

#### J9281B-AO

HP® J9281B Compatible 10GBase-CU SFP+ Direct Attach Cable (Passive Twinax, 1m)

#### **Features**

- Operates from 1 to 10.5Gbps
- 360 degree cable braid crimp and enhanced EMI skirt
- Hot Pluggable
- Single 3.3V power supply
- Operating Temperature: 0 to 70 Celsius
- Low insertion loss and low crosstalk
- Compliant with SFP MSA: SFF-8431 Rev4.1
- Compliant with SFF-8472 Rev11.1
- RoHS Compliant and Lead-Free
- Wire Cable Type Twinax



### **Applications**

- Proprietary Interconnects
- InfiniBand 1X SDR DDR QDR

#### **Product Description**

This is an HP® J9281B compatible 10GBase-CU SFP+ to SFP+ direct attach cable that operates over passive copper with a maximum reach of 1.0m (3.3ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. Our direct attach cables are built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

# **Recommended Operating Conditions**

Parameter	Symbol	Min.	Тур.	Max.	Unit
Power Supply Voltage	Vcc	3.13	3.30	3.47	V
Power Supply Current	Icc			30	mA
Case Operating Temperature	Тс	0		70	°C
Storage Temperature	Tstg	-40		85	
Data Rate Per Lane				10.5	Gbps
Bit Error Rate	BER			10 <sup>-12</sup>	

## **Cable Specifications**

Parameter	Symbol	Min.	Тур.	Max.	Unit
Cable Diameter (30AWG)	DIA		4.5		mm
Time Delay Skew (Within Pair)	Tds			10	ps/m
Cable Time Delay	Td		4.3		ns/m
Cable Impedance	Z	90	100	110	Ω

### Systems

Parameter	Media
10Gbps Line Speed, Full Duplex Bit Error Rate: Better Than 10E <sup>-12</sup>	Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+) copper cable, available at 7m

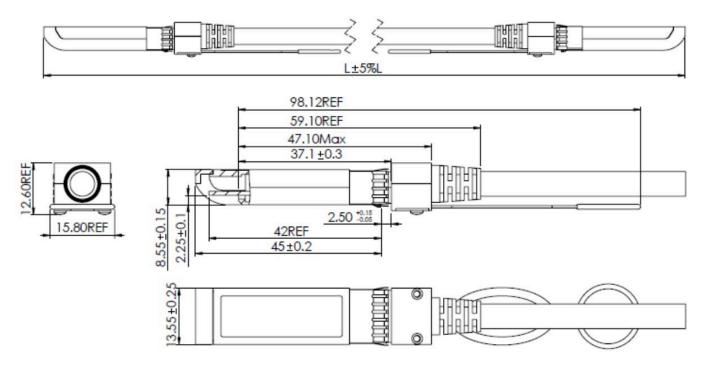
### **Pin Descriptions**

Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground.	
2	LVTTL-O	Tx_Fault	N/A.	1
3	LVTTL-I	Tx_Disable	Transmitter Disable.	2
4	LVTTL-I/O	SDA	2-Wire Serial Data.	
5	LVTTL-I	SCL	2-Wire Serial Clock.	
6		MOD_DEF0	Module Present. Connected to the VeeT.	
7	LVTTL-I	RS0	N/A.	1
8	LVTTL-O	LOS	Loss of Signal.	2
9	LVTTL-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	+3.3V Receiver Power Supply.	
16		VccT	+3.3V Transmitter Power Supply.	
17		VeeT	Transmitter Ground.	
18	CML-I	TD+	Transmitter Data Non-Inverted.	
19	CML-I	TD-	Transmitter Data Inverted.	
20		VeeT	Transmitter Ground.	

### Notes:

- 1. Signals not supported in SFP+ copper pulled down to the VeeT with  $30k\Omega$  resistor.
- 2. Passive cable assemblies do not support LOS and Tx\_Disable.

## **Mechanical Specifications**



#### **About AddOn Networks**

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is in engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.













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