

### SFP-10G-ADACxM-C

MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, Up to 5m)

#### 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 from 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 Compliant



#### Applications

- 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

This is an MSA compliant 10GBase-CU SFP+ to SFP+ direct attach cable that operates over active copper with a maximum reach up to 5.0m (16.4ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' direct attach cables are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



## Order Information

Part Number	Description
SFP-10G-ADAC50CM-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 50cm)
SFP-10G-ADAC1M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 1m)
SFP-10G-ADAC1-5M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 1.5m)
SFP-10G-ADAC2M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 2m)
SFP-10G-ADAC2-5M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 2.5m)
SFP-10G-ADAC3M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 3m)
SFP-10G-ADAC5M-AO	MSA and TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 5m)

## Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.4
- ESD to the LC Receptacle: compatible with IEC 61000-4-3
- EMI/EMC compatible with FCC Part 15 Subpart B Rules, EN55022:2010
- Laser Eye Safety compatible with FDA 21CFR, EN60950-1& EN (IEC) 60825-1,2
- RoHS compliant with EU RoHS 2.0 directive 2015/863/EU

## Recommended Operating conditions

Parameter	Symbol	Min	Typ.	Max.	Unit
Storage Temperature	Ts	-40		85	°C
Operating Case Temperature	Tc	0		70	°C
Power Supply Voltage	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 Power consumption (per end): max 0.2W

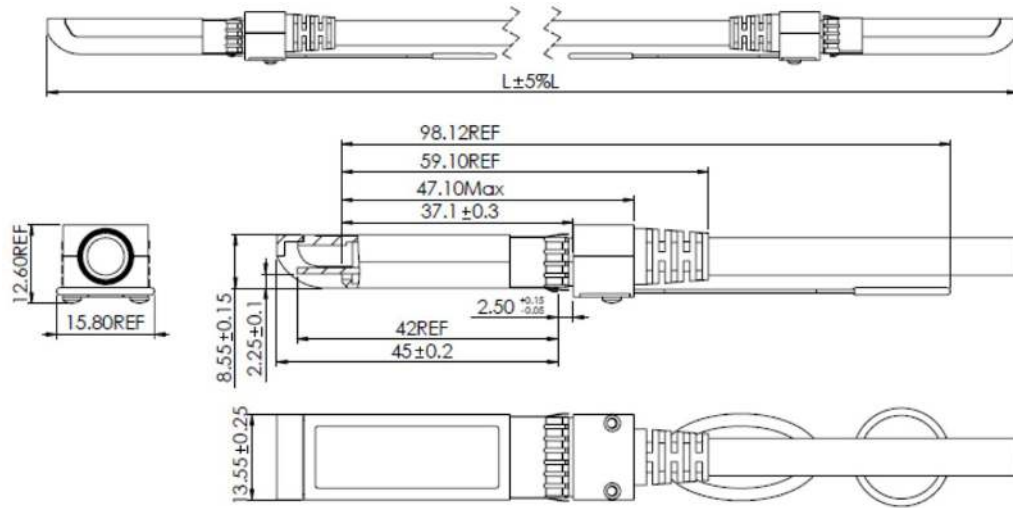
## Pin Descriptions

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	Two Wire Serial Data	
5	LV-TTL-I	SCL	Two 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 Specifications



## **About ProLabs**

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

## **Complete Portfolio of Network Solutions**

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

## **Trusted Partner**

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.

## **Contact Information**

ProLabs US

Email: [sales@prolabs.com](mailto:sales@prolabs.com)

Telephone: 952-852-0252

ProLabs UK

Email: [salessupport@prolabs.com](mailto:salessupport@prolabs.com)

Telephone: +44 1285 719 600