Potential Applications

- Wireless control/measurement
 - Wireless Sensors
 - Lighting
 - Building/Home Automation
 - Energy Efficiency
- Smart Phone App driven hardware control
 - iDevice and Android application support
 - iDevice and Android app integration into hardware designs
- Health & Fitness Monitoring
 - Motion and orientation measurement
 - Pedometer applications
 - Body worn monitors
 - Sensors, glucose, oximeter

Features

- Embedded microcontroller
- Bluetooth Smart v4.0 transceiver
- Hall effect sensor
- 3 axis accelerometer
- Built in Lithium ion battery charger
- Micro USB charger interface
- Multiple external interrupt interfaces
- I2C/SPI bus interface
- 4 Analog inputs
- 4 GPIO interface pins
- Differential/Single ended amplified sensor input
- On board LED indicators
- 2 MOSFET driven switchable battery/3.3V outputs
- 3.3V power and ground interfaces.

Description

The Advantage **Bluetooth Smart Core™** is a powerful development tool offering the user a wide range of potential applications, including iPhone and Android application integration into pre-existing or future hardware electronic designs. The Bluetooth Smart Low Energy Core (BLE) utilizes a proven embedded Bluetooth Low Energy module as a wireless link to cutting edge technology devices including Smartphones, Tablets, iPods, and other popular technology platforms. It's on-board array of analog, digital, and data interfaces allow the user to quickly and easily develop and add an app to virtually any product. The embedded PIC microcontroller allows the user the ability to develop firmware and customize the board features to their specific product needs. Its small size (50mm x 37mm) allows the Bluetooth Smart v4.0 Low Energy Core to be discreetly added into designs without jeopardizing mechanical size, look, and feel.

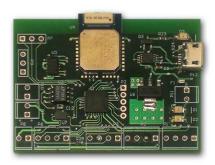


Figure 1: Advantage Bluetooth Smart v4.0 (BLE) Core™ Image (actual size)

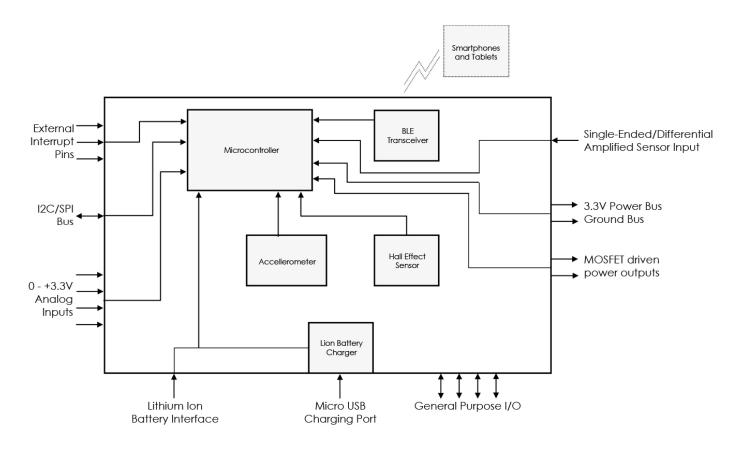


Figure 2: Bluetooth Low Energy Core™ Block Diagram



Our products are manufactured to meet WEEE/ROHS guidelines for lead free parts and electronic waste.

Any business that sells applicable electronic products, sub-assemblies or components directly to EU countries, or sells to resellers, distributors or integrators that in turn sell products to EU countries, is impacted if they utilize any of the restricted materials. WEEE compliance aims to encourage the design of electronic products with environmentally-safe recycling and recovery in mind. RoHS compliance dovetails into WEEE by reducing the amount of hazardous chemicals used in electronic manufacture.