Edgecore ®
NETWORKS

10G 10km SFP+ Transceiver
ET5402-LR

Product Features

- Optical interface compliant to IEEE 802.3ae 10GBASE-LR/LW
- Compliant with SFP+ MSA
- Data Rate 10.3125 Gbps
- 1310nm DFB TOSA and PIN ROSA
- Applicable for 10 km SMF connection
- LC duplex receptacle
- Low power dissipation (<1W)
- Hot Pluggable
- All-metal housing for superior EMI performance
- Built in digital diagnostic functions
- RoHS compliant
- Commercial operating temperature: 0°C to +70°C

Applications

- 10GBASE-LR 10Gigabit Ethernet
- High-speed storage area networks
- Computer cluster cross-connect
- Custom high-speed data pipes

Descriptions

The ET5402-LR transceivers are high-performance, cost-effective modules supporting a data rate of 10Gbps and a 10 km transmission distance with SMF. The transceivers are compatible with SFP+ Multi-Source Agreement (MSA) For further information, please refer to SFP MSA.

Ordering Information

Part Number	Transmitter	Output Power	Sensitivity	Reach	Temp	DDM	RoHS
ET5402-LR	1310 nm	-8.2 ~ 0.5 dBm	-14.4 ~ 0.5 dBm	10 km	0~ 70 °C	Available	Compliant

OPEN PLATINUM

OPEN Compute Project
SOLUTION PROVIDER

Freedom of choice

Greater control

Rapid innovation

Reduced CAPEX and OPEX

Pin Description

Left Pin	Name		Name	Right Pin
		VeeR		10
11	VeeR	RS1		9
12	RD-	Rx LOS		8
13	RD+	RS0		7
14	VeeR	MOD ABS		6
15	VccR	SCL		5
16	VccT	SDA		4
17	VeeT	TX DISABLE		3
18	TD+	TX FAULT		2
19	TD-	VeeT		1
20	VeeT			

← Towards Host with direction of module insertion

Towards Bezel →
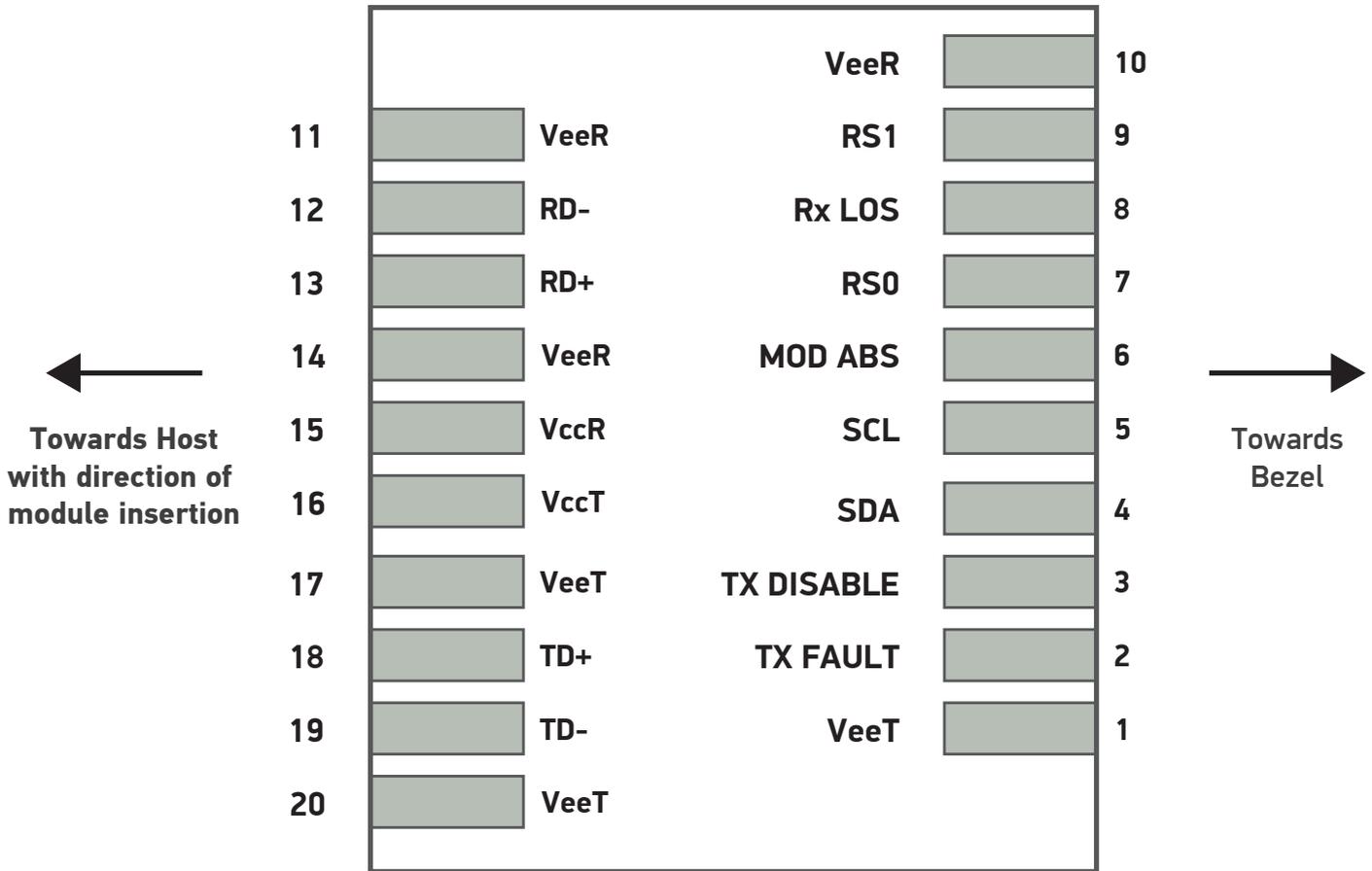
Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of the data sheet. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Minimum	Maximum	Unit	
Storage Temperature	Ts	-40	85	°C	
Relative Humidity	RH	5	95	%	
Supply Voltage	Vcc	0	3.6	V	

Recommended Operating Conditions

Parameter	Symbol	Minimum	Typical	Maximum	Unit	
Operating Case Temperature	Tc	0	25	70	°C	
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Data Rate PER Channel	-	-	10.3125	-	Gb/s	

Transceiver Electrical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Transmitter Differential Input Voltage	VIN	mVpp	180		700	
Receiver Differential Output Voltage	VO	mVpp	300		850	

Transmitter Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Launch Optical Power	Po	-8.2		0.5	dBm	-
Center Wavelength Range	λc	1260		1355	nm	-
Extinction Ratio	ER	3.5	-	-	dB	-

Receiver Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Center Wavelength	λc	1260		1355	nm	-
Receiver Sensitivity in Average Power	Sen	-14.4		0.5	dBm	-

Mechanical Specifications
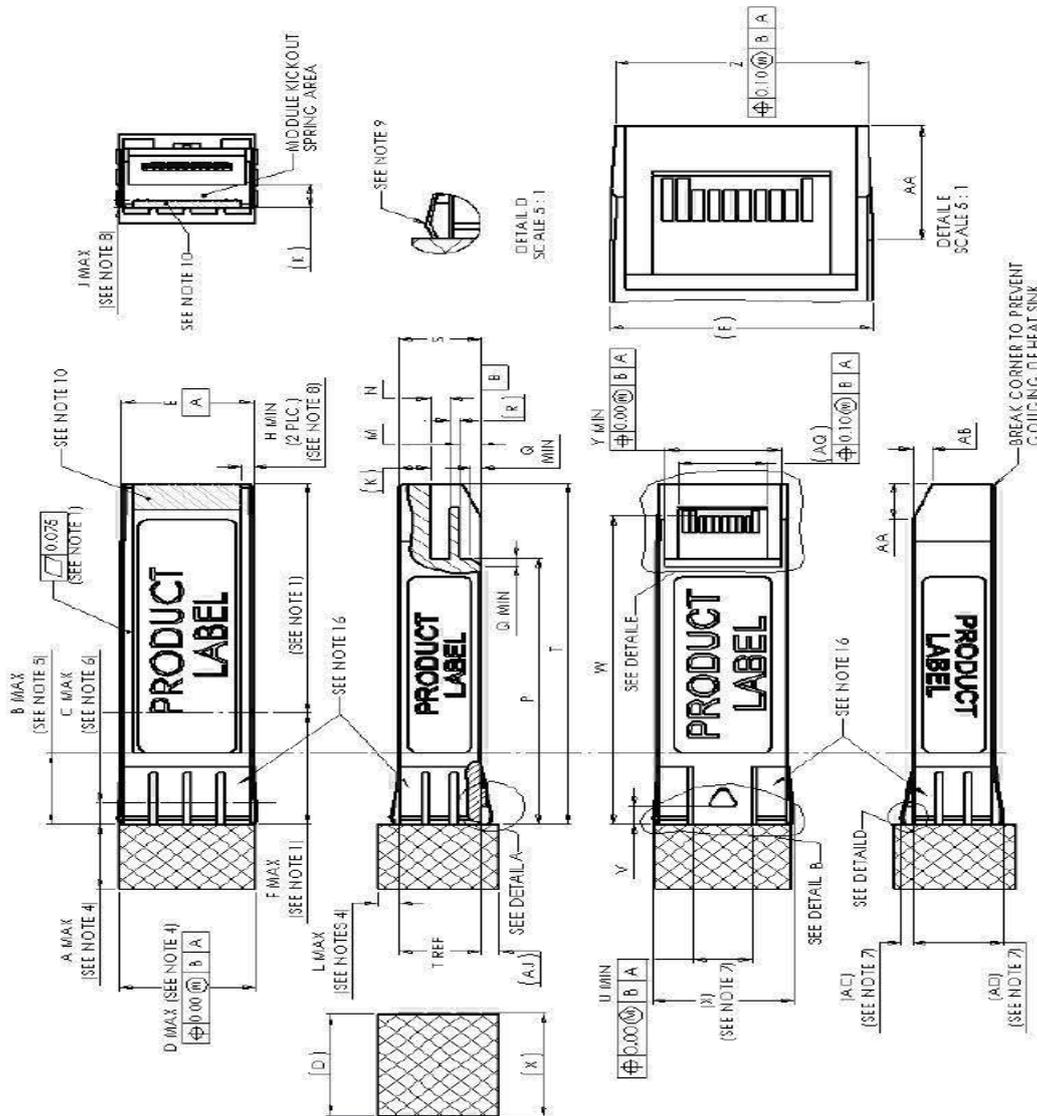
Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.