

Passive and Active Copper Cables

100G PAM4 SFP112 Straight Throughs

Regional Availability – Global



Siemon's 100G (100G per lane) PAM4 Ethernet SFP112 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.

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.*



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 100GBASE CR1
- Top-of-Rack
- Rack-to-Rack
- Switch-to-Switch
- Switch-to-Server
- Network Interface Adapter
- Accelerator Cards
- Storage
- Routers
- Servers

Standards Compliance

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

PHYSICAL PROPERTIES – CONNECTORS

CONNECTOR TYPE		SFP112
LANES UTILIZED		CR1
CONNECTOR SIDE(S)		A/B
CABLE ASSEMBLY CONFIGURATION		1:A
POWER CONSUMPTION PER END (Max)	DAC	0.1 W
	AEC	1.2 W
SUPPLY VOLTAGE		3.3VDC
INSERTION FORCE (Max)		18N
EXTRACTION FORCE (Max)		12.5N
RETENTION FORCE (Max)		90N
DURABILITY (Min)		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		2
CABLE ASSEMBLY CONFIGURATION		1:1
CABLE CONFIGURATION		CR1/CR1
CABLE O.D. PER AWG	30AWG	4.6 mm
	26AWG	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

100G PAM4 SFP112

S1S 112 (X) (XX.X) -8 LB

CONNECTOR TYPE	Side A	Side B	PROTOCOL	CABLE TYPE	LENGTH	JACKET TYPE	JACKET COLOR
S1S	SFP (CR1)	SFP (CR1)	112 = 100G PAM4 Ethernet	P = DAC <i>Direct Attach Copper</i>	00.5 = 0.5 m 01.0 = 1.0 m 01.5 = 1.5 m 02.0 = 2.0 m	L = LSZH/AWM	B = Black
				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.

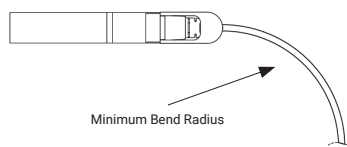
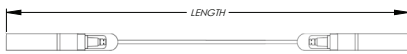
Part Number Examples:

Part Number	Description
S1S112P01.0-8LB	DAC, 100G PAM4, CR1/CR1, SFP112, 1m, LSZH/AWM, Black

Notes:

RS-FEC is always on.

Straight Through



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SPEC SHEET

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