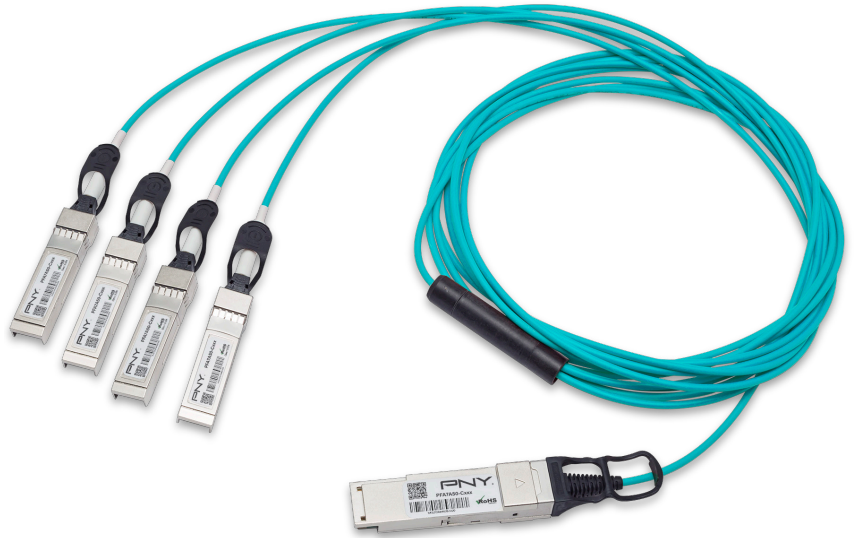


Features

- Support 4x25GBASE-SR application
- Compliant to QSFP28 MSA SFF-8636 and SFP28 MSA SFF-8431 and SF-8472
- Multi rate of up to 25.78125Gbps per lane
- +3.3V single power supply
- Low power consumption
- UL certification cables (optional)
- Operating case temp Commercial: 0°C to +70°C
- RoHS compliant



Applications

- 4x25Gbe-SR
- Other optical links

1. Absolute Maximum Ratings

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Supply Voltage	Vcc3	-0.5	-	+3.6	V	
Storage Temperature	Ts	-10	-	+70	°C	
Operating Humidity	RH	+5	-	+85	%	1

Note 1: No condensation

2. Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Operating Case Temperature	TC	0	-	+70	°C	
Power Supply Voltage	Vcc	3.14	3.3	3.47	V	
Power Dissipation per QSFP28	Pd	-	-	2.5	W	
Power Dissipation per SFP28	Pd	-	-	1.0	W	1
Bit Rate Bit Rate per Lane	BR	10.3125	25.78125	-	Gbps	

Note 1: Per terminal

3. Electrical Characteristics for QSFP28

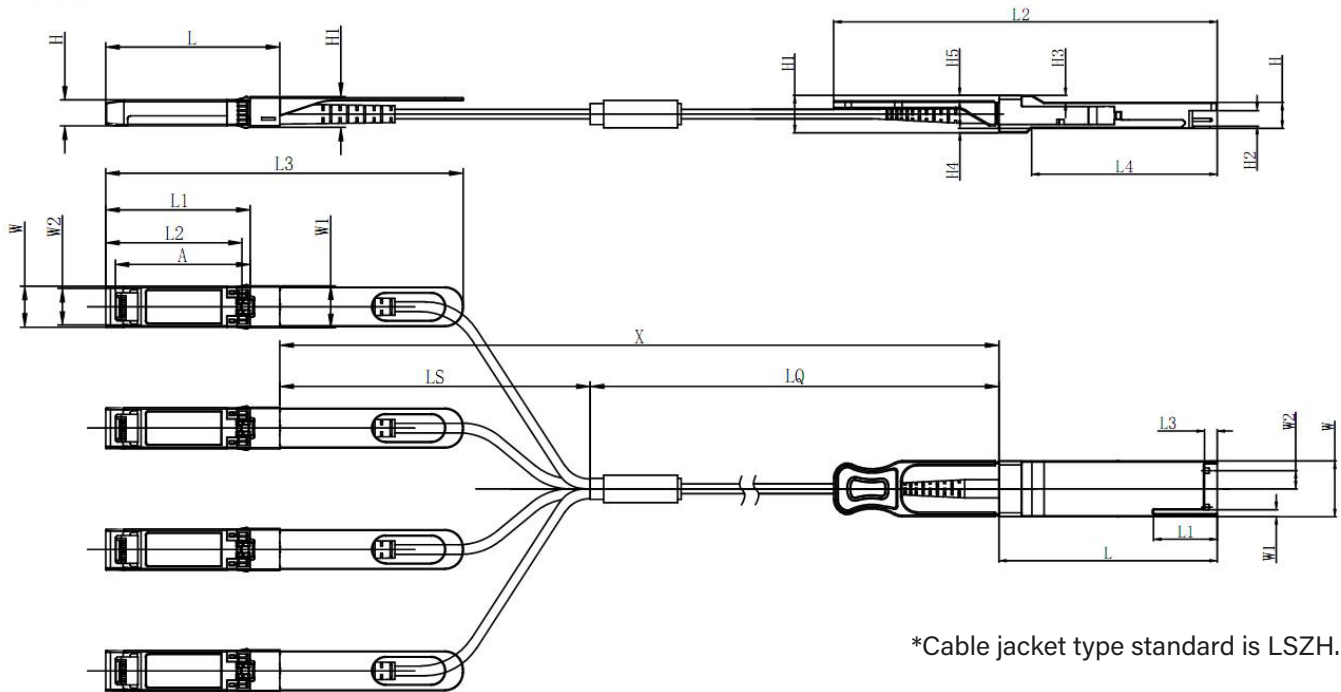
Parameter		Symbol	Min.	Typ.	Max.	Units	Notes
ModSelL	Module Select	VOL	0	-	0.8	V	
	Module Unselect	VOH	2.5	-	VCC	V	
LPMode	Low Power Mode	VIL	0	-	0.8	V	
	Normal Operation	VIH	2.5	-	VCC+0.3	V	
ResetL	Reset	VIL	0	-	0.8	V	
	Normal Operation	VIH	2.5	-	VCC+0.3	V	
ModPrsL	Normal Operation	VOL	0	-	0.4	V	
IntL	Interrupt	VOL	0	-	0.4	V	
	Normal Operation	VoH	2.4	-	VCC	V	
Electrical Transmitter Characteristics							
Differential Data Input Swing		Vout	200	-	1600	mV	
Output Differential Impedance		ZD	90	100	110	Ω	
Electrical Receiver Characteristics							
Differential Data Output Swing		Vin,P-P	200	-	800	mVPP	
Bit Error Rate		BER			E-12		1
Input Differential Impedance		ZIN	90	100	110	Ω	

Note 1: PRBS2^31-1@25.78125Gbps

4. Electrical Characteristics for SFP28

Parameter		Symbol	Min.	Typ.	Max.	Units	Notes
Electrical Transmitter Characteristics							
Differential Data Input Swing		Vin,P-P	200	-	1600	mVPP	
Input Differential Impedance		ZIN	90	100	110	Ω	
Tx_Fault	Normal Operation	VOL	0	-	0.8	V	
	Transmitter Fault	VOH	2.0	-	VCC	V	
Tx_Disable	Normal Operation	VIL	0	-	0.8	V	
	Laser Disable	VIH	2.0	-	VCC+0.3	V	
Electrical Receiver Characteristics							
Differential Data Output		Vout	400	-	800	mV	
Bit Error Rate		BER	-	-	E-12	-	
Output Differential Impedance		ZD	90	100	110	Ω	
Rx_LOS	Normal Operation	VOL	0	-	0.8	V	
	Lose Signal	VoH	2.0	-	VCC	V	

5. Mechanical Diagram



Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

QSFP28 (Unit: mm)															
	L	L1	L2	L3	L4	W	W1	W2	H	H1	H2	H3	H4	H5	H6
Max	72.2	-	128	4.35	61.4	18.45	-	6.2	8.6	12.4	5.35	2.5	1.6	2.0	-
Type	72.0	-	-	4.20	61.2	18.35	-	-	8.5	12.2	5.2	2.3	1.5	1.8	6.55
Min	68.8	16.5	124	4.05	61.0	18.25	2.2	5.8	8.4	12.0	5.05	2.1	1.3	1.6	-

SFP28 (Unit: mm)										
	L	L1	L2	L3	W	W1	W2	H	H1	A
Max	57.6	47.7	44.55	119.9	13.8	14.0	12.3	8.7	10.3	45.25
Type	57.4	47.5	44.35	117.9	13.55	13.8	12.1	8.5	10.1	45
Min	57.2	47.3	44.15	115.9	13.3	13.6	11.9	8.4	9.9	44.65

6. Ordering Information

PNY P/N	Mellanox Legacy P/N	Nvidia P/N	Product Description
PFA7A50-C003	MFA7A50-C003	980-9I40N-00C003	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m 5 Year Warranty
PFA7A50-C003-10	MFA7A50-C003	980-9I40N-00C003	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 3m 10 Year Warranty
PFA7A50-C005	MFA7A50-C005	980-9I40O-00C005	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m 5 Year Warranty
PFA7A50-C005-10	MFA7A50-C005	980-9I40O-00C005	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 5m 10 Year Warranty
PFA7A50-C010	MFA7A50-C010	980-9I49P-00C010	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 10m 5 Year Warranty
PFA7A50-C010-10	MFA7A50-C010	980-9I49P-00C010	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 10m 10 Year Warranty
PFA7A50-C015	MFA7A50-C015	980-9I49Q-00C015	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m 5 Year Warranty
PFA7A50-C015-10	MFA7A50-C015	980-9I49Q-00C015	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 15m 10 Year Warranty
PFA7A50-C020	MFA7A50-C020	980-9I49R-00C020	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 20m 5 Year Warranty
PFA7A50-C020-10	MFA7A50-C020	980-9I49R-00C020	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 20m 10 Year Warranty
PFA7A50-C030	MFA7A50-C030	980-9I49S-00C030	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 30m 5 Year Warranty
PFA7A50-C030-10	MFA7A50-C030	980-9I49S-00C030	100% Mellanox Compatible active fiber hybrid solution, ETH 100GbE to 4x25GbE, QSFP28 to 4xSFP28, 30m 10 Year Warranty

6. Contact Information

gopny@pny.com