

Features

- Supports 25.78Gb/s bit rate
- Hot-pluggable SFP+ footprint
- 850nm VCSEL laser and PIN photo-detector
- Internal CDR on Transmitter and Receiver channel
- RoHS-10 compliant (lead-free)
- Link lengths at 25.78G 400m over OM4 MMF
- Link lengths at 25.78G 300m over OM3 MMF
- LC duplex connector
- Low power consumption < 1W
- 0°C to 70°C operating temperature range
- Single +3.3V±5% power supply
- Programmable TX input equalizer
- Programmable RX



Applications

- 10G/25G BASE-SR Ethernet
- CPRI

Standards

- SFF-8472
- SFF-8024
- SFF-8431
- SFF-8432

1. Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	°C	-40	85
Relative Humidity	RH	%	0	85
Supply Voltage	VCC	V	-0.3	4.0

2. Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tc	°C	0		70
Power Supply Voltage	Vcc	V	3.14	3.3	3.46

Bit Rate	BR	Gb/s		25.78	25.78
Bit Error Ratio	BER				5*10E-5
Max Supported Link Length	L	m			300 OM3
					400 OM4

3. Electrical Characteristics

Parameter	Symbol	Unit	Min	Typ	Max	Note
Supply Voltage	VCC	V	3.14	3.3	3.46	
Supply Current	Icc	mA			230	
Transmitter						
Input Differential Impedance	RIN	Ω	80	100	120	1
Single Ended Data Input Swing	VIN	mVp-p	90		500	
Transmit Disable Voltage	VDIS	V	2		VCCHOST	
Transmit Enable Voltage	VEN	V	VEE		VEE+0.8	
Transmit Fault Assert Voltage	VFA	V	2		VCCHOST	
Transmit Fault De-Assert Voltage	VFDA	V	VEE		VEE+0.8	
Receiver						
Single Ended Data Output Swing	VOD	mVp-p	200		500	
LOS Fault	VLOSFT	V	2		VCCHOST	
LOS Normal	VLOSNR	V	VEE		VEE+0.8	

1. Differential between TD+ / TD-

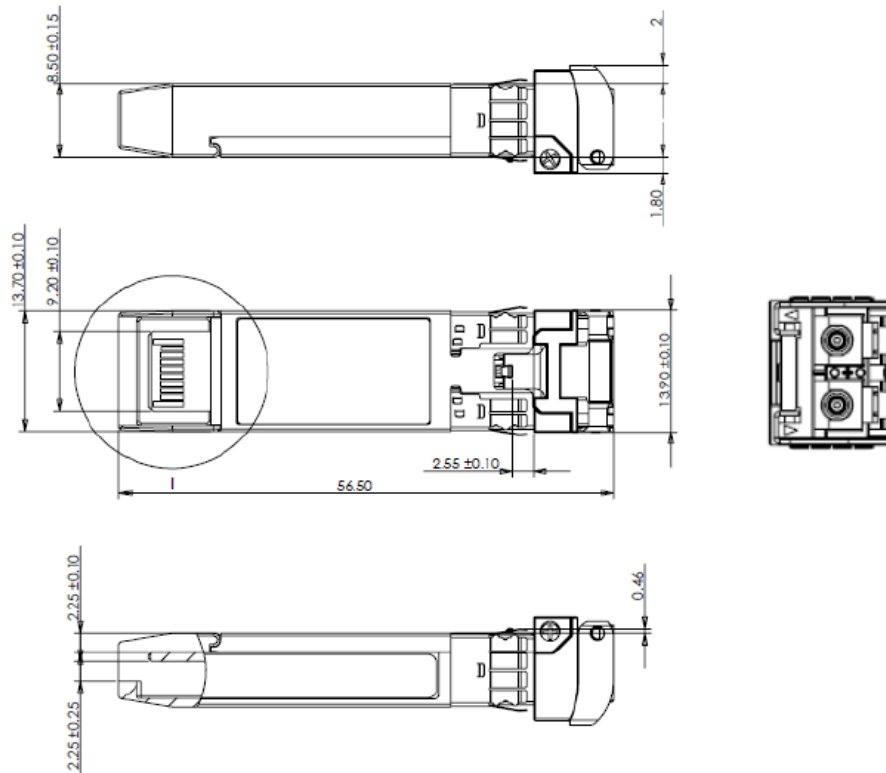
4. Optical Characteristics

Parameter	Symbol	Unit	Min	Typ	Max	Note
Transmitter						
Nominal Wavelength	λ	nm	840		860	
Spectral Width	$\Delta\lambda$	nm			0.6	
Optical Modulation Amplitude	POMA	dBm	-6.4		3	
Optical Output Power	Pav	dBm	-8.4		2.4	
Extinction Ratio	ER	dB	2			
Transmitter and Dispersion Penalty	TDP	dB			4.3	
Average launch power of OFF transmitter	POFF	dBm			-30	
Receiver						
Center Wavelength	λ	nm	840		860	

Average Receiver Power	PAVG	dBm	-10.3		2.4	1
Unstressed Receiver Sensitivity(OMA) @25.78Gb/s	RSENSE1	dBm			-10.3	2
Unstressed Receiver Sensitivity(OMA) @10.3125Gb/s	RSENSE1	dBm			-9.9	2
Stressed Receiver Sensitivity (OMA)	RSENSE	dBm			-5.2	2
Receiver Reflectance	RREFL	dB			-12	
Assert LOS	LOSA	dBm	-30			
De-Assert LOS	LOSD	dBm			-13	
LOS Hysteresis		dB	0.5			

1. Sensitivity for 25.78G PRBS 2³¹-1 and BER better than or equal to 5*10E-5.
2. The stressed sensitivity value in the table are for system level BER measurements which include the effects of CDR circuit.

5. Mechanical Diagram



Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

6. Ordering Information

OEM	Part Number	OEM	Part Number
Cisco	SFP-1025G-CSR-S-AN	Cisco	SFP-10/25G-CSR-S-A
Extreme	10503	MSA Champion ONE	25GSFP28C-SRL-H
OnePort	OP-SFP1025G-SRL		

7. Contact Information

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