# Notified Body EU Type Examination Certificate

Manufacturer company name: Manufacturer address:

Description of the radio equipment: Trade name/brand name: Model/type indication: Software version: Hardware version: Frequency bands of operation: Shanghai Simcom Wireless Solutions Limited SIM Technology Building.,No.633, Jinzhong Rd,Changning District, Shanghai, P.R.China LTE/HSPA/GSM/GNSS MODULE SIMCom SIM7600SA; SIM7600SA miniPCIE SIM7600M21\_V1.1 V1.01 703 MHz to 748 MHz 880 MHz to 748 MHz 1710 MHz to 1785 MHz 1920 MHz to 1980 MHz 2300 MHz to 2400 MHz; 2500 MHz to 2570 MHz;

TD reference: ACB project number: Certificate number: SIM7600SA/SIM7600SA miniPCIE ATCB022923 ATCB022923, issue 1

ACB, Inc. is designated as a Notified Body under the U.S.-EU Mutual Recognition Agreement for Radio Equipment Directive 2014/53/EU

## ACB, Inc. Notified Body Number 1588

6731 Whittier Avenue, Suite C110 McLean, VA 22101, USA

In the opinion of ACB, Inc., the examination of the technical documentation as drawn up by the manufacturer demonstrates that the essential requirements of Article 3.1a, Article 3.1b and Article 3.2, of Radio Equipment Directive 2014/53/EU have been met. The conformity assessment on the radio equipment listed above and as described in Annex 1 to this EU-type examination certificate has been carried out in accordance with Annex III, Module B, of Radio Equipment Directive 2014/53/EU. This EU-type examination certificate relates only to the documents as provided to ACB, Inc. A list of documentation forming the basis for the EU-type examination is provided in Annex 2 to this EU-type examination certificate.

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Notified Body: Ivan Wen

<u>18 July 2018</u> Date



СС ЕUTYPE201453-170425V3

#### Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU Date of issue: 18 July 2018 TD reference: SIM7600SA/SIM7600SA miniPCIE ACB project number/certificate number: ATCB022923, issue 1

The radio equipment as described and documented in the technical documentation as drawn up by the manufacturer is a LTE/HSPA/GSM/GNSS MODULE.

It supports GSM technology with GPRS and EGPRS/EDGE in the E-GSM 900 MHz and DCS 1800 MHz bands. It supports UMTS technology in the 900 MHz Band VIII and 2100 MHz Band I. It supports LTE technology in the 700 MHz Band 28, 900 MHz Band 8, 1800 MHz Band 3, 2100 MHz Band 1, 2300 MHz Band 40, 2600 MHz Band 7. It supports a GPS Receiver in the 1.5 GHz band.

The module has been assessed for use with cables of less than 3m length and not for use in automotive environments. When installing this module permanently into a host product to create a new Radio Equipment Directive device; the manufacturer responsible for the final product must assess if the combination of this module and the host equipment complies with the essential requirements of the RE Directive 2014/53/EU.

This radio equipment also supports operation in frequency bands which are not available for use in Member States of the European Union and EFTA countries and which have not been included in this conformity assessment. The conformity assessment of this radio equipment is limited to those frequency bands of operation which are available for use in one or more Member States of the European Union and EFTA countries as detailed below.

#### **Details of operation:**

Description of service: Transmit frequency: Receive frequency: Modulation: Power class: Transmit power: Transmit power: Transmit power:

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E-GSM 900 MHz 880 MHz to 915 MHz 925 MHz to 960 MHz GMSK, 8PSK Class 4 (GMSK), Class E2 (8PSK) 34.3 dBm, conducted (GSM/GMSK) 30.3 dBm, conducted (GPRS/GMSK) 24.9 dBm, conducted (EGPRS/8PSK)

DCS 1800 MHz 1710 MHz to 1785 MHz 1805 MHz to 1880 MHz GMSK, 8PSK Class 1 (GMSK), Class E2 (8PSK) 30.8 dBm, conducted (GSM/GMSK) 27.2 dBm, conducted (GPRS/GMSK) 24.0 dBm, conducted (EGPRS/8PSK)

UMTS 900 MHz Band VIII 880 MHz to 915 MHz 925 MHz to 960 MHz QPSK, 16QAM, 64QAM(DL) Class 3 23.1 dBm, conducted

UMTS 2100 MHz Band I 1920 MHz to 1980 MHz 2110 MHz to 2170 MHz QPSK, 16QAM, 64QAM(DL) Class 3 22.9 dBm, conducted



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Description of service: Transmit frequency: Receive frequency: Modulation: Power class: Transmit power:

Description of service: Transmit frequency: Receive frequency: E-UTRA LTE Band 1 1920 MHz to 1980 MHz 2110 MHz to 2170 MHz QPSK, 16QAM, 64QAM(DL) Class 3 22.1 dBm, conducted

E-UTRA LTE Band 3 1710 MHz to 1785 MHz 1805 MHz to 1880 MHz QPSK, 16QAM, 64QAM(DL) Class 3 22.4 dBm, conducted

E-UTRA LTE Band 7 2500 MHz to 2570 MHz 2620 MHz to 2690 MHz QPSK, 16QAM, 64QAM(DL) Class 3 21.8 dBm, conducted

E-UTRA LTE Band 8 880 MHz to 915 MHz 925 MHz to 960 MHz QPSK, 16QAM, 64QAM(DL) Class 3 22.6 dBm, conducted

E-UTRA LTE Band 28 703 MHz to 748 MHz 758 MHz to 803 MHz QPSK, 16QAM, 64QAM(DL) Class 3 22.8 dBm, conducted

E-UTRA LTE Band 40 2300 MHz to 2400 MHz 2300 MHz to 2400 MHz QPSK, 16QAM, 64QAM(DL) Class 3 21.7 dBm, conducted

GPS Receiver None 1575.42 MHz





#### Annex 2 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU Date of issue: 18 July 2018 TD reference: SIM7600SA/SIM7600SA miniPCIE ACB project number/certificate number: ATCB022923, issue 1

1 Test report: EMC Radio (GSM) Radio (WCDMA) Radio (LTE) Radio (GPS) RF safety Product safety Report number: B18W00217-EMC B18W00217-GSM RF B18W00217-WCDMA RF B18W00217-LTE RF B18W00217-GPS RF\_Rev1 B18W00217-MPE B18W00217-Safety

Circuit diagram/schematics

Label drawing/location

PCB layout

User manual

2 Technical documentation provided: Block diagram Internal photographs Parts list/bill of materials Test setup photographs Risk Assessment

External photographs Operational description Test reports Antenna Specification

Dated:

28 June 2018

27 June 2018

22 June 2018

22 June 2018

18 July 2018 28 June 2018

29 June 2018

3 Standards used to demonstrate conformity with the essential requirements of Radio Equipment Directive 2014/53/EU:

EU declaration of conformity

Radio Spectrum (Article 3.2):

EN 301 511 V12.5.1 EN 301 908-1 V11.1.1 EN 301 908-2 V11.1.2 EN 301 908-13 V11.1.2 EN 303 413 V1.1.1

EMC (Article 3.1b):

EN 301 489-1 V2.2.0 EN 301 489-19 V2.1.0 EN 301 489-52 V1.1.0 EN 55032: 2015 EN 55035:2017

EN 62311 :2008

RF safety (Article 3.1a):

Product safety (Article 3.1a):

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013





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### 4 Additional information:

This is a Class 1 device.

<u>Radio Equipment Directive 2014/53/EU, Article 10.4</u>: Manufacturers shall keep the technical documentation and the EU declaration of conformity for 10 years after the radio equipment has been placed on the market.

<u>Radio Equipment Directive 2014/53/EU</u>, <u>Article 10.6</u>: Manufacturers shall ensure that radio equipment which they have placed on the market bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the radio equipment does not allow it, that the required information is provided on the packaging, or in a document accompanying the radio equipment.

<u>Radio Equipment Directive 2014/53/EU, Article 10.7</u>: Manufacturers shall indicate on the radio equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where the size or nature of radio equipment does not allow it, on its packaging, or in a document accompanying the radio equipment. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

<u>Radio Equipment Directive 2014/53/EU, Article 10.8</u>: Manufacturers shall ensure that the radio equipment is accompanied by instructions and safety information in a language which can be easily understood by consumers and other end-users, as determined by the Member State concerned. Instructions shall include the information required to use radio equipment in accordance with its intended use. Such information shall include, where applicable, a description of accessories and components, including software, which allow the radio equipment to operate as intended. Such instructions and safety information, as well as any labelling, shall be clear, understandable and intelligible.

The following information shall also be included in the case of radio equipment intentionally emitting radio waves: (a) frequency band(s) in which the radio equipment operates; (b) maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates.

<u>Radio Equipment Directive 2014/53/EU, Article 10.9</u>: Manufacturers shall ensure that each item of radio equipment is accompanied by a copy of the EU declaration of conformity or by a simplified EU declaration of conformity. Where a simplified EU declaration of conformity is provided, it shall contain the exact internet address where the full text of the EU declaration of conformity can be obtained.

<u>Radio Equipment Directive 2014/53/EU, Article 10.10</u>: In cases of restrictions on putting into service or of requirements for authorization of use, information available on the packaging shall allow the identification of the Member States or the geographical area within a Member State where restrictions on putting into service or requirements for authorization of use exist. Such information shall be completed in the instructions accompanying the radio equipment.

<u>Radio Equipment Directive 2014/53/EU, Article 19.2</u>: On account of the nature of radio equipment, the height of the CE marking affixed to radio equipment may be lower than 5 mm, provided that it remains visible and legible.

<u>Radio Equipment Directive 2014/53/EU, Article 20.1</u>: The CE marking shall be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of radio equipment. The CE marking shall also be affixed visibly and legibly to the packaging.





#### Annex 2 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU Date of issue: 18 July 2018 TD reference: SIM7600SA/SIM7600SA miniPCIE ACB project number/certificate number: ATCB022923, issue 1

<u>Radio Equipment Directive 2014/53/EU, Annex III, Module B.7</u>: The manufacturer shall inform the notified body that holds the technical documentation relating to the EU-type examination certificate of all modifications to the approved type that may affect the conformity of the radio equipment with the essential requirements of this Directive or the conditions for validity of that certificate. Such modifications shall require additional approval in the form of an addition to the original EU-type examination certificate.

This review includes draft standards, deviations from the standards and technical justification for compliance.

In accordance with Notified Body guidance; if there are no changes, a Notified Body EU type examination certificate has a validity of 10 years from the date of issue.

5 Contact information:

For contact with ACB or questions regarding this EU-type examination certificate:Web:www.acbcert.comhttp://acbcert.com/contactTel.: (+1) 703 847 4700



