Avnet Electronics Marketing Introduces the Xilinx Kintex-7 FPGA DSP Development Kit with High-Speed Analog

PHOENIX—January 31, 2012 -- Avnet Electronics announced the Xilinx Kintex-7 FPGA DSP Development Kit with High-Speed Analog, supporting Xilinx's 7 series Targeted Design Platforms. As the demand for faster processing of wideband analog signals continues to rise, this digital signal processing (DSP) development kit offers engineers a proven platform to test, design and deliver a wide range of DSP enabled end products. The cost of this kit is $3,995. Order entry is open now and shipments will begin in mid-March. For more details visit the Xilinx Kintex-7 FPGA DSP Development Kit information page.

Designed in collaboration with Xilinx, Inc., the Xilinx Kintex-7 FPGA DSP Development Kit is comprised of two critical elements. The first is the Xilinx Kintex-7 FPGA KC705 base board. The KC705 features high-performance, serial connectivity and advanced memory interfacing, with the flexibility of the 28nm Kintex-7 field programmable gate array (FPGA) that delivers maximum power efficiency and up to 1200 GMACs of DSP processing bandwidth. The second component of the Xilinx Kintex-7 FPGA DSP Development Kit is the 4DSP FMC 150, an integrated high-speed FPGA Mezzanine Card (FMC) that interfaces with signals from the outside world. Featuring dual-channel 800 MSPS 16-bit digital-to-analog converters (DACs) and dual-channel 250 MSPS 14-bit analog-to-digital converters (ADCs) from Texas Instruments (TI), the high-speed analog module delivers exceptional throughput when combined with the massively parallel processing bandwidth of the DSP48E1 arithmetic processing engines in the Kintex-7 FPGA.

Together, these components create a development kit that combines the performance of Xilinx's 7 series FPGA with the high-speed data conversion of the FMC 150, enabling designers to focus on their application at the beginning of the design process. DSP designers will benefit from intuitive MathWorks tools for system modeling, simulation and auto-code generation. Target applications include wireless communications infrastructure, aerospace and defense, test and measurement, and medical imaging.

Included in the Kintex-7 FPGA DSP Development Kit:

Xilinx Kintex-7 KC705 base board with Kintex-7 FPGA
4DSP FMC 150 High-Speed ADC/DAC FMC
12V power supply
Xilinx ISE Design Suite: System Edition
Targeted Reference Designs include RTL and MathWorks model-based design tool flows

"This latest DSP development kit from Avnet and Xilinx enables experienced and

new developers to FPGAs to quickly focus on the heart of their design that leverages signal processing capabilities of Kintex-7 FPGAs," said Tom Hill, senior manager DSP Platforms at Xilinx. "Because Kintex-7 devices deliver 2x price-performance improvement with 50 percent less power consumption than previous generation devices, developers can achieve massive levels of DSP performance with significantly lower power and cost."

"In the time-to-market race, every second counts," said Jim Beneke, vice president, global technical marketing, Avnet Electronics Marketing. "Avnet's technical team understands these pressures and has worked with Xilinx to create several design tutorials and application examples for the kit that shrink development time and allow our customers to focus entirely on innovation and design – moving technology from design to market faster."

View the Xilinx Kintex-7 FPGA DSP Development Kit Firsthand at DesignCon 2012

The Xilinx Kintex™-7 FPGA DSP Development Kit with High-Speed Analog is on display at the 2012 DesignCon event in San Jose, California, in the Xilinx, Inc. booth #732.

The group's website is located at www.em.avnet.com [1]

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