Volex 400G OSFP Active Electrical Cable

Volex's 400G OSFP active electrical cable features 8 transmitting and 8 receiving 50Gbps PAM-4 channels for 400G operation. The cable assembly meets OSFP 400G 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 400G OSFP active electrical 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
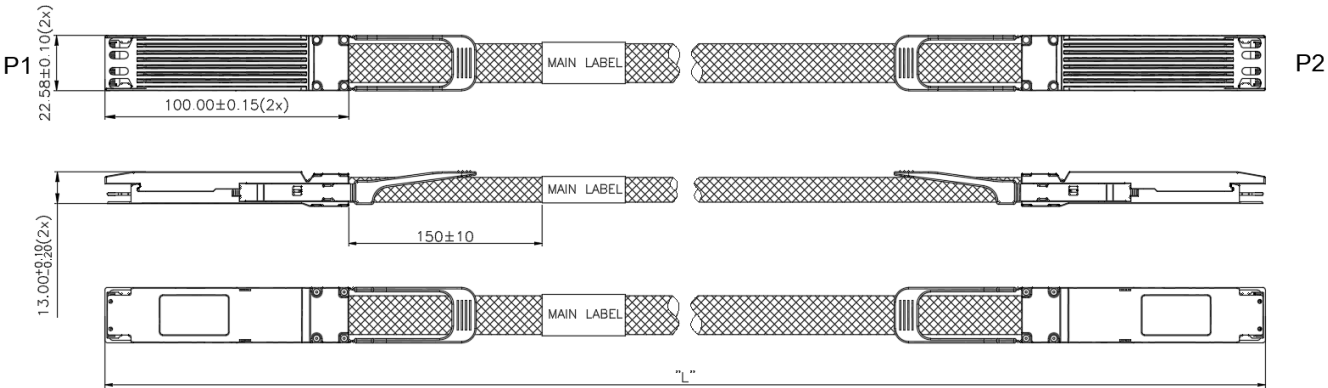
FEATURES AND SPECIFICATIONS	
Product Type	400G OSFP active electrical cable assembly
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	Plastic braided mesh
Packaging	PE bag
Power Supply Voltage	3.3V
Power Consumption	<12W per active module(8 channels)
Temperature Range	0 - 70°C
Retention Force	Minimum 125N per MSA specification
Insertion Force	Maximum 40N 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 802.3ck, Infiniband HDR • Specification for OSFP, Rev 5.0 • 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)
DE52BDG10BE	1.00	32AWG	7.3
DE52BDG20BE	2.00	32AWG	7.3
DE52BDG30BE	3.00	32AWG	7.3
DE58BDG50BE	5.00	28AWG	10.6
DE58BDG60BE*	6.00	28AWG	10.6
DE58BDG70BE*	7.00	28AWG	10.6

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

1.0 – 7.0m 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

Volex Worldwide CONTACT INFO		
Americas Tel: +1 512 608 2402		**EMEA** Tel: +44 7768 924844
China Tel: +86 159 5019 6906	**Asia Pacific** Tel: +65 6904 1545	**India** Tel: +91 99406 10637

Contact us at **sales@volex.com**
for assistance in finding the right solution for your needs.

Volex QSFP-DD 800G Active Electrical Cable

Volex's QSFP-DD 800G Active Electrical Cable features 8 transmitting and 8 receiving 100Gbps PAM4 channels for 800G operation. The cable assembly meets IEEE 802.3ck 400GBase-CR4, 200Gbase-CR2 and 100GBase-CR1 standard 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 5M 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
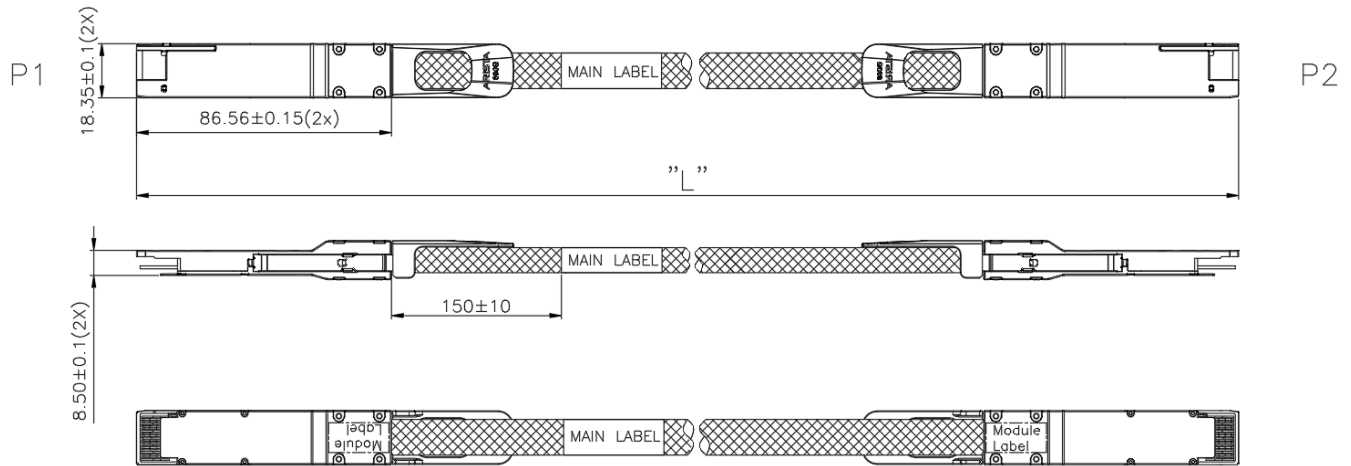
FEATURES AND SPECIFICATIONS	
Product Type	QSFP-DD 800G active electrical cable assembly
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	Plastic braided mesh
Packaging	PE bag
Power Supply Voltage	3.3V
Power Consumption	<14W 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 5.2 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 802.3ck, Infiniband NDR - QSFP-DD/QSFP-DD800/QSFP112 HW Rev 6.3 - CMIS 5.2 - EIA-364 - UL 94, 1581, VW1, File No. E510564 - RoHS

Mechanical Drawing

Arista P/N	Volex P/N	Cable Length (m)	Cable Gauge (AWG)	Cable OD (mm)
CBL-10607-50	DQ62BDR10BE	1.00	32AWG	7.3
CBL-10608-50	DQ62BDR20BE	2.00	32AWG	7.3
CBL-10609-50	DQ62BDR30BE	3.00	32AWG	7.3
CBL-10610-50	DQ68BDR50BE	5.00	28AWG	10.6

1.0 – 5.0m 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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Volex 800G OSFP TO 2X Q112 AEC Y-CABLE

Volex's 800G OSFP TO 2X Q112 AEC Y cable assembly offers a non-typical "Y" type breakout. This breakout cable supports 8 lanes of 112G PAM4 signal in each direction, and provides a breakout function to 2x400G QSFP112 connectors with software selectable 4x112G operation. The signal integrity, severely stressed under high-speed data transmission, is enhanced via advanced DSP equalization. The result is longer reach up to 5M with smallest cable size and highest flexibility.

Volex's 800G OSFP TO 2X Q112 AEC Y cable assembly are high performance and high bandwidth interconnect solutions. It is designed for applications in data centers, networking and telecommunication market which require high speed and reliable cable assemblies.

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
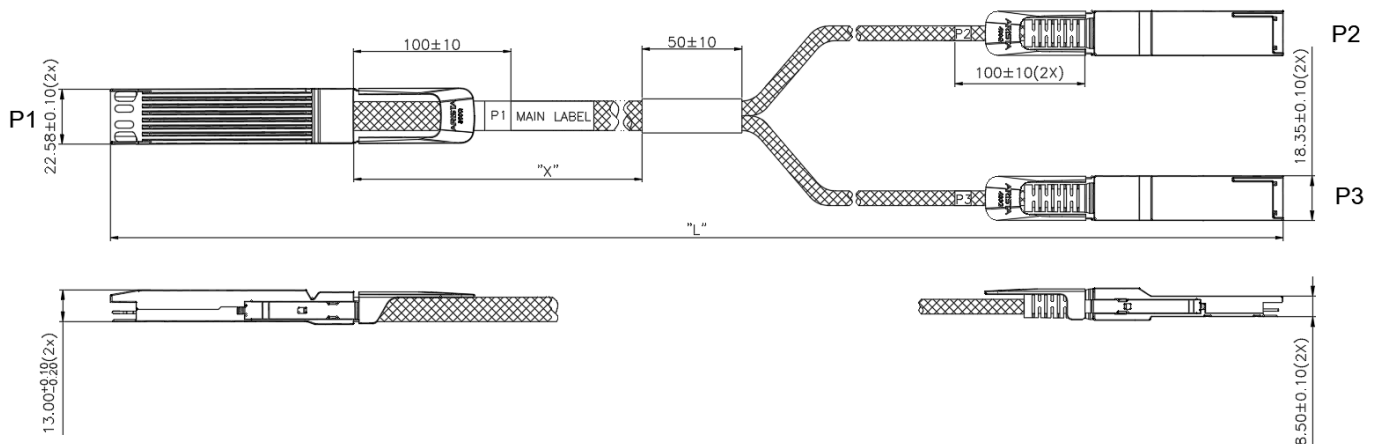
FEATURES AND SPECIFICATIONS	
Product Type	800G PAM4 OSFP TO 2x Q112 AEC Y CABLE assembly
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	Plastic braided mesh
Packaging	PE bag
Power Supply Voltage	3.3V
Power Consumption	<14W per OSFP module(8 channels), <8W per Q112 module(4 channels),
Temperature Range	0 - 70ºC
Retention Force	Minimum 125N per MSA specification
Insertion Force	Maximum 40N per MSA specification
EEPROM	CMIS 5.2 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 802.3ck, Infiniband NDR • OSFP MSA Rev 5.0 /SFF-8665, SFF-8661, SFF-8472, SFF-8636, SFF-8679 • CMIS 5.2 • EIA-364 • UL 94, 1581, VW1, File No. E510564, RoHS

Mechanical Drawing

Arista P/N	Volex P/N	Cable Length (m)	Cable Gauge (AWG)	OSFP Cable OD (mm)	Q112 Cable OD (mm)
CBL-10611-50	DG62BDR10BE	1.00	32AWG	7.3	5.3
CBL-10612-50	DG62BDR20BE	2.00	32AWG	7.3	5.3
CBL-10613-50	DG62BDR30BE	3.00	32AWG	7.3	5.3
CBL-10614-50	DG68BDR50BE	5.00	28AWG	10.6	7.6

1.0 – 5.0m 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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for assistance in finding the right solution for your needs.

Volex 800G QSFP-DD TO 2X Q112 AEC Y-CABLE

Volex's 800G QSFP-DD TO 2X Q112 AEC Y cable assembly offers a non-typical "Y" type breakout. This breakout cable supports 8 lanes of 112G PAM4 signal in each direction, and provides a breakout function to 2x400G QSFP112 connectors with software selectable 4x112G operation. The signal integrity, severely stressed under high-speed data transmission, is enhanced via advanced DSP equalization. The result is longer reach up to 5M with smallest cable size and highest flexibility.

Volex's 800G QSFP-DD TO 2X Q112 AEC Y cable assembly are high performance and high bandwidth interconnect solutions. It is designed for applications in data centers, networking and telecommunication market which require high speed and reliable cable assemblies.

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
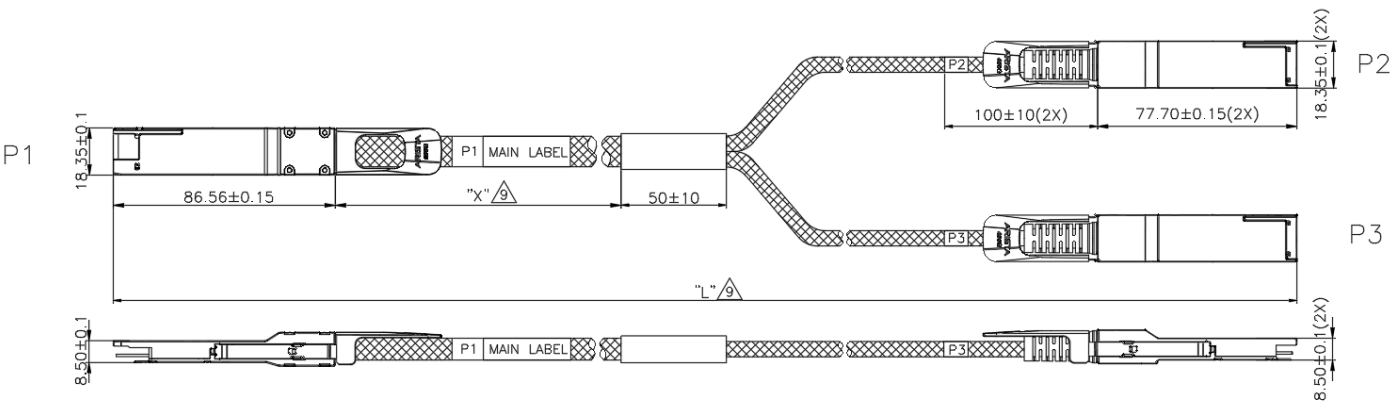
FEATURES AND SPECIFICATIONS	
Product Type	800G PAM4 QSFPDD TO 2x Q112 AEC Y CABLE assembly
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	Plastic braided mesh
Packaging	PE bag
Power Supply Voltage	3.3V
Power Consumption	<14W per QSFP-DD module(8 channels), <8W per Q112 module(4 channels),
Temperature Range	0 - 70°C
Retention Force	>90N for QSFP; >125N for QSFP-DD
Insertion Force	<60N for QSFP; < 90N for QSFP-DD
EEPROM	CMIS 5.2 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 802.3ck, Infiniband NDR • QSFP-DD HW 6.3/SFF-8665, SFF-8661, SFF-8472, SFF-8636, SFF-8679 • CMIS 5.2 • EIA-364 • UL 94, 1581, VW1, File No. E510564, RoHS

Mechanical Drawing

Arista P/N	Volex P/N	Cable Length (m)	Cable Gauge (AWG)	QSFP-DD Cable OD (mm)	Q112 Cable OD (mm)
CBL-10615-50	DT62BDR10BE	1.00	32AWG	7.3	5.3
CBL-10616-50	DT62BDR20BE	2.00	32AWG	7.3	5.3
CBL-10617-50	DT62BDR30BE	3.00	32AWG	7.3	5.3
CBL-10618-50	DT68BDR50BE	5.00	28AWG	10.6	7.6

1.0 – 5.0m 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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