

Product Specification

10GBase-BX

SINGLEMODE OPTICAL SFP TRANSCEIVER

10Gbps BiDi LC 2~60km



Overview

Atrian optical transceivers are Small Form Factor Pluggable (SFP) compatible with the Multi Sourcing Agreement (MSA) and available as a vendor compatible SFP upon request. This family of transceivers are designed for 1.25Gbps 1000Base-X Ethernet transmission and operates with an integrated duplex data link over 9/125µm Single Mode Fiber (SMF).

Atrian Small Form Factor Pluggable (SFP) transceivers provides a reliable and high-performing Gigabit Ethernet network connectivity. They can be easily installed without interrupting the host equipment in operation thanks to the hot pluggable feature.

Atrian optical transceivers are designed to be used on Atrian's media converters and switches as well as third party equipments that supports SFP transceivers.

Key Features

- **Fiber Mode:** Single Mode @ 9/125µm
- **Speed:** 10 Gbps
- **Distance:** 2 Km, 10 Km, 20 Km, 4 Km, 60 Km
- **Wavelength:** 1270 nm, 1330nm DFB laser
- **Temperature:** 0~70°C (Commercial)
- **Connector:** Simplex LC/UPC Connector
- **DMI:** SFF-8472 DOM/DMI Diagnostic Monitoring

Regulatory Compliance

aTrian Communication Technologies transceivers are products with Class 1 Lasers that complies with FDA regulations on eye safety and ETSI EN 60825 and electrical safety measures in accordance with ETSI EN 60950.

Technical Specifications

General Parameters	Symbol	Min.	Typical	Max.	Unit
Power Voltage	VCC	-0.5		4	V
Storage Temperature	Ts	-40		+85	°C
Operating Temperature	Tc	-5		+70	°C
Power Supply Voltage	Vcc	3.15	3.1	3.45	V
Power Supply Current	Icc			300	mA
Data Rate			10		Gbps
Max. Link Distance for 9/125µm SMF	Lmax		See Ordering Information		

Tx Optical Parameters	Symbol	Min.	Typical	Max.	Unit
Central Wavelength	λ_c	1260	1270	1280	nm
	λ_c	1320	1330	1340	nm
Spectral Width (RMS)	σ			3	nm
Output Power	Pout 2,10,20 Km	-4		5	dBm
	Pout 40,60 Km	-1		5	dBm
Extinction Ratio	ER	3.5			dB
Launch Power of Off Transmitter	POFF			-30	dBm

Rx Optical Parameters	Symbol	Min.	Typical	Max.	Unit
Central Wavelength	λ_c	1320	1330	1340	nm
	λ_c	1260	1270	1280	nm
Receive Sensitivity	PIN 2Km			-8	dBm
	PIN 10,20 Km			-14	dBm
	PIN 40 Km			-15	dBm
	PIN 60 Km			-20	dBm
Rx Over-Current	PMAX 2~ 40 Km	5			dBm
	PMAX 60 Km	7			dBm
LOS De-Assert	LOSD			-27	dBm
LOS Assert	LOSA	-30			dBm
LOS Hysteresis	tr/tf	0.5		4.5	dB

Ordering Information

Part Number	Wavelength TX/RX	Distance	Laser Type	Temperature
ASFP10GT27R33-2	1270/1330 nm	2 Km	DFB/PIN	0~70°C Commercial
ASFP10GT33R27-2	1330/1270 nm	2 Km	DFB/PIN	0~70°C Commercial
ASFP10GT27R33-10	1270/1330 nm	10 Km	DFB/PIN	0~70°C Commercial
ASFP10GT33R27-10	1330/1270 nm	10 Km	DFB/PIN	0~70°C Commercial
ASFP10GT27R33-20	1270/1330 nm	20 Km	DFB/PIN	0~70°C Commercial
ASFP10GT33R27-20	1330/1270 nm	20 Km	DFB/PIN	0~70°C Commercial
ASFP10GT27R33-40	1270/1330 nm	40 Km	DFB/PIN	0~70°C Commercial
ASFP10GT33R27-40	1330/1270 nm	40 Km	DFB/PIN	0~70°C Commercial
ASFP10GT27R33-60	1270/1330 nm	60 Km	DFB/APD	0~70°C Commercial
ASFP10GT33R27-60	1330/1270 nm	60 Km	DFB/APD	0~70°C Commercial

*Contact us for industrial grade SFP+

Warranty

FIVE years of limited warranty for products sold directly by Atrian Technologies, unless special agreements have been set. Warranty period start from the ship date and will be only valid for the original customer who bought the product. If you have purchased the product from a reseller you must contact him directly. RMA Form and full warranty details are available on our website.