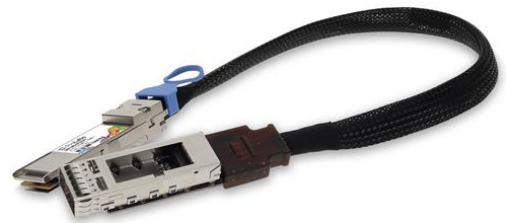


QSFP-100G-EXT22CM-C

100GBase-CU QSFP28 to QSFP28 Male to Female Direct Attach Extension Cable (Passive Twinax, 22cm, 30AWG)

Features:

- Low EMI Emission
- Insertion Loss: 7.0dB at 12.89GHz Per Channel
- Oil-Resistant, Dust-Proof, and Anti-Corrosion
- Low Near-End Crosstalk (NEXT)
- Compliant with QSFP-MSA
- Compliant with SFF-8436 and SFF-8665
- Compliant with IEEE 802.3bj
- Compliant with Infiniband EDR
- Operating Temperature: 0 to 70 Celsius
- RoHS Compliant and Lead-Free



Applications:

- Extends the Link of 100G AOCs
- Extends the Link of 100G Transceivers

Product Description

This is an MSA compliant 100GBase-CU QSFP28 to QSFP28 direct attach extension cable that operates over passive copper with a maximum reach of 22cm (0.6ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S.-made or designated country end products.")



Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	Tstg	-20		80	°C
Operating Case Temperature	Tc	0	25	70	°C
Data Rate Per Lane			25.78125		Gbps

General Specifications

Parameter	Specifications	Notes
Feature	Adapter (convert connector type to cage type) with extended cable	
Connector Type	QSFP28 (SFF-8665)	
Cage Type	QSFP28 cage	
Wire Gauge	30AWG	
Length	22cm	1
Latch Color	Sky blue	

Notes:

1. The length excludes the connector and cage.

Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	GND	Module Ground.	1
2	Tx2-	Transmitter Inverted Data Input.	
3	Tx2+	Transmitter Non-Inverted Data Input.	
4	GND	Module Ground.	1
5	Tx4-	Transmitter Inverted Data Input.	
6	Tx4+	Transmitter Non-Inverted Data Input.	
7	GND	Module Ground.	1
8	ModSelL	Module Select.	
9	ResetL	Module Reset.	
10	VccRx	+3.3V Receiver Power Supply.	
11	SCL	2-Wire Serial Interface Clock.	
12	SDA	2-Wire Serial Interface Data.	
13	GND	Module Ground.	1
14	Rx3+	Receiver Non-Inverted Data Output.	
15	Rx3-	Receiver Inverted Data Output.	
16	GND	Module Ground.	1
17	Rx1+	Receiver Non-Inverted Data Output.	
18	Rx1-	Receiver Inverted Data Output.	
19	GND	Module Ground.	1
20	GND	Module Ground.	1
21	Rx2-	Receiver Inverted Data Output.	
22	Rx2+	Receiver Non-Inverted Data Output.	
23	GND	Module Ground.	1
24	Rx4-	Receiver Inverted Data Output.	
25	Rx4+	Receiver Non-Inverted Data Output.	
26	GND	Module Ground.	1
27	ModPrsL	Module Present. Internally pulled down to the GND.	
28	IntL	Interrupt output should be pulled up on the host board.	
29	VccTx	+3.3V Transmitter Power Supply.	
30	Vcc1	+3.3V Power Supply.	
31	LPMODE	Low-Power Mode.	
32	GND	Module Ground.	1
33	Tx3+	Transmitter Non-Inverted Data Input.	
34	Tx3-	Transmitter Inverted Data Input.	
35	GND	Module Ground.	1
36	Tx1+	Transmitter Non-Inverted Data Input.	
37	Tx1-	Transmitter Inverted Data Input.	
38	GND	Module Ground.	1

Notes:

1. The module circuit ground is isolated from the module chassis ground within the module.

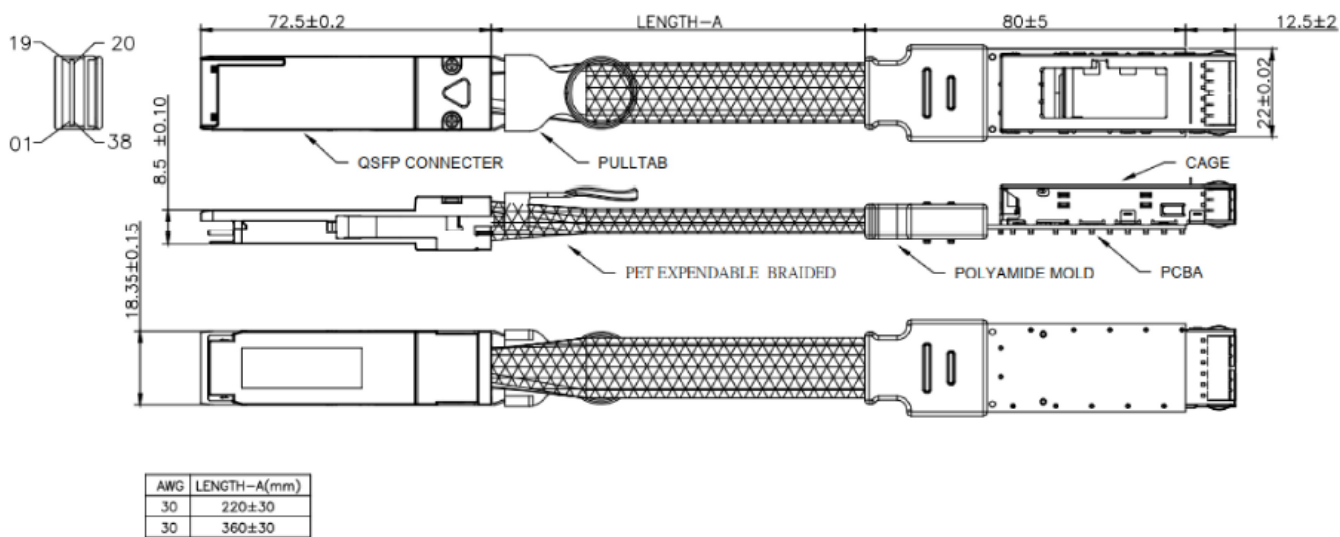
Pin Assignments

WIRING DIAGRAM

HIGH SPEED SIGNAL			
P1(QSFP28 PLUG)			P2(QSFP28 RECEPTACLE)
PAD	SIGNAL		PAD SIGNAL
02	TX2n		02 TX2n
03	TX2p		03 TX2p
05	TX4n		05 TX4n
06	TX4p		06 TX4p
14	RX3p		14 RX3p
15	RX3n		15 RX3n
17	RX1p		17 RX1p
18	RX1n		18 RX1n
21	RX2n		21 RX2n
22	RX2p		22 RX2p
24	RX4n		24 RX4n
25	RX4p		25 RX4p
33	TX3p		33 TX3p
34	TX3n		34 TX3n
36	TX1p		36 TX1p
37	TX1n		37 TX1n
08	ModSelL		08 ModSelL
09	ResetL		09 ResetL
10	VccRx		10 VccRx
11	SCL		11 SCL
12	SDA		12 SDA
27	ModPrsL		27 ModPrsL
28	IntL		28 IntL
29	VccTx		29 VccTx
30	Vcc1		30 Vcc1
31	LPMODE		31 LPMODE
GND GROUP	GND		GND GROUP GND
GND GROUP 01,04,07,13,16,19 20,23,26,32,35,38			GND GROUP 01,04,07,13,16,19 20,23,26,32,35,38
CONNECTOR SHELL			CONNECTOR SHELL

*DC BLOCKING CAPS ON P1,P2 RX END.

Mechanical Specifications



- Notes:
- 1. Standard length as LENGTH-A in drawing with tolerance.
 - 2. Unit: mm.
 - 3. Compliant with IEEE802.3bj.
 - 4. LED function: once pluggable QSFP28 connector end of the extender is plugged into an equipment that supports Vcc power 3.3v, the LED will be ON.

About ProLabs

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

Complete Portfolio of Network Solutions

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

Trusted Partner

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.



Contact Information

ProLabs US

Email: sales@prolabs.com

Telephone: 952-852-0252

ProLabs UK

Email: salesupport@prolabs.com

Telephone: +44 1285 719 600