Wireless ICs Simplify WiFi Integration

Providing a broad portfolio of easy-to-use wireless connectivity solutions, the SimpleLink Wi-Fi [1]CC3000 solution is a flagship device family aimed at expanding the “Internet of Things” with easy-to-implement, proven Wi-Fi technology. Texas Instruments unveiled the SimpleLink product family of easy-to-use wireless connectivity technologies for low-power, low-cost embedded applications. The SimpleLink family includes self-contained wireless processors, aimed at enabling easy integration with any embedded system.

The cornerstone offering in this new family is the new SimpleLink Wi-Fi CC3000 product: an easy-to-implement Wi-Fi solution that will lead the charge in expanding the world’s Internet of Things. The SimpleLink Wi-Fi CC3000 is a self-contained 802.11 network processor, making it ideal for simple and quick addition of Internet connectivity to any embedded application. For full details on the SimpleLink Wi-Fi CC3000 and all SimpleLink products, visit http://ti.com/simplelink [2].

“The number of devices shipping with Wi-Fi inside is forecast to expand to 2.6 billion annually by 2016, as the Internet of Things becomes an even more prolific part of consumer lifestyles and business operations,” said Filomena Berardi, connectivity market analyst, IMS Research. “TI’s new SimpleLink Wi-Fi CC3000 solution will take advantage of the mature Wi-Fi infrastructure, providing the optimal level of integration necessary to help drive this Wi-Fi expansion. TI is well positioned to bring Wi-Fi to low-power embedded devices, and turn traditional products into connected, interactive services.”

Features and benefits include:
-Self-contained 802.11 network processor
- TCP, UDP and IP on chip
- Consumes 0.5% of the resources as compared to traditional Wi-Fi, with as low as 6KB Flash0, 3KB RAM software footprint

- Standard software APIs
-Removes the need for networking “knowhow” when connecting applications to the Internet
-Runs on any low-cost microcontroller (MCU), without need for an operating system
-Saves money in applications where board space is not an issue
- Integrates within hours with any new or existing embedded application
-Self-contained, RF-certified module
-Allows for easy addition to the PCB without RF expertise
-Provides RF compliance for U.S., Canada and Europe (FCC, IC and ETSI)
-Support for TI’s FirstTimeConfig technology
-Facilitates easy pairing to 802.11 access point without the need of a display or user interface
- Ensures proven Wi-Fi interoperability
-Turnkey development kit based on TI’s MSP430 FRAM MCU [3], including forward compatibility with TI’s MCU portfolio
-Enables quick start with TI E2E™ Web support and online documentation, including comprehensive porting guides and sample code

“We are thrilled to announce the SimpleLink family – including the SimpleLink Wi-Fi CC3000 solution – as a prime example of TI’s commitment to fuel the next wave of connected devices and the Internet of Things,” said Eran Sandhaus, general manager, emerging connectivity solutions, TI. “The addition of Internet connectivity to everyday consumer, home and office devices creates new value propositions for our customers, introducing ways to better control these devices and share information through the cloud. The SimpleLink Wi-Fi CC3000 solution provides developers with the quickest and easiest avenue to meet these opportunities by adding best-in-class 802.11 Internet connectivity to their designs.”

The new SimpleLink Wi-Fi CC3000 is only one member of the new SimpleLink family of products, which provides a comprehensive range of technologies for various end applications, and reiterates TI’s commitment to solving the challenges associated with the design and certification of connected devices. Requiring little-to-no RF expertise, SimpleLink products include self-contained software stacks, and come backed by TI and third-party tools and support.

SimpleLink Wi-Fi CC3000 modules are sampling now and released to production.

The SimpleLink Wi-Fi CC3000 FRAM evaluation module kit (EMK) is available today

through
authorized distributors for $199.

For ordering details, please visit http://ti.com/simplelink [2].

The SimpleLink ZigBee CC2530ZNP [4], SimpleLink 6LoWPAN CC1180 [5] and SimpleLink ANT
CC2570/71 [6]solutions are all available today as well. Please visit the respective product pages for
ordering details.
Find out more about TI's wireless connectivity solutions
-TI's SimpleLink product family, including application notes, development tools, and TI E2E
support forum: www.ti.com/simplelink
-SimpleLink Wi-Fi CC3000 solution Wiki: www.ti.com/cc3000wiki [7]
- TI's wireless connectivity solutions: www.ti.com/wirelessconnectivity [8]
- TI E2E low-power RF and wireless connectivity community: www.ti.com/lprf-forum [9]

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