

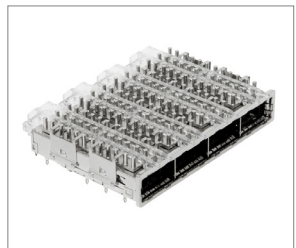
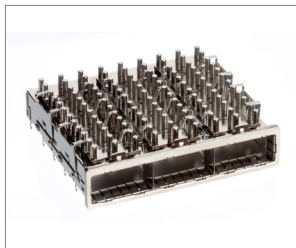
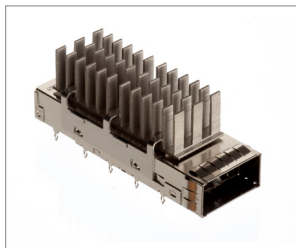
# UltraPort™ QSFP+

## Product Description

The UltraPort™ QSFP+ interconnect system is comprised of a 38-position, 0.8mm pitch connector built for use in high speed serial applications. Each port offers 4 channels to increase port density which allows for more board real estate and cost optimized solutions. The UltraPort™ QSFP+ connector supports next generation 100G+ applications and transmits up to 28 Gbps/channel. It features a stamped and formed contact design providing improved mechanical durability. The resonance dampening features of the design allows for superior signal integrity performance. The design minimizes crosstalk and transmission line impedance discontinuity across the connector interface.

Applications		SFF Supported Standards
Storage	Cellular infrastructure	Connector SFF-8662
Network Interface	Hubs and Servers	Cage SFF-8663
Test and measurement equipment	Switches	

Product Specifications - UltraPort® QSFP+			
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>	2.35 mm (0.093in.)
<b>Contacts Base Material</b>	Phosphor Bronze		
<b>Contact Normal Force</b>	50 grams min.		
<b>Plating Solder Tails</b>	Matte tin or Gold flash options		
<b>Plating Mating Area</b>	Gold		
<b>Resonance Dampening Feature</b>	Conductive Polymer		
<b>Operating &amp; Storage Temperature</b>	-20° 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>	40 N Maximum	<b>Unmating Force</b>	30 N Maximum
<b>Durability</b>	250 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>Heat Sinks and Light Pipes</b>	Available		
<b>Configurations</b>	1XN (N=1,2,3,4,6) 2XN (N=1,2,3)		
<b>Environmental Specifications</b>			
<b>RoHS</b>	Yes		
<b>Halogen Free</b>	Yes		
<b>Flammability Rating</b>	UL 94V-0		



# Ordering Information

## UltraPort™ QSFP+ Connector

FS1 Z38 X 0 Z 6 60

<b>FS1</b>	<b>SERIES DESIGNATION</b>	
<b>Z38</b>	<b>STYLE</b> Z38 - 38 Position	
<b>X</b>	<b>PLATING</b> 2 - 30 μ" (0.76 μm) Gold Plating on Mating Area; 100 μ" (2.54 μm) Matte Tin on Tails Over Nickel Underplate 3 - 15 μ" (0.38 μm) Gold Plating on Mating Area; 100 μ" (2.54 μm) Matte Tin on Tails Over Nickel Underplate	
<b>0</b>	<b>OPTION 1</b> 0 - Standard	
	<b>SPECIAL OPTION</b> 60 - Resonance Dampening, No Hold Down Tabs	60
	<b>OPTION 3</b> 6 - Standard	6
	<b>OPTION 2</b> Z - Standard	Z

## UltraPort™ QSFP+ Cages

U95 X X X 1 1 X X X

<b>U95</b>	<b>SERIES DESIGNATION</b>	
<b>X</b>	<b>STYLE</b> A - 0°, One Rear Pin (1X1 Only) through the bezel L - 0°, No Rear Pin through the bezel T - 0°, Two Rear Pin (1XN: One Rear Pin, 1X1: Two Rear Pin) through the bezel W - 1°, No Rear Pin (1X1 Only) through the bezel	
<b>X</b>	<b>NUMBER OF PORTS IN ROW</b> 1 - 1X1 2 - 1X2 3 - 1X3 4 - 1X4 6 - 1X6	
<b>X</b>	<b>HEAT SINK OPTION</b> 0 - No Heat Sink or Clip Shipped, Closed Top With Vent Holes 1 - No Heat Sink or Clip Shipped 5 - Round Pin Style (Nickel Plated) Heat Sink & Clip (H = 6.5mm) - N/A with Quad Light Pipe 6 - Round Pin Style (Nickel Plated) Heat Sink & Clip (H = 4.2mm) - N/A with Quad Light Pipe 7 - Round Pin Style (Nickel Plated) Heat Sink & Clip (H = 13.5mm)- N/A with Quad Light Pipe A - Square Pin Style (Nickel Plated) Heat Sink & Clip (H = 6.5mm) B - Square Pin Style (Nickel Plated) Heat Sink & Clip (H = 4.2mm) C - Square Pin Style (Nickel Plated) Heat Sink & Clip (H = 13.5mm) N - Pin-Fin Style (Nickel Plated) Heat Sink & Clip (H = 6.5mm) P - Pin-Fin Style (Nickel Plated) Heat Sink & Clip (H = 4.2mm) R - Pin-Fin Style (Nickel Plated) Heat Sink & Clip (H = 13.5mm) Y - Extruded Custom Heat Sink for Front to Back Air Flow (Nickel Plated) & Clip (H = 6.94mm) W - Extruded Custom Heat Sink for Front to Back Air Flow (Nickel Plated) & Clip (H = 8.72mm)	
	<b>PACKAGING</b> 1 - Tray (Light Pipe and/or Heat Sink Shipped Unassembled if Ordered) A - Tray (Light Pipe and/or Heat Sink Shipped Assembled)	X
	<b>LIGHT PIPE OPTION</b> 0 - No Light Pipe 1 - Dual Barrel Light Pipe - Round Outlet 4 - Quad Barrel Light Pipe - Round Outlet 7 - Single Barrel Light Pipe - Round Outlet F - Quad Barrel Light Pipe - Square Outlet	X
	<b>DUST COVER OPTION</b> 0 - Without Dust Cover D - With Dust Cover (Shipped Loose)	X
	<b>PLATING</b> 1 - Nickel	1
	<b>APPLICATION</b> 1 - Press-Fit Pins	1

## UltraPort™ Stacked QSFP+

U95 Z X 0 5 4 X X 1 X X 1

<b>U95</b>	<b>SERIES DESIGNATION</b>	
<b>Z</b>	<b>STYLE</b> Z - Standard	
<b>X</b>	<b>NUMBER OF PORTS IN ROW</b> 1 - 2X1 2 - 2X2 3 - 2X3	
<b>0</b>	<b>HEAT SINK OPTION</b> 0 - No Heat Sink or Clip Shipped	
<b>5</b>	<b>APPLICATION</b> 5 - Press-fit Pins (2mm Long)	
<b>4</b>	<b>CAGE &amp; CONNECTOR CONTACT PLATING</b> 4 - 30 μ" (0.76 μm) Gold over 50 μ" (1.27 μm) to 3.81 μm of Nickel; 15 μ" (0.38 μm) to 1.52 μm of Matte Tin over 50 μ" (1.27 μm) to 3.81 μm of Nickel on Press-Fit Tail Area; Nickel Plating for Cage	
	<b>CONNECTOR FOOTPRINT</b> 1 - Standard	1
	<b>VENT HOLES</b> 0 - Large Vent Holes 2 - Small Vent Holes 4 - Rectangular Vent Holes	X
	<b>EMI GASKET OPTION</b> 1 - Chomerics 1273 Conductive Elastomer 2 - Chomerics S6305 Conductive Elastomer 3 - Through the Bezel L - Longer Spring Finger	X
	<b>PACKAGING</b> 1 - Tray	X
	<b>LIGHT PIPE OPTION</b> 6 - Light Pipes (Triangular Outlet); Left Arrow Pointing Bottom Outlet & Right Arrow Pointing Top Port 7 - Without Light Pipes 8 - With Light Pipes; Left Arrow Pointing Top Port & Right Arrow Pointing Bottom Port	X
	<b>DUST COVER OPTION</b> 0 - Without Dust Cover D - With Dust Cover	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.

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