

For the Tektronix BERTScope™ BSA and Real-Time Oscilloscope

# PCI Express<sup>®</sup> 4.0 Base Specification Receiver Test Automation Software (GRL-PCIE4-BASE-RX)

Quickly test your Receiver Design to the PCIe 4.0 Base Specification





- » Automate PCIe 4.0 Receiver Base Compliance using Tektronix test equipment
- » Perform Receiver Jitter Tolerance testing at the push of a button
- » Reduce technical risk using an industry-accepted calibration methodology
- » Achieve consistent results with rapid test execution

# **Product Overview**

GRL's PCI Express 4.0 Base Specification Receiver Calibration and Test Automation software for the Tektronix BERTScope BSA (GRL-PCIE4-BASE-RX) provides an automated, simple and efficient way to test your PCIe 4.0 Receiver to the Base (ASIC) Specification.

GRL-PCIE4-BASE-RX automates both the BERTScope and the Tektronix real-time oscilloscope to calibrate the stressed eye opening and test Receiver conformance and jitter tolerance. Following an industry-standard methodology, the software uses the Seasim statistical data eye simulator to establish DDJ and the final calibrated eye diagram.

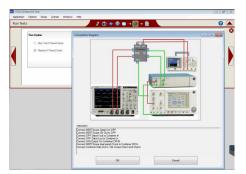
GRL-PCIE4-BASE-RX provides a simple user interface to automate complex PCIe testing. The software runs on any Windows 7 or 8 PC or oscilloscope, and significantly reduces equipment calibration time.

GRL-PCIE4-BASE-RX supports looping through a variety of timing and voltage parameters, using ranges defined by the user, to create 2-dimensional result plots.

Leverage and protect your BERTScope investment. Save valuable time and optimize the use of your resources across multiple projects.

### **Features**

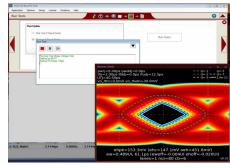
- Automated calibration of signal impairments to achieve stressed Receiver Eye Height and Eye Width, in accordance with PCle 4.0 Base Specification, using Seasim
- » Automated Receiver Compliance and Jitter Tolerance testing, at the spec-defined or userdefined Jitter Frequency steps
- » Automated 2-dimensional range testing with user-selected timing and voltage parameters and ranges, including comprehensive plots and reports
- » Simple setup, test execution, and reporting in PDF files
- Fully configurable and customizable



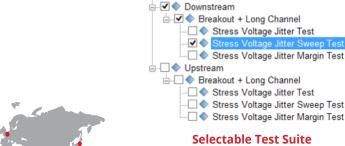
**Push-Button Automation** 



**Fully Configurable** 



**Automated Eye Calibration** 



Rx Tests

**Selectable Test Suite** 



Parameter Looping

# **Application Specifications**

Specification	PCI Express Base Specification Revision 4.0, March 2016
Data Rates	16 GT/s
Supported Receiver Test	Common Clock Architecture
Required Equipment	Tektronix BERTScope BSA, 28.6Gb/s or above Tektronix Real-Time Scope DPO/MSO7000DX Tektronix DPOJET (Jitter and Eye Analysis) Software Tektronix LE160 Linear Equalizer Tektronix AFG3000 Arbitrary Function Generator Tektronix BERTSCOPE ISI Board Tektronix PCIe Combiner High-performance SMA Cables



Silicon Valley, USA

Hsinchu & Taipei, Taiwan

Bangalore, India

Böblingen, Germany

Singapore

Penang, Malaysia

Beaverton Oregon, USA

Yokohama, Japan

Shanghai, China

### **Ordering Information**

For a formal quote & pricing information, contact <u>info@graniteriverlabs.com</u>, or your Tektronix sales representative.

Model Number	Description
GRL-PCIE4-BASE-RX	PCI Express 4 Base Specification Receiver Test Automation (When ordered from Tektronix, includes PCIe Combiner.)

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#### **About Granite River Labs**

Granite River Labs (GRL) provides end-to-end Engineering Services and Test Solutions to help hardware engineers adopt high speed interfaces. A trusted partner of small up-and-coming hardware developers to some of the largest companies in the world, GRL combines recognized indutry expertise in high performance test equipment, automated test solutions, and convenient locations to provide the utmost in customer service and robust, user-friendly tools. Together with our customers, we overcome challenges with designing and validating early stage products and new connectivity technologies.

For additional information or questions regarding Granite River Labs, including quotes, product demonstrartions, software and technical assistance, please contact us at info@graniteriverlabs.com.

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