The new build code was qualified according to Nordic Semiconductor’s standard product approval and quality procedures.

Verification

The Tele regulatory implemented will be locked I

To access In factory state

Consequences

on the nRF52

Informational Notice 133 (IN 133) identifies a fault injection technique that causes failure of the access port protection mechanisms on the nRF52 Series. The introduced changes to revision 2 seek to mitigate this known fault injection technique.

Reason for change:

In factory state, the nRF52805 revision 2 comes with the access port protection enabled. An ERASEALL command via the control access port (CTRL-AP) is required to enable access.

In order to lock the device debug port, execute the following steps to enable access port protection:

1. Start with a CTRL-AP ERASEALL operation.
2. Program code compiled with MDK 8.43.0 or later, with ENABLE_APPROTECT defined.
3. Write Enabled (0x00) to UICR.APPROTECT
4. Perform a hard reset to protect the device. The programmed code from step 2 will write APPROTECT.FORCEPROTECT to Force (0x00).

To unlock the device debug port (for debugging etc.), execute the following steps to disable access port protection:

1. Start with a CTRL-AP ERASEALL operation.
2. Program code compiled with an MDK 8.43.0 or later, without ENABLE_APPROTECT defined.
3. Write HwDisabled (0x5A) to UICR.APPROTECT
4. Perform any reset to run the code. The programmed code from step 2 will open access port by writing to APPROTECT.DISABLE during start-up.

If an nRF52805 revision 2 is programmed with software compiled with a version of the MDK prior to release 8.43.0, the debug port will be locked. However, the APPROTECT.FORCEPROTECT will not be written to Force (0x0), and the errata workarounds implemented in the MDK may not be applied to revision 2. Thus, it is required to upgrade to the latest MDK (version 8.43.0 or later) to ensure correct behavior.

Tele regulatory and Bluetooth certification:

The described changes have no impact on the RF performance, which remains identical to revision 1.

Verification of change:

The new build code was qualified according to Nordic Semiconductor’s standard product approval and quality procedures.
Marking/Shipping labels:

DEVICE: NRFxxxxx-<PP><VV>-<CC>
S/O No.: <Nordic Sales Order>

Chip Marking:

Chip: N52805 CAAAB0 YYWLLL
Build code B00

Labels: B00 B10

Change active from (date):
Orders can be placed now.

Samples Available (date/build code):
2021-11-30 / Bx0

Attachments: ☑ No ☐ Yes – describe:

Technical contact at Nordic Semiconductor:

Commercial contact at Nordic Semiconductor:
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Authorization for Nordic Semiconductor

Product Manager: Pär Häkansson Date: 2021-12-14 Sign:

Quality Director: Ebbe Rømcke Date: 2021-12-14 Sign:

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