2.4G wireless remote control circuit analysis:

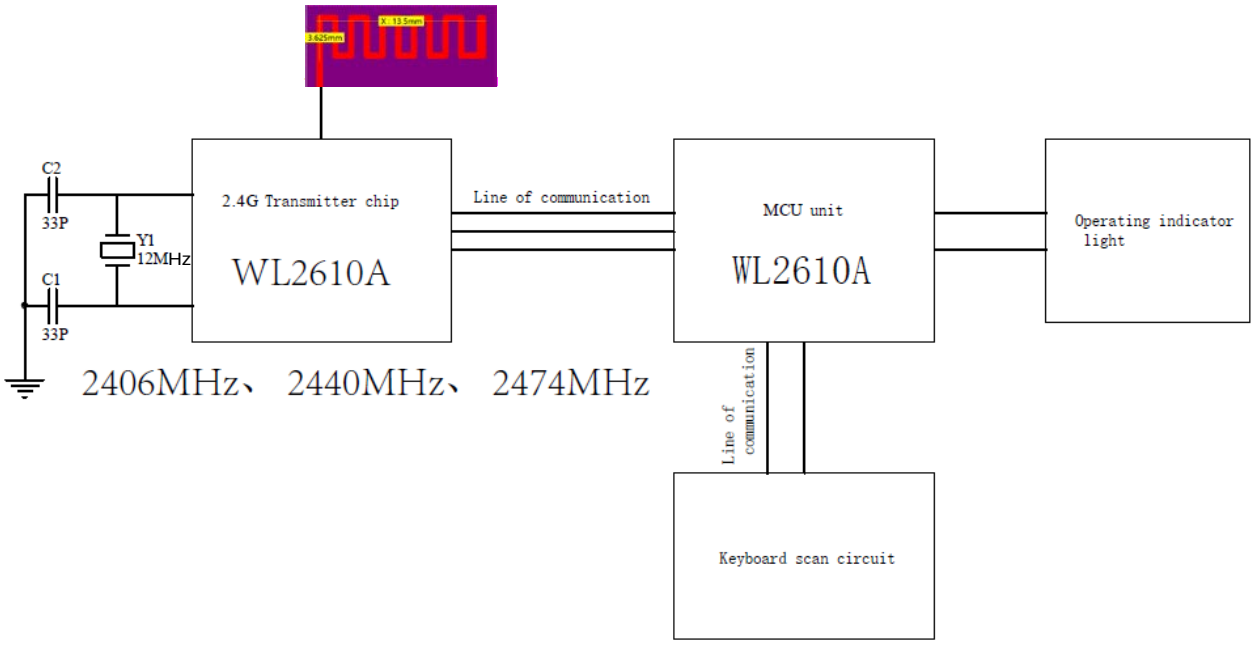
IUL20 remote control is a 2.4G wireless to infrared code remote control program developed by the company. The receiving host does not need to modify the original infrared receiver program,and can be used directly. The operating frequency of the remote control belongs to the open frequency range.

TX transmission part by high frequency circuit unit, control communication unit and keyboard circuit unit three major components.

High frequency circuit unit, mainly by the high frequency transceiver chip U1 completed. SPI communication line communicates with MCU to realize wireless data transceiver function.

The control circuit unit is mainly realized by 8-bit MCU (U2). Divided into key scanning, SPI communication, data coding, LED indication, high-frequency transceiver chip according to system.

MCU realizes key detection through matrix scanning circuit. Different keys correspond to codes. The encoding is realized by MCU, and the generated key encoding is transmitted to U1 through the SPI communication line. After data transmission is completed, the data is sent to U1, which realizes the encoded signal is transmitted wirelessly by U1 to the receiving module, and the transmission process is illuminated by LED1 instruction.



Remote control block diagram