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# PRESS RELEASE

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## National Instruments and TU Dresden Collaborate on Fifth-Generation (5G) Mobile Network Research

**News Highlights:**

- National Instruments will work with the Technical University of Dresden (TU Dresden), Germany, to explore new technologies for 5G wireless systems.
- The 5G wireless lab will be one of the first in the world and the research results will be used to determine global standards for the next phase of wireless communications.
- While the research will include a variety of system concepts, there is a special focus on the evolution of orthogonal frequency-division multiplexing (OFDM) technology.

**AUSTIN, Texas – May 23, 2012** – National Instruments (Nasdaq: NATI) today announced its collaboration with TU Dresden on the exploration of new technologies for 5G wireless systems using NI LabVIEW system design software. Research on 5G wireless systems is in its infancy as 3.5G and 4G systems are still largely in development. TU Dresden previously pioneered 3G systems research in conjunction with the Vodafone Chair Mobile Communications Systems, which is dedicated to cutting-edge research in wireless communication technology. Working on industry-relevant challenges related to next-generation wireless systems, the program conducts thorough research with close industry cooperation.

**Quotes:**

“National Instruments RF and communications tools will enable us to design OFDM prototyping systems within a single software design flow,” said Professor Gerhard Fettweis, head of the Vodafone Chair Mobile Communications Systems. “With the modular NI PXI system, we can start with a SISO link and expand to MIMO links with limited modifications to the code, exceeding an 8x8 setup, as our research evolves.”

“TU Dresden is one of the world’s top research universities, and they’re leading the way in groundbreaking research to prototype next-generation wireless communication systems,” said Dr. James Truchard, president, CEO and cofounder of National Instruments. “We are proud to accelerate the development of future technologies that will ultimately impact anyone who uses a cellphone.”

Readers can learn more about the NI RF/communications lead user platform components by viewing these additional resources:

- NI PXI: [www.ni.com/pxi](http://www.ni.com/pxi)
- NI LabVIEW system design software: [www.ni.com/labview](http://www.ni.com/labview)
- NI LabVIEW DSP Design Module: [www.ni.com/dspdesign](http://www.ni.com/dspdesign)
- Ettus Research RF front ends: [www.ettus.com](http://www.ettus.com)

### **About National Instruments**

Since 1976, National Instruments ([www.ni.com](http://www.ni.com)) has equipped engineers and scientists with tools that accelerate productivity, innovation and discovery. NI's graphical system design approach to engineering provides an integrated software and hardware platform that speeds the development of any system needing measurement and control. The company's long-term vision and focus on improving society through its technology supports the success of its customers, employees, suppliers and shareholders.

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