

100G SFP-DD to SFP-DD Direct Attached Cable



Features

- ◆ SFP-DD Module compliant to SFP-DD MSA
- ◆ Transmission data rate up to 56Gbps per channel
- ◆ Enable 100Gb/s Transmission
- ◆ Maximum link length up to 3m
- ◆ Built-in EEPROM functions
- ◆ Operating case temperature 0°C to 70°C
- ◆ RoHS2.0 compliant

Absolute Maximum Ratings

Parameter	Symbol	Min	Typical	Max	Unit
Supply Voltage	Vcc	3.13	3.3	3.47	V
Storage temperature	Ts	-40		85	°C
Operating Case temperature	Tc	0		70	°C
Humidity	Rh	5		85	%
Data Rate			100		Gbps

Physical Characteristics

Parameter	Symbol	Min	Typical	Max	Unit
Length	L	0.5		3	M
AWG		30		26	AWG
Jacket material		PVC, Black			
Flame Rating		VW- 1			

Electrical Specifications

Parameter	Symbol	Min	Typical	Max	Unit
Resistance	Rcon			3	ohm
Insulation Resistance	Rins			10	°C
Raw cable impedance	Zca	95		110	Mohm
Mated connector Impedance	Zmated	85		110	ohm

Maximum insertion loss at 13.28 GHz	SDD21			17.16	dB
Other SI Performance		Comply with IEEE802.3cd&bj			
Minimum COM	COM	3			dB

Pin Description

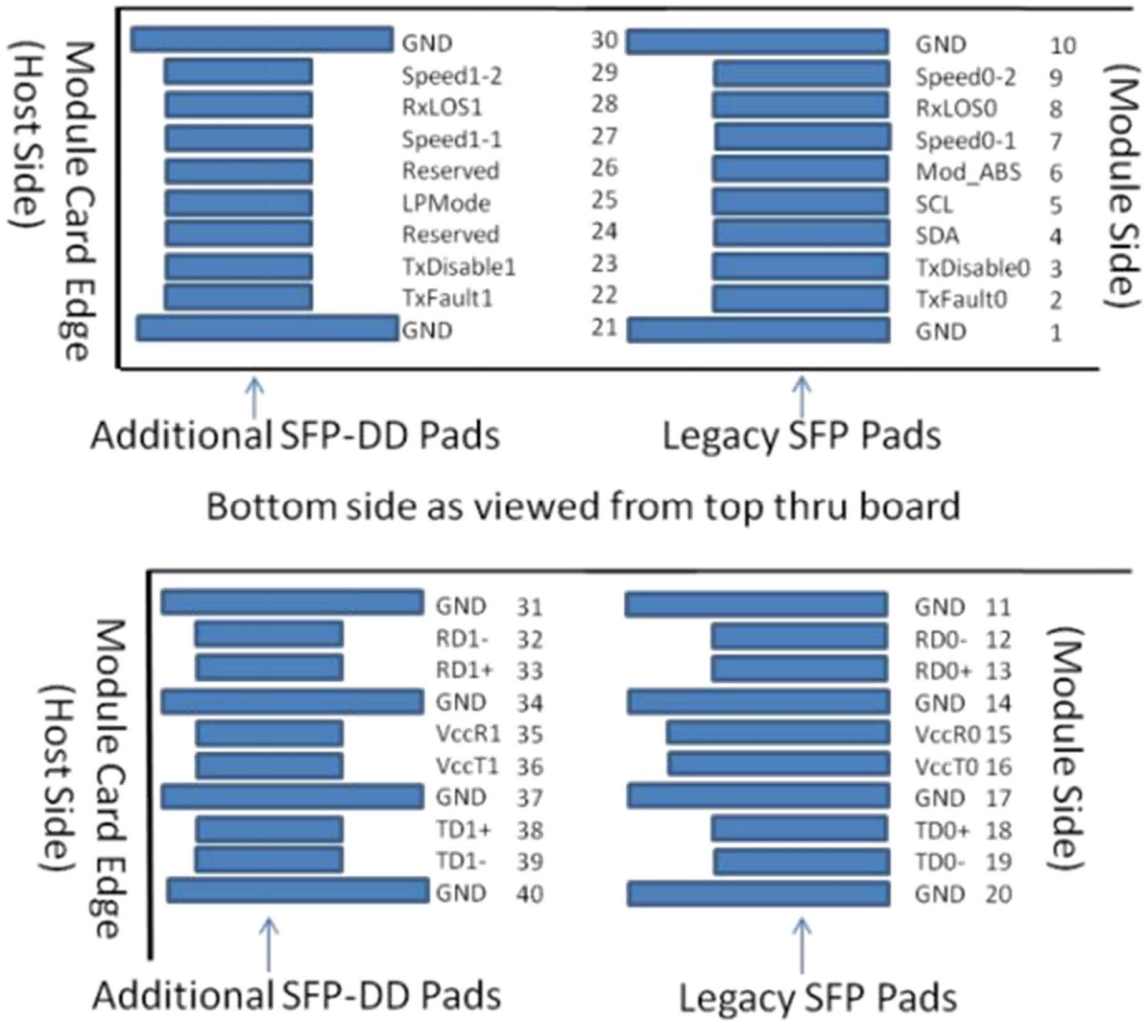


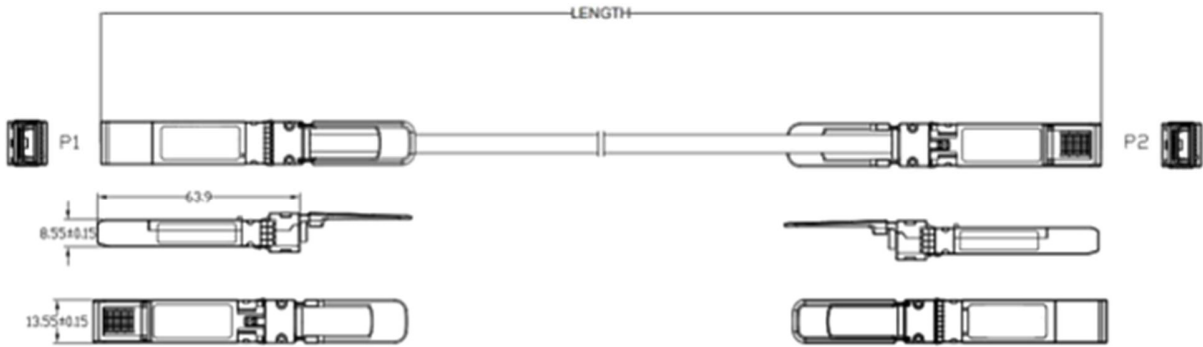
Figure 1. Electrical Pin-out Details for SFP-DD

Table 1-Pad Function Definition

Pad	Logic	Symbol	Module pad Descriptions	Plug sequence	Notes
1		GND	Ground	1A	1
2	LVTTTL-O	Tx Fault0	Transmitter Fault Indication for channel 0	3A	
3	LVTTTL-I	Tx Disable0	Transmitter Disable for channel 0	3A	
4	LVC MOS-I/O	SDA	Management I/F data line	3A	
5	LVC MOS-I/O	SCL	Management I/F clock	3A	
6	LVTTTL-O	Mod_ABS	Module Absent	3A	
7	LVTTTL-I	Speed0-1	Rx Rate Select for channel 0	3A	
8	LVTTTL-O	Rx LOS0	Rx Loos of Signal for channel 0	3A	
9	LVTTTL-I	Speed0-2	Tx Rate Select for channel 0	3A	
10		GND	Ground	1A	1
11		GND	Ground	1A	1
12	CML-O	RDO-	Inverse Received Data Out for channel 0	3A	
13	CML-O	RD0+	Received Data Out for channel 0	3A	
14		GND	Ground	1A	1
15		Vcc R0	Receiver power	2A	2
16		Vcc TO	Transmitter power	2A	2
17		GND	Ground	1A	
18	CML-I	TDD+	Transmit Data li for channel 0	3A	
19	CML-I	TDD-	Inverse Transmit Data In for channel 0	3A	
20		GND	Ground	1A	1
21		GND	Ground	1B	1

22	LVTTL-O	Tx Fault1	Transmitter Fault Indication/Interrupt for channel 1	3B	
23	LVTTL-O	TxDisable1	Transmitter Disable for channel 1	3B	
24		Reserved	Reserved for future Use	3B	
25	LVTTL-I	LP Mode	Low Power Mode Control	3B	
26		Reserved	Reserved for future Use	3B	3
27	LVTTL-I	Speed1-1	Rx Rate Select for channel 1	3B	
28	LVTTL-O	Rx LOS1	Loss of signal for channel 1	3B	
29	LVTTL-I	Speed1-2	Tx Rate Select for channel 1	3B	
30		GND	Ground	1B	1
31		GND	Ground	1B	1
32	CML-O	RD1	Inverse Received Data Out for channel 1	3B	
33	CML-O	RD1+	Received Data Out for channel 1	3B	
34		GND	Ground	1B	1
35		VccR1	Received Power for channel 1	2B	2
36		VccT1	Transmitter Power for channel 1	2B	2
37		GND	Ground	1B	1
38	CML-I	TD1+	Transmitter Data in for channel 1	3B	
39	CML-I	TD1-	Inverse Transmit Data Out for channel 1	3B	
40		GND	Ground	1B	1

Mechanical Dimensions



Ordering Information

Part No.	Description
SFPDD-100G-005	100G SFP-DD to SFP-DD DAC,30AWG, 0.5m, PVC,BLACK.
SFPDD-100G-010	100G SFP-DD to SFP-DD DAC,30AWG, 1.0m, PVC,BLACK.
SFPDD-100G-015	100G SFP-DD to SFP-DD DAC,30AWG, 1.5m, PVC,BLACK.
SFPDD-100G-020	100G SFP-DD to SFP-DD DAC,30AWG, 2.0m, PVC,BLACK.
SFPDD-100G-025	100G SFP-DD to SFP-DD DAC,26AWG,2.5m, PVC,BLACK.
SFPDD-100G-030	100G SFP-DD to SFP-DD DAC,26AWG, 3.0m, PVC,BLACK.

References

1. SFP-DD MSA Rev2. 1
2. IEEE802.3cd&802.3bj
3. SFP-DD-MIS-Rev2.0