

ET5402-AOC-7M-C

Edgecore® Compatible 1G/10Gb/s SFP+ Active Optical Cable, Active, 7m

FEATURES

- Hot pluggable
- Bit rate support from 1G to 11.3Gbps
- Up to 100m by active optical cable with OM2/OM3 fiber
- Pre-terminated fiber cable
- Operating environment temperature 0 ~ 70°C
- Low power consumption
- SFP+ housing with enhanced EMI shielding
- Single 3.3V power supply
- Programmable EEPROM for serial identification

APPLICATIONS

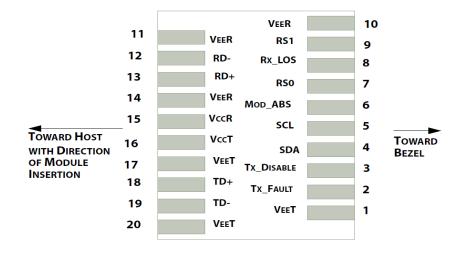
- 10G Ethernet
- Applicable to 1G Ethernet
- 8G Fiber Channel
- Applicable to 4G / 2G / 1G Fiber Channel
- 10G Fiber Channel over Ethernet
- 1X QDR Infiniband
- Applicable to 1X DDR / 1x SDR Infiniband
- High-capacity IO with SFP+ interface
- Data center and in-rack connection
- Compliance
- SFF-8431 SFP+ Electrical MSA
- SFF-8432 SFP+ Mechanical MSA
- RoHS complaint

DESCRIPTION

ATGBICS SFP AOC cable assemblies are high-performance, cost effective I/O solutions for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ active optical cables allow hardware manufacturers to achieve high port density, configurability, and utilization at a very low cost and to reduce power budget. The highspeed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fiber Channel industry standard.



Host Board Connector Pin (Top View)

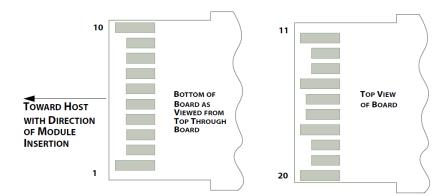


Note:

1. For detail information, please refer to SFF-8083 0.8mm Card Edge Connector for 8/10 Gbps Applications



SFP+ Connector Pin



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



Notes:

- 1. Module circuit ground pins are isolated from the module chassis ground
- 2. Pull up to VccHost with 4.7k 10k
- 3. No connection required
- 4. Power supply filtering circuit required

Absolute Maximum Ratings

| Parameter | Symbol | Min | Мах | Unit |
|----------------------------|--------|------|-----|------|
| Storage Temperature | Ts | -40 | +85 | °C |
| Operating Case Temperature | Тс | -40 | +85 | °C |
| Operating Humidity | RH | | 85 | % |
| Supply Voltage | Vcc | -0.5 | 3.6 | V |

Note:

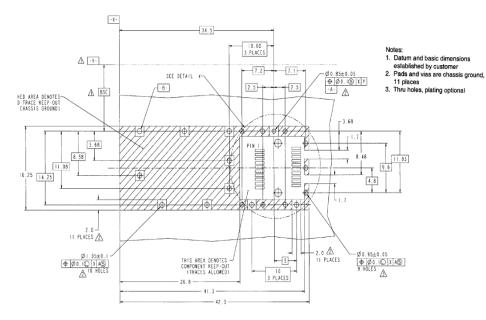
Damage may occur if the transceiver is subjected to conditions beyond the limits.

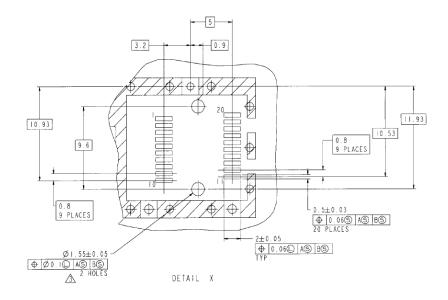
Recommended Operating Conditions

| Parameter | Symbol | Min | Мах | Unit |
|----------------------------|--------|-----|------|------|
| Operating Case Temperature | Тс | 0 | +70 | °C |
| Supply Voltage | Vcc | 3.1 | 3.5 | V |
| Bit Rate | BR | 1 | 11.3 | GB |



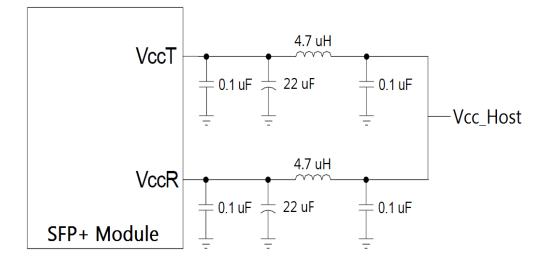
Host PCB Layout







Recommended Power Supply Filter



References:

- 1. SFF-8431 "Specifications for Enhanced Small Form Factor Pluggable Module SFP+"
- 2. SFF-8432 "Specification for Improved Pluggable Form factor"
- 3. SFF-8472 "Specification for Diagnostic Monitoring Interface for Optical Transceivers"

Mechanical Drawing

