# Notified Body TÜV Rheinland LGA Products GmbH

Tillystraße 2 90431 Nürnberg notified by the



Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen

# under No. 0197

herewith issues an

# **EU-Type Examination Certificate**

within the meaning of Annex III Module B of the 2014/53/EU Radio Equipment Directive (RED) for compliance with the essential requirements of this directive

Registration Number:

RT 60120511 0001

Evaluation Report Nr.:

17011920 001

Manufacturer:

Intel Mobile Communications SAS

Le Navigator B

505 Routes des Lucioles

06905 Sophia Antipolis Cedex

France

Product:

Radio Equipment

Intel® Wireless 60 GHz adapter (Intel® Wireless Gigabit 11000)

Type

Identification:

11000D2W, 11000D2WLC

Essential

requirements:

2014/53/EU (RED)

Article 3.1a Health
Article 3.1a Electrical Safety

Article 3.1b EMC

Article 3.2 Radio spectrum

The technical design of the assessed type has been verified based on the technical documentation presented by the manufacturer according to Annex III Module B of the Directive. As far as the essential requirements indicated, the Notified Body of TÜV Rheinland LGA Products GmbH confirms, that the technical design of the apparatus meets the essential requirements of the Directive 2014/53/EU Article 3.

This certificate consists of this page and Annex I. Validity of the certificate is specified in the Annex I.

Date 26.06.2017

Notified Body

Pieter de Beer

Annex 1

Certificate Registration No.: 60120511 0001 Version 1.1 d.d. 26-06-2017

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### Equipment

Product : WiGig, 2x2 PCle M.2 adapter card

Trademark : Intel® Identification : 11000D2W

Product description Intel® Wireless 60 GHz adapter (Wireless Gigabit 11000)

System description

Frequency band(s) of operation : 60 GHz bands Operating frequency : 57-64 GHz

Channel spacing / bandwidth : 60GHz: spacing 2.16GHz / bandwidth 2.5GHz
RF output power (EIRP) : 25 dBm max. (57-64GHz) IEEE 802.11ad mode

Type of modulation : 60 GHz: OFDM

Type of antenna: Referenced antenna is Intel Wireless Gigabit Antenna -

M 10042R (Array Antenna Model No: 10042RRFW)

Mode of operation (simplex / duplex) : Duplex (Tx/Rx)

Duty cycle (access protocol, if applicable) : As in: IEEE 802.11 ad,

Version of firmware/software used Software Intel® Wireless Dock Manager 3.x and previous

versions (Wigig

#### **Technical Documentation**

The following identified Technical Documentation has been reviewed and has been used to determine if the design of the mentioned radio equipment meets the essential requirements:

 $\boxtimes$ 

Technical File Identification RED\_TD\_11000D2W

Version Version 0, First Issue

Issue date: 20-03-2017
Other supporting evidence Not applicable

The following information is available in the technical

Documentation:

X User information and installation instructions X Block diagram  $\boxtimes$ Circuit diagram Part list  $\boxtimes$  $\boxtimes$ PCB layout X Photo documentation Versions of firmware/software used X Statement of compliance with art. 10.2 it can be X operated in at least one Member State without infringing applicable requirements on the use of radio

The technical Documentation included an analysis and assessment of the risk(s) as required by Annex III,

Module B clause 3 (c).

spectrum.



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# Conformity Assessment

			rds in the official Journal of the	
Article		Standard	Test Report No.	Issued by
3.1a	Health			
3.1a	Safety			
3.1b	EMC			
3.2	Radio	EN 302 567 V1.2.1	15120403.TR01	Intel Mobile Communications SA
3.3	Others			

Applied non-harmonised standards						
Article		Standard	Test Report No.	Issued by		
3.1a	Health					
3.1a	Safety	EN 62368-1:2014	Report No. 324815	Nemko USA Inc.		
3.1b	EMC	EN 301 489-1 V2.2.0 (draft) EN 301 489-17 V3.2.0 (draft)	17011807-20.e01	TÜV Rheinland Nederland B.V		
3.2	Radio	EN 302 567 V2.0.22 (extra Rx tests + adaptivity)	170209-01.TR10	Intel Mobile Communications SA		
3.3	Others					

Other solutions, adopted to meet the essential requirements								
Article		Standard	Test Report No.	Issued by				
3.1a	Health	Council Recommendation 1999/519/EC (Exposure on 60GHz compliance at 1.2 mm and above)	11000D2WRFE rev 1.2	Intel Mobile Communications SA				
3.1a	Safety							
3.1b	EMC							
3.2	Radio							
3.3	Others							

#### Rationale for applied non-harmonised standards or other solutions:

- Due to the absence of harmonized standards for safety, health and EMC the latest ETSI EN and CENELEC standards have been used. The differences between R&TTE versions and candidate versions under the RED have been re-assessed and additional measurements have been reviewed. Selections of actions and standards to cover all the essential requirements are also based on the Risk assessment of the Manufacturer.
- Previous assessments under the R&TTE have been validated with letters of opinion with reference 15121601
   The manufacturer has included these previous evaluations as part of the Technical Documentation.

#### Remarks:

- This Type Examination Certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.
- This Type Examination Certificate only relates to the assessment of technical documentation to verify that the technical design of radio equipment meets the essential requirements of the RED 2014/53/EU and will not show compliance with essential requirements of other possible applicable EU Directives.
- The manufacturer has declared in compliance with art. 10.2 that the Radio Equipment can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.
- Validity of this Type Examination Certificate is limited to the versions of the applied standard. If versions standards change or modifications are made to the product, this Certificate will be invalidated.