

Certificate

of
Radio Equipment in JAPAN

No: 201-210496 / 00

Telefication, operating as Conformity Assessment Body (CAB ID Number: 201) with respect to Japan, declares that the listed product complies with the Technical Regulations Conformity Certification of Specified Radio equipment (ordinance of MPT N° 37,1981)

Product description: **11ax RTL8852BE Combo module**
Trademark: **REALTEK**
Type designation: **RTL8852BE**

Manufacturer: **Realtek Semiconductor Corp.**
Address: **No. 2, Innovation Road II, Hsinchu Science Park,**
City: **300 Hsinchu**
Country: **Taiwan**

This certificate is granted to:

Name: **Realtek Semiconductor Corp.**
Address: **No. 2, Innovation Road II, Hsinchu Science Park,**
City: **300 Hsinchu**
Country: **Taiwan**

This certificate has THREE Annexes.

Apeldoorn, 21 July 2021

CAB



David Chen
Product Assessor





- The validity of this Certificate is limited to products, which are equal to the one examined in the type-examination
- When the manufacturer (or holder of this certificate) is placing the product on the Japanese market, the product must be affixed with the following Specified Radio Equipment marking:



R 201-210496

Remarks and observations

The following conditions are applicable:

Radio module

Antennas for IEEE 802.11a/b/g/n/ac/ax & Bluetooth:

PIFA/Dipole antennas, max gain of 3.5 dBi at 2.4 GHz and max gain of 5 dBi at 5 GHz

Documentation lodged for this type-examination

Test Reports:

- Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch - Hsin Chu Laboratory: RJBUI-WTW-P21040655, 15 July 2021
- Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch - Hsin Chu Laboratory: RJBUI-WTW-P21040655-2, 15 July 2021
- Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch - Hsin Chu Laboratory: RJBUI-WTW-P21040655-3, 15 July 2021
- Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch - Hsin Chu Laboratory: RJBUI-WTW-P21040655-1, 15 July 2021

Product Documentation:

- Assembly drawings
- Bill of materials
- Block diagram
- Electrical diagrams
- Antenna specifications
- Internal photos
- External photos
- Manual
- Production quality
- Test setup photos

Technical Standards and Specifications

The product shows no non-compliances with:

- Equipment Radio Regulations: 2008 (including amendments)

Chapter I, General Provisions

Chapter II, Transmitting equipment

Chapter III, Receiving Equipment

Chapter IV, section 4.17 article 49.20

Radio equipment specified in:

Item 19, Paragraph 1, Article 2

Item 19-2, Paragraph 1, Article 2

Item 19-3, Paragraph 1, Article 2

Technical features and characteristics

The product includes the following features and characteristics:

Bluetooth (incl. AFH)_High power

- Operating frequency range: 2402-2480 MHz (79 channels)
- ITU designation: 78M6 F1D,G1D
- Maximum output power: 1 mW/MHz rated

Bluetooth (incl. AFH)_Low power

- Operating frequency range: 2402-2480 MHz (79 channels)
- ITU designation: 78M6 F1D,G1D
- Maximum output power: 0.3 mW/MHz rated

Bluetooth LE_1M_High power

- Operating frequency range: 2402-2480 MHz (40 channels)
- ITU designation: 1M24 F1D
- Maximum output power: 7.3 mW rated

Bluetooth LE_2M_High power

- Operating frequency range: 2402-2480 MHz (40 channels)
- ITU designation: 2M17 F1D
- Maximum output power: 7.3 mW rated

Bluetooth LE_1M_Low power

- Operating frequency range: 2402-2480 MHz (40 channels)
- ITU designation: 1M24 F1D
- Maximum output power: 5 mW rated

Bluetooth LE_2M_Low power

- Operating frequency range: 2402-2480 MHz (40 channels)
- ITU designation: 2M17 F1D
- Maximum output power: 5 mW rated

IEEE 802.11b_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 15M0 G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11g_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ac (VHT20)_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 17M7 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ac (VHT40)_2TX

- Operating frequency range: 2422-2462 MHz (9 channels)
- ITU designation: 36M2 D1D,G1D
- Maximum output power: 3.65 mW/MHz rated

IEEE 802.11b ch14_2TX

- Operating frequency range: 2484-2484 MHz
- ITU designation: 19M6 G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ax (HE20)_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 19M0 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ax (HE40)_2TX

- Operating frequency range: 2422-2462 MHz (9 channels)
- ITU designation: 38M0 D1D,G1D
- Maximum output power: 3.65 mW/MHz rated

IEEE 802.11ax (RU26)_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 7.2 mW/MHz rated

IEEE 802.11ax (RU52)_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M2 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ax (RU106)_2TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11b_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 15M0 G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11g_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 16M6 D1D,G1D
- Maximum output power: 7.2 mW/MHz rated

IEEE 802.11ac (VHT20)

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 17M8 D1D,G1D
- Maximum output power: 7.2 mW/MHz rated

IEEE 802.11ac (VHT40)

- Operating frequency range: 2422-2462 MHz (9 channels)
- ITU designation: 36M2 D1D,G1D
- Maximum output power: 3.6 mW/MHz rated

IEEE 802.11b ch14_1TX

- Operating frequency range: 2484-2484 MHz
- ITU designation: 19M6 G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ax (HE20)_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 19M0 D1D,G1D
- Maximum output power: 7.2 mW/MHz rated

IEEE 802.11ax (HE40)_1TX

- Operating frequency range: 2422-2462 MHz (9 channels)
- ITU designation: 38M0 D1D,G1D
- Maximum output power: 3.6 mW/MHz rated



IEEE 802.11ax (RU26)_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M2 D1D,G1D
- Maximum output power: 7 mW/MHz rated

IEEE 802.11ax (RU52)_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M2 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11ax (RU106)_1TX

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 18M2 D1D,G1D
- Maximum output power: 7.3 mW/MHz rated

IEEE 802.11a_2TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ac (VHT20)_2TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 17M7 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ac (VHT40)_2TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 36M6 D1D,G1D
- Maximum output power: 1.5 mW/MHz rated

IEEE 802.11ac (VHT80)_2TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 76M4 D1D,G1D
- Maximum output power: 0.75 mW/MHz rated

IEEE 802.11a_2TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ac (VHT20)

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 17M7 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ac (VHT40)_2TX

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 36M6 D1D,G1D
- Maximum output power: 1.5 mW/MHz rated

IEEE 802.11ac (VHT80)_2TX

- Operating frequency range: 5290-5290 MHz
- ITU designation: 76M4 D1D,G1D
- Maximum output power: 0.75 mW/MHz rated

IEEE 802.11a_2TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ac (VHT20)_2TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 17M7 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ac (VHT40)_2TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 36M6 D1D,G1D
- Maximum output power: 5 mW/MHz rated

IEEE 802.11ac (VHT80)_2TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 76M4 D1D,G1D
- Maximum output power: 2.5 mW/MHz rated

IEEE 802.11ax (HEW20)_2TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 18M9 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (HEW40)_2TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 38M2 D1D,G1D
- Maximum output power: 1.5 mW/MHz rated

IEEE 802.11ax (HEW80)_2TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 78M0 D1D,G1D
- Maximum output power: 0.75 mW/MHz rated

IEEE 802.11ax (RU26)_2TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 18M2 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (RU52)_2TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (RU106)_2TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (HEW20)_2TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 18M9 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (HEW40)_2TX

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 38M2 D1D,G1D
- Maximum output power: 1.5 mW/MHz rated

IEEE 802.11ax (HEW80)_2TX

- Operating frequency range: 5290-5290 MHz
- ITU designation: 78M0 D1D,G1D
- Maximum output power: 0.75 mW/MHz rated



IEEE 802.11ax (RU26)_2TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (RU52)_2TX

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (RU106)_2TX

- Operating frequency range: 5290-5290 MHz
- ITU designation: 18M0 D1D,G1D
- Maximum output power: 3.1 mW/MHz rated

IEEE 802.11ax (HEW20)_2TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 18M9 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (HEW40)_2TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 38M2 D1D,G1D
- Maximum output power: 5 mW/MHz rated

IEEE 802.11ax (HEW80)_2TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 78M0 D1D,G1D
- Maximum output power: 2.5 mW/MHz rated

IEEE 802.11ax (RU26)_2TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (RU52)_2TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (RU106)_2TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11a_1TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11n/ac (VHT20)_1TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 17M5 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11n/ac (VHT40)_1TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 36M2 D1D,G1D
- Maximum output power: 1.56 mW/MHz rated

IEEE 802.11ac (VHT80)_1TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 76M8 D1D,G1D
- Maximum output power: 0.78 mW/MHz rated

IEEE 802.11a_1TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 16M5 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11ac (VHT20)

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 17M5 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11ac (VHT40)

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 36M2 D1D,G1D
- Maximum output power: 1.56 mW/MHz rated

IEEE 802.11ac (VHT80)

- Operating frequency range: 5290-5290 MHz
- ITU designation: 76M8 D1D,G1D
- Maximum output power: 0.78 mW/MHz rated

IEEE 802.11a_1TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 16M8 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ac (VHT20)_1TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 19M9 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ac (VHT40)_1TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 39M2 D1D,G1D
- Maximum output power: 5 mW/MHz rated

IEEE 802.11ac (VHT80)_1TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 77M7 D1D,G1D
- Maximum output power: 2.5 mW/MHz rated

IEEE 802.11ax (HEW20)_1TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 18M9 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11ax (HEW40)_1TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 37M8 D1D,G1D
- Maximum output power: 1.56 mW/MHz rated

IEEE 802.11ax (HEW80)_1TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 77M6 D1D,G1D
- Maximum output power: 0.78 mW/MHz rated

IEEE 802.11ax (RU26)_1TX

- Operating frequency range: 5180-5240 MHz (4 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (RU52)_1TX

- Operating frequency range: 5190-5230 MHz (2 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (RU106)_1TX

- Operating frequency range: 5210-5210 MHz
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (HEW20)_1TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 18M9 D1D,G1D
- Maximum output power: 3.12 mW/MHz rated

IEEE 802.11ax (HEW40)_1TX

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 37M8 D1D,G1D
- Maximum output power: 1.56 mW/MHz rated

IEEE 802.11ax (HEW80)_1TX

- Operating frequency range: 5290-5290 MHz
- ITU designation: 78M3 D1D,G1D
- Maximum output power: 0.78 mW/MHz rated

IEEE 802.11ax (RU26)_1TX

- Operating frequency range: 5260-5320 MHz (4 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (RU52)_1TX

- Operating frequency range: 5270-5310 MHz (2 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (RU106)_1TX

- Operating frequency range: 5290-5290 MHz
- ITU designation: 18M0 D1D,G1D
- Maximum output power: 3 mW/MHz rated

IEEE 802.11ax (HEW20)_1TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 19M4 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (HEW40)_1TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 39M2 D1D,G1D
- Maximum output power: 5 mW/MHz rated

IEEE 802.11ax (HEW80)_1TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 78M6 D1D,G1D
- Maximum output power: 2.5 mW/MHz rated



IEEE 802.11ax (RU26)_1TX

- Operating frequency range: 5500-5720 MHz (12 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (RU52)_1TX

- Operating frequency range: 5510-5710 MHz (6 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated

IEEE 802.11ax (RU106)_1TX

- Operating frequency range: 5530-5690 MHz (3 channels)
- ITU designation: 18M1 D1D,G1D
- Maximum output power: 10 mW/MHz rated



The product as described in this Certificate includes the following type designations:

- Product description: 11ax RTL8852BE Combo module
- Trademark: REALTEK
- Type designation: RTL8852BE