

## **CIRCUIT DESCRIPTION**

### **1. TX circuit description**

The signal received from audio L and audio R via audio jack was sent to BA3308IC for expansion and AGC. The signal output from pin no. 3 and pin no. 7 was modulated in Vd2 and Vd3, generated TX VCO in Q4 and Q6 through KA8825 PLL VCO control, through double frequency and select frequency, being expanded and sent out by ANT1 and ANT2. Q17 and Q18 generate audio detect circuit; when detect no audio signal, MCU1504 pin no. 27 send out command to RX, make it into saving mode.

MCU1504 and its relevant circuit control channel transition, VCO circuit and detect circuit.

### **2. RX circuit description**

The signal sent out by TX was received by antenna, after being expanded by Q4, was sent to Q3-b, mixing with local oscillator signal, which was formed by KA2258IC and Q11 and frequency select, then being added in Q3-b together with the signal received by antenna; form the heterodyne frequency 10.7Mhz and 6.5Mhz which was expanded by Q12, Q22 and filtered by F2 (10.7Mhz) F3 (6.5Mhz) and then was sent to pin no. 2 and pin no. 15 of TA8187, the signal (after demodulated by TA8187) was sent to hwd2111 IC for amplification via pin no. 7 and pin no. 8, the expanded signal was output to SPK L and SPK R via pin no. 1 and pin no. 9. Q8 and Q9 form data wave amplified circuit, which was sent to MCU1504 for processing after received command from TX. MCU1504 form relevant control circuit, which was in charge of controlling command sent by TX and frequency transferring, VCO and some other circuit.