

UltraPort™ QSFP+

QSFP28 with Stamped and Formed Contact Design

Amphenol ICC's UltraPort™ QSFP+ interconnect system comprises 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 more board real estate and cost optimized solutions. The UltraPort™ QSFP+ connector supports next generation 100G+ applications and transmits up to 28Gb/s per channel. It features a stamped and formed contact design providing improved mechanical durability. The resonance dampening features of the design allows superior signal integrity. The design minimizes crosstalk and transmission line impedance discontinuity across the connector interface.

- Electrical interface employs 4 lanes that operates up to 28 Gb/s per channel
- Passive copper and optical solutions
- Stamped and formed contact design provides improved mechanical durability
- The resonance dampening features minimize crosstalk and transmission line impedance discontinuity across the connector interface

FEATURES

- Electrical interface employs 4 lanes that operate up to 28 Gb/s per channel
- Passive copper and optical solutions
- Stamped and formed contact design
- Resonance dampening features



TARGET MARKETS



BENEFITS

- 100Gb/s aggregated bandwidth solution
- Support various application requirements
- Improved mechanical durability
- Minimizes crosstalk and transmission line impedance discontinuity and provides enhanced signal integrity

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
- Resonance Dampening Feature: Conductive Polymer

MECHANICAL PERFORMANCE

- Durability: 250 mating cycles
- Mating Force: 60 N max.
- Contact Normal Force: 0.5 N min./PIN
- PCB Thickness Single Side (Cage): 1.44 mm (0.057in.) min.
- PCB Thickness Belly to Belly (Cage): 2.35 mm (0.093in.) min.
- Unmating Force (Cage): 30 N max.
- Insertion Force to PCB (Cage):
 - 780 N for 1 port
 - 1000 N for 2 Ports
 - 1700 N for 4 Ports
 - 2400 N for 6 Ports

ELECTRICAL PERFORMANCE

- Operating Voltage: 30 VDC per contact
- Operating Current: 0.5 A per contact
- Differential Impedance: 100Ω +/- 10Ω

ENVIRONMENTAL

- Operating and (Storage) Temperature: -20° to +85° C
- RoHS & Halogen-Free

TOOLING INFORMATION

- Heat Sinks and Light Pipes: Available
- Configurations:
 - 1XN (N=1,2,3,4,6)
 - 2XN (N=1,2,3)

TARGET MARKETS/APPLICATIONS



Cellular Infrastructure
Network Interface Cards



Hubs
Switch
Servers
Storage



Test and Measurement Equipment