

Industry's First 32 Gb/s Protocol-Aware Bit Error Rate Tester Eases 4th Generation Standards Receiver Testing

New Tektronix BSX Series BERTScope Features Built-in De-emphasis, Fast Protocol Handshaking for PCIe 4.0, USB 3.1 Receiver Validation and Troubleshooting

BEAVERTON, Ore., Jan. 31, 2017 /[PRNewswire](#)/ -- Tektronix, Inc., a leading worldwide provider of measurement solutions, today introduced the industry's first 32 Gb/s protocol-aware bit error rate test and analysis system. The new Tektronix BSX series BERTScope not only helps characterize the receiver in Gen3 and Gen4 devices – it enables users to shorten the time needed to debug link training and bit error rate issues.

As 4th generation serial protocols such as PCIe 4.0, USB3.1, and SAS4 become more complex, it has become increasingly difficult to place a receiver being tested into an appropriate state (such as a loopback state) for testing without protocol handshaking between the instrument and the device under test. With its protocol-aware functions, the BSX Series provides the tools and flexibility needed to visualize and control the handshaking and link training process for devices running up to 32 Gb/s.

"When things go wrong during receiver testing, our customers need more than a tool that will simply characterize a device. They need a tool that will pinpoint the root cause of failures, move them from complexity to confidence, and help keep projects on schedule," said Brian Reich, general manager, Performance Oscilloscopes, Tektronix. "Receiver testing is more than just getting a bit-error rate number – it's understanding why you are getting a particular bit-error rate value, or handshaking failure. The BSX Series delivers unique visibility into the underlying root cause of physical layer issues by capturing the exact location and timing of bit errors."

Simplified receiver testing

Available with maximum data rates of 12.5Gb/s, 24Gb/s and 32Gb/s, the BSX Series is available with tools that automate compliance testing, making accurate and repeatable measurements easy to do for the large number of test cases required in the Gen4 standards. With built-in Tx equalization, reference clock multiplication, and interference generation, the BSX Series requires fewer cables and is significantly easier to set up and calibrate than previous offerings.

The BSX Series is the only receiver test tool that continuously stores the context (timing, bit position) of each bit error. Sophisticated error analysis tools such as pattern sensitivity and forward error correction emulation use this information to help developers understand the factors contributing to bit errors.

Pricing and availability

The BSX Series BERTScope will be available in Q2 of 2017. Pricing starts at \$199,000 US MSRP

For full details, go to: www.tek.com/bsx

Wondering what else Tektronix is up to? Check out the Tektronix [Bandwidth Banter blog](#) and stay up to date on the latest news from Tektronix on [Twitter](#) and [Facebook](#).

About Tektronix

Headquartered in Beaverton, Oregon, Tektronix delivers innovative, precise and easy-to-operate test, measurement and monitoring solutions that solve problems, unlock insights and drive discovery. Tektronix

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