# Volex 800G QSFP-DD Active Copper Cable

Volex's 800G QSFP-DD Active Copper 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 linear equalization. The result is longer reach up to 5M vs 2M for the passive version with the same unique dielectric material and cable construction that offers the 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 Copper 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               | 800G QSFP-DD Active Copper cable assembly   |
| <b>Conductor Treatment</b> | 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          | <150mW per active channel   |
| 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 t | to change specifications and availability without prior notice.   |

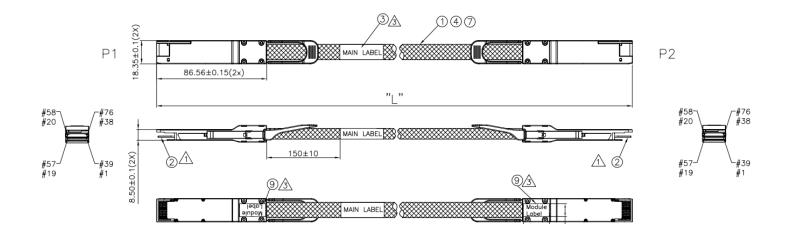
### **High-Speed Interconnect**





| Applications  | Standards Compliance   |  |  |
|---|--|--|--|
| <ul> <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> <li>IEEE 802.3ck</li> <li>QSFP-DD/QSFP-DD800/QSFP112 HW Rev 6.3</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<br>(AWG) | Cable OD (mm) |
|-------------|------------------|----------------------|---------------|
| DQ60BDG10BA | 1.00             | 30AWG                | 9.7           |
| DQ60BDG20BA | 2.00             | 30AWG                | 9.7           |
| DQ60BDG30BA | 3.00             | 30AWG                | 9.7           |
| DQ66BDG40BA | 4.00             | 26AWG                | 11.9          |
| DQ66BDG50BA | 5.00             | 26AWG                | 11.9          |

1.0 – 5.0m lengths available with 30AWG-26AWG conductor sizes to achieve maximum performance.

#### **Options Available**

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

| Volex Worldwide<br>CONTACT INFO |                     |                      |                      |  |  |  |
|---------------------------------|---------------------|----------------------|----------------------|--|--|--|
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## for assistance in finding the right solution for your needs.

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