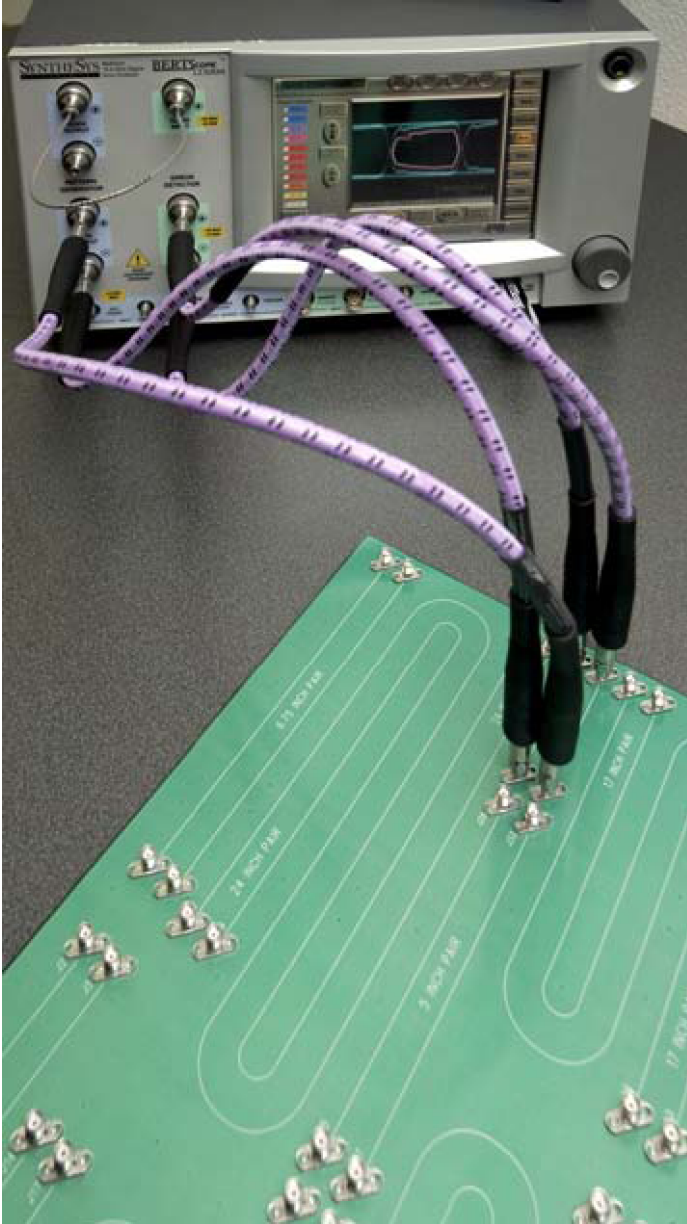


BERTScope™ Differential ISI Board

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.

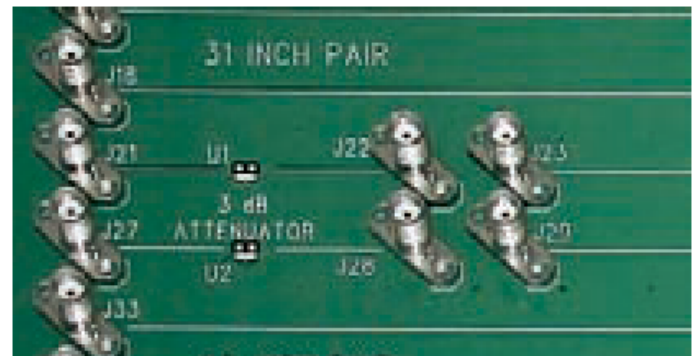
Notice to EU customers

This product is not updated to comply with the RoHS 2 Directive 2011/65/EU and will not be shipped to the EU. Customers may be able to purchase products from inventory that were placed on the EU market prior to July 22, 2017 until supplies are depleted. Tektronix is committed to helping you with your solution needs. Please contact your local sales representative for further assistance or to determine if alternative product(s) are available. Tektronix will continue service to the end of worldwide support life.

Key features

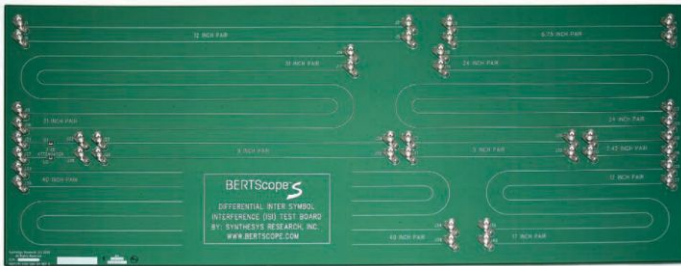
The board has been designed with the following features:

- 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



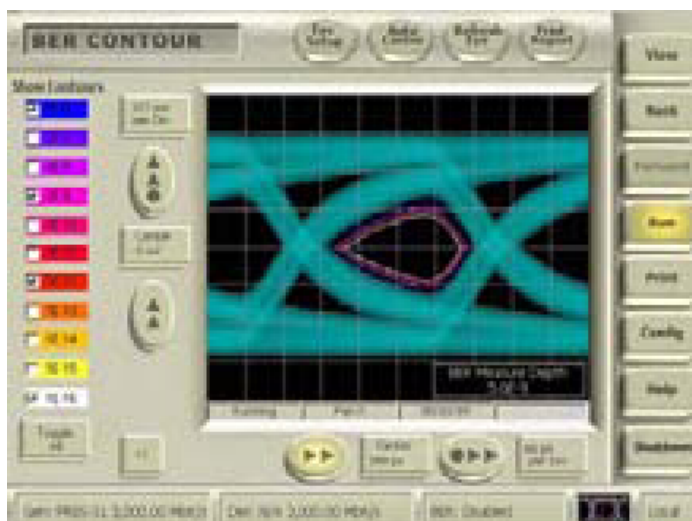
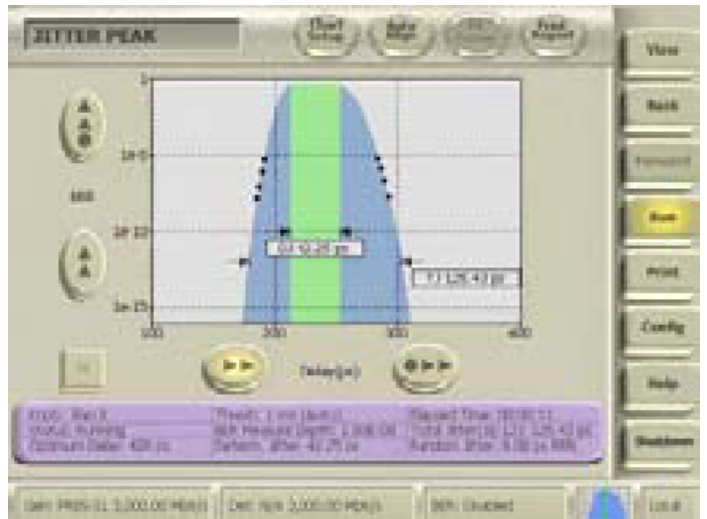
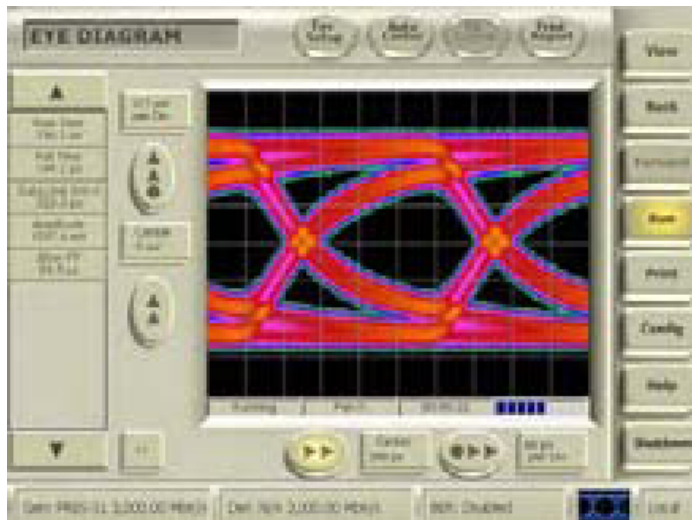
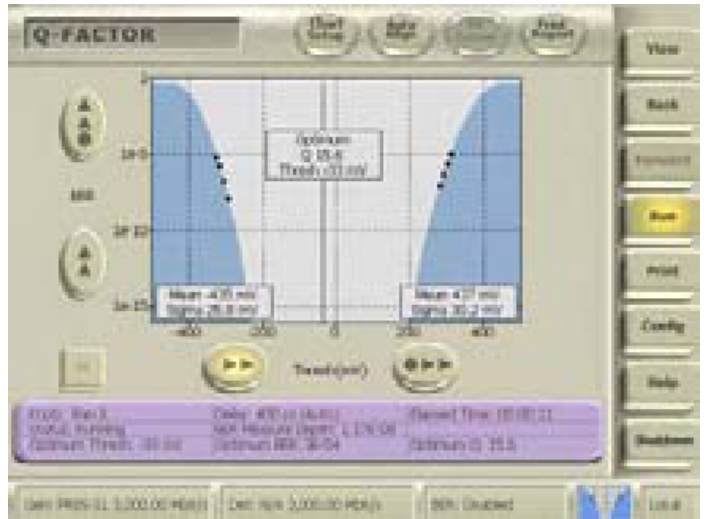
- Flexible and easy to use around the lab with many different pieces of test equipment
- Connector pairs aligned for easy cascade of lines for added length
- Individually characterized s parameter data optionally available
- Correctly exhibits skin effect losses

BSA12500ISI board

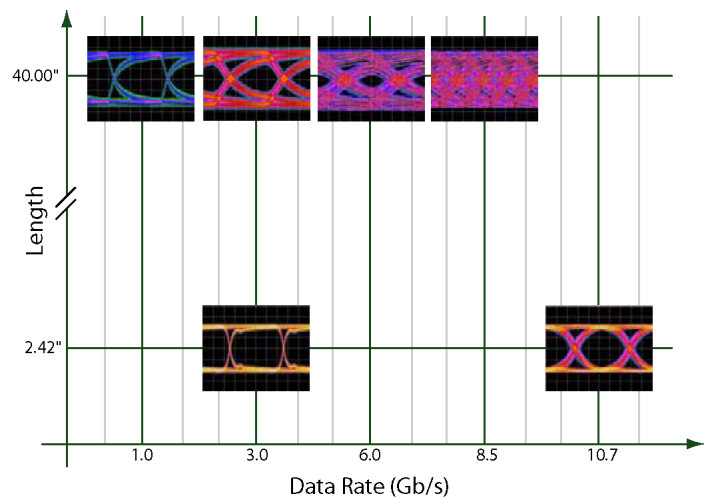


Measurement examples

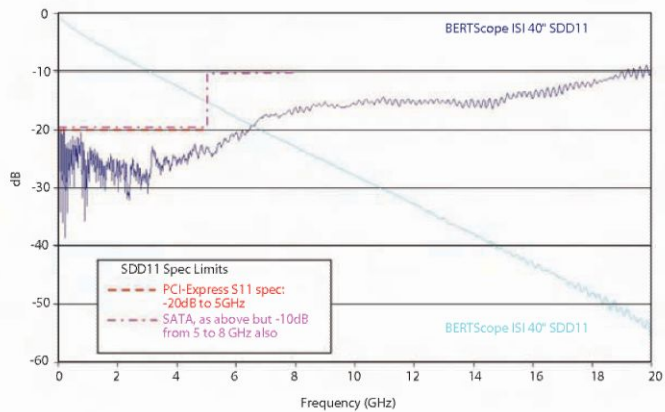
Measurement screens with 40-inches, 3 Gb/s, PRBS7



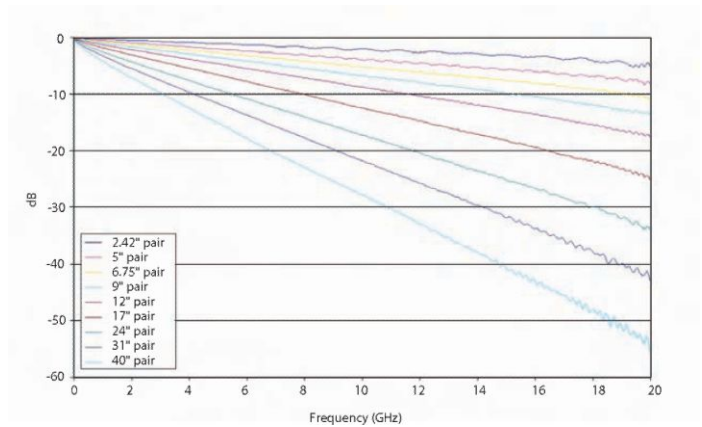
Example measured eye diagram



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.

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