

SV-DAC-10GT3T3-xM

SFP+ Direct Attach Cables , 1m、 3m、 5m、 7m Reach



Features

- Up to 10.3125 Gbps data rate
- Up to 5 meter transmission
- Hot-pluggable SFP 20PIN footprint
- Improved Pluggable Form Factor(IPF) compliant for enhanced EMI/EMC performance
- Compatible to SFP28 MSA
- Compatible to SFF-8402 and SFF-8432
- Temperature Range: 0~ 70 °C
- RoHS Compatible

Applications

- 10G Ethernet
- Cost-effective copper solution
- Lowest total system power solution
- Lowest total system EMI solution
- Optimized design for Signal Integrity

Ordering Information

Part number	Description
SV-DAC-10GT3T3-1M	Starview SFP+ 10Gbps Direct Attach Cable modules, distance up to 1m.
SV-DAC-10GT3T3-3M	Starview SFP+ 10Gbps Direct Attach Cable modules, distance up to 3m.
SV-DAC-10GT3T3-5M	Starview SFP+ 10Gbps Direct Attach Cable modules, distance up to 5m.
SV-DAC-10GT3T3-7M	Starview SFP+ 10Gbps Direct Attach Cable modules, distance up to 7m.

High Speed Characteristics

Parameter	Symbol	Min	Typical	Max	Unit	Note
Differential Impedance	TDR	90	100	110	Ω	
Insertion loss	SDD21	-17.04		-3	dB	At 5.15625 GHz
	SDD11			See 1	dB	At 0.05 to 4.1 GHz
Differential Return Loss	SDD22			See 2	dB	At 4.1 to 11.1 GHz
	SCD11					
Differential to common-mode return loss	SCD11					
	SCD22			-10	dB	At 0.2 to 11.1 GHz
Common-mode to common-mode output return loss	SCC11			See 3		At 0.01 to 2.5 GHz
	SCC22				dB	
				-3		At 2.5 to 11.1 GHz
Channel Operating Margin	COM	3			dB	

Notes:

1. Reflection Coefficient given by equation $SDD11(\text{dB}) < -12 + 2 \times \text{SQRT}(f)$, with f in GHz
2. Reflection Coefficient given by equation $SDD11(\text{dB}) < -6.3 + 13 \times \log_{10}(f/5.5)$, with f in GHz
3. Reflection Coefficient given by equation $SCC11(\text{dB}) < -7 + 1.6 \times f$, with f in GHz

Pin Descriptions

Pin	Logic	Symbol	Description	Notes
1		V _{EET}	Transmitter Ground	
2	LV-TTL-O	TX_FAULT	N/A	Note 1
3	LV-TTL-I	TX_DISABLE	Transmitter Disable	Note 2
4	LV-TTL-I/O	SDA	Two Wire Serial Data	
5	LV-TTL-I	SCL	Two Wire Serial Clock	
6		MOD_DEF(0)	Module present, Connect to VeeT	
7	LV-TTL-I	RS0	N/A	Note 1
8	LV-TTL-O	LOS	Loss of Signal	Note 2
9	LV-TTL-I	RS1	N/A	Note 1
10		V _{EER}	Receiver ground	
11		V _{EER}	Receiver ground	
12	CML-O	RD-	Received Data Inverted	
13	CML-O	RD+	Received Data Non- Inverted	
14		V _{EER}	Receiver ground	
15		V _{CCR}	Receiver Supply 3.3V	
16		V _{CCT}	Transmitter Supply 3.3V	
17		V _{EET}	Transmitter Ground	
18	CML_O	TD+	Transmit Data Non-Inverted	
19	CML_O	TD-	Transmit Data Inverted	
20		V _{EET}	Transmitter Ground	

Note(1): Signals not supported in SFP+ Copper pulled-down to VeeT with 30K ohms resistor

Note(2): Passive cable assemblies do not support LOS and TX_DIS