

# Notified Body

## EU Type Examination Certificate

Manufacturer company name: Shanghai SIMCom Wireless Solutions Ltd.  
Manufacturer address: Building A, SIM Technology Building, No.633 Jinzhong Road,  
Changning District, Shanghai, P.R. China  
Description of radio equipment: LTE/WCDMA/EDGE/GPRS/GSM module  
Trade name/brand name: SIMCom  
Model/type indication: SIM7100E  
Software version: SIM7100E\_V4.5  
Hardware version: SIM7100E\_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  
TD reference: SIM7100E  
ACB project number: ATCB021162  
Certificate number: ATCB021162, 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.

*Michael Derby*

Notified Body: Michael Derby

14 June 2017  
Date



The device under evaluation was an LTE/WCDMA/GSM/GPRS/EGPRS/GPS Module.

It uses GSM technology with GPRS and EGPRS/EDGE in the E-GSM 900 MHz and GSM 1800 MHz bands.  
It uses UMTS technology in the 900 MHz Band VIII and 2100 MHz Band I.

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

It uses a GNSS and GLONASS GPS Receiver in the 1.5 GHz and 1.6 GHz bands.

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:	E-GSM 900 MHz
Transmit frequency:	880 MHz to 915 MHz
Receive frequency:	925 MHz to 960 MHz
Modulation:	GMSK, 8PSK
Power class:	Class 4 (GMSK), Class E2 (8PSK)
Transmit power:	34.0 dBm, conducted (GSM/GMSK)
Transmit power:	27.6 dBm, conducted (EGPRS/8PSK)

Description of service:	DCS 1800 MHz
Transmit frequency:	1710 MHz to 1785 MHz
Receive frequency:	1805 MHz to 1880 MHz
Modulation:	GMSK, 8PSK
Power class:	Class 1 (GMSK), Class E2 (8PSK)
Transmit power:	30.3 dBm, conducted (GSM/GMSK)
Transmit power:	26.6 dBm, conducted (EGPRS/8PSK)

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

Description of service: UMTS 2100 MHz Band I  
Transmit frequency: 1920 MHz to 1980 MHz  
Receive frequency: 2110 MHz to 2170 MHz  
Modulation: QPSK, 16QAM(DL), 64QAM(DL)  
Power class: Class 3  
Transmit power: 22.6 dBm, 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: 23.5 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: 23.4 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: 23.0 dBm, conducted

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: 22.6 dBm, conducted

**Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU**  
**Date of issue: 14 June 2017** **TD reference: SIM7100E**  
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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: 23.1 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: 21.9 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: 22.2 dBm, conducted

Description of service: GNSS Receiver  
Receive Frequency: 1574.4 MHz to 1576.4 MHz

Description of service: GLONASS Receiver  
Receive Frequency: 1598 MHz to 1606 MHz



**Annex 2 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU**  
**Date of issue: 14 June 2017** **TD reference: SIM7100E**  
**ACB project number/certificate number: ATCB021162, issue 1**

- 1 Test report: Report number: Dated:
- |                |                        |             |
|----------------|------------------------|-------------|
| EMC            | UL15820170414RED011-11 | 10 May 2017 |
| EMC            | UL15820170414RED011-4  | 10 May 2017 |
| Radio          | UL15820170414RED011-1  | 10 May 2017 |
| Radio          | UL15820170414RED011-2  | 10 May 2017 |
| Radio          | UL15820170414RED011-3  | 10 May 2017 |
| Radio          | UL15820170414RED011-10 | 10 May 2017 |
| Product safety | UL15820170414RED011-7  | 10 May 2017 |
| RF safety      | UL15820170414RED011-6  | 10 May 2017 |
- 2 Technical documentation provided:
- |                              |                            |                         |
|------------------------------|----------------------------|-------------------------|
| Block diagram                | Circuit diagram/schematics | External photographs    |
| Internal photographs         | Label drawing/location     | Operational description |
| Packaging                    | PCB layout                 | Risk Assessment         |
| Test reports                 | Test setup photographs     | User manual             |
| EU declaration of conformity |                            |                         |
- 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 301 908-2 V11.1.1 |
|                                | EN 301 908-1 V11.1.1   | EN 303 413 V1.1.0    |
|                                | EN 301 908-13 V11.1.1  |                      |
| EMC (Article 3.1b):            | EN 301 489-1 V2.2.0  | EN 301 489-52 V1.1.0 |
|                                | EN 301 489-19 V2.1.0   |                      |
| 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 |                      |





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.

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

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.com](http://www.acbcert.com)

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