10Gbps 70KM CWDM XFP Optical Transceiver RTXM226-69X

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Ordering Information

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Supply Voltage 1	V_{CC3}	V	-0.5	4.0
Supply Voltage 2	Vcc5	V	-0.5	6.0
Storage Temperature	T_s	°C	-40	85
Operating Case Temperature	T_c	°C	-40	85
Relative Humidity (Non condensation)	-	%	5	90

Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature	T_C	°C	-40	-	85
Supply Voltage 1	VCC3	V	3.13	3.3	3.47
Supply Current 1	ICC3	mA	-	-	750
Supply Voltage 2	VCC5	V	4.75	5.0	5.25
Supply Current 2	ICC5	mA	-	-	500
Power Dissipation	-	W	-	-	3.5

Electrical Characteristics

(Tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Unit	Min	Typ	Max	Note
Transmitter						
Input Differential Impedance	Rin	Ω	-	100	-	
Differential Data Input Swing	Vin,pp	mV	120	-	1000	
Transmit Disable Voltage	VD	V	2.0	-	V_{cc3}	
Transmit Enable Voltage	VEN	V	0	-	+0.8	
Transmit Disable Assert Time	-	μs	-	-	10	
Receiver						
Differential Data Output Swing	Vout,pp	mV	400	-	800	
Data Output Rise Time	Tr	ps	24	-	-	
Data Output Fall Time	Tf	ps	24	-	-	
LOS Fault	-	V	V_{dd3}-0.5	-	V_{dd3}	1

LOS Normal	-	V	0	-	+0.8	
Note1: V_{dd3} is host +3.3V power supply.						

Low Speed Electrical Interface

Parameter

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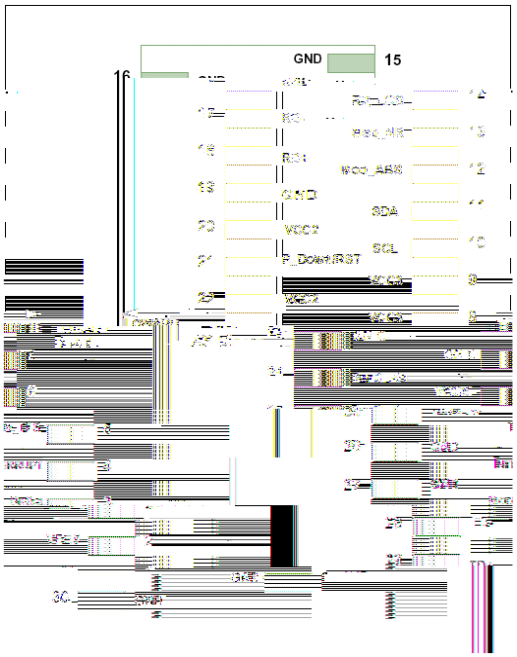
Pin Description



Pin	Logic	Symbol	Name/Description	Note
1		GND	Module Ground	1
2		VEE5	Optional -5.2V Power Supply (Not Required)	
3	LVTTL-I	Mod_DeSel	Module De-select; When held low allows.22 oodule to respond to 2-wire serial interface	
4	LVTTL-O	Interrupt	Interrupt; Indicates presence of an important condition which can be read over the 2-wire serial interface	2
5	LVTTL-I	TX_DIS		

21	LVTTL-I	P_Down/RST	Power down; When high, requires the module to limit power consumption to 1.5W or below. 2-Wire serial interface must be functional in the low power mode. Reset; The falling edge initiates a complete reset of the module including the 2-wire serial interface, equivalent to a power cycle.	

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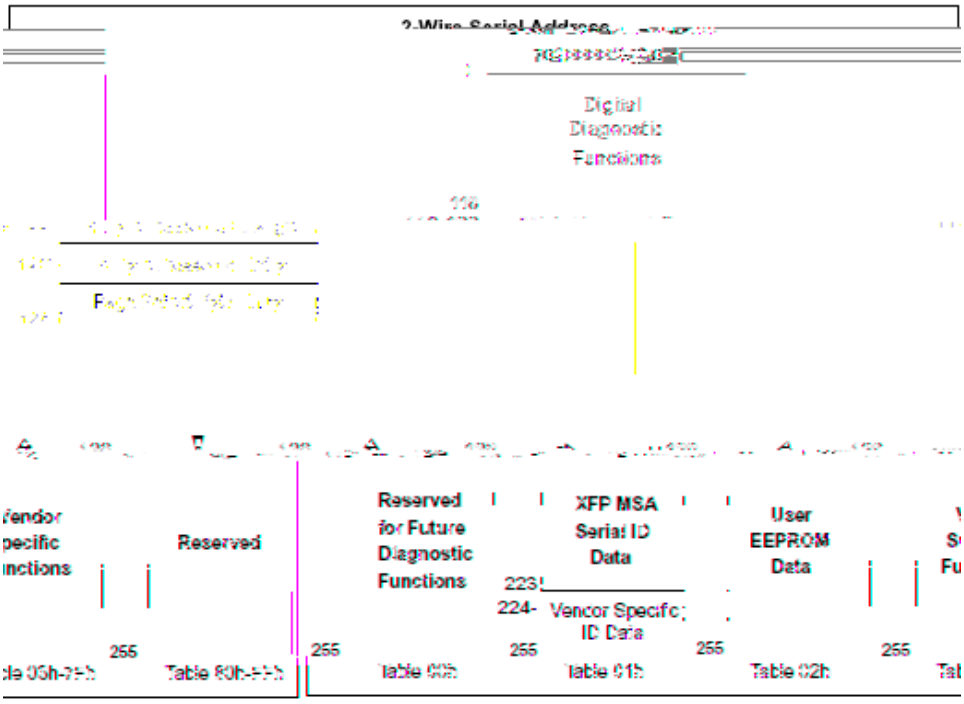
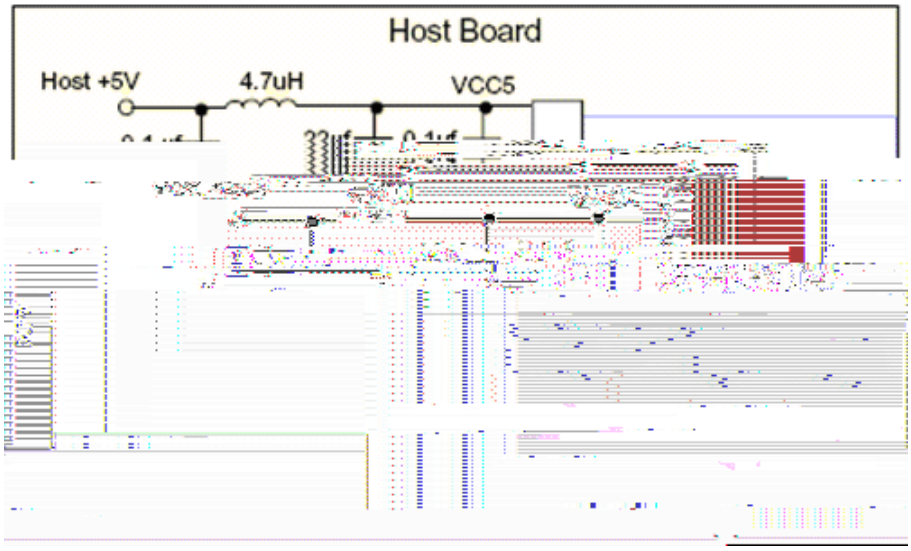


Typical Application Circuit for Power Supply



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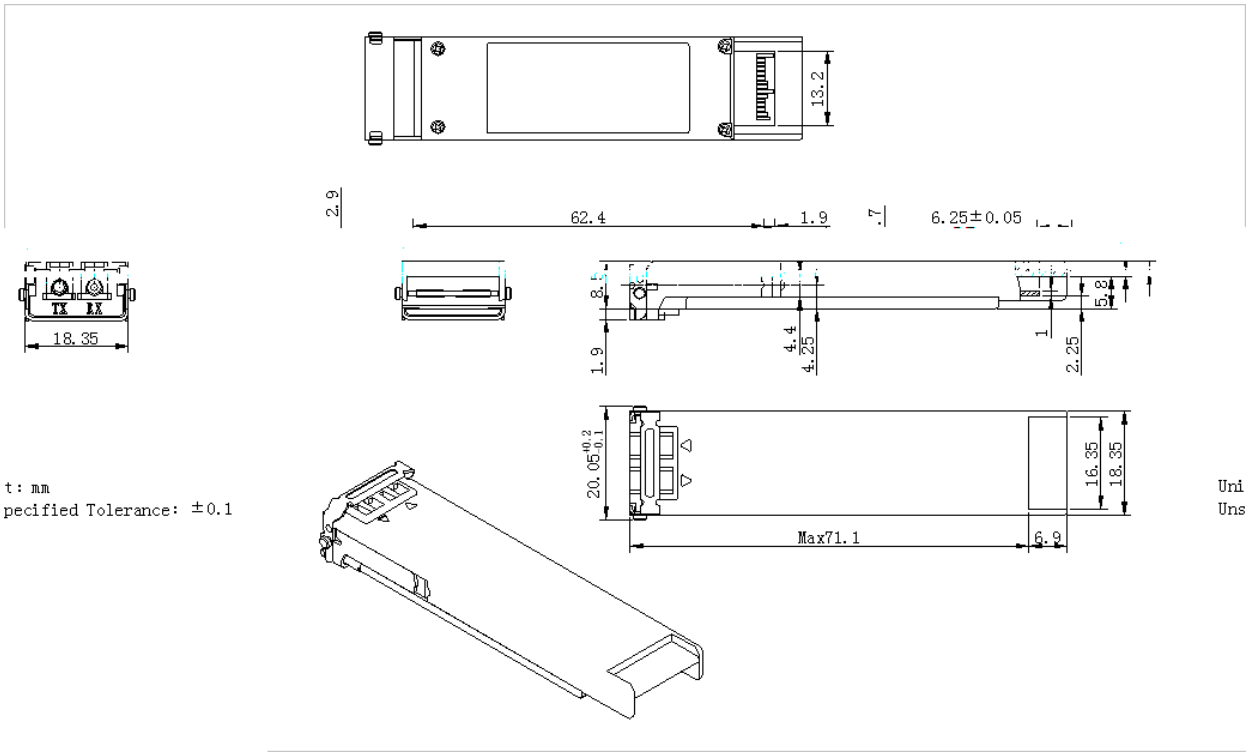
Package Outline



Regulatory Compliance

Feature	Test Method	Performance
Laser Eye Safety	FDA 21 CFR 1040.10 and 1040.11 IEC 60825-1: 1994+ A11: 1996+ A2: 2001 IEC 60825-2: 2004 + A1: 2006 EN 60825-1:1994+A1:2002+A2:2001 EN 60825-2: 2004	Compliant with Class 1 laser product
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7 Human Body Model	Class 1 (>1.5kV)
Electrostatic Discharge (ESD) Immunity	IEC 61000-4-2: 2001	Class 2 (>4.0kV)
Electromagnetic Interference (EMI)	FCC Part 15 Subpart J Class B CISPR22:1997+A1:2000+A2:2002, Class B EN55022:1998+A1:2000+A2:2003, Class B	Compliant with standards

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