

EFM32 Happy Gecko Family EFM32HG-SLSTK3400A Quick-Start Guide

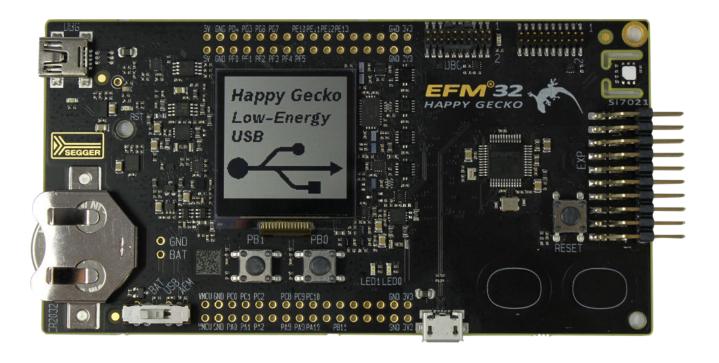


The EFM32HG-SLSTK3400A is an excellent starting point to get familiar with the EFM32 Happy Gecko microcontrollers.

The kit contains sensors and peripherals demonstrating some of the MCU's many capabilities. The kit can also serve as a starting point for application development.

KIT CONTENTS

- EFM32 Happy Gecko Starter Kit board
- 1 x mini USB cable
- 1 x micro USB cable
- 1 x CR2032 coin cell battery
- Getting Started card
- USB flash drive with Simplicity Studio



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

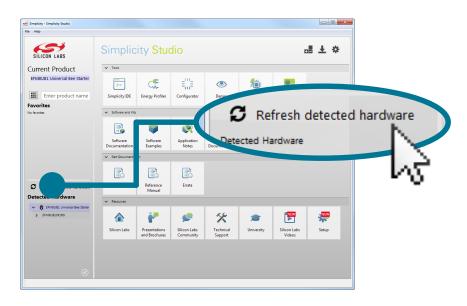


Note: The board comes pre-loaded with a default application, Space Invaders, to play with while the software downloads.

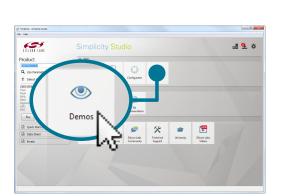
- · Set Up Your Kit
 - 1. Provide power to the board by connecting the DBG USB connector to the PC using the provided USB cable.
 - 2. Move the switch to the AEM position.

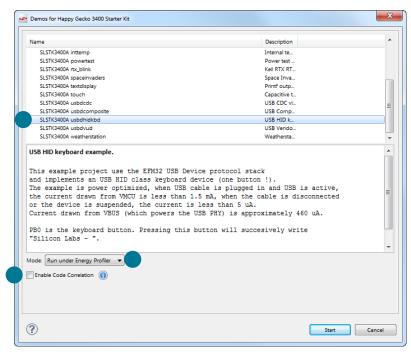


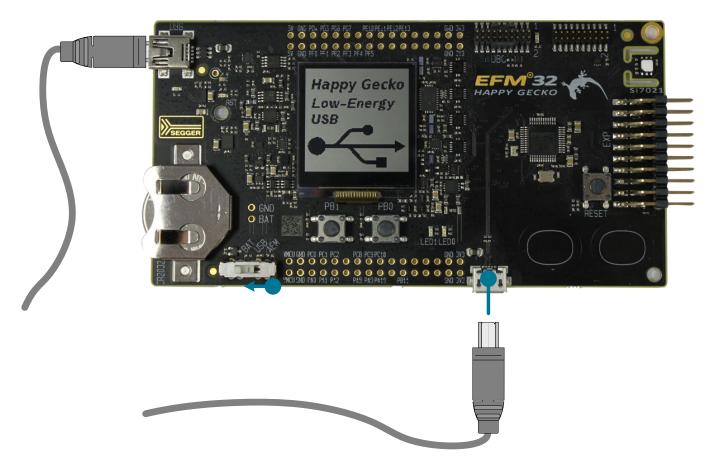
- · Detect Your Device
 - 1. Click [Refresh detected hardware]. The board may take some time to appear due to driver installations for the debug adapter.
 - 2. Click the EFM32 Happy Gecko Starter Kit Board. This will verify that the installation was successful, identify the MCU on the kit hardware, and automatically configure the software tools for use with your device.



- · Run the USB Low Energy Mode Keyboard Demo
 - 1. Click the [Demos] tile to load the available demos.
 - 2. Select [SLSTK3400A usbdhidkbd], ensure [Run with Energy Profiler] is selected under [Mode] with [Enable Code Correlation] unchecked, and click [Start] to download and run the demo.
 - 3. Connect the device USB connector to the PC and move the power switch to the USB position. **Note:** The switch should be placed in the AEM position to reprogram the device.
 - 4. Pressing [**PB0**] will type on the keyboard, and pressing [**PB1**] will switch between normal USB and USB Low Energy Mode. The energy consumption in these modes can be viewed using Energy Profiler.







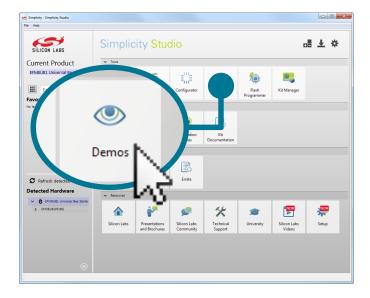
· Utilize the Available Resources

The next section includes additional resources available for the kit, including software examples, documentation, and application notes.

2. Resources

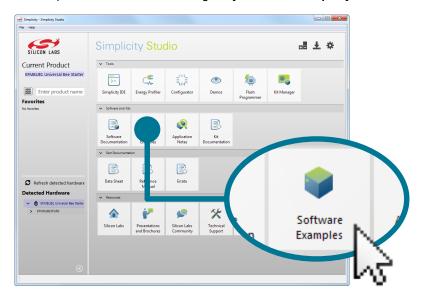
Demos

Demos are a quick and easy way to evaluate a device without compiling or debugging code. Demos can be accessed using the [**Demos**] tile.



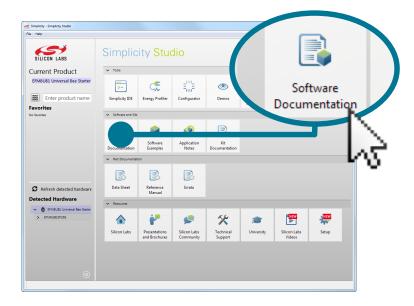
Software Examples

Software examples can be imported, compiled, and downloaded using the [Software Examples] tile.



Software Documentation

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



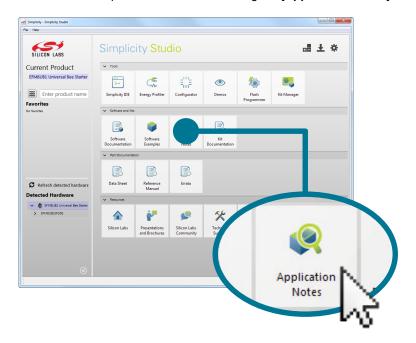
Kit Documentation and User's Guide

Kit documentation like the schematic and detailed board description can be found using the [Kit Documentation] tile.



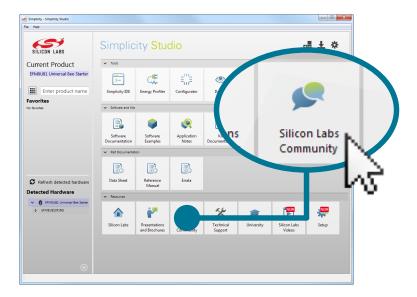
Application Notes

Application Notes on peripherals and other various topics can be accessed using the [Application Notes] tile.



Community and Support

Have a question? Visit the community by clicking the [Community] tile.













Disclaimer

Silicon Laboratories intends to provide customers with the latest, accurate, and in-depth documentation of all peripherals and modules available for system and software implementers using or intending to use the Silicon Laboratories products. Characterization data, available modules and peripherals, memory sizes and memory addresses refer to each specific device, and "Typical" parameters provided can and do vary in different applications. Application examples described herein are for illustrative purposes only. Silicon Laboratories reserves the right to make changes without further notice and limitation to product information, specifications, and descriptions herein, and does not give warranties as to the accuracy or completeness of the included information. Silicon Laboratories shall have no liability for the consequences of use of the information supplied herein. This document does not imply or express copyright licenses granted hereunder to design or fabricate any integrated circuits. The products must not be used within any Life Support System without the specific written consent of Silicon Laboratories. A "Life Support System" is any product or system intended to support or sustain life and/or health, which, if it fails, can be reasonably expected to result in significant personal injury or death. Silicon Laboratories products are generally not intended for military applications. Silicon Laboratories products shall under no circumstances be used in weapons of mass destruction including (but not limited to) nuclear, biological or chemical weapons, or missiles capable of delivering such weapons.

Trademark Information

Silicon Laboratories Inc., Silicon Laboratories, Silicon Labs, SiLabs and the Silicon Labs logo, CMEMS®, EFM, EFM32, EFR, Energy Micro, Energy Micro logo and combinations thereof, "the world's most energy friendly microcontrollers", Ember®, EZLink®, EZMac®, EZRadio®, EZRadioPRO®, DSPLL®, ISOmodem ®, Precision32®, ProSLIC®, SiPHY®, USBXpress® and others are trademarks or registered trademarks of Silicon Laboratories Inc. ARM, CORTEX, Cortex-M3 and THUMB are trademarks or registered trademarks of ARM Holdings. Keil is a registered trademark of ARM Limited. All other products or brand names mentioned herein are trademarks of their respective holders.



Silicon Laboratories Inc. 400 West Cesar Chavez Austin, TX 78701 USA