLATING</b>	2 - NICKEL	X
	<b>PLATING FOR MATING CONTACT</b>	3 - 0.76µm (30µin) GOLD MATING	X



**Order Information:**

P: 416.291.4401 | F: 416.292.0647 | E: cages@amphenol-highspeed.com

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.

All specifications are subject to change without notice.

© 2015 Amphenol High Speed Interconnects. All rights reserved.

