

Microchip and Future Engineers Climb Mt. Kilimanjaro to Demo Extreme Low Power Tracking

Darren Wenn of Microchip Technology Inc. and Chris McAneny of Future Electronics engaged in a practical design exercise to take extremely low power tracking devices to the top of Africa's Mt. Kilimanjaro, during two separate climbs.

Microchip engineering intern Tim Moffat built the devices, which tracked the climbers' locations via GPS while continuously taking various measurements, such as temperature and barometric pressure, and operated for the duration of the climb on two Energizer Ultimate Lithium AA batteries. The devices are based on Microchip's 8-bit PIC18LF14K50 microcontroller, featuring the company's eXtreme Low Power technology.

During preparations for the climbs, Wenn, McAneny and Moffat launched a joint, limited-series blog on the EE Life Community site from EE Times, called "Ex-



Tim Moffat and Darren Wenn's flag-signing ceremony with Microchip's CEO, Steve Sanghi.

treme Low Power in an Extreme Location."

The goal of the blog is to provide engineers with an entertaining way to learn about designing a device that has to operate in extreme conditions with a limited battery-power budget. Additionally, McAneny raised money and awareness for the Everyman Male Cancer Charity, in honor of his son, who won a battle with testicular cancer.

The tracking devices are designed to run for more than two months on a single charge from two AA batteries. System components include a GPS receiver, a barometer and a temperature sensor, which are used to log altitude, latitude, longitude, UTC time, barometric pressure and temperature.

Now that the climbs are complete, visit their blog to find out how everything went: <http://www.microchip.com/get/3HLE>. ■



GE PARTNERS WITH ADVANCED TELEMETRY TO OFFER HOME BUILDERS A RESIDENTIAL ENERGY MANAGEMENT SYSTEM

Advanced Telemetry, developer of the EcoView smart energy management system for light commercial and residential applications has partnered with General Electric Co. to offer the option to energy-conscious home builders across North America.

GE is working with a select group of home builders and developers to design homes that can achieve at least a 20%

reduction in household energy usage, indoor water consumption and overall carbon emissions as compared to average new homes.

"EcoView Residential is an innovative solution addressing the rapidly growing smart grid industry, enabling homeowners to actively participate in taking the pressure off our overloaded grid infrastructure," said Gus Ezcurra, president of Advanced Telemetry. "This helps improve grid reliability and security, while reducing residential energy bills and environmental impacts."

In addition to EcoView, homes being built by the GE customers are equipped with an GE Energy Star appliances and Energy Smart compact fluorescent lighting package. When used in combination with the EcoView Residential energy monitoring touch screen, homeowners have the power

to measure and control utility use and better understand the true value of their home's energy-efficient features.



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When HoMedics, Inc. approached Teams