

# Bluetooth LE

Summary

Application and middleware

Host Stack

Controller

802.15.4 Mesh + BLE Multiprotocol

## Bluetooth LE

# Bluetooth LE Version 11.0.1 - Release Notes (Mar 25, 2026)

Silicon Labs is a leading vendor in Bluetooth hardware and software technologies, used in products such as sports and fitness, consumer electronics, beacons, and smart home applications. The core SDK is an advanced Bluetooth 6.1-compliant stack that provides all of the core functionality along with multiple API to simplify development. The core functionality offers both standalone mode, allowing a developer to create and run their application directly on the SoC, or NCP mode, allowing for the use of an external host MCU.

Click [here](#) for earlier releases.

## Release Summary

Release Item	Version	Release Date	Release Notes	Key Features	API Changes	Bug Fixes
Example and Middleware	11.0.1	Mar 25, 2026	<a href="#">Release Notes</a>	Channel Sounding: added support for max_procedure_count=1 in Real Time Fast mode.	None	Targeted quality improvement and bug fixes
Host Stack	11.0.1	Mar 25, 2026	<a href="#">Release Notes</a>	None	None	Targeted quality improvement and bug fixes
Controller	11.0.1	Mar 25, 2026	<a href="#">Release Notes</a>	None	None	Targeted quality improvement and bug fixes
802.15.4 Mesh + BLE Multiprotocol	11.0.1	Mar 25, 2026	<a href="#">Release Notes</a>	Per-protocol TX power control in CMP applications.	sl_802154_radio_set_scheduler_priorities() removed.	Targeted quality improvement and bug fixes

## Impact of Release Changes

[Impact Statements](#) | [Migration Guide](#)

### Impact Statements

None.

## Using This Release

[What's in the Release?](#) | [Compatible Software](#) | [Installation and Use](#) | [Help and Feedback](#)

### What's in the Release?

- [Host Stack and Controller](#)
- [Example and Middleware](#)

### Compatible Software

Software	Compatible Version or Variant
Simplicity SDK	2025.12.2
Simplicity Studio	Any version that is compatible to Simplicity SDK 2025.12
Simplicity Commander	provided with Simplicity Studio
GCC (The GNU Compiler Collection)	12.2.1 (provided with Simplicity Studio)
IAR Embedded Workbench for ARM (IAR-EWARM)	9.40.1

## Installation and Use

To run your first demo, see our [Getting Started Guides](#).

To kick start your development, see our [Developer's Guide](#).

For information about Secure Vault Integration, see [Secure Vault](#).

To review Security and Software Advisory notifications and manage your notification preferences:

1. Go to <https://community.silabs.com/>.
2. Log in with your account credentials.
3. Click your profile icon in the upper-right corner of the page.
4. Select Notifications from the dropdown menu.
5. In the Notifications section, go to the My Product Notifications tab to review historical Security and Software Advisory notifications
6. To manage your preferences, use the Manage Notifications tab to customize which product updates and advisories you receive.

To learn more about the software in this release, dive into our [online documentation](#).

## Help and Feedback

- Contact [Silicon Labs Support](#).
- To use our Ask AI tool to get answers, see the search field at the top of [this page](#).

Note: Ask AI is experimental.

- Get help from our [developer community](#).

## SDK Release and Maintenance Policy

See our [SDK Release and Maintenance Policy](#).

## Application and middleware

# Bluetooth LE SDK Example and Middleware Version 11.0.1 - Release Notes (Mar 25, 2026)

### Bluetooth LE Version 11.0.1

The Bluetooth SDK is an advanced Bluetooth 6.1-compliant stack that provides all of the core functionality along with multiple API to simplify development. The core functionality offers both standalone mode, allowing a developer to create and run their application directly on the SoC, or, in NCP mode, allowing for the use of an external host MCU.

Click [here](#) for earlier releases.

## Release Summary

[Key Features](#) | [API Changes](#) | [Bug Fixes](#) | [Chip Enablement](#)

### Key Features

#### Added in 11.0.1

Channel Sounding: added support for max\_procedure\_count=1 in Real Time Fast mode.

#### Added in 11.0.0

- Host examples shown on Studio Launcher page.
- Most bootloader-aware example applications converted to standalone to simplify early development.

### API Changes

None.

### Bug Fixes

#### Fixed in 11.0.1

Targeted quality improvements and bug fixes.

#### Fixed in 11.0.0

- Various Electronic Shelf Label (ESL) related bug fixes.
- Various Channel Sounding (CS) related bug fixes.
- Targeted quality improvements and bug fixes.

### Chip Enablement

#### Added in 11.0.1

None.

#### Added in 11.0.0

Added xGM270S SiP module support.

## Key Features

[New Features](#) | [Enhancements](#) | [Removed Features](#) | [Deprecated Features](#)

### New Features

None.

### Enhancements

#### Added in 11.0.1

- Electronic Shelf Label (ESL) Access Point (AP): refactored event dispatcher to follow the Observer pattern.
- Electronic Shelf Label (ESL) Access Point (AP): improved ping performance.

#### Added in 11.0.0

The "Log" component now enables the compiler to optimize out filtered out (or masked out) loggings. If a project uses any related API (`app_log_filter_threshold_enable`, `app_log_filter_threshold_set`, `app_log_filter_mask_enable`, `app_log_filter_mask_set`), turn on the "Enable runtime configuration" setting in the Log configuration.

### Removed Features

None.

### Deprecated Features

None.

## API Changes

[New APIs](#) | [Modified APIs](#) | [Removed APIs](#) | [Deprecated APIs](#)

### New APIs

None.

### Modified APIs

None.

### Removed APIs

None.

### Deprecated APIs

None.

## Bug Fixes

### Fixed in 11.0.1

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1589062	ESL: image transfer fails if ESL Tag NVM Image storage is used instead of ESL Tag RAM Image.	None	All; generic software issue
1566100	ESL AP: fixed a rare ESL AP script crash triggered by unsuccessful EAD decryption.	None	NCP; generic software issue
1581223	Corrupted BGAPI events on NCP-host running on EFR32.	None	NCP; generic software issue
1569678	Unvalidated input in Bluetooth secure NCP-host app leads to integer underflow.	None	NCP; generic software issue

### Fixed in 11.0.0

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1557180	ESL AP: PAwR default timing parameters have been changed to avoid ESL tags losing sync during network deployment.	None	All; generic software issue

## Chip Enablement

### Added in 11.0.1

None.

### Added in 11.0.0

Chip Family	OPNs / Boards / OPN Combinations	Supported Software Variants (if applicable)	Supported Modes	Supported Host Interfaces
xGM270S	Board: BRD2715A, BRD4356A	Standard	SoC, NCP, RCP	N/A

## Application Example Changes

[New Examples](#) | [Modified Examples](#) | [Removed Examples](#) | [Deprecated Examples](#)

### New Examples

None.

### Modified Examples

#### Modified in 11.0.1

Example Name	Changes	Supported Software Variants if applicable	Supported Modes	Supported OPNs / Boards / OPN Combinations	Supported Host Interfaces
All NCP-host examples	Added dynamic log filtering to NCP-host examples using <code>app_log_cli</code> .	Standard	NCP	All supported.	UART

#### Modified in 11.0.0

Example Name	Changes	Supported Software Variants if applicable	Supported Modes	Supported OPNs / Boards / OPN Combinations	Supported Host Interfaces
All NCP-host examples	<ul style="list-style-type: none"> <li>Listed in Studio Launcher when virtual host part is selected as target device.</li> <li>Projects and their components are defined using SLC metadata.</li> </ul>	Standard	NCP	External Hosts: <ul style="list-style-type: none"> <li>Windows (WIN32)</li> <li>Linux (LINUX_32, LINUX_64)</li> <li>MacOS (MACOS)</li> </ul>	UART
bt_rcp example	This example requires flow-control.	Standard	RCP	Radio boards with flow control pins routed out supported only.	UART
bt_rcp_cpc example	Security is enabled by default in the bt_rcp_cpc sample application.	Standard	RCP	All supported.	UART

## Removed Examples

### Removed in 11.0.1

None.

### Removed in 11.0.0

Removed Example Name	Was Deprecated?	Note
NCP-host positioning GUI example	Yes	
NCP-host daemon example	No	Functionality covered by adding <code>ncp_sec</code> component to <code>bt_host_empty</code> example.

## Deprecated Examples

None.

## Known Issues and Limitations

ID	Issue or Limitation Description	GitHub / Salesforce Reference (if any)	Workaround (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1543819	The automated upgrade is not possible for bt_cs_ncp and bt_cs_soc_initiator examples.	None	Upgrade from 2025.6.x has to be carried out manually. The recommended way to upgrade your project is to create a new project from sisdk-2025.12.x and migrate your changes (e.g. application logic) on top of that.	All
1565117	IAR toolchain is not supported by Solution Examples	None	None	SoC
1566100	ESL sporadic crash after EAD decryption error	None	None	All
1568416	ESL Access point (AP) "exclusive mode" does not filter the ESL tags in some cases	None	None	All

## Host Stack

# Bluetooth LE SDK Host Stack Version 11.0.1 - Release Notes (Mar 25, 2026)

## Bluetooth LE Version 11.0.1

The Bluetooth Host Stack is a Bluetooth 6.1-compliant stack that provides the core functionality along with multiple API to simplify development. The core functionality offers both standalone mode, allowing a developer to create and run their application directly on the SoC, or NCP mode, allowing for the use of an external host MCU.

Click [here](#) for earlier releases.

## Release Summary

[Key Features](#) | [API Changes](#) | [Bug Fixes](#) | [Chip Enablement](#)

### Key Features

#### Added in 11.0.1

None.

#### Added in 11.0.0

- Bluetooth host qualification for Core specification 6.1.
- PAwR event counter reporting.
- Channel classification reporting for a remote peripheral device.
- Support for larger BGAPI payload size in NCP applications with compile-time configurability.

### API Changes

#### Changed in 11.0.1

Connection Analyzer now reports RSSI in `sl_bt_evt_connection_analyzer_report` at every connection interval.

#### Changed in 11.0.0

- The parameter list of an API function declares as 'void' explicitly if the function has no parameters.
- Added parameters for NADM capabilities in commands `sl_bt_cs_read_local_supported_capabilities` and `sl_bt_evt_cs_read_remote_supported_capabilities_complete`.

### Bug Fixes

#### Fixed in 11.0.1

Fixed TrustZone build failure when using External Bonding Database.

#### Fixed in 11.0.0

Improved L2CAP and ATT packet validation and error handling.

### Chip Enablement

None.

## Key Features

[New Features](#) | [Enhancements](#) | [Removed Features](#) | [Deprecated Features](#)

### New Features

#### Added in 11.0.1

None.

#### Added in 11.0.0

- The Bluetooth host stack has been improved and qualified for Core specification 6.1.
- Support PAWR event counter reporting with new feature component `bluetooth_feature_linklayer_interface`.
- Support reporting the channel classification of a remote peripheral device.
- New component `bgapi_service_feature_system` provides the System class APIs of the BGAPI Service. Command `sl_bgapi_system_get_max_payload_sizes` can be used to get the maximum payload sizes that BGAPI Protocol is configured to support in the application.
- The static GATT database supports the "Write Without Response" property so that the descriptor value could be updated by remote GATT clients using Write Command.
- The dynamic GATT database has a new descriptor property flag `SL_BT_GATTDDB_DESCRIPTOR_WRITE_NO_RESPONSE` so that the descriptor value could be updated by remote GATT clients using Write Command.

### Enhancements

#### Added in 11.0.1

Connection Analyzer now reports RSSI in `sl_bt_evt_connection_analyzer_report` at every connection interval. Even if the Peripheral packet sniffing fails, the event is generated with the Peripheral RSSI marked as invalid.

#### Added in 11.0.0

None.

### Removed Features

None.

### Deprecated Features

None.

## API Changes

[New APIs](#) | [Modified APIs](#) | [Removed APIs](#) | [Deprecated APIs](#)

### New APIs

#### Added in 11.0.1

None.

#### Added in 11.0.0

New API Signature	Deprecated API replaced by this (if any)
sl_status_t <a href="#">sl_bt_linklayer_event_info_reporting_enable</a>	N/A
<a href="#">sl_bt_evt_linklayer_event_info_report</a>	N/A
<a href="#">sl_bt_evt_connection_channel_classification</a>	N/A

## Modified APIs

### Modified in 11.0.1

Old API	Modified
<a href="#">sl_bt_evt_connection_analyzer_report</a>	The analyzer now generates a report at every connection interval. When a central or peripheral packet could not be observed, the RSSI for the role is reported as unavailable (127). Previously, when this device was in central role, the analyzer generated a report only after the peripheral responded to the central in a connection event.

### Modified in 11.0.0

Old API	Modified
sl_status_t <a href="#">sl_bt_dfu_flash_upload_finish()</a>	sl_status_t <a href="#">sl_bt_dfu_flash_upload_finish(void)</a>
sl_status_t <a href="#">sl_bt_system_hello()</a>	sl_status_t <a href="#">sl_bt_system_hello(void)</a>
sl_status_t <a href="#">sl_bt_system_start_bluetooth()</a>	sl_status_t <a href="#">sl_bt_system_start_bluetooth(void)</a>
sl_status_t <a href="#">sl_bt_system_stop_bluetooth()</a>	sl_status_t <a href="#">sl_bt_system_stop_bluetooth(void)</a>
sl_status_t <a href="#">sl_bt_system_forcefully_stop_bluetooth()</a>	sl_status_t <a href="#">sl_bt_system_forcefully_stop_bluetooth(void)</a>
sl_status_t <a href="#">sl_bt_system_reboot()</a>	sl_status_t <a href="#">sl_bt_system_reboot(void)</a>
sl_status_t <a href="#">sl_bt_system_data_buffer_clear()</a>	sl_status_t <a href="#">sl_bt_system_data_buffer_clear(void)</a>
sl_status_t <a href="#">sl_bt_resource_disable_connection_tx_report()</a>	sl_status_t <a href="#">sl_bt_resource_disable_connection_tx_report(void)</a>
sl_status_t <a href="#">sl_bt_scanner_stop()</a>	sl_status_t <a href="#">sl_bt_scanner_stop(void)</a>
sl_status_t <a href="#">sl_bt_nvm_erase_all()</a>	sl_status_t <a href="#">sl_bt_nvm_erase_all(void)</a>
sl_status_t <a href="#">sl_bt_test_dtm_end()</a>	sl_status_t <a href="#">sl_bt_test_dtm_end(void)</a>
sl_status_t <a href="#">sl_bt_sm_set_debug_mode()</a>	sl_status_t <a href="#">sl_bt_sm_set_debug_mode(void)</a>
sl_status_t <a href="#">sl_bt_sm_delete_bondings()</a>	sl_status_t <a href="#">sl_bt_sm_delete_bondings(void)</a>
sl_status_t <a href="#">sl_bt_resolving_list_remove_all_devices()</a>	sl_status_t <a href="#">sl_bt_resolving_list_remove_all_devices(void)</a>
sl_status_t <a href="#">sl_bt_accept_list_remove_all_devices()</a>	sl_status_t <a href="#">sl_bt_accept_list_remove_all_devices(void)</a>
sl_status_t <a href="#">sl_bt_cs_read_local_supported_capabilities</a>	sl_status_t <a href="#">sl_bt_cs_read_local_supported_capabilities</a> : added new return parameters nadm_sounding_capability nadm_random_capability
<a href="#">sl_bt_evt_cs_read_remote_supported_capabilities_complete</a>	<a href="#">sl_bt_evt_cs_read_remote_supported_capabilities_com</a> : added new fields nadm_sounding_capability and nadm_random_capability
sl_status_t <a href="#">sl_bt_cs_test_end()</a>	sl_status_t <a href="#">sl_bt_cs_test_end(void)</a>
sl_status_t <a href="#">sl_bt_cte_transmitter_clear_dtm_parameters()</a>	sl_status_t <a href="#">sl_bt_cte_transmitter_clear_dtm_parameters(void)</a>
sl_status_t <a href="#">sl_bt_cte_receiver_clear_dtm_parameters()</a>	sl_status_t <a href="#">sl_bt_cte_receiver_clear_dtm_parameters(v</a>
sl_status_t <a href="#">sl_bt_cte_receiver_disable_silabs_cte()</a>	sl_status_t <a href="#">sl_bt_cte_receiver_disable_silabs_cte(void)</a>
sl_status_t <a href="#">sl_bt_user_reset_to_dfu()</a>	sl_status_t <a href="#">sl_bt_user_reset_to_dfu(void)</a>

## Removed APIs

### Removed in 11.0.1

None.

### Removed in 11.0.0

Removed API Name	Was Deprecated?
void <a href="#">sl_bt_system_reset</a>	Yes
sl_status_t <a href="#">sl_bt_sm_set_bonding_key</a>	Yes

## Deprecated APIs

None.

## Bug Fixes

### Fixed in 11.0.1

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1565402	Fixed an issue where <code>sli_bt_external_bondingdb_config.c</code> in the <code>bluetooth_feature_external_bonding_database</code> component included the <code>sl_mbedtls_config.h</code> header, which could not be found when using TrustZone. This resolves a build failure caused by the missing header file.	None	All; generic software issue

### Fixed in 11.0.0

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1521108	In <code>ATT_EXECUTE_WRITE_REQ</code> handling, the GATT server now ensures either all prepared write requests are successfully written in the GATT database or nothing will be written. Previously, successful writes before an error would remain in the database, leaving it in an inconsistent state.	None	All; generic software issue
1521428	Improved the L2CAP CoC signaling packet validation by adding the length checks for all L2CAP command types and checking both L2CAP header length and SDU length.	None	All; generic software issue
1564484	Fixed an issue where the device could enter EM2 even when the LF clock accuracy was below the threshold required for reliable Bluetooth connections.	None	All; generic software issue

## Impact of Release Changes

### Impact Statements and Migrations from 10.x to 11.0.0

Change	Migration Guide	Affected Software Variants if applicable	Affected Modes	Affected OPNs / Boards / OPN Combinations	Affected Host Interfaces
The parameter list of an API function declared as 'void' explicitly if the function has no parameters	Code that correctly calls with no arguments will continue to work. If there happens to be code calling such functions with arguments, remove the arguments.	All	All	Hardware agnostic	N/A
New parameters <code>nadm_sounding_capability</code> and <code>nadm_random_capability</code> in commands <code>sl_bt_cs_read_local_supported_capabilities</code>	The implementation that invokes this API should provide valid pointers for the new parameters, or provide NULL if the capability values are unused.	All	All	Hardware agnostic	N/A
New data fields <code>nadm_sounding_capability</code> and <code>nadm_random_capability</code> in event <code>sl_bt_evt_cs_read_remote_supported_capabilities_complete</code>	Rebuild NCP host applications on Simplicity SDK 2025.12.	All	NCP	Hardware agnostic	N/A

## Known Issues and Limitations

ID	Issue or Limitation Description	GitHub / Salesforce Reference (if any)	Workaround (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1417141	The OTA DFU fast mode in the Bootloader with Apploader is unreliable due to the chance of packet losses.	None	Use OTA DFU reliable mode.	All
1562916	The device does not enter EM2 when Bluetooth is used on radio boards <code>brd2704a</code> , <code>brd4319a</code> and <code>brd4337a</code> due to LFRCO precision mode is not enabled by default.	None	Enable LFRCO precision mode by overriding configuration <code>SL_CLOCK_MANAGER_LFRCO_PRECISION</code> to <code>cmuPrecisionHigh</code> in the application project.	All

## Controller

# Bluetooth LE SDK Controller Version 11.0.1 - Release Notes (Mar 25, 2026)

## Bluetooth LE Version 11.0.1

The Bluetooth SDK is an advanced Bluetooth 6.1-compliant stack that provides all of the core functionality along with multiple API to simplify development. The core functionality offers both standalone mode, allowing a developer to create and run their application directly on the SoC, and NCP mode, allowing for the use of an external host MCU.

Click [here](#) for earlier releases.

## Release Summary

[Key Features](#) | [API Changes](#) | [Bug Fixes](#) | [Chip Enablement](#)

### Key Features

#### Added in 11.0.1

None.

#### Added in 11.0.0

- PAwR event counter reporting.
- Support for HCI\_LE\_Set\_Resolvable\_Private\_Address\_Timeout (v2).

### API Changes

#### Changed in 11.0.1

None.

#### Changed in 11.0.0

- New: HCI\_LE\_Set\_Resolvable\_Private\_Address\_Timeout (v2).
- Modified: Power amplifier configuration centralized in SL\_RAIL\_UTIL\_PA; automatic PA mode in BLE controller removed.

### Bug Fixes

#### Fixed in 11.0.1

- Connection Analyzer reliability improved: RSSI is now reported for every connection event, including cases where the peripheral does not respond.
- Fixed BLE Extended Advertising TX power handling. The controller now correctly interprets the HCI "no preference" TX power setting.
- Fixed timing of the periodic advertising sync transfer vendor specific extension event notification to the host. The controller now reports the event only when the sync packet is received or when the sync attempt times out.

#### Fixed in 11.0.0

- Improved PAwR reliability: fixed Too\_Late failures, ensured subevent failure reporting, and refined scheduling.
- Increased scanning robustness on xG27/xG29 under noisy RF during flash operations.
- Prevented supervision timeouts with simultaneous PHY updates and with subrating + latency cases.
- Restored correct 80 MHz system clock requirement for BLE on xG21 custom boards.
- Controller no longer modifies LDMA interrupt priority on Series 2.

## Chip Enablement

None.

## Key Features

[New Features](#) | [Enhancements](#) | [Removed Features](#) | [Deprecated Features](#)

### New Features

#### Added in 11.0.1

None.

#### Added in 11.0.0

- Added support to report event counters for Periodic Advertising with Responses (PAwR).
- Added support for HCI command: HCI\_LE\_Set\_Resolvable\_Private\_Address\_Timeout [v2]

### Enhancements

#### Added in 11.0.1

None.

#### Added in 11.0.0

All PA related configuration are done via SL\_RAIL\_UTIL\_PA component including automatic PA selection.

### Removed Features

None.

### Deprecated Features

None.

## API Changes

[New APIs](#) | [Modified APIs](#) | [Removed APIs](#) | [Deprecated APIs](#)

### New APIs

#### Added in 11.0.1

None.

#### Added in 11.0.0

New API Signature	Deprecated API replaced by this (if any)
HCI Command HCI_LE_Set_Resolvable_Private_Address_Timeout (v2): Configure the resolvable private address timeout.	

## Modified APIs

### Modified in 11.0.1

None.

### Modified in 11.0.0

Old API	Modified
The power amplifier (PA) configuration	All PA related configuration are done via SL_RAIL_UTIL_PA component, including automatic PA selection. The BLE controller no longer has the option to configure automatic PA mode.

## Removed APIs

None.

## Deprecated APIs

None.

## Bug Fixes

### Fixed in 11.0.1

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1604648	Connection Analyzer reliability improved: RSSI is now reported for every connection event, including cases where the peripheral does not respond.	None	All; Connection Analyzer
1584863	Fixed BLE Extended Advertising TX power handling. The controller now correctly interprets the HCI "no preference" TX power setting.	None	All; BLE Extended Advertising
1521937	Fixed timing of the periodic advertising sync transfer vendor specific extension event notification to the host. The controller now reports the event only when the sync packet is received or when the sync attempt times out.	None	All; Periodic Advertising Sync Transfer

### Fixed in 11.0.0

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1530268	BLE controller no longer changes the LDMA interrupt priority on Series 2 devices. SoC applications retain their configured priorities.	None	Series 2; SoC Mode

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1514837	Fixed a timing issue in the Bluetooth LE controller affecting PAwR scanner operation where setting periodic advertising response data could fail with status Too_Late at higher sub-events, leading to missed responses.	None	All; PAwR scanner
1506571	Fixed a mix-up in Bluetooth connection scheduling selection. PAwR connections now use the correct empty-center scheduler, and the legacy even-connection scheduler is deprecated in favor of the standard even scheduling.	None	All; PAwR and connections
1502895	Fixed a rare condition on xG27/xG29 where BLE scanning could stop under very noisy RF conditions during flash operations (for example, OTA DFU). Radio recovery after RX overflow has been improved to ensure scanning resumes reliably.	None	xG27/xG29; scanning; flash operations
1498088	Fixed a PAwR synchronization issue where the controller did not report sub-event data transmission failures when preempted by a connection request at the same sub-event. The host is now correctly informed, preventing loss of sync and eliminating spurious “memory capacity exceeded” errors.	None	All; PAwR
1496667	Improved BLE Link Layer handling of simultaneous PHY updates. When both devices request a PHY change at the same time, the stack now correctly defers the local request until the peer’s procedure completes.	None	All; generic software issue
1472068	Improved link-layer scheduling and timing for PAwR to prevent missed sub-events. PAwR now maintains priority over legacy advertising, scan/connection window timing is corrected, and invalid sub-event data from the host is rejected. This enhances reliability of ESL ping/PAwR operations and reduces rare cases of missing AUX_SYNC_SUBEVENT_IND transmissions.	None	All; PAwR; scanning
1455227	Fixed a BLE connection synchronization issue where using subrating together with peripheral latency could cause disconnects (supervision timeouts), particularly during connection parameter updates.	None	All; connections with subrating and latency
1401692	Fixed an issue where BLE advertising and connection could intermittently fail on xG21 (MG21) custom boards when using SDK 2024.12 and later. The failure was caused by an incorrect default system clock configuration in custom-board projects. The platform now configures the required 80 MHz system clock for Bluetooth on xG21. For older SDKs, set the system clock source to HFRCODPLL at 80 MHz to avoid the issue.	None	xG21 custom boards; advertising/connection; system clock

## Known Issues and Limitations

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1516595	Angle of departure over connection is not stable on efr32xg24 platforms when using 2Mb PHY.	None	efr32xg24; 2Mb AoD



## 802.15.4 Mesh + BLE Multiprotocol

# Bluetooth LE - 802.15.4 Mesh + BLE Multiprotocol Version 11.0.1 (Mar 25, 2025) - Release Notes

### [Bluetooth LE Version 11.0.1](#)

This document provides release information for the 802.15.4 Mesh + BLE Multiprotocol SDK.

Click [here](#) for earlier releases.

## Release Summary

[Key Features](#) | [API Changes](#) | [Bug Fixes](#) | [Chip Enablement](#)

### Key Features

#### Added in 11.0.1

Per-protocol TX power control in CMP applications.

#### Added in 11.0.0

- Concurrent Listening support with CMP on SiMG301x.
- Bi-directional Green Power support with CMP Zigbee NCP + OpenThread RCP.

### API Changes

#### Changed in 11.0.1

`sl_802154_radio_set_scheduler_priorities()` removed.

#### Changed in 11.0.0

None.

### Bug Fixes

Targeted quality improvements and bug fixes.

### Chip Enablement

#### Added in 11.0.1

None.

#### Added in 11.0.0

- xGM270S Leopard SiP Module GA SW support.
- xG301 Explorer Kit and Pro-kit support.

## Key Features

[New Features](#) | [Enhancements](#) | [Removed Features](#) | [Deprecated Features](#)

### New Features

#### Added in 11.0.1

None.

#### Added in 11.0.0

Bi-directional Green Power support with CMP Zigbee NCP + OpenThread RCP

Added bi-directional Green Power support with CMP Zigbee NCP + OT RCP configuration, enabling Green Power Proxy functionality in NCP-RCP multiprotocol applications.

### Enhancements

#### Added in 11.0.1

In CMP applications, the RAIL MUX now dynamically switches to each protocol's individually configured TX power when that protocol is actively transmitting. Previously, all co-existing 15.4 protocols were constrained to the minimum TX power across all protocol configurations. Additionally, new CLI commands `txpower` and `txpower_set <dBm>` are available in CMP applications to independently get and set the OpenThread TX power.

#### Added in 11.0.0

None.

### Removed Features

None.

### Deprecated Features

None.

## API Changes

[New APIs](#) | [Modified APIs](#) | [Removed APIs](#) | [Deprecated APIs](#)

### New APIs

None.

### Modified APIs

None.

### Removed APIs

#### Removed in 11.0.1

Removed API Name	Was Deprecated?
sl_802154_radio_set_scheduler_priorities	Yes

#### Removed in 11.0.0

None.

## Deprecated APIs

Deprecated in 11.0.1

None.

Deprecated in 11.0.0

Deprecated API Name	Planned Removal Date
<a href="#">sl_802154_radio_set_scheduler_priorities</a>	2026 Q1

## Bug Fixes

Fixed in 11.0.1

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1569320	Fixed an issue where CPCd could crash after a BLE scan with an active OT network in the ot-ncp-ftd-ble-rcp application. Updated SL_BTCTRL_RTOS_LINK_LAYER_TASK_STACK_SIZE to 1100 for Series 2 devices. Note: RTOS stack sizes require tuning as needed.	N/A	ot-ncp-ftd-ble-rcp app on Series 2 devices
1569847	Fixed an issue where gp_transmit_complete_event was not executed in a timely manner due to the Zigbee RTOS task not waking up, causing intermittent bi-directional Green Power commissioning failures.	N/A	CMP Zigbee NCP + OpenThread RCP app with Bi-directional Green Power support

Fixed in 11.0.0

ID	Issue Description	GitHub / Salesforce Reference (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1471746	Fixed an issue where the Zigbee + Bluetooth NCP application examples did not appear in Studio.	N/A	Zigbee + Bluetooth NCP app
1524505	Fixed an issue that could pass an invalid mac layer packet to cause an assert.	N/A	All OPNs, boards, modes and interfaces
1568095	Changed default SL_BT_CONTROLLER_BUFFER_MEMORY value for OpenThread NCP + BLE RCP application to work on parts with 96kB RAM.	N/A	OpenThread NCP + BLE RCP app

## Chip Enablement

Added in 11.0.1

None.

Added in 11.0.0

- xGM270S Leopard SiP Module: Added GA software support for xGM270S Leopard SiP Module.
- xG301 Explorer Kit and Pro-kit Support: Added support for Explorer Kit and Pro-kit boards for xG301 devices.

## Application Example Changes

[New Examples](#) | [Modified Examples](#) | [Removed Examples](#) | [Deprecated Examples](#)

### New Examples

Added in 11.0.1

None.

Added in 11.0.0

Example Name	Description	Supported Software Variants if applicable	Supported Modes	Supported OPNs / Boards / OPN Combinations	Supported Host Interfaces
ot-ncp-ble-rcp See <a href="#">README</a>	New sample application that integrates DMP BLE-RCP components with OpenThread NCP FTD CPC application, enabling OpenThread NCP with BLE RCP support.	N/A	NCP/RCP	All supported OPNs, boards, modes and interfaces	CPC
zigbee_ncp_ot_rcp_uart_gp_multi_rail See <a href="#">README</a>	New sample application providing bi-directional Green Power support with CMP Zigbee NCP + OT RCP configuration using multi-rail UART interface.	N/A	NCP/RCP	All supported OPNs, boards, modes and interfaces	CPC-UART

### Modified Examples

Modified in 11.0.1

None.

Modified in 11.0.0

Example Name	Changes	Supported Software Variants if applicable	Supported Modes	Supported OPNs / Boards / OPN Combinations	Supported Host Interfaces
Zigbee - BLE Dynamic Multiprotocol Light SED See <a href="#">sample here</a>	The Zigbee BLE - DynamicMultiprotocolLightSed sample project can now be built for boards with only one LED if the LED1 component is excluded from the project.	N/A	N/A	N/A	N/A

Example Name	Changes	Supported Software Variants if applicable	Supported Modes	Supported OPNs / Boards / OPN Combinations	Supported Host Interfaces
Zigbeed  See <a href="#">sample here</a>	The Zigbeed sample application is now extended with the --conf parameter, so the location of the zigbeed.conf is now configurable and not being hardcoded to /usr/local/etc/zigbeed.conf	N/A	N/A	N/A	N/A

## Removed Examples

None.

## Deprecated Examples

None.

## Known Issues and Limitations

ID	Issue or Limitation Description	GitHub / Salesforce Reference (if any)	Workaround (if any)	Affected Software Variants, Hardware, Modes, Host Interfaces
1209958	The Zigbee + OpenThread + BLE RCP may stop working in endurance testing (~2 hours) on MG24 and MG21 devices with constant and concurrent traffic on all three stacks.	N/A	None	Zigbee + OpenThread + BLE RCP app
1385052	Coex-enabled RCP may still occasionally transmit TX ACK after losing the Grant even when Acking is disabled and TX Abort is enabled.	N/A	This will be fixed in future releases.	Coex-enabled RCP
1385486	TX from coex-enabled RCP may infrequently happen without the request after turning on the non-802.15.4 compliant MAC Holdoff coex option.	N/A	This will be fixed in future releases.	Coex-enabled RCP
1457086	Coex-enabled EFR32MG24 RCP may sometimes output higher than expected grant denied counts in the PTA counters.	N/A	This will be fixed in future releases.	Coex-enabled RCP
1458795	Using BLE GAP scanning stop command in the Zigbee DMP GP - Proxy app may not be able to stop BLE scanning on certain parts.	N/A	None	Zigbee DMP GP - Proxy app
1514786	Wi-Fi coexistence on SiXG301 is currently not supported. Other references: 1514794, 1515385.	N/A	This will be supported in future releases.	SiXG301 devices
1619497	The sample app zigbee-ncp-ot-rcp over SPI may fail to form OT network after a Zigbee connection is established.	N/A	None	Series-3 xG301 devices with zigbee-ncp-ot-rcp app over SPI