

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



## FXC-XFP-ER10G-ADT

### Features

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

### Applications

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

### Description

The L-com FXC-XFP-ER10G-ADT is an XFP form-factor transceiver, supporting 10G Ethernet/OC-192 data rates. The L-com FXC-XFP-ER10G-ADT supports 40KM distance and it is Adtran compliant transceiver. The L-com FXC-XFP-ER10G-ADT features digital diagnostics for performance monitoring of the transceiver. The L-com FXC-XFP-ER10G-ADT 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 | Adtran      |

### 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, Adtran FXC-XFP-ER10G-ADT](#)

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## FXC-XFP-ER10G-ADT

|                         |      |      |      |
|-------------------------|------|------|------|
| 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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## FXC-XFP-ER10G-ADT

**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   | Interrupt  | 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.<br>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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**FXC-XFP-ER10G-ADT**

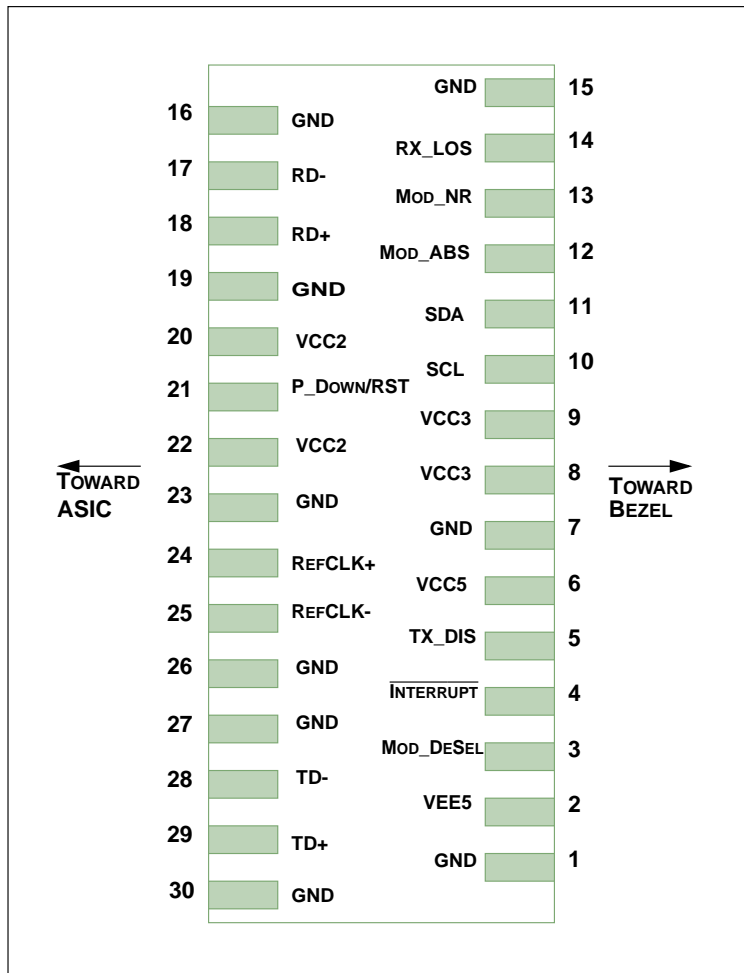


Figure 1 Host PCB XFP Pinout Top View

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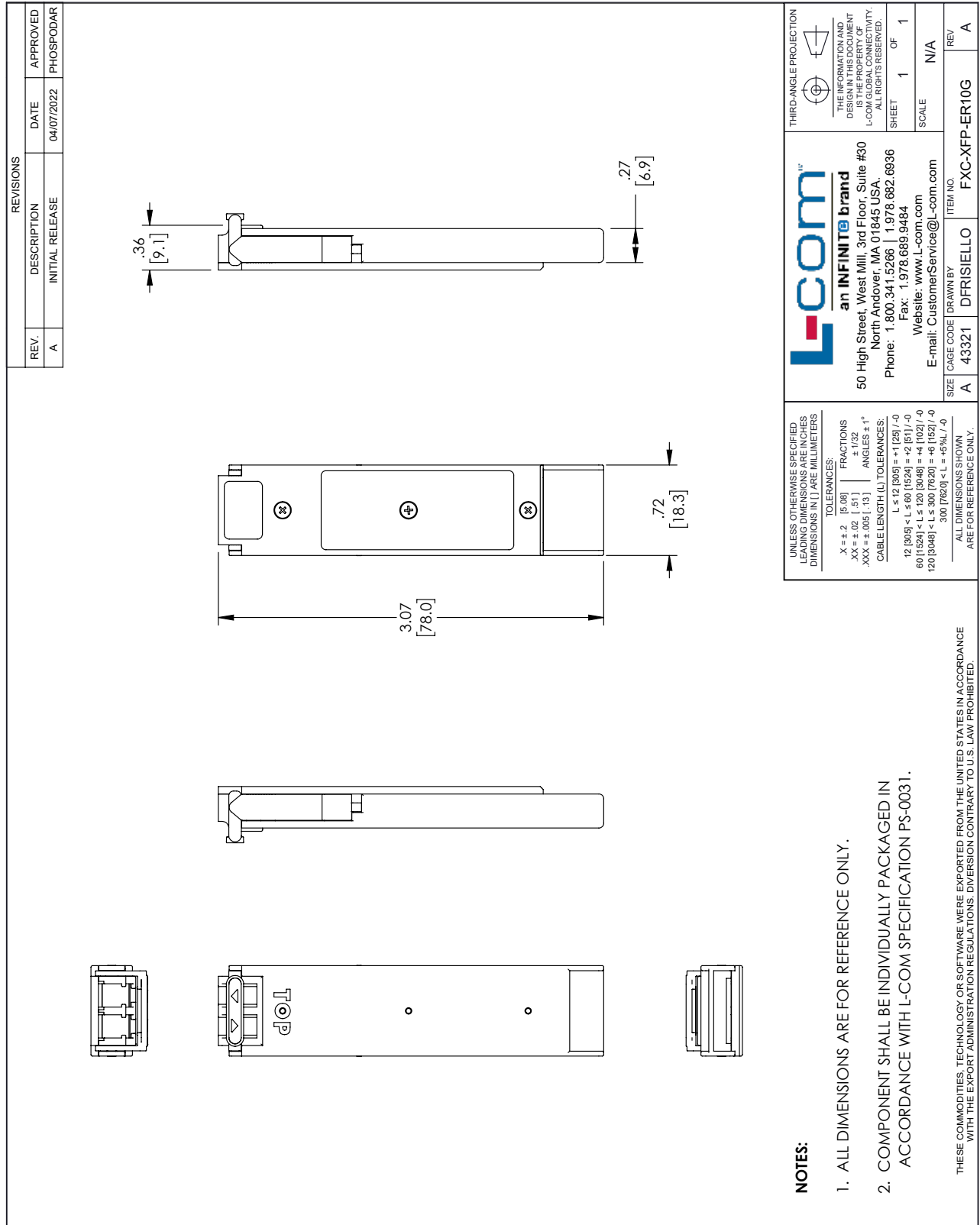
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50 High Street, West Mill, 3rd Floor, Suite #30  
North Andover, MA 01845 USA.  
Phone: 1.800.341.5266 | 1.978.682.6936  
Fax: 1.978.689.9484  
Website: www.L-com.com  
E-mail: CustomerService@L-com.com

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SHEET 1 OF 1  
SCALE N/A

|      |           |            |               |     |
|------|-----------|------------|---------------|-----|
| SIZE | CAGE CODE | DRAWN BY   | ITEM NO.      | REV |
| A    | 43321     | DFRISIELLO | FXC-XFP-ER10G | A   |

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.