

32-bit MCU SDK 6.6.6.0 GA Gecko SDK Suite 4.4 February 26, 2025

The 32-bit MCU SDK provides sample applications for EFM32 and EZR32 development kits.

This document covers the following SDK versions:

6.6.6.0 released February 26, 2025 (Underlying platform changes only)
6.6.5.0 released October 23, 2024
6.6.4.0 released August 14, 2024
6.6.3.0 released May 2, 2024
6.6.2.0 released April 10, 2024
6.6.1.0 released February 14, 2024
6.6.0.0 released December 13, 2023

KEY FEATURES

- Added support for new OPNs
- Upgrade compilers to GCC 12.2.1 and IAR 9.40.1

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 <u>Silicon Labs Release Notes page</u>. 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 9.40.1
- GCC (The GNU Compiler Collection) version 12.2.1 (provided with Simplicity Studio)

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1 New Items

New in release 6.6.0.0

Added support for the following new OPNs:

- BRD2500B
- BRD2501B

2 Improvements

3 Fixed Issues

4 Known Issues in the Current Release

Known issues in release 6.6.0.0

There is a known issue, detected when updating the GCC toolchain from version 10.3 to 12.2, which increases the RAM usage by about 400 bytes in some cases.

5 Deprecated Items

6 Removed Items

7 Using This Release

The 32-bit MCU SDK v 64.x is installed as part of Gecko SDK (GSDK) 4.4.x, the suite of Silicon Labs SDKs. To quickly get started with the GSDK, install <u>Simplicity Studio 5</u>, 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 <u>Simplicity Studio 5 User's Guide</u>.

Alternatively, Gecko SDK may be installed manually by downloading or cloning the latest from GitHub. See <u>https://github.com/Sili-conLabs/gecko_sdk</u> 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>\SimplicityStudio\SDKs\gecko_sdk

MacOS: /Users/<NAME>/SimplicityStudio/SDKs/gecko_sdk

7.1 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 following figure is an example:

Search Within the Su	oport Portal for Cases, etc		SEARCH	CATHERIN				
HOME CASES SOFTWARE RELEASES								
Update Preference								
WHAT EMAILS WOULD YOU LIKE TO REC	EIVE?							
Newsletters Community Monthly Newsletter Sales Newsletter Micrium Newsletter Product Specific Notifications Product Information and Newsletter V Stoftware/Security Advisory Notices & F	roduct Chanse Notices (PCNs)							
Interface		Sensors						
Isolation		TV and Video						
Modems and DAAs		Voice						
Microcontrollers	7	Wireless						
8-bit MCUs		Bluetooth Classic						
✓ 32-bit MCUs		Bluetooth Low Energy						
Timing		Proprietary						
Clocks		🗌 Wi-Fi						
Buffers		ZigBee and Thread						
Oscillators		Z-Wave						
CDR and PHY								

7.2 Support

Development Kit customers are eligible for training and technical support. Use the Silicon Laboratories web site <u>www.silabs.com/prod-ucts/mcu/32-bit</u> 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

Simplicity Studio

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



www.silabs.com/IoT



www.silabs.com/simplicity



www.silabs.com/quality



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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 La

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