

## Features

- SFF-8431 Compliant
- Broadband serial data rate oper 10 Mbps to 12 Gbps
- Power Level I: 15 mW per cable
- 100 Ohm differential impedance
- Retractable pin latch
- EEPROM signature
- Pull to Release latch design
- 360°cable braid crimp
- Enhanced EMI skirt design
- Color options for strain relief and pull tab
- Linear design for use with EDCs
- AC-coupled inputs and outputs
- 30AWG to 24AWG cable available



## Applications

- 10 Gigabit Ethernet and Gigabit Ethernet (IEEE 802.3ae)
- Fiber Channel: 1, 2, 4, 8, and 10GFC
- Infiniband SDR, DDR, and QDR
- Fiber Channel over Ethernet (FCoE)
- Serial data transmission

## 1. Recommended Operation Conditions (Electrical)

Parameter	Symbol	Minimum	Typical	Max	Unit
Operating Temp.		0		70	°C
Input Voltage	V <sub>ccT</sub> , V <sub>ccR</sub>	1.8	3.3	5.5	Volts
Clock Frequency	f <sub>SCL</sub>			400	kHz
Maximum Power				15	mW
Maximum Average Current	I <sub>cc</sub>			4	mA
Data Rate		0.010		10.3125	Gbps

## 2. WDP Specifications

Cable Gauge	Cable Length	WDPo (dB)	WDPI (dB)	dWDP
Spec Limit	--	--	--	6.75
30 AWG	3 meter	6.16	2.4	3.76
28 AWG	5 meter	7.49	2.4	5.09
24 AWG	7 meter	7.44	2.4	5.04

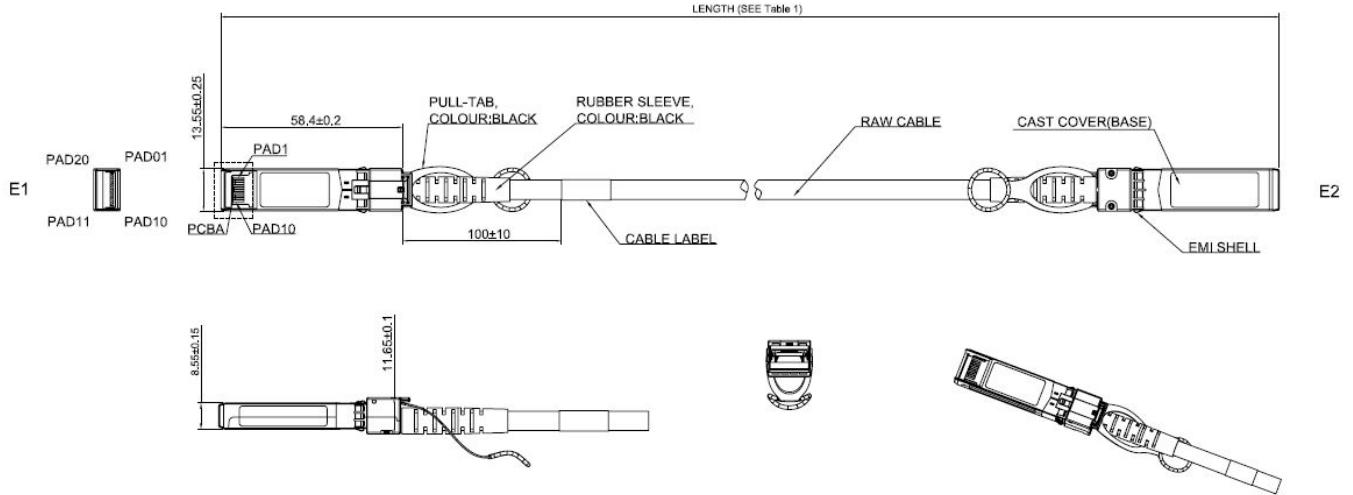
## 3. Time Domain

Item	Test Parameter	Specification (Proposal )
1	Intra-Skew*	30 ps Max
2	Impedance	100 +/- 10 Ohm
3	Insertion Loss* (SDD21)	a. 0.6GHz : -1.5 dB Max b. 1.25GHz : -2.15 dB Max c. 2.50GHz : -3.22 dB Max d. 3.25GHz : -3.95dB Max e. 5.0GHz : -5.52 dB Max

## 4. Mechanical Specifications

Parameter	Minimum	Typical	Maximum	Unit
Cable Diameter (24 AWG)		0.255		Inches
Bend Radius (24 AWG)	1.25			Inches
Cable Diameter (28 AWG)		0.185		Inches
Bend Radius (28AWG)	0.8			Inches
Cable Diameter (30 AWG)		0.175		Inches
Bend Radius (30 AWG)	0.7			Inches
Within Pair Skew			120	ps/10m
Cable Insertion Loss		10 d		B/10m
Bulk Cable Crosstalk			1	%
Bulk Cable Time Delay			4.3	ns/m
Cable Capacitance (intra-pair)			43	pF/m
Bulk Cable Impedance	95	100	105	Ohms

## 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.

## 6. Ordering Information

PNY P/N	Mellanox Legacy P/N	Nvidia P/N	Product Description
PC3309124-004	MC3309124-004	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m 5 Year Warranty
PC3309124-004-10	MC3309124-004	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 4m 10 Year Warranty
PC3309124-005	MC3309124-005	980-9I683-00J005	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m 5 Year Warranty
PC3309124-005-10	MC3309124-005	980-9I683-00J005	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 5m 10 Year Warranty
PC3309124-006	MC3309124-006	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m 5 Year Warranty
PC3309124-006-10	MC3309124-006	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 6m 10 Year Warranty
PC3309124-007	MC3309124-007	980-9I685-00J007	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m 5 Year Warranty



PC3309124-007-10	MC3309124-007	980-9I685-00J007	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 7m 10 Year Warranty
PC3309124-0A3	MC3309124-0A3	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3.5m 5 Year Warranty
PC3309124-0A3-10	MC3309124-0A3	#N/A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3.5m 10 Year Warranty
PC3309130-001	MC3309130-001	980-9I686-00J001	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m 5 Year Warranty
PC3309130-001-10	MC3309130-001	980-9I686-00J001	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1m 10 Year Warranty
PC3309130-002	MC3309130-002	980-9I688-00J002	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m 5 Year Warranty
PC3309130-002-10	MC3309130-002	980-9I688-00J002	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2m 10 Year Warranty
PC3309130-003	MC3309130-003	980-9I68B-00J003	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m 5 Year Warranty
PC3309130-003-10	MC3309130-003	980-9I68B-00J003	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 3m 10 Year Warranty
PC3309130-00A	MC3309130-00A	980-9I68F-00J00A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m 5 Year Warranty
PC3309130-00A-10	MC3309130-00A	980-9I68F-00J00A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 0.5m 10 Year Warranty
PC3309130-0A1	MC3309130-0A1	980-9I68G-00J01A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m 5 Year Warranty
PC3309130-0A1-10	MC3309130-0A1	980-9I68G-00J01A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 1.5m 10 Year Warranty
PC3309130-0A2	MC3309130-0A2	980-9I68H-00J02A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m 5 Year Warranty
PC3309130-0A2-10	MC3309130-0A2	980-9I68H-00J02A	100% Mellanox Compatible passive copper cable, ETH 10GbE, 10Gb/s, SFP+, 2.5m 10 Year Warranty



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## 7. Contact Information

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