

Tektronix+ SenarioTek Introduce Wideband Microwave Frequency Up/Down Conversion

Enables Calibrated Signal Generation, Analysis for Test Requirements Over 1GHz Bandwidth and 50GHz Carrier Frequencies on Tektronix Instruments

BEAVERTON, Ore., May 24, 2010 – Tektronix, Inc., a leading innovator of signal generation and analysis solutions required for the microwave and RF industry, and SenarioTek, a leading provider of custom RF/microwave test and measurement solutions, today announced a customizable standard solution for wideband microwave frequency up/down conversion. This solution enables calibrated wideband radar and satellite signal generation and analysis for testing requirements greater than 1 GHz bandwidth and for carrier frequencies up to 50 GHz using standard Tektronix instruments.

The companies will be demonstrating an industry leading 1.3GHz bandwidth up and down converter solution for up to 18GHz carrier frequencies in booth #1033 here at the IEEE MTT 2010 International Microwave Symposium, the premier annual international meeting for technologists involved in all aspects of microwave theory and practice.

Wideband radar and wideband satellite communications signals use carrier frequencies that are beyond the direct synthesis and direct analysis capabilities of wideband RF instruments. In order to test radar and satellite devices using these instruments, engineers often build their own test fixtures and signal conditioning capabilities. By using the new SenarioTek solution, engineers can instead take advantage of a calibrated and optimized solution for doing this testing using industry leading Tektronix RF test instruments such as the AWG7000 Series signal generators and the DPO/DSA/MSO70000 Series high performance oscilloscopes.

The approach used by the SenarioTek solution improves microwave test performance by matching microwave up and down conversion from and to an IF (intermediate frequency). This optimizes the performance of the Tektronix instruments and eliminates instabilities, cost and periodic calibration of IQ (in-phase quadrature) modulator conversion techniques. It also provides the widest bandwidth signal generation and analysis and can be used for both multi-band radar and satellite communication frequencies.

“This SenarioTek offering represents a significant breakthrough in giving our customers a standard, yet highly customizable solution, for demanding wideband radar and satellite test applications,” said Lynne Camp, Vice President, Performance Products, Tektronix. “Across the board, there is a need for more bandwidth to improve radar resolution and imaging or to increase the capacity of satellite crosslink communications. This new direct IF solution is significant because it provides the widest combined signal generation and analysis bandwidths designed to optimize the highest fidelity in our instruments. The total solution is the most cost effective method to analyze wideband microwave signals.”

Because the solution uses IF it offers improved performance compared to direct analysis at microwave frequencies. Further, the overall solution cost can be reduced by acquiring just the baseband performance required to support the IF frequency as opposed to the microwave frequency.

“Tektronix already makes the highest performance wideband signal generation and analysis tools for RF, so it made sense that we would work with Tektronix to develop a solution for leading edge radar development and satellite radar test applications,” said Simi Ghiasvand, CEO, SenarioTek. “With this solution we are both improving test performance and lowering costs.”

Availability

The SenarioTek solution for up/down microwave conversion along with supporting Tektronix

instrumentation is available now for US customers.

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About SenarioTek

Expertise, experience and ingenuity in the design, manufacture and testing in the RF/microwave Test and Measurement arena make SenarioTek, a Woman Owned, Small Business (WOSB), the prime candidate to lead Custom RF Interface design into the next era. SenarioTek enhances customers test capabilities aiding in the successful development, delivery, performance and profitability of their products while improving quality in design and manufacturing. www.senariotek.com.

About Tektronix

For more than sixty 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 instrumentation 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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