

O44JMR5100 Circuit Descriptions.

(Block1,2,3,4,5,6,15 is Logic part and another block is RF part)

Block 1 : The Battery supply the power of 1.5volts to the Regulator.

Block 2 : This is the 3volts DC/DC step-up circuit by U5,D3,L13,TC2,TC3

Block 3 : The Buttons of this product. When Being pressed this remote starts to work.

Block 4 : This is the micro-controller. U2(Micro-controller) reads the button and make the radio transmission circuits work.

Block 5 : This is the real time circuit. XT2 supply the real time clock to the U2.

Block 6 : This is the radio power control circuit by U2.

U2 make radio frequency circuit (B7, B8) enable by Block6.

Block 7 : : This is the basic oscillation circuit to radiate the radio frequency.

(433.920MHz by SAW1) And By switching(between 0v and 3V) at R17 the frequency modulation is done.

Block 8 : The basic frequency 433.920MHz of Block8 will be amplified at this by Q3.

Block 9 : Besides 433.920MHz will be removed by first filter. (L6, C27, C28)

Block 10 : Besides 433.920MHz will be removed by second filter. (L1, C1, C2)

Block 11 : This is the Low Noise Amplify circuit by Q1, L3, C5

Block 12 : This is the 434.0MHz SAW Filter circuit by SAW2.

Block 13 : This is the Local Frequency oscillator(423.2202MHz) circuit by

U1, XT1, C19, C20.

Block 14 : This is the 1 Chip Receiver IC (Mixer, Multiplier, Demodulator) circuit by U1.

Block 15 : This is the reception power control circuit by U2.