ADD-SHPSHPA-PDAC5M

HP® J9283B to HP® 537963-B21 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)

Features:

- SFF-8431 Compliant
- 100Ohm Differential Impedance
- Data Rate Operation: 10Mbps to 12Gbps
- Pull-to-Release Latch Design
- Enhanced EMI Skirt Design
- Retractable Pin Latch
- Operating Temperature: -20 to 85 Celsius
- AC-Coupled Inputs and Outputs
- RoHS Compliant and Lead-Free



Applications:

- 10GBase Ethernet

Product Description

This HP® J9283B to HP® 537963-B21 dual OEM compatible 10GBase-CU SFP+ to SFP+ passive direct attach cable has a maximum reach of 5.0m (16.4ft). It is 100% HP® to HP® compatible and has been programmed, uniquely serialized, and data-traffic and application tested to ensure that it is compliant and functional. This direct attach cable will initialize and perform identically to HP® and HP®'s individual cables and is built to meet or exceed HP® and HP®'s specifications, and comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

AddOn's transceivers are RoHS compliant and lead-free.

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating Temperature	Tc	-20		85	°C
Storage Temperature	Tstg	-40		85	°C
Relative Humidity (Non-Condensing)	RH	35		60	%
Input Voltage	VccT, VccR	3.135	3.3	3.465	V
Clock Frequency	fSCL			400	kHz
Maximum Power				0.03	W
Maximum Average Current	Icc			10	mA
Data Rate		0.010		10.3125	Gbps

WDP Specifications

Cable Gauge	Cable Length	WDPo (dB)	WDPi (dB)	dWDP
26 AWG	4m	7.49	2.4	5.09

VMA and VCR Specifications

Cable Gauge	Cable Length	VMA (dB)	VCR (dB)
26 AWG	4m	3.93609	38.53281

Frequency Domain

Item	Test Parameter	Specification (Proposal)
1	Receive Return Loss (SDD22)	-12+2*SQRT(f) @ 0.01 to 4.1GHz <-6.3 + 13 * log10(f/5.5), with f in GHz; @4.1 to 11.1GHz
2	Transmit Return Loss (SDD11)	-12+2*SQRT(f) @ 0.01 to 4.1GHz <-6.3 + 13 * log10(f/5.5), with f in GHz; @4.1 to 11.1GHz
3	Common-Mode Reflection (SCC22)	< -7 + 1.6 x f, with f in GHz ; @ 0.01 to 2.5GHz -3dB @ 2.5 to 11.1GHz
4	Common-Mode Conversion (SCD11)	-10dB @ 0.01 to 11.1GHz

Mechanical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Cable Diameter			0.165		Inches
Bend Radius		0.827			Inches
Within Pair Skew				120	ps/10m
Cable Insertion Loss			10		dB/10m
Bulk Cable Crosstalk				1	%
Bulk Cable Time Delay				4.3	ns/m
Cable Capacitance (Intra-Pair)				43	pF/m
Bulk Cable Impedance		95	100	105	Ω
Insertion Force				20	N
Withdrawal Force				12.5	N
Retention Force		90			N
Durability		50 Cycles			

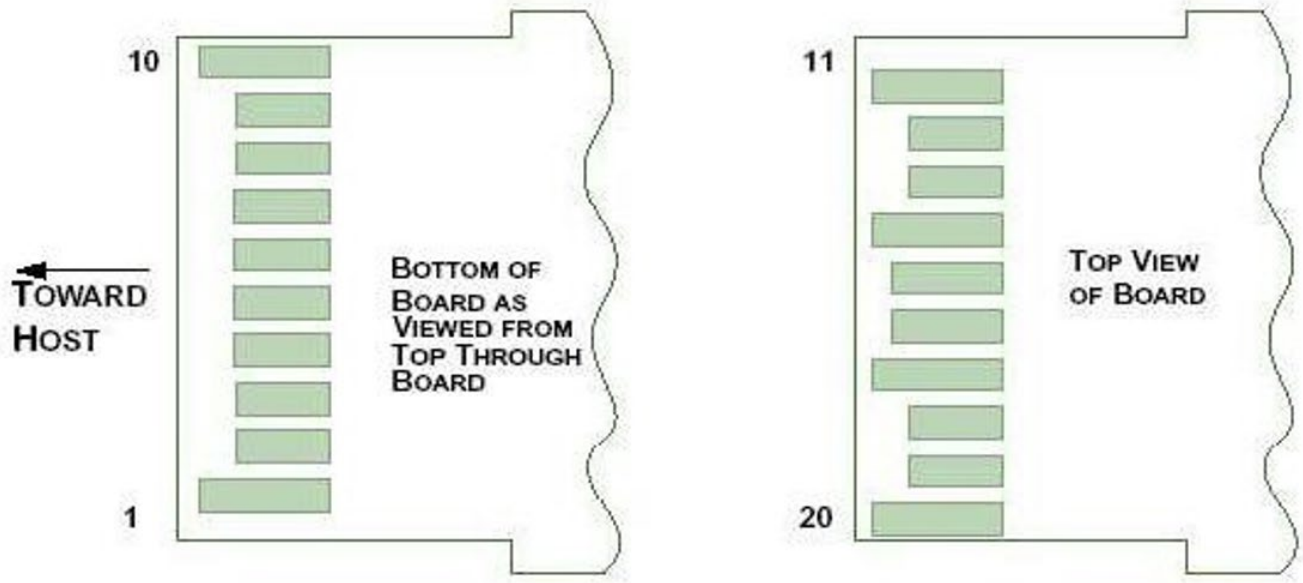
Pin Descriptions

Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Module Transmitter Ground.	1
2	LVTTL-O	Tx_Fault	Transmitter Fault.	2
3	LVTTL-I	Tx_Disable	Transmitter Disable.	3
4	LVTTL-I/O	SDA	MOD-DEF2. 2-Wire Serial Interface Data Line.	
5	LVTTL-I/O	SCL	MOD-DEF1. 2-Wire Serial Interface Clock Line.	
6		MOD_ABS	Module Absent.	4
7	LVTTL-I	RS0	Rate Select Zero.	
8	LVTTL- O	Rx_LOS	Module Receiver Loss of Signal.	2
9	LVTTL-I	RS1	Rate Select One.	
10		VeeR	Module Receiver Ground.	1
11		VeeR	Module Receiver Ground.	1
12	CML-O	RD-	Receiver Inverted Data Output.	
13	CML-O	RD+	Receiver Non-Inverted Data Output.	
14		VeeR	Module Receiver Ground.	1
15		VccR	Module Receiver 3.3V Supply.	
16		VccT	Module Transmitter 3.3V Supply.	
17		VeeT	Module Transmitter Ground.	1
18	CML-I	TD+	Transmitter Non-Inverted Data Input.	
19	CML-I	TD-	Transmitter Inverted Data Input.	
20		VeeT	Module Transmitter Ground.	1

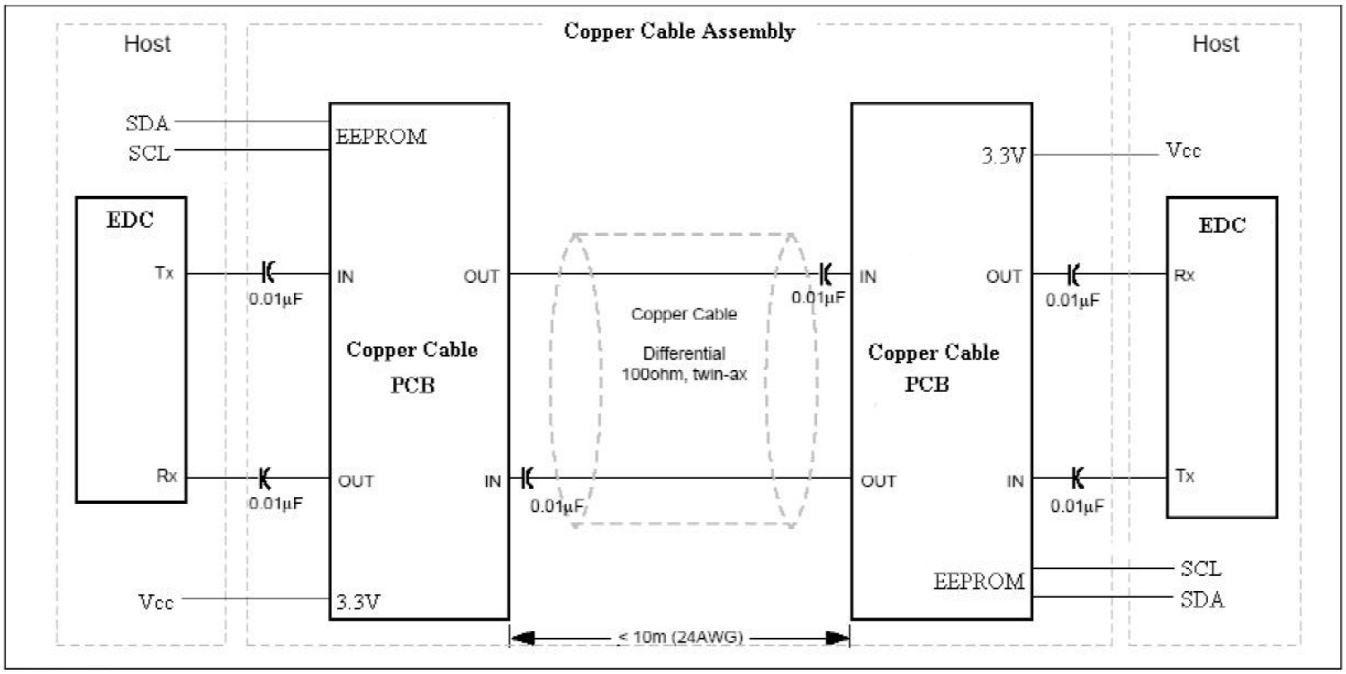
Notes:

1. The module signal ground pins, VeeR and VeeT, shall be isolated from the module case.
2. This pin is an open collector/drain output pin and shall be pulled up with 4.7-10k to the Host_Vcc on the host board. Pull-ups can be connected to multiple power supplies; however, the host board design shall ensure that no module pin has voltage exceeding module VccT/R + 0.5V.
3. This pin is an open collector/drain input pin and shall be pulled up with 4.7-10k to the VccT in the module.
4. This pin shall be pulled up with 4.7-10k to the Host_Vcc on the host board.

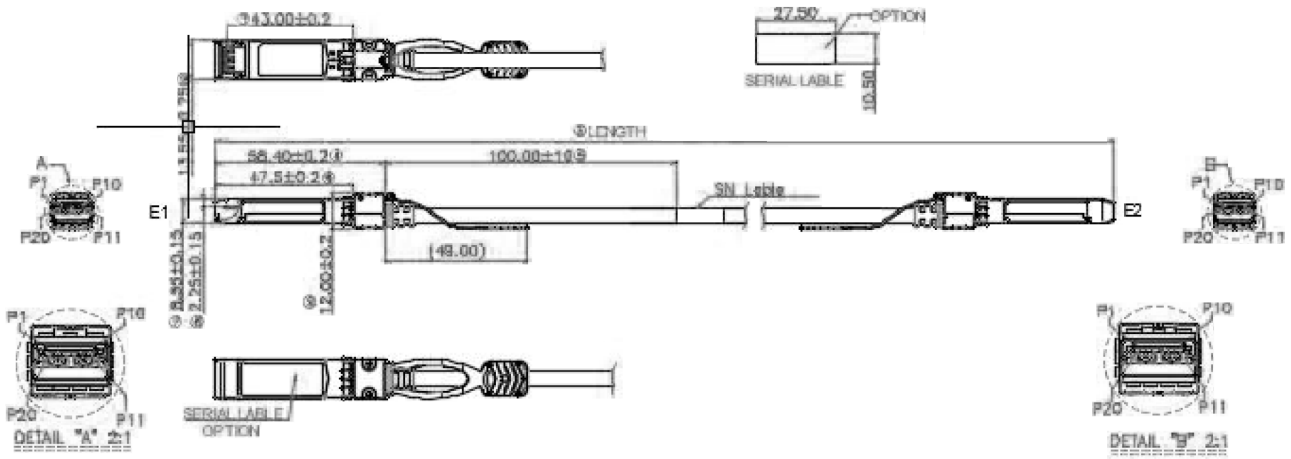
Host Board Connector Pin-Out



Copper Cable Assembly



Mechanical Specifications



About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is ingrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications ranging from NEBS Level 3 to ISO 9001:2015 with every new development while maintaining the signature reliability of its products.



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