



Z-Wave and Z-Wave Long Range 700/800 SDK 7.18.0.0 Pre-Certified GA Gecko SDK Suite 4.1 June 8, 2022

Z-Wave and Z-Wave Long Range 700/800 are 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 un-hackable.

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 700/800 SDK v7.18.0 Pre-Certified GA, see section [10 Product Life Cycle and Certification](#).

These release notes cover SDK version(s):

7.18.0.0 Pre-Certified GA released June 8, 2022

Compatibility and Use Notices

For more 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 Z-Wave 700/800 SDK, see section [9 Using This Release](#).



KEY FEATURES

- Keyfob application
- New Z-Wave 800 SDK containing preprogrammed radio boards for quick IOT demos and Z-Wave technology evaluations
- Z-Wave 800 S2 protocol uses secure vault for cryptographic key storage and hardware acceleration
- White paper about large network performance
- Serial API Controller and End Devicesource code available enabling customization of I/O etc.
- Z-Wave Long Range supports now both 250ms and 1000ms wakeup beams
- Improved SmartStart inclusion time on Z-Wave Long Range
- Streamlined hardware dependencies in Z-Wave applications
- Z-Wave Region stored in MFG token
- Support of WSTK v2 mainboard BRD4002A

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1 Supported Radio Boards

This section describes the radio boards supported by the certified and pre-certified applications for 700 and 800 Series, respectively.

Table 1-1. Supported Radio Boards.

Series	Radio Board	Description	Applications
800	BRD4204A	EFR32ZG23: ZW-LR, SoC & 14 dBm	Serial API using BRD4002A
800	BRD4204B	EFR32ZG23: ZW-LR, SoC & 14 dBm	Serial API using BRD4002A
800	BRD4204C	EFR32ZG23: ZW-LR, SoC, 14 dBm & Secure Vault High	Serial API using BRD4002A
800	BRD4204D	EFR32ZG23: ZW-LR, SoC, 14 dBm, Secure Vault High & external 32kHz crystal mounted	Serial API using BRD4002A
800	BRD4205A	ZGM230SA: ZW-LR, SiP, 14 dBm & Secure Vault Mid	Applications using BRD4002A/BRD8029A
800	BRD4205B	ZGM230SB: ZW-LR, SiP, 14 dBm & Secure Vault High	Applications using BRD4002A/BRD8029A
800	BRD4210A	ZGM230S: ZW-LR, SoC, 20 dBm & Secure Vault High	Applications using BRD4002A/BRD8029A
700	BRD4200A	ZGM130S: SiP & 14 dBm	Applications using BRD4002A/BRD8029A
700	BRD4201A	EFR32ZG14: SoC & 14 dBm	Serial API using BRD4002A
700	BRD4202A	ZGM130S: SiP, 14 dBm & no SAW filters	Applications using BRD4002A/BRD8029A
700	BRD4206A	EFR32ZG14: ZW-LR, SoC & 14 dBm	Serial API using BRD4002A
700	BRD4207A	ZGM130S: ZW-LR, SiP & 14 dBm	Applications using BRD4002A/BRD8029A
700	BRD4208A	EFR32ZG14: ZW-LR, SoC & 20 dBm	Serial API using BRD4002A
700	BRD4209A	ZGM130S: ZW-LR, SoC & 20 dBm	Applications using BRD4002A/BRD8029A

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 indicate that the radio boards 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.

2 Z-Wave Protocol

It's important that 800 products based on SDK v7.17.x are migrated to v7.18.x because Secure Element firmware and main bootloader can't be upgraded over the air (OTA) in the previous version.

2.1 New Items

Added in release 7.18.0 Pre-Certified GA

The Gecko Software Development Kit version 4.00 introduces a new underlying platform architecture based on components. The Z-Wave SDK 7.17.x now uses this component structure, and therefore the structure and build method of Z-Wave applications has changed compared to previous releases of Z-Wave SDK. The new component structure offers several new features in the GSDK:

- Search and filter to find and discover software components that work with the target device
- Automatically pull in all component dependencies and initialization code
- Configurable software components including peripheral units and drivers
- All configuration settings in C header files for usage outside of Simplicity Studio
- Configuration validation to alert developers to errors or issues
- GNU makefiles as a build option

Other changes specific to the Z-Wave Gecko SDK:

- main() is now part of the application
- The FreeRTOS configuration is available for application developers
- The region can be configured in Simplicity Studio GUI

2.2 Improvements

None

2.3 Fixed Issues

Fixed in release 7.18.0 Pre-Certified GA

ID #	Description
822972	Z-Wave Controller library is not available for both the ZG23A (BRD4204A and BRD4204B) and ZG23B (BRD4204C and BDR4204D).
833179	When excluding a Z-Wave Long Range device from the network the callback for FUNC_ID_ZW_REMOVE_NODE_FROM_NETWORK with REMOVE_NODE_STATUS_DONE – the nodeID is 0000 rather than the expected nodeID of the removed device. Additionally, note that FUNC_ID_SERIAL_API_GET_LR_NODES still has the node present. This only happens if another Node Info Frame (NIF) was received between inclusion and exclusion.
817671	Z-Wave 800 Listen Before Talk (LBT) threshold does not work because App configuration iListenBeforeTalkThreshold setting is not used in protocol.
738700	Controller cannot handle incoming notification command from a device during removal of a device.
839495	When a device sends a routed frame it processes the routed_Ack frame before the device receives the silent_ack frame. This results in additional transmitted frames, creating unnecessary overhead.
746113	Packet Trace Interface (PTI) is enabled on 800. This peripheral collects all received and transmitted packets and some meta data directly from the sequencer, thereby providing valuable information to help debug complex problems in a mesh network.
848606	Network Wide Exclusion (NWE) through repeaters doesn't work.
819943	Difference between 700 and 800 SmartStart timeout. Timeout expires about 4 seconds later on 800 compared to 700 that takes around 245 seconds.

2.4 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
753756	Network Wide Inclusion (NWI) of 500-based apps doesn't work through 700/800 repeaters.	NWI works at second attempt.
355095	In small networks Assign Return Routes will only generate direct range or one-hop routes even though multi-hop routes are possible.	None
361273	Transport Service is used when it is necessary to split a frame in two parts due to size. However, Transport Service does not forward RSSI information from the lower layers but only routing information. The RSSI value is the difference between LWR RSSI and background RSSI. As a consequence it is not possible to use RSSI for large frames handled by Transport Service in a network health calculation.	None
825895	800 based device cannot add a 100 based device.	None
830343	FUNC_ID_NVM_BACKUP_RESTORE is used by Z/IP Gateway in this order; OPEN, READ, and CLOSE. However, 800 returns no response on CLOSE while 700 works fine.	None
761735	OTA firmware update to a FLiRS device via a repeater result always in a wakeup beam before the repeater forwarded a Firmware Update Md Report from Controller to the LSS destination. This prolong time used for the entire OTA firmware update process.	None

2.5 Deprecated Items

None

2.6 Removed Items

None

3 Z-Wave Plus V2 Application Framework

3.1 New Items

None

3.2 Improvements

Changed in release 10.18.0 Pre-Certified GA

For a detailed description of application development using the Z-Wave Plus V2 Framework, refer to *INS14259: Z-Wave Plus V2 Application Framework SDK7*.

A porting guide is also available for customers that want to migrate 800 hardware. The guide contains a detailed example of how to port a non-UC 700-based Switch On/Off App (7.16.3) to a UC 800-based Switch On/Off App (7.17.0), refer to *APL14836: Application Note for Porting Z-Wave Appl. SW from 700 to 800 Hardware*.

3.3 Fixed Issues

Fixed in release 10.18.0 Pre-Certified GA

ID #	Description
758507	The NVM3 file storing the result of the OTA upgrade was not done before reboot. The file migration would therefore fail in case it needed to be converted from the old format to the new FW format.

3.4 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
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.
473723	True status doesn't report correctly if there are multiple instances like colors (in Color Switch CC), endpoints, etc.	None

3.5 Deprecated Items

None

3.6 Removed Items

None

4 Certified Applications

The certified applications based on v7.x.1+ will be formally certified by a certification house. However, the first release (v7.x.0) will only contain pre-certified applications based on a certification test using CTT v3. Refer to *INS14278: How to Use Certified Apps* for details.

4.1 Door Lock Key Pad

4.1.1 New Items

None

4.1.2 Improvements

None

4.1.3 Fixed Issues

None

4.1.4 Known Issues in the Current Release

None

4.1.5 Deprecated Items

None

4.1.6 Removed Items

None

4.2 LED Bulb

4.2.1 New Items

None

4.2.2 Improvements

None

4.2.3 Fixed Issues

None

4.2.4 Known Issues in the Current Release

None

4.2.5 Deprecated Items

None

4.2.6 Removed Items

None

4.3 Power Strip

4.3.1 New Items

None

4.3.2 Improvements

None

4.3.3 Fixed Issues

None

4.3.4 Known Issues in the Current Release

None

4.3.5 Deprecated Items

None

4.3.6 Removed Items

None

4.4 Sensor PIR

4.4.1 New Items

None

4.4.2 Improvements

None

4.4.3 Fixed Issues

None

4.4.4 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
758906	Wakeup current has increased on both 700 and 800 SoCs. Caused by an unintentional IR calibration performed at start-up.	None
844498	When the Wake Up Interval times out, SensorPIR app in SDK 7.17.2 for both 700s and 800s reports the reset reason as 4 (ERESETREASON_EM4_EXT_INT), which should be 1 (ERESETREASON_EM4_WUT)	None

4.4.5 Deprecated Items

None

4.4.6 Removed Items

None

4.5 Switch On/Off

4.5.1 New Items

None

4.5.2 Improvements

None

4.5.3 Fixed Issues

None

4.5.4 Known Issues in the Current Release

None

4.5.5 Deprecated Items

None

4.5.6 Removed Items

None

4.6 Wall Controller

4.6.1 New Items

None

4.6.2 Improvements

None

4.6.3 Fixed Issues

None

4.6.4 Known Issues in the Current Release

None

4.6.5 Deprecated Items

None

4.6.6 Removed Items

None

5 Pre-Certified Applications

The pre-certified applications will not be formally certified but certification tests have been performed based on CTT v3. Refer to *INS14816: How to Use Pre-Certified Apps* for details.

5.1 Multilevel Sensor

5.1.1 New Items

None

5.1.2 Improvements

None

5.1.3 Fixed Issues

None

5.1.4 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
844930	Multilevel Sensor should send Basic Set to the nodes in Association Group 2 when holding button S2 pressing down for at least 1 second.	None

5.1.5 Deprecated Items

None

5.1.6 Removed Items

None

5.2 Keyfob Controller

5.2.1 New Items

None

5.2.2 Improvements

None

5.2.3 Fixed Issues

Fixed in release 10.18.0 Pre-Certified GA

ID #	Description
820623	The Portable Controller EM2 sleep current shows that it consumes more than 40 μ A. Expects approximately 2 μ A.

5.2.4 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
844319	Keyfob as a secondary controller cannot perform security probing of an associated device.	None

5.2.5 Deprecated Items

None

5.2.6 Removed Items

None

6 Serial API Applications

Beginning with version 7.16, when backing up and restoring a SerialAPI via the FUNC_ID_NVM_BACKUP_RESTORE, the SerialAPI will automatically upgrade the protocol non-volatile memory (NVM) to the latest version. Any backup made of a 7.16 or later SerialAPI can be restored to its original version or to a later version of the SerialAPI without any manual upgrade of the protocol NVM being necessary.

The serial interface is unchanged in version 8.

6.1 Serial API Controller

Added in release 10.18.0 GA

Host application on Unify use the Serial API Controller application.

6.1.1 New Items

None

6.1.2 Improvements

None

6.1.3 Fixed Issues

None

6.1.4 Known Issues in the Current Release

None

6.1.5 Deprecated Items

None

6.1.6 Removed Items

None

6.2 Serial API End Device

Application using Serial API End Device doesn't exist.

6.2.1 New Items

None

6.2.2 Improvements

None

6.2.3 Fixed Issues

None

6.2.4 Known Issues in the Current Release

None

6.2.5 Deprecated Items

None

6.2.6 Removed Items

None

7 Important Changes

7.1 7.18.x

7.1.1 Power Down Debug

Debugging in EM2 power down mode is enabled by default, as it was in the previous SDK version. To disable the EM2 debug capability in Simplicity Studio go to application.slocp **SOFTWARE COMPONENTS** -> **Services** -> **Device Initialization** and open the Component Editor for **Device Init: EMU**. Then uncheck the slide button at **Allow debugger to remain connected in EM2**.

The macro `APP_POWERDOWNDEBUG` in `config_app.h` that was previously used to select if EM2 debug would be enabled/disabled has been deprecated.

7.1.2 ZAF_Init() and ZAF_Reset()

`ZAF_Init()` will initialize command classes that have registered an init function using `REGISTER_CC_V4()`. `ZAF_Reset()` will reset command classes that have registered a reset function using `REGISTER_CC_V4()`. See `CC_PowerLevel.c` for an example of this.

7.1.3 Command Class Z-Wave Plus Info

Command Class Z-Wave Plus Info was refactored to decouple it better from the application. This means that the `CC_ZWavePlusInfo.h` does not exist anymore. On the application side the `static const SCCZWavePlusInfo CCZWavePlusInfo` is no longer needed because the `CC_ZWavePlusInfo_Init(&CCZWavePlusInfo);` function is removed. All configuration is done under the hood by the command class and the values are still extracted from the `config_app.h`.

7.1.4 Command Class Version

Command Class Version was refactored to support excluding it from a build and thus creating a smaller application that can be used for updating Secure Element. This resulted in the following functions no longer being required in the application:

`CC_Version_getNumberOfFirmwareTargets_handler()`

This function was replaced by a configuration parameter for the ZAF component that can be set in Simplicity Studio.

`handleGetFirmwareVersion() / CC_Version_GetFirmwareVersion_handler()`

`handleGetFirmwareVersion()` was a compatibility macro of `CC_Version_GetFirmwareVersion_handler()`. The firmware version is now fetched directly inside the command class using ZPAL functions. An application must continue to set the version in `config_app.h` using `APP_VERSION`, `APP_REVISION` and `APP_PATCH`.

This function is defined weakly in `CC_Version.c` and can be overridden in case an application requires support for more than one firmware target. The Z-Wave example applications use one firmware target only. For more information about firmware targets, see the Command Class Firmware Update Meta Data specification.

`CC_Version_GetHardwareVersion_handler()`

This function was replaced by a configuration parameter for the ZAF component that can be set in Simplicity Studio.

7.1.5 Command Class Device Reset Locally

Command Class Device Reset Locally was refactored to support excluding it from a build and thus creating the option for a smaller application that can be used for updating Secure Element.

`CC_DeviceResetLocally_notification_tx()` no longer takes an AGI profile nor a callback function as arguments. The profile was removed because the recommended profile is Lifeline. The callback is now declared externally in `CC_DeviceResetLocally.h`.

7.1.6 Command Class Power Level

`CC_PowerLevel.h` was removed as CC Power Level no longer has an API in the application. The initialization and reset of this command class is now done automatically by `ZAF_Init()` and `ZAF_Reset()`.

7.1.7 MFG Token Z-Wave Region

Starting with 7.18.0, Z-Wave Region is saved in MFG Token `MFG_ZWAVE_COUNTRY_FREQ`. When binary is flashed to the board for the first time, value of Z-Wave region gets written to this token.

It's important to note that the value of `MFG_ZWAVE_COUNTRY_FREQ` does NOT get erased when a binary with a different region is flashed. Once written, this value is only changed by writing a new value, or `0xFF` (uninitialized). This applies to all applications.

Useful commands:

- Write REGION_US value: `commander flash --tokengroup znet --token MFG_ZWAVE_COUNTRY_FREQ:0x01`
- Read value: `commander tokendump --tokengroup znet --token MFG_ZWAVE_COUNTRY_FREQ`
- Delete value: `commander flash --tokengroup znet --token MFG_ZWAVE_COUNTRY_FREQ:0xFF`

It's still possible to set the region using `ZW_REGION` value, but it's important to remember that `MFG_ZWAVE_COUNTRY_FREQ` must be `0xFF`, otherwise `ZW_REGION` will be ignored.

Please note that Serial API reads the region from the MFG token on first startup only. After that, region is stored in NVM and can be changed by using PC Controller, for example.

7.1.8 Z-Wave Long Range SmartStart Sequence

SmartStart frames order has been swapped for LR supporting devices, so that LR inclusion is prioritized. This change does not affect devices that do not support LR.

8 Open Source Software

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

9 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 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, PSA, and mbedTLS. Gecko Platform release notes are available through Simplicity Studio's Launcher Perspective.

9.1 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 world-wide 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 700/800 SDK is provided as part of the Gecko SDK (GSDK), 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 for more information.

Simplicity Studio installs the GSDK by default in:

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

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

9.2 Security Information

Secure Vault Integration

This version of the stack are 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 minimum for your platform and protocol. Click **Save** to save any changes.

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<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	

9.3 Support

Development Kit customers are eligible for training and technical support.

See support resources and contact Silicon Laboratories support at <http://www.silabs.com/support>.

10 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 matured 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.

Ascent Phase (BETA)

Silicon Labs releases new Z-Wave protocol generations (branches), i.e., initial BETA release of a Z-Wave Protocol generation that will introduce major new features/functions or support for a new Z-Wave Single Chip generation. This release is not certified and not eligible for certification.

Maturity Phase (ACTIVE/MAINTAINED)

Each new generation will generate follow-on matured releases to resolve protocol issues prioritized by Silicon Labs and based on input from Z-Wave Alliance Partners.

Decline Phase (MONITORED/OBSOLETE)

After a period of 17-24 months in the maturity phase a branch/release is discontinued and for an additional period (up to 24 months) a discontinued branch/release will be monitored since products based on this branch may still be shipping or under warranty in the field.

Table 10-1. Z-Wave SDK Life Cycle Status

Series	SDK Version	Release Date [DD-MMM-YYYY]	Life Cycle Status
700/800	7.18.0 Pre-Certified GA	08-JUN-2022	Beta
700/800	7.17.2 GA	09-MAR-2022	Active
700/800	7.17.1 Pre-Certified GA	28-JAN-2022	Obsolete
700/800	7.17.0 Pre-Certified GA	08-DEC-2021	Obsolete
700	7.16.2 GA	08-SEP-2021	Active
700	7.16.1 GA	21-JUL-2021	Maintained
700	7.16.0 Pre-Certified GA	16-JUN-2021	Obsolete
700	7.15.4 GA	07-APR-2021	Active
700	7.15.2 Pre-Certified GA	27-JAN-2021	Monitored
700	7.15.1 Pre-Certified GA	09-DEC-2020	Obsolete
700	7.14.3 GA	14-OCT-2020	Monitored
700	7.14.2 GA	09-SEP-2020	Obsolete
700	7.14.1 GA	29-JUL-2020	Obsolete
700	7.14.0 Beta	24-JUN-2020	Obsolete
700	7.13.10 GA	18-AUG-2021	Obsolete
700	7.13.9 GA	03-MAR-2021	Obsolete
700	7.13.8 GA	28-OCT-2020	Obsolete
700	7.13.7 GA	12-AUG-2020	Obsolete
700	7.13.6 GA	27-MAY-2020	Obsolete
700	7.13.5 GA	29-APR-2020	Obsolete
700	7.13.4 GA	15-APR-2020	Obsolete
700	7.13.3 GA	20-MAR-2020	Obsolete
700	7.13.2 GA	21-FEB-2020	Obsolete
700	7.13.1 GA	24-JAN-2020	Obsolete
700	7.13.0 Beta	13-DEC-2019	Obsolete
700	7.12.2 GA	26-NOV-2019	Obsolete
700	7.12.1 GA	20-SEP-2019	Obsolete
700	7.11.1 GA	12-JUL-2019	Obsolete
700	7.11.0 GA	29-MAR-2019	Obsolete

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.

Table 10-2. Z-Wave Certification in case of a SDK upgrade.

Series	SDK Version	Upgrade to SDK Version	Type of Certification
700/800	7.18.0 Pre-Certified GA	NA	-
700/800	7.17.2 GA	NA	-
700/800	7.17.1 Pre-Certified GA	7.17.2 GA	Full certification
700/800	7.17.0 Pre-Certified GA	7.17.2 GA	Full certification
700	7.16.2 GA	7.17.2 GA	Full certification
700	7.16.1 GA	7.16.2 GA	Re-certification
700	7.16.0 Pre-Certified GA	7.16.1 GA	Full certification
700	7.15.4 GA	7.16.1 GA	Full certification
700	7.15.2 Pre-Certified GA	7.15.4 GA	Full certification
700	7.15.1 Pre-Certified GA	7.15.2 Pre-Certified GA	Full certification
700	7.14.3 GA	7.15.1 Pre-Certified GA	Full certification
700	7.14.2 GA	7.14.3 GA	Re-certification
700	7.14.1 GA	7.14.2 GA	Re-certification
700	7.14.0 Beta	7.14.1 GA	Full certification
700	7.13.10 GA	7.14.1 GA	Re-certification
700	7.13.9 GA	7.13.10 GA	Re-certification
700	7.13.8 GA	7.13.9 GA	Re-certification
700	7.13.7 GA	7.13.8 GA	Re-certification
700	7.13.6 GA	7.13.7 GA	Re-certification
700	7.13.5 GA	7.13.6 GA	Re-certification
700	7.13.4 GA	7.13.5 GA	Re-certification
700	7.13.3 GA	7.13.4 GA	Re-certification
700	7.13.2 GA	7.13.3 GA	Re-certification
700	7.13.1 GA	7.13.2 GA	Re-certification
700	7.13.0 Beta	7.13.1 GA	Full certification
700	7.12.2 GA	7.13.1 GA	Re-certification
700	7.12.1 GA	7.13.1+ GA	Re-certification
700	7.11.1 GA	7.14.1+ GA 7.13.1+ GA	Re-certification Re-certification
700	7.11.0 GA	7.14.1+ GA 7.13.1+ GA	Re-certification Re-certification

11 Legal

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