Unrivaled 10 GS/s AXIe High-Speed Digitizer Providing High Dynamic Range with Wide Bandwidth

Multi-Module Capability Ensures Very High Channel Density

- New AXIe high-speed digitizer with up to 10 GS/s sampling rate
- 4 channels, 10-bit, DC up to 2.5 GHz bandwidth
- Multi-channel applications in advanced physics experiments, and aerospace & defense

Dec. 2, 2016 – Keysight Technologies high-speed digitizers team announces the new M9710A 10-bit AXIe high-speed digitizer running at 10 GS/s. With high dynamic range across a wide 2.5 GHz bandwidth, this digitizer is ideal for multi-channel applications in advanced physics experiments, and aerospace & defense.

The new M9710A AXIe module features up to 4 DC-Coupled input channels, a very high sampling rate up to 10 GS/s and a long on-board acquisition memory up to 8 GB in a compact single-slot AXIe form factor.

This new module includes proprietary ICs developed by Keysight. In particular, the LDNA front-end amplifier IC provides single ended to differential outputs to the interleaved ADC. The resulting channel performance in interleaved ADC mode remains unaltered thanks to a low noise architecture and distortion contribution, which is 15 dB lower than the ADC specification.

Build Multi-Channels Data Acquisition Systems

Based on the modular AXIe architecture, the M9710A high-speed DAQ is scalable and extensible to provide a fully operational multichannel system on a compact format. It combines high channel density, measurement fidelity and high throughput to build acquisition systems with high channel count and fast, accurate measurements in a compact form factor. The architecture provides a fully operational system, with an offer of 2-, 5- and 14-slot AXIe chassis.

For instance, up to thirteen M9710A high-speed digitizers can be inserted in the M9514A 14-slot chassis providing a 52 channels 10-bit system.
"With its new design and outstanding performance, such as flat SFDR over a large analysis bandwidth combined with minimum overshoot on fast pulse and exceptional low noise input level, the M9710A targets time and frequency domain

applications" said Pierre-François Maistre, High-Speed Digitizers Project Manager, Keysight R&D Digital & Photonics Centre of Excellence. "With its new proprietary ICs, it provides better measurement fidelity at higher sampling rate over larger bandwidth".

AXIe is an open system, and users can choose between 8-, 10-, and 12-bit high-speed digitizers' resolution and mix and match modules and chassis.

Moreover, multichannel acquisition software AcqirisMAQS, designed specifically for large multichannel acquisition enables configuration management as well as visualization of data for hundreds of channels from a single console.

Additional information about product configuration and pricing is available at www.keysight.com/find/M9710A.

Availability

The M9710A AXIe high-speed digitizer, 4-channel, 10-bit, up to 10 GS/s is available now. Contact Keysight at digitizers@keysight.com for additional information.

About Keysight High-Speed Digitizers

Keysight's high-speed digitizers provide superior measurement fidelity and signal integrity, higher measurement throughput, a smaller footprint, and the lowest total cost of ownership. Keysight's engineering staff includes hardware designers and software developers that have decades of experience in a wide-range of applications—including data conversion and ADC/DAC design. Additional information about Keysight's high-speed digitizers is available at www.keysight.com/find/high-speed-digitizers.

About Keysight in Modular

Keysight provides unrivaled PXI and AXIe performance built on the industry's most accurate measurement science. Keysight helps engineers get to first measurement faster with common measurement software and Keysight Reference Solutions. Keysight has the industry's largest global network of experienced application engineers and metrology-grade calibration centers. Additional information about Keysight's PXI and AXIe modular test and measurement solutions is available at www.keysight.com/find/modular.

About Keysight Technologies

Keysight Technologies (NYSE:KEYS) is a global electronic measurement technology and market leader helping to transform its customers' measurement experience through innovations in wireless, modular, and software solutions. Keysight's electronic measurement instruments, systems, software and services are used in the design, development, manufacture, installation, deployment and operation of electronic equipment. The business had revenues of $2.9 billion in fiscal year 2015. Information about Keysight is available at www.keysight.com.