GRL
GRANITE RIVER LABS

For the Anritsu MP1900A BERT

PCI Express® 5.0 Receiver Test Automation Software (GRL-PCIE5-RXA)

Quickly test your Design to the PCIe® 5.0 Base and CEM Specifications

Product Overview

The GRL PCI Express® and 5.0 Receiver Test Automation Software Suite (GRL-PCIE5-RXA) provides an automated, simple and efficient way to test your PCIe® 5.0 Host and Add-In Card designs using the Anritsu MP1900A with any Tektronix or Keysight Real-Time Oscilloscope.

GRL-PCIE5-RXA features two components that can be ordered separately or together: GRL-PCIE5-BASE-RXA for testing your PCIe® 5.0 Receiver to the Base (ASIC) Specification, and GRL-PCIE5-CEM-RXA for testing end products to the PCIe® 5.0 CEM (Card Electro-Mechanical) Specification. GRL-PCIE5-RXA provides a simple user interface to automate complex PCIe® testing, and significantly reduces equipment calibration and test time. The software runs on a Windows 7 or higher oscilloscope or PC.
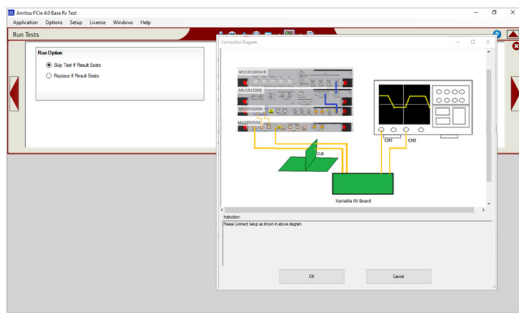
BASE-RXA uses the industry-standard Seasim statistical data eye simulator to establish the calibrated test channel DDJ and arrive at the final stressed eye diagram. Receiver jitter tolerance and margin testing can then be performed on the device under test.

CEM-RXA uses the VNA method for channel measurement and SigTest for all other stressed eye impairments. Jitter Tolerance and Margin Testing is offered in both versions.
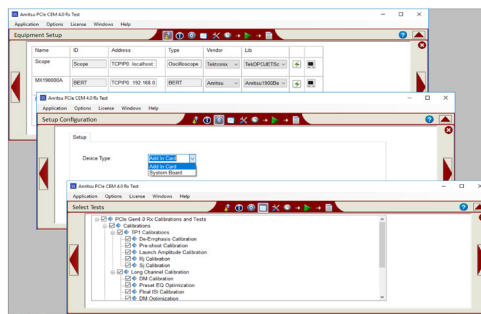
GRL-PCIE5-RXA also automates LTSSM training into loopback mode for RX Link EQ BER Measurement and TX Link EQ Tests.

- Automates PCIe® 5.0 (32GT/s) Base and CEM Spec testing

- Perform Base and CEM Receiver Jitter Tolerance testing at the push of a button

- Perform PCIe® TX and RX Link Equalization (Link EQ) tests at 32GT/s

- Reduce technical risk using an industry-accepted calibration methodology

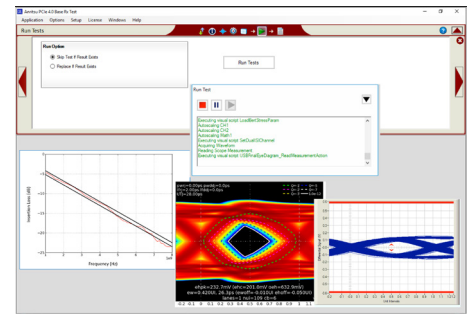- Achieve consistent results with rapid test execution

Features

- Automated calibration of signal impairments to achieve stressed Receiver Eye Height and Eye Width, in accordance with PCIe® 5.0 Base & CEM Specification

- Uses Industry Standard tools Seasim and SigTest for Stressed Signal Calibration

- Automated Receiver Compliance and Jitter Tolerance and Marging testing

- Using spec-defined or user-defined Jitter Frequency steps

- Performs all CEM CTS Tests (Transmitter & Receiver) in single Software Framework

- Simple setup, test execution, and reporting in PDF files
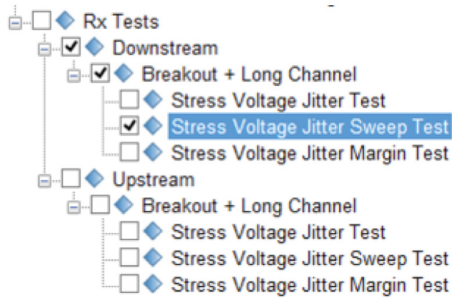
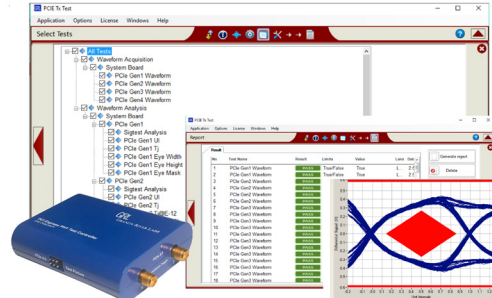- Fully configurable and customizable

Push-Button Automation

Fully Configurable

Stressed Eye Calibration Using Seasim and SigTest

Selectable Test Suite

Transmitter CEM Testing using GRL-PCIE34-TXP1

Application Specifications

Specification	PCI Express® Base Specification Revision 5.0, Version 1.0 PCI Express® CEM Specification Revision 5.0, draft (contact GRL for details)
Data Rates	32 GT/s
Stressed Eye Calibration Method	For Base: Seasim for Insertion Loss, Seasim & SigTest for final eye calibration using Fixed or Variable ISI Solutions For CEM: SigTest using PCIe® CEM CLB/CBB Fixtures
Supported Tests from PCIe® 5.0	GRL-PCIE5-BASE-RXA: Rx Jitter Tolerance & Margin Testing GRL-PCIE5-CEM-RXA: Rx Jitter Tolerance & Margin Testing, Initial Tx EQ, Lane Margining, Link EQ Response, and Receiver Link EQ for Host and Add-In Cards

Ordering information

For a formal quote & pricing information, contact info@graniteriverlabs.com, or your Anritsu sales representative.

Model Number	Description
GRL-PCIE5-BASE-RXA	GRL PCIe® 5.0 (32GT/s) Base Specification Receiver Test
GRL-PCIE5-CEM-RXA	GRL PCIe® 5.0 (32GT/s) CEM Specification Receiver Test SW Rx Jitter Tolerance & Margin Testing, Tx Link EQ, Lane Margining, Link EQ Response, and Receiver Link EQ for Hosts and Add-In Cards
GRL-PCIE5-RXA	GRL PCIe® 5.0 (32GT/s) Base & CEM Specification Receiver Test SW Bundle
GRL-PCIE5-XXX-RXA	FLT Adds floating license through USB Dongle

Silicon Valley, USA

Hsinchu & Taipei, Taiwan

Shanghai, China

Dongguan, China

Yokohama, Japan

Bangalore, India

Böblingen, Germany

Singapore

Penang, Malaysia

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About Granite River Labs

The world's leading Engineering Services and Test Automation Solutions firm for connectivity, GRL helps engineers solve tough design and validation challenges. GRL began in 2010 with a vision to provide affordable test services to help hardware developers implement digital interface technologies as they become faster, more complex, and more challenging to test. Today, GRL has worked with hundreds of companies from our worldwide test facilities and R&D centers.

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