



# Zigbee EmberZNet SDK 6.10.9.0 GA

## Gecko SDK Suite 3.2

### October 25, 2023

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Silicon Labs is the vendor of choice for OEMs developing Zigbee networking into their products. The Silicon Labs Zigbee platform is the most integrated, complete, and feature-rich Zigbee solution available.

Silicon Labs EmberZNet SDK contains Silicon Labs' implementation of the Zigbee stack specification.

These release notes cover SDK version(s):

- 6.10.9.0 released October 25, 2023
- 6.10.8.0 released September 5, 2023
- 6.10.7.0 released July 13, 2023
- 6.10.5.0 released March 29, 2023
- 6.10.4.0 released January 11, 2023
- 6.10.3.0 released October 13, 2021
- 6.10.2.0 released September 8, 2021
- 6.10.1.0 released July 21, 2021
- 6.10.0.0 released June 16, 2021



#### KEY FEATURES

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- Support for redesigned MG22 radio board (BRD4183C)
- Updated IAR and GCC compiler versions

## 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 Zigbee EmberZNet SDK, see [Using This Release](#).

### Compatible Compilers:

IAR Embedded Workbench for ARM (IAR-EWARM) version 8.50.9.

- Using wine to build with the IarBuild.exe command line utility or IAR Embedded Workbench GUI on macOS or Linux could result in incorrect files being used due to collisions in wine's hashing algorithm for generating short file names.
- Customers on macOS or Linux are advised not to build with IAR outside of Simplicity Studio. Customers who do should carefully verify that the correct files are being used.

GCC (The GNU Compiler Collection) version 10.2.0, provided with Simplicity Studio.

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# 1 New Items

## 1.1 New Plugins

None

## 1.2 New APIs

### Added in release 6.10.0.0

**emberAddChild()** - SoC-only API for adding a child to the child/neighbor table, allowing direct manipulation of these tables by the application.

**emberRemoveChild()** - SoC-only API for removing a node from child/neighbor table, allowing direct manipulation of these tables by the application.

**emberRemoveNeighbor()** - SoC-only API for removing a node from neighbor table, allowing direct manipulation of these tables by the application.

## 1.3 New Sample Applications

None

## 1.4 New Platform Support

### Added in release 6.10.7.0

This release added support for the following radio board models :

- BRD4195b
- BRD4196b

### Added in release 6.10.2.0

This release added support for the following radio board models :

- BRD4264c
- BRD4265b
- BRD4204c
- BRD4204d
- BRD4210a

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## 2 Improvements

### 2.1 Plugin Changes

None

### 2.2 API Changes

None

### 2.3 Sample App Changes

None

### 2.4 Framework Changes

None

### 2.5 Documentation Changes

None

### 3 Fixed Issues

#### Fixed in release 6.10.7.0

| ID #                   | Description  |
|------------------------|--|
| 398694, 823888, 519731 | ZCL reporting plugin is modified so that a rarely occurring exception condition (failure to read a reportable attribute's value; possibly because the attribute's endpoint is disabled) does not result in excess execution cycles, repetitive printing of a debug message, and (for an RTOS configuration) blocking of a lower-priority task. |
| 841499                 | Fixed issue where a newly joined device can sometimes not get added to the child table if its IEEE address is not known.   |
| 1150905                | Fixed spurious frame pending bit set when there is no data pending.  |

#### Fixed in release 6.10.5.0

| ID #    | Description  |
|---------|--|
| 1103581 | Fixed an issue that caused a new device to join the network with a random extended PAN Id instead of using the same from received beacon. This difference in extended PAN Id was causing a PAN Id conflict upon device join. |

#### Fixed in release 6.10.3.0

| ID #   | Description   |
|--------|---|
| 437817 | We now allow configuration of SL_ZIGBEE_TRANSIENT_DEVICE_DEFAULT_TIMEOUT_MS from the app. This timeout controls the duration that a device is allowed to remain in a transient table while it fully authenticates, after which it is moved into other tables (child or neighbor). Note that this timeout replaces EMBER_SHORT_CHILD_TIMEOUT, which previously defaulted to 2 minutes. |
| 648307 | Changed code to allow application callback (macFilterMatchMessageHandler) to fire for ZLL SCAN RESPONSE messages.   |
| 688146 | Reduced maximum value of network key update duration from 45 days to 22 days since this is the maximum that our event-control implementation will allow.  |
| 703761 | ID conflicts between child nodes now result in rejoin responses being sent to both children.  |
| 703776 | Fixed issue where an unsolicited rejoin response due to node ID conflict was not getting written into tokens.   |
| 739820 | Packet Handoff plugin: Fixed option to mangle outgoing packet when returning EMBER_MANGLE_PACKET for outgoing message of types EMBER_ZIGBEE_PACKET_TYPE_RAW_MAC, EMBER_ZIGBEE_PACKET_TYPE_NWK_DATA and EMBER_ZIGBEE_PACKET_TYPE_NWK_COMMAND   |

#### Fixed in release 6.10.2.0

| ID #   | Description  |
|--------|--|
| 435628 | Prevent unnecessary route discoveries if the destination is not in the neighbor table or routing table, but is one-hop away in the source route table. |
| 645781 | Fixed issue where EMBER_ALLOCATE_PACKET_BUFFER_FAILURE counter is not incremented upon buffer allocation failure.                                      |
| 681929 | Fixed issue where the network-steering plugin does not utilize the configured radio power for performing an active scan.                               |
| 692456 | Fixed issue with intermittent Bluetooth LE connections when the "Poll CLI" option in the RTOS-Common plugin is disabled.                               |
| 702011 | Fixed issue where store and forward queue access can corrupt RAM.  |
| 709663 | The stack now implements some defensive code to protect against vulnerabilities of Trust Center rejoin Mechanism.                                      |

| ID #   | Description  |
|--------|--|
| 711280 | Fixed issue where mfglibStart would return success, but immediately calling other mfglib functions after would result in failures.<br>Note that with this fix, depending on the state of the radio, mfglibStart can take 10s of milliseconds to return control to the application, as it waits on the radio to be fully shut down.   |
| 715425 | Fixed issue where the network-find plugin does not utilize the configured radio power for performing an active scan.   |
| 719226 | Fixed issue where the DMP node does not re-start advertising after a Bluetooth LE connection has been opened.  |
| 730936 | Resolved issue where nodes that fail a periodic trust-center link key update leave the network.  |
| 731554 | Support run-time switching from the 15.4 RX antenna diversity PHY to the default PHY when RX antenna diversity is disabled.  |
| 734217 | An issue has been fixed where the Multi-PAN NCP UART HW application would fail to connect to a host application when the NCP was an EFR device using NVM3 for persistent storage. The root cause - an insufficient NVM3 cache size - has been changed for the sample application from 200 to 600. Users encountering this issue who have already created a project should make this change in the NVM3 plugin. |
| 734940 | Corrected an error in the CLI for getting Antenna Diversity RX mode.   |
| 737854 | Fixed issue where mfglib does not ignore acks and thereby causes inconsistent transmit power levels.   |

### **Fixed in release 6.10.1.0**

| ID #   | Description   |
|--------|---|
| 683680 | A fix was introduced to avoid erroneous association requests when joining a network via Alternate MAC interface, after an unsuccessful joining attempt to a different network.  |
| 689998 | An issue has been fixed where the Mgmt_NWK_Update_notify command frame would contain incorrect values for the EnergyValues field, where every other byte would be incrementing from 0x0B to 0x12 in hexadecimal. The Mgmt_NWK_Update_notify frame now contains valid energy scan values for each channel scanned. |
| 719332 | Fixed an issue where running network-steering after mfglib caused an assert.  |
| 719388 | Now when the Zigbee coordinator/router leaves a network, we close it cleanly including resetting the permit joining state. This prevents a newly formed network to assume a false open state that might have been set from the previous network.  |

### **Fixed in release 6.10.0.0**

| ID #   | Description  |
|--------|--|
| 480969 | ZCL8 specifies default values for the optional optionsMask and optionsOverride fields in certain ZCL commands in the Level and Color Control clusters. When such a command is received and those optional fields are omitted, the specified default values are used. Note, the implementation was already properly handling the absence of these optional command fields. The change made here is to obtain the default values from ZCL cluster metadata, rather than use implementation-chosen defaults. There is no functional change in the behavior of these cluster commands.   |
| 493695 | Fixed an issue where receiving a malformed link power delta message caused an assert.  |
| 622615 | Resolved issue where a malformed association response packet may cause a segmentation fault when a null-pointer is dereferenced.   |
| 622616 | Fixed issue that caused a segmentation fault upon receiving a malformed association request or network rejoin packet.  |
| 630405 | If a ZCL global command for discovery of cluster commands / attributes specifies the "wildcard" value 0xFFFF in the request's manufacturer-specific code field, we first resolve the lowest numbered manufacturer-specific cluster command ID / attribute ID at or following the request's specified starting ID. We then further resolve to find the lowest-numbered manufacturer-specific code if that cluster command ID / attribute ID happens to be overloaded by more than one manufacturer-specific implementation. Having resolved the manufacturer-specific code, the discovery operation is then executed using that code and the discovery results are returned accordingly. The ZCL response message will reflect the resolved code in the message's manufacturer-specific code field. |
| 652699 | The issue of GPD switch crashing is root-caused to inappropriate configuration of the mbed TLS in the GPD framework. The issue is resolved by updating the mbed TLS setup in the framework to use Silicon Labs platform memory manager, and by allocating adequate heap space for the GPD framework.   |

| ID #   | Description   |
|--------|---|
| 656677 | 'sl_mac_make_raw_message' API now takes in a Buffer instead of an array as argument.<br>'emberReallyAppendToLinkedBuffers' and 'emberAppendToLinkedBuffers' APIs now returns sl_status_t instead of EmberStatus.  |
| 675893 | Fixed an issue where the Zigbee GB868 stack could get the transmit power originally established for the 2.4 GHz band after switching to the SubGHz band, impacting power negotiation in Enhanced Beacon Requests. |
| 679453 | Fixed issue with buttons being unresponsive on DMP sleepy sample app that can only be observed when Polling CLI option is disabled in the idle-sleep plugin.  |
| 698048 | Fixed issue where ZNet Antenna Diversity CLI did not correctly set TX Antenna mode.   |
| 705595 | Fixed an issue where custom PA curves provided through the PA Module were not respected when building Silicon Labs Zigbee applications.   |

## 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  |
|--------|---|---|
| 82569  | RAM corruption (in Packet Buffers) could occur if MAC Filter Match List Size is non-zero and a list of the maximum size is provided to ezspSetValue for EZSP_VALUE_MAC_FILTER_LIST.                                       | No known workaround   |
| 106307 | Nodetest calChannel command does not wake the radio to work properly.   | No known workaround   |
| 119939 | ZDO IEEE Request's APS ACK proxied by parent incorrectly includes long source address.  | No known workaround   |
| 135649 | Multi-networking can cause APS frame counter confusion between networks.  | Use emberAfSecurityInitCallback to add EMBER_NO_FRAME_COUNTER_RESET to EmberInitialSecurityBitmask.   |
| 251287 | Sleepy sample apps may not include Voltage Scaling, which is required to achieve the lowest current during sleep on some EFR32 parts.   | In Hardware Configurator, enable the EMU peripheral if applicable to your part, set Voltage Scaling to TRUE for EM0/EM1 and to Fast Wakeup for EM2/3. In the CMU peripheral, set the clock sources for "EM2 and 3", EM4, RTCC and WDOG to LFXO. |
| 261670 | Harden the ZLL touchlink process to mitigate malicious attacks  | No known workaround   |
| 266341 | Z3 Light sample app has two endpoints that support similar cluster commands, so duplicate responses may be generated for certain commands.  | No known workaround   |
| 271644 | A device that performs a classic join to a legacy ZLL gateway may eventually leave the network on its own initiative.   | No known workaround   |
| 278063 | Smart Energy Tunneling plugins have conflicting treatment/usage of address table index  | No known workaround   |
| 281832 | Green Power Common plugin incorrectly formats groupList and groupListCount parameters of GP Pairing Configuration frame.  | No known workaround   |
| 289569 | Network-creator plugin power level picklist doesn't offer full range of supported values for EFR32  | Change the range in the plugin.properties file.   |
| 295498 | UART reception sometimes drops bytes under heavy load in Zigbee+BLE DMP use case  | Use hardware flow control or lower the baud rate.   |
| 312291 | EMHAL: The halCommonGetIntxxMillisecondTick functions on linux hosts currently use the gettimeofday function, which is not guaranteed to be monotonic. If the system time changes, it can cause issues with stack timing. | Modify these functions to use clock_gettime with the CLOCK_MONOTONIC source instead.  |
| 331438 | Service discovery may time out too quickly in busy networks.  | Define EMBER_AF_DISCOVERY_TIMEOUT_QS to customize the timeout period.   |
| 338151 | Initializing NCP with a low packet buffer count value may cause corrupt packets.  | No known workaround   |
| 356937 | Read/write attribute CLI commands do not support manufacturer-specific ZCL attributes. Some implementations may allow local CLI debug access to display or modify these attributes.                                       | Access the attributes from a remote device in the network via ZCL global Read/WriteAttributes commands.   |
| 363162 | There is a bug in emberAfAddAddressTableEntry which could allow for duplicate entries in the address table  | Under Investigation   |



| ID #   | Description  | Workaround   |
|--------|--|--|
| 387750 | Issue with Route Table Request formats on end device.  | Under Investigation  |
| 400418 | A touchlink initiator cannot link to a non-factory-new end-device target.  | Under Investigation  |
| 406826 | EMHAL: Eeprom Powerdown Plugin may occasionally fail to power down the external flash on the radio board, resulting in higher (about 6 $\mu$ A) EM2 current.   | Reset the radio board.   |
| 424355 | A non-factory-new sleepy end device touchlink target-capable initiator is not able to receive a device information response in certain circumstances.  | Under Investigation  |
| 426066 | OTA client could reset when it starts to apply the new image if all debug print is disabled.   | Modify the function emberAfOtaClientBootloadCallback in source file "ota-client-policy/ota-client-policy.c", comment the function call of "emberSerialWaitSend".   |
| 437502 | hallInit() is called twice in EmberZNet SPI NCP Host Application.  | No known workaround  |
| 437704 | The OccupiedCoolingSetpoint attribute should be optional by default in Appbuilder.   | Modify the "optional" flag from false to true in the OCCUPIED_COOLING_SETPOINT attribute in app/zcl/ha.xml   |
| 437817 | EMBER_SHORT_CHILD_TIMEOUT defaults to 2 minutes and cannot be overridden as it should.   | No known workaround  |
| 439062 | When receiving a Network Status command as a broadcast, the command frame is neither retransmitted nor added to the broadcast transaction table.   | No known workaround  |
| 442664 | In a dense network with many devices joining simultaneously, a packet buffer assert is sometimes seen when collecting beacons during network steering.   | No known workaround  |
| 446827 | There is a potential for the code to get stuck in an infinite loop if it is unable to write to the edge detect setting of the GPIO in function edgeGpioDevice in file spi-protocol-linux.c.  | If using SPI Host, increment the loopCount variable in the while loop.   |
| 454935 | When the Z3Switch sample app is changed to be a sleepy end device on EFR32MG21, it may reset repeatedly.   | Press Reset button, power cycle or disconnect debug interface.   |
| 456350 | "emberAfPluginIasZoneClientReadAttributesResponseCallback" in "ias-zone-client.c" incorrectly sets the type of "zoneStatus" and "zoneType" attributes to uint8_t. The correct type should be uint16_t.   | Modify the type of these two attributes to "uint16_t" in "emberAfPluginIasZoneClientReadAttributesResponseCallback".   |
| 465180 | The Coexistence Radio Blocker Optimization item "Enable Runtime Control" may block proper Zigbee operation.  | Optional 'Wi-Fi Select' Control of Blocker Optimization should be left "Disabled".   |
| 468581 | ZCL attribute tokens creator codes are likely to change if you add or remove one or more attributes. For instance, if you add an attribute whose cluster ID or attribute ID is not the largest numerically, then this attribute gets inserted into a list of creator codes and makes all creator codes after it to be different (shifted). | Use the script at <a href="https://github.com/SiliconLabs/loT_Utility_Scripts/tree/master/token_preserver">https://github.com/SiliconLabs/loT_Utility_Scripts/tree/master/token_preserver</a> to fix this issue. |

| ID #   | Description  | Workaround   |
|--------|--|--|
| 469704 | <p>On EFR32XG2x there is a known issue with the debug interface where a pin reset, connection to a debugger or flashing an image on device could cause a pull up on DBG_TDI and DBG_TDO pins which cannot be reliably disabled in software.</p> <p>On BRD4182A, this could cause the device to be unable to communicate with the Serial flash. As a result a reset loop is possible when a bootloader is used. A pin reset is needed to get the device out of the reset loop.</p> <p>A related software bug that caused a reset loop for applications with application bootloaders is fixed.</p> | <p>Avoid a pin reset of EFR32XG2X when a debugger is attached. If a pin reset is necessary, avoid using PA3 and PA4, or use JTAG instead of SWD.</p>   |
| 474616 | EEPROM POWERDOWN plugin can't compile on MG22.   | No known workaround  |
| 475287 | The DCDC settings in the Hardware Configurator do not take effect on EFR32MG22 Zigbee SoC samples.   | <pre> Call the following code in emberAfMainInitCallback() #if BSP_DCDC_PRESENT EMU_DCDCInit_TypeDef dcdcInit = BSP_DCDC_INIT; #if HAL_DCDC_BYPASS dcdcInit.dcdcMode = emuDcdcMode_Bypass; #endif EMU_DCDCInit(&amp;dcdcInit); #else EMU_DCDCPowerOff(); #endif </pre>   |
| 479521 | Building Zigbee SoC images with the Smart energy token optimization feature enabled and using the Simplicity Studio 5 IDE will not link the correct stub libraries.  | The path to the stub libraries in the .ewp file need to be corrected manually.   |
| 480550 | The OTA cluster has its own built-in fragmentation method, hence it should not use APS fragmentation. Although, in case APS encryption is enabled it grows the payload of the ImageBlockResponses to a size where the APS fragmentation is activated. This could lead to the OTA process failing.  | No known workaround  |
| 481128 | Detailed Reset Cause and crash details should be available by default via the Virtual UART (Serial 0) on NCP platforms when Diagnostics plugin and Virtual UART peripheral are enabled.  | <p>Since Serial 0 is already initialized in the NCP, customers can enable the emberAfNcpInitCallback in the Zigbee NCP Framework and call the appropriate diagnostic functions (halGetExtendedResetInfo, halGetExtendedResetString, halPrintCrashSummary, halPrintCrashDetails, and halPrintCrashData) in this callback to print this data to Serial 0 for viewing in the Network Analyzer capture log. For an example of how to use these functions, refer to the code included in af-main-soc.c's emberAfMainInit() when EXTENDED_RESET_INFO is defined.</p> |
| 481618 | The "Network Open Time" option of the Network Creator Security plugin may not work as expected when you open network if the time does not match the transient key timeout.   | Set the Network Open time to the same value as the Transient Key Timeout.  |
| 486369 | If a DynamicMultiProtocolLightSoc forming a new network has child nodes remaining from a network it has left, emberAfGetChildTableSize returns a non-zero value in startIdentifyOnAllChildNodes, causing Tx 66 error messages when addressing the "ghost" children.  | Mass-erase the part if possible before creating a new network or programmatically check the child table after leaving the network and delete all children using emberRemoveChild prior to forming a new network.   |

| ID #   | Description  | Workaround  |
|--------|--|---|
| 488977 | OTA of EFR32xG2x devices will fail if using Slot Manager with Gecko bootloader 1.10 or newer.  | Set the macro "SLOT_MANAGER_VERIFICATION_CONTEXT_SIZE" to "BOOTLOADER_STORAGE_VERIFICATION_CONTEXT_SIZE" in \util\plugin\slot-manager\slot-manager.h. This must be modified in the SDK directly.  |
| 494873 | The sleepy end device can't rejoin to its previous parent with the rejoining API when the parent's child table is full.  | Reset the sleepy end device.  |
| 495563 | Joining SPI NCP Sleepy End Device Sample App doesn't short poll, therefore the joining attempt fails at the state of Update TC Link Key.   | The device that wishes to join should be in Short Poll mode before attempt to join. This mode can be forced by End Device Support plugin.   |
| 497832 | In Network Analyzer the Zigbee Application Support Command Breakdown for the Verify Key Request Frame mistakenly references the part of the payload that indicates the frame Source Address as the Destination Address.  | No known workaround   |
| 498094 | In function checkForReportingConfig() in metering-server.c, the second input parameter of the invoked function emberAfContainsServer() incorrectly references the attribute ID instead of the cluster ID.                | Change the 2nd input parameter from the attribute ID (ZCL_CURRENT_SUMMATION_DELIVERED_ATTRIBUTE_ID) to the cluster ID (ZCL_SIMPLE_METERING_CLUSTER_ID).   |
| 519905 | Spi-NCP may very rarely fail to start up bootloader communication using the 'bootload' CLI command of the ota-client plugin.   | Restart the bootload process  |
| 521706 | A duplicated attribute ID is assigned in the altConsumptionMonthAttrIds[] array of the gas-proxy-funxion plugins in gpf-structured-data.c.   | Change the second ZCL_PREVIOUS_MONTH6_ALTERNATIVE_CONSUMPTION_DELIVERED_ATTRIBUTE_ID to ZCL_PREVIOUS_MONTH7_ALTERNATIVE_CONSUMPTION_DELIVERED_ATTRIBUTE_ID.   |
| 620596 | NCP SPI Example for BRD4181A (EFR32xGMG21) nWake default pin defined cannot be used as a wake-up pin.  | Change the default pin for nWake from PD03 to a EM2/3 wake-up-enabled pin in the NCP-SPI Plugin.  |
| 621144 | GP on/off switch example cannot be compiled for the BRD4183A board.  | The sample has to be manually modified to use only one button.  |
| 621532 | A few seconds after NCP-SPI goes to sleep, it will wake-up once and go to sleep again.   | Disable the CC1 channel interrupt of RTCC in the callbacks.c file by using the EM23PresleepHook<br><pre>#include "em_emu.h"#include "em_rtcc.h"void EMU_EM23PresleepHook(void) { RTCC-&gt;CC[1].CTRL &amp;= ~_RTCC_CC_CTRL_MODE_MASK; RTCC_IntDisable(RTCC_IF_CC1); RTCC_IntClear(RTCC_IF_CC1); }</pre> |
| 623755 | The Dynamic Multiprotocol Light (DMP) sample application does not currently work on boards without a connection to the LCD display on the WSTK. This includes any custom boards and Silicon Labs boards like BRD4309A/B. | DMP can still be used on these boards, as this is only a limitation of the sample application.  |
| 631713 | A Zigbee End Device will report address conflicts repeatedly if the plugin "Zigbee PRO Stack Library" is used instead of "Zigbee PRO Leaf Library".  | Use the "Zigbee PRO Leaf Library" instead of the "Zigbee PRO Stack Library" plugin.   |
| 634828 | Certain messages with invalid Source Address (0xFFFE) trigger assert(0) in the application. In Host-NCP model the issue terminates the Host application execution.   | Modify the securityAddToAddressCache() in SoC model. The function source is not available in the NCP model, hence the emberPacketHandoffIncoming() function should be used to filter out invalid packets.   |

| ID #   | Description   | Workaround  |
|--------|---|---|
| 643130 | Sleepy end device may keep awake for a while if the "minimal wake time" option of plugin "idle/sleep" is set to 0.  | Disable debug print.  |
| 648861 | Routers using optimized scans during network steering will "miss" beacons that are broadcast by nodes that are open but advertise no end-device capacity that is, their child table is full). | No known workaround.  |
| 648906 | emberChildId API was accidentally removed in EmberZNet 6.8.0.2.   | Call sl_mac_child_short_id instead.   |
| 652833 | Host-NCP based nodes using optimized scans during network steering will "miss" beacons that are broadcast by nodes that are open.   | No known workaround.  |
| 659010 | emberChildIndex API was accidentally removed in EmberZNet 6.8.0.2.  | Call sl_mac_child_index instead.  |
| 661214 | Upgrading NCP from the host side will fail if the communication port between host and NCP is not USART0.  | Use USART0 as the communication port.   |
| 702802 | Slot Manager plugin fails to boot Series 2 devices with Zigbee app and Internal Storage Bootloader with multiple images configured.   | Change #define SLOT_MANAGER_VERIFICATION_CONTEXT_SIZE in slot-manager.h from 384 to 556 |

## 5 Deprecated Items

### Advanced Notice

Starting with the next major GSDK release, the Zigbee EmberZNet SDK version will be incremented to version 7.x, which is not backwards compatible with version 6.x. This means that an application written with the v6.x SDK will not work without modifications with the new v7.x SDK.

NOTE: Customers who cannot immediately move to Zigbee EmberZNet SDK v7.0 are reminded that 'maintenance' support for SDK v6.x will be provided in accordance to the "Software Longevity Commitment" statement found at <https://www.silabs.com/products/software/longevity-commitment>.

Version 7.x will be based on an underlying framework redesign that results in a new and improved development work flow within Simplicity Studio 5. Zigbee projects will be configured and built on a component architecture similar to that used by Bluetooth LE, Bluetooth Mesh, and Proprietary Flex SDKs. The release will contain an additional advanced configuration tool for the ZCL.

### Deprecated in release 6.10.0.0

The NodeTest binary is deprecated, and will be removed in the next major release. On the EFR32, NodeTest is replaced by the Manufacturing Library (Zigbee only) and RAILtest (Zigbee and other SDKs, provided through the Flex SDK).

The following plugins have been deprecated in this release:

- bulb-pwm-cli
- bulb-ui
- configuration-server
- connection-manager
- electrical-measurement-server
- illuminance-measurement-server
- led-dim-pwm
- led-rgb-pwm
- led-temp-pwm
- occupancy-pyd1698-cli
- occupancy-sensor-server
- power-configuration-server
- relative-humidity-measurement-server
- security-sensor
- silabs-device-ui
- temperature-measurement-server

## 6 Removed Items

None

## 7 Using This Release

This release contains the following:

- Zigbee stack
- Zigbee Application Framework
- Zigbee Sample Applications

For more information about Zigbee and the EmberZNet SDK see [UG103.02: Zigbee Fundamentals](#).

If you are a first-time user, see [QSG106: Getting Started with EmberZNet PRO](#), for instructions on configuring your development environment, building and flashing a sample application, and documentation references pointing to next steps.

### 7.1 Installation and Use

Use the EmberZNet SDK v6.10.n with the Silicon Labs Simplicity Studio 5 development platform. Installation instructions are provided in the [Simplicity Studio 5 online User's Guide](#). Simplicity Studio ensures that most software and tool compatibilities are managed correctly. Install software and board firmware updates promptly when you are notified.

Documentation specific to the SDK version is installed with the SDK. Additional information can often be found in the [knowledge base articles \(KBAs\)](#). API references and other information about this and earlier releases is available on <https://docs.silabs.com/>.

### 7.2 Security Information

#### Secure Vault Integration

This version of the stack does not integrate Secure Vault Key Management.

#### 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 screenshot shows the 'Update Preference' page in the Silicon Labs customer portal. The page is titled 'Update Preference' and has a sub-header 'WHAT EMAILS WOULD YOU LIKE TO RECEIVE?'. Under this section, there are several checkboxes for newsletters and product-specific notifications. The checkbox for 'Software/Security Advisory Notices & Product Change Notices (PCNs)' is checked and highlighted with a red box. Below this, there is a section titled 'SELECT THE PRODUCTS TO RECEIVE UPDATES FOR'. This section contains a grid of checkboxes for various product categories. The '32-bit MCUs' checkbox is checked and highlighted with a red box. The 'Wireless' section is also highlighted with a red box, and it contains several sub-checkboxes, including 'Proprietary', which is checked.

## 7.3 Support

Development Kit customers are eligible for training and technical support. Use the [Silicon Laboratories Zigbee web page](#) to obtain information about all Silicon Labs Zigbee products and services, and to sign up for product support.

You can contact Silicon Laboratories support at <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!



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**Support & Community**  
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