Соединитель, QSFP28-QSFP28, 100G, twinax, Xm

Соединители моделей QSFP28-QSFP28-DA-Xm являются сборками двух модулей QSFP28 без оптических фотоприемников и передатчиков, соединенных между собой электрическим TWINAX кабелем.

Особенности:
- Supports 103.125Gb/s and 111.8Gb/s bit rates
- Lower Power Consumption for Single Module < 1.3W
- Power Supply: +3.3V
- Compatible to SFF-8665
- Temperature Range: 0~ 70℃
- RoHS6 Compliant
- With both side CDR

Области применения:
- 100GBASE Ethernet

Model	Media type	Distance
QSFP28-QSFP28-DA-05m	30 AWG TP	Up to 0.5m
QSFP28-QSFP28-DA-1m	30 AWG TP	Up to 1m
QSFP28-QSFP28-DA-2m	30 AWG TP	Up to 2m
QSFP28-QSFP28-DA-3m	26 AWG TP	Up to 3m
QSFP28-QSFP28-DA-4m	26 AWG TP	Up to 4m
QSFP28-QSFP28-DA-5m	26 AWG TP	Up to 5m

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	Ts	-40	+85	°C
Supply Voltage	Vcc	-0.5	3.6	V
Operating Relative Humidity	RH	5	85	%

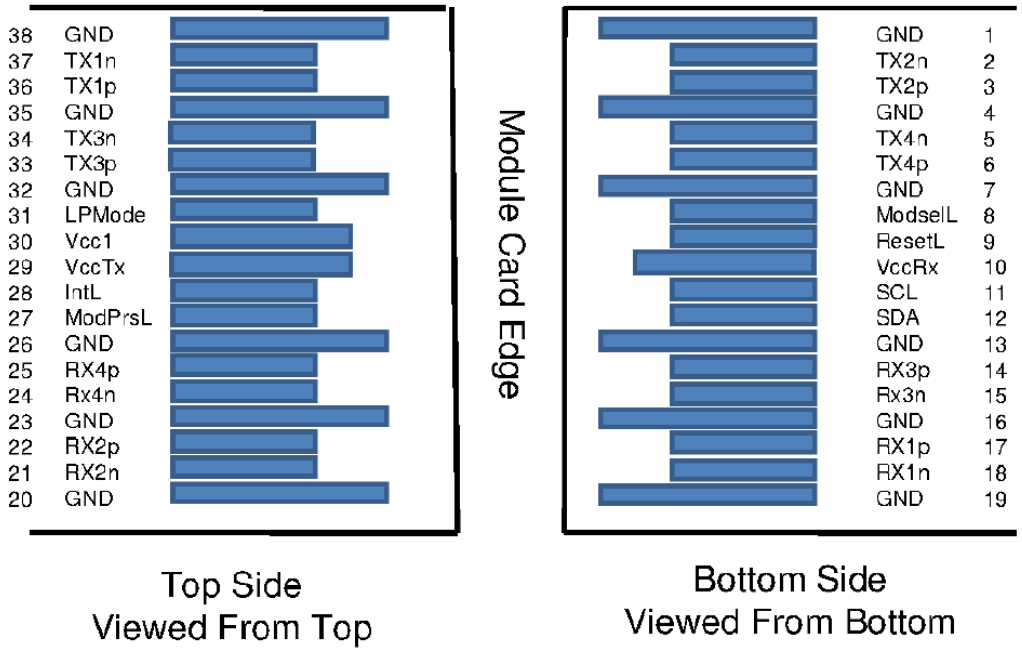
Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Case Temperature	QSFP28-QSFP28-DA-Xm	0		70	°C
Power Supply Voltage	Vcc	3.15	3.3	3.45	V
Power Consumption	P			1.3	W

Performance Specifications - Electrical

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
Transmitter						
Transmitter Differential Input Voltage	Vin	500		1200	mVpp	
Receiver Differential Output Voltage	Zin	500		1200	mVpp	
Impedance	Zin	90	100	110	ohms	

QSFP28 Transceiver Electrical Pad Layout



Top Side
Viewed From Top

Bottom Side
Viewed From Bottom

Pin Function Definitions

Pin	Logic	Symbol	Description	Plug Sequence	Notes
1		GND	Ground	1	1
2	CML-I	Tx2n	Transmitter Inverted Data Input	3	
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input	3	
4		GND	Ground	1	1
5	CML-I	Tx4n	Transmitter Inverted Data Input	3	
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input	3	
7		GND	Ground	1	1
8	LVTTL-I	ModSelL	Module Select	3	
9	LVTTL-I	ResetL	Module Reset	3	
10		VccRx	+3.3V Power Supply Receiver	2	2
11	LVCMOS- I/O	SCL	2-wire serial interface clock	3	
12	LVCMOS- I/O	SDA	2-wire serial interface data	3	
13		GND	Ground	1	1
14	CML-O	Rx3p	Receiver Non-Inverted Data Output	3	
15	CML-O	Rx3n	Receiver Inverted Data Output	3	
16		GND	Ground	1	1
17	CML-O	Rx1p	Receiver Non-Inverted Data Output	3	
18	CML-O	Rx1n	Receiver Inverted Data Output	3	
19		GND	Ground	1	1
20		GND	Ground	1	1
21	CML-O	Rx2n	Receiver Inverted Data Output	3	
22	CML-O	Rx2p	Receiver Non-Inverted Data Output	3	
23		GND	Ground	1	1
24	CML-O	Rx4n	Receiver Inverted Data Output	3	
25	CML-O	Rx4p	Receiver Non-Inverted Data Output	3	
26		GND	Ground	1	1
27	LVTTL-O	ModPrsL	Module Present	3	
28	LVTTL-O	IntL	Interrupt	3	
29		VccTx	+3.3V Power supply transmitter	2	2
30		Vcc1	+3.3V Power supply	2	2
31	LVTTL-I	LPMode	Low Power Mode	3	
32		GND	Ground	1	1
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input	3	
34	CML-I	Tx3n	Transmitter Inverted Data Input	3	
35		GND	Ground	1	1
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input	3	
37	CML-I	Tx1n	Transmitter Inverted Data Input	3	
38		GND	Ground	1	1

1: GND is the symbol for signal and supply (power) common for the QSFP28 module. All are common within the QSFP28 module and all module voltages are referenced to this potential unless otherwise noted. Connect these directly to the host board signal-common ground plane.

2: Vcc Rx, Vcc1 and Vcc Tx are the receiver and transmitter power supplies and shall be applied concurrently. Requirements defined for the host side of the Host Edge Card Connector are listed in Table 6. Recommended host board power supply filtering is shown in Figures 3 and 4. Vcc Rx Vcc1 and Vcc Tx may be internally connected within the QSFP28 Module in any combination. The connector pins are each rated for a maximum current of 500mA.

Mechanical Specifications