

Fiber Optic Transceiver, XFP, BiDi, 10G DDM, Alcatel 7x50 Compatible



## FXC-XFB-wwxx-10-A7x

### Features

- Operating Data Rates up to 11.3 Gbps
- Distance Range 10, 40, 60 & 80 km
- Pluggable Bi-Directional XFP Simplex LC Connectors
- Standard Temperature Range (available in Industrial Operating Temperatures)
- Compliant with Alcatel 7x50 system level specifications

### Applications

- Telecommunication Service Providers
- Metro Ethernet
- OTN And Other Optical Links
- Transport Networks
- Enterprise Optical Networks
- Carrier Ethernet

### Description

The L-com FXC-XFB-wwxx-10-A7x is the highest quality Bi-Directional XFP transceiver series in the industry that delivers a dependable 10G Ethernet data rates. This XFP BiDi transceiver series has been designed, programmed and tested to be 100% compliant with the Alcatel 7x50 system level specifications. The L-com FXC-XFB-wwxx-10-A7x series has different distances options of 10, 40, 60 & 80 km to meet current and future networking requirements. The L-com FXC-XFB-wwxx-10-A7x series features digital diagnostics for performance monitoring of this BiDi transceiver. The L-com FXC-XFB-wwxx-10-A7x series is one of thousands of fiber optic connectivity products available with in-stock inventory and ready to ship. Contact our technical support and sales staff with your questions on fiber optic connectivity or other L-com products.

### Configuration

Data Rate	10 Gbps
Form Factor	XFP
Connector	LC
Connector Mode	Simplex
Mfg Platform Compatibility	Alcatel 7x50

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Power Supply Voltage	3.13		3.45	V
Power Supply Current			580	mA

\*See table below

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[FXC-XFB-wwxx-10-A7x](#)

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**FXC-XFB-wwxx-10-A7x**

**Optical Specifications**

Base Part Number	Distance (km)	Wavelength pair designator (ww)	Transmitter center wavelength (nm)	Receiver center wavelength (nm)	Transmitter Output (min/max) dBm	Receiver Sensitivity (min) dBm
FXC-XFB-ww10-10	10	23	1270	1330	-5/0	-14
		32	1330	1270	-5/0	-14
FXC-XFB-ww40-10	40	23	1270	1330	1/5	-15
		32	1330	1270	1/5	-15
FXC-XFB-ww60-10	60	23	1270	1330	1/5	-20
		32	1330	1270	1/5	-20
FXC-XFBww80-10	80	45	1490	1550	-1/4	-24
		54	1550	1490	-1/4	-24

**Size**

Length 3.3 in [83.82 mm]  
Weight 0.05 lbs [22.68 g]

**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-XFB-wwxx-10-A7x

Pin	Logic	Symbol	Name/Description	Note
1		GND	Module Ground	1
2		VEE5	Optional -5.2 Power Supply – <b>Not required</b>	
3	LVTTL-I	Mod_Desel	Module De-select; When held low allows the module to respond to 2-wire serial interface commands	
4	LVTTL-O	Interrupt	Interrupt (bar); Indicates presence of an important condition which can be read over the serial 2-wire interface	2
5	LVTTL-I	TX_DIS	Transmitter Disable; Transmitter laser source turned off	
6		VCC5	+5 Power Supply – <b>Not required</b>	
7		GND	Module Ground	1
8		VCC3	+3.3V Power Supply	
9		VCC3	+3.3V Power Supply	
10	LVTTL-I	SCL	Serial 2-wire interface clock	2
11	LVTTL/O	SDA	Serial 2-wire interface data line	2
12	LVTTL-O	Mod_Abs	Module Absent; Indicates module is not present. Grounded in the module.	2
13	LVTTL-O	Mod_NR	Module Not Ready; XGIGA defines it as a logical OR between RX LOS and Loss of Lock in TX/RX.	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	
21	LVTTL-I	P_Down/RST	Power Down; When high, places the module in the low power stand-by mode and on the falling edge of P_Down initiates a module reset 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	
23		GND	Module Ground	1
24	PECL-I	RefCLK+	Reference Clock non-inverted input, AC coupled on the host board – <b>Not required</b>	3
25	PECL-I	RefCLK-	Reference Clock inverted input, AC coupled on the host board – <b>Not required</b>	3
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

Notes:

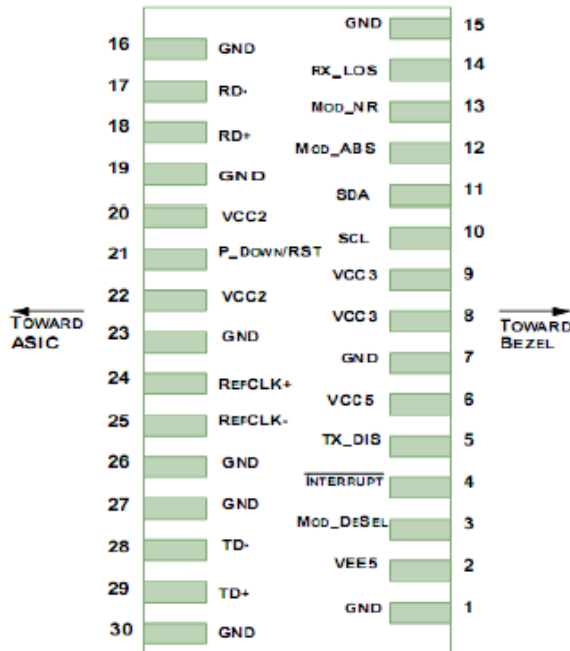
1. Module circuit ground is isolated from module chassis ground within the module.
2. Open collector; should be pulled up with 4.7k – 10kohms on host board to a voltage between 3.15V and 3.6V.
3. A Reference Clock input is not required by the XFBL-XXYY96-80D (A). If present, it will be ignored.

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**FXC-XFB-wwxx-10-A7x**

## Pin Assignment



Fiber Optic Transceiver, XFP, BiDi, 10G DDM, Alcatel 7x50 Compatible from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

L-com CAD Drawing

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	10/28/2022
		APPROVED PHOSPODAR

.45 [11.4]  
 .33 [8.4]  
 3.07 [78]  
 .72 [18.2]

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

**TOLERANCES:**

.X = ±.2 [5.08]	FRACTIONS ± 1/32	ANGLES ± 1°
.XX = ±.02 [ .51]		
.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%L / -0

**ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.**

**THIRD-ANGLE PROJECTION**

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SHEET 1 OF 1  
SCALE N/A

**L-com™**  
**an INFINITE brand**  
 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

SIZE A    CAGE CODE 43321    DRAWN BY HBAKKE    ITEM NO. FXC-XFB-WWXX-RR-PPP    REV A

**NOTES:**

- THE ITEM NUMBER "FXC-XFB-WWXX-RR-PPP" IS CODED FOR XFP BiDi TRANSCEIVERS; "WW" REFERS TO THE BiDi WAVELENGTH; "XX" REFERS TO THE DISTANCE RANGE OF THE BiDi TRANSCEIVER; "RR" REFERS TO THE OPERATION DATA RATE; "PPP" DENOTES THE OEM COMPATIBLE PLATFORM.
- ITEM SHALL BE INDIVIDUALLY PACKAGED IN ACCORDANCE WITH L-COM SPECIFICATION PS-0031.

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