

## **Tektronix Adds Critical Support for 100G Communications Test** **Announces new 28.6 GB/s BERTScope with Pattern Generation, Error Detection and Jitter Analysis for IEEE802.3ba & 32G Fibre Channel Standards**

BEAVERTON, Ore., September 17, 2012 - Tektronix, Inc., the world's leading manufacturer of oscilloscopes, today announced a significant expansion of its BERTScope Bit Error Rate Tester Series to meet growing 100G testing requirements. With the introduction of the new Tektronix BSA286C BERTScope, Tektronix becomes the first test equipment manufacturer to offer complete support for standards-compliant testing up to 28.6 Gb/s, including error detection, pattern generation and clock recovery.

As service providers struggle to meet global bandwidth demands, development labs face time-to-market challenges such as extremely small timing and jitter margins as they work to bring compliant 100G components, routers and other products to market. The new BERTScope, with its industry leading sub 300 RJ femtoseconds intrinsic jitter noise floor, brings extremely accurate BER test and root-cause PHY layer analysis to the growing portfolio of Optical Communications Test products from Tektronix.

"The new Tektronix BSA286C provides a turnkey high-speed communications testing framework for design labs trying hard to keep up with 100G test requirements," said Brian Reich, general manager, Performance Oscilloscopes, Tektronix. "What's more, the BSA286C is the only solution that provides a deep level of debugging insight, allowing designers to understand why a particular device failed initial testing."

For debugging applications, engineers can use the BSA286C to perform true jitter measurements on a variety of signals including low probability events, with the added ability to accurately decompose jitter into its random and deterministic components. As speeds increase, crosstalk has become a major source of jitter-related signal noise. The Tektronix BERTScope and Performance Oscilloscopes alike have adopted a jitter decomposition model that separates out bounded uncorrelated jitter (BUJ) for rapid insight into potential design problems related to crosstalk.

For 100G testing, 28.6 Gb/s bit error rate (BER) stressed receiver testing has emerged as an important requirement for ensuring standard compliance and performance. This data rate provides adequate room for margin verification and forward error correction (FEC) that is required on top of the 25.78125 Gb/s data rate of 100GBASE-LR & ER-4.

"For 100G testing, PHY layer qualification at full data rate is crucial, especially as the field moves into more complex modulation formats," said Michael Hochberg, Director of the OpSIS silicon photonic prototyping service and a faculty member at the University of Delaware and at National University of Singapore. "One of the key challenges in this field is the complexity of test setup and creating a validation methodology; we've used BERTScopes in my lab and these systems are remarkably easy to use while providing very accurate BER and jitter measurement results."

The combination of high speed pattern generation and error detection on the BERTScope provides a fast time to answer for complex measurement scenarios that involve debug root cause analysis. For the full spectrum of 100 G design challenges, Tektronix provides instrument capability and measurement expertise for PHY TX, RX and Optical Modulation Analysis. Starting with the Tektronix DSA8300 Digital Sampling Oscilloscope for TX Eye Diagram Analysis along with the OM4000 Coherent Lightwave Signal Analyzer for Complex Modulation testing; the addition of the BSA286C BERTScope provides labs with comprehensive PHY test suite for 100G standards verification and debug.

### **Availability & Pricing**

The BERTScope BSA286C is available for ordering now worldwide with prices starting at \$347,000 U.S.

MSRP for the new models. Deliveries will begin in Q4, 2012.

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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](http://www.tektronix.com).

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