CIRCUIT DESCRIPTION

The majority of the phone circuitry consists of a four device chipset;The SC6610 Baseband Processor, the SR528 Transceiver IC, the VC5268Q Power Amplifier and transmit/receive switch ,and bluetooth IC RDA5875 .

1. The SC6610 Baseband Processor is a highly integrated mixed signal baseband processor for GSM/GPRS applications,Which is designed to provide a cost-effective,low power and high-performance solution for mobile phones.It consists of an embedded 32-bit microcontroller and an embedded 16-bit DSP core and integrates management unit,analog baseband,audio DAC and ADC,an many drivers,even some resistors to simplify the system design and minimize the total number of system components. Further more,embedded PSRAM is supported in SC6610 for the purpose of decreasing the system complexity.

2. The SR528 Transceiver IC is consist with RFVCO, Mixer, Loopfilter, LC, and IFVCO, Demodulator and Phase Det filter etc. Serial data can get well communication and controlling with it. And the well characteristics VCO , filter and high performance data dealing and controlling make it as a good IC for mobile design.

3.The PA VC5268Q enlargement is a amplifier for the modulation and demodulation signal and enlarge the well siganl for the mobile using. It

supporting the USGSM850, EGSM900, DCS1800 and PCS1900 protocol.

4. Bluetooth IC RDA5875 is a highly integrated single-chip IC with radio transceiver and baseband processor, which is compliant with Bluetooth 2.1 + EDR specification and provides an optimal solution for data and voice application.RDA5875C provides UART which is specified as HCI interfaces by Bluetooth SIG standard, and also supports PCM audio interface.RDA5875C has been designed on highest level of integration to extremely reduce the number of external component.

The mobile is consist the main part of SC6610,SR528, VC5268Q and RDA5875, and other I/O interface accessories.

SR528 is powered and supporting with the 26MHz DCXO and actived the PhaseDet. I/Q is also controlled with it and the the phase signal is pass to the IFVCO and enter to the LNA mixer and filter.

Also, the serial data interface is actived and communicate with the RFVCO, then to the Mixer and loopfilter. As the modulation and demodulation with the SC6610 RF Processing, the GSM signal enter into the 5dB LP and passing through the PA Enlargement for amplify. Then the enlarge siganl run to the LP and to the ANT switch.

Matching with the antenna circuit. The siganl is transmitting out through the ANT.

The receiving procedure is a revised direction as the transmitting procedure while is seperated through the ANT switch and monitor with the Serial data interface terminal.