

Microchip Technology Achieves ZigBee(TM) Compliant Platform Status for the Combination of its MRF24J40 IEEE 802.15.4 Radio and PIC18 MCUs

Complete ZigBee Compliant Platform Includes Free Stack with Source Code, Development Tools, 2.4 GHz IEEE 802.15.4 Transceiver and High-End 8-bit MCUs

CHANDLER, Ariz .-- (BUSINESS WIRE)--

(NASDAQ:MCHP) -- Microchip Technology Inc., a leading provider of microcontroller and analog semiconductors, today announced that it has achieved the ZigBee(TM) Compliant Platform designation from the National Testing Service and the ZigBee Alliance, for the combination of its MRF24J40 IEEE 802.15.4 RF transceiver and the PIC18 family of highend 8-bit Flash microcontrollers. Additionally, Microchip offers compliant development tools and compliant source code for its royalty-free, no-cost license ZigBee(TM) protocol stack. The ZigBee Compliant Platform designation means that design engineers can use Microchip's semiconductors to build products that will interoperate over a ZigBee protocol wireless network.

According to In-Stat, the market for IEEE 802.15.4 wireless Personal Area Networking, via the ZigBee specification network layer and other proprietary protocols, could grow 200% by 2009--with annual shipments surpassing 150 million units in 2009. Microchip addresses the needs of this market with the only zero-cost-license and royalty-free ZigBee protocol stack, which provides a source-code format that allows designers to customize their product utilizing Microchip's broad portfolio of compliant PIC18 microcontrollers. Microchip's PIC18 high-performance microcontrollers offer a wide range of options--with 32 Kbytes to 128 Kbytes of Flash program memory in 28- to 100-pin packages.

Microchip's MRF24J40 transceiver is a highly integrated RF transceiver. This radio also offers low power consumption and performance that exceeds all IEEE 802.15.4 specifications, with full Media Access Controller (MAC) support and an Advanced Encryption Standard (AES) hardware encryption engine. In addition to supporting the ZigBee protocol, this transceiver supports Microchip's free MiWi(TM) protocol--a small-footprint protocol developed by Microchip for customers who do not need ZigBee protocol interoperability.

"Microchip's MRF24J40 IEEE 802.15.4 transceiver can be combined with any of our PIC18 microcontrollers to form a ZigBee Compliant Platform upon which customers can build interoperable, cost-optimized wireless networking products," said Ganesh Moorthy, Microchip's executive vice president. "Together with our free ZigBee protocol stack and world-class development tools, Microchip offers a complete solution for one of the fastest-growing technology market segments."

Development Tools

Microchip's IEEE 802.15.4 wireless networking development tools have been upgraded to ensure ZigBee protocol compliance. Available tools include the ZENA(TM) wireless network analyzer (part # DM183023), available now for \$129.99, which uses a simple graphical interface to configure the free Microchip ZigBee and MiWi protocol stacks. This enables customers to reduce the code size of the stacks by removing optional features; cuts development time by simplifying the interactions with the stacks; and allows customization of the stack to fit a particular need. Consisting of both hardware and software, the ZENA wireless network analyzer is an IEEE 802.15.4 protocol analyzer that is capable of decoding ZigBee and MiWi protocol packets--from the lowest layers to the top of the stack (including the security modules). The network-configuration display window allows users to see the traffic in real time, as it travels from one node to another. A session can also be saved to a file, to allow further analysis of all the network traffic.

The ZENA tool can be purchased separately, or as part of the PICDEM(TM) Z 2.4 GHz Demonstration Kit (part # DM163027-4), which is available now for \$269.99. The PICDEM Z is an easy-to-use evaluation and development platform for IEEE 802.15.4 application designers. The kit includes all of the hardware, software source code and printed circuit board (PCB) layout files needed to rapidly prototype wireless products. Additionally, an instructional application note is available from Microchip's online Wireless Networking Design Center at www.microchip.com/zigbee.

Pricing and Availability

Microchip's ZigBee Compliant Platform MRF24J40 IEEE 802.15.4 transceiver--based on the 1.0 Spec--is available now, in combination with the PIC18 microcontrollers, at www.microchipdirect.com. In 10,000-unit quantities, the MRF24J40 starts at \$2.99 each in Pb-free/RoHS-compliant, 40-pin, 6x6 mm QFN packages. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at www.microchip.com/zigbee.

Microchip Customer Support

Microchip is committed to supporting its customers by helping design engineers develop products faster and more efficiently. Customers can access four main service areas at www.microchip.com. The Support area provides a fast way to get questions answered; the Sample area offers free evaluation samples of any Microchip device; microchipDIRECT provides 24-hour pricing, ordering, inventory and credit for convenient purchasing of all Microchip devices and development tools; finally, the Training area educates customers through webinars, sign-ups for local seminar and workshop courses, and information about the annual MASTERs events held throughout the world.

About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at www.microchip.com.

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Transceiver Photo and Block Diagram available through editorial contact.

Source: Microchip Technology Inc.