

# SILICON LABS 32-bit MCU SDK 6.5.0.0 GA Gecko SDK Suite Instruction Manual

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## 32-bit MCU SDK 6.5.0.0 GA Gecko SDK Suite

### Product Information

The 32-bit MCU SDK 6.5.0.0 GA is a software development kit that provides sample applications for EFM32 and EZR32 development kits. It is compatible with various compilers and includes Gecko Platform components such as EMLIB, EMDRV, RAIL Library, NVM3, and mbedTLS. The SDK release notes provide information about security updates and notices.

### Key Features

- Provides sample applications for EFM32 and EZR32 development kits
- Compatible with various compilers

- Includes Gecko Platform components such as EMLIB, EMDRV, RAIL Library, NVM3, and mbedTLS
- Provides information about security updates and notices

## Product Usage Instructions

To use the 32-bit MCU SDK 6.5.0.0 GA, follow these steps:

1. Ensure that your development kit is compatible with the SDK.
2. Download and install the SDK from the Silicon Labs website or clone the latest version from GitHub.
3. Choose a compatible compiler to use with the SDK.
4. Refer to the SDK release notes for information about security updates and notices.
5. Use the provided sample applications to develop your own applications.

To subscribe to Security Advisories, log in to the Silicon Labs customer portal and select Account Home. From there, click HOME to go to the portal home page and then click the Manage Notifications tile. Make sure that 'Software/Security Advisory Notices & Product Change Notices (PCNs)' is checked, and that you are subscribed at minimum for your platform and protocol. Click Save to save any changes.

## Compatibility and Use Notices

For information about security updates and notices, see the Security chapter of the Gecko Platform Release notes installed with this SDK or on the Silicon Labs Release Notes page. Silicon Labs also strongly recommends that you subscribe to Security Advisories for up-to-date information. For instructions, or if you are new to the 32-bit MCU SDK, see Using This Release.

### Compatible Compilers:

This version of the 32-bit MCU SDK is compatible with the following tool chains.

- IAR Embedded Workbench for ARM (IAR-EWARM) version 9.20.40
- GCC (The GNU Compiler Collection) version 10.3-2021.10 (provided with Simplicity Studio)

## New Items

Added support for the following OPN:

- BRD2001B
- BRD2010B
- BRD2012B
- BRD2100B
- BRD2503B
- BRD2506A

## Using This Release

The 32-bit MCU SDK v 64.x is installed as part of Gecko SDK (GSDK) 4.2.x, the suite of Silicon Labs SDKs. To quickly get started with the GSDK, install Simplicity Studio 5, which will set up your development environment and walk you through GSDK installation. Simplicity Studio 5 includes everything needed for IoT product development with Silicon Labs devices, including a resource and project launcher, software configuration tools, full IDE with

GNU toolchain, and analysis tools. Installation instructions are provided in the online Simplicity Studio 5 User's Guide.

Alternatively, Gecko SDK may be installed manually by downloading or cloning the latest from GitHub. See [https://github.com/SiliconLabs/gecko\\_sdk](https://github.com/SiliconLabs/gecko_sdk) for more information.

This release contains the following.

- EFM32 and EZR32 sample applications

This SDK depends on Gecko Platform. The Gecko Platform code provides functionality that supports protocol plugins and APIs in the form of drivers and other lower layer features that interact directly with Silicon Labs chips and modules. Gecko Platform components include EMLIB, EMDRV, RAIL Library, NVM3, and mbedTLS. Gecko Platform release notes are available through Simplicity Studio's Launcher Perspective.

The GSDK default install location has changed with Simplicity Studio 5.3.

- **Windows:** C:\Users<NAME>\SimplicityStudioSDKs\gecko\_sdk
- **MacOS:** /Users/<NAME>/SimplicityStudio/SDKs/gecko\_sdk

## Security Information

### Security Advisories

To subscribe to Security Advisories, log in to the Silicon Labs customer portal, then select Account Home. Click HOME to go to the portal home page and then click the Manage Notifications tile. Make sure that 'Software/Security Advisory Notices & Product Change Notices (PCNs)' is checked, and that you are subscribed at minimum for your platform and protocol. Click Save to save any changes.

The screenshot shows the 'Update Preference' page in the Silicon Labs customer portal. The page has a header with the Silicon Labs logo, a search bar, and a user profile. The main content area is titled 'Update Preference' and contains two sections: 'WHAT EMAILS WOULD YOU LIKE TO RECEIVE?' and 'SELECT THE PRODUCTS TO RECEIVE UPDATES FOR'.

**WHAT EMAILS WOULD YOU LIKE TO RECEIVE?**

- Newsletters**
  - ☐ Community Monthly Newsletter
  - ☐ Sales Newsletter
  - ☐ Micrium Newsletter
- Product Specific Notifications**
  - ☐ Product Information and Newsletter
  - ☒ Software/Security Advisory Notices & Product Change Notices (PCNs)
  - ☐ Technical Document Updates (Release Notes, Data Sheets, etc.)

**SELECT THE PRODUCTS TO RECEIVE UPDATES FOR**

<input type="checkbox"/> Select/Unselect All	
<input type="checkbox"/> Audio and Radio	<input type="checkbox"/> Power over Ethernet
<input type="checkbox"/> Interface	<input type="checkbox"/> Sensors
<input type="checkbox"/> Isolation	<input type="checkbox"/> TV and Video
<input type="checkbox"/> Modems and DAAs	<input type="checkbox"/> Voice
<input type="checkbox"/> Microcontrollers	<input type="checkbox"/> Wireless
<input type="checkbox"/> 8-bit MCUs	<input type="checkbox"/> Bluetooth Classic
<input checked="" type="checkbox"/> 32-bit MCUs	<input type="checkbox"/> Bluetooth Low Energy
<input type="checkbox"/> Timing	<input checked="" type="checkbox"/> Proprietary
<input type="checkbox"/> Clocks	<input type="checkbox"/> Wi-Fi
<input type="checkbox"/> Buffers	<input type="checkbox"/> ZigBee and Thread
<input type="checkbox"/> Oscillators	<input type="checkbox"/> Z-Wave
<input type="checkbox"/> CDR and PHY	

Development Kit customers are eligible for training and technical support. Use the Silicon Laboratories web site [www.silabs.com/products/mcu/32-bit](http://www.silabs.com/products/mcu/32-bit) to obtain information about all EFM32 Microcontroller products and services, and to sign up for product support. You can contact Silicon Laboratories support at [www.silabs.com/support](http://www.silabs.com/support)

## Simplicity Studio

One-click access to MCU and wireless tools, documentation, software, source code libraries & more. Available for Windows, Mac and Linux!

**IoT Portfolio:** [www.silabs.com/loT](http://www.silabs.com/loT)

**SW/HW:** [www.silabs.com/simplicity](http://www.silabs.com/simplicity)

**Quality:** [www.silabs.com/quality](http://www.silabs.com/quality)

**Support & Community:** [www.silabs.com/community](http://www.silabs.com/community)

## 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 to the product information, specifications, and descriptions herein, and does not give warranties as to the accuracy or completeness of the included information. Without prior notification, Silicon Labs may update product firmware during the manufacturing process for security or reliability reasons. Such changes will not alter the specifications or the performance of the product. Silicon Labs shall have no liability for the consequences of use of the information supplied in this document. This document does not imply or expressly grant any license to design or fabricate any integrated circuits. The products are not designed or authorized to be used within any FDA Class III devices, applications for which FDA premarket approval is required or Life Support Systems without the specific written consent of Silicon Labs. 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. Silicon Labs disclaims all express and implied warranties and shall not be responsible or liable for any injuries or damages related to use of a Silicon Labs product in such unauthorized applications.

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



## Trademark Information

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## Documents / Resources

	<p><a href="#">SILICON LABS 32-bit MCU SDK 6.5.0.0 GA Gecko SDK Suite</a> [pdf] Instruction Manual 32-bit MCU SDK 6.5.0.0 GA, 32-bit MCU SDK 6.5.0.0 GA Gecko SDK Suite, Gecko SDK Suite, SDK Suite</p>
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## References

-  [Silicon Labs](#)
-  [Silicon Labs](#)
-  [Inclusive Lexicon Project - Silicon Labs - Silicon Labs](#)
-  [Silicon Labs Community](#)
-  [Internet of Things \(IoT\) - Silicon Labs](#)
-  [32-bit Microcontrollers \(MCUs\) - EFM32 - Silicon Labs](#)
-  [Quality - Silicon Labs](#)
-  [Simplicity Studio - Silicon Labs](#)
-  [Technical Support - Silicon Labs](#)
-  [Overview - latest - Simplicity Studio 5 Users Guide Silicon Labs](#)
-  [GitHub - SiliconLabs/gecko\\_sdk: The Gecko SDK \(GSDK\) combines all Silicon Labs 32-bit IoT product software development kits \(SDKs\) based on Gecko Platform into a single, integrated SDK.](#)
-  [Simplicity Studio - Silicon Labs](#)