

Volex 400G QSFP-DD to QSFP56 Passive DAC Breakout Cable



Volex's QSFP-DD to 2x/4x QSFP56 passive breakout Direct Attach Cable features 8 50Gbps channels with PAM-4 modulation for each of the transmitting and receiving directions. The breakout cable is offered in a 400Gbps (QSFP-DD) to 2x 200Gbps (2x QSFP56) or 4x 100Gbps (4x QSFP56) configurations. The cable assembly meets IEEE 802.3cd 50GBase-CR and 100GBase-CR2 standard with substantial signal integrity margin providing high performance and bandwidth interconnect solutions for high-density applications.

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. This breakout cable assembly is designed to meet the next-gen data center needs offering smallest cable outer diameter and bend radius and highest flexibility while meeting or exceeding the MSA signal integrity specification.



Near zero power consumption and no heat generated



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	400Gbps QSFP-DD to 2x/4x QSFP56 Passive Breakout DAC Cable
Conductor Treatment	Laser stripped conductors
Cable Type	High speed twinax cable, 16-pair differential, 100 +/-5 ohms
Cable Colour	Black
Cable Jacket	PVC or Plastic braided mesh
Packaging	Anti-Static PE bag
Power Supply Voltage	3.3V
Power Consumption	Near zero
Temperature Range	0 - 70°C
Retention Force	Minimum 125N per MSA specification (All ends)
Insertion Force	Maximum 90N for QSFP-DD and Maximum 60N for QSFP per MSA specification
EEPROM	Each connector module contains an EEPROM to provide product information to the host system
Cable Termination	100% factory tested including comprehensive signal integrity verification and serial number traceability using advanced Manufacturing Execution Systems

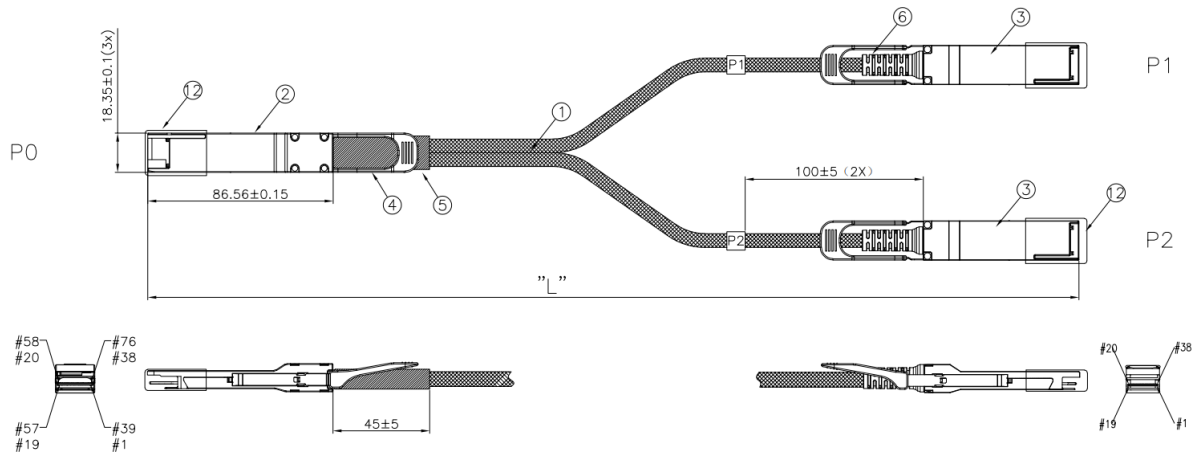
Volex reserves the right to change specifications and availability without prior notice.

High-Speed Interconnect

Applications	Standards Compliance
<ul style="list-style-type: none"> Switches, Servers, Routers, Storage Arrays Networking Equipment Data Centres Telecommunication Central Offices Test and Measurement Equipment 	<ul style="list-style-type: none"> IEEE 802.3cd QSFP-DD/QSFP-DD800 HW MSA, SFF-8665, SFF-8661, SFF-8636, SFF-8679, CMIS 5.0 EIA-364 UL 94, 1581, VW1, File No. E510564 RoHS

Mechanical Drawing

QSFP-DD to 2x QSFP56 configuration shown



Volex P/N (QSFP-DD to 2x QSFP56)	Volex P/N (QSFP-DD to 4x QSFP56)	Cable Length (M)	Gauge (AWG)	Cable OD (mm) (2x/4x)
DT50BDG05BS	DC50BDG05BS	0.50	30	6.8/5.3
DT50BDG10BS	DC50BDG10BS	1.00	30	6.8/5.3
DT50BDG15BS	DC50BDG15BS	1.50	30	6.8/5.3
DT50BDG20BS*	DC50BDG20BS*	2.00	30	6.8/5.3
DT58BDG25BS*	DC58BDG25BS*	2.50	28	7.9/6.5
DT56BDG30BS*	DC56BDG30BS*	3.00	26	8.5/6.8

0.5 – 3.0m 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

“*” - Maximum cable reach of passive DAC will be shorter in InfiniBand HDR application.

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.