Volex 400G QSFP-DD Active Electrical Cable

Volex's 400G QSFP-DD Active Electrical Cable features 8 transmitting and 8 receiving 50Gbps PAM4 channels for 400G operation. The cable assembly meets QSFP-DD MSA and IEEE 802.3cd specifications with substantial signal integrity margin providing high performance and bandwidth interconnect solutions for high-density applications.
The signal integrity, severely stressed under high-speed data transmission, is enhanced via advanced DSP equalization.
The result is longer reach up to 7M with smallest cable size and highest flexibility. The result is a highly flexible DAC cable which reduces the overall bend space up to 30% vs the passive version, making it ideal for deployment in high density rack.

As next-gen data centers deploy faster speed in a tighter space, they need high performance cables that reduce power consumption, provide reliable operation and are low cost. Volex's QSFP-DD Active Electric Cable is designed to meet the next-gen data center needs and is a cost-effective alternative to the high-power consumption Active Optical Cable.

Low power consumption and heat dissipation

Complete cable assembly uniquely terminated at the factory to provide the most reliable operation

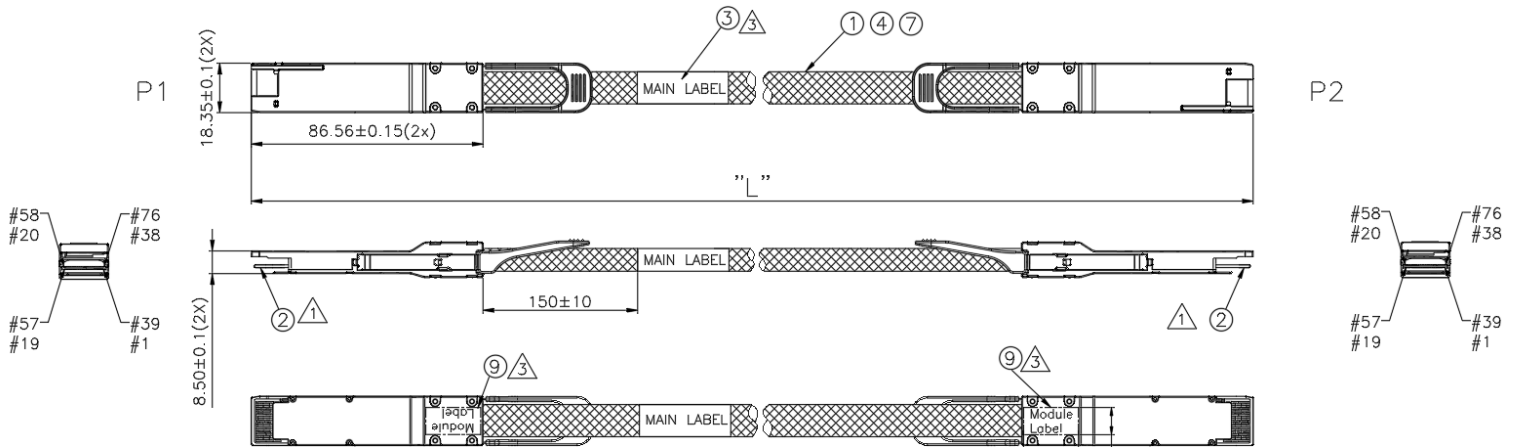100% tested for signal integrity with serial number traceability

FEATURES AND SPECIFICATIONS	
Product Type	400G QSFP-DD active electrical cable assembly
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	Plastic braided mesh
Packaging	PE bag
Power Supply Voltage	3.3V
Power Consumption	<12W per active module(8 channels)
Temperature Range	0 - 70°C
Retention Force	Minimum 125N per MSA specification
Insertion Force	Maximum 90N per MSA specification
EEPROM	CMIS 5.0 compliance
Cable Termination	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

Volex reserves the right to change specifications and availability without prior notice.

High-Speed Interconnect

Applications	Standards Compliance
• Switches, Servers, Routers, Storage Arrays • Networking Equipment • Data Centres • Telecommunication Central Offices • Test and Measurement Equipment	• IEEE 802.3cd, Infiniband HDR • QSFP-DD/QSFP-DD800 HW MSA • CMIS 5.0 • EIA-364 • UL 94, 1581, VW1, File No. E510564 • RoHS

Mechanical Drawing

Volex P/N	Cable Length (m)	Cable Gauge (AWG)	Cable OD (mm)
DQ52BDG10BE	1.00	32AWG	7.3
DQ52BDG20BE	2.00	32AWG	7.3
DQ52BDG30BE	3.00	32AWG	7.3
DQ52BDG40BE	4.00	32AWG	7.3
DQ58BDG50BE	5.00	28AWG	10.6
DQ58BDG60BE*	6.00	28AWG	10.6
DQ58BDG70BE*	7.00	28AWG	10.6

* Cables are pending final qualification. Length listed above are preliminary.

1 – 7m lengths available with 32AWG-28AWG conductor sizes to achieve maximum performance.

Options Available

Custom colours for cable jacket
Custom colours for pull tab
Custom EEPROM mapping

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