

FCC ID: LU94225

Technical Description :

The brief circuit description is listed as follows :

- U2 (HL5232) and associated circuit act as RFID Reader.
- Y1 and associated circuit act as 13.56 MHz Oscillator.
- ANT and associated circuit act as Loop Antenna.
- U1 (SNC5A4C) and associated circuit act as MCU and Sound Synthesizer.
- Q1 and associated circuit act as CDS Trigger.
- S6 – S9 and associated circuit act as Control Key.

Antenna Used :

An Loop antenna has been used.

豐榮國際有限公司 Wisefield International Limited

Flat A, 8th Floor, World Tech Centre, No. 95 How Ming St., Kwun Tong, Kowloon, Hong Kong.
Tel : 3101 6989 Fax : 2115 9579 / 3101 9028 Email: sales@wisefield-intl.com

HL5232
HF RFID Reader IC
Preliminary Version
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Features

- Low standby current.
- Low power consumption.
- Simple application circuit.
- Stable performance.
- The system and oscillator can be enable separately.
- 3 kinds of Decoder outputs.
- Level hold mode and one shot Trigger mode.
- High Active and low Active output selectable.

Applications

- Toy RFID.
- Asset control.
- Contactless entry control.
- Education.

General Description

HL5232 is a CMOS IC used to perform the function of a RFID Reader. A RFID contains two parts: RFID TAG (HL5230) and RFID Reader (HL5232). HL5232 contains of a 13.56MHz crystal oscillator, a 13.56MHz output buffer, a preamplifier and data decoder. The output buffer drives an antenna which can transmits RF signal to the RFID TAG.

If TAG is close enough to the Reader, the encoder of TAG will send out a data train. The data train is used to modulate the RF signal in the TAG, and the amplitude of RF signal in the Reader will be modulated also. Preamplifier is used to amplify the modulating signal. The decoder is used to decoder the encoded data transmitted from TAG.

There are three kinds of output data: Synchronous, Asynchronous and direct drive outputs. In order to interface to most of power Speech IC, the data rate of the outputs is slower than the data rate of the RFID TAG.

Block Diagram

