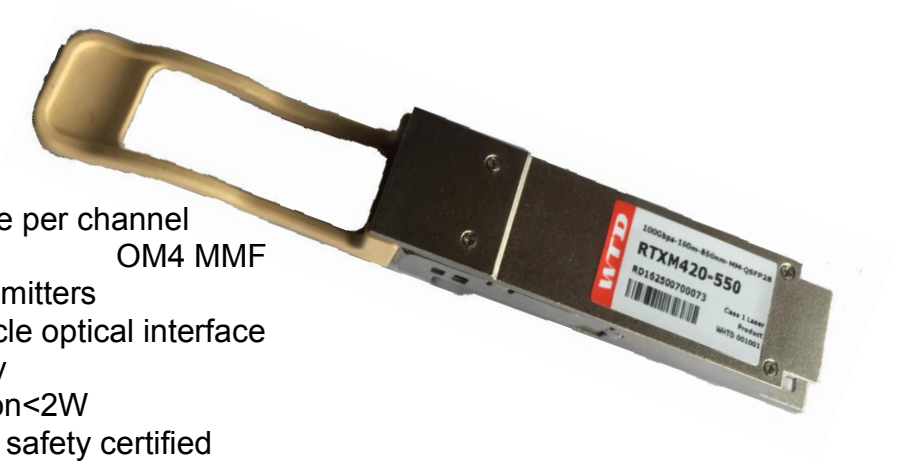
100G QSFP28 For SR4/ESR4 Transceiver

This product is designed for fiber-communication based on optical-electrical technology. The product is an integrated module containing a micro-optic component and semiconductor material. The module could implement optical-electrical conversion and electrical-optical conversion function. It could be used at key locations in optical networks like 100GBASE Ethernet.



DESCRIPTION

Features

- Up to 27.952Gb/s data rate per channel
- Distance up to 300m on OM4 MMF
- 850nm VCSEL array transmitters
- Single 1x12 MPO receptacle optical interface
- Single +3.3V power supply
- Maximum power dissipation<2W
- International Class 1 laser safety certified
- Operating temperature range: 0℃ ~ +70℃
- Compliant with RoHS6

Applications

- 100GBASE-SR4/ESR4 Ethernet

Standards

- Compliant with SFF-8636 (V2.6)
- Compliant with IEEE Std 802.3bm 2015
- Compliant with SFF-8665 (V1.9),SFF-8661(V2.3)and SFF-8679(V1.7)

SPECIFICATION

Recommended Operating Conditions

Parameter	Units	MIN.	TYP.	MAX.	Notes
Recommended Operating Conditions					
Operating Case Temperature	°C	0		+70	
Power Supply Voltage	V	3.135	3.3	3.465	
Data Rate, each Lane	Gbps		25.78125		
Control Input Voltage High	V	2		Vcc	
Control Input Voltage Low	V	0		0.8	
Link Distance with G.652	M			300	

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Electrical Specification

Parameter	Units	MIN.	TYP.	MAX.	Notes
Power Consumption	W	1.2		2.0	
Supply Current	A			0.6	
Transceiver Power-on Initialization Time	ms			2000	

Electrical Specification – Transmitter (EACH LANE)

Parameter	Units	MIN.	TYP.	MAX.	Notes
Single-ended Input Voltage Tolerance	V	-0.3		4	Referred to signal common
AC Common Mode Input Voltage Tolerance	mV	15			RMS
Differential Input Voltage Swing	mVpp	190		700	
Differential Input Impedance	Ω	90	100	110	

Electrical Specification – Receiver (each Lane)

Parameter	Units	MIN.	TYP.	MAX.	Notes
Single-ended Output Voltage	V			0.2	
AC Common Mode Output Voltage	mV			7.5	RMS
Differential Output Voltage Swing	mVpp	350		850	
Differential Output Impedance	Ω	90	100	110	

Note:

1. Power - on Initialization Time is the time from when the power supply voltages reach and remain above the minimum recommended operating supply voltages to the time when the module is fully functional.
2. The single ended input voltage tolerance is the allowable range of the instantaneous input signals.

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Ordering Information

Part No	Product Description	Data Rate	Tx	Tx Power (dBm)	Rx	OMA Sensitivity (dBm)	Temp (℃)	Reach (m)	Power (W)
RTXM420-550	QSFP28 SR4	4*25G	850nm VCSEL	-4~ 2.4	PIN	-7.4	0~70	100	<2
RTXM420-551	QSFP28 eSR4	4*25G	850nm VCSEL	-4 ~ 2.4	PIN	-7.4	0~70	300	<2
RTXM420-552	QSFP28 SR4	4*28G	850nm VCSEL	-4 ~ 2.4	PIN	-7.4	0~70	100	<2
RTXM420-553	QSFP28 eSR4	4*28G	850nm VCSEL	-4 ~ 2.4	PIN	-7.4	0~70	300	<2