

QSG107: SLWSTK6101A Quick-Start Guide

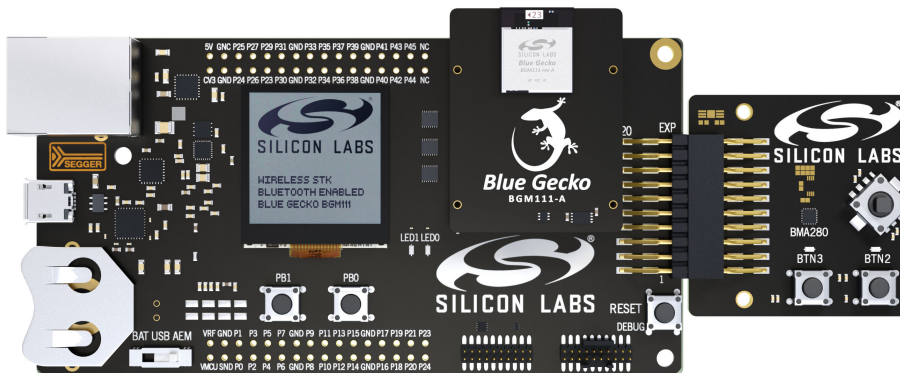


SLWSTK6101A Blue Gecko Bluetooth® Smart Module Wireless Starter Kit Quick-Start Guide

The Blue Gecko Bluetooth Smart Wireless Starter Kit is meant to help you evaluate the Silicon Labs' Blue Gecko Bluetooth Smart modules and get started with your own development.

The wireless starter kit also allows you to easily test the features of the Bluetooth Smart modules and try out the example applications provided by Silicon Labs.

This quick start guide provides instructions on how to test the built-in demo application pre-installed into the module of your DKBG wireless starter kit. The guide also points you to the additional software and documentation resources available for your device.



KIT FEATURES

- Supplied with BGM111 Blue Gecko Bluetooth Smart Module Radio Board BRD4300A
- Ethernet and USB connectivity
- SEGGER J-Link on-board debugger
- Debug Multiplexer supporting external hardware as well as radio board
- Silicon Labs' Si7021 Relative Humidity and Temperature sensor
- Ultra low power 128x128 pixel Memory LCD
- LEDs / Push buttons / Reset button
- 20-pin 2.54 mm header for expansion boards
- Breakout pads for direct access to all radio I/O pins
- Power sources includes USB and CR2032 coin cell holder

EXTENSION BOARD FEATURES

- Accelerometer
- Buttons and LEDs
- Joystick
- I2C expansion

ORDERING INFO

- SLWSTK6101A

KIT CONTENTS

- BGM111 Bluetooth Smart module radio board
- WSTK main board
- Expansion board
- USB cable
- CR2032 battery

SOFTWARE SUPPORT

- Blue Gecko Bluetooth Smart Software
- Blue Gecko Bluetooth Smart SDK
- Example applications for the kit
- iOS and Android applications
- PC tools

1. Preparing the Blue Gecko Bluetooth Smart Module Wireless Starter Kit

1. Connect the BGM111 Bluetooth Smart Module radio board to the WSTK main board, as shown below. Connect the WSTK via USB to a PC.
2. Turn the **Power switch** to **AEM** position.
3. Connect the WSTK via USB to a PC.

Note: You might be prompted to install the drivers for the WSTK main board, but this step can be skipped at this stage.

Verify:

1. That the blue LED next to the Ethernet connector turns on or starts blinking.
2. The display turns on and shows a Silicon Labs logo.

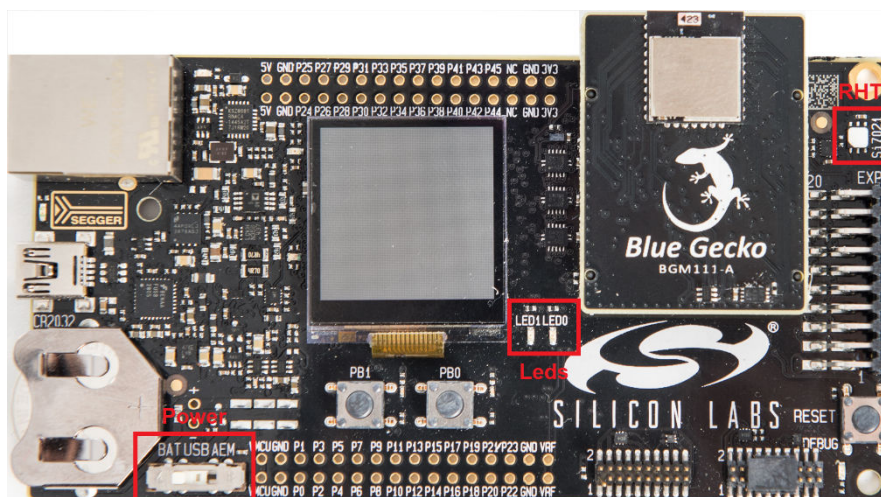


Figure 1.1. Preparing Blue Gecko Bluetooth Smart Module Wireless Starter Kit

2. Try the Built-in Bluetooth Smart Demo

Step 1: Download the **BLE Utility** for iPhone from Apple App Store or the **BLE Tool** for Android from Google Play Store.



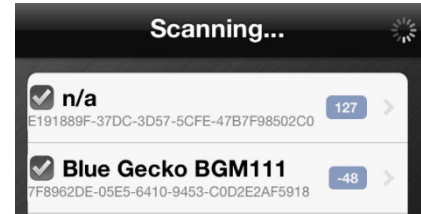
BLE Utility
Runware®



BLE Tool
Action+

Step 2: Open the application and search for Bluetooth Smart devices.

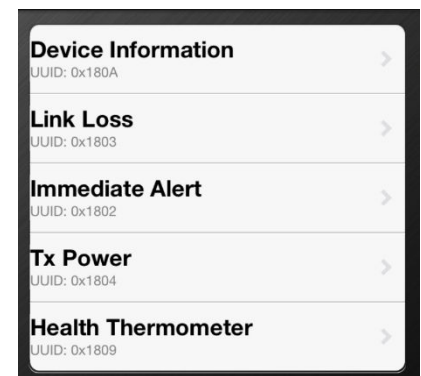
Step 3: Select the **Blue Gecko BGM111** device and connect it.



Step 4: Select the **Health Thermometer** service and the **Temperature Measurement** characteristic.

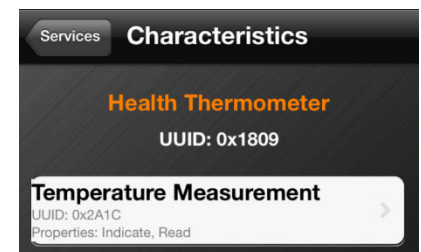
Step 5: Enable notification or read the value to see updated temperature value.

Step 6: To try out the proximity profile demo, select **Immediate Alert** service.



Step 7: Select the **Alert Level** characteristic.

Step 8: Write HEX value 01 to the characteristic to send alert to the WSTK and turn on the LED0.



Step 9: Write HEX value 00 to the characteristic to turn off the alert and LED0 on the WSTK.

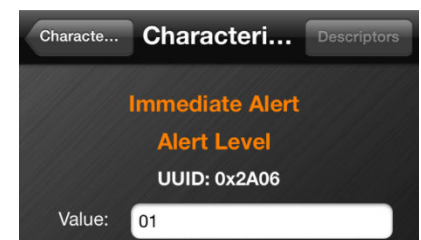
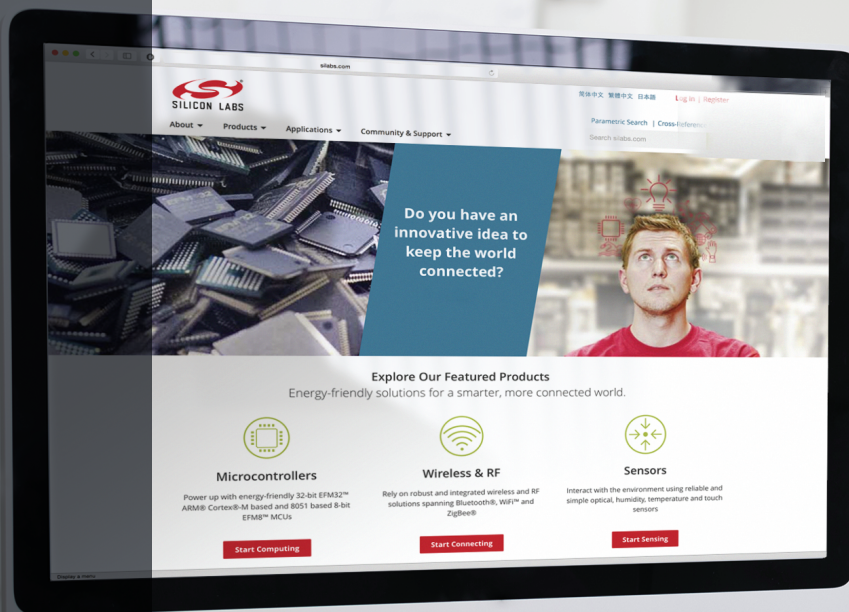


Figure 2.6. BLE Utility App for iPhone

3. Get Started with Your Own Development

To learn more about the Blue Gecko Bluetooth Smart Modules and to try other demos and examples:

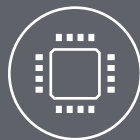
- Go to: www.silabs.com/bluetooth-getstarted.
- Create an account and log in.
- Download the **QSG108: Blue Gecko Bluetooth Smart Software Quick-Start Guide** to learn more about the Bluetooth Smart software, SDK, tools and other demo applications.
- Download the **UG122: Blue Gecko Bluetooth Smart Module Wireless Starter Kit User's Guide** to learn more about the wireless starter kit.
- Download the **Blue Gecko Bluetooth Smart Software Development Kit** and install it to start developing your own applications.



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