

Bluetooth SDK 2.10.0 GA

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1 Release Highlights

1.1 Version 2.10.0 GA:

- Software now passes EN 300 328 (CE) compliance tests
- Bluetooth Modules are treated as individual products like SoCs in Studio
- New example application for Bluetooth + RAIL Dynamic Multi-Protocol Range Test

2 Added Items

2.1 Version 2.10.0 GA:

2.1.1 New Features:

- Issue 112: Report the channel on which an advertising packet was received
- Issue 4156: Thermometer client example (SoC)
- Issue 4157: NCP Host example for EFR32

2.1.2 New APIs:

- Event: A new extended scan response event `le_gap_extended_scan_response` has been added. If enabled, it replaces the `le_gap_scan_response` event.
- Command: `le_gap_set_discovery_extended_scan_response` has been added for enabling and disabling the new extended scan response event. In this release the event additionally reports the channel on which an advertising packet was received. By default, the extended scan response event is disabled in the stack.

3 Changed Items

3.1 Version 2.10.0 GA:

- Issue 4356: In previous releases the stack always re-pair in the operation of increase security command or client security request, even if security level does not actually increase in the new operation. Now, instead of re-pairing, key refresh operation will be performed in this situation.

4 Deprecated Items

4.1 Version 2.10.0 GA:

Bluetooth Developer Studio plug-ins for generating GCC, IAR and Studio projects for Bluetooth and Apple HomeKit, are deprecated, and these will be removed in the next SDK release. BT SIG has discontinued Developer Studio and it is no longer maintained.

5 Removed Items

5.1 Version 2.10.0 GA:

No items in this category were removed in this release.

6 Fixed Issues

6.1 Version 2.10.0 GA:

- Issue 2224: The stack may drop advertisement set terminated events (`evt_le_gap_adv_timeout_id`) when it runs out of memory
- Issue 4193: Connection issues when using 125k and 500k coding on coded PHY at the same time
- Issue 4215: In passive scanning, the scanner should not report anything related to scannable extended advertising packets
- Issue 4332: Connecting to an extended advertiser may fail if the data payload in advertising packets is long enough
- Issue 4348: AFH certification: Channel Occupancy Time issue with 125k Coded PHY
- Issue 4373: NCP on target device does not respond to commands when the NCP is flooded with many events
- Issue 4388: On MGM12P, LNA is not enabled in Bluetooth NCP empty target
- Issue 4417: Out of memory error is returned for BGAPI commands when there are too many BGAPI events queued waiting for processing
- Issue 4473 AFH certification: ETSI timeout issue for deciding when a channel can be used again
- Issue 4474: Channelmap update messages may be delayed too much when streaming data with AFH enabled.
- Issue 4502: Command `system_set_tx_power` may return a max Tx power value above the chip supports. This was found on some BG1 and MG12 parts. However the issue does not affect actual output power which is limited correctly by the system.
- Issue 4524: Occasionally starting an advertiser fails when the stack runs out of memory
- Issue 4546: GATT service discovery may fail if the stack receives the command in the middle of ATT MTU exchange
- Issue 4558: The Tx power of legacy advertising is not limited to +10 dBm when AFH is enabled
- Issue 4695: DTM application transmitter test transmits carrier wave when the DTM command is for coded PHY 125k 1111 payload
- Issue 4711: Random address resolving may fail if some other bonded devices have been deleted
- Issue 4713: IOP issue with some devices that cannot handle pairing operations in certain situation. A workaround has been added to make the stack working better with these devices.

7 Open Issues

7.1 Version 2.10.0 GA:

- Issue 1835: With certain events, GCC breakpoints cannot be set.
- Issue 3894: Eventually out of memory error will be returned if application repeats closing a connection while a GATT procedure is outstanding.

8 Documentation Changes

8.1 Version 2.10.0 GA:

- Issue 4322: New summary table of Bluetooth supported features in UG136
- Issue 4625: Description for `le_gap_connect` command has been clarified that this command has no timeout.
- Issue 4661: Bonding handle terminology clarification cross the whole API reference document.