

QSFP-DD Turbo-DAC Active DAC Assemblies

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QSFP-DD Turbo-DAC Active DAC Assemblies, with QSFP-DD Interconnects, provide 25- and 56-Gbps data rates and serve as reliable substitutes for 3.0-to-7.0m active optical cables while providing the plug-and-play convenience of passive cable assemblies

Features and Advantages:

Turbo-DAC Assemblies with QSFP-DD Interconnects (Series 211795)

Linear-amplified technology

- Amplifies signal
- Serves as an effective substitute for AOC assemblies from 3.0 to 7.0m
- Looks and feels like normal copper cable assemblies, but at longer lengths, performs as well as shorter cables

Low latency, low power and low cost

Delivers better, more economical performance than assemblies with clock-and-data recover (CDR)/retimer designs

Designed for automated termination process

Improves production efficiency to maximize cost competitiveness



Temp-Flex cable technology

- Provides significant insertion loss improvement without OD penalty
- Boosts cost efficiencies through a vertically integrated supply chain
- Improves signal integrity performance with enhanced shielding compared with standard cable



56 Gbps Turbo-DAC Active DAC Assembly with QSFP-DD Interconnects

Acts like a standard cable

- Provides convenient plug-and-play deployment
- Requires no special configuration needed.
- Looks like a passive cable to the host system
- Performs similar to a 1.5m passive cable, despite being up to 7.0m long

Backward compatibility with SFP+ I/O ports

Enables utility of legacy 40 Gbps Ethernet systems

Meets new IEEE 802.3bj and 802.3cd industry requirements

- Guarantees reliability in 28/56 Gbps systems
- Functions across a wide variety of next-generation technologies and applications

Markets and Applications

Telecommunication/Networking

Switches, routers
Central office
Cellular infrastructure
Multi-platform service systems
(DSL, cable data)

Servers /Storage

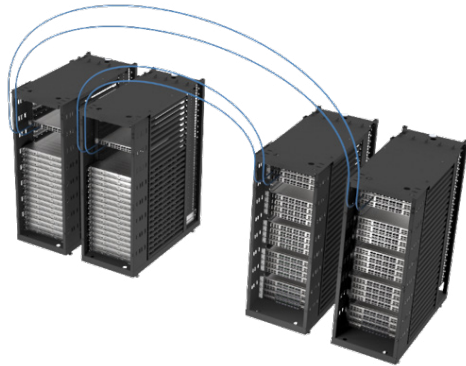
Rack servers
Blade Servers
Storage

Data Centers

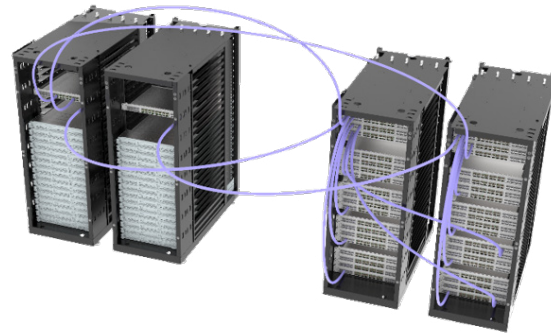
Enterprise
Cloud
Edge

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TOR-to-EOR/Spine Switches
• 25 and 56 Gbps
• 7.0-10.0m



Mesh Fabric of Spin /
Aggregator Switches
• 56 Gbps
• 5.0-7.0m

Mesh Fabric of Spin /
Aggregator Switches OR
Server-to-TOR Switch
• 56 Gbps
• 2.0-3.0m

Specifications

SERIES: 211795

STATUS: Active

OVERVIEW: QSFP-DD Turbo-DAC Active DAC Assemblies

DESCRIPTION: QSFP-DD-to-QSFP-DD Active Copper Cable (ACC) Assembly, 28/56 Gbps, 30, 28 & 26 AWG Cable, Pull-to-Release, Plunger-Style Latch, 3.0m Length (min), 7m Length (max)

PRODUCT FAMILY: Cable Assemblies

ASSEMBLY CONFIGURATION: Dual-Ended Connectors

COMMENTS: Meets customer requirements for speeds up to 56 Gbps. Linear cables may require host pre-emphasis and equalization to reach longer lengths. Meets customer requirements for speeds up to 56 Gbps. Linear cables may require host pre-emphasis and equalization to reach at the longer lengths.

CONNECTOR TO CONNECTOR: QSFP-DD-to-QSFP-DD

ELECTRICAL MODEL: Coming soon

PRODUCT NAME: QSFP-DD

UPC: TBD

REFERENCE INFORMATION

Mates with: QSFP-DD Connectors and Cages (Series 202718, 204058, 203143)

PHYSICAL

Backshells: Nickel-plated Zinc
Delatch: Plastic
Circuits (Loaded): 16 differential pairs
Gender: Male-male
Lock-to-Mating Part: Yes
Material: Metal Beryllium Copper, Zinc alloy
Number of Rows: 4
Packaging Type: Bag
Single-Ended: No
Waterproof/Dustproof: Yes
Wire/Cable Type: Twinax
Operating Temperature: 0 to +70°C
Storage Temperature: -20 to +85°C

ELECTRICAL

Impedance: 100 Ohms, Differential
Shield Type: Full Shield
Shielded: Yes
Voltage (max.): 3.3V

ENVIRONMENTAL

RoHS compliant: Yes
Halogen-free: No
EU ELV: Yes
China RoHS: Yes
EU RoHS: Yes

www.molex.com/link/qsfpdd.html

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