Pro**Labs**

487655-B21-C

HP[®] 487655-B21 Compatible TAA Compliant 10GBase-CU SFP+ Direct Attach Cable (Passive Twinax, 3m)

Features

- True broadband operates from 1 to 10.5Gb/s
- Support hot-pluggable
- 3m Length
- 30 AWG wire gauge
- 360 degree cable braid crimp and enhanced EMI skirt
- Low insertion loss and low crosstalk
- Single 3.3V power supply
- RoHS Compliant and Lead-Free
- Compliant with SFF-8472 Rev11.1
- Compliant with SFP+ MSA: SFF-8431 Rev4.1
- Wire/Cable Type Twinax

Applications

- 1/10GbE
- 1/2/4/8x FC
- InfiniBand 1X SDR DDR QDR
- Proprietary Interconnects

Product Description

This is an HP[®] 487655-B21 compatible 10GBase-CU SFP+ to SFP+ direct attach cable that operates over passive copper with a maximum reach of 3.0m (9.8ft). 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.

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."





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.	Тур.	Max.	Unit
Power Supply Voltage	Vcc	3.13	3.30	3.47	V
Power Supply Current	lcc			30	mA
Case Operating Temperature	Тс	-5		70	°C
Data Rate Per Lane				10.5	Gbps
Bit Error Rate	BER			10 ⁻¹²	

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
10 Gbps Line Speed, Full Duplex Bit Error Rate: Better Than 10E ⁻¹²	Hot-pluggable. Industry-standard Small Form-Factor Pluggable (SFP+) copper cable, available as 7m.

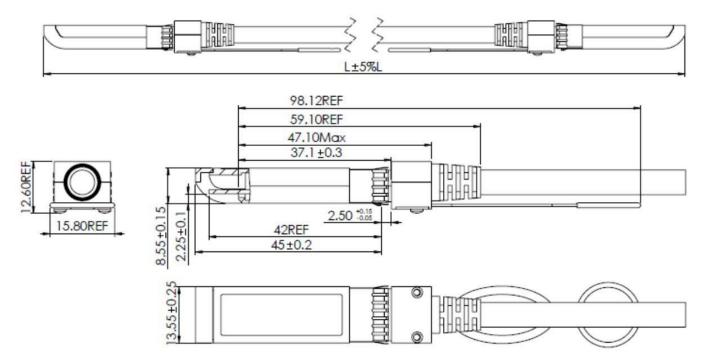
Pin Descriptions

Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground.	
2	LVTTL-O	Tx_Fault	None.	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. Connect to VeeT.	
7	LVTTL-I	RSO	None.	1
8	LVTTL-O	LOS	Loss of Signal.	2
9	LVTTL-I	RS1	None.	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 Supply.	
16		VccT	+3.3V Transmitter 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 VeeT with $30k\Omega$ resistor.
- 2. Passive cable assemblies do not support LOS and Tx_Disable.

Mechanical Specification



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.

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