

## Features

- 100GbE to 4x25GbE data rate
- SFF-8402 SFP28 compliant
- SFF-8665 QSFP28 compliant
- Single 3.3V supply voltage
- Hot pluggable
- RoHS compliant
- SFF-8432 compliant
- IEEE P802.3bj compliant



## Applications

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

## 1. Recommended Operation Condition

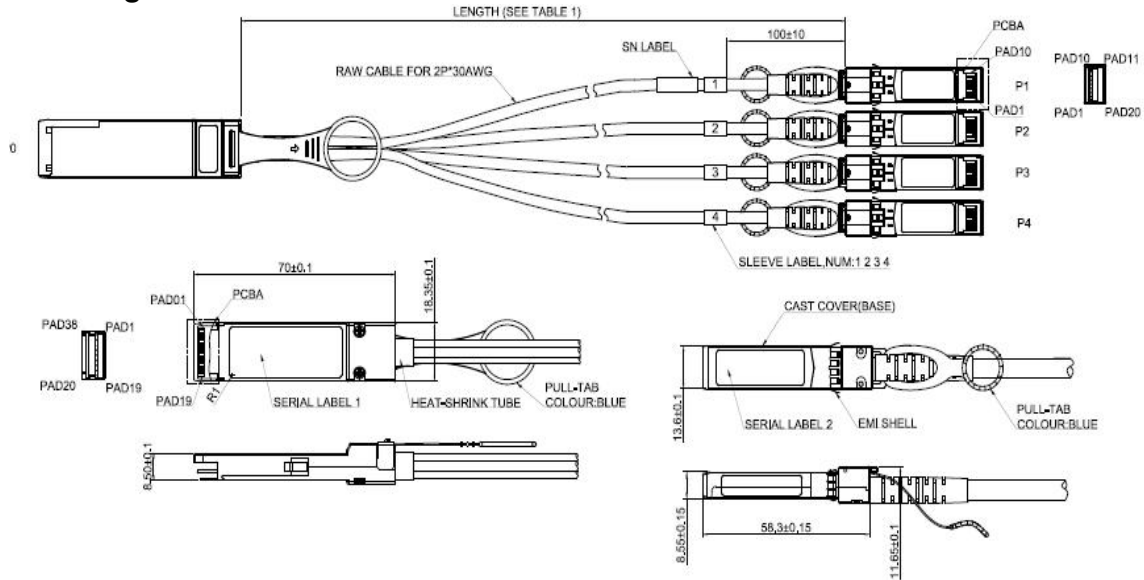
Stress or conditions exceed the above range may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those listed in the operational sections of this specification is not applied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

| Parameter                            | Symbol  | Min  | Max      | Unit |
|--------------------------------------|---------|------|----------|------|
| Operating Case Temperature           | Topc    | -20  | 85       | °C   |
| Storage Temperature                  | Tst     | -40  | 85       | °C   |
| Relative Humidity (non-condensation) | RS      | 35   | 60       | %    |
| Supply Voltage                       | VCC3    | 3.35 | 3.465    | V    |
| Voltage on LVTTTL Input              | Vilvttl | -0.3 | VCC3+0.2 | V    |
| Power Supply Current                 | ICC3    |      | 15       | mA   |
| Total Power Consumption              | Pd      | -    | 0.05     | W    |

## 2. Mechanical Specifications

| Parameter               | Minimum                                 | Typical                         | Maximum                   | Unit   |
|-------------------------|---|---------------------------------|---------------------------|--------|
| Cable Diameter (26 AWG) |   | QSFP28: 0.4409<br>SFP28: 0.2204 |                           |        |
| Bend Radius (26 AWG)    | QSFP28: 2.204<br>SFP28: 1.102           |                                 |                           |        |
| Cable Diameter (28 AWG) |   | QSFP28: 0.3897<br>SFP28: 0.195  |                           | Inches |
| Bend Radius (28 AWG)    | QSFP28: 1.948<br>SFP28: 0.9750          |                                 |                           | Inches |
| Cable Diameter (30 AWG) |   | QSFP28: 0.3622<br>SFP28: 0.181  |                           | Inches |
| Bend Radius (30 AWG)    | QSFP28: 1.811<br>SFP28: 0.905           |                                 |                           | Inches |
| Within Pair Skew        |   |                                 | 60                        | ps/5m  |
| Cable Insertion Loss    |   | 15.34                           |                           | dB/5m  |
| Bulk Cable Time Delay   |   |                                 | 5.2                       | ns/m   |
| Bulk Cable Impedance    | 95                                      | 100                             | 105                       | Ohms   |
| Insertion Force         | /                                       |                                 | QSFP28: 40<br>SFP28: 18   | N      |
| Withdrawal Force        | /                                       |                                 | QSFP28: 30<br>SFP28: 12.5 | N      |
| Retention Force         | 90                                      |                                 | /                         | N      |
| Durability              | QSFP28: 250 Cycles<br>SFP28: 250 Cycles |                                 | /                         | /      |

### 3. 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.

### 4. Ordering Information

| PNY P/N             | Mellanox Legacy P/N | Nvidia P/N       | Product Description  |
|---------------------|---------------------|------------------|--|
| PCP7F00-A001R30N    | MCP7F00-A001R30N    | 980-9I486-00C001 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 1m, Colored, 30AWG, CA-N 5 Year Warranty  |
| PCP7F00-A001R30N-10 | MCP7F00-A001R30N    | 980-9I486-00C001 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 1m, Colored, 30AWG, CA-N 10 Year Warranty |
| PCP7F00-A002R30N    | MCP7F00-A002R30N    | 980-9I48B-00C002 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2m, Colored, 30AWG, CA-N 5 Year Warranty  |
| PCP7F00-A002R30N-10 | MCP7F00-A002R30N    | 980-9I48B-00C002 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2m, Colored, 30AWG, CA-N 10 Year Warranty |
| PCP7F00-A003R26N    | MCP7F00-A003R26N    | 980-9I48G-00C003 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 3m, Colored, 26AWG, CA-N 5 Year Warranty  |



|                     |                  |                  |  |
|---------------------|------------------|------------------|--|
| PCP7F00-A003R26N-10 | MCP7F00-A003R26N | 980-9I48G-00C003 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 3m, Colored, 26AWG, CA-N 10 Year Warranty   |
| PCP7F00-A003R30L    | MCP7F00-A003R30L | 980-9I48H-00C003 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 3m, Colored, 30AWG, CA-L 5 Year Warranty    |
| PCP7F00-A003R30L-10 | MCP7F00-A003R30L | 980-9I48H-00C003 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 3m, Colored, 30AWG, CA-L 10 Year Warranty   |
| PCP7F00-A005R26L    | MCP7F00-A005R26L | 980-9I48J-00C005 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 5m, Colored, 26AWG, CA-L 5 Year Warranty    |
| PCP7F00-A005R26L-10 | MCP7F00-A005R26L | 980-9I48J-00C005 | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 5m, Colored, 26AWG, CA-L 10 Year Warranty   |
| PCP7F00-A01AR30N    | MCP7F00-A01AR30N | 980-9I48N-00C01A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 1.5m, Colored, 30AWG, CA-N 5 Year Warranty  |
| PCP7F00-A01AR30N-10 | MCP7F00-A01AR30N | 980-9I48N-00C01A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 1.5m, Colored, 30AWG, CA-N 10 Year Warranty |
| PCP7F00-A02AR26N    | MCP7F00-A02AR26N | 980-9I48S-00C02A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2.5m, Colored, 26AWG, CA-N 5 Year Warranty  |
| PCP7F00-A02AR26N-10 | MCP7F00-A02AR26N | 980-9I48S-00C02A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2.5m, Colored, 26AWG, CA-N 10 Year Warranty |
| PCP7F00-A02AR30L    | MCP7F00-A02AR30L | 980-9I48T-00C02A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2.5m, Colored, 30AWG, CA-L 5 Year Warranty  |
| PCP7F00-A02AR30L-10 | MCP7F00-A02AR30L | 980-9I48T-00C02A | 100% Mellanox Compatible passive copper hybrid cable, ETH 100GbE to 4x25GbE, QSFP28 to 4 xSFP28, 2.5m, Colored, 30AWG, CA-L 10 Year Warranty |

## 5. Contact Information

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