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 programming 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™ 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

RFD77801
Simblee Starter Kit includes:
1 - RFD77201 Simblee 7-Pin DIP
1 - RFD22121 USB Programming Shield
1 - RFD22122 RGB LED/Button Shield

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
2 - 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 AAA Battery 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

RFD22126
2xAAA Battery Shield

RFD22127
1xAAA Battery Shield

RFD22128
CR2032 Battery Shield

RFD22130
MicroSD Shield

RFD22131
Dual Relay Shield