nRF21540 Engineering C

Errata v1.0



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1 nRF21540 Engineering C Errata

This Errata document contains anomalies and configurations for the nRF21540 chip, revision Engineering C (QDAA-GA0).

The document indicates which anomalies are fixed, inherited, or new compared to revision **Revision 1**.



2 Revision history

See the following list for an overview of changes from previous versions of this document.

Version	Date	Change
nRF21540 Engineering C v1.0	21.01.2022	 Added: No. 7. "Current leakage via MODE pin affecting RF performance" Added: No. 10. "Increased current consumption in Power-down state"



3 New and inherited anomalies

The following anomalies are present in revision Engineering C of the nRF21540 chip.

ID	Module	Description	Inherited from Revision 1
7		Current leakage via MODE pin affecting RF performance	Х
10		Increased current consumption in Power-down state	Х

Table 1: New and inherited anomalies

3.1 [7] : Current leakage via MODE pin affecting RF performance

This anomaly applies to IC Rev. Engineering C, build codes QDAA-GA0.

It was inherited from the previous IC revision Revision 1.

Symptoms

Current leakage via MODE pin. Both TX and RX gain, as well as LNA noise figure (NF), are affected.

Conditions

Using pin control with MODE pin pulled to VDD.

Consequences

Increased current leakage into MODE pin when pulled to VDD. TX and RX gain will be affected, as well as the device current consumption. Higher noise figure will impact the RX sensitivity.

Workaround

Use one of the following:

- **1.** 33 k Ω resistor in series on MODE pin.
- 2. SPI control and keep MODE pin pulled to GND.

3.2 [10] : Increased current consumption in Power-down state

This anomaly applies to IC Rev. Engineering C, build codes QDAA-GA0.

It was inherited from the previous IC revision Revision 1.



Symptoms

Increased current consumption in Power-down state.

Conditions

MODE pin is set high while PDN pin is set low.

Consequences

Current flows to MODE pin.

Workaround

MODE signal should be pulled low in Power-down state.



4 Fixed anomalies

The anomalies listed in this table are no longer present in the current chip version.

For a detailed description of the fixed anomalies, see the Errata for revision Revision 1.

ID	Module	Description
4		Low PA or LNA gain

Table 2: Fixed anomalies

