EM MICROELECTRONIC

A COMPANY OF THE SWATCH GROUP

Bluetooth® Low-Energy Beacon Development Kit

General Description

The EMBC01DVK is a Bluetooth Low-Energy beacon development kit comes with 5 EMBC01 coin-cell beacons that can be modified in many unique ways to create a new product exclusive for your company. The DVK is suitable for development of sensor and proximity beacons, and comes with an adapter board and cable to interface to the Raisonance RLink programming tools. The RLink Standard and Pro versions are available separately.

The EM beacon firmware and programming scripts are available from requests through the website forums.emdeveloper.com. The EMBC01 PCB has easy to soldier to I/O pins for additional analog and digital (I2C) sensors. These can be used to prototype beacons with sensors. The plastic housing also allows for customization. Your company or product logo can be embedded into the top plastic with minimum tooling. Your custom beacon custom versions are intended for volume production. Minimum order quantity may vary from type to type of customization. For more information please contact our EM Sales Organization.

Your custom beacon may require re-certification of FCC/IC/CE compliance which can be easily accomplished with assistance from EM Microelectronic.

Customization Options

l Beacon parameters: beacon interval, power level

l Unique Identification Numbers: UUID, Major ID, Minor ID

l Sensor options, packet format

l Plastic housing color, logo, label, mounting accessories

Features

l Basic Firmware Options
· Your own UUID
· Specified Major and Minor ID Ranges
· Beacon Interval
· Transmit power level
· Packet Format

l Sensor Hardware Options
· Analog
  · Photo-diode
  · Visible light or Infra-red
· Digital
  · Accelerometer
  · Pressure
  · Temperature
  · Humidity

l Advanced Firmware Options
· Sensor Gating
  · Beacon only above or below a specified battery voltage
  · Beacon only above or below a specified temperature
  · Beacon only above or below a specified light level
· Switch activated beaconing
  · Beacon after a button press for a specified amount of time
  · Beacon after movement for a specified amount of time

l Housing
· Your own logo
· Your own color
· RFID tag
· Custom accessory
· Or choose no housing at all