

Passive and Active Copper Cables

200G PAM4 SFP-DD Straight Throughs and Breakouts

Regional Availability – Global



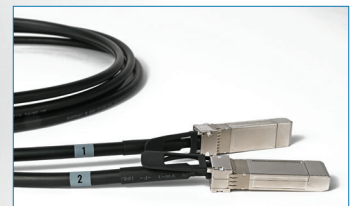
Siemon's 200G (100G per lane) PAM4 Ethernet SFP-DD passive copper cable DAC¹ assemblies are designed to exceed industry standard performance offering a cost-effective, low latency, low-power option for high-speed data center network equipment direct connections.

Passive DACs are available up to 2 meters with the lowest power consumption. AECs² offer lengths up to 3.5 meters. Both are available in 0.5 meter increments in 1:1 straight throughs and 1:2 breakouts.

1: DAC – Direct Attach Copper *Passive cable assembly with limited lengths and lowest power consumption requirement.*
 2: AEC – Active Electrical Cable *Digital re-timer based active cable assembly with longer lengths than DACs.*



SFP-DD 1:2 Breakout



Numbered Breakout Legs

- 1. Available in an LSZH Jacket
- 2. Ultra-Low Crosstalk for Enhanced Performance
- 3. Positive Retention Pull-Release Latch System
- 4. MSA Compliant Connectors

Applications

- Ethernet 200GBASE CR2
- Top-of-Rack
- Rack-to-Rack
- Switch-to-Switch
- Switch-to-Server
- Network Interface Adapter
- Accelerator Cards
- Storage
- Routers
- Servers

Standards Compliance

SFP-DD

IEEE 802.3ck
 SFP-DD MSA
 SFP-DD MIS

QSFP112

IEEE 802.3ck
 SFF-8661
 SFF-8672
 SFF-8679
 QSFP112 MSA
 CMIS

OSFP-RHS

IEEE 802.3ck
 OSFP MSA
 CMIS

SFP112

IEEE 802.3ck
 SFF-8402
 SFF-8071
 SFF-8419
 CMIS

PHYSICAL PROPERTIES – CONNECTORS

CONNECTOR TYPE		SFP-DD	QSFP112	OSFP-RHS	SFP112
LANES UTILIZED		CR2	CR2	CR2	CR1
CONNECTOR SIDE(S)		A	B	B	B
CABLE ASSEMBLY CONFIGURATION		1:1	1:1	1:1	1:2
POWER CONSUMPTION PER END (Max)	DAC	0.1 W	0.1 W	0.1 W	0.1 W
	AEC	2.1 W	2.1 W	2.1 W	1.2 W
SUPPLY VOLTAGE		3.3VDC	3.3VDC	3.3VDC	3.3VDC
INSERTION FORCE (Max)		40N	60N	55N	18N
EXTRACTION FORCE (Max)		30N	30N	45N	12.5N
RETENTION FORCE (Max)		90N	90N	125N	90N
DURABILITY (Min)		50 cycles	250 cycles	50 cycles	250 cycles
OPERATING TEMPERATURE		0 to 70°C (32 to 158°F)			
STORAGE TEMPERATURE		-40 to 85°C (-40 to 185°F)			

PHYSICAL PROPERTIES – CABLE

JACKET TYPE		LSZH/AWM	
JACKET MATERIAL		LSZH	
FLAMMABILITY RATING		UL94 V-0 (AWM)	
TWINAX PAIRS PER CABLE LEG		4	2
CABLE ASSEMBLY CONFIGURATION		1:1	1:2
CABLE CONFIGURATION		CR2/CR2	CR2/CR1
CABLE O.D. PER AWG	30AWG	6.0 mm	4.6 mm
	26AWG	7.4 mm	5.6 mm
CONSTRUCTION		Twinaxial	
SHIELD		Braid/Foil	
CONDUCTOR		Solid	
IMPEDANCE		100± 5 ohms	
GREEN FEATURES		RoHS, Lead-Free and REACH	

		DAC MAX LENGTH	AEC MAX LENGTH
		LSZH/AWM	LSZH/AWM
MAX LENGTH	30AWG	-	2 m
	26AWG	2 m	3.5 m

Ordering Information

200G PAM4 SFP-DD

(XXX) (XXX) (X) (XX.X) -8 (X) (X)

CONNECTOR TYPE	Side A	Side B	PROTOCOL	CABLE TYPE	LENGTH	JACKET TYPE	JACKET COLOR
SDD	SFP-DD (CR2)	SFP-DD (CR2)	112 = 100G PAM4 Ethernet	P = DAC <i>Direct Attach Copper</i>	00.5 = 0.5 m	L = LSZH/AWM	B = Black
SDQ	SFP-DD (CR2)	QSFP (CR2)			01.0 = 1.0 m		
SDR	SFP-DD (CR2)	OSFP-RHS (CR2)			01.5 = 1.5 m		
SD2	SFP-DD (CR2)	2SFP (CR1)			02.0 = 2.0 m		
				E = AEC <i>Active Electrical Cable</i>	02.5 = 2.5 m		
					03.0 = 3.0 m		
					03.5 = 3.5 m		

Please contact our Technical Sales Group if you require connectivity or cable configurations that are not listed above.

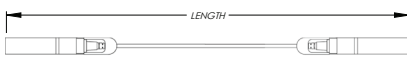
Part Number Examples:

Part Number	Description
SDD112P01.0-8LB	DAC, 200G PAM4, CR2/CR2, SFP-DD, 1m, LSZH/AWM, Black
SDR112E03.5-8LB	AEC, 200G PAM4, CR2/CR2, SFP-DD/OSFP-RHS, 3.5m, LSZH/AWM, Black
SD2112P02.0-8LB	DAC, 200G PAM4, CR2/CR1, SFP-DD/2SFP112, 2m, LSZH/AWM, Black

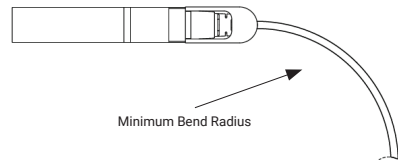
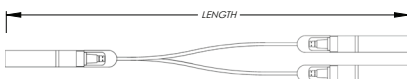
Notes:

OSFP-RHS is OSFP Riding Heat Sink (also called Flat Top).
RS-FEC is always on.

Straight Through



1:2 Breakout



Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

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