

LS Research announces TiWi-SL: The first industrial temp-rated Wi-Fi module designed for simple connectivity to the industry's most popular microcontroller platforms

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CEDARBURG, WI (January 18, 2012) – Building on more than three decades of wireless product development leadership and expanding their popular TiWi™ product line, LS Research (LSR) today announced TiWi-SL, a self-contained 802.11 transceiver module aimed at enabling easy wireless connectivity integration with any embedded system. The FCC/IC-certified and ETSI-tested TiWi-SL utilizes the SimpleLink™ Wi-Fi CC3000 solution, launched today by Texas Instruments Incorporated (TI). Beyond the TiWi-SL module, LSR also announced that it is providing design services to customers looking to build Wi-Fi-enabled designs with TI's SimpleLink Wi-Fi CC3000 solution.

LSR's new TiWi-SL module offers customers an ideal avenue to quickly and simply integrate Wi-Fi connectivity on the full range of low-cost, microcontrollers (MCU)-based applications, including those in home automation, health and fitness, security and other markets. The module's intelligent architecture is built in a way that moves nearly all functions required for Wi-Fi connections off of the host processor and onto the SimpleLink Wi-Fi CC3000 solution itself. This speeds the integration of Internet capabilities on the embedded processor and simplifies the design process, making it easier to add Wi-Fi to an application, even without previous RF expertise.

“The launch of TI's SimpleLink Wi-Fi CC3000 offering reflects a major milestone in our commitment – together with partners such as LSR – to solving the challenges associated with the integration and certification of Wi-Fi technology on embedded applications,” said Eran Sandhaus, general manager, emerging connectivity solutions, TI. “With a solid history of building modules and supporting all aspects of customer design around TI's connectivity solutions, LSR opens the door today to simplified, Wi-Fi-based designs with a full support model and product-ready TiWi-SL module.”

No display? No keyboard? Battery operated? No problem.

In addition to its robust performance and ease of use for hardware and software development, LSR's TiWi-SL enables “headless” Wi-Fi connectivity for end equipments that do not include displays and/or keyboards. This is made possible via TI's SimpleLink Wi-Fi CC3000 FirstTimeConfig, a unique feature that facilitates easy pairing to 802.11 access point without the need of a display or user interface. Moreover, the TiWi-SL consumes less than 5 uA in shutdown mode, extending battery life and reducing the need for maintenance and service over a product's lifetime.

Full design service and support

Ti's easy-to-use, scalable SimpleLink Wi-Fi CC3000 solution is complimented by LSR's turnkey hardware design services, in-house EMC certification services and software capabilities – all helpful tools aimed at providing customers with a full-service option to quickly bring Wi-Fi-based designs from the drawing board to production.

Additional features of LSR's TiWi-SL module

- Self-contained solution with Wi-Fi driver, security supplicant and TCP/IP stack all on-module
- FCC and IC Certified
- Compliant with ETSI standards EN 300 328 and EN 301 489
- Small host footprint consumes 0.5% of the resources as compared to traditional Wi-Fi, with as low as 6KB Flash, 3KB RAM software footprint
- Low MIPS/CPU overhead
- Extremely simple API, primarily BSD socket, with about 35 total APIs
- Quickly portable to any low-cost, low-power MCU platform
- Readily available today for customers of all sizes through the industry's key distribution channels

Tools, availability and pricing

Featured recently in demonstrations at this year's CES, the TiWi-SL and related development kits are now released to production and available for purchase. Begin development with practically any MCU using LSR's [TiWi-SL EM Board \(450-0089\)](#), available from LSR's authorized distribution partners, or with [TI's MSP430™ FRAM evaluation module kit](#) (EVK) for \$199. For additional ordering details, please visit www.lsr.com/tiwi-sl.

Find out more about LS Research's leadership in wireless product development:

- TiWi™ family of Wi-Fi modules: www.lsr.com/tiwi
- Wireless Wiki: wiki.lsr.com
- Applications Forum: forum.lsr.com
- EMC Certification Center: www.lsr.com/certification_center/
- Design Services: www.lsr.com/design_services/

For additional information on TiWi-SL, please see www.lsr.com/tiwi-sl.

About LS Research

LS Research is a premier wireless product development company specializing in RF design. Our design services include hardware and software development, antenna design, CAD and layout. We also provide EMC certification services, and sell both catalog and custom-developed RF modules. LSR is at the forefront of the latest wireless technologies including Wi-Fi, RFID, MICS, NFC, Bluetooth, BLE, ANT+, 802.15.4, and ZigBee. We have developed a long history of helping Fortune 500 companies and startups with new product development. LS Research is the only wireless product development firm with turnkey design service, modules, and an on-site IEC 17025-approved test facility for all your testing and certification needs, including EMC scanning, ETSI testing, and FCC and IC certification. Learn more at www.lsr.com.

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