

Notified Body

EU Type Examination Certificate

Manufacturer company name: Xiaomi Communications Co., Ltd.
Manufacturer address: The Rainbow City of China Resources, NO.68, Qinghe Middle Street,
Haidian District, Beijing, China

Description of the radio equipment: Mobile Phone
Trade name/brand name: MI
Model/type indication: MDE5
Software version: MIUI8
Hardware version: P2.0
Frequency bands of operation: 703 MHz to 748 MHz, 832 MHz to 862 MHz,
880 MHz to 915 MHz, 1710 MHz to 1785 MHz,
1920 MHz to 1980 MHz, 2010 MHz to 2025 MHz,
2300 MHz to 2400 MHz, 2500 MHz to 2570 MHz,
2570 MHz to 2620 MHz, 2402 MHz to 2480 MHz,
2412 MHz to 2472 MHz, 5180 MHz to 5320 MHz,
5500 MHz to 5700 MHz, 5745 MHz to 5825 MHz

TD reference: MDE5
ACB project number: ATCB021677
Certificate number: ATCB021677, issue 2

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
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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.



Notified Body: Tero Lehtinen

25 September 2017
Date



Annex 1 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU
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The radio equipment as described and documented in the technical documentation as drawn up by the manufacturer is a mobile phone.

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, 1800 MHz Band III and 2100 MHz Band I.

It supports LTE technology in the 700 MHz Band 28, 800 MHz Band 20, 900 MHz Band 8, 1800 MHz Band 3, 2000 MHz Band 34, 2100 MHz Band 1, 2300 MHz Band 40, 2500 MHz Band 38 and 2600 MHz Band 7.

It supports IEEE 802.11b,g,n(HT20 & HT40) Wireless LAN technology in the 2.4 GHz band.

It supports IEEE 802.11a,n,ac (HT20 & HT40 & HT80) Wireless LAN technology in the 5 GHz band(s).

It supports Bluetooth Wireless PAN technology in the 2.4 GHz band with EDR and BLE.

It supports a GPS and Glonass Receiver in the 1.5 GHz band.

It supports Near Field Communication in the 13.56 MHz band.

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:	32.5 dBm (GSM/GMSK), conducted 32.5 dBm (GPRS GMSK), conducted 25.6 dBm (EGPRS 8-PSK), conducted

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:	29.6 dBm (GSM/GMSK), conducted 29.5 dBm (GPRS GMSK), conducted 25.4 dBm (EGPRS 8-PSK), conducted



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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: 21.5 dBm, conducted

Description of service: UMTS 1800 MHz Band III
Transmit frequency: 1710 MHz to 1785 MHz
Receive frequency: 1805 MHz to 1880 MHz
Modulation: QPSK, 16QAM(DL), 64QAM(DL)
Power class: Class 3
Transmit power: 21.2 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: QPSK, 16QAM(DL), 64QAM(DL)
Power class: Class 3
Transmit power: 23.7 dBm, conducted

Description of service: E-UTRA LTE Band 28
Transmit frequency: 703 MHz to 748 MHz
Receive frequency: 758 MHz to 803 MHz
Modulation: QPSK, 16QAM, 64QAM
Power class: Class 3
Transmit power: 22.9 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
Power class: Class 3
Transmit power: 23.0 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
Power class: Class 3
Transmit power: 23.0 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
Power class: Class 3
Transmit power: 20.9 dBm, conducted



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Description of service: E-UTRA LTE Band 34
Transmit frequency: 2010 MHz to 2025 MHz
Receive frequency: 2010 MHz to 2025 MHz
Modulation: QPSK, 16QAM, 64QAM
Power class: Class 3
Transmit power: 22.7 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
Power class: Class 3
Transmit power: 21.1 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
Power class: Class 3
Transmit power: 23.0 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
Power class: Class 3
Transmit power: 21.3 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, 64 QAM
Power class: Class 3
Transmit power: 23.2 dBm, conducted

Description of service: IEEE 802.11bgn WLAN
Transmit frequency: 2412 MHz to 2472 MHz(HT20)
2422 MHz to 2462 MHz(HT40)
Receive frequency: 2412 MHz to 2472 MHz(HT20)
2422 MHz to 2462 MHz(HT40)
Modulation: DSSS, OFDM
Transmit power: 17.9 dBm, e.i.r.p.



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Description of service: IEEE 802.11a,n,ac WLAN (HT20 & HT40 & HT80)
 Transmit frequency: 5180 MHz to 5320 MHz
 Receive frequency: 5180 MHz to 5320 MHz
 Modulation: OFDM
 Transmit power: 19.3 dBm, e.i.r.p.

Description of service: IEEE 802.11an WLAN (HT20 & HT40 & HT80)
 Transmit frequency: 5500 MHz to 5700 MHz
 Receive frequency: 5500 MHz to 5700 MHz
 Modulation: OFDM
 Transmit power: 18.3 dBm, e.i.r.p.

Description of service: IEEE 802.11an WLAN (HT20 & HT40 & HT80)
 Transmit frequency: 5745 MHz to 5825 MHz
 Receive frequency: 5745 MHz to 5825 MHz
 Modulation: OFDM
 Transmit power: 13.5 dBm, e.i.r.p.

Description of service: Bluetooth Basic Rate + EDR
 Transmit frequency: 2402 MHz to 2480 MHz
 Receive frequency: 2402 MHz to 2480 MHz
 Modulation: GFSK, $\pi/4$ DQPSK, 8DPSK
 Transmit power: 8.6 dBm, e.i.r.p.

Description of service: Bluetooth Low Energy (BLE)
 Transmit frequency: 2402 MHz to 2480 MHz
 Receive frequency: 2402 MHz to 2480 MHz
 Modulation: GFSK
 Transmit power: -1.4 dBm, e.i.r.p.

Description of service: GPS Receiver
 Transmit frequency: None
 Receive frequency: 1575.42 MHz

Description of service: Glonass Receiver
 Transmit frequency: None
 Receive frequency: 1602 MHz

Description of service: NFC
 Transmit frequency: 13.56 MHz
 Receive frequency: 13.56 MHz
 Modulation: ASK
 Transmit power: 20.2 dB μ A/m @ 10m



Annex 2 to EU-type examination certificate for Radio Equipment Directive 2014/53/EU
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1 Test report:	Report number:	Dated:
EMC	170726001EMC-1	19 August 2017
Radio	170726001RFM-1	19 August 2017
Radio	170726001RFM-2	19 August 2017
Radio	170726001RFM-3	19 August 2017
Radio	170726001RFC-4	19 August 2017
Radio	170726001RFC-3	20 September 2017
Radio	170726001RFC-2	19 August 2017
Radio	170726001RFC-7	19 August 2017
Radio	170726001RFC-6	28 August 2017
Radio	170726001RFC-1	19 August 2017
Radio	170726001RFC-5	19 August 2017
RF safety	SE170728W002	21 August 2017
Product safety	50094473 001	24 August 2017
Acoustic safety	170726001SPL-1	24 August 2017

2 Technical documentation provided:		
Assembly drawing(s)	Block diagram	Circuit diagram/schematics
Risk Assessment	External photographs	Internal photographs
Label drawing/location	Operational description	Packaging example
Parts list/bill of materials	PCB layout	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 V12.1.1	EN 301 908-1 V11.1.1
	EN 301 908-2 V11.1.1	EN 301 908-13 V11.1.1
	EN 300 328 V2.1.1	EN 300 440 V2.1.1
	EN 300 330 V2.1.1	EN 301 893 V2.1.1
	EN 303 413 V1.1.0	
EMC (Article 3.1b):	EN 301 489-1 V2.2.0	EN 301 489-3 V2.1.1
	EN 301 489-17 V3.2.0	EN 301 489-19 V2.1.0
	EN 301 489-52 V1.1.0	EN 55032: 2015
	EN 55024: 2010 + A1:2015	
RF safety (Article 3.1a):	EN 62479: 2010	EN 50360: 2001 + A1:2012
	EN 50566: 2013 + AC:2014	
Product safety (Article 3.1a):	EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013	



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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

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