

SFP-10G-ADAC15M-LEG  
10GBASE-CU SFP+ DAC  
TWINAX 15M ACTIVE



## Features

- Support for multi-gigabit data rates up to 10 Gb/s
- Data rates backward compatible to 1 Gb/s
- Hot-Pluggable SFP 20PIN footprint
- Improved Pluggable Form Factor (IPF) compliant for enhanced EMI/EMC performance
- Low Power Consumption <0.2W
- Power Supply: +3.3V
- Compatible to SFP+ MSA
- Compatible to SFF-8431, SFF-8432
- Temperature Range: 0~70°C
- RoHS Compatible

## Application

- High Capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers
- Switched fabric I/O such as ultra high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections between networking equipment

## Product Description

The SFP-10G-ADAC15M-LEG active cable assemblies are high performance, cost effective I/O solutions for 10G Ethernet and 10G Fiber Channel applications. SFP+ copper modules allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and reduced power budget. The high-speed cable assemblies meet and exceed Gigabit Ethernet and Fiber channel industry standard requirements for performance and reliability.

## Recommended Operating conditions

| Parameter                  | Symbol           | Min  | Typ. | Max. | Unit |
|----------------------------|------------------|------|------|------|------|
| Storage Temperature        |                  | -40  |      | 85   | °C   |
| Operating Case Temperature | Tc               | 0    |      | 70   | °C   |
| Power Supply Volrage       | V <sub>CC3</sub> | 3.14 | 3.3  | 3.47 | V    |
| Power Dissipation          | PD               |      |      | 0.2  | W    |

## Systems

| Parameter  | Media  | Operating Parameters  |
|--|--|---|
| 10 Gb/s line speed, full duplex Bit error rate: better than 10E-12 | Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+) copper cable, available max 15m. | Supply Voltage: 3.3V<br>Power consumption (per end): max 0.2W |

## Pin Descriptions

| Pin | Logic      | Symbol   | Name/Description                | Notes |
|-----|------------|----------|---------------------------------|-------|
| 1   |            | VeeT     | Transmitter Ground              |       |
| 2   | LV-TTL-O   | TX_Fault | N/A                             | 1     |
| 3   | LV-TTL-I   | TX_DIS   | Transmitter Disable             |       |
| 4   | LV-TTL-I/O | SDA      | Tow Wire Serial Data            |       |
| 5   | LV-TTL-I   | SCL      | Tow Wire Serial Clock           |       |
| 6   |            | MOD_DEF0 | Module present, connect to VeeT |       |
| 7   | LV-TTL-I   | RS0      | N/A                             | 1     |
| 8   | LV-TTL-O   | LOS      | LOS of Signal                   |       |
| 9   | LV-TTL-I   | RS1      | N/A                             | 1     |
| 10  |            | VeeR     | Receiver Ground                 |       |
| 11  |            | VeeR     | Receiver Ground                 |       |
| 12  | CML-O      | RD-      | Receiver Data Inverted          |       |
| 13  | CML-O      | RD+      | Receiver Data Non-inverted      |       |
| 14  |            | VeeR     | Receiver Ground                 |       |
| 15  |            | VccR     | Receiver Supply 3.3V            |       |
| 16  |            | VccT     | Transmitter Supply 3.3V         |       |
| 17  |            | VeeT     | Transmitter Ground              |       |
| 18  | CML-I      | TD+      | Transmitter Data Non-Inverted   |       |
| 19  | CML_I      | TD-      | Transmitter Data Inverted       |       |
| 20  |            | VeeT     | Transmitter Ground              |       |

**Note:**

- 1. Signals not supported in SFP+ Copper pulled-down to VeeT with 30K ohms resistor

**Mechanical Specification**

