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National Instruments Introduces PXI Express Data Acquisition Module for High Speed, Bridge-Based Measurements

New Module Increases Accuracy and Bandwidth for High-Channel-Count Strain, Load, and Pressure Measurement Systems

AUSTIN, Texas – Sept. 14, 2010 – National Instruments (Nasdaq: NATI) today announced the [NI PXIe-4331](#), the latest in the [NI SC Express](#) family of high-performance data acquisition (DAQ) modules with built-in signal conditioning. The DAQ device is a simultaneous high-speed bridge input module that provides signal conditioning for dynamic measurements from strain, pressure, torque and load sensors. The NI PXIe-4331 increases the speed of bridge-based measurements and, with [PXI Express](#), provides 250 MB/s of dedicated bandwidth per device to give engineers the freedom to increase channel count without compromising sampling rates or data throughput.

The NI PXIe-4331 features eight channels with 24-bit analog-to-digital converters (ADCs) per channel and 102.4 kS/s per channel sampling rate. To improve accuracy and reject noise, the module offers antialiasing and digital filters per channel. Additionally, the module includes an independent programmable 0.625 to 10 V excitation voltage on each channel for flexibility and fault protection. The NI PXIe-4331 also provides remote sensing, internal bridge completion and shunt calibration options per channel. The 8-channel bridge input module can scale to a 136-channel system in a single chassis and thousands of channels when synchronizing across multiple chassis. The simultaneous sampling, high sample rate and channel synchronization features make the module ideal for structural test applications such as fatigue and impact test, design validation and other dynamic tests. These applications are common in industries such as automotive, aerospace, defense and renewable energy.

The NI PXIe-4331 includes NI-DAQmx driver software with support for multidevice tasks, making it possible for engineers to easily synchronize multiple modules. Engineers can combine the NI PXIe-4331 module with a variety of NI hardware including other SC Express modules, NI X Series DAQ devices, dynamic signal acquisition products and more than 1,500 types of I/O available on the PXI platform. The NI PXIe-4331 also integrates with NI software including [NI LabVIEW](#), the [LabVIEW Real-Time Module](#) and [NI DIAdem](#).

The SC Express family of modules delivers increased accuracy, high-data throughput and best-in-class synchronization for measuring strain gages, bridge-based transducers, thermocouples and high-voltage analog inputs. With a smaller footprint, simplified cable management and software features for automatic

synchronization, SC Express makes it easy for engineers to set up and program high-channel-count sensor measurement systems on a single platform.

Readers can visit www.ni.com/lp/sc-express to learn more about achieving higher measurement performance with the NI PXIe-4331 module and the SC Express family.

About National Instruments

National Instruments (www.ni.com) is transforming the way engineers and scientists design, prototype and deploy systems for measurement, automation and embedded applications. NI empowers customers with off-the-shelf software such as NI LabVIEW and modular cost-effective hardware, and sells to a broad base of more than 30,000 different companies worldwide, with no one customer representing more than 3 percent of revenue and no one industry representing more than 15 percent of revenue. Headquartered in Austin, Texas, NI has more than 5,000 employees and direct operations in more than 40 countries. For the past 11 years, FORTUNE magazine has named NI one of the 100 best companies to work for in America. Readers can obtain investment information from the company's investor relations department by calling (512) 683-5090, e-mailing nati@ni.com or visiting www.ni.com/nati.

Pricing and Contact Information

NI PXIe-4331

Priced* from \$3,999; €3,999; ¥500,000

Web: www.ni.com/lp/sc-express

**Prices are subject to change without notice.*

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