

### DESCRIPTION

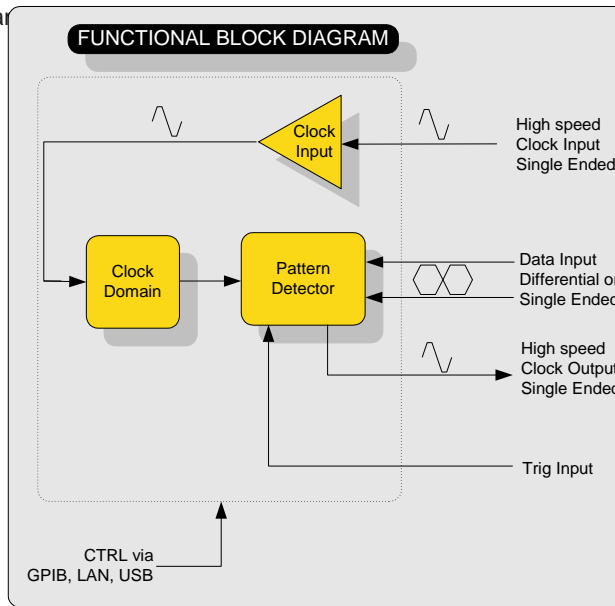
EED10-6 is an Electrical Error Detector module that plugs into the *XBERT* and *Parallel*® Chassis. EED10-6 can receive electrical data from 2 Gbps up to 13 Gbps, optionally up to 14.5G. Front panel indicators give immediate status for Rx Data.



ERROR DETECTOR MODULE PN L-6001-EED10-6

### KEY FEATURES

- Data Rates 2 to 13Gbps
- Optional operation up to 14.5G
- Optional differential input
- Differential Electrical Error Detector (SMA connector)
- PRBS: 7, 9, 10, 11, 15, 21, 23, 31
- User-Pattern: 8Bit - 64Kbit
- Clock-Pattern:  $\frac{1}{1}$ ,  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$
- Additional: K28.0-K28.7, CJPAT, SSPS-64 and
- Data input polarity swap
- External gating Input
- Automatic data alignment routine
- BER Detection: 0.5 to  $<1E-15$
- Data log Gating-time: up to 5000h
- High speed Clock Input and Output
- LabView™ drivers available
- GPIB/LAN/USB Interface via XBERT Chassis.
- Small size: width 25.4mm (1")



EED10-6  
Module  
Product  
Overview

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



*XBERT* is a low-cost, modular Bit Error Rate Test Platform used for verification and test of up to 13Gbps optical and electrical chip, sub assembly and system designs. *Parallel*® 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 *Parallel*® 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 *Parallel*® system's scalability to perform parallel testing in volume production environments.

# Error Detector Module PN L-6001-EED10-6

## KEY PERFORMANCE PARAMETERS

PRELIMINARY

PARAMETER	SYMBOL	Min	Max	UNIT	NOTE
Data Rate	DR	2	13	Gbps	Option144 for Max 14.4Gbps
Data Formats			NRZ		
PRBS Pattern		7, 9, 10, 11, 15, 21, 23, 31			
User-Defined Pattern length		8	65536	Bit	
Measurable Bit Error Rate	BER	<1E-15	0.5		
Data Input Signal Amplitude	D <sub>InP/N</sub>	100	1000	mV <sub>pp</sub>	
Differential Data Input signal (D <sub>InDiff</sub> =D <sub>InP</sub> -D <sub>InN</sub> )	D <sub>InDiff</sub>	200	2000	mV <sub>pp</sub>	Option 147 for differential input
External gating input	Gi				Starts and stops the gating measurement
Single ended Data Input Impedance	Z <sub>Ise</sub>	45	55	Ω	
Data Input Termination			AC -coupled		
Clock Input Amplitude		300	1000	mV <sub>pp</sub>	
Clock Output Amplitude		300	1000	mV <sub>pp</sub>	Not adjustable
Clock Input / Output Frequency	F <sub>Clk</sub>	1	13	GHz	
Clock Input / Output Impedance	Z <sub>Clk</sub>	45	55	Ω	
Clock Input / Output Termination			AC - coupled		
Operating Temperature	T <sub>OP</sub>	0	40	°C	Ambient temp.

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