



# Apple® HomeKit® for *Bluetooth*® SDK 2.2.1.0 GA

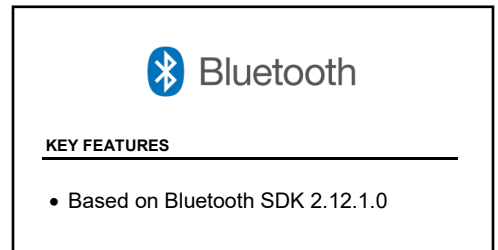
## 19Q2 Gecko SDK Suite

### July 19, 2019

---

HomeKit SDK, an extension SDK built upon the standard Silicon Labs Bluetooth SDK, offers developers the ability to use Bluetooth with Apple's proprietary smart-home appliance framework.

The HomeKit SDK extension is only available to developers who are members of the Apple MFi Program and supports both Apple's hardware encryption processor and standalone software authentication methods.



These release notes cover SDK version(s):

- 2.2.1.0 released on July 19, 2019
- 2.2.0.0 released on June 7, 2019

## Compatibility and Use Notices

If you are new to the Silicon Labs Apple HomeKit for *Bluetooth*® SDK, see [Using This Release](#).

### Compatible Compilers:

IAR Embedded Workbench for ARM (IAR-EWARM) version 8.30.1

- Using wine to build with the `IarBuild.exe` command line utility or IAR Embedded Workbench GUI on macOS or Linux could result in incorrect files being used due to collisions in wine's hashing algorithm for generating short file names.
- Customers on macOS or Linux are advised not to build with IAR outside of Simplicity Studio. Customers who do should carefully verify that the correct files are being used.

GCC (The GNU Compiler Collection) version 7.2.1, provided with Simplicity Studio.

**Contents**

- 1 New Items ..... 3
  - 1.1 New Features ..... 3
  - 1.2 New APIs ..... 3
- 2 Improvements ..... 4
  - 2.1 Changed APIs ..... 4
- 3 Fixed Issues ..... 5
- 4 Known Issues in the Current Release ..... 6
- 5 Deprecated Items ..... 7
- 6 Removed Items ..... 8
- 7 Using This Release ..... 9
  - 7.1 Installation and Use ..... 9
  - 7.2 Support ..... 9
- 8 Legal ..... 10
  - 8.1 Disclaimer ..... 10
  - 8.2 Trademark Information ..... 10

# 1 New Items

## 1.1 New Features

For the standard Bluetooth SDK New Features list, please refer to the [Bluetooth Software 2.12.1.0 Release Notes](#).

### Added in release 2.2.0.0

ID #	Description
3580	HomeKit library now supports NVM3 non-volatile memory solution with EFR32[B M]G2x devices.
4746	HomeKit library and example applications now support also EFR32[B M]G2x devices.
5664	Testing of the software has been done against updated R13 test specification; HomeKit Certification Test Cases R8.2, HomeKit Accessory Validator (HAV) v1.0, HomeKit Certification Assistant (HCA) v2.14, and HomeKit Accessory Tester (HAT) v5.3.
5780, 6170, 6292	Documentation updates related OTA testing procedure, authentication hardware and new features in general.
6161	HomeKit Setup Code tool updates.

For the standard Bluetooth SDK New Features list, please refer to the [Bluetooth Software 2.12.0.0 Release Notes](#).

## 1.2 New APIs

For additional documentation about Bluetooth APIs, please refer to the [Bluetooth Software API Reference Manual](#). HomeKit-specific API extensions are described in the *Bluetooth*<sup>®</sup> Software API Reference Manual: Apple HomeKit API Extensions.

## 2 Improvements

### 2.1 Changed APIs

For additional documentation about Bluetooth APIs, please refer to the [Bluetooth Software API Reference Manual](#). HomeKit specific API extensions are described in the Bluetooth® Software API Reference Manual: Apple HomeKit API Extensions.

#### **Changed in release 2.2.0.0**

ID #	Description
5253	Now both <code>homekit_gecko_init</code> and <code>ncp_homekit_gecko_init</code> return <code>bg_err_success</code> code or proper error code (in case <code>gecko_stack_init</code> was not successful).

### 3 Fixed Issues

#### **Fixed in release 2.2.1.0**

For the standard Bluetooth SDK Fixed Issues list, please refer to the [Bluetooth Software 2.12.1.0 Release Notes](#).

ID #	Description
6160	TCB016 and TCH083 fail against HCA v2.14
6367	HomeKit example app has been fixed so that HAV004 no longer fails
6431	Broadcast advertising data is now properly cleared in persistent storage after factory reset

#### **Fixed in release 2.2.0.0**

For the standard Bluetooth SDK Fixed Issues list, please refer to the [Bluetooth Software 2.12.0.0 Release Notes](#).

ID #	Description
5266, 5779	All usage of the deprecated Bluetooth BGAPI commands was replaced with updated BGAPI commands in HomeKit example applications. This also fixes NCP host example application getting stuck when entering to OTA mode.
6153	TCB011 fails against HCA v2.14.

## 4 Known Issues in the Current Release

For the standard Bluetooth SDK Known Issues list, please refer to the [Bluetooth Software 2.12.1.0 Release Notes](#).

Issues in bold were added since the previous release.

ID #	Description	Workaround
6365	TCH085 fails against HAT v5.3 for accessories supporting SW authentication method.	None. The issues have been reported to Apple, but not yet fixed in the test tools.
6366	HAV002 fails.	None. The issue has been reported to Apple, but not yet fixed in the test tools.
6368	HAV039 fails.	None. The issue has been reported to Apple, but not yet fixed in the test tools.

## 5 Deprecated Items

### Deprecated in release 2.2.0.0

As of June 2019 Simplicity Studio 3.0 is being deprecated. All access will be removed from Silicon Labs' website at the end of 2019. For the standard Bluetooth SDK Deprecated Items list, please refer to the [Bluetooth Software 2.12.0.0 Release Notes](#).

## 6 Removed Items

None



## 7 Using This Release

This release contains the following

- Silicon Labs Apple HomeKit for Bluetooth library
- Example applications
- Documentation

For more information about the Apple HomeKit for Bluetooth SDK see *AN1037: Apple® HomeKit Over Bluetooth®*. If you are a first time user for Bluetooth in general, see [QSG139: Getting Started with Bluetooth® Software Development](#).

### 7.1 Installation and Use

A registered account at Silicon Labs is required in order to download the SDK. You can register at [https://siliconlabs.force.com/apex/SL\\_CommunitiesSelfReg?form=short](https://siliconlabs.force.com/apex/SL_CommunitiesSelfReg?form=short).

The Apple HomeKit for Bluetooth SDK is only available for Apple MFI licensees and you need to request it separately. To get started with the HomeKit software development, please refer to <https://www.silabs.com/products/development-tools/software/bluetooth-software-for-apple-homekit>.

Use the Apple HomeKit for Bluetooth SDK with the Silicon Labs Simplicity Studio V4 development platform. Simplicity Studio ensures that most software and tool compatibilities are managed correctly. Install software and board firmware updates promptly when you are notified.

Documentation specific to the SDK version is installed with the SDK. Additional information can often be found in the [knowledge base articles \(KBAs\)](#).

### 7.2 Support

Development Kit customers are eligible for training and technical support. You can use the [Silicon Labs Bluetooth LE web page](#) to obtain information about all Silicon Labs Bluetooth products and services, and to sign up for product support.

You can contact Silicon Laboratories support at <http://www.silabs.com/support>.

## 8 Legal

### 8.1 Disclaimer

Silicon Labs 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 Labs 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 Labs 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 Labs 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 are not designed or authorized to be used within any Life Support System. 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 Labs products are not designed or authorized for military applications. Silicon Labs 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.

### 8.2 Trademark Information

Silicon Laboratories Inc.®, Silicon Laboratories®, Silicon Labs®, SiLabs® and the Silicon Labs logo®, Bluegiga®, Bluegiga Logo®, Clockbuilder®, CMEMS®, DSPLL®, EFM®, EFM32®, EFR, Ember®, Energy Micro, Energy Micro logo and combinations thereof, "the world's most energy friendly microcontrollers", Ember®, EZLink®, EZRadio®, EZRadioPRO®, Gecko®, ISOModem®, Micrium, Precision32®, ProSLIC®, Simplicity Studio®, SiPHY®, Telegesis, the Telegesis Logo®, USBXpress®, Zentri, Z-Wave and others are trademarks or registered trademarks of Silicon Labs.

ARM, CORTEX, Cortex-M3 and THUMB are trademarks or registered trademarks of ARM Holdings.

Keil is a registered trademark of ARM Limited.

Apple and HomeKit are registered trademarks of Apple Inc.

All other products or brand names mentioned herein are trademarks of their respective holders.