IoT Hero Leads Chinese Sports and Fitness Market Using EFM32 MCU

Case Studies | 32-bit MCUs | Optical Sensors | Fitness Wearables

Customer's Needs
- Precise Data
- Energy Efficient
- Bluetooth Compatible

Results
- Data-to-Cloud
- Flexible Design
- Accelerated Development

Products
- EFM32™ Wonder Gecko MCU
- Si1144 Heart Rate Monitoring Solution

Fitcare Electronics Gives Fitness New Meaning with Smart Watches

Situation:
Wearable devices are becoming increasingly popular, and Yin Shaoxiang of Fitcare Electronics wanted to shift the focus of wearables to professional-level sports and fitness enthusiasts. Fitcare Electronics aims to bring precision and specialization to the wearable market so users can track everything from sleep quality to calorie consumption in order to perform at the top of their game.

Solution:
Because the founding members all have engineering backgrounds, they were able to tap into their extensive experience working in the development and production of wearables, as well as relationships they've developed over the years within the industry. They adopted the EFM32 Wonder Gecko MCU to give them the wide range of sensing technology needed while still providing them with a low-power solution along with the Si1144 HRM optical sensor module for high precision monitoring.

“Silicon Labs’ American team and also its local Chinese team gave us fast, professional technical support and helped us reduce power consumption and accelerate the product development process.”

Yin Shaoxiang | Manager of Fitcare Electronics

Benefit:
The EFM32 MCUs have highly differentiated Gecko technology that make them ideal for a long-lasting and durable wearable device. The sensor technology and easy configuration allows for a wide range of applications and added specialization. Additionally, data stored in the cloud allows for users to access their current and historical data with the push of a button.

EFM32 Wonder Gecko Fundamentals:

- 48 MHz ARM Cortex-M4 CPU
- Flexible Energy Management System with 5 Different Energy Modes
- Ultra-low Power Precision and Analog Peripherals
- Low-Power Sensor Interface