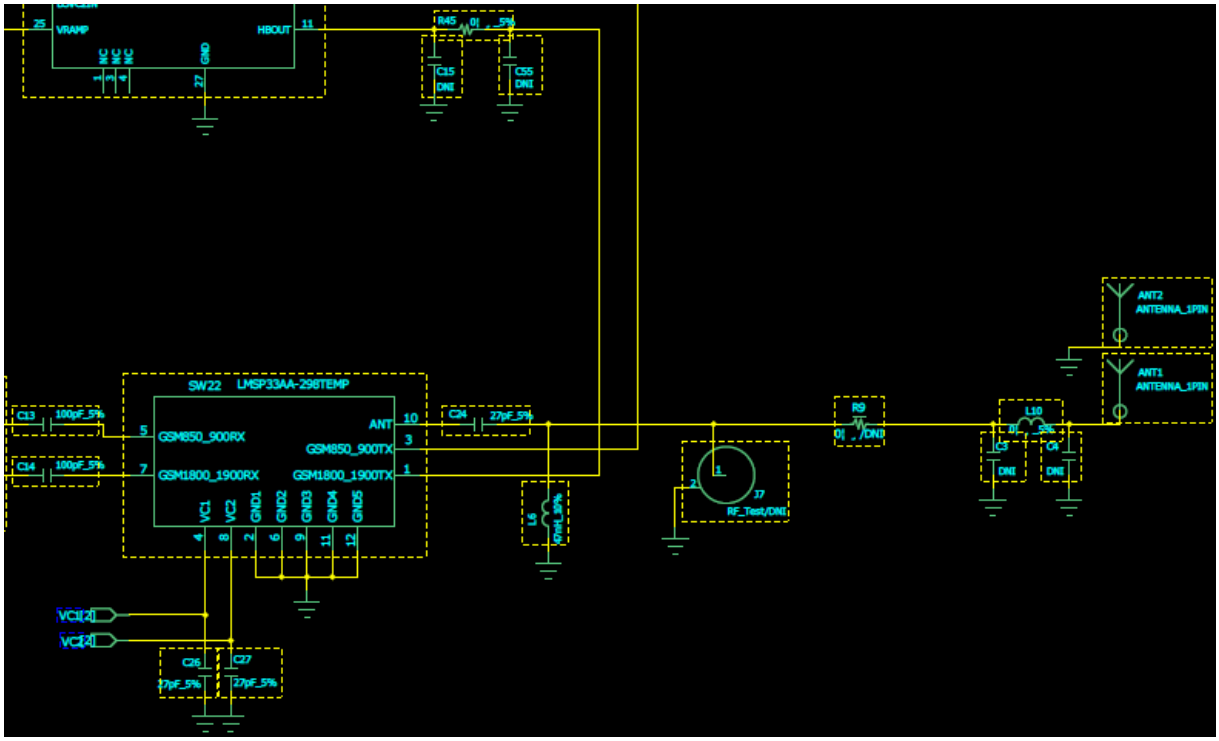
1 RX antenna switch SCH

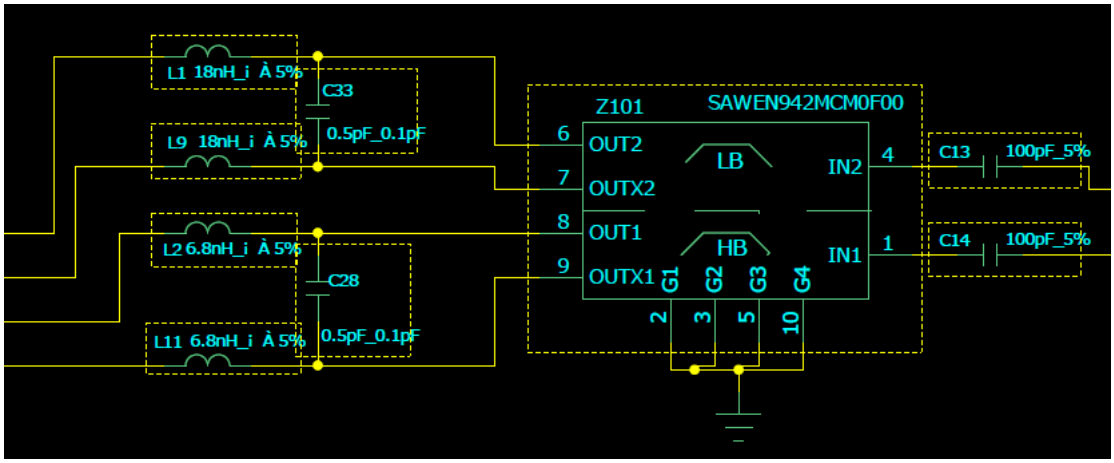



The aerial signal mobile phone received goes from antenna to RF Connector. RF Connector, which is a special parts developed for RF test. By connecting RF cable to spectrum analyzer, you can measure RF signal.

Signal output from RF Connector will be input to GSM Dual band front-end module SW22.CPU output VC1 , VC2 and TXON_PA signals , which will be in charge of GSM Dual band front-end module SW22 in relative Band(GSM900/850、DCS/PCS)and in TX/RX or standby status as below figure

| TX_PAEN | BS(Band SW) | VC1 | VC2 | TX Module Mode |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | GSM850 RX |
| 0 | 1 | 0 | 0 | PCS1900 RX |
| 1 | 0 | 1 | 0 | GSM850 TX |
| 1 | 1 | 0 | 1 | PCS1900 TX |

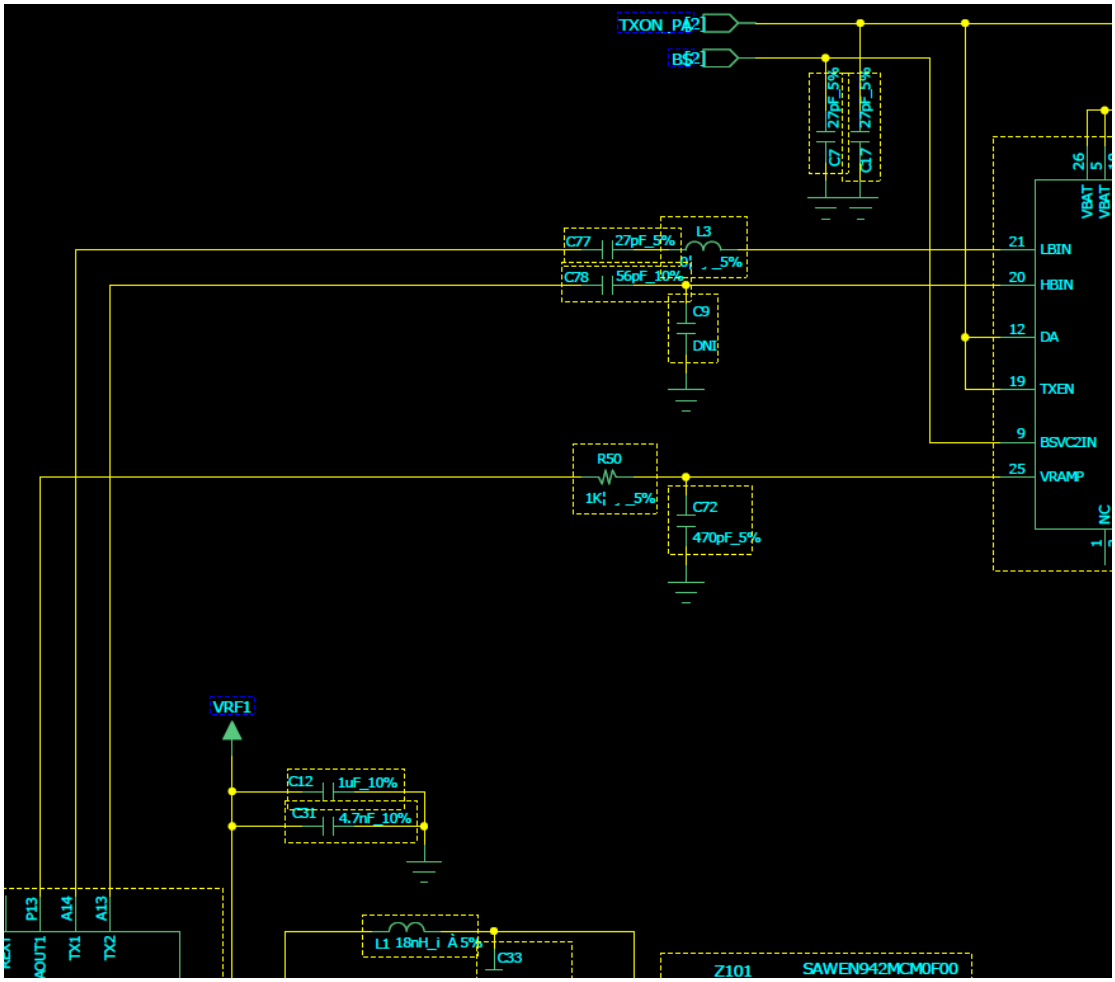
2 RX SAW Filter SCH




The RX signal output from RF SW, than input SAW filter .changed two difference signals

in SAW filter, than input the BB IC2. Signal demodulated in IC2 after pass SAW filter: Signal pass LNA, mixed with local signal (VCO frequency synthesizer), pass PGA and ADC, mixed with local signal low-IF, after pass the DAC, then output IQ signal to BB.

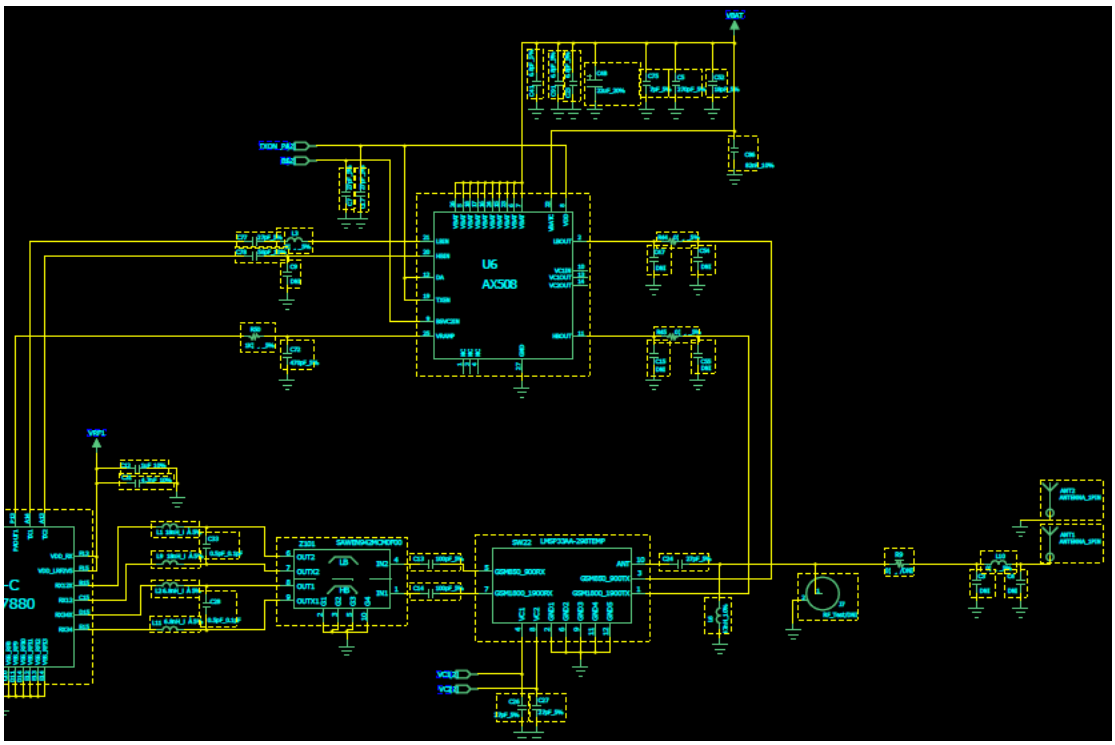
3 TX Transmit SCH




Audio signal input Microphone, Microphone convert the voice signal to analog signal and input to CPU (IC2). After A/D (convert analog signal to digital signal) in CPU, then the logic signal will be processed in DSP section .Then the processed logic signal pass D/A converter, output four signals (IQ) to transiver(include in BB IC2). The TX output signal from BB [pin A14 (GSM8850/900) & pin A13(DCS/PCS)] will flow to RF PA (U6).

TX signals output from PA (U6), flow through RF_SW (SW22, Front-end module part of RF PA), RF-Connector to antenna. REF below chart

4 RF part schematic




The RF overall schematic as up. It contains the TX path and RX path. The signal received from the air will be demodulated in CPU through RX SAW and Transceiver, Then the original voice signal will driver the receiver.

At the same time the signal from microphone will be sent to transceiver through CPU, then be amplified by RF PA, at last sent to air from the antenna switch.