# LUCEO TECHNOLOGIES

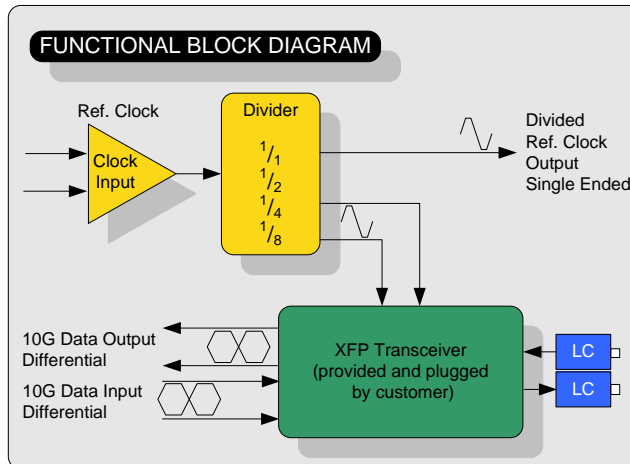# XFP Converter Module
## PN L-6001-xCMXFP-1

## DESCRIPTION

iCMXFP-1 is an XFP O/E, E/O converter module that plugs into the *XBERT* and *ParalleX*™ chassis. iCMXFP-1 incorporates a standard XFP module slot, which gives the user great flexibility to provide & plug-in an XFP module which meets their testing requirements. All MSA voltages are supported for XFP modules to 3.5W. Monitor and control functions can be changed via an easy to use GUI, including serial bus access of the XFP module. An identical module in terms of performance is the eCMXFP. This external module can be connected via cable to the *X-BERT* mainframe, and is very useful for device testing during temperature cycling or burn-in, due to the relaxed cable length requirement between the converter module and DUT.

## KEY FEATURES

- Plug-in for XFP Transceiver
- Differential 10G Data Input/Output
- Differential Ref CLK Input
- Internal Ref CLK Divider 1/1, 1/2, 1/4, 1/8
- Divided Ref CLK Out
- Standard XFP module slot
- Supports all MSA voltages, 1.8V, 3.3V, 5V, -5.2V
- Supports XFP modules up to 3.5W
- Monitor & control functions via GUI
- Serial Bus access of XFP via GUI
- LabView™ drivers available
- GPIB/LAN/USB  Interface via XBERT Chassis
- eCMXFP-1 connected via cable with X-BERT mai
- Small size: width 50.8mm (2") (iCMXFP-1)



XFP CONVERTER MODULE PN L-6001-**i**CMXFP-1

EXTERNAL CONVERTER MODULE PN L-6001-**e**CMSFP-1




FUNCTIONAL BLOCK DIAGRAM

Ref. Clock — Clock Input — Divider 1/1 1/2 1/4 1/8 — Divided Ref. Clock Output Single Ended

10G Data Output Differential
10G Data Input Differential

XFP Transceiver (provided and plugged by customer)

LC
LC

## XBERT PLATFORM: LETS YOU START SMALL AND GROW BIG



*XBERT* is a low-cost, modular Bit Error Rate Test Platform used for verification and test of 10Gb/s and above optical and electrical chip, sub assembly and system designs. *ParalleX*™ allows users to perform several BER tests at once using a single clock source. The system is ideal for developers desiring to run simultaneous BER tests on parallel interfaces or multiple independent interfaces. *XBERT* and *ParalleX*™ are scalable so users can start off with a single channel and add modules to grow the system. Manufacturers can realize great savings by taking advantage of the *XBERT* and *ParalleX*™ system's scalability to perform parallel testing in volume production environments.

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## KEY PERFORMANCE PARAMETERS

The maximum number of XFP module connections/disconnections depends not only on the connector, but also on the XFP module used. This is approximately 200 connections before significant degradation occurs.
The table below shows the limits of the XFP modules defined by the MSA.

| PARAMETER | SYMBOL | MIN | MAX | UNIT | NOTE |
|---|---|---|---|---|---|
| Data Input signal channel P or N | Din P/N | 60 | 410 | mV | Note 1 Single ended |
| Data Output signal channel P or N | Dout P/N | 170 | 425 | mV | Single ended |
| Ref CLK Input signal channel P or N | Ref CLK P/N | 320 | 800 | mV | Single ended |

Note    1    For use together with the E-BERT plug-in module, the output level of the E-BERT plug-in must be reduced to achieve the specified limits given above.