

# **QSFP DD Connectors**

# COMPRISED OF 76 POSITION, 0.8MM PITCH CONNECTOR

Each port supports up to 400Gb/s in aggregate over an 8 x 50Gb/s 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.

- Operating at 56Gb/s PAM-4 for up to 400Gb/s aggregated bandwidth solution
- QSFP series double density product with 8 channels per port
- Backwards mating compatible with QSFP
- Multiple connector and heat sink configurations



#### **FEATURES**

- Electrical interface employs 8 lanes that support 25Gb/s NRZ modulation or 56Gb/s PAM4, providing solutions up to 400Gb/s aggregate bandwidth
- Enables up to 14.4Tb/s aggregate bandwidth in a single switch slot
- Backwards mating compatible with QSFP
- Supports passive & active copper and optical solutions product
- Multiple connector configurations
- MSA supported standard interface
- Multiple heat sink options

RoHS compliant

#### **BENEFITS**

- Enables 200G and 400G aggregate bandwidth per port
- A single switch slot can have 36 ports QSFP DD
- Allows for use of either QSFP or QSFP DD products in any port
- Enables use of DAC, short and long range optical
- Single (1x1), ganged (1xN) and stacked (2xN) connector and cage configurations
- Amphenol offering meets or exceeds MSA defined product specifications
- Allows user to choose from multiple options to maximize heat dissipation
- Environmentally friendly

### TECHNICAL INFORMATION

#### **MATERIAL**

- Housing: Black color, glass reinforced, Lead-free solder reflow process compatible thermo plastic
- Contacts Base Material: High performance Copper Alloy
- Plating Solder Tails: Matte Tin
- Plating Mating Area: Gold
- Resonance Dampening Feature: Conductive polymer

#### **ELECTRICAL PERFORMANCE**

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

#### **MECHANICAL PERFORMANCE**

- Durability: 100 mating cycles
- Mating Force: 90N max.
- PCB Thickness (Cage): 1.44mm min. for singlemounted (1xN)
- Belly to Belly (Cage): 2.35mm min. for 1xN
- Unmating Force (Cage): 50N max.

#### **ENVIRONMENTAL**

- Operating and Storage Temperature: -40° to +85°C
- RoHS and halogen-free

#### **TOOLING INFORMATION**

- Cage mounting: Thru bezel
- EMI options: Spring fingers
- Configurations:
- 1XN (N=1, 2, 3, 4, 5)
- 2XN (N=1, 2)

#### **TARGET MARKETS/APPLICATIONS**



Cellular Infrastructure Network Interface Cards SAN-Storage Attached Networks



Hubs Switch Servers



Test and Measurement Equipment

## **PART NUMBERS**

Description	Part Numbers
56G QSFP-DD 1x1 SMT connector	UE36-A10X5-X000T (X represents various options)
QSFP-DD 1x1 cage assembly with heat sink and light pipe options	UE36-C16XXX-XXXXX (X represents various options)
QSFP-DD 1x2 cage assembly with heat sink and light pipe options	UE36-C26XXX-XXXXX (X represents various options)
QSFP-DD 1x3 cage assembly with heat sink c& light pipe options	UE36-C36XXX-XXXXX (X represents various options)
QSFP-DD 1x4 cage assembly with heat sink & light pipe options	UE36-C46XXX-XXXXX (X represents various options)
QSFP-DD 1x5 cage assembly with heat sink & light pipe options	UE36-C56XXX-XXXXX (X represents various options)
QSFP-DD 2x1 press-fit connector and cage assembly with heat sink and light pipe options	UE36-E162XX-XXXXX (X represents various options)
QSFP-DD 2x2 press-fit connector and cage assembly with heat sink and light pipe options	UE36-E262XX-XXXXX (X represents various options)