

# Volex 800G OSFP Active Electrical Cable



Volex's 800G OSFP active electrical Direct Attach Cable features 8 transmitting and 8 receiving 100Gbps PAM-4 channels. The cable assembly meets OSFP 800G MSA and IEEE 802.3ck specifications. 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 800G 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

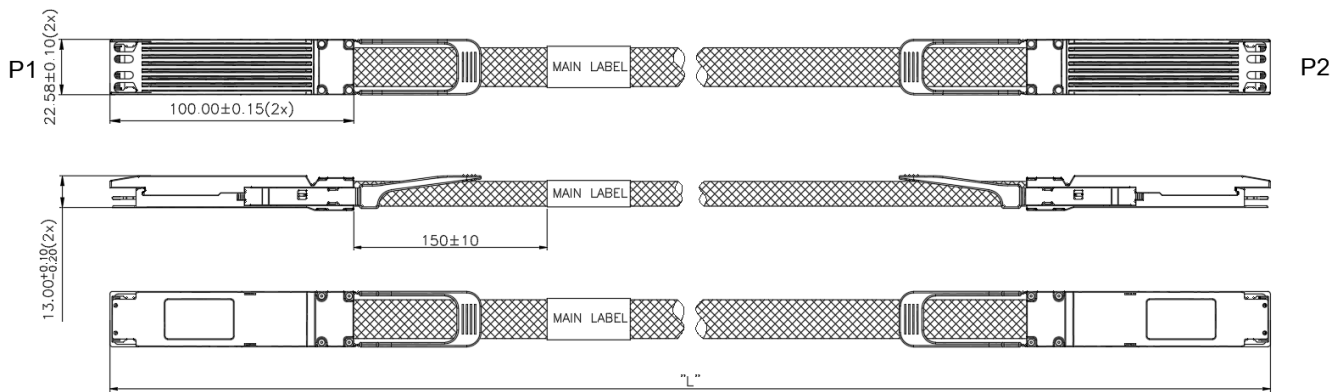
<b>Product Type</b>	OSFP 800G active electrical cable assembly
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	Plastic braided mesh
<b>Packaging</b>	PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	<12W per active module(8 channels)
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	Minimum 125N per MSA specification
<b>Insertion Force</b>	Maximum 40N per MSA specification
<b>EEPROM</b>	CMIS 5.0 compliance
<b>Cable Termination</b>	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
<ul style="list-style-type: none"> <li>• Switches, Servers, Routers, Storage Arrays</li> <li>• Networking Equipment</li> <li>• Data Centres</li> <li>• Telecommunication Central Offices</li> <li>• Test and Measurement Equipment</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.3ck, InfiniBand NDR</li> <li>• Specification for OSFP, Rev 5.0</li> <li>• CMIS 5.0</li> <li>• EIA-364</li> <li>• UL 94, 1581, VW1, File No. E510564</li> <li>• RoHS</li> </ul>

## Mechanical Drawing



Volex P/N	Cable Length (m)	Cable Gauge (AWG)	Cable OD (mm)
DE62BDG10BE	1.00	32AWG	7.3
DE62BDG20BE	2.00	32AWG	7.3
DE62BDG30BE	3.00	32AWG	7.3
DE68BDG50BE	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

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

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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



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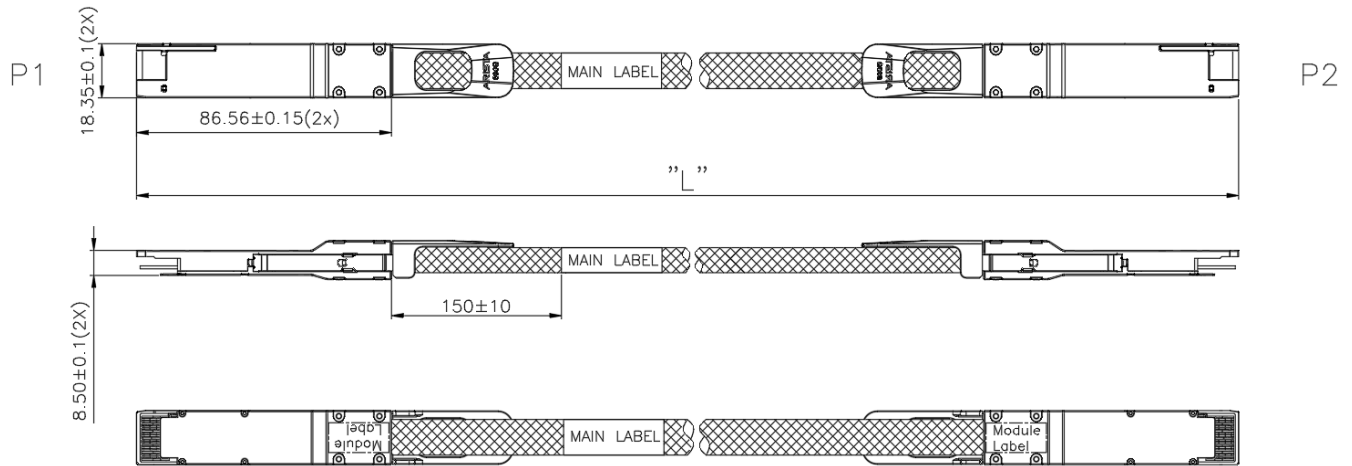
## FEATURES AND SPECIFICATIONS

<b>Product Type</b>	QSFP-DD 800G active electrical cable assembly
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	Plastic braided mesh
<b>Packaging</b>	PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	<14W per active module(8 channels)
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	Minimum 125N per MSA specification
<b>Insertion Force</b>	Maximum 90N per MSA specification
<b>EEPROM</b>	CMIS 5.2 compliance
<b>Cable Termination</b>	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

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Applications	Standards Compliance
<ul style="list-style-type: none"> <li>Switches, Servers, Routers, Storage Arrays</li> <li>Networking Equipment</li> <li>Data Centres</li> <li>Telecommunication Central Offices</li> <li>Test and Measurement Equipment</li> </ul>	<ul style="list-style-type: none"> <li>IEEE 802.3ck, Infiniband NDR</li> <li>QSFP-DD/QSFP-DD800/QSFP112 HW Rev 6.3</li> <li>CMIS 5.2</li> <li>EIA-364</li> <li>UL 94, 1581, VW1, File No. E510564</li> <li>RoHS</li> </ul>

## 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

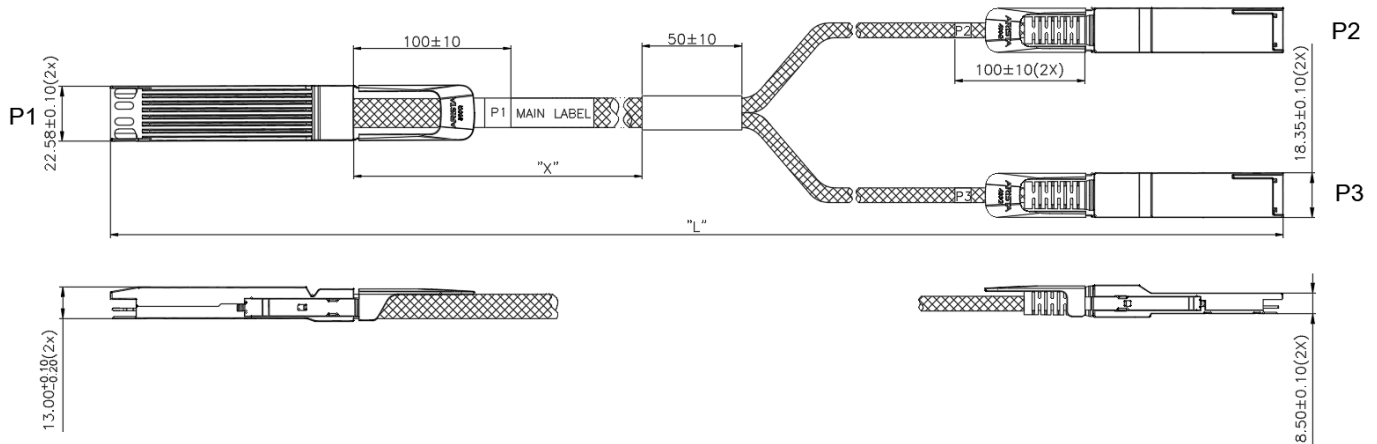
<b>Product Type</b>	800G PAM4 OSFP TO 2x Q112 AEC Y CABLE assembly
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	Plastic braided mesh
<b>Packaging</b>	PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	<14W per OSFP module(8 channels), <8W per Q112 module(4 channels),
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	Minimum 125N per MSA specification
<b>Insertion Force</b>	Maximum 40N per MSA specification
<b>EEPROM</b>	CMIS 5.2 compliance
<b>Cable Termination</b>	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

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**High-Speed Interconnect**

Applications	Standards Compliance
<ul style="list-style-type: none"> <li>Switches, Servers, Routers, Storage Arrays</li> <li>Networking Equipment</li> <li>Data Centres</li> <li>Telecommunication Central Offices</li> <li>Test and Measurement Equipment</li> </ul>	<ul style="list-style-type: none"> <li>IEEE 802.3ck, Infiniband NDR</li> <li>OSFP MSA Rev 5.0 /SFF-8665, SFF-8661, SFF-8472, SFF-8636, SFF-8679</li> <li>CMIS 5.2</li> <li>EIA-364</li> <li>UL 94, 1581, VW1, File No. E510564, RoHS</li> </ul>

## 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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# 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.

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## FEATURES AND SPECIFICATIONS

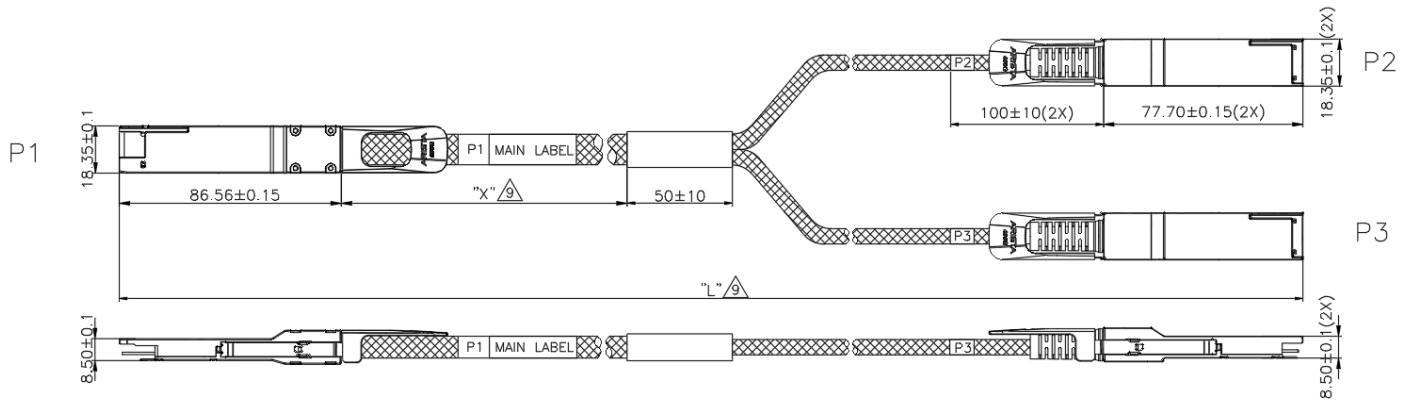
<b>Product Type</b>	800G PAM4 QSFPDD TO 2x Q112 AEC Y CABLE assembly
<b>Conductor Treatment</b>	Laser stripped conductors
<b>Cable Type</b>	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
<b>Cable Colour</b>	Black
<b>Cable Jacket</b>	Plastic braided mesh
<b>Packaging</b>	PE bag
<b>Power Supply Voltage</b>	3.3V
<b>Power Consumption</b>	<14W per QSFP-DD module(8 channels), <8W per Q112 module(4 channels),
<b>Temperature Range</b>	0 - 70°C
<b>Retention Force</b>	>90N for QSFP; >125N for QSFP-DD
<b>Insertion Force</b>	<60N for QSFP; < 90N for QSFP-DD
<b>EEPROM</b>	CMIS 5.2 compliance
<b>Cable Termination</b>	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

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**High-Speed Interconnect**

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## 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

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