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Test & Measurement World Names NI Flexible-Resolution Digitizer Best in Test

NEWS RELEASE – Jan. 4, 2006 – Editors from *Test & Measurement World* magazine recently named the [National Instruments PXI-5922 flexible-resolution digitizer](#) as a Best in Test winner and finalist for the Test Product of the Year in the publication's 2006 Best in Test awards.

"Each year, a *Test & Measurement World* editorial panel presents the Best in Test awards to 12 products we think are particularly innovative or useful," said Rick Nelson, chief editor of *Test & Measurement World*. "We selected the NI PXI-5922 flexible-resolution digitizer as a 2006 Best in Test product because of its user-defined resolution and proprietary linearization technique, which combine to make the digitizer a flexible general-purpose instrument for dynamic measurements."

Unlike traditional oscilloscopes and PC-based digitizers that have a fixed resolution for all sample rates, the NI PXI-5922 is a flexible-resolution digitizer with which engineers can trade sample rate for resolution through software. For example, at 15 MS/s, the module delivers 16 bits of resolution; by reducing the sample rate to 500 kS/s or less through a software call, the same module (without any hardware changes) delivers 24 bits of resolution. The NI PXI-5922 digitizer is the industry's highest dynamic range digitizer with noise density as low as -170 dBFS/Hz. With the increased dynamic range, engineers can analyze a signal that was previously lost in the noise floor of their instrumentation. This unprecedented dynamic range and flexible resolution are possible with the development of the Flex II analog-to-digital converter (ADC) technology, which uses an enhanced multibit delta-sigma converter and patented techniques for digital linearization.

"NI invests heavily in innovation with a strong R&D investment, resulting in high-quality, high-performance products that revolutionize the way engineers and scientists work," said Tim Dehne, NI senior vice president of R&D. "With the NI PXI-5922 flexible-resolution digitizer, engineers now can use a single digitizer to make a wide range of measurements spanning many different applications with the best performance and resolution available. Engineers can combine the digitizer with National Instruments LabVIEW software to create virtual instruments that often exceed the measurement performance of traditional instruments with similar functionality."

Nominations for the Best in Test competition were submitted by manufacturers and users of products introduced between Nov. 1, 2004 and Oct. 31, 2005. The magazine publishes its list of Best in Test finalists in December and asks readers to vote for the Test Product of the Year. Representatives from *Test & Measurement World* announce the results at the APEX tradeshow on Feb. 9 in Anaheim, Calif.

[About NI Modular Instruments](#)

NI offers essential technologies for test, which combine high-performance hardware, flexible software and innovative timing and synchronization technology for test and design applications. NI modular instruments offer accurate, high-throughput measurements from DC to 2.7 GHz. The product family includes:

- Digitizers/PC-based oscilloscopes (up to 24 bits, up to 250 MS/s)
- Signal generators (up to 16 bits, 200 MS/s)
- Digital waveform generator/analyzers (up to 400 Mb/s)
- Digital multimeters (up to 7½ digits)
- RF vector signal generators and analyzers (up to 2.7 GHz)
- Dynamic signal analyzers (up to 24 bits, 500 kS/s)

- Switching (multiplexers, matrices and general purpose)

About National Instruments

National Instruments (www.ni.com) is a technology pioneer and leader in [virtual instrumentation](#) – a revolutionary concept that has changed the way engineers and scientists in industry, government and academia approach measurement and automation. Leveraging PCs and commercial technologies, virtual instrumentation increases productivity and lowers costs for test, control and design applications through easy-to-integrate software, such as NI LabVIEW, and modular measurement and control hardware for PXI, PCI, PCI Express, USB and Ethernet. Headquartered in Austin, Texas, NI has more than 3,800 employees and direct operations in nearly 40 countries. In 2004, the company sold products to more than 25,000 companies in 90 countries. For the past six years, *FORTUNE* magazine has named NI one of the 100 best companies to work for in America.

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