

i1421-sw Bluetooth &Wi-Fi module

Introduction

i1421-sw module is a small size and low profile of WIFI+BT combo module. It provides SDIO interface for WIFI to connect with host processor and high speed UART interface for BT. It also has a PCM interface for audio data transmission with direct link to external audio codec via BT controller. The WIFI data rate can go up to 433.4Mbps in theory by using 1 stream 802.11a/b/g/n/ac and Bluetooth can support BT2.1+EDR/BT3.0 and BT5.3.

Key Features

IEEE 802.11a/b/g/n/ ac compatible WLAN

Complies with SDIO1.1/2.0/3.0 for WLAN with clock rate up to 100MHz (SDR50 and DDR50)

Support BT2.1+EDR/BT3.0 and BT5.3

Bluetooth 5.3Dual Mode Support: Simultaneous LE and BR/EDR

Voltage: 3.3V

Operating Temperature: -40 to +85°C

Storage Temperature: -55 to +125°C

16mm*16mm*2.6mm (Tolerance: ±0.2mm)

External Antenna

UART, SDIO, PCM, GPIO

Applications

Automotive

Measurement systems

Networking camera

Network Radios

FCC Regulations

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as shown in this manual.

This device is intended only for OEM integrators under the following conditions: (For module device use)

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users,
- and 2) The transmitter module may not be co-located with any other transmitter or antenna. As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.