



# 32-bit MCU SDK 6.0.2.0 GA

## Gecko SDK Suite 3.1

### April 7, 2021

---

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

This document covers the following SDK versions:

6.0.2.0 released April 7, 2021 (underlying platform changes only)  
6.0.1.0 released January 27, 2021 (underlying platform changes only)  
6.0.0.0 released December 9, 2020

#### KEY FEATURES

---

- Added platform examples for EFM32 series 0 and series 1 devices
- Reduced number of sample applications for EFM32 hardware kits
- Reduced pre-compiled demo list for EFM32 hardware kits

**This Gecko SDK Suite release has a known security compatibility issue with one Gecko Platform component.** For more information about this, as well as other 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 EmberZNet SDK, see [Using This Release](#).

**Contents**

- 1 New Items .....2
- 2 Improvements.....3
- 3 Fixed Issues .....4
- 4 Known Issues in the Current Release .....5
- 5 Deprecated Items .....6
- 6 Removed Items .....7
- 7 Using This Release.....8
  - 7.1 Compatible Software .....8
  - 7.2 Security Information .....8
  - 7.3 Support.....9
- 8 Legal.....10
  - 8.1 Disclaimer.....10
  - 8.2 Trademark Information .....10

## New Items

None

## Improvements

### **Changed in release 6.0.2.0**

- Re-added sources for the “factory\_demo” sample application.

### **Changed in release 6.0.0.0**

- Renamed the sample application called “helges\_demo” to “factory\_demo”, to make it more descriptive.
- The following sample applications have been modified to improve integration in Simplicity Studio 5:
  - micriumos\_canopen
  - micriumos\_net
  - micriumos\_webmic
  - si72xx\_wheeldemo

## Fixed Issues

None

## Known Issues in the Current Release

Issues in bold were added since the previous release. If you have missed a release, recent release notes are available on <https://www.silabs.com/products/software>.

ID #	Description	Workaround
	Both Debug and Release build configurations of MCU examples define <b>DEBUG_EFM=1</b> , which enables <b>em_assert</b> functionality.	
	<b>micriumos_lwip_wfx</b> example for <b>SLSTK3701A_EFM32GG11</b> is not compiling when using the <b>Simplicity Studio IDE</b> .	

## Deprecated Items

None

## Removed Items

### Removed in release 6.0.0.0

The following examples were removed:

biometric blink (refer to new Blink example(s)) burtc (refer to new Sleep Timer example(s)) calibrate can_board (refer to micriumos_canopen example) clock cpt007b cpt112s cslib efp emlcd (refer to new MEMLCD example(s)) emode (refer to new Power Manager example(s)) energy ezradio_per ezradio_direct_rx ezradio_direct_tx ezradio_pn9 ezradio_simple_trx ezradio_trx_ack ezradio_unmodulated_carrier flasherase freertos_blink (refer to new Blink example(s)) glib gpinterrupt humitemp iadc (refer to Silicon Labs' GitHub example(s)) inttemp inttemp_harvesting inttemp_textdisplay lcd (refer to new MEMLCD example(s)) lcd_power_modes (refer to new MEMLCD and/or Power Manager example(s)) lcsense leuart (refer to new IO Stream or UARTDRV example(s)) lightsense lightsensefft lte_xbee_device_cloud	lte_xbee_sms lte_xbee_time_server lte_xbee_time_server_bypass mbedtls_aescript (refer to new mbedTLS example) mbedtls_ecdh (refer to new mbedTLS example) mbedtls_ecdsa (refer to new mbedTLS example) micriumos_blink (refer to new Blink example(s)) micriumos_dynamic (refer to new Blink example(s)) micriumos_httpcloader micriumos_lwip_wfx micriumos_shell micriumos_usbhidmouse micriumos_usbhmsc micriumos_wifi_whiteboard mpu (refer to new Simple MPU example) nandflash persistent_trng pll pdm-led prs (refer to Silicon Labs' GitHub example(s)) pwm powertest qspi_direct qspi_indirect rangeTest rs232 rs232_isolated rs485_isolated sensor_puck spaceinvaders spectrum_analyzer spi_display textdisplay textdisplay_printf touch usb_isolated usbdcdc usbdcomposite usbdcompositehidkbd	usbdhidkbd usbdloader usbdmsd usbdpdmnic usbdphdcglucometer usbdtest usbdvud usbhenum usbhidkbd usbhloader usbhmsdfatcon usbhstest usbxpress_echo usbxpress_test_panel userpage vcom watch weatherstation wstk_vcom_bridge
---	--	--



## Using This Release

The 32-bit MCU SDK v 6.0.x is optionally installed with Gecko SDK Suite v3.x in Simplicity Studio 5 for EFM32 and EZR32 products. Installation instructions are available in the [Simplicity Studio 5 online User's Guide](#). 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..

### 7.1 Compatible Software

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

- IAR Embedded Workbench for ARM (IAR-EWARM) version 8.30.1
- GCC (The GNU Compiler Collection) version 7.2.1 is provided with Simplicity Studio
- Keil MDK V5.25 for ARM

### 7.2 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.

**SILICON LABS** Search Within the Support Portal for Cases, etc... SEARCH CATHERIN...

HOME CASES SOFTWARE RELEASES

**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

<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 checked="" type="checkbox"/> 32-bit MCUs	<input type="checkbox"/> Bluetooth Classic <input type="checkbox"/> Bluetooth Low Energy <input checked="" type="checkbox"/> Proprietary
<input type="checkbox"/> Timing	<input type="checkbox"/> Wi-Fi
<input type="checkbox"/> Clocks	<input type="checkbox"/> ZigBee and Thread
<input type="checkbox"/> Buffers	<input type="checkbox"/> Z-Wave
<input type="checkbox"/> Oscillators	
<input type="checkbox"/> CDR and PHY	

## 7.3 Support

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)

## 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 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. **Note: This content may contain offensive terminology that is now obsolete. Silicon Labs is replacing these terms with inclusive language wherever possible. For more information, visit [www.silabs.com/about-us/inclusive-lexicon-project](http://www.silabs.com/about-us/inclusive-lexicon-project)**

### 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®, Gecko OS, Gecko OS Studio, ISOModem®, Precision32®, ProSLIC®, Simplicity Studio®, SiPHY®, Telegesis, the Telegesis Logo®, USBXpress®, Zentri, the Zentri logo and Zentri DMS, 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. Wi-Fi is a registered trademark of the Wi-Fi Alliance. All other products or brand names mentioned herein are trademarks of their respective holders.