

### Features:

- Compatible with IEEE 802.3bj and InfiniBand EDR
- In accordance with the paging function in the protocol SFF-8636, paging can be selected 00H or 02H in 127 bytes
- Supports aggregate data rates of 100Gbps(NRZ)
- Optimized construction to minimize insertion loss and cross talk
- Backward compatible with existing QSFP+ connectors and cages
- Pull-to-release slide latch design
- 26AWG through 30AWG cable
- Straight and break out assembly configurations available
- Customized cable braid termination limits EMI radiation
- Customizable EEPROM mapping for cable signature
- RoHS compliance



### Features:

- Switches, servers and routers
- Data Center networks
- Storage area networks
- High performance computing
- Telecommunication and wireless infrastructure
- Medical diagnostics and networking
- Test and measurement equipment

### 1. High Speed Characteristics

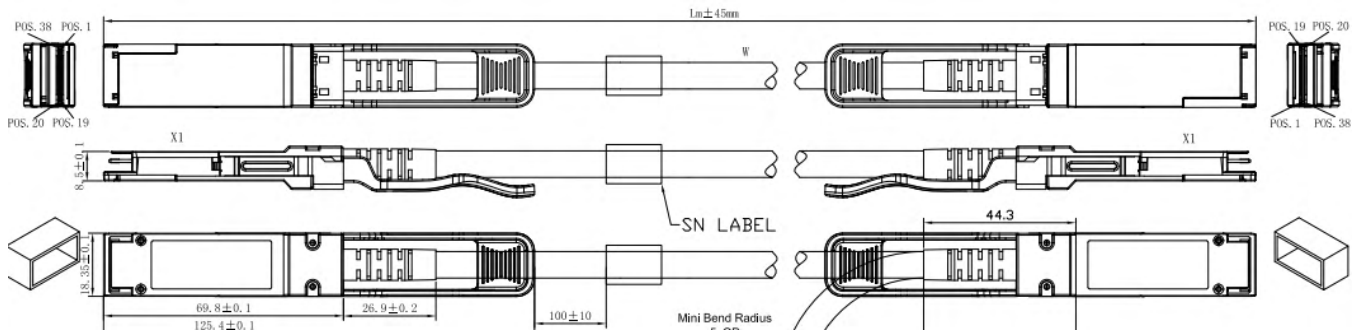
Parameter	Symbol	Min	Typ	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	-13			dB	At 12.89 GHz
Differential Return Loss	SDD11			See 1	dB	At 0.05 to 4.1 GHz
	SDD22			See 2	dB	At 4.1 to 19 GHz

Common-mode to common-mode output return loss	SCC11 SCC22			-2	dB	At 0.2 to 19 GHz
Differential to common-mode return loss	SCD11 SCD22			See 3	dB	At 0.01 to 12.89 GHz
				See 4		At 12.89 to 19 GHz
Differential to common Mode Conversion Loss	SCD21-IL			-10	dB	At 0.01 to 12.89 GHz
				See 5		At 12.89 to 15.7 GHz
				-6.3		At 15.7 to 19 GHz

**Notes:**

1. Reflection Coefficient given by equation  $SDD11(dB) < -16.5 + 2 \times \text{SQRT}(f)$ , with f in GHz
2. Reflection Coefficient given by equation  $SDD11(dB) < -10.66 + 14 \times \log_{10}(f/5.5)$ , with f in GHz
3. Reflection Coefficient given by equation  $SCD11(dB) < -22 + (20/25.78)*f$ , with f in GHz
4. Reflection Coefficient given by equation  $SCD11(dB) < -15 + (6/25.78)*f$ , with f in GHz
5. Reflection Coefficient given by equation  $SCD21(dB) < -27 + (29/22)*f$ , with f in GHz

**2. Mechanical Diagram**



Length (m)	Cable AWG
1	30
2	26/30
3	26

**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.

### 3. Ordering Information

PNY P/N	Mellanox Legacy P/N	Nvidia P/N	Product Description
PCP1600-E001	MCP1600-E001	980-9I17M-00FS00	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m 30AWG 5 Year Warranty
PCP1600-E001E30	MCP1600-E001E30	980-9I98O-00V002	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1m, Black, 30AWG 5 Year Warranty
PCP1600-E002	MCP1600-E002	980-9I48Y-00W001	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2m 28AWG 5 Year Warranty
PCP1600-E002E30	MCP1600-E002E30	980-9I62Y-00E004	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 2m, Black, 30AWG 5 Year Warranty
PCP1600-E003	MCP1600-E003	980-9I35S-00W01A	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m 26AWG 5 Year Warranty
PCP1600-E003E26	MCP1600-E003E26	980-9IA3S-00W001	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 3m, Black, 26AWG 5 Year Warranty
PCP1600-E004	MCP1600-E004	980-9I54G-00V003	100% Mellanox Compatible Passive Copper cable IB EDR 100GB/S, QSFP, 4m 26AWG 5 Year Warranty
PCP1600-E004E26	MCP1600-E004E26	980-9I98J-00V003	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 4m, Black, 26AWG 5 Year Warranty
PCP1600-E005	MCP1600-E005	980-9I43Z-00V003	100% Mellanox Compatible Passive Copper cable IB EDR 100GB/S, QSFP, 5m 26AWG 5 Year Warranty
PCP1600-E005E26	MCP1600-E005E26	980-9I58I-00N100	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 5m, Black, 26AWG 5 Year Warranty
PCP1600-E00A	MCP1600-E00A	980-9I99S-00C004	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 0.5m 30AWG 5 Year Warranty
PCP1600-E00AE30	MCP1600-E00AE30	980-9I35P-00W002	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.5m, Black, 30AWG 5 Year Warranty



PCP1600-E00BE30	MCP1600-E00BE30	980-9IA3P-00V003	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 0.75m, Black, 30AWG 5 Year Warranty
PCP1600-E01A	MCP1600-E01A	980-9I62Z-00E005	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1.5m 30AWG 5 Year Warranty
PCP1600-E01AE30	MCP1600-E01AE30	980-9I48Z-00W002	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.5m, Black, 30AWG 5 Year Warranty
PCP1600-E01BE30	MCP1600-E01BE30	980-9I35T-00W02A	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 1.25m, Black, 30AWG 5 Year Warranty
PCP1600-E02A	MCP1600-E02A	980-9IA3T-00W002	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2.5m 26AWG 5 Year Warranty
PCP1600-E02AE26	MCP1600-E02AE26	980-9I48J-00C005	100% Mellanox Compatible Passive Copper cable, IB EDR, up to 100Gb/s, QSFP28, 2.5m, Black, 26AWG 5 Year Warranty

#### 4. Contact Information

[gopny@pny.com](mailto:gopny@pny.com)