

## **O44JMA510SS Circuit Descriptions.**

Block 1: The Battery supply the power of 12volts to the Regulator.

Block 2: This is the 5volts Regulator circuit by U5, C43, TC1.

Block 3: This is the 3volts Regulator circuit by U3, TC1, TC2.

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 U3.

Block 6: This is the radio power control circuit by U3.

U3 make radio frequency circuit (B8, B9, B10, B13, B14) enable by Block6.

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

Oscillates 19.2MHz by XT1, R11, R12.

Block 8: This is the Single Chip RF Transceiver IC (LNA, PA, Multiplexer, VCO, Demodulator, Modulator, Mixer, PLL) circuit by U1.

Block 9: The basic frequency 907.1973 ~ 909.6473 MHz of Block8 will be amplified at this by Q2, L4.

Block 10: This is the Single Chip Power Amplifier IC circuit by U1.

Block 11: Besides 909.6473MHz will be removed by first filter (L2, C5, C6).

Block 12: Besides 909.6473MHz will be removed by second filter (L1, C1, C2).

Block 13: This is the First Low Noise Amplify circuit by Q2, L13.

Block 14: This is the Second Low Noise Amplify circuit by Q3, L12.

Block 15: This is the 908.00MHz SAW Filter circuit by SAW1.