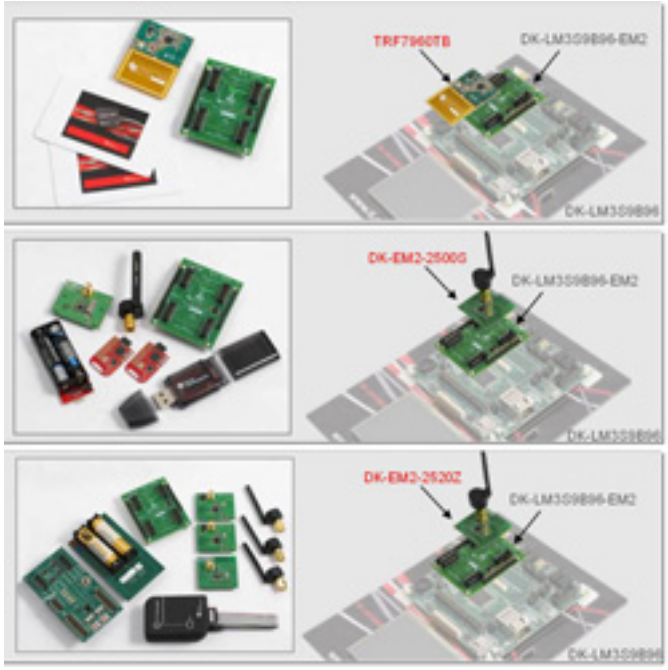
Development kits accelerate design of wireless networking applications



Merging the performance and ease-of-use of Stellaris ARM Cortex-M3-based microcontrollers (MCU) with leading wireless connectivity solutions, Texas Instruments Incorporated (TI) today launched three new wireless kits. The kits serve as modular extensions to TI's Stellaris DK-LM3S9B96 development kit to give engineers complete software and reference design solutions for adding RFID, low-power RF and ZigBee capabilities to designs. With this offering, TI is building on its broad portfolio of 16-bit, ultra-low-power MSP430-based wireless connectivity solutions, now providing 32-bit Stellaris MCU performance for execution of additional advanced connectivity and control functions. For more information, go to www.ti.com/wk-pr-lp and for a video overview of the kits, go to www.ti.com/wk-pr-v.

When coupled with the DK-LM3S9B96 development board, each kit includes all of the hardware and software needed to jumpstart design, and the quickstart application included in each kit allows developers to immediately evaluate working networks in 10 minutes or less. The performance and integration of Stellaris MCUs paired with TI's leading wireless solutions will help developers address the demand for extensible functionality in wireless networking applications, such as pre-pay options in smart metering, remote monitoring for home automation and backup systems for security, alarm and plant engineering.

Stellaris 13.56 MHz RFID Wireless Kit key features and benefits (DK-EM2-7960R)

· Complete RFID wireless system solution based on proven technology that is operable in harsh conditions and offers high levels of security via the contactless interface

· TI TRF7960TB HF RFID Reader Module target board, two ISO/IEC 14443A (MIFARE-1K) contactless smart cards, additional TRF7960-supported tags/inlays, and Stellaris DK-LM3S9B96-EM2 Expansion Board

· Example ISO/IEC 14443A application, firmware and documentation with support for additional protocols coming soon

· Multiple software sample applications, including RFID Classic 1K and 4K card reader, simultaneous dual- or single-card access, command-line access over serial port and more

Stellaris 2.4 GHz SimpliciTI Wireless Kit key features and benefits (DK-EM2-2500S)

· Complete 2.4 GHz wireless solution based on TI's open source SimpliciTI software tailored for small RF networks and designed for easy implementation and deployment out-of-the-box

· Includes multiple heterogeneous network nodes via TI's eZ430-RF2500 kit, one CC2500 evaluation module, and one Stellaris DK-LM3S9B96-EM2 Expansion Board

· Multi-platform software support, including access to binaries for low-power RF solutions from sub-1 GHz to 2.4 GHz

· Firmware, documentation and example SimpliciTI application supporting simple star network and point-to-point configuration

Stellaris ZigBee Networking Kit key features and benefits (DK-EM2-2520Z)

· Complete ZigBee wireless system solution featuring compliant Z-Stack 2.4 software and example coordinator application software to address the growing portfolio of IEEE 802.15.4 products and platforms

· Includes multiple heterogeneous network nodes with one CC2520 evaluation module, two battery operated sensor modules and two CC2530 evaluation modules pre-programmed with a temperature sensor application, along with one Stellaris DK-LM3S9B96-EM2 Expansion Board

· Example ZigBee application, StellarisWare software and documentation

Demonstrations of the kits can be seen at Embedded Systems Conference Boston September 21 – 22, 2010 at TI's Booth #901.

Pricing and availability

The Stellaris 13.56 MHz RFID Wireless Kit is priced at $99 US and available to order at www.ti.com/wk-7960r-pr-es [1]. The Stellaris 2.4 GHz SimpliciTI Wireless Kit is priced at $125 US and available to order at www.ti.com/wk-2500s-pr-es [2]. The Stellaris ZigBee Networking Kit is priced at $249 and available to order at

www.ti.com/wk-2520z-pr-es [3]. The Stellaris EM2 Expansion Board is priced at $39 US and available to order at www.ti.com/wk-em2-pr-es [4]. The DK-LM3S9B96, sold separately and priced at $425 US, is also immediately available to order at www.ti.com/wk-lm3s9b96-pr-es [5].

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Links:
[1] http://www.ti.com/wk-7960r-pr-es
[2] http://www.ti.com/wk-2500s-pr-es
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[5] http://www.ti.com/wk-lm3s9b96-pr-es