

XGPON1 OLT Transceiver XFP Module



RTXM266-702 product is designed for OLT module based on XGPON technology. The product is an integrated module containing a micro-optic component and semiconductor material. The module could implement DDM function. It could be used at key locations in optical networks.

Features

- XFP package with SC receptacle optical interface compliant
- Hot-Pluggable
- 9.953Gbps downstream and 2.488Gbps upstream
- +3.3V single power supply
- ROHS Compliant

Applications

- Optical transceiver for N2a XGPON OLT

Standards

- ITU-T G.987
- MSA SFF-8077iv4.5

Specifications

Parameter	Symbol	Unit	Value		
			Min	typical	Max
Electrical Characteristics					
Supply Current	I _{cc}	mA			1200
Differential Input Swing (note1)	-	mV	120		1000
Differential Output Swing (note2)	-	mV	400		1600
Optical transmitter Characteristics					
Launch Optical Power	P _o	dBm	+4		+8
Center Wavelength Range	λ _c	nm	1575	1577	1580
Extinction Ratio -10G	EX	dB	8.2		
Spectral Width(@-20dB)	Δλ	nm			1
Side Mode Suppressing Ratio	SMSR	dB	30		
Eye Diagram	Complies with G.987.2				
Dispersion Penalty	-	dB			1.0
Pout @TX-Disable Asserted	P _{off}	dBm			-39
Optical receiver Characteristics					
Receiver Optical Wavelength	λ _{IN}	nm	1260	1270	1280
Receiver Sensitivity (note3)	S	dBm			-29.5
Overload Input Optical Power	P _{in}	dBm	-7		
SD Assert		dB			-30
SD De-assert		dB	-45		
Receiver Settling Time		ns			64
1. AC coupled internally; 2. DC coupled internally; 3. Measured with a PRBS 2 ²³ -1 NRZ test pattern, @2.488Gb/s, EX=9dB, BER<10 ⁻⁴ .					

Ordering Information

Part No	Specification								
	Package	Data rate	Laser	Power	Detector	Sensitivity	Temp	Reach	Other
RTXM266-702	XFP SC	9.953/2.5	EML	+4~+8dBm	APD	< -29.5dBm	0~70°C	20km+	RoHS . DDM

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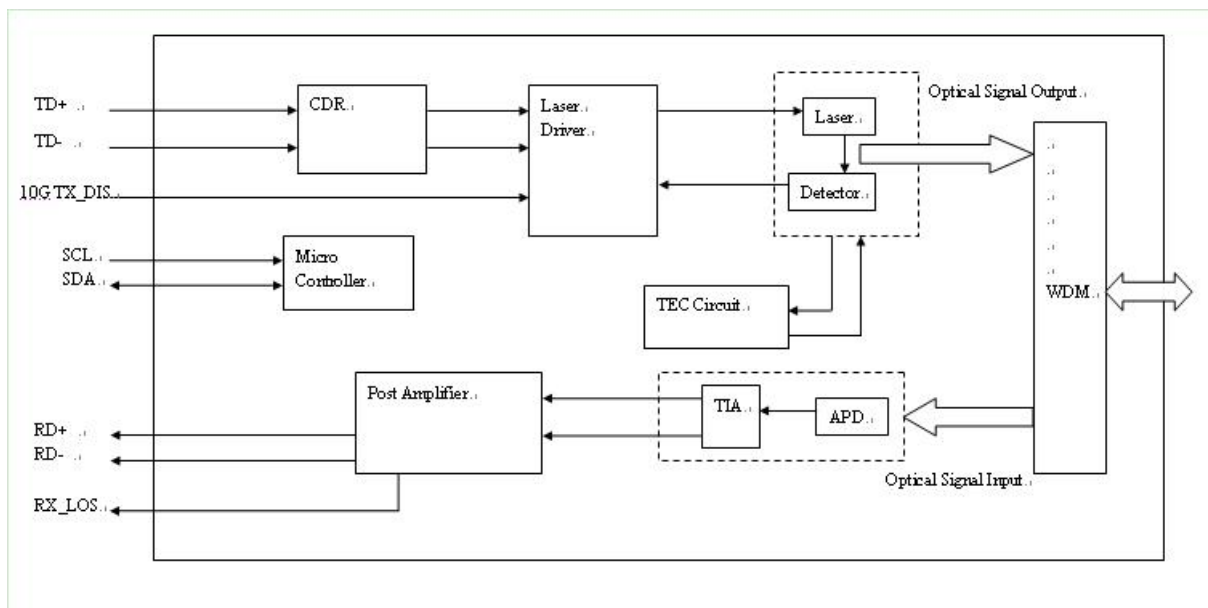
Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	oC	-40	+85
Relative Humidity	RH	%	5	95
Power Supply Voltage	Vcc	V	0	+3.6

Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tc	oC	0	-	70
Power Supply Voltage	Vcc	V	3.13	3.3	3.47
Power Consumption	P	W			4

Principle diagram



Electric Ports Definition

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Regulatory Compliance

Feature	Test Method	Performance
RoHS	BS EN 1122: 2001 US EPA METHOD 3050B US EPA METHOD 3052 US EPA METHOD 3060A	Pb <1000ppm Cr6+ <1000ppm Hg <1000ppm PBB <1000ppm PBDE <1000ppm Cd <100ppm
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7	Class 1 (>1.5kV) – Human Body Model
Electrostatic Discharge (ESD) Immunity	IEC61000-4-2	Class 2(>4.0kV)
Electromagnetic Interference (EMI)	CISPR22 ITE Class B FCC Class B CENELEC EN55022 VCCI Class 1	Compliant with standard
Immunity	IEC61000-4-3 Class 2	Typically show no measurable effect from a 3 V/m field swept from 80 to 1000MHz applied to the transceiver without a chassis enclosure.