

XFP to SFP+ Passive Copper Direct Attach Cable

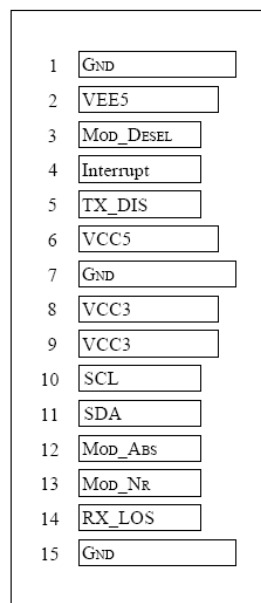
Features

- Hot pluggable 30 pin connector
- Compliant with XFP / SFP MSA
- Pre-terminated twin axial cable / fiber cable
- Operating environment temperature 0 ~ 70°C
- Low power consumption
- XFP/SFP housing with enhanced EMI shielding
- Single 3.3V power supply
- XFP/SFP electrical interface with AC coupling

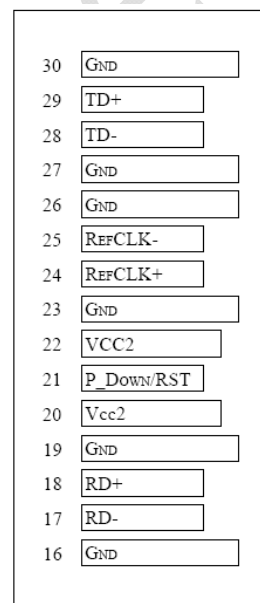
Applications

- SONET Ethernet
- Applicable to 1G Ethernet
- Fiber Channel
- Applicable to 4G / 2G / 1G Fiber Channel
- Fiber Channel over Ethernet
- 1X QDR Infiniband
- Applicable to 1X DDR / 1x SDR Infiniband
- Capacity IO with XFP/SFP interface
- Data center and in-rack connection

XFP/SFP+ Host Board Connector Pin

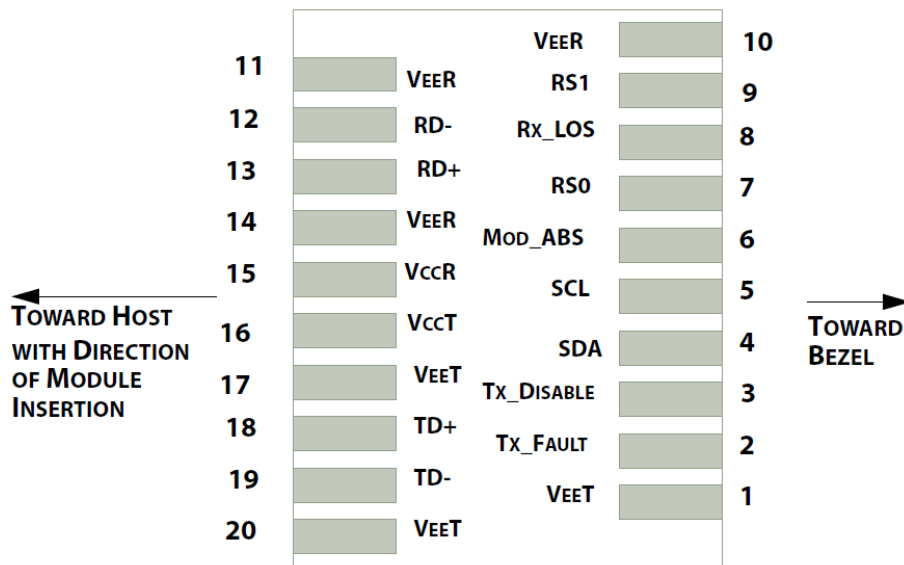


Bottom of Board
(As view through top of board)



Top of Board

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XFP Pin definitions

| Pin | Logic | Symbol | Name/Description | Ref. |
|-----|------------|-----------|--|------|
| 1 | | GND | Module Ground | 1 |
| 2 | | VEE5 | Optional -5.2 Power Supply – Not required | |
| 3 | LVTTL-I | Mod-Desel | Module De-select; When held low allows the module to respond to 2-wire serial interface commands | |
| 4 | LVTTL-O | Interrupt | Interrupt (bar); Indicates presence of an important condition which can be read over the serial 2-wire interface | 2 |
| 5 | LVTTL-I | TX_DIS | Transmitter Disable; Transmitter laser source turned off | |
| 6 | | VCC5 | +5 Power Supply | |
| 7 | | GND | Module Ground | 1 |
| 8 | | VCC3 | +3.3V Power Supply | |
| 9 | | VCC3 | +3.3V Power Supply | |
| 10 | LVTTL-I | SCL | Serial 2-wire interface clock | 2 |
| 11 | LVTTL- I/O | SDA | Serial 2-wire interface data line | 2 |
| 12 | LVTTL-O | Mod_Abs | Module Absent; Indicates module is not present. Grounded in the module. | 2 |
| 13 | LVTTL-O | Mod_NR | Module Not Ready | 2 |
| 14 | LVTTL-O | RX_LOS | Receiver Loss of Signal indicator | 2 |
| 15 | | GND | Module Ground | 1 |
| 16 | | GND | Module Ground | 1 |
| 17 | CML-O | RD- | Receiver inverted data output | |
| 18 | CML-O | RD+ | Receiver non-inverted data output | |

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| | | | | |
|----|----------|------------|--|---|
| 19 | | GND | Module Ground | 1 |
| 20 | | VCC2 | +1.8V Power Supply – Not required | |
| 21 | LVTTTL-I | P_Down/RST | Power Down; When high, places the module in the low power stand-by mode and on the falling edge of P_Down initiates a module reset | |
| | | | Reset; The falling edge initiates a complete reset of the module including the 2-wire serial interface, equivalent to a power cycle. | |
| 22 | | VCC2 | +1.8V Power Supply – Not required | |
| 23 | | GND | Module Ground | 1 |
| 24 | PECL-I | RefCLK+ | Reference Clock non-inverted input, AC coupled on the host board – Not required | 3 |
| 25 | PECL-I | RefCLK- | Reference Clock inverted input, AC coupled on the host board – Not required | 3 |
| 26 | | GND | Module Ground | 1 |
| 27 | | GND | Module Ground | 1 |
| 28 | CML-I | TD- | Transmitter inverted data input | |
| 29 | CML-I | TD+ | Transmitter non-inverted data input | |
| 30 | | GND | Module Ground | 1 |

Note

1. Module circuit ground is isolated from module chassis ground within the module.
2. Open collector; should be pulled up with 4.7k – 10k ohms on host board to a voltage between 3.15V and 3.6V.
3. A Reference Clock input is not required.

SFP+ Pin Definitions

| Pin | Symbol | Logic | Description | Note |
|-----|------------|------------|-----------------------------------|------|
| 1 | VeeT | | Module Transmitter Ground | 1 |
| 2 | Tx_Fault | LVTTTL-O | Not supported. | 3 |
| 3 | Tx_Disable | LVTTTL-I | Not supported. | 3 |
| 4 | SDA | LVTTTL-I/O | 2-wire Serial Interface Data Line | 2 |
| 5 | SCL | LVTTTL-I/O | 2-wire Serial Interface Clock | 2 |
| 6 | Mod_ABS | | Module Absent | 2 |
| 7 | RS0 | LVTTTL-I | Not supported. | 3 |
| 8 | Rx_LOS | LVTTTL-O | Not supported. | 3 |
| 9 | RS1 | LVTTTL-I | Not supported. | 3 |
| 10 | VeeR | | Module Receiver Ground | 1 |

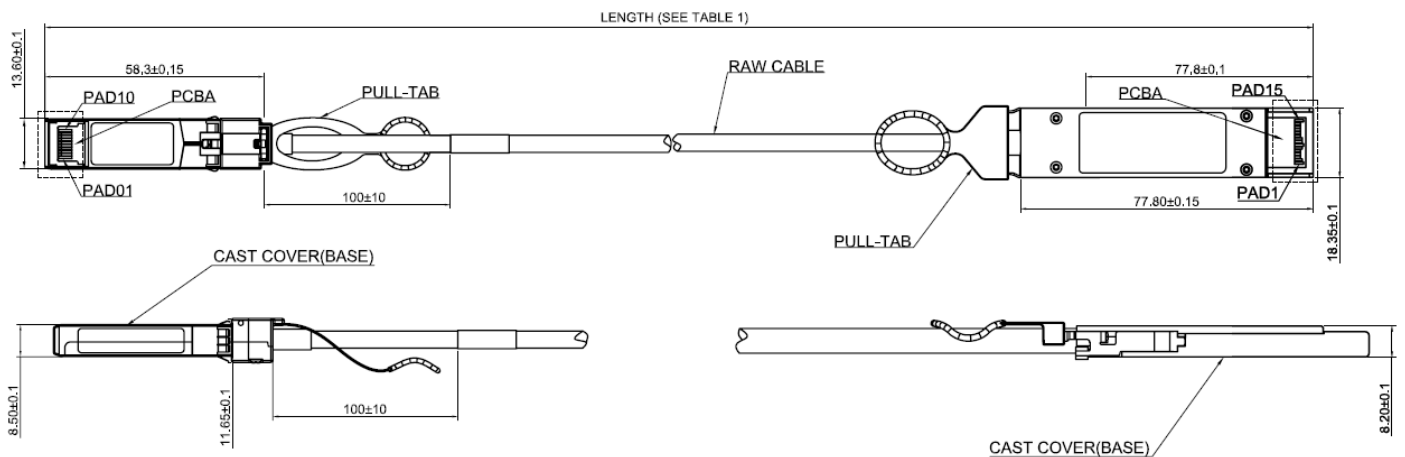
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| | | | | |
|----|------|-------|-------------------------------------|---|
| 11 | VeeR | | Module Receiver Ground | 1 |
| 12 | RD- | CML-O | Receiver Inverted Data Output | |
| 13 | RD+ | CML-O | Receiver Non-Inverted Data Output | |
| 14 | VeeR | | Module Receiver Ground | 1 |
| 15 | VccR | | Module Receiver 3.3 V Supply | 4 |
| 16 | VccT | | Module Transmitter 3.3 V Supply | 4 |
| 17 | VeeT | | Module Transmitter Ground | 1 |
| 18 | TD+ | CML-I | Transmitter Non-Inverted Data Input | |
| 19 | TD- | CML-I | Transmitter Inverted Data Input | |
| 20 | VeeT | | Module Transmitter Ground | 1 |

Absolute Maximum Ratings

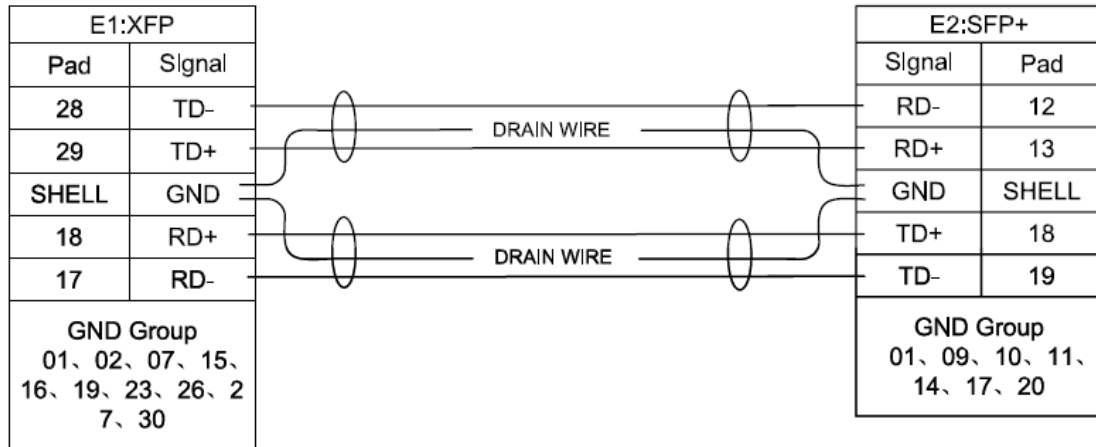
| Parameter | Symbol | Min | Max | Unit |
|----------------------------|-----------|------|------|-------------|
| Storage Temperature | T_{ST} | -40 | +85 | $^{\circ}C$ |
| Case Operating Temperature | T_{IP} | 0 | +70 | $^{\circ}C$ |
| Supply Voltage | V_{CC3} | -0.5 | +4.0 | V |

Mechanical Drawing



XFP to SFP+ Passive Copper Direct Attach Cable

Cable connection



Ordering Information

| Model | Description |
|--------------|--|
| UXSFP-DAC-01 | XFP to SFP+ Direct Attach Passive Cable 1m |
| UXSFP-DAC-02 | XFP to SFP+ Direct Attach Passive Cable 2m |
| UXSFP-DAC-03 | XFP to SFP+ Direct Attach Passive Cable 3m |
| UXSFP-DAC-05 | XFP to SFP+ Direct Attach Passive Cable 5m |