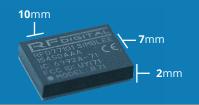
# Simblee™ by RF Digital

The IoT for Connecting Everyone and Everything - IoT4EE



**RFD77101 Simblee Module** 

At RF Digital, we believe that technology should be transparent and seamless, so we created Simblee™, an innovative new product line that will radically change how we interact with the physical world. With Simblee™, things and people can work in a cooperative, and familiar way. This product makes it possible for device developers to embed mobile apps in the device themselves, passing interface information over

Bluetooth™ Smart to a generic framework Simblee™ for Mobile app on a mobile device.

Like RFduino, Simblee can be programmed using Arduino IDE. Simblee™ extends the sketch format used by RFduino by also including mobile app generation on the same page allowing one convenient programing environment for both hardware

### Simblee™ Features & Benefits

- Interact with everything around you without having to download native apps
- Easily create IOS and Android apps without using Xcode or the Android SDK
- Hardware code and mobile are both on the same page of code
- Creative phone & tablet apps are as easy as blinking an LED
- Device functionality, app functionality, cloud functionality all in one session
- Create true end-to-end IoT products and accelerate your design time

## Simblee™ Specifications

- Bluetooth<sup>™</sup>Smart Stack
- Simblee interference immunity
- 3ms latency
- 10us accuracy (jitter)
- Physical range adjustable from a few inches to hundreds of feet
- Build iPhone and Android apps without Xcode or the Android SDK
- FCC, IC, CE, TELEC compliance approved
- Built-in AES encryption engine
- 7mm x 10mm x 2.2mm
- 29 GPIOs (flexible pin configuration)
- <3uA ULP with clock running (run for years on a coin cell)
- 600nA ULP Sleep mode
- 8mA TX @ 0dBm

- 12mA TX @ +4dBm
- 10mA RX
- -93dBm receiver sensitivity
- -55dBm to +4dBm TX power
- ARM Cortex M0 processor
- Flash code space available for user application (no need for external controller)
- 6x ADC inputs, 4x PWM outputs, 2x SPI master/ slave, 2x I2C, 1 x UART
- Temperature sensor
- · Battery/Supply voltage monitoring
- Onchip UART bootloader
- OTA programming with hardware OTA disable
- Integrated 16 MHz crystal and 32KHz precision crystal
- Integrated antenna
- Integrated shield



# Development and Evaluation Tools



**RFD77101 Simblee Module** 



Simblee Starter Kit includes:

1 - RFD77201 Simblee 7-Pin DIP

1 - RFD22121 USB Programming Shield

1 - RFD22122 RGB LED/Button Shield

RFD77801

# RFD77802 Simblee Project Kit includes:

- 2 RFD77203 Simblee 29-Pin GPIO Breakout
- 2 RFD22121 USB Programming shields
- 2 RFD22122 RGB LED/Button shields
- 2 RFD22126 2 x AAA Battery shields



#### RFD77803 Simblee Development Kit includes:

- 1 RFD77201 Simblee 7-pin DIP
- 2 RFD77203 Simblee 29-Pin GPIO Breakout
- 2 RFD22121 USB programming shields
- 3 RFD22122 RGB LED/Button shields
- 1 RFD22123 Servo shield
- 1 RFD22124 PCB USB programming shield
- 1 RFD22125 Prototyping shield
- 1 RFD22126 2x AAA Battery shield
- 1 RFD22127 1x AAABattery shield
- 1 RFD22128 CR2032 Battery shield
- 1 RFD22130 microSD shield
- 1 RFD22131 Dual Relay shield

#### **A La Carte Products**



RFD77201 Simblee

7-PIN DIP Adapter

OR



RFD77203 Simblee 29-Pin Breakout Board

**PLUS** 



RFD22121
Required USB
Programming Shield

## **Additional Accessory Shields**



RFD22122 RGB Button Shield



RFD22123 Servo Shield



RFD22124 PCB USB Shield



RFD22125 Proto Shield







RFD22128 CR2032 Battery Shield



RFD22130 MicroSD Shield



