

SV-SFP28-SRD

25Gbps 850nm MM (LC) with DDM, distance up to 70m on 50/125um OM3 MM fiber, 100m for 50/125um MM OM4 MM fiber



Features

- Operating data rate up to 25.78Gbps
- 850nm VCSEL Transmitter
- Distance up to 100m @50 / 125 um OM4
- Distance up to 70m @50 / 125 um OM3
- Single 3.3V Power supply
- Duplex LC Connector Interface, Hot Pluggable
- Built-in dual CDR
- Compliant with SFP28 Specification SFF-8402
- Power Dissipation < 1.2W
- Operating Case Temperature Standard: 0°C~+70°C

Applications

- 25.78Gb/s single lane 100GBE SR4
- 25GBE
- Other Optical Link

Ordering Information

Part number	Description	TX Power (dBm)	RX Sens. (dBm)	Fiber Budget (dB)	Distance (km)	DDM
SV-SFP28-SRD	Starview SFP28 module supporting 25GbE 850nm MM (LC) with Digital Diagnostic Monitoring (DDM), distance up to 70m on 50/125um OM3 MM fiber, 100m for 50/125um MM OM4 MM fiber	-8.4 to 2.4	-10.3 to 3	1.9	0.1	Yes

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	TS	-45	+100	°C
Supply Voltage	VCC	-0.5	4.0	V

Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Case Temperature	TA	0		70	°C
Power Supply Voltage	VCC	3.15		3.46	V
Power Supply Current	ICC			340	mA

Performance Specifications – Electrical

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
Transmitter						
CML Inputs(Differential)	Vin	150		980	mVpp	AC coupled inputs
Input Impedance (Differential)	Zin		100		ohms	Connected directly to TX pins
Tx_DISABLE Input Voltage – High		2		Vcc	V	
Tx_DISABLE Input Voltage – Low		0		0.8	V	
Receiver						
CML Outputs (Differential)	Vout	300		900	mVpp	AC coupled outputs
Rx_LOS Output Voltage – High		2		Vcc_Host	V	
Rx_LOS Output Voltage – Low		0		0.8	V	

Performance Specifications – Electrical

Parameter	Symbol	Min.	Typical	Max.	Unit
50 / 125 um MMF OM3		2		70	m
50 / 125 um MMF OM4		2		100	m
Data Rate				25.78	Gbps
Transmitter					
Centre Wavelength	λ_C	840	850	860	nm
Spectral Width (RMS)@25Gb/s	$\Delta\lambda$			0.6	nm
Average Output Power: 50 MMF	P _{out}	-8.4		2.4	dBm
Extinction Ratio	ER	2			dB
Receiver					
Centre Wavelength	λ_C	840	850	860	nm
Stressed Receiver Sensitivity(OMA)	P _{min}			-5.2	dBm
Receiver Sensitivity*Note4	P _{min}			-10.3	dBm
Receiver Overload	P _{max}	3			dBm
Optical Return Loss	ORL			-12	dB
LOS De-Assert	LOSD			-13	dBm
LOS Assert	LOSA	-30			dBm
LOS Hysteresis		0.5			dB

Note4: The bit error ratio(BER) would be controlled less than 5E-5.