

2.5.1 Release Notes

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Updates and new features

Frontend control by the Nordic Semiconductor SoftDevice

Frontends configured by Mira can now be controlled by the SoftDevice. This means that the frontend will be left in its most power efficient state (idle) by Mira, and switched to 'bypass TX' by the SoftDevice when it uses the radio. This enables both concurrent BLE capabilities and low current consumption. Keep in mind that use of concurrent BLE will still affect the current consumption of the device.

Bugfixes

Frontend antenna control incorrect during Nordic Semiconductor SoftDevice runtime

Resolved an issue where the antenna wasn't correctly set when leaving control to the Nordic Semiconductor SoftDevice, resulting in the wrong antenna being used for concurrent BLE. The issue was fixed by introducing support for frontend control by the SoftDevice.

This issue affects users of version 2.5.0 on an nRF52 platform using frontend modules and our concurrent BLE feature. This includes users of our MWA-N2 module. If a custom frontend configuration is used there is a chance that you might be unaffected, but we still strongly recommend an upgrade to 2.5.1 regardless. We also encourage users that are not currently using concurrent BLE to also upgrade, in the event that you would want to introduce that feature in the future.

Known issues

NFC performance on nRF52840

NFC on nRF52840 platforms have a very short range when used with some smart phones. Running a firmware built for nRF52832 often provide a better range, but it is not recommended for production use. This issue will be fixed in the coming 2.6.0 version.

Limitations

Multiple antenna designs using the Nordic Semiconductor SoftDevice and concurrent BLE

The degree of control the SoftDevice has over the frontend is limited; it will use the antenna index that was used last before it gained control.

This can cause problems if:

- The SoftDevice is used for concurrent BLE.
- Multiple antennas are used.
- Antenna needs to be changed during runtime.

Contact LumenRadio support if this applies to you.

Upcoming Changes

Deprecation of nRF based builds without Nordic Semiconductor SoftDevice

Builds on the nRF52840 and nRF52832 will require the Nordic Semiconductor SoftDevice in version 2.6.0. Builds without the SoftDevice will be removed. Contact LumenRadio if your product can't be changed to use the SoftDevice.