

SI367 Circuit Description

By David Chow

Circuit Description of SI367

There are three parts of main unit and are connected by a cable.

MCU parts:

U1 is a MCU EM78P15S which controls by Sw1 key and Sw2 key. During the unit is on sleep mode, all the circuit will be down. Each 4 seconds, the MCU wakes up and to enable the Rx circuitry to detect any signal, which come from Antenna. No signal detected, it will return to sleep mode again. Otherwise, it will start-up system and check the detected signal in which assigned or not. If corrects, the MCU try to decode it. The MCU will trigger the alarm on and LED flashing. After 4 second, the system will go back to sleep mode.

On any time, the end-user presses LED key. The MCU wakes up and turns on the LED. The system will go to sleep mode while the user press key again.

If the user presses the “ Find it” button, the MCU wakes up and triggers the Tx circuitry to transmit a pattern digital pulse for three times in second. Then it go back to sleep mode.

Tx parts:

Tx IC TH71072 is a main part of remote kit. In normally, the remote kit is on sleep mode. While the button pressed, it will transmit the digital signal on data signal line. While the button released, no digital signal transmits on data signal line. The circuitry is returned to sleep mode.

Rx parts:

RF transistor BFR93A will get the RF signal from antenna and amplified the wanted signal to OP amp. LMV358MM. After that, it will generate a digital signal to MCU. The circuitry is only power up by MCU received power line.

End of descriptions

30-Aug-2004/10/8