nRF7002
Revision 1

Errata

v1.3

Contents

1 nRF7002 Revision 1 Errata

This Errata document contains anomalies and configurations for the nRF7002 chip, Revision 1 (QFAA-B00).

2 Revision history

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

Version	Date	Change
nRF7002 Revision 1 v1.3	05.07.2023	• Added: No. 6. "Production trim values are incorrect"
nRF7002 Revision 1 v1.2	14.04.2023	• Added: No. 5. "Production trim values are not in use"
nRF7002 Revision 1 v1.1	22.03.2023	• Added: No. 4. "QFN package dimension L is incorrect"
nRF7002 Revision 1 v1.0	02.03.2023	• Added: No. 1. "Reduced sensitivity in parts of the 2.4 GHz band"

3 New and inherited anomalies

The following anomalies are present in Revision 1 of the nRF7002 chip.

ID	Module	Description	New in Revision 1
1	RADIO	Reduced sensitivity in parts of the 2.4 GHz band	X
4	Mechanical specification	QFN package dimension L is incorrect	X
5	RADIO	Production trim values are not in use	X
6	RADIO	Production trim values are incorrect	X

Table 1: New and inherited anomalies

3.1 [1] RADIO: Reduced sensitivity in parts of the 2.4 GHz band

This anomaly applies to Revision 1, build codes QFAA-B00.

Symptoms

Sensitivity is reduced on channels 5, 6, 7, 8, and 13 by 0.5-3.5 dB depending on modulation type and frame format.

Conditions

The device is receiving in channel 5, 6, 7, 8, or 13.

Consequences

Operating range is reduced for a given modulation type and frame format.

Workaround

None.

3.2 [4] Mechanical specification: QFN package dimension L is incorrect

This anomaly applies to Revision 1, build codes QFAA-B00.

Symptoms

In nRF7002 Product Specification v1.0 table Package dimensions in millimeters, the L dimension is incorrect.

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Conditions

Always.

Consequences

The PCB is designed incorrectly which can lead to weaker solder joints between the package and PCB.

Workaround

Use 0.4 mm for the L dimension.

3.3 [5] RADIO: Production trim values are not in use

This anomaly applies to Revision 1, build codes QFAA-B00.

Symptoms

TX output power deviates from the value specified in the nRF7002 Product Specification.

Conditions

The device is operational, and its tracking code is 2252 or 2302 (assembly year and week "YYWW"). These devices are not correctly using the trim values applied in the production test.

Consequences

Output power can vary by up to ±3 dB.

Workaround

Apply commit 87ee9351d37b5b58b0c3c820e0112741447f76e3 to nRF Connect SDK v2.3.0 in your nRF Connect SDK repository.

The workaround will be incorporated in the future releases of nRF Connect SDK.

3.4 [6] RADIO: Production trim values are incorrect

This anomaly applies to Revision 1, build codes QFAA-B00.

Symptoms

TX output power exceeds the value specified in the nRF7002 Product Specification.

Conditions

The device is operational, and its tracking code is lower than or equal to 2327 (assembly year and week "YYWW"). These devices are not correctly trimmed in the production test.

Consequences

The device operates outside specified TX EVM limits.

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Workaround

Apply commit 970dfa7672eba180465e63990b5bd0bd1b2aa4d3 to nRF Connect SDK <v2.5.0 in your nRF Connect SDK repository.

The workaround will be incorporated in the future releases of nRF Connect SDK.