

# 40G 10km QSFP+ Transceiver

## ET6401-LR4



### Product Features

- Compliant with IEEE Std 802.3ba, 40G Ethernet LR4
- Compliant with QSFP+ MSA
- Management interface specifications per SFF-8436
- 4 channels CWDM DFB
- 4 channels PIN photo detector array
- Up to 10.3 Gb/s per channel data links
- Single +3.3 V power supply
- Class 1 laser safety certified
- Commercial Operating Temperature: 0°C to +70°C
- Up to 10 km on SMF
- RoHS Compliant

### Applications

- High-speed storage area networks
- Fiber channel
- Data center

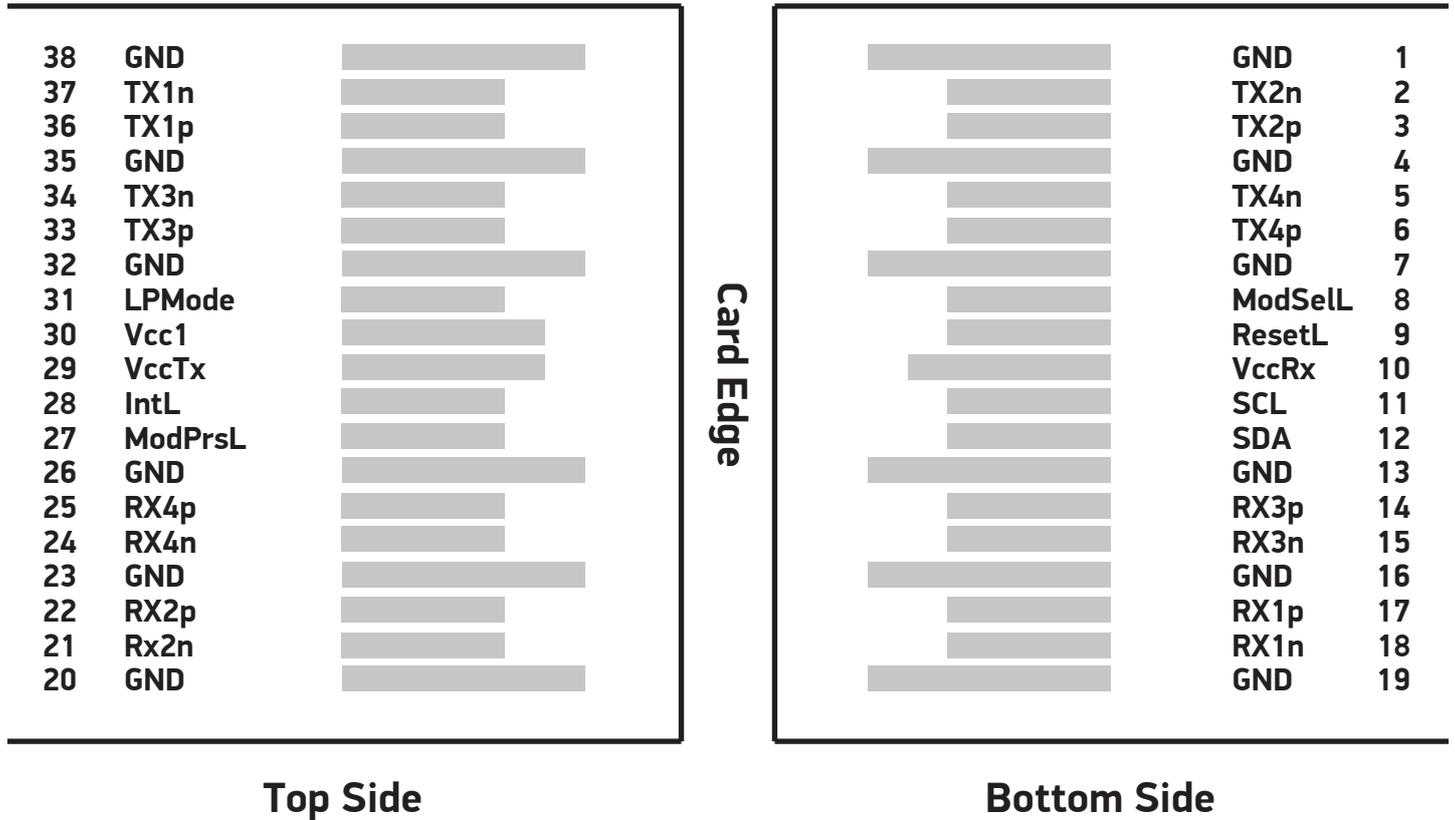
### Description

The ET6401-LR4 QSFP+ transceiver is designed for 40 Gb/s links over single mode fiber. The transceiver integrates a four-channel CWDM DFB laser and multiplexes them into a single channel for 40 Gb/s optical transmission; in receiver side, the module de-multiplexes the 40 Gb/s optical signal into four CWDM channels. Each channel operates at 10.3125 Gb/s, and the module can operate at 40 Gb/s up to 10 km using 9/125 um SMF. The transceiver is compliant with the QSFP+ MSA and IEEE 802.3ba 40GBASE-LR4.

### Ordering Information

Part Number	Transmitter	Output Power	Sensitivity	Reach	Temp	DDM	RoHS
ET6401-LR4	1310 nm	-7.0 ~ +2.3 dBm	<-11.5 dBm	10 km	0~ 70 °C	Available	Compliant

## Pin Description



## 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 datasheet. 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	-0.5	4.0	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
Module Supply Current	Icc	-	-	1100	mA	
Power Dissipation	Pd	-	-	3.5	W	

## Transmitter Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Launch Optical Power per Lane	Po	-7.0	-	+2.3	dBm	-
Extinction Ratio	ER	3.5	-	-	dB	
Center Wavelength Range	λ0	1264.5	1271	1277.5	nm	-
	λ1	1284.5	1291	1297.5	nm	
	λ2	1304.5	1311	1317.5	nm	
	λ3	1324.5	1331	1337.5	nm	

## Receiver Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Center Wavelength	λc	1260		1340	nm	-
Receiver OMA Sensitivity	RxSENS	-	-	-11.5	dBm	-
Receiver Overload (Pavg)	Pol	3.3	-	-	dBm	-

## Warranty

Please check [www.edge-core.com](http://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](http://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](http://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.

© Copyright 2021 Edgecore Networks Corporation. The information contained herein is subject to change without notice. This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered by Edgecore Networks Corporation. Edgecore Networks Corporation shall not be liable for technical or editorial errors or omissions contained herein.