PRO-S28CIS28HPA-O7M

Cisco® SFP-25G-AOC7M to HP® 844480-B21-AOC7M Compatible 25GBase-AOC SFP28 Active Optical Cable (850nm, MMF, 7m)

Features

- Hot-pluggable SFP28 form factor
- 850nm VCSEL laser and PIN photo-detector
- Supports 25Gbps data rate
- Single 3.3V power supply
- Power dissipation < 1W
- Internal CDR on both Transmitter and receiver channel
- Operating Case temperature: 0 to 70 Celsius
- Digital diagnostics functions are available via the I2C interface
- RoHS Compliant and Lead-Free

Applications:

- 25Gbase-SR Ethernet

Product Description

This Cisco® SFP-25G-AOC7M to HP® 844480-B21-AOC7M dual oem compatible 25GBase-AOC SFP28 to SFP28 active optical cable has a maximum reach of 7.0m (23.0ft). It is 100% Cisco® to HP® 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 Cisco® and HP®'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.

TAA COMPLIANT

Rev. 032924

General Specifications

Parameter	Symbol	Min	Typ.	Max.	Unit
Storage Temperature		-40		85	°C
Operating Case Temperature	Tc	0		70	°C
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Supply Voltage	Vcc	0		3.6	V
Storage Temperature	Tstg	-40		85	°C
Operating Humidity		5		85	%

Optical Characteristics

Parameter		Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter							
Data Rate		BR		25.78		Gbps	
Centre Wavelength		λc	840	850	860	nm	
Spectral Width (-20dB)		σ			0.6	nm	
Average Output Power		Pavg	-8.4		2.4	dBm	
Optical Power OMA		P_{OMA}	-6.4		3	dBm	
Extinction Ratio		ER	2			dB	
Differential data input swing		$V_{IN,PP}$	40		1000	mV	
Input Differential Impedance		ZIN	90	100	110	Ω	
TX Disable	**Disable**		2.0		Vcc	V	
	Enable		0		0.8	V	
TX Fault	**Fault**		2.0		Vcc	V	
	Normal		0		0.8	V	
Receiver							
Data Rate		BR		25.78		Gbps	
Centre Wavelength		λc	840	850	860	nm	
Receiver Sensitivity (OMA)		Psens			-10	dBm	
Stressed Sensitivity (OMA)					-5.2	dBm	
Receiver Power (OMA)					3	dBm	
LOS De-Assert		LOS_D			-13	dBm	
LOS Assert		LOS_A	-30			dBm	
LOS Hysteresis			0.5			dB	
Differential data output swing		Vout,PP	500		1130	mV	
LOS	**High**		2.0		Vcc	V	
	Low				0.8	V	

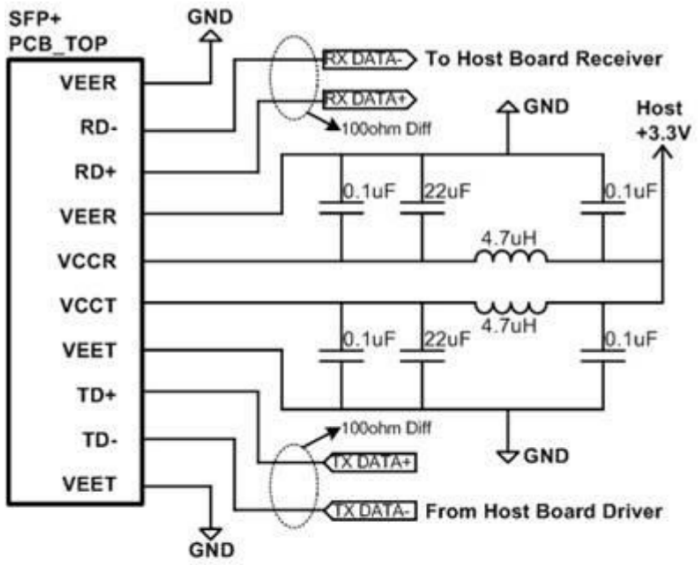
Pin Descriptions

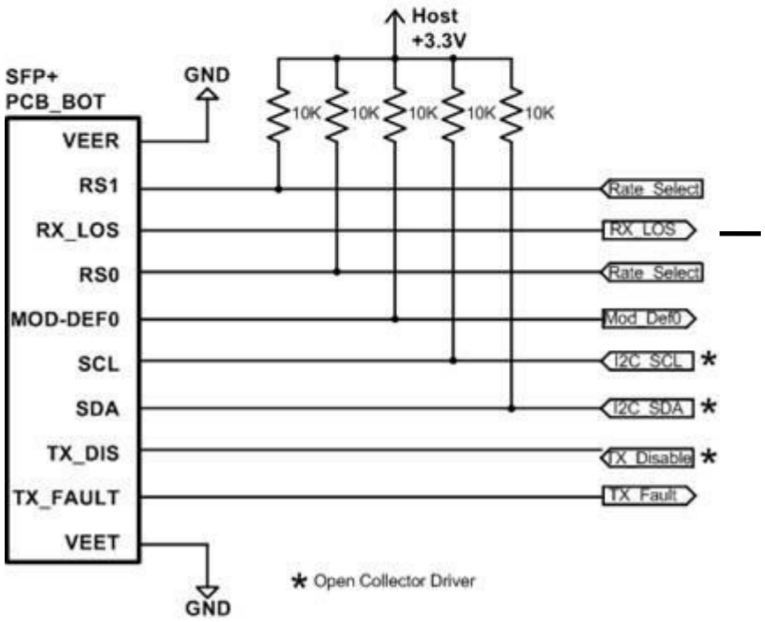
Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground.	
2	LV-TTL-O	TX_Fault	N/A	1
3	LV-TTL-I	TX_DIS	Transmitter Disable.	
4	LV-TTL-I/O	SDA	2-Wire Serial Data.	
5	LV-TTL-I	SCL	2-Wire Serial Clock.	
6		MOD_DEF0	Module present, connect to VeeT.	
7	LV-TTL-I	RS0	N/A	1
8	LV-TTL-O	LOS	LOS of Signal.	
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:

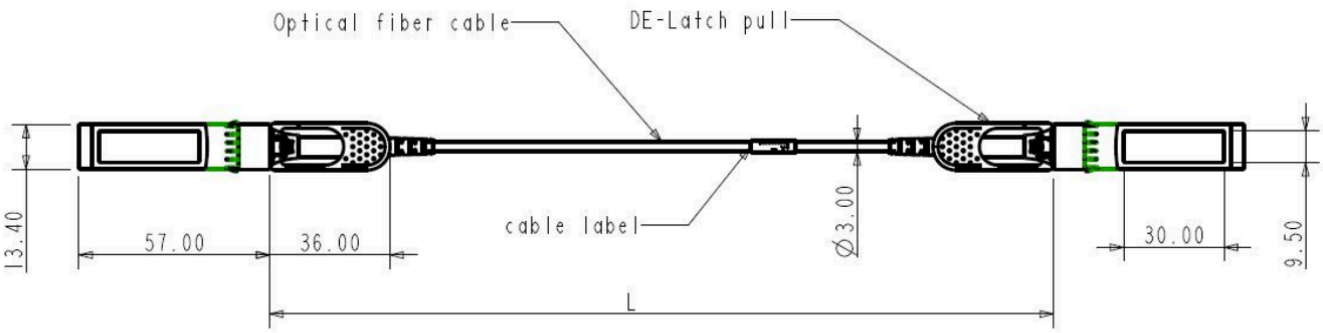
1. Signals not supported in SFP28 Copper pulled-down to VeeT with 30kΩ resistor.

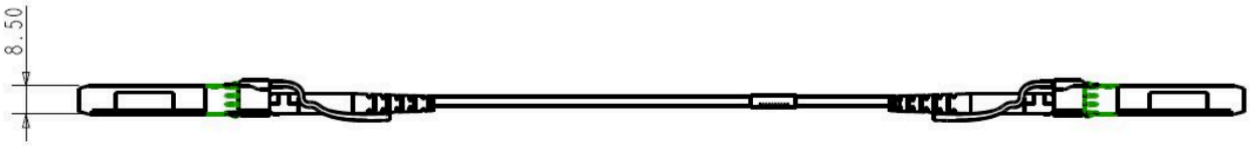
Host Board


SFP+
PCB_TOP
GND
VEER
RD-
RD+
VEER
VCCR
VCCT
VEET
TD+
TD-
VEET
GND
RX DATA-
To Host Board Receiver
RX DATA+
100ohm Diff
GND
Host
+3.3V
0.1uF
22uF
0.1uF
4.7uH
4.7uH
0.1uF
22uF
0.1uF
100ohm Diff
TX DATA+
GND
TX DATA-
From Host Board Driver


SFP+
PCB_BOT
GND
Host
+3.3V
10K
10K
10K
10K
10K
VEER
RS1
RX_LOS
RS0
MOD-DEF0
SCL
SDA
TX_DIS
TX_FAULT
VEET
GND
Rate_Select
RX_LOS
Rate_Select
Mod_Def0
I2C_SCL
I2C_SDA
TX_Disable
TX_Fault
* Open Collector Driver

Mechanical Specification





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.

Tel: 855.933.3223
Email: sales@prolineoptions.com
Email: techsupport@prolineoptions.com
Web: https://www.prolineoptions.com