

Tektronix Introduces Most Comprehensive, Automated PCI Express 3.0 Tx, Rx Test Suite

Comprehensive Receiver and Transmitter Solutions Give Silicon, Hosts and Card Designers One Stop for PCIe 3.0 Testing and Debug

BEAVERTON, Ore., Oct. 23, 2012 - Tektronix, Inc., the world's leading manufacturer of oscilloscopes, today announced the industry's most flexible and complete automated transmitter (Tx) and receiver (Rx) compliance and debug testing solution for the PCI Express 3.0 standard. With new product enhancements to the BERTScope Bit Error Rate Tester Series, and PCI Express test software, Tektronix now offers silicon, hosts and card designers a single destination for PCI Express 3.0 testing.

PCI Express has become faster and more complex with each succeeding generation. At speeds of 8 Gb/s, PCI Express 3.0 testing involves complex Rx stress conditioning, BER compliance testing, and numerous Tx compliance tests. Full test support is also required for debugging when designs fail. With the latest updates, Tektronix now offers the industry's most integrated level of support for PHY layer test automation and debug of PCI Express 3.0.

"Many aspects of PCIe3 testing such as link training and Tx equalization characterization are very complex or not well understood by the design community," said Brian Reich, general manager of Performance Oscilloscopes for Tektronix. "By offering a robust automation package, we are making complex PCIe3 testing easy while ensuring more consistent results. This means that long and complex tests such as stressed eye calibration and transmitter compliance testing don't have to be performed by only senior engineers."

For PCIe3 Rx testing, stressed pattern generation as required by PCI-SIG test specifications, are automated and now include integrated support for clock multiplication and eye opening tests. Additionally, DUT loopback control is automated, simplifying the testing process and cutting down on time to test results. Enhancements to enable these capabilities include the new DPP125C which adds pre-emphasis to the stressed pattern, the new BSAITS125 integrated interference combiner with variable ISI, and the new BSAPCI3 automated calibration, loopback and link training software. Other components that make up the complete Rx solution include a Tektronix AFG3000 arbitrary/function generator for common mode interference testing and the PLL loop bandwidth solution based on the world-class CR286A series clock recovery unit. These complements to the BERTScope eliminate the need for third-party add-ons.

For PCIe3 Tx testing, Tektronix has enhanced its solution by incorporating the PCI-SIG's SigTest utility software for compliance testing directly into its TekExpress automation framework on Tektronix DSA70000 Series digital oscilloscopes. With this integration, the updated PCE3 software automates test instrumentation and DUT control, pattern validation, data acquisition and analysis with SigTest, and allows custom reporting of multiple SigTest results. The PCE3 software also provides a seamless transition to debugging when compliance testing fails.

To learn about the full range of Tektronix electrical compliance, debug and validation solutions for Tx and Rx testing of PCI Express 3.0, including a 30-minute summary video, go to:
<http://www.tek.com/technology/pci-express>.

Availability

The Tektronix solution for PCI Express 3.0 Tx, Rx testing and debug is available now worldwide.

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About Tektronix

For more than sixty-five years, engineers have turned to Tektronix for test, measurement and monitoring solutions to solve design challenges, improve productivity and dramatically reduce time to market. Tektronix is a leading supplier of test equipment for engineers focused on electronic design, manufacturing, and advanced technology development. Headquartered in Beaverton, Oregon, Tektronix serves customers worldwide and offers award-winning service and support. Stay on the leading edge at www.tektronix.com.

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