

Volex Direct Attach Copper (DAC) Cables



Volex is a leading manufacturer and supplier of Direct Attach Copper (DAC) cable. The Volex DAC cable product family is comprised of cable assemblies with Small Form-factor Pluggable (SFP), Quad Small Form-factor Pluggable (QSFP) and Octal Small Form-factor Pluggable (OSFP) single and double density series modules. Volex offers a full line of active and passive direct attach copper cables from 10Gbps SFP+ to 800Gbps OSFP, QSFP-DD800 and 1.6 TB is in developing designed to meet the requirements of the most demanding data centres with industry leading quality and reliability.

Volex DAC Cables are optimised for Ethernet, Infiniband and Fibre Channel data connection applications in data centres, with benefits that include:

- ✓ Near-zero power consumption, low heat dissipation, very low cost
- ✓ Complete cable assembly uniquely terminated at the factory to provide the most reliable operation
- ✓ 100% tested for signal integrity with serial number traceability
- ✓ Product customisation available to meet customer specifications
- ✓ Production capacity to meet mega sized global data centre demand
- ✓ Innovative design development to support next-generation interconnect technology and deployment



Volex's engineering teams can customise a solution to a customer's specific requirements and provide quick turn custom design samples supported by skilled local sales and field applications engineering (FAE) teams. A global factory footprint, which includes tariff-free manufacturing sites, efficient global supply chain and logistics support, enables reduced product lead time and efficient cost management.

By partnering with Volex on data centre high-speed interconnect solutions, customers benefit from strong technical expertise and manufacturing prowess to help future-proof data centres and fulfil infrastructure development and growth goals.

Direct Attach Copper (DAC) Cable Technical Information

DAC cable from Volex is offered with many different form factors, total speeds, lane speeds and lengths in straight and various breakout configurations.

Contact us at sales@volex.com
for further assistance with High-Speed Interconnect products.

Volex Direct Attach Copper Cable Products	Total Speed (Gbps)	Lanes, Lane Speed (Gbps)	Lengths (M)	Twinax (n-pair)	Application
10Gbps SFP+ and 40Gbps QSFP+					
SFP+ Passive DAC Cable	10	1, 10	0.5 – 7	2	E, F
QSFP+ Passive DAC Cable	40	4, 10		8	E, I, F
QSFP+ to 4x SFP+ Passive Breakout DAC Cable	40/ 4x 10	4, 10		4x 2	E, F
25Gbps SFP28 and 100Gbps QSFP28					
SFP28 Passive DAC Cable	25	1, 25	0.5 – 5	2	E, F
QSFP28 Active DAC Cable	100	4, 25	4 – 9	8	E, I, F
QSFP28 Passive DAC Cable	100	4, 25	0.5 – 5	8	E, I, F
QSFP28 to 2x QSFP28 Active Breakout DAC Cable	100/ 2x 50	4, 25	4 – 9	2x 4	E
QSFP28 to 2x QSFP28 Passive Breakout DAC Cable	100/ 2x 50	4, 25	0.5 – 5	2x 4	E
QSFP28 to 4x SFP28 Active Breakout DAC Cable	100/ 4x 25	4, 25	4 – 9	2x 4	E
QSFP28 to 4x SFP28 Passive Breakout DAC Cable	100/ 4x 25	4, 25	0.5 – 5	4x 2	E, F
50Gbps SFP56, 100Gbps SFP-DD and 200Gbps QSFP56					
SFP56 Passive DAC Cable	50	1, 50	0.5 – 3	2	E, F
SFP-DD Passive DAC Cable	100	2, 50	0.5 – 3	4	E, F
QSFP56 Active DAC Cable	200	4, 50	4 – 9	8	E, I, F
QSFP56 Passive DAC Cable	200	4, 50	0.5 – 3	8	E, I, F
QSFP56 to 2x QSFP56 Active Breakout DAC Cable	200/ 2x 100	4, 50	4 – 9	2x 4	E, I
QSFP56 to 2x QSFP56 Passive Breakout DAC Cable	200/ 2x 100	4, 50	0.5 – 3	2x 4	E, I
QSFP56 to 4x SFP56 Active Breakout DAC Cable	200/ 4x 50	4, 50	4 – 9	4x 2	E, F
QSFP56 to 4x SFP56 Passive Breakout DAC Cable	200/ 4x 50	4, 50	0.5 – 3	4x 2	E, F
400Gbps QSFP-DD and OSFP					
QSFP-DD Active DAC Cable	400	8, 50	4 – 9	16	E
QSFP-DD Passive DAC Cable	400	8, 50	0.5 – 3	16	E
QSFP-DD to 2x QSFP56 Passive Breakout DAC Cable	400/ 2x 200	8, 50	0.5 – 3	2x 8	E
QSFP-DD to 4x QSFP56 Passive Breakout DAC Cable	400/ 4x 100	8, 50	0.5 – 3	4x 4	E
OSFP 400G Passive DAC Cable*	400	8, 50	0.5 – 3	16	E
400Gbps QSFP112, 800G OSFP and QSFP-DD800					
QSFP112 Active DAC Cable	400	4, 100	1 – 5	8	E
QSFP112 Passive DAC Cable	400	4, 100	0.5 – 2	8	E
800G OSFP Active DAC Cable	800	8, 100	1 – 5	16	E, I
800G OSFP Passive DAC Cable	800	8, 100	0.5 – 2	16	E
QSFP-DD800 Active DAC Cable	800	8, 100	1 – 5	16	E, I
QSFP-DD800 Passive DAC Cable	800	8, 100	0.5 – 2	16	E
1600Gbps OSFP-XD and OSFP1600					
1.6 TB OSFP-XD**	1600	16, 100	0.5 - 1.5	32	E, I
1.6 TB OSFP1600**	1600	8, 200	0.5 - 1.0	16	E, I
* Volex's OSFP 400G Passive DAC Cable Products (including part numbers DO50PDG05BS, DO50PDG10BS, DO50PDG15BS, DO58PDG20BS, DO58PDG25BS and DO56PDG30BS) are not intended for use and should not be used with cages configured to also receive an OSFP module with a riding heat sink or with stacked cages configured to receive an OSFP module with a riding heat sink.					
** Cables are pending final qualification. Length listed above are preliminary.					
E = Ethernet, I = InfiniBand, F = Fibre Channel					

For each product line, different lengths (meters) and wire gauges (AWG) and other customisation options including pull-tab colour, low-smoke zero-halogen cable jacket and colour, and EEPROM custom programming and pages are available.