

# 100G 10km QSFP28 Transceiver

ET7402-LR4



#### **Product Features**

- Compliant with IEEE Std 802.3ba, 100G Ethernet LR4
- Compliant with QSFP28 MSA
- 4 cooled 25 Gb/s channels
- 4 channels PIN photo detector
- Single +3.3 V power supply
- Class 1 laser safety certified
- Power consumption less than 3.5 W
- Commercial Operating Temperature: 0°C to +70°C
- Up to 10 km on SMF
- Duplex LC connector
- RoHS Compliant

## **Applications**

- 100GBASE-LR4 Ethernet links
- Data center

## **Descriptions**

The ET7402-LR4 QSFP28 transceiver module is designed for 100 Gigabit Ethernet over single mode fiber. The transceiver is compatible with the QSFP28 MSA and IEEE 802.3ba 100GBASE-LR4. Digital diagnostics functions are available via the I2C interface, as specified by the QSFP28 MSA.

## **Ordering Information**

Part Number	Transmitter	Output Power	Receiver	Sensitivity	Reach	Temp	DDM	RoHS
ET7402-LR4	1310	-4.3~ +4.5 dBm	PIN	< -8.6 dBm	10 km	0~ 70 °C	Available	Compliant







of choice



control

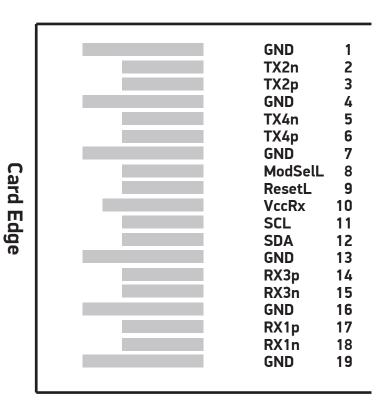
Rapid





## **Pin Description**

38	GND	
37	TX1n	
36	TX1p	
35	GND	
34	TX3n	
33	TX3p	
32	GND	
31	LPMode	
30	Vcc1	
29	VccTx	
28	IntL	
27	ModPrsL	
26	GND	
25	RX4p	
24	RX4n	
23	GND	
22	RX2p	
21	Rx2n	
20	GND	



**Top Side** 

### **Bottom Side**

### **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	Тс	0	25	70	°C	
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Data Rate Per Channel	-	-	25.78125	-	Gb/s	

## **Transceiver Electrical Characteristics**

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Module Supply Current	lcc	-	-	1100	mA	
Power Dissipation	PD	-	-	3.5	W	

# **Transmitter Optical Characteristics**

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Launch Optical Power per Lane	Po	-4.3	-	+4.5	dBm	-
	L1	1294.53	1295.56	1296.59	nm	-
Courtes Ways law of Page 19	L2	1299.02	1300.05	1301.09	nm	
Center Wavelength Range	L3	1303.54	1304.58	1305.63	nm	
	L4	1308.09	1309.14	1310.19	nm	
Extinction Ratio	EX	4.0	-	-	dB	-

# **Receiver Optical Characteristics**

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
	L1	1294.53	1295.56	1296.59	nm	-
Control Wood Longton	L2	1299.02	1300.05	1301.09	nm	-
Center Wavelength	L3	1303.54	1304.58	1305.63	nm	-
	L4	1308.09	1309.14	1310.19	nm	-
Sensitivity per Channel (OMA)	S	-	-	-8.6	dBm	-
Overload (each channel)	POL	4.5	-	-	dBm	-

## Datasheet T

#### Transceiver



#### 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.

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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.

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