



# SILICON LABS 32-bit MCU SDK Provides Sample Applications Owner's Manual

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**SILICON LABS 32-bit MCU SDK Provides Sample Applications**

**OWNER'S MANUAL**

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

**This document covers the following SDK versions:**

6.4.7.0 released January 15, 2025 (underlying platform changes only)  
6.4.6.0 released July 3, 2024 (underlying platform changes only)  
6.4.5.0 released January 24, 2024 (underlying platform changes only)  
6.4.4.0 released August 16, 2023 (underlying platform changes only)  
6.4.3.0 released May 3, 2023 (underlying platform changes only)  
6.4.2.0 released March 8, 2023 (underlying platform changes only)  
6.4.1.0 released February 1, 2023 (underlying platform changes only)  
6.4.0.0 released December 14, 2022

## **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)

## **1. New Items**

New in release 6.4.0.0

### **Added support for the following new OPNs:**

- BRD2200C
- BRD2201B
- BRD2400B
- BRD2102B

## **2. Improvements**

None

## **3. Fixed Issues**

None

## 4. Known Issues in the Current Release

None

## 5. Deprecated Items

None

## 6. Removed Items

None

## 7. 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>\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.



## Update Preference

### 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

#### ☐ Select/Unselect All

#### ☐ Audio and Radio

#### ☐ Power over Ethernet

#### ☐ Interface

#### ☐ Sensors

#### ☐ Isolation

#### ☐ TV and Video

#### ☐ Modems and DAAs

#### ☐ Voice

#### ☐ Microcontrollers

#### ☐ 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 [www.silabs.com/prod-ucts/mcu/32-bit](http://www.silabs.com/prod-ucts/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/IoT](http://www.silabs.com/IoT)



**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.

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## Specifications

- 32-bit MCU SDK version: 6.4.7.0 GA
- Gecko SDK Suite version: 4.2 (January 15, 2025)
- Provides sample applications for EFM32 and EZR32 development kits
- Key Features: Compatibility with various compilers, security updates, support for EMLIB, EMDRV, RAIL Library, NVM3, and mbedTLS

## Product Usage Instructions

### Installation

1. Download the SDK from the official Silicon Labs website.
2. Follow the installation instructions provided in the documentation.
3. Ensure that your development environment meets the compatibility requirements.

### Getting Started

1. Refer to the sample applications included in the SDK for initial testing.
2. Consult the Gecko Platform release notes for additional information on supported features.
3. Explore the provided functionalities and APIs to start your development process.

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## FAQ

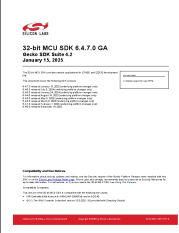
**Q: How do I subscribe to Security Advisories?**

A: To subscribe to Security Advisories, log in to the Silicon Labs customer portal, select Account Home, click HOME to go to the portal home page, click the Manage Notifications tile, ensure 'Software/Security Advisory Notices & Product Change Notices (PCNs)' is checked, and save any changes.

**Q: Where can I find technical support for the development kit?**

A: Development Kit customers are eligible for training and technical support. Visit [www.silabs.com/products/mcu/32-bit](http://www.silabs.com/products/mcu/32-bit) to obtain information about EFM32 Microcontroller products and services. Contact Silicon Laboratories support at [www.silabs.com/support](http://www.silabs.com/support).

## Documents / Resources

	<a href="#">SILICON LABS 32-bit MCU SDK Provides Sample Applications</a> [pdf] Owner's Manual EFM32, EZR32, 32-bit MCU SDK Provides Sample Applications, MCU SDK Provides Sample Applications, SDK Provides Sample Applications, Provides Sample Applications, Sample Applications, Applications
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## References

- [Silicon Labs](#)
- [Silicon Labs](#)
- [Silicon Labs Community](#)
- [IoT – Internet of Things - Silicon Labs](#)
- [Technical Support - Silicon Labs](#)
- [User Manual](#)

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