

Super QSFP-DD and Ultra QSFP-DD High Speed I/O Connector & Cage



OVERVIEW

Luxshare-TECH's Super QSFP-DD and Ultra QSFP-DD connector has 76 contacts with 0.8mm pitch, it could be use in high speed serial applications. There are 8 channels per port, supports up to 400Gb/s in aggregate. Super QSFP-DD and Ultra QSFP-DD module can be inserted into a U-QSFP-DD port, just uses 4 of 8 channels. U-QSFP-DD includes cages insingle, ganged (1X2) configurations. Cage construction features EMI shielding available in the form of metal spring. Additional features available include light pipes, heat sinks and many other custom features.

FEATURES & BENEFITS

- Compliant with QSFP-DD MSA
- Using 76 position PT(Pluggable Transceiver)SMT
- connector with 8 channels
- U-QSFP-DD connector and cage backward compatible
- with QSFP+ and S-QSFP transceiver module and copper cable, provide flexibility for system designers
- Employ eight lanes operated up to 25Gbps(NRZ) modulation or 50Gbps(PAM4)modulation
- Providing solutions up to 200Gbps or 400Gbps-aggregate
- U-QSFP-DD can support 36 ports of 400GbE in a single Rack Unit providing over 14.4 Tb/s bandwidth in a 1RU linecard
- Enhanced EMI cage design provides excellent EMI protection and thermal performance
- Available in EMI spring
- Behind bezel and thru bezel
- Belly-to-belly mounting capability for panel density
- Light pipe and heat sink options available

PRODUCT APPLICATIONS

Data center
Servers/Storage Devices
Switches/Routers
SAN,NIC cards
Test and Measurement Equipment
Networking Interface Card

INDUSTRY STANDARDS

QSFP-DD MSA

TECHNICAL INFORMATION

MATERIAL

Cage: Copper Alloy
EMI Spring: Stainless Steel or Copper Alloy
Connector
Housing&Molding: High temperature thermoplastic(UL 94V-0)
Terminals: Copper Alloy
Contact Area Finish: Gold over Nickel
Solder Area Finish: Tin over Nickel

ELECTRICAL PERFORMANCE

Voltage: 30V AC(RMS)/DC MAX
Current: 0.5A maximum per contact

ENVIRONMENTAL

Connector
Operating temperature: -40°C TO +85°C
Storage temperature: -15°C TO +85°C
Relative humidity: 20% to 80%
Atmospheric pressure: 650mm to 800mm of Hg (86 ~106Kpa)
Cage
Operating temperature : -55°C TO +85°C

Partial PN Table

| Product Numbers | Product Description |
|--------------------|---|
| PQD076-7520-001-1H | S-QSFP-DD 1X1 Connector,76Pin,SMT TYPE |
| PQD076-7521-001-1H | S-QSFP-DD 1x1 Connector with PAD type |
| PQDC10-E3MC-110-0R | QSFP-DD 1X1 CAGE_Nickel,No EON in the rear-end ,w/ Logo&HS,w/ painted lightpipe |
| PQDC24-E3JB-010-0R | QSFP-DD 1X2 CAGE_Nickel,2 EON in the rear-end,w/ Logo&HS(15.5),w/ lightpipe |
| PQDC24-E3KB-010-0R | QSFP-DD 1X2 CAGE_Nickel,2 EON in the rear-end,w/Logo&HS(18.0),w/ lightpipe |

MECHANICAL PERFORMANCE

Rated Durability Cycles: 100
Mating Force: 1.18N/pin MAX
Unmating Force: 0.39N/pin MIN
Insertion Force to PCB(immersion OSP plated):
544N for 1X1
714N for 1X2
1024N for 1X4
Extraction Force to PCB(immersion OSP plated):
88N for 1X1
176N for 1X2
350N for 1X4

TOOLING INFORMATION

Configurations:
1XN (N=1,2,4)
2XN (N=1)

PACKAGING

Connector: Tape & Reel
Cage: Tray

SPECIFICATION

ES-11-00-0026
ES-11-00-0027