

Agilent N2101B 10.3125 Gb/s Bit Error Ratio Tester

DISCOVER the Alternatives...

Industries and Applications

- · Transceiver Test
- · Telecommunication Equipment Test
- Fibre Channel, Ethernet, PON, Parallel Optics
- · Multi-port system testing
- · High port count burn-in test

Product Description

The N2101B PXI 10.3125 Gb/s BERT consists of a high accuracy clock source, data pattern generator, and error detector. It will automatically perform bit error ratio analysis to characterize the quality of devices at 12 standard internal rates from 155 Mb/s to 8.5 Gb/s.

In conjunction with a synthesizer such as the Agilent N2099A, the N2101B BERT can operate at any rate up to 10.3125 Gb/s.

Models	
N2101B	PXI Bit Error Rate Test Module
N2101B-300	155 Mb/s to 10.3125 Gb/s

Main Features and Benefits

Your benefit	
Fits well in space constrained test environments	
Complete, integrated, modular PXI transceiver test solution	
Same test platform for a wide number of formats, including Fibre Channel, GbE, Xaui, PCI Express, OC196/STM64	

Connector compatibility: cPCI, PXI-H, PXI-1



... Agilent MODULAR Products

Specifications and Characteristics

Hardware			
Size	3-slot module		
Pattern generator output Jitter	2.5 ps RMS (max), 1.5 ps RMS (characteristic)		
Pattern generator output voltage range	250 mV to 1 V		
Rise/ Fall times (20-80%)	25 ps (max), 22 ps (characteristic)		
Error detector input (differential)	50 mV to 2 V range, 50 mV sensitivity		
External clock input	500 mV to 1 V (characteristic), 500 MHz to 10.3125 GHz		
Divided clock rate outputs	1, 2, 4, 8 & 128 (output on separate port)		



Software

The N2101B BERT and its accompanying software fully complies with PXI specifications, enables the user to control the instrument without any user development required. The DLL provides an API through which custom applications can be easily developed to integrate the BERT. An ActiveX Control wrapper for the DLL is included.

Software operating systems	Microsoft Windows® XP (32-bit) Windows 7 (32-bit, 64-bit)
Standard compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Supported application development environments (ADE)	VisualStudio® (VB.NET, C#, C/ C++), VEE, LabVIEW, LabWindows/ CVI, MATLAB
Agilent IO Libraries	Includes: VISA Libraries, Agilent Connection Expert, IO Monitor

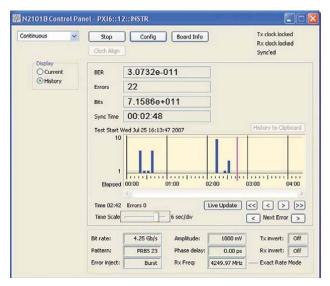


Figure 1. Bit Error Rate: History Mode.

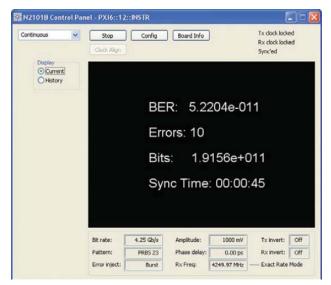


Figure 2. Bit Error Rate: Continuous Mode

Ordering Information

Typical Product Configuration			
Model	Description		
N2101B	PXI Bit Error Ratio Tester		
N2101B-300	155 Mb/s to 10.3125 Gb/s module		

Related products		
N2100B	PXI Digital Communication Analyzer	
N2102B	PXI Pattern Generator	
N2099A	PXI Synthesizer	

Advantage Services: Calibration and Warranty

Agilent Advantage Services is committed to your success throughout your equipment's lifetime.

	•	,		
R-50C-011-3		Agilent	Calibration -	- 3 years
R-50C-011-5		Agilent	Calibration -	- 5 years

Discover Agilent

www.agilent.com

www.agilent.com/find/modular www.agilent.com/find/pxi-ber

USA: (800) 829-4444

For more information on Agilent Technologies' products, applications, or services, please contact your local Agilent office. The complete list is available at: www.agilent.com/find/contactus

PICMG and the PICMG logo, CompactPCI and the CompactPCI logo, AdvancedTCA and the AdvancedTCA logo are US registered trademarks of the PCI Industrial Computers Manufacturers Group. "PCIe" and "PCI EXPRESS" are registered trademarks and/or service marks of PCI-SIG. Microsoft, Windows, Visual Studio, Visual C++, Visual C#, and Visual Basic are either registered trademark or trademarks of Microsoft Corporation in the United States and/or other countries.

Product specifications and descriptions in this document subject to change without notice.

© Agilent Technologies, Inc. 2010-2011 Printed in USA, November 27, 2011 5990-7671EN

