

# RE741

## User manual

### Product Description

RE741 is the latest WIFI/BLE SOC SV32WB01 chip design in Southern Silicon Valley, adopting advanced design technology to achieve low power consumption and high throughput; WLAN MAC, Baseband and RF is integrated on the hardware of the module. Chip internal integration MCU, main frequency 320 MHz, 384 KB SRAM, built 128K ROM. Working at 2.4 GHz, Support 802.11 b/g/n wireless standards and BLE5.0. The module uses 3.3~5V single power supply, SMT installation mode, So that the module can be flexibly applied to all kinds of consumer products.

### Product Features

#### WLAN

- Working Frequency : 2400MHz-2483.5MHz
- Support 802.11b/g/n
- Support HT20/HT40
- Support STA/AP work mode
- Support WEP, WPA/WPA2
- Integration 16Mbit SPI flash

#### Bluetooth

- Working Frequency : 2400MHz-2483.5MHz
- Support BLE 5.0
- Support for simultaneous receiving / broadcast / scan operation mode
- Support for the SIG Mesh V1.01 protocol
- Support GATT and Mesh protocol.

### Product Specification

<b>Product model</b>	RE741
<b>Frequency Band</b>	b/g/n20:2412-2462MHz n40:2422-2452MHz BLE:2402-2480MHz
<b>Modulation mode</b>	802.11b: CCK, DQPSK, DBPSK 802.11g: 64-QAM, 16-QAM, QPSK, BPSK With OFDM 802.11n: 64-QAM, 16-QAM, QPSK, BPSK With OFDM BLE: GFSK
<b>Operation mode</b>	Infrastructure, Ad-Hoc
<b>Security mechanism</b>	WEP/WPA/WPA2
<b>Operating Voltage</b>	3.3-5V
<b>Antenna Type</b>	PCB Antenna

### CE Caution:

Hereby, Shenzhen Water World Co., Ltd declares that this Mobile Phone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

EUT work Temperature: -20°C~105°C.

In accordance with Article 10(2) and Article 10(10), this product is allowed to be used in all EU member states.

#### **FCC Statement**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Important Note:

#### **FCC Caution:**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **FCC RF Radiation Exposure Statement:**

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment.
3. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Host product manufacturers that they need to provide a physical or e-label stating, "Contains FCC ID:2AYCN-RE741 with their finished product.

Only those antennas with same type and lesser gain filed under this FCC ID can be used with this device.

The host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

The final host integrator must ensure there is no instruction provided in the user manual or

customer documentation indicating how to install or remove the transmitter module except such device has implemented two-ways authentication between module and the host system. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This module has been tested and found to comply with part 15.247 requirements for modular approval

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated. Additional testing and certification may be necessary when multiple modules are used.

### **Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01**

#### **2.2 List of applicable FCC rules**

CFR 47 FCC PART 15 SUBPART C has been investigated. It is applicable to the modular transmitter

#### **2.3 Specific operational use conditions**

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

#### **2.4 Limited module procedures**

Not applicable

#### **2.5 Trace antenna designs**

Not applicable

#### **2.6 RF exposure considerations**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **2.7 Antennas**

This radio transmitter **FCCID: 2AYCN-RE741** has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Model	Type	Connector	Peak gain ( dBi )				
			2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
2400-2483.5 MHz	PCB Antenna	/	1.0dBi	/	/	/	/

#### **2.8 Label and compliance information**

The final end product must be labeled in a visible area with the following " Contains FCC ID:2AYCN-RE741".

#### **2.9 Information on test modes and additional testing requirements**

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

#### **2.10 Additional testing, Part 15 Subpart B disclaimer**

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B.