# Development boards Integrate TCP/IP stack, enable Internet of Things via simple serial connection

Microchip Technology announced the integration of its Wi-Fi modules from the recent Roving Networks acquisition into its flexible, modular Explorer development systems supporting all of Microchip's 8, 16 and 32-bit PIC microcontrollers. The RN-131 and RN-171 PICtail/PICtail Plus daughter boards [1] are the first two products developed by Microchip based on Roving Networks modules. These modules use a simple serial interface to connect with any PIC microcontroller, and expand Microchip's wireless portfolio [2] with the industry's lowest power consumption along with an integrated TCP/IP stack in a certified Wi-Fi solution.

The Roving Networks RN-171 and RN-131 fully certified modules from Microchip are comprehensive networking solutions that include a true 802.11 b/g radio, baseband processor, TCP/IP stack and a host of networking application features. No external processor drivers are required, enabling Wi-Fi connectivity for 4, 8, 16 and 32-bit processors. This on-board-stack approach significantly reduces customers' integration time and development effort in a small form factor, while offering ultra-low power consumption (down to 4 µA in sleep, 35 mA in receive and 120 mA in transmit mode).

"Integrating these exceptional modules onto standard PICtail/PICtail Plus boards enables more than 70,000 Microchip customers to easily add Wi-Fi connectivity to the entire portfolio of PIC microcontrollers," said Steve Caldwell, director of

Microchip's Wireless Products Division. "Additionally, designers can add this connectivity without integrating a TCP/IP stack and while using standard development tools, which speeds time to market and reduces R&D resources."

Pricing & availability

The RN-131 PICtail Daughter Board [3] (Part # RN-131-PICtail) is available now for $44.95 each. Likewise, the RN-171 PICtail Daughter Board [4] (Part # RN-171-PICtail) is available now for $39.95 each.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at http://www.microchip.com/get/T074 [1].

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