SV-SFP-SGLXD4

100BaseFX/ OC3,1310nm, 40km

Features

- 1310nm Laser and PIN Photo-Detector
- 40km distance over SMF at least
- Build-in PHY supporting SGMII Interface
- Support More Link Status Monitor, Such as CRC,
- Package Counter and Far End Fault Indication(FEFI)
- Single 3. 3V Power Supply and TTL Logic Interface
- Compliant with SFP MSA package with duplex LC Connector
- Standard Serial ID information Compliant with SFP MSA
- Operating Case Temperature
  Standard: 0℃~+70℃
  Industrial: -40℃~+85℃

Applications

- 100BASE-FX
- Switched Backplane Applications
- Switch to Switch Interface
- Other Optical Transmission Systems

Ordering Information

Part number	Description
SV-SFP-SGLXD4	Starview Single Fiber Serial Gigabit Media Independent Interface (SGMII) SFP module. 100BaseFX/ OC3 1310nm SM (LC), distance up to 40km

Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit
Storage Temperature	Ts	-40		85	°C
Operative Relative Humidity		5		95	%
Supply Voltage	VCC	-0.5		3.6	V

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Operating Case Temperature	Ts	0		+70	°C	
		-40		+85		
Power Supply Voltage	Vcc	3.15	3.3	3.45	V	
Power Supply Current	Icc			360	%	
Date Rate			125			

Optical and Electrical Characteristics

Parameter		Symbol	Min.	Typ.	Max.	Unit	Note
SMF		L		40		km	
Data Rate				125		Mbps	
Transmitter							
Center Wavelength		λC	1260	1310	1360	nm	
Spectral Width (RMS)		Δλ			4	nm	
Average Output Power		Pout	-5		0	dBm	Note (5)
Extinction Ratio		ER	9			dB	
Rise/Fall Time(20%～80%)		tr/tf			3	ns	
Total Jitter		TJ			1.0	ns	
Output Optical Eye		Compliant with IEEE 802.3-2002					Note(6)
TX_Disable Assert Time		t_off			10	us	
TX Disable Asserted		Pout			-45	dBm	
LVPECL Inputs(Differential)		Vin	400		2000	mVpp	AC coupled inputs*(note4)
Input Impedance (Differential)		Zin	85	100	115	ohm	Rin > 100 kohm @ DC
TX_Dis	Disable		2		Vcc+0.3	V	
	Enable		0		0.8		
TX_FAULT	Fault		2		Vcc+0.3	V	
	Normal		0		0.8		
Receiver							
Center Wavelength		λ	1200		1600	nm	
Receiver Sensitivity		Pmin			-34	dBm	(note7)
Return Loss			12			dB	
LOS De-Assert		LOSD			-35	dBm	
LOS Assert		LOSA	-45			dBm	

LOS Hysteresis			1		3	dB	
Overload		Pmax	0			dBm	(note7)
LVPECL Outputs (Differential)		Vout	400		2000	mVpp	AC coupled inputs*(note4)
Output Impedance (Differential)		Zout	85	100	115	ohm	
RX_LOS	LOS		2		Vcc+0.3	V	
	Normal		0		0.8	V	
MOD_DEF (0:2)		VoH	2.5			V	With Serial ID
		VoL	0		0.5	V	

Note(4): PECL logic, internally AC coupled.
Note(5): Output is coupled into a 9/125μm single-mode fiber.
Note(6): Measured with 4B/5B code for 125Mbps.
Note(7): Measured with 4B/5B code for 125Mbps, worst-case extinction ratio, and BER 1E-12.