KT902 RF Circuit Specifications/FCC

Tag Receives _ 433.92 MHz

The signal sent into the antenna undergoes the conversion of both transmission and reception that is essential to TDD method. During this reception period, the signal is sent to U101 (1 Chip Transceiver IC, CC 1100). At this time, transmission is blocked.

U101 (1 Chip Transceiver IC, CC1100) receives the signal from ANT101, separates the I signal and Q signal of 307.2 KHz through LNA and mixer, filters and amplifies both of them, generates the baseband digital signal via both ADC (analog to digital converter) and FSK demodulator, and sends it to the MCU of a main board.

Tag Transmits _ 433.92 MHz

The digital data in the MCU of a main board is modulated into FSK in the U101 (1 Chip Transceiver IC, CC1100), and then converted into the reference signal of VCO. The RF signal of 433.92 MHz transmitted from VCO is converted into the single ended signal via a phase shifter and MUX. U101 sends the RF signal to the antenna for a certain time. At thistime, reception is blocked. The RF signal inputted into the antenna is also transmitted from the antenna.