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 rata can go up to 433.4Mbps in theory by using 1 stream 802.11a/b/g/n/ac MIMO technology 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.

Information to user

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Manual Information to the End User

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 show 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.

Radiation Exposure Statement

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