PRO-S28HPAS28AR-P0-5M

HP® 844471-B21 to Arista Networks® CAB-S-S-25G-0-5M Compatible 25GBase-CU SFP28 Direct Attach Cable (Passive Twinax, 50cm)

Features

- Up to 25Gbps bi-directional data links
- Hot-pluggable
- Compliant with SFF-8402
- 100 Ohm differential impedance
- Enhanced EMI design
- AC coupled inputs and outputs
- Operating Temperature: 0 to 70 Celsius
- Single power supply 3.3V
- RoHS Compliant and Lead-Free

Applications:

- 25GBase Ethernet

Product Description

This HP® 844471-B21 to Arista Networks® CAB-S-S-25G-0-5M dual oem compatible 25GBase-CU SFP28 to SFP28 passive direct attach cable has a maximum reach of 50.0cm (1.6ft). It is 100% HP® to Arista Networks® compatible and has been programmed, uniquely serialized, data-traffic and application tested to ensure that it is compliant and functional. This cable will initialize and perform identically to HP® and Arista Networks®'s individual cables and is built to meet or exceed OEM specifications. This product complies with MSA (Multi-Source Agreement) standards and is TAA (Trade Acts Agreement) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

Proline's transceivers 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.

Rev. 111423

General Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Data Rate	DR		25		Gbps	1
Bit Error Rate	BER			10^{-12}		
Operating Temperature	Tc	0		70	ºC	2
Storage Temperature	Tstg	-40		85	ºC	3
Supply Current	Icc			4	mA	4
Input Voltage	Vcc	3.14	3.3	3.46	V	4
Cable Impedance	Z	90	100	110	Ω	
Product Weight	GD		78		g/PCS	5
Cable Weight	GC		32		G/M	
Dust Cap Weight	GS		0.80		g/PCS	

Notes:

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

Cable Dimensions and Insertion Loss Level

Length	Standard Wire Gauge AWG	Cable Diameter OD (mm)	Minimum Bending Radius R (mm)	Insertion Loss Level (Note 1)	Tolerance Range (±cm)
0.5m	30AWG	4.6	26	CA-25G-N	2

Notes:

1. Cable insertion loss classification standard IEEE 802.3by 110-10.

Pin Descriptions

Pin	Symbol	Name/Description	Notes
1	VeeT	Transmitter Ground (Common with Receiver Ground).	1
2	Tx_Fault	Transmitter Failure Alarm. Not Used.	
3	Tx_Disable	Not Used. The signal turns off the module transmitter when it is "high" or "open."	
4	SDA	Data Line for Serial ID.	2
5	SCL	Clock Line for Serial ID.	2
6	MOD_ABS	Module Absent. Grounded within the module.	2
7	RS0	No Connection Required.	
8	LOS	Loss of Signal Indication. "Logic 0" indicates normal operation.	
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 Non-Inverted 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. The circuit ground is isolated from the chassis ground.
2. Should be pulled up with 4.7kΩ to 10kΩ on the host board to a voltage between 2V and 3.6V.
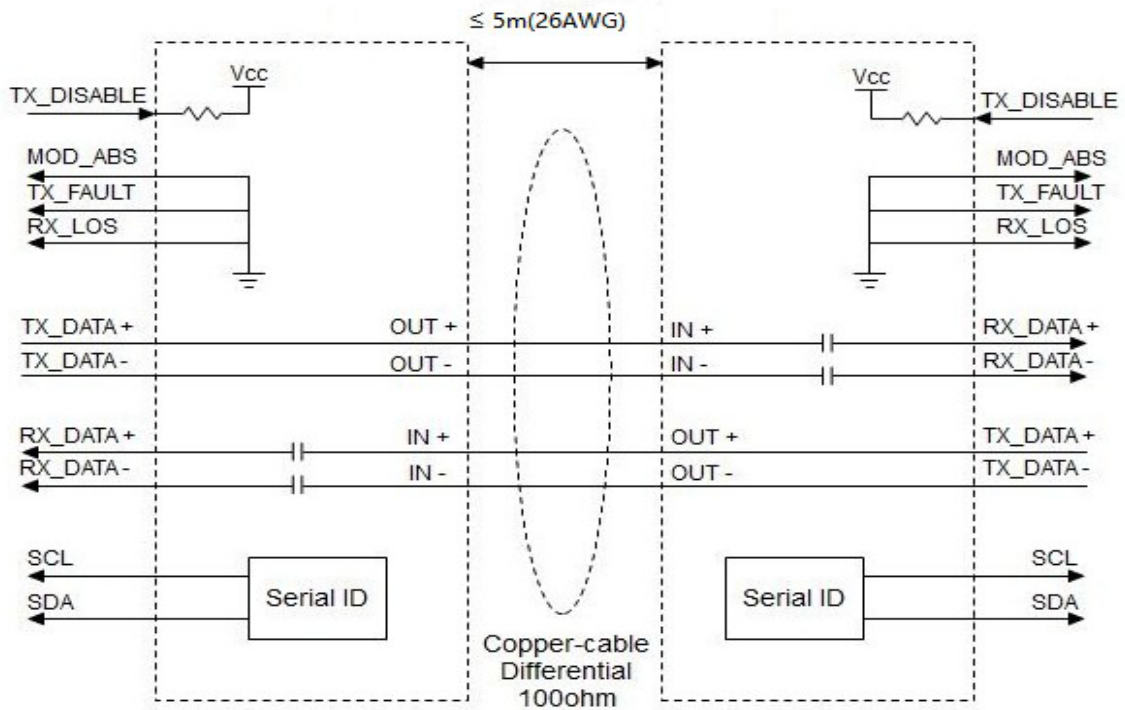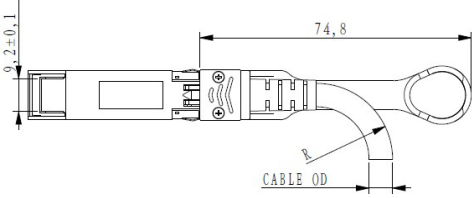
Electrical Pad Layout

20 → V_{EET}		1 → V_{EET}	
19 → TD-		2 → TX_FAULT	
18 → TD+		3 → TX_DISABLE	
17 → V_{EET}		4 → SDA	
16 → V_{CCT}		5 → SCL	
15 → V_{CCR}		6 → MOD_ABS	
14 → V_{EER}		7 → RS0	
13 → RD+		8 → LOS	
12 → RD-		9 → RS1	
11 → V_{EER}		10 → V_{EER}	

Top of Board   Bottom of Board

Top

Bottom

Block Diagram of Transceiver

≤ 5m(26AWG)

TX_DISABLE — Vcc

MOD_ABS
TX_FAULT
RX_LOS

TX_DATA+ — OUT +   IN + — RX_DATA+
TX_DATA- — OUT -   IN - — RX_DATA-

RX_DATA+ — IN +   OUT + — TX_DATA+
RX_DATA- — IN -   OUT - — TX_DATA-

SCL
SDA — Serial ID

Vcc — TX_DISABLE

MOD_ABS
TX_FAULT
RX_LOS

Serial ID — SCL
SDA

Copper-cable
Differential
100ohm

Mechanical Specifications

LENGTH

13,4±0,1

18,35±0,5

8,5±0,1

122,3 REF

9,2±0,1

74,8

R

CABLE OD

Unmarked Tolerance +0.2
Unit: mm

About Us:

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.

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