



R0M46A-1-SKY

Aruba Networks® R0M46A-1 Compatible 50GBase-CU SFP56 to SFP56 Direct Attach Cable (Passive Twinax, 1m)

Product Description

This is an Aruba Networks® R0M46A-1 compatible 50GBase-CU SFP56 to SFP56 direct attach cable that operates over passive copper with a maximum reach of 1.0m (3.3ft). It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This direct attach cable is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

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

Features:

- Compliant with SFP56 MSA Specification
- Management interface specifications per SFF-8472
- Electrical interface specifications per SFF-8431
- PAM4 modulation
- Cable Color: Black
- Supports 56Gbps
- RoHS Compliant and Lead-Free
- I2C for EEPROM communication



Applications:

- Servers, Switches, Routers, Data Centers
- High Performance Computing

For your product safety, please read the following information carefully before any manipulation of the transceiver:



ESD

This transceiver is specified as ESD threshold 1kV for SFI pins and 2kV for all others electrical input pins, tested per MIL-STD-883G, Method 3015.4 / JESD22-A114-A (HBM). However, normal ESD precautions are still required during the handling of this module.



LASER SAFETY

This is a Class1 Laser Product according to IEC 60825-1:2007. This product complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated (June 24, 2007).

The optical ports of the module need to be terminated with an optical connector or with a dust plug in order to avoid contamination.

Characteristics

Parameter	Specifications
Data Rate	56Gbps
Assembly Color	Black
Number of Pluggable I/O Cable Assembly Positions	2-Pair
Number of Signal Positions	4
Cable Assembly Category	High-Speed

Cable Specifications

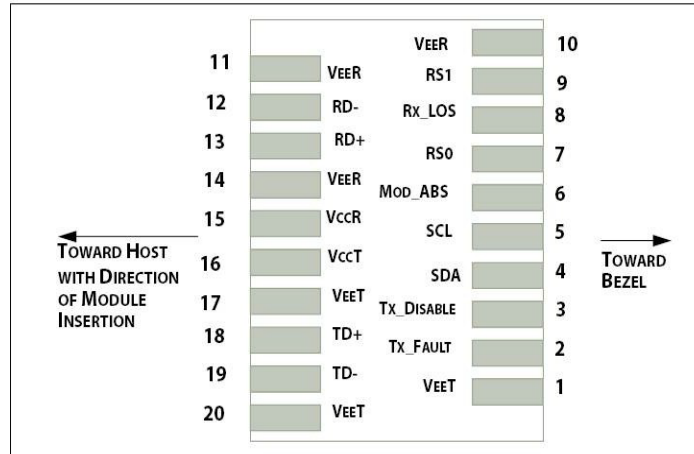
Length	Tolerance	Wire Gauge
1m (3.3ft)	±30mm	30AWG

SFP56 Pin Definitions

Pin	Symbol	Name/Description	Notes
1	VeeT	Transmitter Ground.	1
2	Tx_Fault	Transmitter Fault. LVTTTL-O. "High" indicates a fault condition.	2
3	Tx_Disable	Transmitter Disable. LVTTTL-I. "High" or "open" disables the transmitter.	3
4	SDA	2-Wire Serial Interface Data. LVCMOS-I/O. MOD-DEF2.	4
5	SCL	2-Wire Serial Interface Clock. LVCMOS-I/O. MOD-DEF1.	4
6	MOD_ABS	Module Absent (Output). Connected to the VeeT or VeeR in the module.	5
7	RS0	N/A.	6
8	Rx_LOS	Receiver Loss of Signal. LVTTTL-O.	2
9	RS1	N/A.	6
10	VeeR	Receiver Ground.	1
11	VeeR	Receiver Ground.	1
12	RD-	Inverse Received Data Out. CML-O.	
13	RD+	Received Data Out. CML-O.	
14	VeeR	Receiver Ground.	
15	VccR	+3.3V Receiver Power.	
16	VccT	+3.3V Transmitter Power.	
17	VeeT	Transmitter Ground.	1
18	TD+	Transmitter Data In. CML-I.	
19	TD-	Inverse Transmitter Data In. CML-I.	
20	VeeT	Transmitter Ground.	1

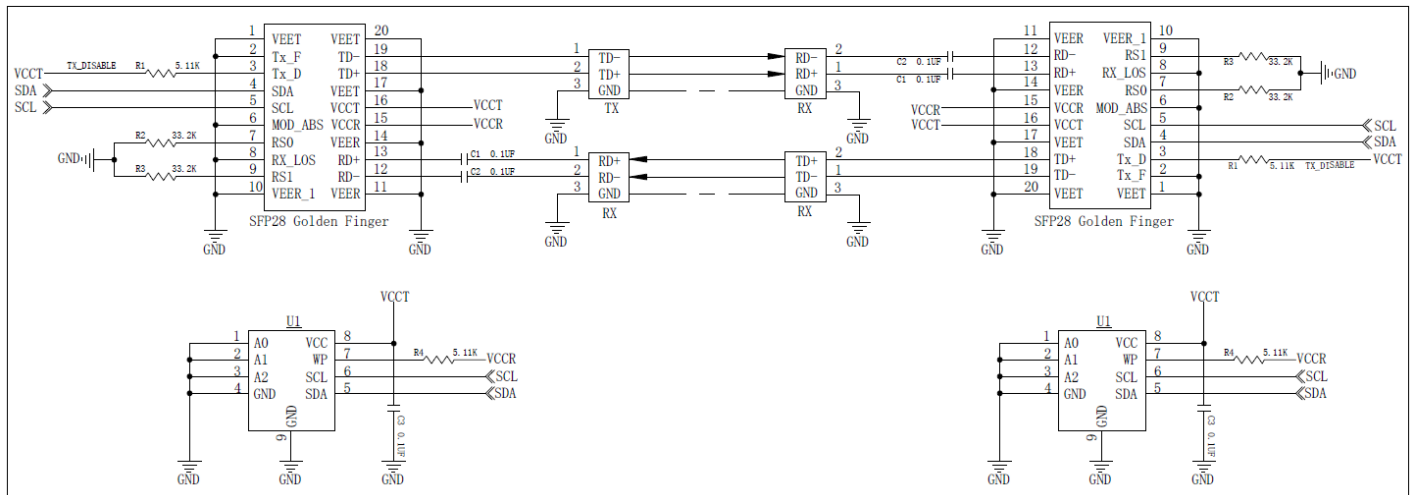
Notes:

1. The module signal grounds are isolated from the module case.
2. This is an open collector/drain output that, on the host board, requires a 4.7k Ω to 10k Ω pull-up resistor to the Host_Vcc.
3. This input is internally biased "high" with a 4.7k Ω to 10k Ω pull-up resistor to the VccT.
4. 2-Wire Serial Interface Clock and Data lines require an external pull-up resistor.
5. This is a ground return that, on the host board, requires a 4.7k Ω to 10k Ω pull-up resistor to the Host_Vcc.
6. Rate Select is not available.

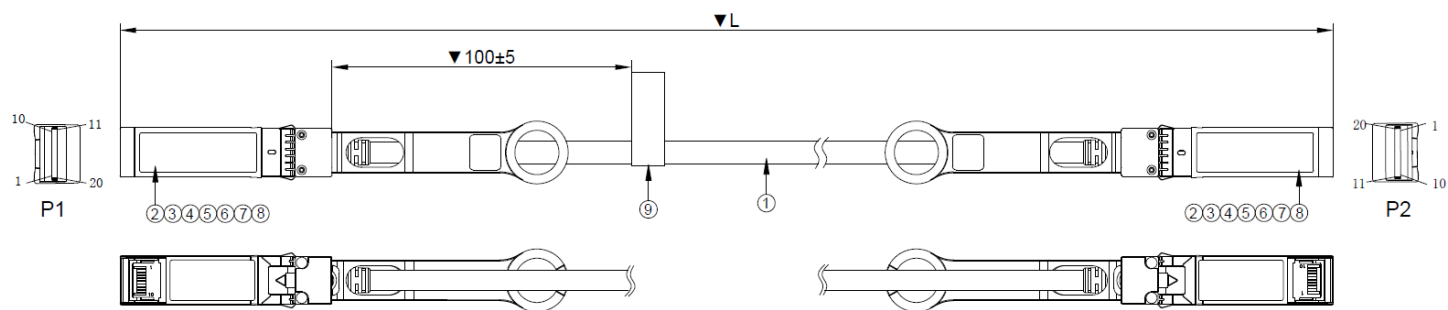


Host PCB SFP56 Pad Assignment Top View

Wiring Schematic



Mechanical Specifications



No.	Description	Quantity	Unit
1	SFP56 Cable, 30AWG, Black, RoHS	A/R	M
2	SFP56 Connector Shell	2	PCS
3	SFP28 25G PCBA, MCU	2	PCS
4	Pull Tab: Black	2	PCS
5	SR: Black, PVC	A/R	KG
6	Resin, Black	A/R	KG
7	Heat-Resistant Tape	A/R	M
8	W=5mm Copper Foil	A/R	M
9	Label	1	PCS

About Skylane Optics

Skylane is a leading provider of transceivers for optical communication.

We offer an extensive portfolio for the enterprise, access, datacenter and metropolitan fiber optical market as well as for smart home applications and home networks.

We cover the European, South American and North American market with a strong partner network and have offices in Belgium, Brazil, Sweden and USA.

Our offerings are characterized by high quality and performance. In combination with our strong technical support, we enable our customers to build cost optimized network solutions.

We offer an extensive range of high-quality products including transceivers (Optical and copper), Active Optical Cable (AOC), Direct Attach Cable (DAC), Mux/Demux, Coding Box.

