

## **Circuit Description of PBI3040 Baby Unit**

### **Power Supply**

Power from AC adaptor is regulated by the regulator circuit formed by Q1 and ZD1. The regulator can provide a stable voltage to other circuits.

### **Mic Amplifier**

Signal from microphone is amplified by U1. The mic signal is output at pin 6 of U1 and then fed to FM modulation circuit.

### **RF Frequency Oscillator**

The crystal oscillator circuit consists of X1 (or X2), VD1, T1, Q6, C32 and C33. The oscillating frequency can be selected by the switch. The capacitance of VD1 is varied by the audio signal from pin 6 of U1, thus performing the FM Modulation.

### **Frequency Tripler Circuit**

The RF frequency from crystal oscillator is tripled and selected by the tuned amplifier, Q7 and T2. This RF signal will then feed to Transmitter RF Power Amplifier.

### **Transmitter RF Power Amplifier**

The RF Power Amplifier consists of Q8 and T3. The RF signal is amplified before it is transmitted by antenna.

### **Antenna Matching Circuit**

Signal from RF Power Amplifier is transmitted by antenna through the matching circuit, L2, C42 and C43 to reduce the unwanted harmonic.

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