



Features:

- ✧ High-Density QSFP 38-PIN Connector
- ✧ Hybrid cable conforms to the Small Form Factor SFF-8436

- ✧ Maximum aggregate data rate: 41.25 Gbps (4 x10.3125Gbit/s)
- ✧ Copper link length up to x (x=0.5~7m)
- ✧ Power Supply :+3.3V
- ✧ Low power consumption: 0.02 W (typ.)
- ✧ Temperature Range: 0~ 70°C

Applications:

- ✧ 10G/40Gigabit Ethernet
- ✧ InfiniBand SDR, DDR, QDR
- ✧ Switches, Routers, and HBAs
- ✧ Data Centers

Ordering information

| PN | Description |
|--------|---------------------------------------|
| OPQCT1 | QSFP+ Passive Cables, 1m, 0°C ~ +70°C |
| OPQCT3 | QSFP+ Passive Cables, 3m, 0°C ~ +70°C |
| OPQCT5 | QSFP+ Passive Cables, 5m, 0°C ~ +70°C |
| OPQCT7 | QSFP+ Passive Cables, 7m, 0°C ~ +70°C |

Description:

The OPQCT3 QSFP+ passive cable assemblies are high performance, cost effective I/O solutions for 40G LAN, HPC and SAN applications. The QSFP+ passive copper cables are compliant with SFF-8436, QSFP+ MSA and IEEE P802.3ba 40GBASE-CR4. It is offer a low power consumption, short reach interconnect applications. The cable each lane is capable of transmitting data at rates up to 10Gb/s, providing an aggregated rate of 40Gb/s.

● Absolute Maximum Ratings

| Parameter | Symbol | Min. | Typical | Max. | Unit |
|---------------------|---------------------|------|---------|------|------|
| Storage Temperature | T _s | -40 | | +85 | °C |
| Supply Voltage | V _{ccT, R} | -0.5 | | 4 | V |
| Relative Humidity | RH | 0 | | 85 | % |

● Recommended Operating Environment

| Parameter | Symbol | Min. | Typical | Max. | Unit |
|---------------------------|---------------------|-------|---------|-------|------|
| Caseoperating Temperature | T _C | 0 | | +70 | °C |
| Supply Voltage | V _{CCT, R} | +3.13 | 3.3 | +3.47 | V |
| Power Dissipation | PD | | | 0.02 | W |

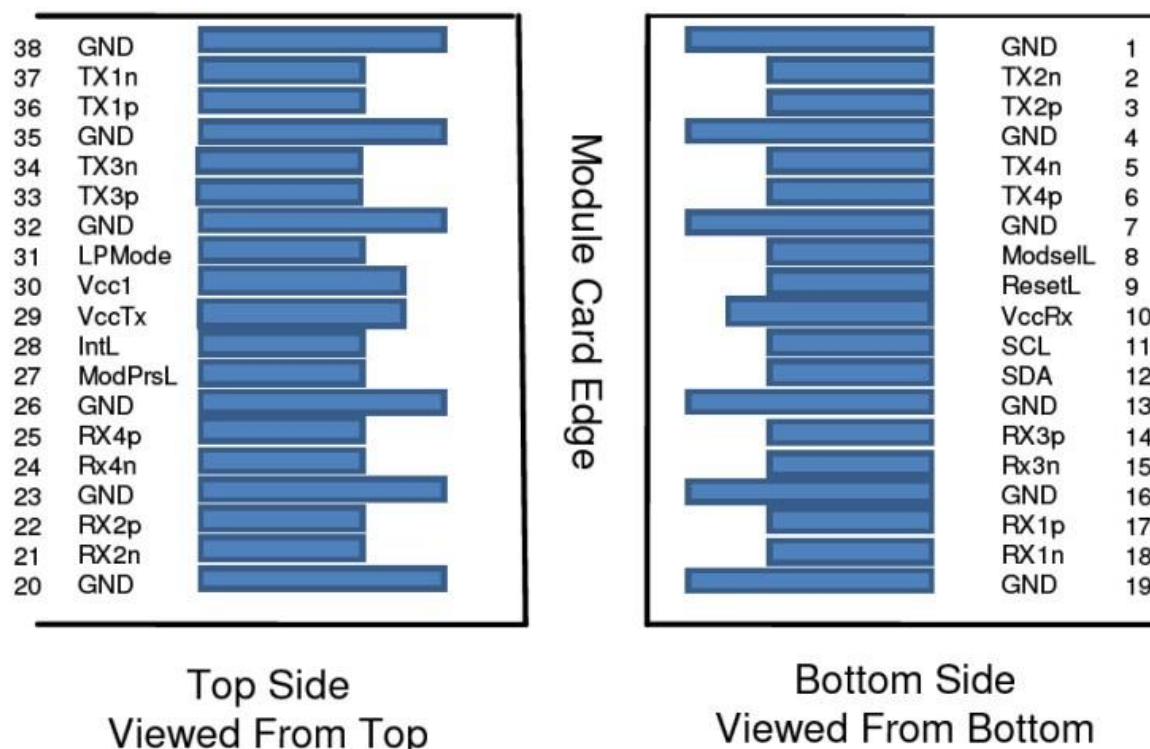
● QSFP+ Pin Descriptions

| Pin | Logic. | Symbol | Name/Description | Note |
|-----|------------|---------|-------------------------------------|------|
| 1 | | GND | Ground | 1 |
| 2 | CML-I | Tx2n | Transmitter Inverted Data Input | |
| 3 | CML-I | Tx2p | Transmitter Non-Inverted Data Input | |
| 4 | | GND | Ground | 1 |
| 5 | CML-I | Tx4n | Transmitter Inverted Data Input | |
| 6 | CML-I | Tx4p | Transmitter Non-Inverted Data Input | |
| 7 | | GND | Ground | 1 |
| 8 | LVTTL-I | ModSelL | Module Select | |
| 9 | LVTTL-I | ResetL | Module Reset | |
| 10 | | Vcc Rx | +3.3V Power Supply Receiver | 2 |
| 11 | LVC MOSI/O | SCL | 2-wire serial interface clock | |
| 12 | LVC MOSI/O | SDA | 2-wire serial interface data | |
| 13 | | GND | Ground | 1 |
| 14 | CML-O | Rx3p | Receiver Non-Inverted Data Output | |
| 15 | CML-O | Rx3n | Receiver Inverted Data Output | |
| 16 | | GND | Ground | 1 |
| 17 | CML-O | Rx1p | Receiver Non-Inverted Data Output | |
| 18 | CML-O | Rx1n | Receiver Inverted Data Output | |
| 19 | | GND | Ground | 1 |
| 20 | | GND | Ground | 1 |
| 21 | CML-O | Rx2n | Receiver Inverted Data Output | |
| 22 | CML-O | Rx2p | Receiver Non-Inverted Data Output | |
| 23 | | GND | Ground | 1 |
| 24 | CML-O | Rx4n | Receiver Inverted Data Output | |
| 25 | CML-O | Rx4p | Receiver Non-Inverted Data Output | |
| 26 | | GND | Ground | 1 |
| 27 | LVTTL-O | ModPrsL | Module Present | |
| 28 | LVTTL-O | IntL | Interrupt | |
| 29 | | VccTx | +3.3V Power supply transmitter | 2 |
| 30 | | Vcc1 | +3.3V Power supply | 2 |

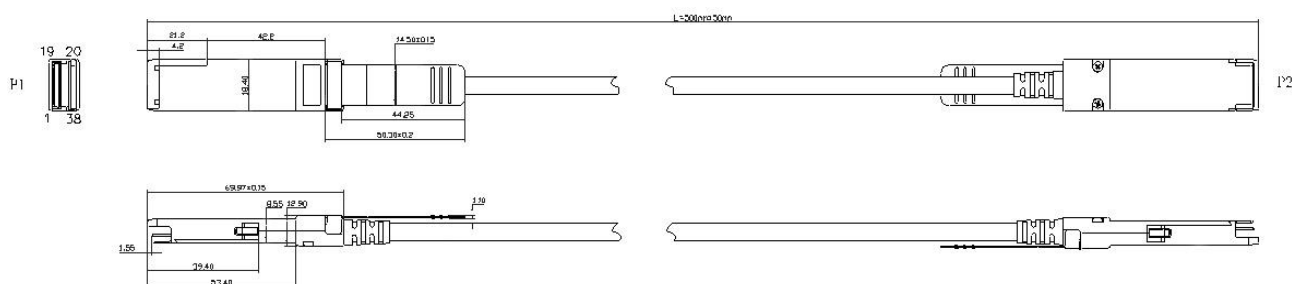
| | | | | |
|----|---------|--------|--------------------------------------|---|
| 31 | LVTTL-I | LPMode | Low Power Mode | |
| 32 | | GND | Ground | 1 |
| 33 | CML-I | Tx3p | Transmitter Non-Inverted Data Input | |
| 34 | CML-I | Tx3n | Transmitter Non-Inverted Data Output | |
| 35 | | GND | Ground | 1 |
| 36 | CML-I | Tx1p | Transmitter Inverted Data Output | |
| 37 | CML-I | Tx1n | Transmitter Non-Inverted Data Output | |
| 38 | | GND | Ground | 1 |

Note:

1. GND is the symbol for signal and supply (power) common for the QSFP+ module. All are common within the QSFP+ 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 VccTx are the receiver and transmitter power supplies and shall be applied concurrently. Vcc Rx Vcc1 and VccTx may be internally connected with- in the QSFP+ Module module in any combination. The connector pins are each rated for a maximum current of 500 mA.

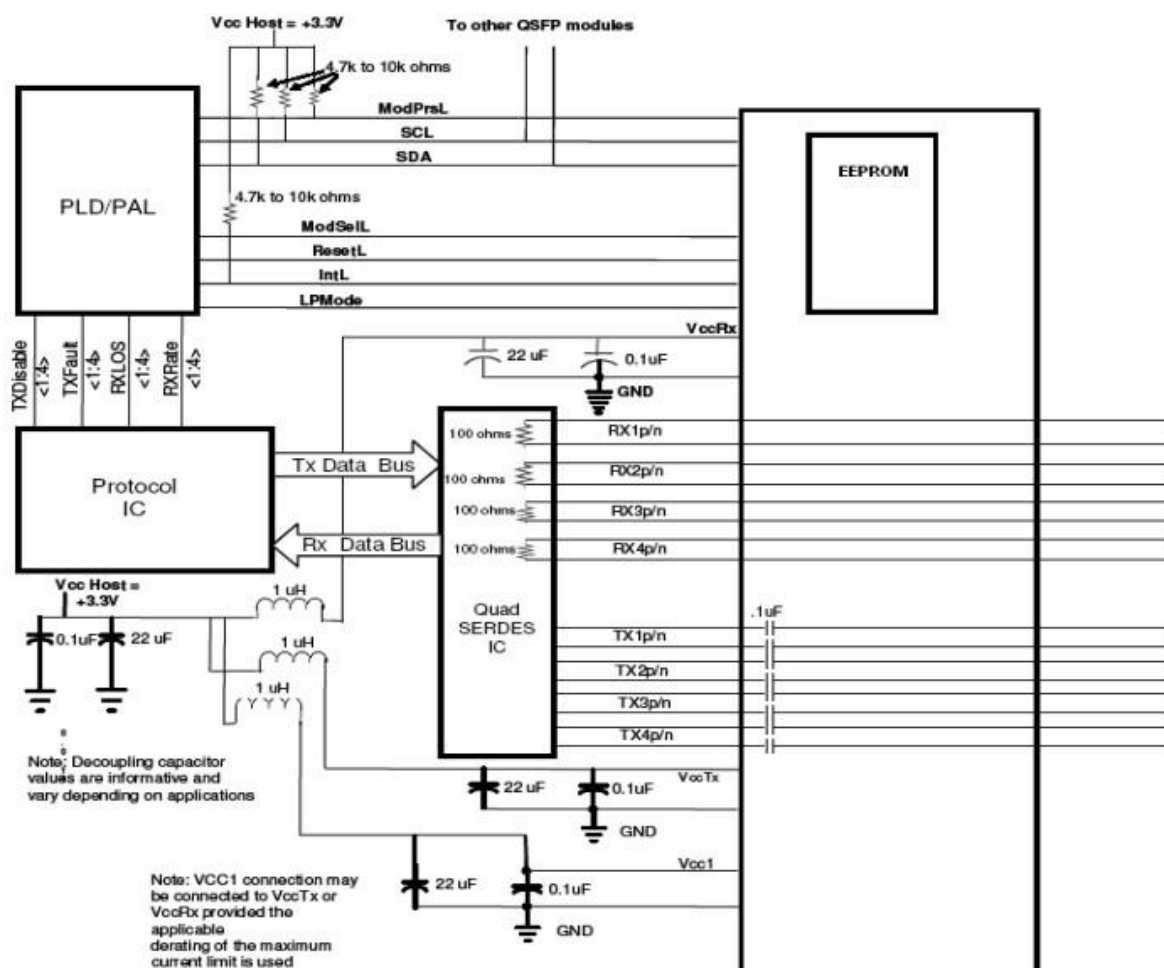


● Mechanical Dimensions



Mechanical Drawing

● QSFP+ Host Board Schematic for passive copper cables



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