

National Instruments Introduces PXI Express Quad-Core Controller Featuring Intel® Core™ i7 Processor

Embedded Controller Offers Double the Processing Power and Data Throughput Compared to Previous Models

NEWS RELEASE – May 17, 2010 – National Instruments today announced the NI PXIe-8133 high-performance embedded controller, which features the quad-core Intel® Core™ i7-820QM processor. The new controller is the first PXI Express quad-core controller in the industry. By combining the latest technology from Intel and advancements in the PCI Express bus, the new controller helps engineers greatly reduce test time with double the processing performance and data throughput compared to previous NI controllers.



The Intel Core i7-820QM processor offers a 1.73 GHz base clock frequency and uses Intel® Turbo Boost Technology to automatically increase the clock frequency based on the application type. For example, when running applications that generate only a single processing thread, the CPU places the three unused cores into an idle state and increases the active core's clock frequency from 1.73 GHz to 3.06 GHz. This feature removes the requirement that software applications need to be multithreaded to use the latest CPU developments. As a result, engineers and scientists can use the new NI controller to significantly reduce test times for applications that require intensive data processing such as RF protocol testing and hardware-in-the-loop (HIL) simulations.

The NI PXIe-8133 embedded controller uses the advancements of PCI Express technology to offer four x4 Gen 2 PCI Express links for interfacing to the PXI chassis backplane. Using the NI PXIe-8133 embedded controller with a PXI Express chassis, such as the NI PXIe-1082, doubles the total system data throughput from 4 GB/s to 8 GB/s. With this feature, engineers can simultaneously stream a larger set of I/O channels, giving them the ability to create larger and more complex data record-and-playback applications.

The NI PXIe-8133 embedded controller comes standard with 2 GB of DDR3-1333 MHz RAM and the option of Windows XP or Windows 7 32-bit OSs. For memory-intensive applications, engineers can upgrade to 8 GB of system RAM and the Windows 7 64-bit OS. The NI PXIe-8133 controller also is available with an extended temperature option and solid-state hard drives for harsh environments.

The NI PXIe-8133 embedded controller provides industry-leading support for the NI LabVIEW graphical development environment and the NI LabVIEW Real-Time Module. With the new controller, engineers can use LabVIEW to allocate multiple CPU cores for running time-critical test sections while delegating noncritical services to the remaining cores. By doing so, they can build sophisticated real-time and deterministic systems that take advantage of the increased performance and throughput of the new controller. The NI PXIe-8133 controller also supports the use of NI LabWindows™/CVI software, C/C++, and Microsoft Visual Studio .NET for test, measurement, and control applications.

For detailed information about the NI PXIe-8133 quad-core embedded controller, readers can visit www.ni.com/pxi.

About PXI

PCI eXtensions for Instrumentation (PXI) is an open specification governed by the PXI Systems Alliance (www.pxisa.org) that defines a rugged, CompactPCI-based platform optimized for test, measurement and control. Founded in 1997, the PXI specification is supported by more than 70 vendors offering more than 1,500 PXI products. PXI products are compatible with the CompactPCI and CompactPCI Express industrial computer standards and offer additional features such as environmental specifications, standardized software and built-in timing and synchronization.

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.

Pricing and Contact Information

NI PXIe-8133 embedded controller Priced* from \$5,649; €5,199; ¥707,000 Web: www.ni.com/pxi <i>*Prices are subject to change without notice.</i>	Contact Sales: www.ni.com/contact E-mail: info@ni.com
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