Notified Body Type Examination Certificate Council Directive 2014/53/EU

Nordic Semiconductor ASA

Otto Nielsens veg 12, 7052 Trondheim Norway

nRF9151 nRF9151-DK

The above model has been evaluated and conforms, subject to any restrictions stated in the attached Annex, with the essential requirements of Annex III, Module B, of the Council Directive 2014/53/EU on Radio Equipment (RED) and the mutual recognition of their conformity, in relation to the essential requirements of the articles identified in the Scope of Examination.

Signed:

Mark Briggs MIET CEng

Details of this certification, standards used, RF parameters of this equipment and other information necessary for the correct interpretation and application, including any remarks, restrictions or observations are detailed in the attached Annex.

This is to certify that (a) sample(s) of the Product described herein has been investigated and found to be in compliance with the Standard(s) indicated on this Certificate. This Certificate applies only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The Applicant/ Manufacturer are solely and fully responsible for conformity of all products to all applicable standard(s), specifications or requirements.

This Certificate shall only be used in its entirety.



Certificate

AN24C14350-1

Issue date¹

April 1, 2024

¹This certificate expires 3 years after the

conformity of the radio equipment with the

issue date. Revisions of the applied

essential requirements of Directive 2014/53/EU may also have an impact on the

validity of this certificate.

standards and/or modifications to the approved type which may affect the

NOTIFIED BODY EXAMINATION AN24C14350-1
Notified Body Number: 0984 Issue Date: April 1, 2024

Annex

Scope of examination

Article Applied standard(s) (and version) or reference.

Article 3.2 Radio Spectrum use EN 301 406-2 V3.1.1

Technical documentation details

Title: Technical Construction File (TCF)

Reference number: Technical Summary document for nRF9151 DK and nRF9151

Issue date: January 26th, 2024, plus updates

Contact name: Mona Hämeenaho

General product details

Brand / Trade Name: Nordic Semiconductor

Model Number(s) / Type Designation: nRF9151

nRF9151-DK

Build Version / Revision Level: v.0.9.0

Software Name and Version: nRF9151DK HW 0.2.0

Operating Frequency and Declared

Maximum Output Power

DECT NR+ 1880 – 1900 MHz 22.0 dBm eirp

The above values are for the development kit when using module nRF9151 with

maximum gain antennas of 3.0dBi.

Maximum conducted powers for Module

DECT NR+ 1880 – 1900 MHz 19.0 dBm

Description of Use / Function: nRF9151 is an IoT module containing a DECT NR+ radio. The Development Kit,

nRF9151-DK, is used to design and develop application firmware for the IoT

module.

Manufacturers Company Name: Nordic Semiconductor ASA

Manufacturers Address: Otto Nielsens veg 12, 7052 Trondheim Norway

Accessories

The development kit may be used with maximum gain antennas of 3.0 dBi.

Product variant details

The module and development kit can be configured to support either DECT technology or a combination of LTE and GNSS technologies. This certificate is for the version that supports DECT.

Assessment methods applied

References to RE-D harmonised standards consider Official Journal entries to the Commission Implementing Decision (EU) 2023/2669 of 27 November 2023.

Although EN 301 406 V2.2.2 is the harmonised standard covering the essential requirements of article 3.2 for DECT equipment the most recent but non-harmonised version of the standard, EN 301 406-2 V3.1.1 was used. This standard represents state of the art state of the art with respect to demonstrating compliance with the essential requirements of the RE-D. The manufacturer needs to consider re-assessment of compliance as newer versions of standards used are published and harmonised.



Issue Date: April 1, 2024

Remarks and observations

The manufacturer's declaration of conformity (DoC) appropriately lists the standards used and identifies the equipment by a model number. The additional inclusion of batch or serial numbers in the DoC may be required to identify which version of a DoC applies whenever the DoC is updated and applies only to specific versions of a model (e.g. after a modification to meet a requirement introduced through revisions in standards). The simplified DoC is included in the user documentation, meeting the requirements of Article 10.9. The EU Declaration of Conformity and the Technical Documentation, which includes this certificate, shall be kept at the disposal of the National Authorities for ten years after the radio equipment has been placed on the market.

The product labelling and product packaging contained the CE mark as required by the RE-D. As required by article 10.7 the registered trademark / name of the manufacturer and their postal address is/are indicated on the equipment. Due to the size / nature of the module the manufacturer has placed their postal address on the packaging or in a document accompanying the radio equipment.

The user information provided in the technical documentation includes the operating frequency and output power information required by article 10.8. This information should be consistent with the actual maximum power supported by the technical documentation and with the output power across production units.

There are no restrictions of use for DECT technologies operating in the 1880 – 1890 MHz band as designated under ERC/DEC/(94)03, ERC/DEC/(98)22 and ERC Recommendation 70-03, annex A

It is the responsibility to the manufacturer to ensure the ongoing compliance of this equipment. The manufacturer shall inform the notified body of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of the Radio Equipment Directive or the conditions for validity of this certificate. Such modifications shall require additional approval in the form of an addition to this EU-type examination certificate.

Additional comments for modular radio devices

This certificate is limited to the radio module as identified and documented. It does not constitute compliance of products which will incorporate this module, with the exception of the Development Kit nRF9151-DK.

Integrators shall be provided with sufficient technical detail instruction for compliant installation / integration of the module. Such instruction should include an alert to the integrator to evaluate the host product with the integrated radio module against the essential requirements of the Radio Regulations and may contain recommendations about the scope of re-evaluation.

Compliance with essential requirements related to use of the Regulation 6(2) for most host systems may be limited to the radiated spurious emissions and receiver blocking test requirements detailed in the referenced standards provided that the host system is intended for use in indoor/outdoor locations (temperature range of -10°C to 70°) and providing a stable voltage (+/- 10% of nominal 5 Volts) to the module over a +/-15% input voltage range to the host system.

Additional, host-level evaluation is required for systems using this module to demonstrate compliance with the essential requirements of Radio Equipment Directive Articles 3.1(a), 3.1(b), 3.3 and 3.4 taking into consideration all of the functions and features of the combined equipment.

System integrators may find the following ETSI technical guide of use when performing evaluations of the final product: ETSI EG 203 367 V1.1.1 "Guide to the application of harmonised standards covering articles 3.1b and 3.2 of the Directive 2014/53/EU (RED) to multi-radio and combined radio and non-radio equipment". In addition, Guidance Note 01 published by the RED CA contains guidance on requirements for host system incorporating radio modules.

Revision history

April 1, 2024 Original version (-1) released.

