

Technical Description of the Circuit:

The product can be divided into two parts, RF and Baseband, the RF circuit is a single conversion, super-heterodyne architecture receiver IC. The incoming RF signal received by the antenna is fed to the RF input terminal of the IC RX3310A, then the RF signal is amplified by the LNA in the IC RX3310A. The amplified signal will be fed to the mixer input, the LO for the mixer is generated by the external LC tank circuit, in the above circuit, the LO is 432.12MHz, the IF ($F_{RF}-F_{LO}$) is then demodulated by the demodulator in the IC RX3310A and the IC RX 3310A provides the raw data. The data is then fed to the baseband MCU TM8706 for decoding and the MCU TM8706 will display the decoded temperature at the LCD. The RCC receiver UE6011 receives the RCC signal and decodes the signal to raw data for the TM8706, and then the TM8706 displays the time and date from the data received.