

Data Sheet

**40Gb/S QSFP+ to 4xSFP+ Direct Attach Cable**  
**P/N: WST-QP4S+DACPx-x**



**Features:**

- Compliant with IEEE 802.3ba
- Compliant with QSFP+ MSA and SFP+ MSA
- Compliant with SFF-8436 / SFF-8431 / SFF-8074i
- Hot plug swappable
- Single 3.3V power supply
- 0°C to 70°C case temperature operating range
- I<sup>2</sup>C management interface

**Applications:**

- Switches, Routers, and HBA
- Data Center
- Fiber Channel
- 10G/40G Gigabit Ethernet

**QSFP+ Module Pad Assignments and Descriptions**

38	GND	████████████████████
37	TX1n	██████████████████
36	TX1p	██████████████████
35	GND	████████████████████
34	TX3n	██████████████████
33	TX3p	██████████████████
32	GND	████████████████████
31	LPMODE	██████████████████
30	Vcc1	██████████████████
29	VccTx	██████████████████
28	IntL	██████████████████
27	ModPrsL	██████████████████
26	GND	████████████████████
25	RX4p	██████████████████
24	Rx4n	██████████████████
23	GND	████████████████████
22	RX2p	██████████████████
21	RX2n	██████████████████
20	GND	████████████████████

Top Side  
Viewed From Top

Module Card Edge

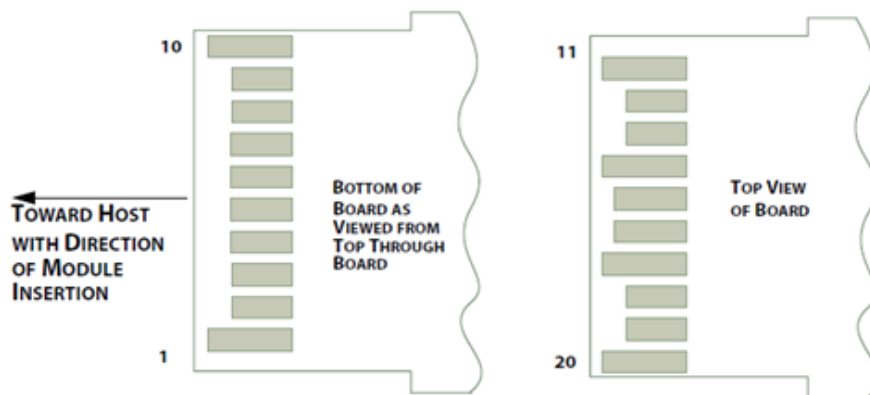
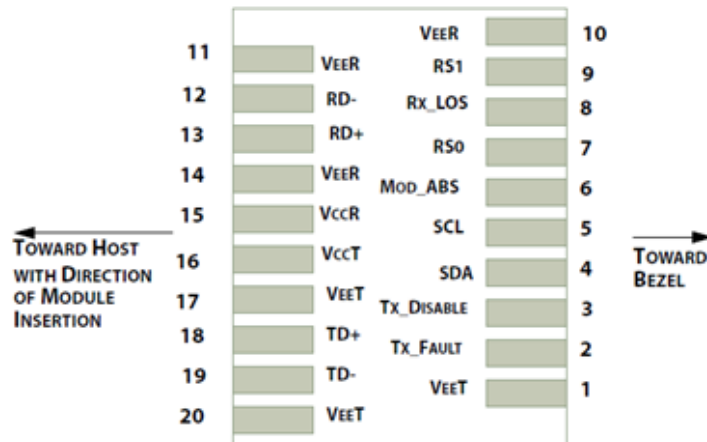
██████████████████	GND	1
██████████████████	TX2n	2
██████████████████	TX2p	3
██████████████████	GND	4
██████████████████	TX4n	5
██████████████████	TX4p	6
██████████████████	GND	7
██████████████████	ModSelL	8
██████████████████	ResetL	9
██████████████████	VccRx	10
██████████████████	SCL	11
██████████████████	SDA	12
██████████████████	GND	13
██████████████████	RX3p	14
██████████████████	Rx3n	15
██████████████████	GND	16
██████████████████	RX1p	17
██████████████████	RX1n	18
██████████████████	GND	19

Bottom Side  
Viewed From Bottom

Pin	Logic	Symbol	Description	Notes
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	LVTTTL-I	ModSelL	Module Select	
9	LVTTTL-I	ResetL	Module Reset	
10		Vcc Rx	+3.3V Power Supply Receiver	
11	LVC MOS-I/O	SCL	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		Vcc Tx	+3.3V Power supply transmitter	
30		Vcc1	+3.3V Power supply	
31	LVTTTL-I	LPMODE	Low Power Mode	
32		GND	Ground	

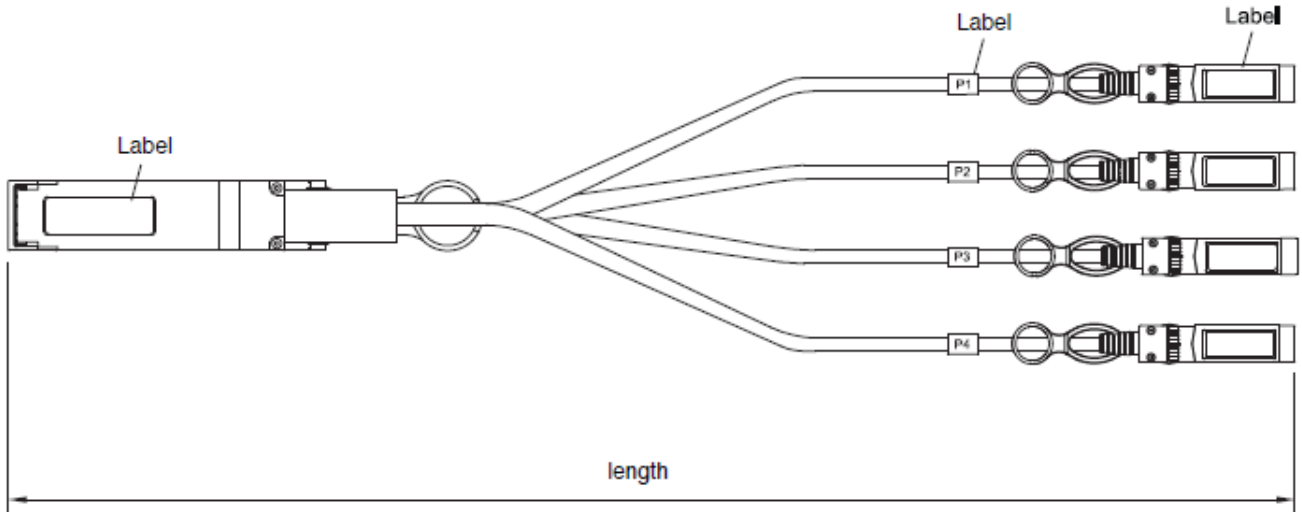
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input	
34	CML-I	Tx3n	Transmitter Inverted Data Input	
35		GND	Ground	
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input	
37	CML-I	Tx1n	Transmitter Inverted Data Input	
38		GND	Ground	

**SFP+ Module Pad Assignments and Descriptions**



PIN	Logic	Symbol	Name / Description	Note
1		VeeT	Module Transmitter Ground	1
2	LVTTL-O	TX_Fault	Module Transmitter Fault	
3	LVTTL-I	TX_Dis	Transmitter Disable; Turns off transmitter laser output	
4	LVTTL-I/O	SDA	2-Wire Serial Interface Data Line	2
5	LVTTL-I	SCL	2-Wire Serial Interface Clock	2
6		MOD_DEF0	Module Definition, Grounded in the module	
7	LVTTL-I	RS0	N/A	
8	LVTTL-O	RX_LOS	Receiver Loss of Signal Indication Active LOW	
9	LVTTL-I	RS1	N/A	
10		VeeR	Module Receiver Ground	1
11		VeeR	Module Receiver Ground	1
12	CML-O	RD-	Receiver Inverted Data Output	
13	CML-O	RD+	Receiver Data Output	
14		VeeR	Module Receiver Ground	1
15		VccR	Module Receiver 3.3 V Supply	
16		VccT	Module Transmitter 3.3 V Supply	
17		VeeT	Module Transmitter Ground	1
18	CML-I	TD+	Transmitter Non-Inverted Data Input	
19	CML-I	TD-	Transmitter Inverted Data Input	
20		VeeT	Module Transmitter Ground	1

**Mechanical Drawing**



Unit: mm

**Ordering Information**

Part No	Specification					
	Package	Data rate	Temp.	Gauge	Length*	Application
WST-QP4S+DACP0-1	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	30AWG	1m	10G/40G Gigabit Ethernet
WST-QP4S+DACP0-2	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	30AWG	2m	10G/40G Gigabit Ethernet
WST-QP4S+DACP0-3	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	30AWG	3m	10G/40G Gigabit Ethernet
WST-QP4S+DACP8-4	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	28AWG	4m	10G/40G Gigabit Ethernet
WST-QP4S+DACP6-5	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	26AWG	5m	10G/40G Gigabit Ethernet
WST-QP4S+DACP4-6	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	24AWG	6m	10G/40G Gigabit Ethernet
WST-QP4S+DACP4-7	Passive QSFP+ to SFP+	40G 4x10Gbps	0~70°C	24AWG	7m	10G/40G Gigabit Ethernet

**Modification History**

Revision	Date	Description	Originator	Review	Approved
V1.0	17-Dec-2019	New Issue	Ivy Chen	Tom Tang	Tom Tang



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All specification data are accurate on the date of publication for product comparisons and ordering information. WaveSplitter Technologies, Inc. reserves the right to change specifications without notice.