FCC Part 15.247/Industry Canada RSS-210 Annex 8 Application Form

Product Name: 900MHz Band RFID Reader .....

FCC id/or Industry Canada ID: SDQSENSE1853 .....

Introduction

The following listed sections are requirements outlined by the FCC/Industry Canada which the equipment must meet in order to complete a successful application to the FCC/Industry Canada . If the equipment being submitted for testing is subject to the rules in 15.247 or RSS-210 Annex 8 , the following sections must be completed. Sections 3 to 6 are taken from the FCC Guidance Document DA 00-705.

Section 1

15.203 - Antenna requirement.

a) Integral Antenna [√]

b) Dedicated Antenna [ ]

c) Antenna Connector* [ ] Antenna Connector Type:

Where option B is identified please specify how this is connected to the Transmitting circuitry

Where option C is identified please specify the connector type, eg. Reverse SMA and provide or request photographs of both connectors.

Section 2

Has the radio device been approved to 802.15.1? Yes [ ] No [√]

(RFID)

If **Yes,** then please provide evidence of such approval (e.g. Certificate, Test Report etc) .

If **Yes** you do not have to answer the questions in Sections 3 to 6.

If **No, or no available** evidence please answer the following questions in Sections 3 to 6 is not required.

Note: The supporting evidence for the following sections may either be clear design information, Test Results obtained on the product, or Test Results obtain using the same Driver Chip where the Chip itself controls compliance to the requirement.

Section 3 Pseudorandom Frequency Hopping Sequence

Describe how the hopping sequence is generated. Provide an example of the hopping sequence channels, in order to demonstrate that the sequence meets the requirement specified in the definition of a frequency hopping spread spectrum system.

The system used 50 hopping frequencies (between 902MHz to 928MHz) and the average time of occupancy on any frequency is not greater than 0.4 seconds within a 20 second period. The frequency hopping sequence generated by program arithmetic, it made the hopping sequence stochastic. For example, if the first frequency is 902.75MHz, and then, the second frequency maybe 915.25MHz,the third frequency maybe 920.25MHz, and so on.

Section 4 Equal Hopping Frequency Use

Describe how each individual EUT meets the requirement that each of its hopping channels is used equally on average (e.g., that each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event).

Any frequency is not greater than 0.4 seconds, and it is only generated one time within 20 second. By the program arithmetic, any frequency will be mark if it appeared, till all frequency be mark, it will be appear second time possibly.

Section 5 System Receiver Input Bandwidth

Describe how the associated receiver(s) complies with the requirement that its input bandwidth (either RF or IF) matches the bandwidth of the transmitted signal.

The system used only one antenna for signals transmission and receiving. The bandwidth of antenna is 26MHz (the transmitted signal from 902MHz to 928MHz).The system used a RF integrated circuit for RF signal disposal. When the transmitted signal changed (Hopping Frequency from 902MHz to 928MHz), the local oscillation changed homologous. All the operation control by the RF integrated circuit.

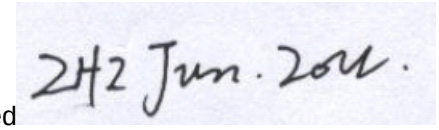
Section 6 System Receiver Hopping Capability

Describe how the associated receiver(s) has the ability to shift frequencies in synchronization with the transmitted signals.

In the module, the RF integrated circuit controlled by CPU, it controlled the channel which RF integrated circuit working. When it is working in a channel, it will receive and disposing the frequency which it sent out. When the frequency of sent out is changed, the frequency of received is changed, too. And all the operation controlled by the RF signal disposal.

Completed by Name: ZHIJUN ZOU .....

Job Title: Assistant Manager Dept. of Production

Signed  ..... Date: 27th Aug. 2008.....