

# QSG164: EFM8BB1LCK Quick-Start Guide

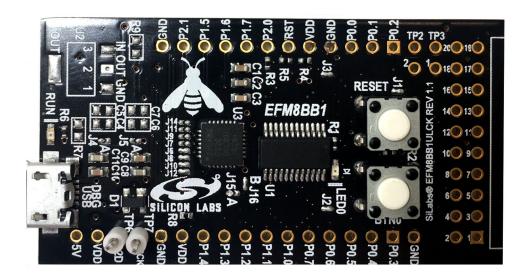


The EFM8BB1LCK is an excellent way to get started with the EFM8 Busy Bee microcontrollers.

The kit contains an on-board USB debugger and break-out headers for the device's GPIOs, making it easy to use as a starting point for application development.

#### KIT CONTENTS

- EFM8BB1 Busy Bee Low Cost Kit Board
- · Getting Started card

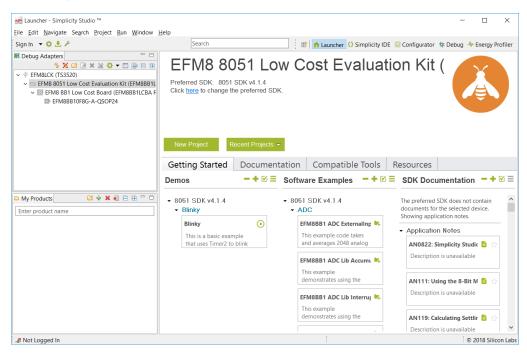


# 1. Getting Started

#### **Install Simplicity Studio**

Simplicity Studio is a free software suite needed to start developing your application. Download the latest version of Simplicity Studio from the Silicon Labs website:

http://www.silabs.com/simplicity-studio



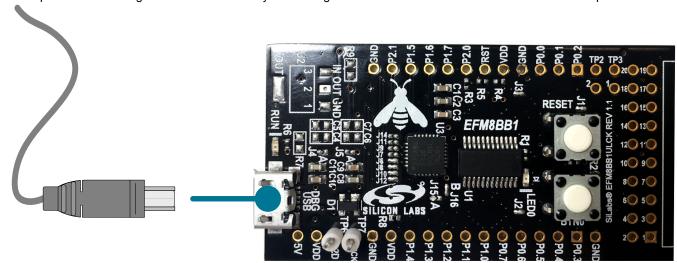
- 1. Download the software and follow the installation instructions.
- 2. The installation wizard automatically selects the recommended software for the connected device or selected product line. To adjust the installed software, click the [Update Software] button in the [Launcher] area. In the dialog that opens, select the desired software under the [SDKs] tab and tools under the [Tools] tab.
- 3. Finalize the installation.

## Preprogrammed demo

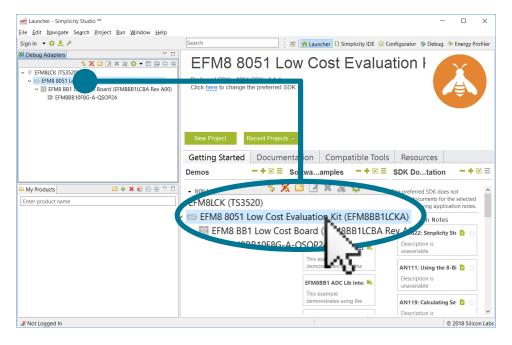
- 1. The EFM8BB1 Busy Bee Low Cost Kit has a pre-programmed demo that you can explore while Simplicity Studio is installing. This demo is the LED Pulse program.
- 2. To run the demo, connect a micro USB cable between the kit and computer.
- 3. This application pulses the LED on the kit using the a PWM output. Pressing BTN0 changes the PWM frequency, changing the rate at which the LED pulses.

# **Detect Your Device**

1. Provide power and a debug connection to the kit by connecting the a micro USB cable between the kit and a computer.



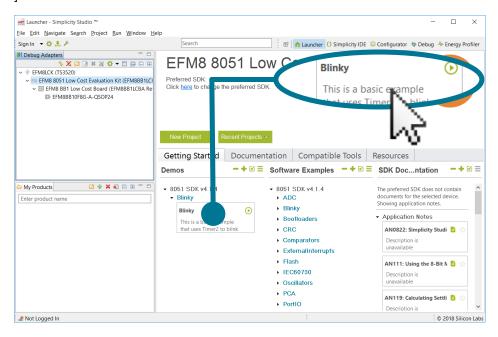
- 2. Click the [Refresh] button in the [Device] area. The board may take some time to appear due to driver installations for the debug adapter.
- 3. Once an item with the name [EFM8LCK] appears, expand by clicking the arrow, and verify that the detected devices matches the kit. Click the EFM8BB1LCK.
- 4. The [Launcher] view will now display a number of available resources, including pre-compiled demos, examples, documentation, tools, and other resources.



## 2. Resources

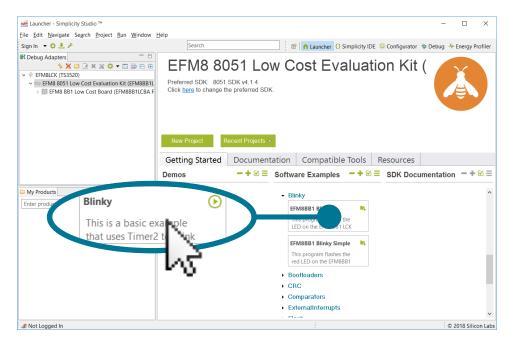
#### **Demos**

Demos are a quick and easy way to evaluate a device without compiling or debugging code. Demos can be accessed using the [Getting Started]>[Demos] area in the launcher.



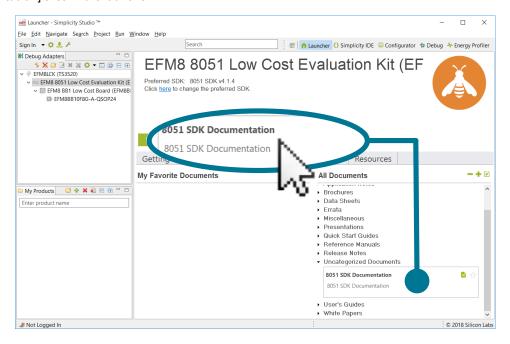
## **Software Examples**

Software examples can be imported, compiled, and downloaded using the [Getting Started]>[Software Examples] area in the launcher.



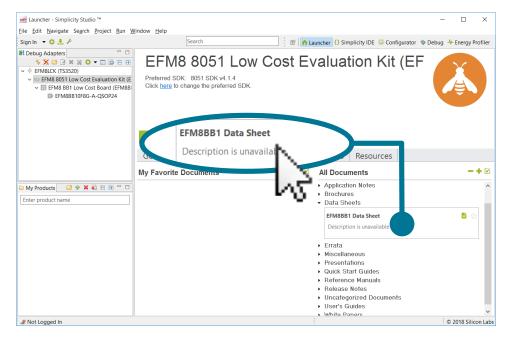
#### **Software Documentation**

Software documentation provides more information on the firmware libraries available for the selected device. Access these documents using the [**Documentation**] area in the launcher.



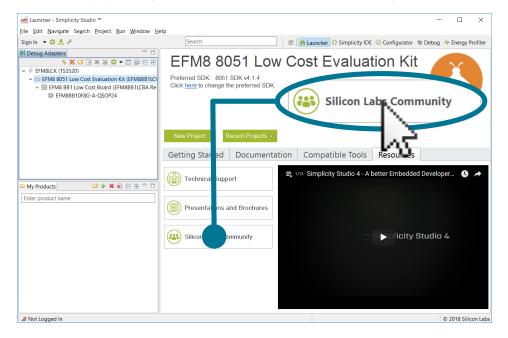
#### **Other Documentation**

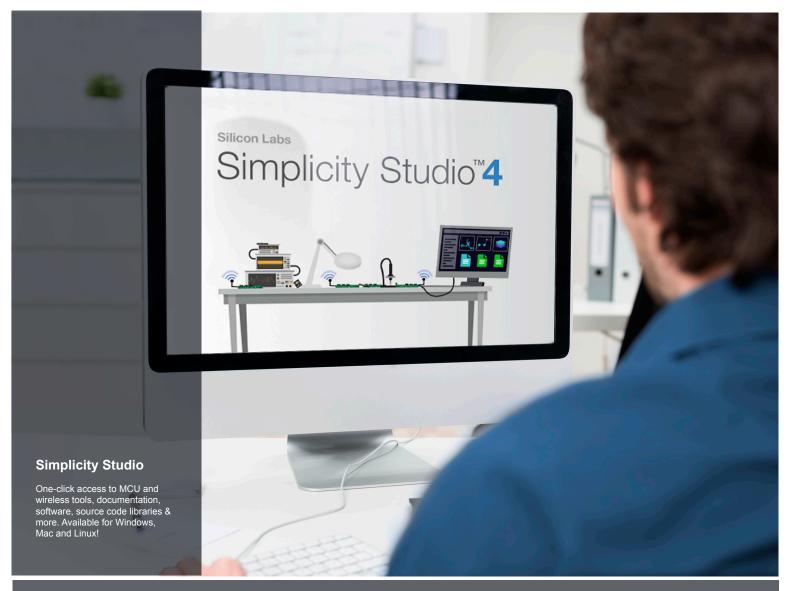
Kit documentation, application notes, and device documentation can be found using the [Documentation] area of the launcher.



## **Community and Support**

Have a question? Visit the community by clicking the [Resources]>[Silicon Labs Community] area of the launcher.







loT Portfolio www.silabs.com/loT



www.silabs.com/simplicity



Quality www.silabs.com/quality



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