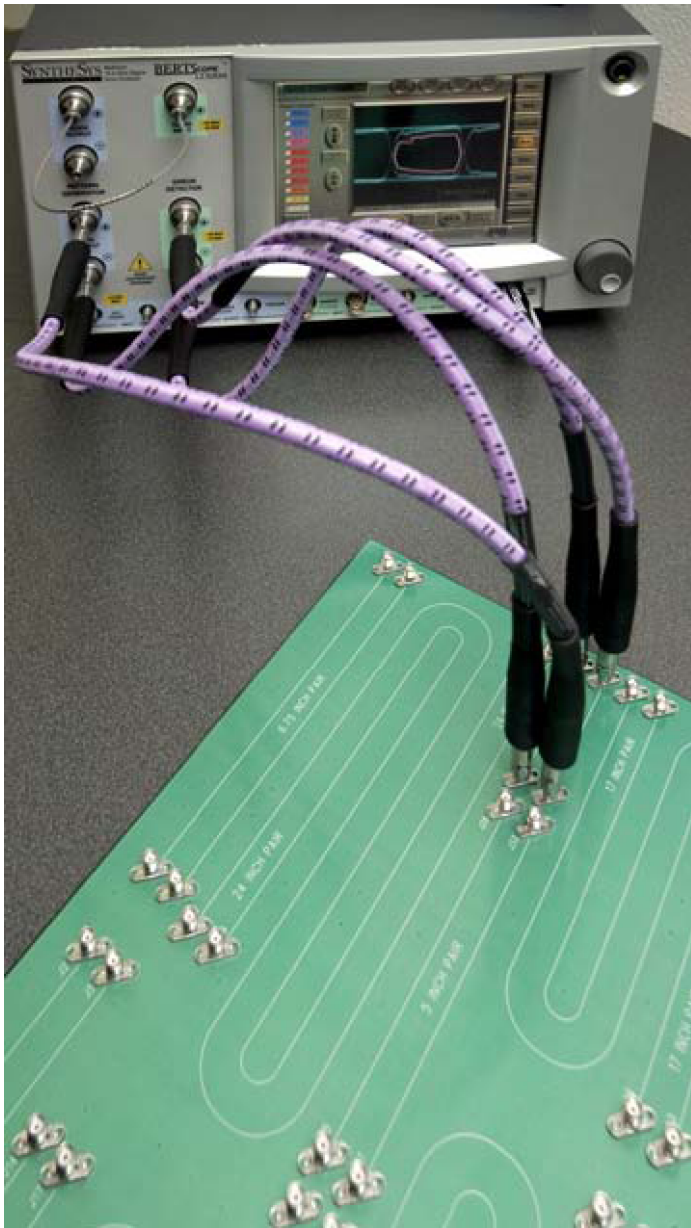


BERTScope™ Differential ISI Board

Precision ISI Test Accessory

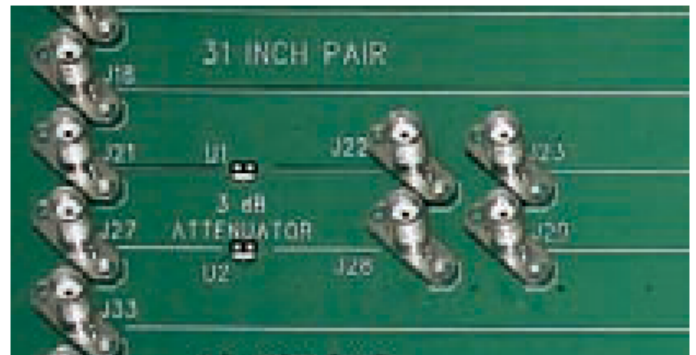


The BERTScope Differential ISI Board meets the needs of engineers constructing stressed eye type receiver jitter tolerance test signals. It provides a convenient variety of realistic test channels for designers wanting to exercise semiconductor circuits with features such as de-emphasis.

Key features

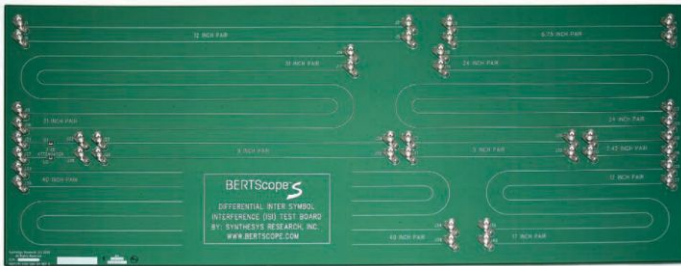
The board has been designed with the following features:

- Specially designed to provide a low cost, high accuracy method of introducing controlled amounts of Inter-Symbol Interference (ISI) for stress testing and general lab use
- Matched Differential Lines of the following nine lengths: 2.42", 5", 6.75", 9", 12", 17," 24", 31", 40"
- Matched 3 dB attenuators for easy amplitude adjustment in compliance testing for standards such as Serial ATA



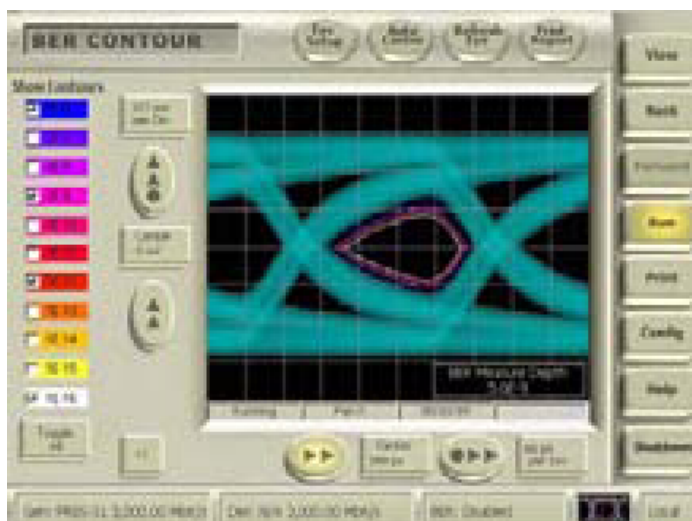
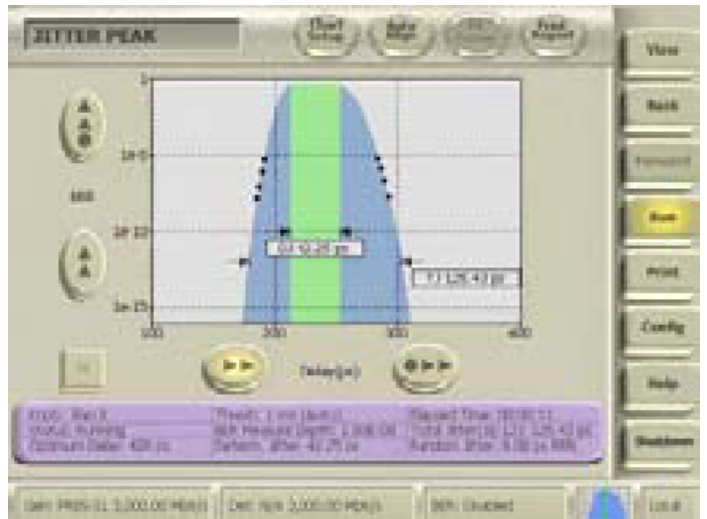
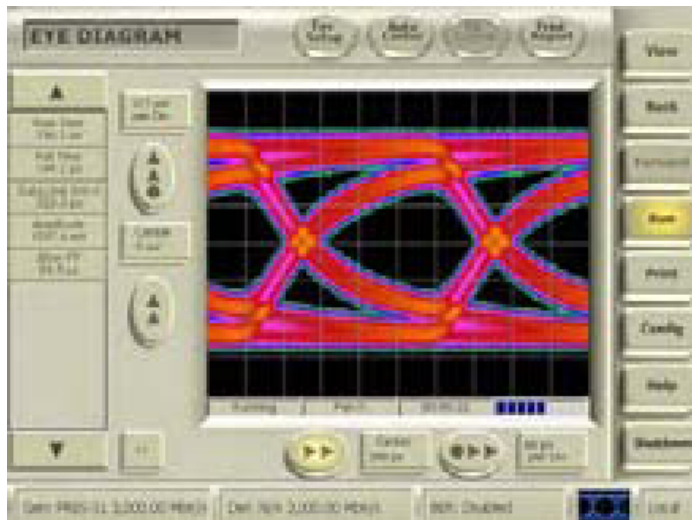
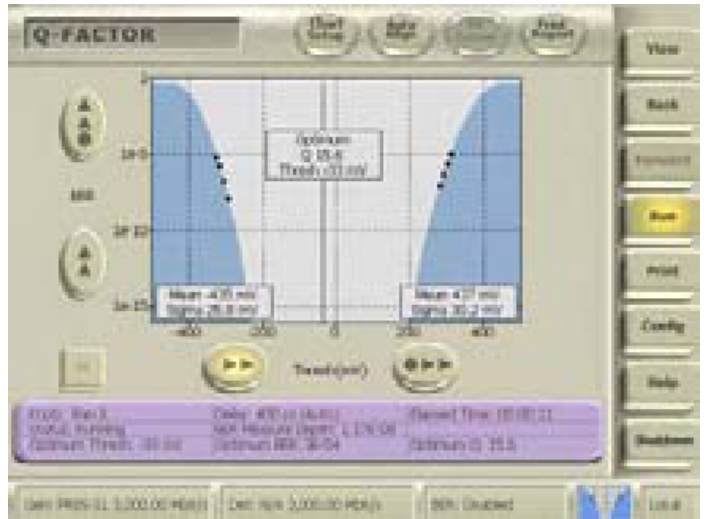
- Flexible and easy to use around the lab with many different pieces of test equipment
- Connector pairs aligned for easy cascade of lines for added length
- Individually characterized s parameter data optionally available
- Correctly exhibits skin effect losses

BSA12500ISI board

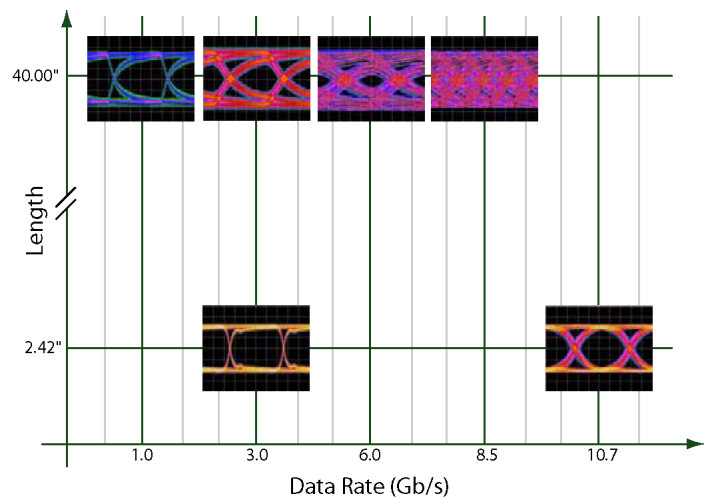


Measurement examples

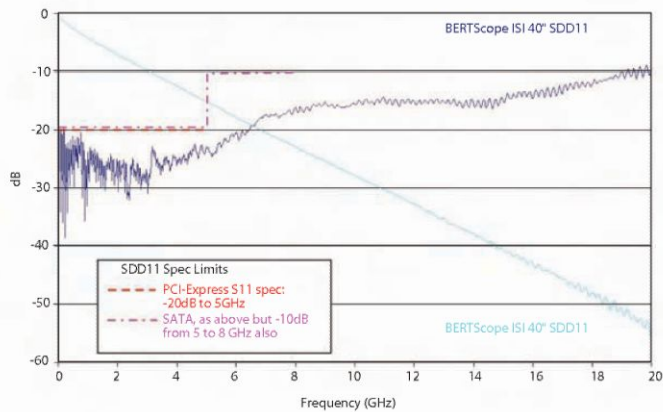
Measurement screens with 40-inches, 3 Gb/s, PRBS7



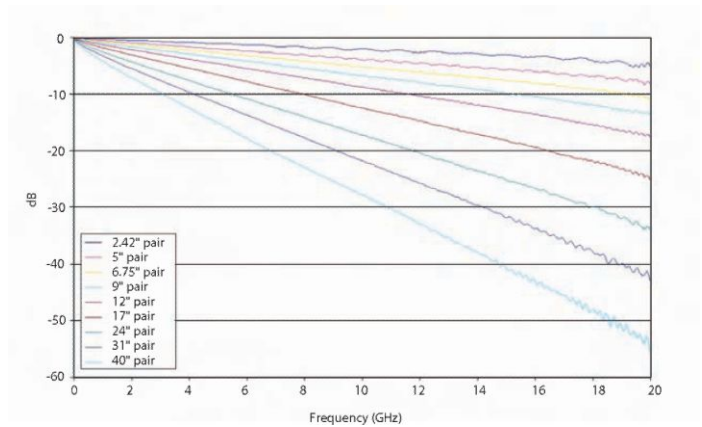
Example measured eye diagram



Example measured properties of 40-inch length: Forward SDD21 and Reflected SDD11



Example measured SDD21 responses for all lengths



Compliance information

BERTScope ISI Board compliance to common standards

Standard	Requirement	BERTScope ISI Board Trace Length (inches)
DisplayPort, Reduced Bit Rate (RBR), 1.62 GHz	Inter Symbol Interference (ISI) Interconnect Media	40+31+24+17
DisplayPort, High Bit Rate (HBR), 2.7 GHz	ISI Interconnect Media	24
PCI-Express	Calibration Channel	40
Serial Advanced Technology Attachment (SATA), 6 Gbps	Compliance Interconnect Channel (CIC)	17
SATA, Gen1x and Gen2x	CIC	40
Serial Attached SCSI (SAS)	Low-loss Transmitter Compliance Transfer Function (TCTF) Test Load	24
	TCTF Test Load	40
XAUI (802.3ae)	Compliance Interconnect	40
10GBASE-KX4 (802.3ap)	Test Channel	40+24
8x Fibre Channel (8xFC)	TCTF for 400-DF-EL-S Intercabinet Gamma Point	31

Ordering information

Models

BSA12500ISI

Differential ISI Board

Typical S parameters are available upon request.

ASEAN / Australasia (65) 6356 3900
Belgium 00800 2255 4835*
Central East Europe and the Baltics +41 52 675 3777
Finland +41 52 675 3777
Hong Kong 400 820 5835
Japan 81 (3) 6714 3010
Middle East, Asia, and North Africa +41 52 675 3777
People's Republic of China 400 820 5835
Republic of Korea +822 6917 5084, 822 6917 5080
Spain 00800 2255 4835*
Taiwan 886 (2) 2656 6688

Austria 00800 2255 4835*
Brazil +55 (11) 3759 7627
Central Europe & Greece +41 52 675 3777
France 00800 2255 4835*
India 000 800 650 1835
Luxembourg +41 52 675 3777
The Netherlands 00800 2255 4835*
Poland +41 52 675 3777
Russia & CIS +7 (495) 6647564
Sweden 00800 2255 4835*
United Kingdom & Ireland 00800 2255 4835*

Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
Canada 1 800 833 9200
Denmark +45 80 88 1401
Germany 00800 2255 4835*
Italy 00800 2255 4835*
Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90
Norway 800 16098
Portugal 80 08 12370
South Africa +41 52 675 3777
Switzerland 00800 2255 4835*
USA 1 800 833 9200

* European toll-free number. If not accessible, call: +41 52 675 3777

For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tek.com.

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

