

## **1710484F10A-OPC**

AdTran® Compatible TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Active Twinax, 10m)

### **Features**

- Up to 10Gbps bi-directional data links
- Dual SFP Connectors
- Industry Standard small form pluggable
- Hot Pluggable
- Single Power Supply 3.3V
- Operating Temperature: 0 to 70 Celsius
- RoHS Compliant and Lead-Free



### **Applications:**

- 10G Ethernet
- 10G Fibre Channel

### **Product Description**

This is a AdTran® compatible 10GBase-CU SFP+ to SFP+ direct attach cable that operates over active copper with a maximum reach of 10.0m (32.8ft). 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.

## General Specifications

Parameter	Symbol	Min	Typ.	Max.	Unit	Notes
Data Rate	DR		10.3125		Gbps	1
Bit Error Rate	BER			$10^{-12}$		
Operating Case Temperature	T <sub>c</sub>	0		70	°C	2
Storage Temperature	T <sub>stg</sub>	-40		85	°C	3
Input Voltage	V <sub>cc</sub>	3.14	3.3	3.46	V	4
Supply Current	I <sub>cc</sub>		100	300	mA	4
Cable Impedance	Z	90	100	110	Ω	
Product Weight	GD		88		g/PCS	
Cable Weight	GC		42		G/M	
Dust Cap Weight	GS		0.80		g/PCS	
Wire Gauge			28		AWG	
Tolerance Range			8		±cm	

### Notes:

1. IEEE 802.3ae compatible.
2. Case temperature.
3. Ambient temperature.
4. For electrical power interface.

## Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	VeeT	Transmitter ground. Common with receiver ground.	1
2	Tx_Fault	Transmitter Fault.	
3	Tx_Disable	Transmitter Disable. Laser output disabled on "high" or "open."	2
4	SDA	Data line for Serial ID.	3
5	SCL	Clock line for Serial ID.	3
6	MOD_ABS	Module absent. Grounded within the module.	3
7	RS0	No connection required.	
8	LOS	Loss of Signal. Logic 0 indicated normal operation.	4
9	RS1	No connection required.	
10	VeeR	Receiver ground. Common with transmitter ground.	1
11	VeeR	Receiver ground. Common with transmitter ground.	1
12	RD-	Receiver Inverted DATA out. AC coupled.	
13	RD+	Receiver NonInverted DATA out. AC coupled.	
14	VeeR	Receiver ground. Common with transmitter ground.	1
15	VccR	Receiver power supply.	
16	VccT	Transmitter power supply.	
17	VeeT	Transmitter ground. Common with receiver ground.	1
18	TD+	Transmitter Non-Inverted DATA in. AC coupled.	
19	TD-	Transmitter Inverted DATA in. AC coupled.	
20	VeeT	Transmitter ground. Common with receiver ground.	1

### Notes:

1. Circuit ground is isolated from chassis ground.
2. Disabled: Tdis>2V or open, Enabled Tdis<0.8V.
3. Should be pulled up with 4.7k $\Omega$ -10k $\Omega$  on host board to a voltage between 2V and 3.6V.
4. LOS is open collector output.

Electrical Pad Layout



Block Diagram



Mechanical Specifications

