s310_nrf51422 release notes

Introduction to the s310_nrf51422 release notes

These release notes describe the changes in the s310_nrf51422 from version to version.

This is how the document is laid out:

- There is one main section per new version of the s310_nrf51422. This section will describe the changes from the previous version.
- Within each main section, there are sections for:
  - Bugfixes
  - Changes
  - New functionality
  - Limitations
  - Known issues

The release notes are intended to list all relevant changes in a given version. They are kept brief, to make it easy to get the overview.

s310_nrf51422_1.0.0

This is the initial production release of the s310_nrf51422 SoftDevice.

The s310_nrf51422 is a multiprotocol SoftDevice, containing both a Bluetooth Low Energy (BLE) protocol stack and an ANT protocol stack. These two protocol stacks can execute concurrently. The featureset of the s310_nrf51422_1.0.0 corresponds to the combined featuresets of the s110_nrf51822_6.0.0 BLE SoftDevice and the s210_nrf51422_3.0.0 ANT SoftDevice.

Bugfixes

(This is the first production release of s310_nrf51422.)

Changes

(This is the first production release of s310_nrf51422.)

New functionality

(This is the first production release of s310_nrf51422.)

Limitations

- SoftDevice
  - If Radio Notifications are enabled, flash write and flash erase operations initiated through the SoftDevice API will be notified to the application as Radio Events (FORT-809).
  - If Radio Notifications are enabled, radio disable periods initiated through the SoftDevice API will be notified to the application as Radio Events (FORT-809)
  - If Radio Notifications are enabled and configured with INT_ON_ACTIVE or INT_ON_BOTH and flash write, flash erase or radio disable periods are initiated through the SoftDevice API concurrently with ANT traffic, the radio notification distance should be set to 800 µs.
- GATTS
  - To conform to the Bluetooth specification there shall not be a secondary service that is not referenced somehow by a primary service. The SoftDevice does not enforce this (DRGN-906, DRGN-2260).

- SoftDevice
    - Synthesized low frequency clock source is not tested or intended for use with BLE stack.
    - DCDC converter operation controlled by the SoftDevice may interfere with radio function. As a result, nrf_power_dcdc_mode should not be modified by the application. The mode must not be set to NRF_POWER_DCDC_MODE_AUTOMATIC or NRF_POWER_DCDC_MODE_ON at any time. (DRGN-2420)

Known Issues

- SoftDevice
    - Stopping advertising (either by calling sd_ble_gap_adv_stop() or by a timeout) and then starting advertising again immediately may lead to undefined behaviour. The workaround is to wait 50 ms or more from advertising is stopped until starting advertising again. (DRGN-3785)