

Datasheet

100G QSFP+ Passive Copper Cable (PCC)

ZeeVee Part #: Z4KDAC100GB-2M



Features:

- 4-Channel Full-Duplex Passive Copper Cable Transceiver
- Support for multi-gigabit data rates up to 25.78Gbps (per channel)
- Maximum aggregate data rate: 100Gb/s
- Wire AWG: AWG30
- IEEE 802.3bj 100GEBASE-CR4
- All metal housing for superior EMI performance
- Available length (in meters): 2
- Commercial temperature range (COM): 0~ 70 °C
- Power supply: +3.3V
- Low crosstalk
- Shielded copper twin axial design for reduced skew rate and crosstalk
- RoHS Compliant
- Compliant with industry standard QSFP+ form factor SFF-8665

Description

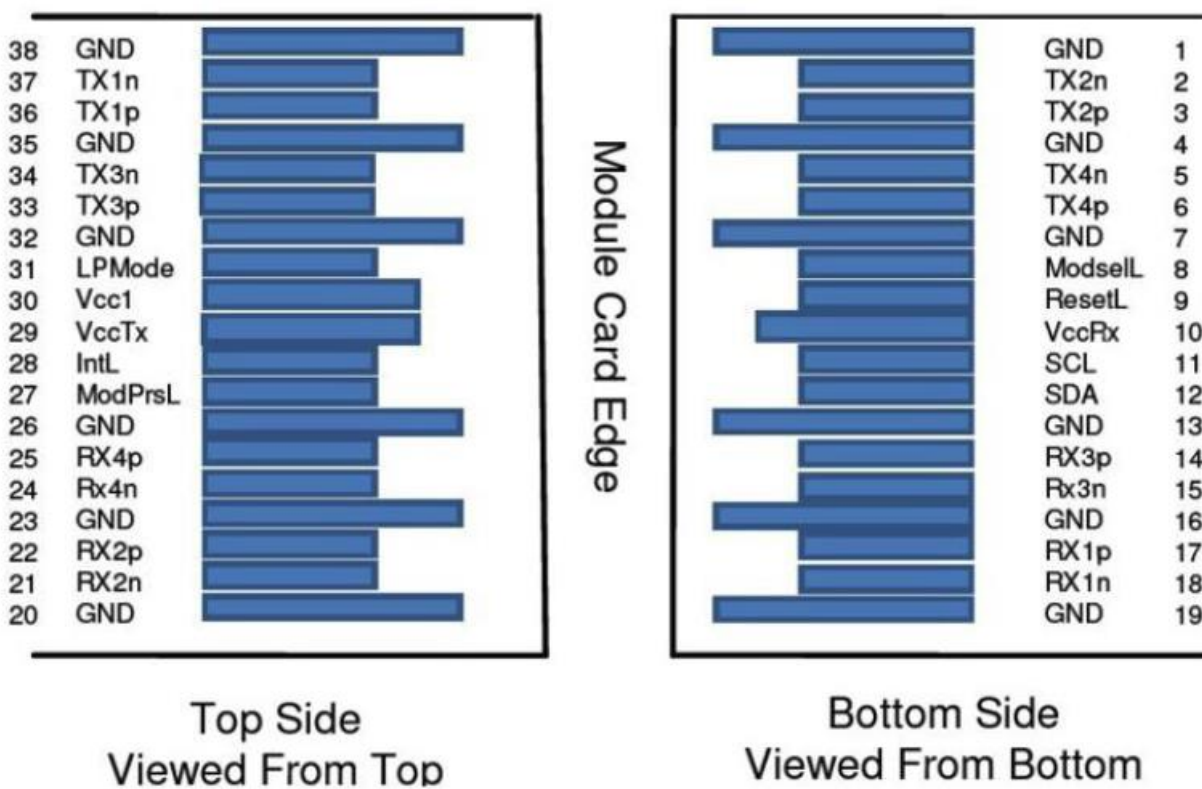
100G QSFP28 to QSFP28 Passive Copper Cable assemblies are high performance, cost effective I/O solutions for LAN, HPC and SAN. The high-speed cable assemblies meet and exceed 100 Gigabit Ethernet, InfiniBand EDR and temperature requirements for performance and reliability. The cables are compliant with SFF-8436 specifications and provide connectivity between devices using QSFP ports.

Product Specifications

I. Absolute Maximum Ratings

Parameter	Symbol	Min	Typ.	Max	Unit
Operating Case Temp	Tc	-40		85	°C
Relative Humidity	RH	0		70	%
Supply Voltage	VCC3	3.14	3.3	3.47	V
Data Rate Per Lane		1		25.78	Gb/s

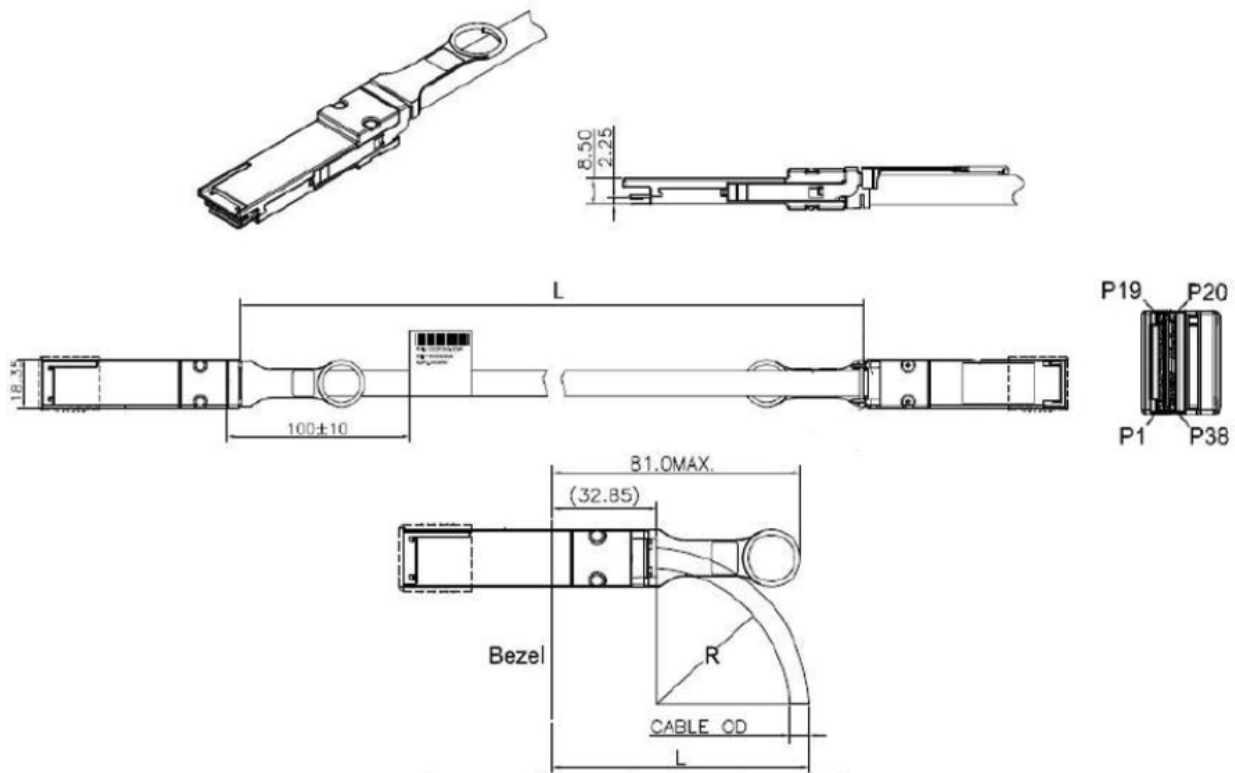
II. Pin Designation



Pin	Logic	Symbol	Name/Description
1		GND	Ground
2	CML-I	Tx2n	Transmitter Inverted Data Input
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input
4		GND	Ground
5	CML-I	Tx4n	Transmitter Inverted Data Input
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input
7		GND	Ground
8	LVTTL-I	ModSelL	Module Select

9	LVTTTL-I	ResetL	Module Reset
10		Vcc Rx	+3.3V Power Supply Receiver
11	LVC MOS-I/O	SCI	2-Wire Serial Interface Clock
12	LVC MOS-I/O	SDA	2-Wire Serial Interface Data
13		GND	Ground
14	CML-O	Rx3p	Receiver Non-Inverted Data Output
15	CML-O	Rx3n	Receiver Inverted Data Output
16		GND	Ground
17	CML-O	Rx1p	Receiver Non-Inverted Data Output
18	CML-O	Rx1n	Receiver Inverted Data Output
19		GND	Ground
20		GND	Ground
21	CML-O	Rx2n	Receiver Inverted Data Output
22	CML-O	Rx2p	Receiver Non-Inverted Data Output
23		GND	Ground
24	CML-O	Rx4n	Receiver Inverted Data Output
25	CML-O	Rx4p	Receiver Non-Inverted Data Output
26		GND	Ground
27	LVTTTL-O	ModPrsL	Module Present
28	LVTTTL-O	IntL	Interrupt
29		VccTx	+3.3V Power Supply Transmitter
30		Vcc1	+3.3V Power Supply
31	LVTTTL-I	LPMODE	Low Power Mode
32		GND	Ground
33	CML-I	Tx3p	Transmitter Non-inverted Data Input
34	CML-I	Tx3n	Transmitter Inverted Data Input
35		GND	Ground
36	CML-I	Tx1p	Transmitter Non-inverted Data Input
37	CML-I	Tx1n	Transmitter Inverted Data Input
38		GND	Ground

III: Mechanical Dimensions



Cable Gauge	Cable "OD"	Min Ben Radius "R"	Min Ben Space "L"
30 AWG	6.6mm	33mm	72.45mm

IV: Installation Instructions

Caution:

Follow accepted ESD practices when handling QSFP+ connectors to prevent damage to the internal components within the connector. ESD (electrostatic discharge) is the sudden flow of electricity between two objects at different voltage potentials caused by contact. The basis of any ESD protection strategy is to ground or bring all elements in the ESD protected area to the same potential. An ESD wrist strap should be used for everything in the ESD protected area including personnel, tools, cabinets and components.

A. Installing QSFP+ Modules

Follow these steps to install a QSFP+ cable assembly:

Step 1. Remove the protective ESD cap from the connector.

Step 2. Slide the QSFP+ cable end into the slot until it locks into position.

There is an audible click when the connector is properly seated.

Caution:

The latching mechanism locks the QSFP+ connector into place when cables are connected. Do not pull on the cable in an attempt to remove the QSFP+ connector.

B. Removing QSFP+ Modules

Follow these steps to remove a QSFP+ cable assembly:

Step 1. Pull on the QSFP+ latch pull lanyard.

Step 2. Grasp the QSFP+ connector on both sides and remove it from the system.

Step 3. If possible, replace the ESD protective cap or put the QSFP+ into an ESD protected bag.

Order Information

Part Number	Description	Length
ZV-100Gb-DAC-2.0M	100G QSFP+ Passive Copper Cable (PCC)	2.0m