

Notified Body

EU Type Examination Certificate

Manufacturer company name: Shanghai Simcom Wireless Solutions Co., Ltd
Manufacturer address: Building A, SIM Technology Building, No. 633,
Jinzhong Road, Changning District,
Shanghai P.R.China

Description of the radio equipment: LTE /HSPA/GSM/GNSS MODULE
Trade name/brand name: SIMCom
Model/type indication: SIM7600E, SIM7600E miniPCIE
Software version: SIM7600M21_V1.1
Hardware version: V1.02
Frequency bands of operation: 832 MHz to 862 MHz
880 MHz to 915 MHz
1710 MHz to 1785 MHz
1920 MHz to 1980 MHz
2300 MHz to 2400 MHz
2500 MHz to 2570 MHz
2570 MHz to 2620 MHz

TCF reference: LTE/HSPA/GSM/GNSS MODULE, SIM7600E, SIM7600E miniPCIE
ACB project number: ATCB022081
Certificate number: ATCB022081, 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
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In the opinion of ACB, Inc., the examination of the technical construction file (TCF) as drawn up by the manufacturer demonstrates that the requirements, including 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.



Notified Body: Ivan Wen

08 December 2017

Date



Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU

Date of issue: 08 December 2017

TCF reference: LTE/HSPA/GSM/GNSS MODULE, SIM7600E, SIM7600E miniPCIE

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The device under evaluation was a LTE /HSPA/GSM/GNSS MODULE.

It used GSM with GPRS and EDGE (EGPRS) technology in the E-GSM 900 MHz and GSM 1800 MHz bands.

It used UMTS technology in the 900 MHz Band VIII and 2100 MHz Band I.

It supports LTE technology in the 800 MHz Band 20, 900 MHz Band 8, 1800 MHz Band 3, 2100 MHz Band 1, 2300 MHz Band 40, 2500 MHz Band 38 and 2600 MHz Band 7.

It supports a GPS Receiver in the 1.5 GHz band.

It supports a GLONASS Receiver in the 1.6 GHz band.

The module receiver 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: GSM 900 MHz
Transmit Frequency: 880 MHz to 915 MHz
Receive Frequency: 925 MHz to 960 MHz
Modulation type: GMSK, 8PSK
Power Class: Class 4, Class E2
Transmit power: 33.1 dBm (GMSK); 26.1 dBm (8PSK), Conducted

Description of service: GSM 1800 MHz
Transmit Frequency: 1710 MHz to 1785 MHz
Receive Frequency: 1805 MHz to 1880 MHz
Modulation type: GMSK, 8PSK
Power Class: Class 4, Class E2
Transmit power: 30.1 dBm (GMSK); 24.8 dBm (8PSK), Conducted

Description of service: UMTS 2100 MHz Band I
Transmit Frequency: 1920 MHz to 1980 MHz
Receive Frequency: 2110 MHz to 2170 MHz
Modulation type: QPSK, 16QAM 64QAM(DL)
Power Class: Class 3
Transmit power: 23.0 dBm, Conducted

Description of service: UMTS 900 MHz Band VIII
Transmit Frequency: 880 MHz to 915 MHz
Receive Frequency: 925 MHz to 960 MHz
Modulation type: QPSK, 16QAM 64QAM(DL)
Power Class: Class 3
Transmit power: 23.3 dBm, Conducted



Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU

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Description of service: E-UTRA LTE Band 1
Transmit frequency: 1920 MHz to 1980 MHz
Receive frequency: 2110 MHz to 2170 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 23.7 dBm, conducted

Description of service: E-UTRA LTE Band 3
Transmit frequency: 1710 MHz to 1785 MHz
Receive frequency: 1805 MHz to 1880 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 23.8 dBm, conducted

Description of service: E-UTRA LTE Band 7
Transmit frequency: 2500 MHz to 2570 MHz
Receive frequency: 2620 MHz to 2690 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 22.7 dBm, conducted

Description of service: E-UTRA LTE Band 8
Transmit frequency: 880 MHz to 915 MHz
Receive frequency: 925 MHz to 960 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 23.9dBm, conducted

Description of service: E-UTRA LTE Band 20
Transmit frequency: 832 MHz to 862 MHz
Receive frequency: 791 MHz to 821 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit Power: 24.0 dBm, conducted

Description of service: E-UTRA LTE Band 38
Transmit frequency: 2570 MHz to 2620 MHz
Receive frequency: 2570 MHz to 2620 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 23.3 dBm, conducted

Description of service: E-UTRA LTE Band 40
Transmit frequency: 2300 MHz to 2400 MHz
Receive frequency: 2300 MHz to 2400 MHz
Modulation: QPSK, 16QAM, 64QAM(DL)
Power class: Class 3
Transmit power: 22.4 dBm, conducted



Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU

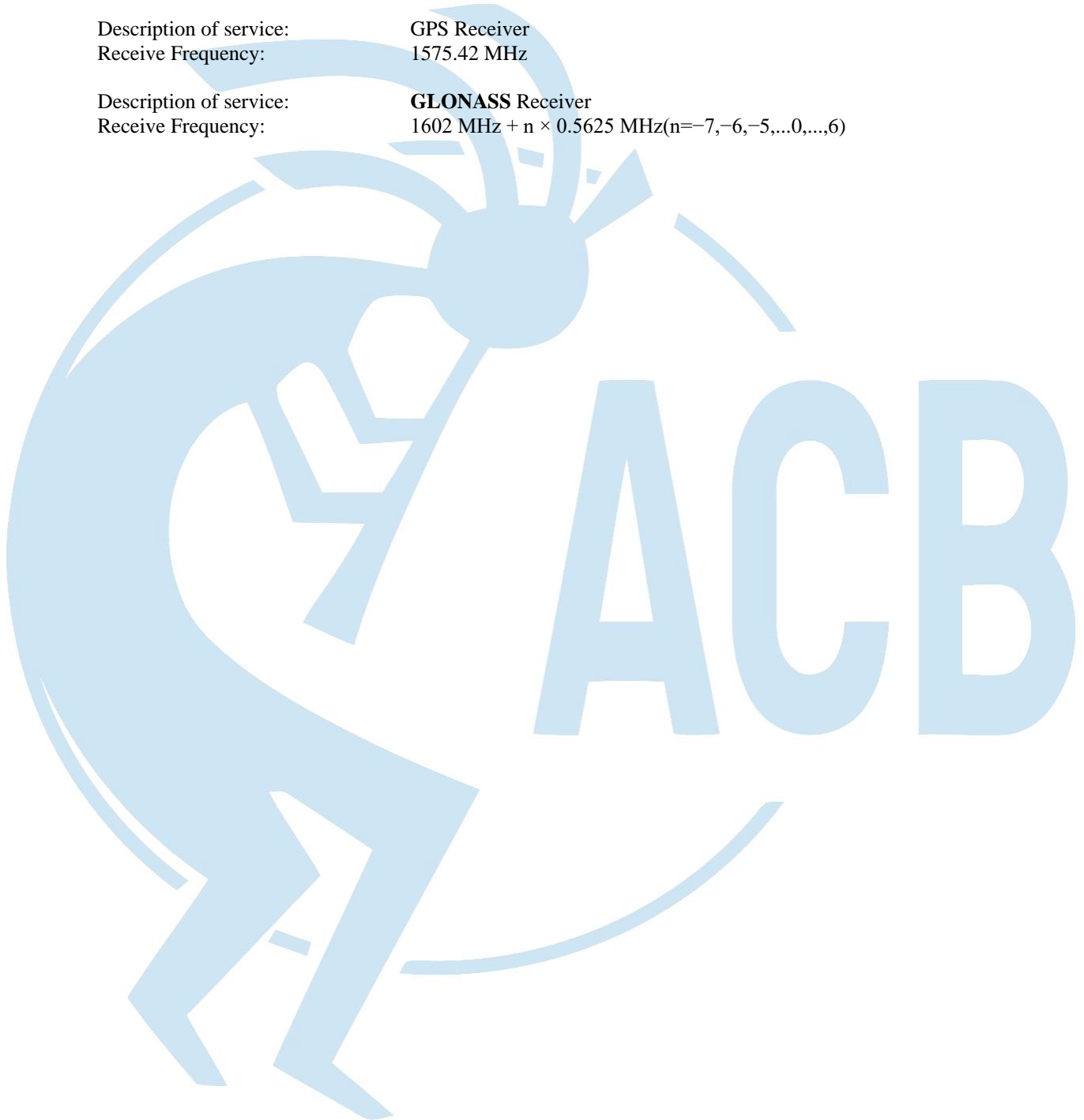
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Description of service: GPS Receiver
Receive Frequency: 1575.42 MHz

Description of service: **GLONASS** Receiver
Receive Frequency: $1602 \text{ MHz} + n \times 0.5625 \text{ MHz} (n=-7, -6, -5, \dots, 0, \dots, 6)$



Annex 2 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU

Date of issue: 08 December 2017

TCF reference: LTE/HSPA/GSM/GNSS MODULE, SIM7600E, SIM7600E miniPCIE

ACB project number/certificate number: ATCB022081, issue 1

1	Test report:	Report number:	Dated:
	EMC	UL15820170831CE035-5	16 November 2017
	EMC	UL15820170831CE034-5	23 November 2017
	EMC	UL15820170831CE034-6	23 November 2017
	Radio(GSM)	UL15820170831CE034-1	23 November 2017
	Radio(UMTS)	UL15820170831CE034-2	23 November 2017
	Radio(LTE)	UL15820170831CE034-3	23 November 2017
	Radio(GPS)	UL15820170831CE034-4	23 November 2017
	RF safety	UL15820170831CE034-8	23 November 2017
	Product safety	UL15820170831CE034-7	23 November 2017

2	Technical documentation provided:		
	Antenna details	User manual	Block diagram
	Circuit diagram/schematics	External photographs	Internal photographs
	Label drawing/location	Operational description	Parts list/bill of materials
	PCB layout	Test reports	Test setup photographs
	EU declaration of conformity		

TD Reference: RED application for model SIM7600E-H&SIM7600E-H miniPCIE

3	Standards used to demonstrate conformity with the essential requirements of Radio Equipment Directive 2014/53/EU:	
	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
	RF safety (Article 3.1a):	EN 62311:2008
	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.

Radio Equipment Directive 2014/53/EU, Article 10.4: 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.

Radio Equipment Directive 2014/53/EU, Article 10.6: 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.

Radio Equipment Directive 2014/53/EU, Article 10.7: 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.

Radio Equipment Directive 2014/53/EU, Article 10.8: 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.

Radio Equipment Directive 2014/53/EU, Article 10.9: 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.

Radio Equipment Directive 2014/53/EU, Article 10.10: 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.

Radio Equipment Directive 2014/53/EU, Article 19.2: 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.

Radio Equipment Directive 2014/53/EU, Article 20.1: 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.



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Radio Equipment Directive 2014/53/EU, Annex III, Module B.7: 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.

If there are no changes to the product, the standards or the state of the art; this 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.com

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Tel.: (+1) 703 847 4700

