

## **Circuit Description**

Our V-850 is a tool for PPT Presentation, and it includes the following functions: Page up, Page down, PPT play, blank screen, and laser pointer.

The modulation method is OOK.

(1) Keyboard circuit consists of k1-K5. They are all pushing switch, used as a simple on-off switch by connecting to the MCU in the circuit.

(2) MCU is BJ8P153SNJ, it is an 8-bit micro controller and processor with low-power and high-speed CMOS technology, with a 1024\*13-bits OTP-ROM within it. The work voltage in the circuit is 3V. And the available temperature is 0 degrees Centigrade to +70 degrees Centigrade.

(3) 433.92MHz RF transmitter is consist of X1, Q1, Q3, etc, Antenna. While Key is pressed, the status of MCU PIN is changed, MCU wake up from sleep. It commands X1 send 433.92MHz RF signal. X1 is a 433.92MHz surface acoustic wave resonator.

(4) Laser pointer is consist of D2, Q2, Q4, Q5, etc.

D2 is a 650nm red laser diode. The operating voltage of D2 in the circuit is 3V.

Q2, Q4, Q5 are NPN surface mounted transistor. They are response for current control and amplify.

While K5 is pressed, the status of MCU is changed, I/O PIN53 command the D2 send 650nm laser.