

Fiber Optic Transceiver, XFP, 1550nm, ER SMF
40km, 10G/OC-192 DDM, MSA



FXC-XFP-ER10G-MSA

Features

- Operating Data Rate up to 11.30 Gbps
- Distance Range 40KM
- Pluggable XFP Duplex LC Connector
- Standard and Industrial Operating Temperature
- Compliant with MSA XFP Specification

Applications

- Telecom (Service Provider)
- Datacom
- Enterprise Networks
- Government
- Fiber to the home/business

Description

The L-com FXC-XFP-ER10G-MSA is an XFP form-factor transceiver, supporting 10G Ethernet/OC-192 data rates. The L-com FXC-XFP-ER10G-MSA supports 40KM distance and it is MSA compliant transceiver. The L-com FXC-XFP-ER10G-MSA features digital diagnostics for performance monitoring of the transceiver. The L-com FXC-XFP-ER10G-MSA is one of thousands of fiber optic connectivity products available from L-com in-stock and ready to ship. Contact our knowledgeable technical support and sales staff for your answers on fiber optic connectivity or other L-com products.

Configuration

Data Rate	10 Gbps
Form Factor	XFP
Connector	LC
Connector Mode	Duplex
Mode	Single Mode
Distance	40 km
Mfg Platform Compatibility	MSA

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Wattage (Wcc3)			1.79	W
Power Supply Voltage (Vcc3)	3.13	3.3	3.57	V
Power Supply Current (Icc3)			500	mA
Wattage (Wcc5)			1.95	W
Power Supply Voltage (Vcc5)	4.75	5	5.25	V
Power Supply Current (Icc5)			370	mA

Optical Specifications

Description	Minimum	Typical	Maximum	Units
TX Center Wavelength	1530		1565	nm
TX Data Rate	9.95	10.3	11.3	Gbps

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[Fiber Optic Transceiver, XFP, 1550nm, ER SMF 40km, 10G/OC-192 DDM, MSA FXC-XFP-ER10G-MSA](#)

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TX Spectral Width	0	4	nm
TX Average Output Power	6		dBm
TX Extinction Ratio	3.5		dB
RX Center Wavelength	1270	1550	1600
RX Receiver Sensitivity	-24		dBm
RX Receiver Overload		-7	dBm

Environmental Specifications

Temperature

Operating Range

0 to +70 deg C

Storage Range

-40 to +85 deg C

Notes:

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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Table 1 Module Electrical Pin Definition

Pin	Logic	Symbol	Name/Description	Note
1		GND	Module Ground	1
2		VEE5	Optional -5.2V Power Supply	
3	LVTTL-I	Mod_DeSel	Module De-select; When held low allows module to respond to 2-wire serial interface	
4	LVTTL-O	$\overline{\text{Interrupt}}$	$\overline{\text{Interrupt}}$; Indicates presence of an important condition which can be read over the 2-wire serial interface	2
5	LVTTL-I	TX_DIS	Transmitter Disable; Turns off transmitter laser output	
6		VCC5	+5V Power Supply	
7		GND	Module Ground	1
8		VCC3	+3.3V Power Supply	
9		VCC3	+3.3V Power Supply	
10	LVTTL-I/O	SCL	2-Wire Serial Interface Clock	2
11	LVTTL-I/O	SDA	2-Wire Serial Interface Data Line	2
12	LVTTL-O	Mod_Abs	Indicates Module is not present. Grounded in the Module	2
13	LVTTL-O	Mod_NR	Module Not Ready; Indicating Module Operational Fault	2
14	LVTTL-O	RX_LOS	Receiver Loss Of Signal Indicator	2
15		GND	Module Ground	1
16		GND	Module Ground	1
17	CML-O	RD-	Receiver Inverted Data Output	
18	CML-O	RD+	Receiver Non-Inverted Data Output	
19		GND	Module Ground	1
20		VCC2	+1.8V Power Supply	3
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.	
22		VCC2	+1.8V Power Supply	3
23		GND	Module Ground	1
24	PECL-I	RefCLK+	Reference Clock Non-Inverted Input, AC coupled on the host board	
25	PECL-I	RefCLK-	Reference Clock Inverted Input, AC coupled on the host board	
26		GND	Module Ground	1
27		GND	Module Ground	1
28	CML-I	TD-	Transmitter Inverted Data Input	
29	CML-I	TD+	Transmitter Non-Inverted Data Input	
30		GND	Module Ground	1

1. Module ground pins Gnd are isolated from the module case and chassis ground within the modul
2. Shall be pulled up with 4.7K-1 ohms to a voltage between 3.15V and 3.45V on the host board.
3. The 1.8 V wer supply can be optionally programmed to voltages lower than 1.8 V in modules supporting the variable power supply.

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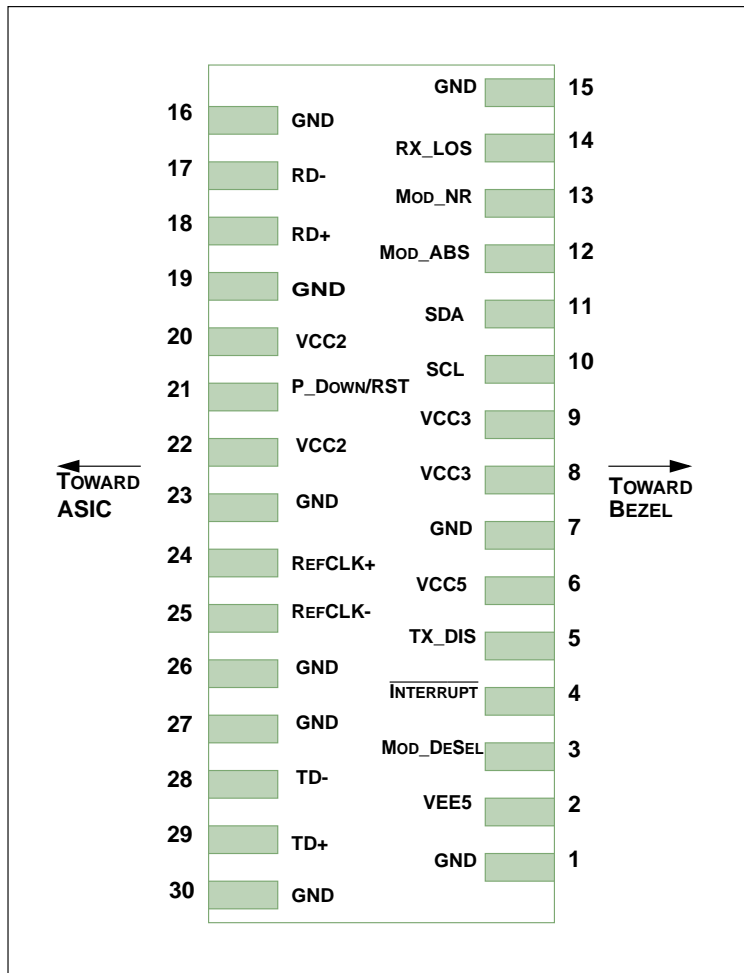


Figure 1 Host PCB XFP Pinout Top View

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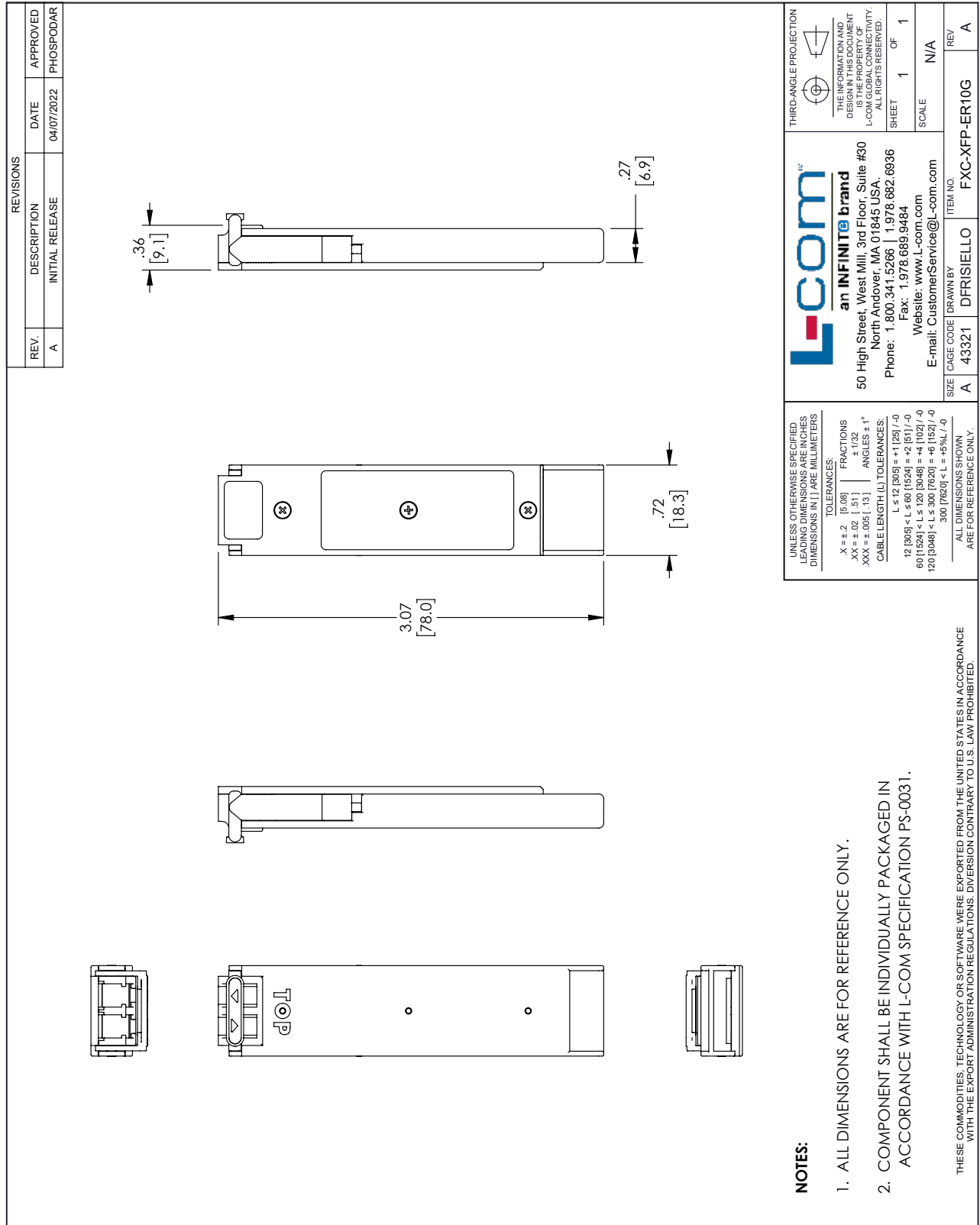


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LEADING DIMENSIONS ARE IN INCHES
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TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13] CABLE LENGTH (L) TOLERANCES:
 L ≤ 12 [305] < L ≤ 60 [1524] = ±1 [25] / -0
 60 [1524] < L ≤ 120 [3048] = ±4 [102] / -0
 120 [3048] < L ≤ 300 [7620] = ±6 [152] / -0
 300 [7620] < L = ±5% / -0

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