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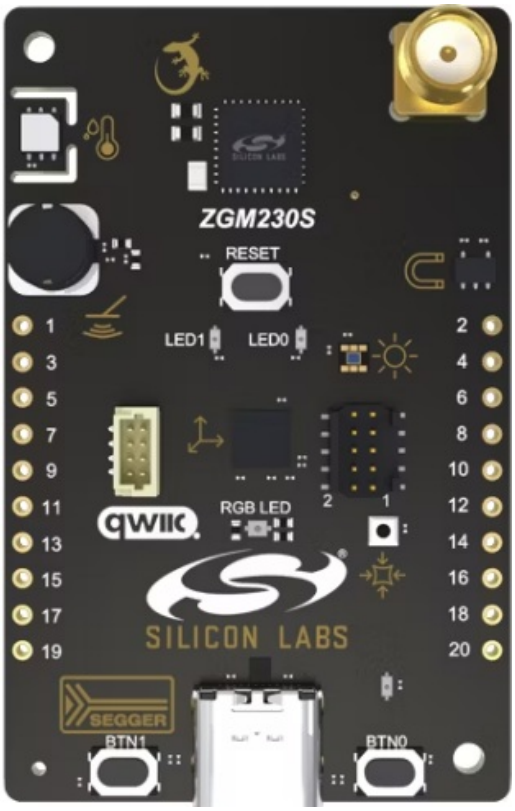
SILICON LABS Z-Wave and Z-Wave Long Range 800 SDK



Specifications

- Z-Wave and Z-Wave Long Range 800 SDK 7.22.4
- Simplicity SDK Suite 2024.6.3 April 23, 2025
- **Interoperability**: 100% interoperable with all Z-Wave ecosystem products
- **Security**: Best-In-Class Security with Z-Wave's Security 2 (S2) framework
- **Installation**: SmartStart Easy Installation for simplified setup
- **Backward Compatibility**: Z-Wave certification mandates backward compatibility
- **Compatible Compilers**: GCC version 12.2.1 provided with Simplicity Studio

Description

Z-Wave and Z-Wave Long Range 800 is designed to meet the demands of the future smart home, where increasing needs for more sensors and battery-operated devices require both long range and low power. Context-aware environments are the next evolution in the smart home market, and they require technologies that have been optimized specifically for these applications.

- **100% Interoperable**: Every product in the Z-Wave ecosystem works with every other product, regardless of type, brand, manufacturer or version. No other smart

home/IoT protocol can make this claim.

- **Best-In-Class Security**: Z-Wave's Security 2 (S2) framework provides end-to-end encryption and the most advanced security for smart home devices and controllers. Homes with S2 Z-Wave devices are virtually unhackable.
- **SmartStart Easy Installation**: SmartStart radically simplifies the installation of smart devices by using QR code scans for uniform, trouble-free setup. Devices and systems can be pre-configured, dramatically easing deployments.
- **Backwards-Compatible**: Z-Wave certification mandates backward-compatibility. The first Z-Wave devices on the market, more than ten years old, still perform as intended in networks with the latest Z-Wave technologies.
  For more information about the certification status of Z-Wave and Z-Wave Long Range 800 SDK v7.22.4.0 OSR, see section 9, Product Life Cycle and Certification.

These release notes cover SDK version(s):

1. released April 23, 2025
2. OSR released November 13, 2024
3. GA released September 18, 2024
4. GA released July 24, 2024
5. GA released June 5, 2024

Compatibility and Use Notices

For more information about security updates and notices, see the Security chapter of the 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 Z-Wave 800 SDK, see section 8 Using This Release.

Compatible Compilers

GCC (The GNU Compiler Collection) version 12.2.1, provided with Simplicity Studio.

KEY FEATURES

- 7.22.x and future updates support the 800 Series platform

- 700 Series platform will continue to be sup-ported through the upcoming 7.21.x releases
- Adding additional information on the reset reason in the FUNC_ID_SERIAL_API_STARTED payload

Supported Radio Boards

This section describes the radio boards supported by the certified and pre-certified applications for the 800 Series, respectively.

Table 1-1. Supported Radio Boards

Series	Radio Board	Description	Z-Wave Long Range	Tx Power	Secure Vault
800	BRD2603A	ZGM230SB: SiP	yes	14 dBm	High
800	BRD2705A	EFR32ZG28B: SoC	yes	14 dBm	High
800	BRD4204A	EFR32ZG23A: SoC	yes	14 dBm	Mid
800	BRD4204B	EFR32ZG23A: SoC	yes	14 dBm	Mid
800	BRD4204C	EFR32ZG23B: SoC	yes	14 dBm	High
800	BRD4204D	EFR32ZG23B: SoC	yes	14 dBm	High
800	BRD4205A	ZGM230SA: SiP	yes	14 dBm	Mid
800	BRD4205B	ZGM230SB: SiP	yes	14 dBm	High
800	BRD4210A	EFR32ZG23B: SoC	yes	20 dBm	High

800	BRD4400B	EFR32ZG28B: SoC	yes	14 dBm	High
800	BRD4400C	EFR32ZG28B: SoC	yes	14 dBm	High
800	BRD4401B	EFR32ZG28B: SoC	yes	20 dBm	High
800	BRD4401C	EFR32ZG28B: SoC	yes	20 dBm	High

The applications in the above table need a radio board in combination with BRD4002A – Wireless Starter Kit Mainboard (WSTK) and BRD8029A – Buttons and LEDs Expansion Board. Notice that BRD4002A is compatible with the old BRD4001A mainboard that is going to be deprecated. The Serial APIs in the above table only need a radio board and a BRD4002A – Wireless Starter Kit Mainboard (WSTK). Refer to INS14278: How to Use Certified Apps and INS14816: How to Use Pre-Certified Apps, for details.

ZW-LR indicates that the radio board supports both Z-Wave and Z-Wave Long Range. 14/20 dBm indicates the transmit power of the radio board. Secure Vault is an industry-leading suite of state-of-the-art security features that address escalating Internet of Things (IoT) threats.

Table 1-2. Radio Boards versus OPNs.

Series	Radio Board	OPN Description
800	BRD2603A	ZGM230SB27HGN3
800	BRD2705A	EFR32ZG28B312F1024IM48-A
800	BRD4204A	EFR32ZG23A010F512GM48
800	BRD4204B	EFR32ZG23A010F512GM48
800	BRD4204C	EFR32ZG23B010F512IM48
800	BRD4204D	EFR32ZG23B010F512IM48

800	BRD4205A	ZGM230SA27HNN0
800	BRD4205B	ZGM230SB27HGN2
800	BRD4210A	EFR32ZG23B020F512IM48
800	BRD2603A	ZGM230SB27HGN3
800	BRD4400C	EFR32ZG28B312F1024IM68-A
800	BRD4401B	EFR32ZG28B322F1024IM68-A
800	BRD4401C	EFR32ZG28B322F1024IM68-A

The table above shows the Radio Boards and OPN relation. This table can be used to clarify the compatibility of the prebuilt binaries offered in the Simplicity SDK. The prebuilt binaries are built targeting boards and not OPNs. More OPNs are available than the ones listed above. For those OPNs the prebuilt binaries will not work. The desired application must be built targeting the specific OPN instead.

Z-Wave Protocol

Be aware that 800 products are based on SDK v7.17.x do not support the upgrade of Secure Element firmware over the air (OTA). However, a migration path exists to upgrade both main bootloader and Secure Element firmware to enable support of this feature. See INS14895: Instruction for How to Use Tiny App regarding the upgrade path. The 800-based SDK v7.18.x supports upgrade of Secure Element firmware over the air (OTA). The 8 kB reduction of the Z-Wave protocol NVM3 file system has an impact when making OTA firmware update on 800-based applications deployed on version 7.17.2 and earlier. To make an OTA firmware update from 7.17.2 to 7.18.1/2 requires that 7.18.1/2 is modified to keep the same NVM3 protocol size as 7.17.2. This can be configured by the define NVM3_DEFAULT_NVM_SIZE when building 7.18.1/2. Note that due to the introduction of Secure Key Storage on the 800 series, having externally supplied key pairs is no longer sup-ported. To ensure that security is not compromised, keys are generated internally on first boot and the private key kis ept only in secure storage. The public key and the QR code can be read out in production.

New Items

Added in release 7.22.4 GA

ID #	Description
1439232	Changed the watchdog configuration and removed the step where it is disable by the Z-Wave stack. The default watchdog was changed to reset the device after 8 seconds without a feed.
1434642	Improved CCA (clear channel assessment) reliability. Previously, only the lates measured RSSI value was used instead of the highest value in the RX window

- Adding a new Serial API command to retrieve the supported region list.

Added in release 7.22.1 GA

ID #	Description
1246332	There is now a single ZPAL library per device family.
1271456	Merged radio board RF configuration files (cf. zw_config_rf.h).
1242395	ZAF_BUILD_NO, SDK_VERSION_[MAJOR|MINOR|PATCH], ZAF_VERSION_[MAJOR|MINOR|PATCH] are no longer available in Applications. They have been replaced by several accessor functions defined in “ZAF_version.h”.
1196450	zpal_reset_reason_t replaces EResetReason_t enum.

- Adding additional information on the reset reason in the FUNC_ID_SERIAL_API_STARTED payload.

Improvements

Improved in release 7.22.4 GA

ID #	Description

1439232	Changed the watchdog configuration and removed the step where it is disabled by the Z-Wave stack. The default watchdog was changed to reset the device after 8 seconds without a feed.
1434642	Improved CCA (clear channel assessment) reliability. Previously, only the latest measured RSSI value was used instead of the highest value in the RX window.

Improved in release 7.22.0 GA

ID #	Description
1246332	There is now a single ZPAL library per device family.
1271456	Merged radio board RF configuration files (cf. zw_config_rf.h).
1242395	ZAF_BUILD_NO, SDK_VERSION_[MAJOR|MINOR|PATCH], ZAF_VERSION_[MAJOR|MINOR|PATCH] are no longer available in Applications. They have been replaced by several accessor functions defined in “ZAF_version.h”.
1196450	zpal_reset_reason_t replaces EResetReason_t enum.

Fixed Issues

Fixed in release 7.22.4

ID #	Description
1363469	Fixed RAIL handling where multiple TX and RX radio events could be part of the same callback, confusing the state machine. It would leave the stack in a state where it was not able to receive packets.
1397177	Fixed a behavior in the REMOVE_NODE_FROM_NETWORK SAPI command where the command would fail if the node ID targeted was shared in the remover’s network.

1439197	Fixed an issue preventing the configuration of a TX output power above +14 dBM in the Serial API controller appli- cation.
1330168	Fixed an NVM migration path issue from 7.18 (or older) to 7.21 or newer on the controller side. The application data was not updated during the migration.
1439269	Fixed a condition where the stack would try to send an oversized packet over the air.
1385589	Fixed an issue where a Never Listening device would unintentionally wake up every minute.
1374874	A Z-Wave Long Range end device could exhibit reduced transmit power output after a soft-reset. This has been fixed.

Fixed in release 7.22.3 OSR

ID #	Description
1367428	Fixed an issue related to LBT mechanism, where the end device was unable to switch to a free channel and re- spond to incoming requests.

Fixed in release 7.22.2 GA

ID #	Description
1346170/ 1295158	The SerialAPI end device application is fixed and can be used with the CTT agent.

Fixed in release 7.22.1 GA

ID #	Description
1321606	Fixed an issue causing a controller to be locked in a constant beaming pattern. The behavior was caused by an incorrect configuration entered in the controller NVM.

1325749	Fix prevents a self-lock between the ZAF application queue and the transport queue under heavy traffic load.
1325746	Fixed a condition where an end device would soft-reset when surrounded by a crowded RF environment.
1302749	Fixed an issue where the controller configured in Z-Wave Long-Range mode can enter a state where the CRCs associated with TX packets are erroneous. The issue is triggered in noisy environments, including FLiRS devices.
1313883	Fixed an issue where the controller was not reporting EU_LR as a Long-Range region.

Fixed in release 7.22.0 GA

ID #	Description
1062482	An issue was fixed that affected the OTA, where it would get stuck when a Timer interrupt was triggered.
1266899	Fixed a controller migration issue impacting the migration process from 7.17 to newer NCP Serial API Controller.
1271456	The BRD4401C radio board (EFR32ZG28 + 20 dBm output power) was misconfigured resulting in a low TX output power. This issue has been addressed.
1273430	Fixed high priority packet management impacting Network Wide Inclusion and Exclusion.
1289422	Fixed an issue causing a reset when polling the end device with a high frequency.
1238611	TX queue refactoring addressing race conditions impacting the controller stability.
1285197	Rarely, the controller hit a state that led to an unmanaged state (RAIL_EVENT_RX_FIFO_OVERFLOW). The con- troller now triggers a soft-reset.

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 Silicon Labs Release Notes page.

ID #	Description	Workaround
1227385	While the controller stability has been greatly improved in Z-Wave Classic, the workaround implementation is still recommended on the host side.	This low occurrence issue can be mitigated by the host. When the control- ler is locked replying with the status, TRANSMIT_COMPLETE_FAIL, the host should reset the controller.

1247775	The RTOS tick can stop when the application requires frequent interruptions. The RTOS tick is then not incremented and stops the Z- Wave stack and other tasks.	In the sli_schedule_wakeup_timer_expire_handler() function, replace
		
		/* Increment the RTOS tick. */
		
		while ((current_tick_count – last_update_lftick) > lfticks_per_os_ticks) {
		
		sched |= xTaskIncrementTick();
		last_update_lftick+= lfticks_per_os_ticks;
		
		}
		
		By
		
		/* Increment the RTOS tick. */
		
		while ((current_tick_count – last_update_lftick)
		
		>= lfticks_per_os_ticks) {
		
		sched |= xTaskIncrementTick();
		last_update_lftick+= lfticks_per_os_ticks;
		
		}

1300414	End-Device acknowledges packet after exclusion.	No workaround.
1295158	The emulated end-device inclusion fails when used with the CTT agent.	It is recommended that testers use another version of the emulated end-device.

753756	Network Wide Inclusion (NWI) of 500-based apps doesn’t work through 700/800 repeaters.	NWI works at the second attempt.

Deprecated Items

As of the 7.22.0 stack release, the 700 platform is not supported by the Simplicity SDK. The 700 platform will be maintained through the 7.21.x release stream.

Removed Items

Removed in release 7.22.0 GA

- None.

Z-Wave Plus V2 Application Framework

New Items

Added User Credential Command Class beta implementation. Please note that more updates are expected in this command class specification in the upcoming 2024A Z-Wave specification, and this early implementation does not implement all of these changes. The command class will be adjusted to the 2024A specs in the future patch releases. New variant of the Door Lock Key Pad sample application is added: “Door Lock Key Pad with U3C Beta”, which supports the User Credential Command Class. CLI support is added for the sample apps. In case of FL and NL applications, the CLI is disabled by default because it prevents the apps from entering sleep mode. The instructions to enable the CLI for these sleeping apps can be found in the apps’ readme files.

Improvements

For a detailed description of application development using the Z-Wave Plus V2 Framework, refer to INS14259: Z-Wave Plus V2 Application Framework GSDK. A porting guide is also available for customers who want to migrate to the 800 platform.

The guide contains a detailed example of how to port a non-component/700-based Switch On/Off App (7.16.3) to a component/800-based Switch On/Off App (7.17.0). See APL14836: Application Note for Porting Z-Wave Appl. SW from 700 to 800 hardware.

Fixed Issues

Fixed in release 7.22.2 GA

ID #	Description
1332325	Fixed OTA failing with 0x05 when using Bootloader – SoC Internal Storage project.

Fixed in release 7.22.1 GA

ID #	Description
1301405	Z-Wave Version Config SLC component's input fields were set to 1.0.0 by default, but 0 is outside of the allowed range. The version was not set properly in zw_version_config.h in the case of 0 input fields.
1304174	Quality level of Z-Wave bootloader demos was missing in Simplicity Studio.

Fixed in release 7.22.0 GA

ID #	Description
1243767	ZG28 OTA and OTW demo bootloaders are missing in Simplicity Studio.

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 the Silicon Labs Release Notes page

ID #	Description	Workaround

369430	All S2 multicast frames are sent using verified delivery S2_TXOPTION_VERIFY_DELIVERY whether or not a response is expected.	Change source code depending on the frame sent.
1172849	On series 800, sleep will no longer take advantage of EM1P current savings.	Currently not available.
1257690	sl_storage_config.h does not handle custom OTA slot size.	Currently not available.
1347089	CC Configurator can’t create Multilevel Sensor endpoints.	Currently not available.

Deprecated Items

The known issue with the 1080416 ID has been deprecated by the removal of the Assert component.

Removed Items

Removed in release 7.22.0. GA

- None.

Sample Applications

The Door Lock Key Pad, Power Strip, Sensor PIR and Wall Controller applications on 7.22.0 SDK version have been officially certified based on the approved 2023B Z-Wave Specification test suite. The 7.22.0 Sensor PIR sample application contains a CTT issue; the workaround is described for the 1322043 issue. The sample apps based on 7.22.1 SDK version have been self-certified by Silicon Labs based on the approved 2023B Z-Wave Specification test suite without any issues. In 7.21.1 SDK the Serial API End Device demo firmware is added for BRD2603A and BRD2705A boards.

Fixed Issues

Fixed in release 7.22.2 GA

ID #	Description
1327637	Fixed Doorlock app compile error with CLI component.

Fixed in release 7.22.1 GA

ID #	Description
1303548	Fixed an issue where the set_new_user_code CLI command took only the first 4 digits of the pin code.
1303546	Fixed an issue where the enter_user_code CLI command did not open the door.

Known Issues in the Current Release

ID #	Description	Workaround
1245554	DoorLock app does not work with UserID over 163.	Currently not available.

Door Lock Key Pad with U3C Beta

This is a new variant of the Door Lock Key Pad sample application which supports the User Credential Command Class, and is a Beta version. Because it has not been self-certified yet, the application contains known issues and will be adjusted according to changes expected in the 2024A Z-Wave specification.

Fixed Issues

Fixed in release 7.22.2 GA

ID #	Description
1297891	Fixed an issue where User Credential Association Reports only arrived in case of a successful Credential Association.
1308210	Fixed an issue where Credential Learn Status Report sends multiple duplicate frames.

Fixed in release 7.22.1 GA

ID #	Description
1297891	User Credential Association Reports only arrived in case of a successful Credential Association.
1297667	Credential Set Error contained wrong data.
1297614	User Credentials not deleted after user deletion.
1297611	Next Credential value did not keep ascending order.
1297370	Multiple Credential delete was not working.
1297352	Pin code should only store numbers instead of any character.
1297175	Credential max length was wrong in Credential Capabilities Report.
1296879	User deletion did not guarantee deletion of all associated Credentials.
1296863	Unsupported User Types could be added.
1296859	USER_NOTIFICATION_REPORT commands were missing.
1296854	USER_SET_ERROR_REPORT commands were missing.

Known Issues in the Current Release

ID #	Description	Workaround
1297831	Credential Learn not working with BTN2.	Currently not available.
1347581	User and Credential report is incorrectly sent to an associated lower secured node only.	Currently not available.

1346581	Default user pin code contains only consecutive digits.	Change the user PIN code to an allowed PIN code.

Fixed Issues

Fixed in release 7.22.1 GA

ID #	Description
	Sensor PIR enabling User Task ended up in Hard Fault.
1274235	This Enabled the User Task in Sensor PIR sample app (by setting the CREATE_USER_TASK macro from 0 to 1 in app.c), leading to Hard Fault.
1231755	Sensor PIR On to Off movement alarm notification was missing.
1087508	Notification CC status value changed by injected SET command before S2 bootstrapping.

Known Issues in the Current Release

ID #	Description	Workaround
1256505	Sensor PIR does not wake up on BTN0 and BTN1 button pressing on an expansion board using BRD4400C and BRD4401C radio boards due to these GPIOs not supporting wakeup from EM4.	Remap the buttons to GPIOs that support wakeup from EM4.

Known Issues in release 7.22.0 GA

ID #	Description	Workaround

1322043	First Lifeline report is missing in SensorPIR, causing failure in CTT Test case CCM_AssociationCmdClass_Rev01 CTT.	Find the fix for the issue beneath this table.

Sample Applications

Fix for the 1322043 known issue:

In the file `app.c` in function `zaf_event_distributor_app_event_manager` `CC_Basic_Set_tx` and `CC_Notification_TriggerAndTransmit` functions are called in the wrong order. Also, `CC_Notification_TriggerAndTransmit` is called with wrong parameters in `app.c`. This can cause a missing notification in case of PIR event simulation. It can be fixed in three steps.

Step 1.

Change the `CC_Notification_TriggerAndTransmit` function input parameters to the following in `zaf_event_distributor_app_event_manager` function:

```
(void) CC_Notification_TriggerAndTransmit(0,
NOTIFICATION_EVENT_HOME_SECURITY_MOTION_DETECTION_UNKNOWN_LOCATION,
                                          &supportedEvents,
                                          0,
                                          NULL,
                                          false);
```

Step 2.

Reverse the order of calling `CC_Notification_TriggerAndTransmit` and `CC_Basic_Set_tx` functions in `CC_Notification_TriggerAndTransmit`

Step 3.

In the function `ZCB_EventJobsTimer` change the input parameters of the `CC_Notification_TriggerAndTransmit` function as follows

```
  (void) CC_Notification_TriggerAndTransmit(0,
                                            NOTIFICATION_EVENT_HOME_SECURITY_NO_EVENT,
                                            &supportedEvents,
                                            0,
                                            NULL,
                                            false);
```

Fixed Issues

ID #	Description
1274235	Sensor PIR enabling User Task ended up in Hard Fault. This Enabled the User Task in Sensor PIR sample app (by setting the CREATE_USER_TASK macro from 0 to 1 in app.c), leading to Hard Fault.

1231755	Sensor PIR On to Off movement alarm notification was missing.
1087508	Notification CC status value changed by injected SET command before S2 bootstrapping.

- None.

Known Issues in the Current Release

ID #	Description	Workaround
1256505	Sensor PIR does not wake up on BTN0 and BTN1 button pressing on an expansion board using BRD4400C and BRD4401C radio boards due to these GPIOs not supporting wakeup from EM4.	Remap the buttons to GPIOs that support wakeup from EM4.

Serial API Applications

Beginning with version 7.16, when backing up and restoring a Serial API end node via the FUNC_ID_NVM_BACKUP_RESTORE, the Serial API end node will automatically upgrade the protocol non-volatile memory (NVM) to the latest version. Any backup made of a 7.16 or later Serial API end node can be restored to its original version or to a later version of the Serial API end node without any manual upgrade of the protocol NVM being necessary. The serial interface is unchanged in version 8. As of SDK version 7.18.x, Serial API end node is available as source code as well as binary. This opens the possibility for building customized versions of Serial API end node with different pin configuration or additional hardware utilization. A use case might be to use SPI instead of UART for serial communication. No application using Serial API End Device is available in the Simplicity SDK.

Important Changes

Starting in version 7.19, API-breaking changes have been documented in “Important_changes.md” available in the Simplicity SDK. Check it for a detailed

description of changes introduced in the latest release. HTML documentation has been added to the Simplicity SDK and can be found on https://docs.silabs.com/z-wave/7.22.2/zwave-api/ and in Simplicity Studio, Documentation section, under “Z-Wave zipped doxygen documentation”. Location of this document is <SDK>/protocol/z-wave/docs_public/z-wave-html-docs.zip.

Open Source Software

Z-Wave is using FreeRTOS as the underlying OS, and it is based on FreeRTOS Kernel V10.4.3.

Using This Release

This release contains the following:

- Z-Wave Plus V2 Application Framework
- Z-Wave Certified Applications for a broad range of smart home applications
- Z-Wave Protocol and Serial API Applications

If you are a first-time user, Z-Wave documentation is installed with the SDK. See INS14280: Z-Wave Getting Started for End Devices, INS14278: How to Use Certified Apps in Z-Wave, and INS14281: Z-Wave Getting Started for Controller Devices for instructions. This SDK depends on a Simplicity SDK Platform. The Simplicity SDK 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, PSA, and mbedTLS. Gecko Platform release notes are available through Simplicity Studio’s Launcher Perspective.

Installation and Use

Order a Z-Wave Wireless Starter kit. The kit offers the easiest and fastest way to start evaluation and development of your own Z-Wave mesh application. It provides a single worldwide development kit for both end devices and gateways with multiple radio boards, with which developers can create a mesh network and evaluate the Z-Wave module. The Z-Wave and Z-Wave Long Range 800 SDK is provided as part of the Simplicity SDK, the suite of Silicon Labs SDKs. To quickly get started with the

Simplicity SDK, install Simplicity Studio 5, which will set up your development environment and walk you through Simplicity SDK installation. Simplicity Studio 5 includes everything needed for IoT product development with Silicon Labs devices, including a resource and project launcher, software configuration tools, a full IDE with GNU toolchain, and analysis tools. Installation instructions are provided in the online Simplicity Studio 5 User's Guide. Alternatively, Simplicity SDK may be installed manually by downloading or cloning the latest from GitHub. See https://github.com/SiliconLabs/simplicity_sdk for more information.
Simplicity Studio installs the SDK by default in:

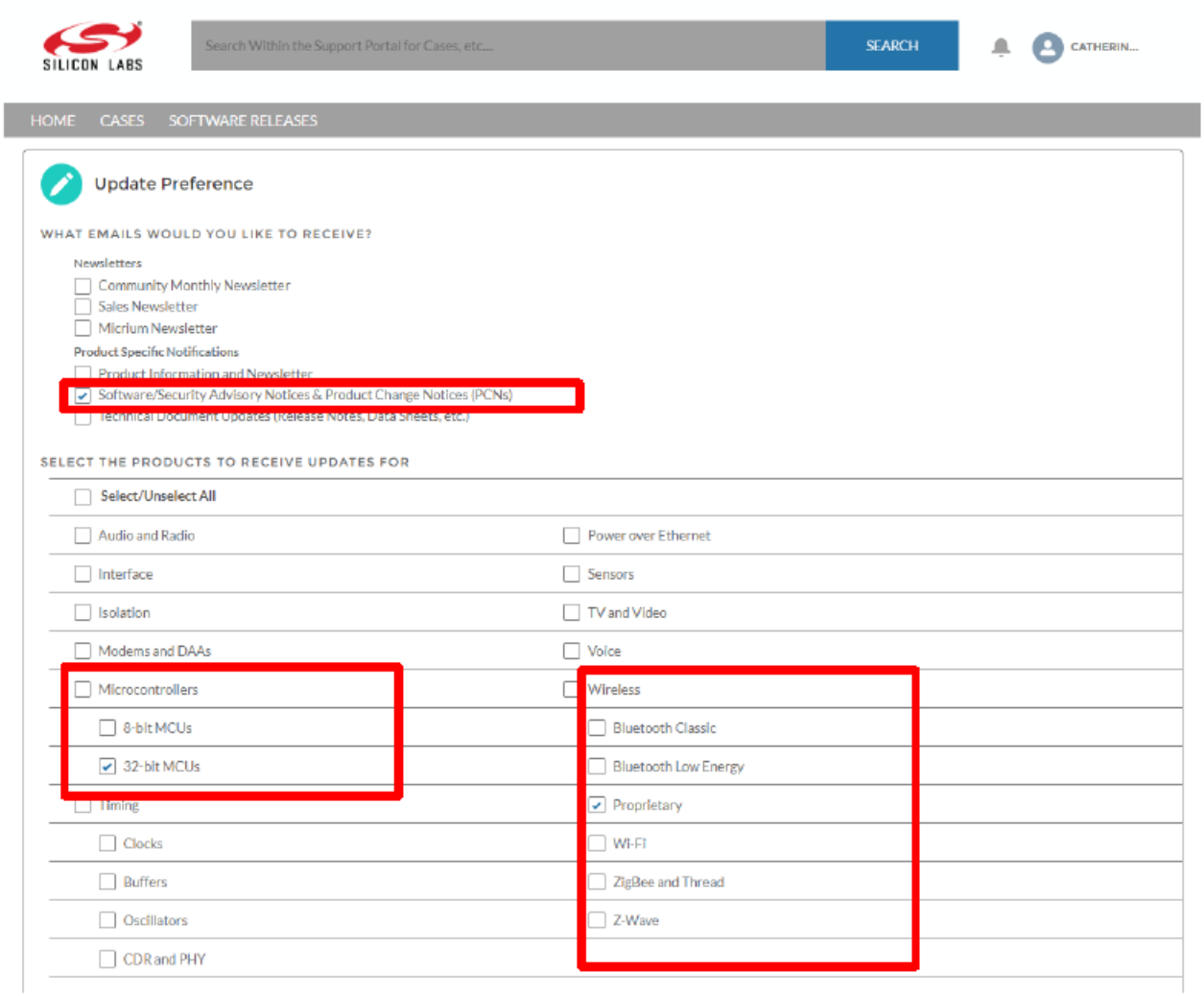
- (Windows): C:\Users\<NAME>\SimplicityStudio\SDKs\simplicity_sdk
- (MacOS): /Users/<NAME>/SimplicityStudio/SDKs/simplicity_sdk

To implement a specific application, Silicon Labs recommends starting with one of the existing self-certified apps with the desired Role Type.

Security Information

Secure Vault Integration
This version of the stack is using secure vault interface for key management of asymmetric keys (ECC Curve 25519) and Symmetric keys (AES).

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 a minimum for your platform and protocol. Click Save to save any changes.



Support

Development Kit customers are eligible for training and technical support. See support resources and contact Silicon Laboratories support at https://www.silabs.com/support.

Product Life Cycle and Certification

Silicon Labs will add new features based on market requirements and continuously improve the Z-Wave Protocol to position the Z-Wave Ecosystem. The Z-Wave Protocol Life Cycle is a process to provide rapid innovation, new features, and robust mature protocol release to Z-Wave Partners. The Z-Wave Protocol Life Cycle defines the maturation process of Z-Wave Protocol generations and consist of three phases divided in five Life Cycle stages. A change in the Z-Wave SDK utilized for a specific device does require recertification; however, the type of certification required, the amount of testing needed, and the associated fees depend on the scope of the change. Refer to Z-Wave Alliance home page https://z-wavealliance.org/ for details.

Table 9-1. Z-Wave SDK Release History

Series	SDK Version	Release Date [DD-MMM-YYYY]
800	7.22.3 OSR	13-NOV-2024
800	7.22.2 GA	18-SEP-2024
800	7.22.1 GA	24-JUL-2024
800	7.22.0 GA	06-JUN-2024
700/800	7.21.4 GA	14-AUG-2024
700/800	7.21.3 GA	02-MAY-2024
700/800	7.21.2 GA	10-APR-2024
700/800	7.21.1 GA	14-FEB-2024
700/800	7.21.0 GA	15-DEC-2023
700/800	7.20.3 GA	13-MAR-2024
700/800	7.20.2 GA	9-OCT-2023
700/800	7.20.1 GA	26-JUL-2023
700/800	7.20.0 Pre-Certified GA	07-JUN-2023
700/800	7.19.6 GA	03-JUL-2024
700/800	7.19.5 GA	24-JAN-2024
700/800	7.19.4 GA	16-AUG-2023
700/800	7.19.3 GA	03-MAY-2023
700/800	7.19.2 GA	08-MAR-2023
700/800	7.19.1 GA	01-FEB-2023
700/800	7.19.0 Pre-Certified GA	14-DEC-2022
700/800	7.18.8 GA	13-SEP-2023
700/800	7.18.6 GA	28-JUN-2023
700/800	7.18.4 GA	18-JAN-2023
700/800	7.18.3 GA	19-OCT-2022

700/800	7.18.2 GA	28-SEP-2022
700/800	7.18.1 GA	17-AUG-2022
700/800	7.18.0 Pre-Certified GA	08-JUN-2022
700/800	7.17.2 GA	09-MAR-2022
700/800	7.17.1 Pre-Certified GA	28-JAN-2022
700/800	7.17.0 Pre-Certified GA	08-DEC-2021
700	7.16.3 GA	13-OCT-2021
700	7.16.2 GA	08-SEP-2021
700	7.16.1 GA	21-JUL-2021

Series	**SDK Version**	**Release Date [DD-MMM-YYYY]**
700	7.16.0 Pre-Certified GA	16-JUN-2021
700	7.15.4 GA	07-APR-2021
700	7.15.2 Pre-Certified GA	27-JAN-2021
700	7.15.1 Pre-Certified GA	09-DEC-2020
700	7.14.3 GA	14-OCT-2020
700	7.14.2 GA	09-SEP2020
700	7.14.1 GA	29-JUL-2020
700	7.14.0 Beta	24-JUN-2020
700	7.13.12 GA	21-SEP-2023
700	7.13.11 GA	02-NOV-2022
700	7.13.10 GA	18-AUG-2021
700	7.13.9 GA	03-MAR-2021
700	7.12.2 GA	26-NOV-2019

Simplicity Studio

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FAQs

Q: What compilers are compatible with Z-Wave and Z-Wave Long Range 800 SDK?

A: GCC version 12.2.1 provided with Simplicity Studio is compatible with the Z-Wave SDK.

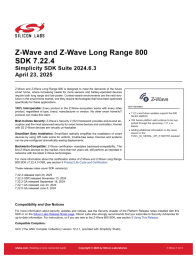
Q: How can I ensure the security of my Z-Wave devices?

A: Use the Security 2 (S2) framework provided by Z-Wave for end-to-end encryption and enhanced security features.

Q: Can I integrate new Z-Wave devices into my existing setup?

A: Yes, every product in the Z-Wave ecosystem is designed to be interoperable, allowing you to seamlessly integrate new devices.

Documents / Resources


Z-Wave and Z-Wave Long Range 800 SDK 7.22.4 Simplicity SDK Suite 2024.6.3 April 23, 2025

SILICON LABS Z-Wave and Z-Wave Long Range 800 SDK [pdf] Owner's Manual

7.22.4.0, 2024.6.3, Z-Wave and Z-Wave Long Range 800 SDK, Z-Wave Long Range 800 SDK, Long Range 800 SDK, Range 800 SDK, 800 SDK, SDK

References

- Silicon Labs
- Silicon Labs
- Silicon Labs Community
- IoT – Internet of Things - Silicon Labs
- Simplicity Studio - Silicon Labs
- Sil- · GitHub
- Technical Support - Silicon Labs
- User Manual

SILICON LABS2024.6.3, 7.22.4.0, 800 SDK, Long Range 800 SDK, Range 800 SDK, SDK, SILICON LABS, Z-Wave and Z-Wave Long Range 800 SDK, Z-Wave Long Range 800 SDK

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