

DSF-10G-LR40

10Gbps 40Km SFP+ Transceiver



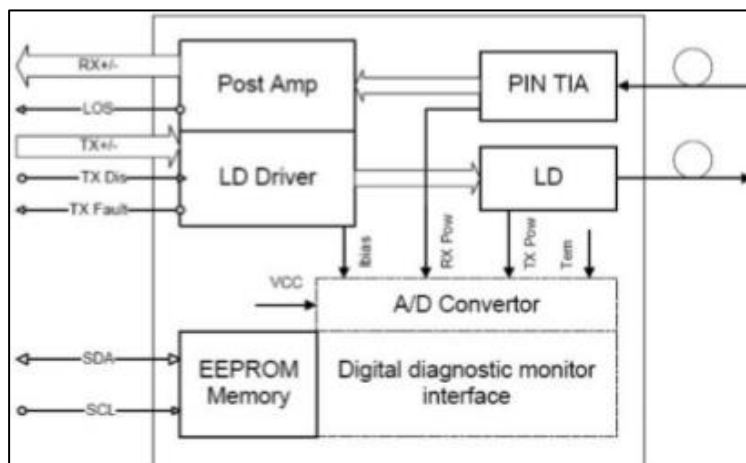
Product Features

- Support 10Gbps
- Duplex LC connector
- Hot pluggable SFP+ footprint
- Uncooled 1310nm DFB Transmitter PIN photo-detector
- Applicable for 40Km SMF connection
- Low power consumption, <1W
- Digital Diagnostic Monitor Interface
- Optical interface compliant IEEE 802.3ae
- Electrical interface compliant to SFF-8431
- Operating case temperature : 0 to 70°C

Applications

- 10GBase-LR/LW at 10.3125G
- 10G Fiber Channel
- Switch to Switch interface
- Router / Server interface
- Other optical links

Functional Diagram



General Operating Characteristics

Parameter	Symbol	Min.	Typ	Max.	Unit
Data Rate		9.953	10.3125	11.3	Gb/s
Supply Voltage	V _{CC}	3.13	3.3	3.47	V
Supply Current	I _{CCS}		200	285	mA
Operating Case Temp.	T _C	0		70	°C

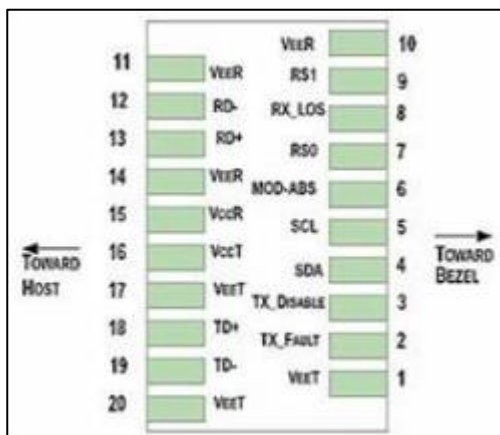
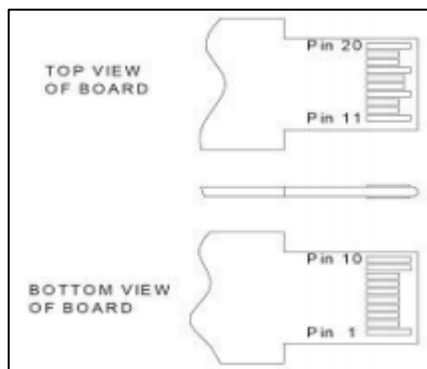
Optical Characteristics(Transmitter)

Parameter	Symbol	Min.	Typ	Max.	Unit
Operating Wavelength	λ	1260		1355	nm
Ave. output Power (Enabled)	P _{AVE}	1		5	dBm
Extinction Ratio	ER	5	6		dB
Output Optical Eye	Compliant with IEEE 802.3ae				

Optical Characteristics(Receiver)

Parameter	Symbol	Min.	Typ	Max.	Unit
Operating Wavelength	λ	1260		1600	nm
Receiver Sensitivity	P _{SENI}			-15	dBm
Overload	P _{AVE}			0.5	dBm

Pin Definition And Functions



Pin	Symbol	Name / Description
1	VeeT	Tx ground
2	Tx Fault	Tx fault indication
3	Tx Disable	Transmitter Disable. Laser output disabled on high or open
4	SDA	2-wire Serial Interface Data Line
5	SCL	2 wire serial interface clock input
6	MOD-ABS	Module Absent. Grounded within the module
7	RS0	Rate Select 0
8	RX_LOS	Loss of signal indication. Logic 0 indicates normal operation
9	RS1	Rate Select 1
10/11	VeeR	Rx ground
12	RD-	Receiver Inverted DATA out. AC Coupled
13	RD+	Received data out. AC Coupled
14	VeeR	Rx ground
15	VccR	Rx power supply
16	VccT	Tx power supply
17	VeeT	Tx ground
18	TD+	Transmit data in. AC Coupled
19	TD-	Transmitter Inverted DATA in. AC Coupled
20	VeeT	Tx ground

Digital Diagnostic Specifications

Parameter	Symbol	Unit	Min.	Max.	Accuracy
Transceiver temperature	DTemp-E	°C	-45	90	±5°C
Transceiver supply voltage	Dvoltage	V	2.8	4.0	±3%
Transmitter bias current	DBias	mA	0	127	±10%
Transmitter output power	DTx-Power	dBm	-1	7	±2dB
Receiver average input power	DRx-Power	dBm	-17	1	±2dB

Package Dimensions

