

Silicon Labs Giant Gecko MCU Enables Echo Smart Sports Watch to Go the Distance

Magellan Selects EFM32 Giant Gecko for the First Smartphone-Compatible Sports Watch Powered by Long-Lasting Replaceable Batteries

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LAS VEGAS--([BUSINESS WIRE](#))--[Silicon Labs](#) (NASDAQ: SLAB), a leader in high-performance, analog-intensive, mixed-signal ICs, today announced that Magellan, a leader of innovative GPS devices for vehicles, fitness, outdoor and mobile navigation, has chosen Silicon Labs' [EFM32™ Giant Gecko](#) microcontroller (MCU) as the energy-friendly processing platform for the [Magellan Echo smart sports watch](#). Named as a CES Innovations 2014 Design and Engineering Award Honoree, the Echo is the first “open” smart sports watch platform that enables application developers to augment their apps to be viewed on and controlled from the wrist.

In the emerging market of wearables and accessories, the award-winning Magellan Echo stands out for its innovative design. Its display and watch face can be customized to reflect various sports and fitness activities from running, biking, hiking to golfing while offering additional features such as the ability to remotely control music and sports apps from a smartphone. Unlike other smartwatches, the Echo leverages the smartphone's integrated GPS and communicates directly with Bluetooth Smart-enabled iPhone and Android smartphones. This streamlined design results in a lightweight sports watch with exceptionally long battery life that is far superior to competing devices.

The 32-bit Giant Gecko MCU, based on the ARM® Cortex®-M3 core, also plays a key role in the sport watch's energy efficiency, enabling the Echo to operate for up to 11 months on a single CR2032 coin-cell battery. The Magellan Echo design team achieved their ultra-low energy goals by optimizing the Giant Gecko MCU's five different energy modes and leveraging the MCU's low-energy sensor interface (LESENSE) and peripheral reflex system (PRS). These features enable energy-friendly and autonomous peripherals to handle timing and sensor control without involving the CPU.

“We designed the Echo to give sports and fitness enthusiasts direct access to their favorite training and entertainment apps while ensuring that the watch is easy to use and always on, with a long battery life and no need for recharging,” said Clark Weber, senior director of Fitness and Wearable Products at Magellan. “Since sophisticated multiple functions potentially require a lot of energy, we chose the EFM32 Giant Gecko and companion Simplicity Studio design tools as our 32-bit low-energy platform, enabling us to maximize battery life without compromising the end user experience or future functionality.”

[Simplicity Studio](#) is an easy-to-use graphical development environment for EFM32 Gecko MCU applications. Available to developers at no charge, Simplicity Studio provides one-click access to all the documentation, tools, and software and source code libraries needed to accelerate development time. Key elements of Simplicity Studio include the energyAware Profiler, a developer-friendly debugging tool for low-energy embedded development, and the energyAware Designer, a tool that eases the task of debugging I/O pin conflicts.

“The Magellan Echo smart sports watch exemplifies a rapidly growing class of energy-efficient, battery-powered wearables for which our energy-friendly EFM32 Gecko MCUs are exceptionally well-suited,” said Geir Førre, senior vice president and general manager of Silicon Labs' microcontroller products. “We applaud Magellan for introducing many new innovations with its award-winning Echo sports watch, such as on-the-go smartphone compatibility and an open platform approach to fitness application development.”

About Magellan

Headquartered in Santa Clara, CA, MiTAC Digital Corporation, manufacturer of the Magellan ([www.magellangps.com](#)) brand of portable GPS navigation devices, is a wholly-owned subsidiary of MiTAC International Corporation. Magellan, the industry leader for innovative GPS navigation devices since 1986, globally markets award-winning products in multiple categories including auto, RV, commercial, outdoor, fitness and mobile. Continuing its spirit of innovation, Magellan is developing new cloud-based technologies, wearables,

OEM and B-to-B solutions to meet the changing needs of today's consumers.

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Silicon Labs

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