

10.3Gb/s SFP+ Passive Cable

APCP01-SSCxxx-yy

■ Product Features

- ✓ Truly broadband - operates from 1 to 10.5 Gb/s
- ✓ Support hot-pluggable
- ✓ Available in lengths from 1m to 7m
- ✓ 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 Rev 11.1
- ✓ Compliant with SFP+ MSA: SFF-8431 Rev4.1
- ✓ Wire/Cable Type Twinax



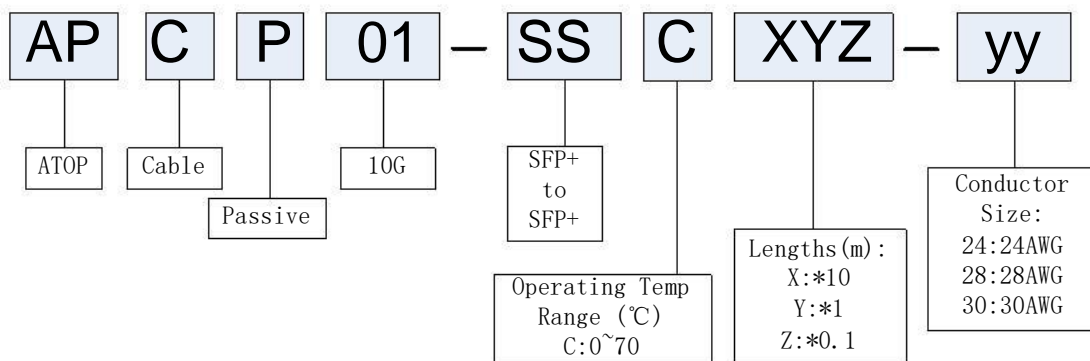
■ Applications

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

■ General

Passive cables may require host pre-emphasis and equalization to reach at the longer lengths.

■ Product Selection



Part Number	Lengths	Conductor Size	Note
APCP01-SSC010-yy	1m	24/28/30 AWG	1,2



APCP01-SSC015-yy	1.5m	24/28/30 AWG	1,2
APCP01-SSC020-yy	2m	24/28/30 AWG	1,2
APCP01-SSC025-yy	2.5m	24/28/30 AWG	1,2
APCP01-SSC030-yy	3m	24/28/30 AWG	1,2
APCP01-SSC050-yy	5m	24/28 AWG	1,2
APCP01-SSC070-yy	7m	24 AWG	1,2

Note:

1, yy=30,28,24,present wire size AWG

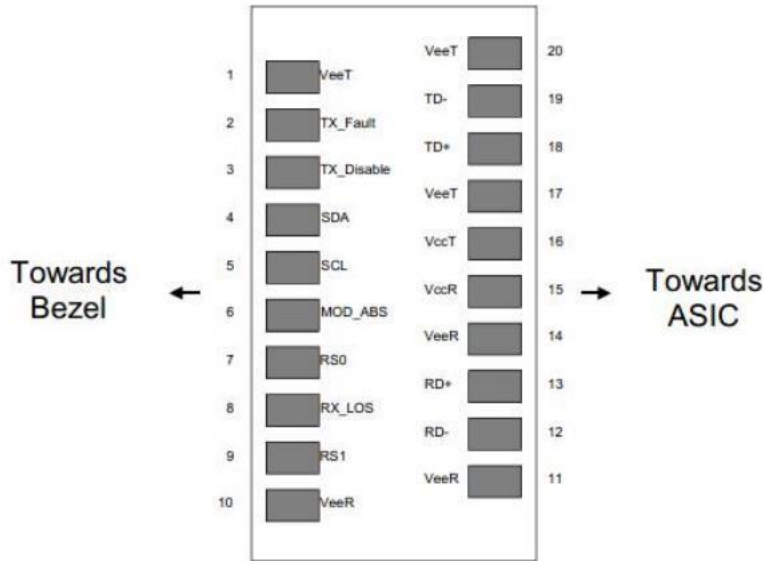
2, 24 AWG is default

Pin Descriptions

Pin	Symbol	Name/Description	Ref.
1	VeeT	Transmitter Ground (Common with Receiver Ground)	
2	TX Fault	Transmitter Fault. LVTTTL-O	
3	TX Disable	Transmitter Disable. Laser output disabled on high or open. LVTTTL-I	
4	SDA	2-Wire Serial Interface Data Line(Same as MOD-DEF2 in INF-8074i). LVTTTL-I/O	
5	SCL	2-Wire Serial Interface Data Line(Same as MOD-DEF2 in INF-8074i). LVTTTL-I	
6	Mod_ABS	Module Absent, Connect to VeeT or VeeR in Module.	
7	RS0	Rate Select 0, optionally controls SFP+ module receiver LVTTTL-I	
8	LOS	Loss of Signal indication. Logic 0 indicates normal operation. LVTTTL-O	
9	RS1	Rate Select 1, optionally controls SFP+ module transmitter. LVTTTL-I	
10	VeeR	Receiver Ground (Common with Transmitter Ground)	
11	VeeR	Receiver Ground (Common with Transmitter Ground)	
12	RD-	Receiver Inverted DATA out. AC Coupled. CML-O	
13	RD+	Receiver Non-inverted DATA out. AC Coupled. CML-O	



14	VeeR	Receiver Ground (Common with Transmitter Ground)	
15	VccR	Receiver Power Supply	
16	VccT	Transmitter Power Supply	
17	VeeT	Transmitter Ground (Common with Receiver Ground)	
18	TD+	Transmitter Non-Inverted DATA in. AC Coupled. CML- I	
19	TD-	Transmitter Inverted DATA in. AC Coupled. CML- I	
20	VeeT	Transmitter Ground (Common with Receiver Ground)	



Pin-out of Connector Block on Host Board

Absolute Maximum Ratings

Parameter	Symbol	Min	Typ	Max	Unit	Ref.
Maximum Supply Voltage	Vcc	-0.5		+4.0	V	
Storage Temperature	TS	-40		+85	°C	
Operating Humidity	RH	0		85	%	

Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Unit	Ref.
Power Supply Voltage	Vcc	3.13	3.30	3.47	V	
Power Supply Current	Icc			120	mA	One side

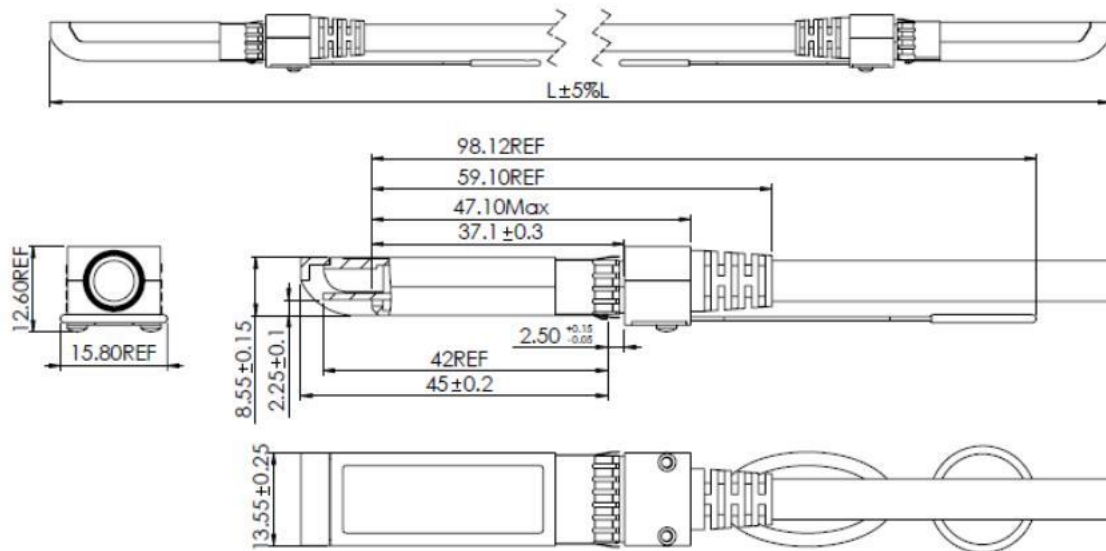


Case Operating Temperature	Tc	0		+70	°C	
Data Rate, each Lane				10.5	Gbps	
Bit Error Rate	BER			10-12		

■ **Cable Specifications**

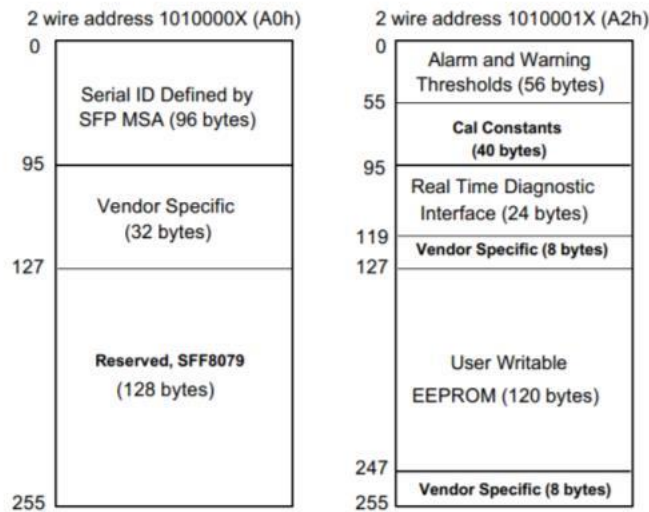
Parameter	Symbol	Min	Typ	Max	Unit	Note
Cable Diameter(24AWG)	DIA		6		mm	
Cable Diameter(28AWG)	DIA		4.7		mm	
Cable Diameter(30AWG)	DIA		4.5		mm	
Time Delay Skew(Within Pair)	Tds			10	ps/m	
Cable Time Delay	Td		4.3		ns/m	
Cable Impedance	Z	90	100	110	Ω	

■ **Mechanical Specifications**



■ **EEPROM Information**

EEPROM memory map specific data field description is as below:



Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883E Method 3015.7
- Immunity compatible with IEC 61000-4-3
- EMI compatible with FCC Part 15 Class B EN55022 Class B
- RoHS compliant with 2002/95/EC 4.1&4.2 2005/747/EC

Revision History

Revision	Initiated	Reviewed	Approved	DCN	Release Date
V1.a	xiaoaiyou	wanggang		NewReleased.	July 28, 2016

For More Information

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