

## Circuit Description

### Transmitter:

After the Infrared Detector detect some subjects, it will supply DC9V to transmitter for 2 seconds. When the transmitter is powered up, oscillator X1 resonates at 48.21333MHz, while the encoder U1 will send out serial data include the address of the transmitter to modulate the 48.21333MHz signal at Q3, then send out the 144.64MHz tripled modulation signal. Through the Band-pass Filter, the signal will be tripled again at Q2 to get 433.92MHz, after pass 2nd BFP, power amplifier, and 3rd BFP, the signal is send by the antenna.