

# QSFP28 CLR4 Transceiver



Accelink's 100Gbps QSFP28 CLR4 module is designed to meet the requirements of optical fiber interface for 2km reach over duplex SMF in data centers. It is a cost-effective, low power CWDM optical transceiver with high port densities and compact size. Each transceiver incorporates four direct modulated lasers with driver ICs, four PIN diodes with TIAs, and two Mux/De-Mux blocks in a highly integrated CWDM configuration.

## Specifications

### Features

- Single channel rate up to 25.8Gbps
- Transmission distance up to 2km
- Compliant with QSFP+ MSA
- 4 CWDM uncooled DML lasers
- Duplex LC connectors
- Single +3.3V power supply
- Low power consumption less than 3.5W
- Operating temperature range: 0°C ~ +70°C
- Compliant with RoHS6

### Standards

- Compliant with SFF-8636
- Compliant with IEEE Std 802.3bm
- Compliant with SFF-8665, SFF-8661 and SFF-8679

Parameter	Symbol	Unit	Value		
			Min	Typ	Max
Tx					
Center wavelength		nm	1264.5		1277.5
			1284.5		1297.5
			1304.5		1317.5
			1324.5		1337.5
Signaling rate, per lane		Gbit/s	25.78125±100ppm		
Operating link reach		km	0.002		2
Optical modulation amplitude, per lane <sup>1</sup>	OMA	dBm	-4		2.5
Optical extinction ratio	ER	dB	3.5		
Transmitter reflectance		dB			-12
Relative intensity noise	RIN	dB/Hz			-130
Rx (per Lane)					
Center wavelength		nm	Same as Tx		
Signaling rate, per lane		Gbit/s	Same as Tx		
Damage threshold	DT	dBm	3.5		
Average launch power, per lane		dBm	-10		2.3
Receive Sensitivity(OMA) per lane <sup>2</sup>		dBm			-8.5
LOS De-Assert (OMA)	LOSD	dBm	-30		-17
LOS Assert (OMA)	LOSA	dBm			-16
Receiver reflectance		dB			-26

Note: 1 At TP2. 2 PRBS2<sup>31</sup>-1 and BER<1E-12

### Ordering Information

Part No	Specification								
	Package	Maximum Data rate	Laser	Power	Detector	OMA Sensitivity	Temp	Reach	Other
RTXM420-430	QSFP28	4*25.78Gbps	DFB	-4~ 2.5dBm	PIN	-8.5dBm	0~70°C	2km	DDM, RoHS