HSS-70698-55-xM
SFP+ to SFP+ 10Gbps Active Optical Cable assembly (AOC)

Product Description

Our SFP+ Cable assemblies are high-performance, cost effective I/O solutions for 10 GB Ethernet Infiniband and Fiber Channel applications. SFP+ optical transceiver with non-detachable fiber interface allow users to achieve high port density, configurability and utilization in a cost and power efficient way.

Features

- Supports 1Gb/s to 10.5Gb/s bit rates
- 850nm VCSEL transmitter
- 1-100m length
- Bend radius 30mm
- Hot-pluggable
- Single 3.3V power supply
- Power Consumption< 1W
- Digital Diagnostic Monitoring (DDM)

Applications

- 1000Base and 10GBase Ethernet
- 1G/2G/4G/8G Fiber Channel
- SDR, DDR and QDR Infiniband
- Data center cabling infrastructure

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Ordering Information guide

Part No.	Data rate	Length
HSE-70698-55-1M	Up to 10.5G	1m
HSE-70698-55-3M	Up to 10.5G	3m
HSE-70698-55-5M	Up to 10.5G	5m

Absolute Maximum Ratings

Param	Symbol	Min.	Typ.	Max.	Unit
Maximum Supply Voltage	Vcc	-0.3		3.6	V
Storage Temperature	T_S	-40		85	℃
Operating Case Temperature	Top	0		70	℃

Operating condition

Paramete	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	Vcc	3.13	3.3	3.47	V
Supply Current	Icc		60		mA
Power Supply Noise				200	mVpp
Data Rate	BR	-	10.3125	-	Gbps

Electrical Specification

Parameter	Symbol	Min.	Typ.	Max.	Unit
Transmitter					
Input Differential Impedance	Zin	90	100	110	Ω
Data Input Swing Differential	Vin	200		700	mV
Tx-Dis Disable	Vd	2.0		Vcc	V
Tx-Dis Enable	Ven	0		0.8	V
Receiver					
Data Output Swing Differential	Vout	300		800	mV
Rx-Los Fault	Vlf	2.0		VccHOST	V
Rx-Los Normal	Vln	0		0+0.8	V
Output rise and fall time	Tr, Tf	28			ps

Optical Specification

Parameter	Symbol	Min.	Typ.	Max.	Unit
Transmitter					
Centre Wavelength	c	840	850	860	nm
Spectral Width (RMS)	σ			0.5	nm
Average Output Power	Pout	-5		-1	dBm
Extinction Ratio	ER	3.5			dB
Average Launch Power of Off Transmitter	Poff			-30	dBm
Receiver					
Centre Wavelength	ëc	840		860	nm
Receiver Sensitivity	P_{IN}			-13	dBm
Receiver Overload	Pmax	0.5			dBm
LOS De-Assert	LOS_D			-15	dBm
LOS Assert	LOS_A	-30			dBm
LOS Hysteresis		0.5			dB

For safety and reliability reasons, please read the following information carefully.

DIRT/DEBRIS UTGÅR PÅ DENNA DÅ MAN INTE KAN KOPPLA LOSS FIBERN
Övrig info med.

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Light Budget is one of the key items for designing fiber optic network. in order to create a product that will meet application requirements. To adequately characterize the budget loss, the following key parameters are generally considered:

- Transmitter: Output power, temperature and aging
- Fiber connections: Active connection and splices
- Fiber Cable: fiber attenuation and temperature effect
- Receiver: Detector sensitivity
- Others: Safety margin and repairs

When one of the above-listed variables fails to meet specifications, the performance of the network can be greatly affected or worse, the degradation can lead to network failure. Unfortunately, not all the variables can be controlled with ease during the deployment of the network or the maintenance stage; however, there exists one component—the connector—that is too-often overlooked, sometimes overused (test jumpers) but that can be controlled using the proper procedure.

CE EU declaration of conformity

The CE marking is mandatory for this category of products. It is the manufacturer's declaration that the product meets the requirements of the applicable EU directives required to allow free movement and sale of the product throughout the European Economic Area.

Equipment Specific part number extension

-51	Cisco	-59	Alcatel (Nokia)
-52	Ericsson	-60	Combo code
-53	Huawei	-61	H3C (HP)
-54	Juniper	-62	Brocade
-55	Generic (MSA)	-63	Arista Networs
-56	HP	-64	Adva
-57	Extreme	-65	Microsens
-58	3COM (HP)		