

Tektronix to Adopt IBM's 9HP SiGe Technology in Next Generation 70GHz Oscilloscopes

New Performance Oscilloscope Series will Also Offer Improved Signal Fidelity to Power High End Test Applications

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BEAVERTON, Ore., June 25, 2013 /[PRNewswire](#)/ -- Tektronix, Inc., the world's leading manufacturer of oscilloscopes, today announced that its next generation of high performance real-time oscilloscopes will incorporate IBM's latest 9HP silicon-germanium (SiGe) chip-making process. This fifth generation of IBM's semiconductor technology along with other advances such as patent pending Asynchronous Time Interleaving [announced previously](#) will result in oscilloscopes with bandwidth capability of 70 GHz and improvements in signal fidelity.

(Logo: <http://photos.prnewswire.com/prnh/20130103/SF36616LOGO-b>)

Operating at speeds up to 350 GHz, 9HP is the first SiGe technology in the industry featuring the density of 90nm BiCMOS and delivers higher performance, lower power and higher levels of integration than current 180nm or 130nm SiGe offerings. Tektronix has been a long-time adopter of SiGe, using it to consistently deliver the best performing and most accurate oscilloscopes in the industry.

The next generation of performance oscilloscopes from Tektronix is due for availability in 2014. With real-time bandwidth of 70 GHz, and the potential for more in future iterations, the new oscilloscope platform will deliver the performance and signal fidelity needed for applications such as 400 Gbps and 1 Tbps optical communications and fourth generation serial data communications. This level of advancement in oscilloscope technology is a direct result of Tektronix's commitment to innovation and one the industry's highest levels of R&D investment year over year.

"By extending our long-standing relationship with technology leader IBM, Tektronix is continuing to push the envelope on what can be achieved in high-fidelity, high-speed data acquisition systems. Early adoption of 9HP has allowed our engineers to explore innovative architectures and performance thresholds once thought unattainable," said Kevin Ilcisin, chief technology officer, Tektronix. "The advanced 9HP SiGe BiCMOS technology provides the faster switching speeds, high integration levels, and low noise our next generation of performance instrumentation requires to meet customer requirements."

Improving Signal to Noise

In addition to leveraging the advances made possible by 9HP, Tektronix' forthcoming oscilloscopes will benefit from the use of Asynchronous Time Interleaving technology to improve signal-to-noise ratio beyond the frequency interleaving approach in use by some vendors today. In traditional frequency interleaving, each analog-to-digital converter (ADC) in the signal acquisition system only sees part of the input spectrum. With Asynchronous Time Interleaving, all ADCs see the full spectrum with full signal path symmetry. This offers the performance gains available from interleaved architectures but without the same impact to signal fidelity. To learn more, download the new white paper ["Techniques for Extending Real-Time Oscilloscope Bandwidth."](#)

Investment Protection

Over the past decade, Tektronix has consistently anticipated the proper levels of bandwidth support for the leading serial standards, and is an active participant in such bodies as the IEEE Society, PCI-SIG, SATA-IO and USDB-IF. The Tektronix Performance Oscilloscope Investment Protection Program provides customers with a cost-effective migration path to higher-performance oscilloscopes as their needs evolve. If interested, customers should contact their Tektronix Account Manager to discuss future migration plans.

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

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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