

## **Tektronix Introduces World's Only 'One Box' Serial Data Receiver Test Solution**

**SerialXpress® Software with the AWG7000 Simplifies Receiver Bit Error Rate (BER) Testing and Improves Design Productivity for Next Generation Serial Data Buses**

PRNewswire

BEAVERTON, Ore.

Tektronix, Inc., a leading, worldwide provider of test, measurement and monitoring instrumentation, announced the availability of SerialXpress® [http://www.tek.com/serial\\_data](http://www.tek.com/serial_data), an advanced new software package that performs direct synthesis of waveforms for high-speed serial data receiver testing, ideal for testing SATA, SAS, PCI-Express, HDMI, and DisplayPort serial data standards, as well as any other serial bus technology operating at speeds up to 6 Gbps. SerialXpress manages the creation of these waveforms for high-speed transmission on the AWG7000 Arbitrary Waveform Generator series. An easy to use interface provided by the SerialXpress software package makes the creation and management of high speed serial waveforms far more intuitive. The AWG7000 with SerialXpress software is the world's only one-box high-speed serial data signal generator for receiver stress and BER testing, eliminating the need for multiple instruments and complicated test configurations.

Next generation high-speed serial standards ranging from 3 to 6 Gb/s have diminishing timing margins that require receiver characterization to complement conventional transmitter testing. Increases in transmission speeds and trace length of transmission lines heighten the potential for errors in the signal path (channel). Engineers need to simulate these effects during the design phase to test the tolerance of their receiver designs. SerialXpress software provides these capabilities working in tandem with the AWG7000 arbitrary waveform generators through use of direct synthesis. Direct synthesis is a flexible and repeatable method for creating ideal or impaired waveforms incorporating periodic & random Jitter, pre/de-emphasis, channel emulation, Idle-states, and SSC parameters. This often eliminates the need for multiple test instruments such as sine wave generators, noise generators, power dividers and power combiners that not only complicate the entire test set-up but also require extensive calibration.

"SerialXpress is ideal for design and test engineers who need to perform validation and characterization of high speed serial data receivers and effectively obsoletes alternative methods using logic sources," said Mike Higashi, vice president, Signal Source Product Line, Tektronix. "Instead of needing to create mathematical formulas, the intuitive UI provided by SerialXpress software improves productivity through pre-defined, fill-in-the-blank templates for each of the major high-speed serial standards, facilitating simple and cost-effective receiver testing. With SerialXpress software, the AWG7000 is the easiest to use, most powerful and comprehensive high speed serial data signal generator for high-speed serial data technologies."

Engineers are able to simply recall a setup file that encapsulates all of the relevant standard mandated tests and signal impairments, without the need for any additional external components or mixing required, reducing complexity and cost. To replicate the test scenarios across multiple labs, AWG setup file deployment can be managed through electronic circulation of files, enabling test systems worldwide to have consistent settings and capabilities and with no external hardware dependencies.

### **Availability and Pricing**

The SerialXpress software is currently available for order and runs as an integral part of the AWG5000 or AWG7000 models, or as a standalone application on an external PC. The U.S. MSRP for SerialXpress begins at \$7,000.

## About the AWG7000

Announced last fall, the AWG7000 is the only AWG fast enough for high speed serial data test with up to 20GS/s and the ability to generate data streams including imperfections such as noise and jitter for data rates up to 10Gb/s. With two analog channels and four marker outputs, the AWG7000 is capable of generating mixed-signal waveforms to provide for analog signals and digital control channels. For serial data, the high sample rate of the AWG7000 enables developers to create pre- and de-emphasis or multi-level signals such as four PAM (pulse amplitude modulation) without having to work with cumbersome external components and without wasting multiple output channels.

## About Tektronix

Tektronix is a leading supplier of test, measurement, and monitoring products, solutions and services for the communications, computer, and semiconductor industries -- as well as military/aerospace, consumer electronics, education and a broad range of other industries worldwide. With 60 years of experience, Tektronix enables its customers to design, build, deploy, and manage next-generation global communications networks, advanced and pervasive technologies. Headquartered in Beaverton, Oregon, Tektronix has operations in 19 countries worldwide. Tektronix' Web address is <http://www.tektronix.com/>.

Tektronix is a registered trademark of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

First Call Analyst:

FCMN Contact:

SOURCE: Tektronix, Inc.

CONTACT: Gary Grossman, Worldwide Sr. PR Manager of Tektronix, Inc.,  
+1-503-627-1097, [gary.grossman@tektronix.com](mailto:gary.grossman@tektronix.com)

Web site: <http://www.tektronix.com/>

---

<http://news.tektronix.com/2008-03-10-Tektronix-Introduces-Worlds-Only-One-Box-Serial-Data-Receiver-Test-Solution>