

## **Powercast to Demonstrate RF-Powered, Battery-Free Wireless Sensor Module at Sensors Expo 2010**

Powercast Corporation, a technology leader in the field of RF-based wireless power and energy harvesting, will participate as an exhibitor at the Sensors Expo & Conference on June 7-9, 2010. At the event, Powercast will be demonstrating a battery-free wireless sensor module powered by RF energy and designed for extremely low power consumption. The sensor module provides temperature, light level, and humidity data to an access point, along with the received signal strength (RSSI) and the ID number of the Powercaster™ transmitter from which it is receiving power.

Powercast recently released the P1110 and P2110 Powerharvester™ Receivers, which are capable of converting radio waves in the range of 850-950 MHz into DC power. The demonstration sensor module uses the P2110 Powerharvester receiver to store the received energy into a capacitor, and then performs a voltage boost to supply the module components with a regulated voltage. Both the P1110 and P2110 enable a microcontroller to determine the signal strength of the received power, as well as to recover low-rate data encoded in the power broadcasted from the power transmitter.

Microchip Technology Inc. (NASDAQ: MCHP), a leading supplier of low power MCUs, provided software and hardware development support for both the sensor module and the access point. The devices use PIC® microcontrollers featuring XLP eXtreme Low Power technology, and the MRF24J40MA agency-certified IEEE 802.15.4™ radio module, resulting in high-performance, low power processing and communications. Microchip's MiWi™ P2P protocol provides the reliable, short-duration messaging required for the optimal performance of the harvesting system.

"We see great potential in the use of energy harvesting to power a growing network of low-power wireless devices," said Jason Tollefson, a product marketing manager at Microchip. "The sensor module developed with Powercast, using Microchip's XLP technology, is a unique and powerful demonstration of using radio waves as an on-demand source of energy for a battery-free wireless sensor."

Harry Ostaffe, Director of Marketing and Business Development for Powercast, will also be delivering two presentations during the event. During the pre-conference symposium on June 7, 2010, he will speak on "Design Techniques for RF Energy Harvesting Devices." During the main conference on June 8, 2010, he will also present "Power Out of Thin Air: Ambient RF Energy Harvesting for Wireless Sensors."

Powercast's exhibit and wireless sensor demonstration will be located at Booth 1022 in the exhibition hall.

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