

Circuit principle

1.Power supply: Regulator AC100 ~ 240V to DC9V to supply the phone power through switch power adaptor outside, and inside outputting 4.2V(VDD) supplying to module A6000 and 3.0V(VCC) supplying to CPU and LCD display

2.Adopting the kit antenna to get the network signal in good quality. Through SMA the antenna can join to the antenna connector which fixed on the button shell, so the signal will be transit from the connector to module A6000, then filtered by the SAW to RF Transceiver (also named MODEM). Modulating when launching as follows: loading the Base to RF, demodulating when receiving as follows: filtering the Base from RF. The Transceiver involves a direct conversion receiver, translation loop transmitter architecture, a n-frequency PLL synthesizers, integrated power management and built-in crystal oscillator and calibration systems.

3.Frequency: Through the direct conversion receiver to convert RF signal to the Base without any processing during the IF, there are many benefits doing so. First, the elimination of IF has reduced the complexity and cost of the path of Transceiver. Second, it just need a local oscillator for there is only one frequency conversion, thus has avoid the MF completely. Last, Transceiver architecture has made up of four low-noise amplifier to support total four GSM frequencies—GSM850.

- (1) Module A6000 can share one antenna, and module the antennas will be released on the base of the released om.
- (2) Rechargeable battery backup support and it can be charged while using outside power supply without any consumption.
- (3) Module A6000 can support standard AT command and communicate with microcontroller through the serial port (TXD, RXD) and control start-up by CPU I/O .

- (4) SPK1-、SPK1+ are the output signal of the handset earpiece;
- (5) MIC-、MIC+ are the input signal of handset MIC;
- (6) SPK2-、SPK2+ are output signal of handfree key ;
- (7) Support the LED remote display to show the call fee
- (8) All the functions like keyboard scanning ,LCD, call fee and time are finished by CPU (SM5964A) .
- (9) CY101 provide 11.0592 MHz frequency to the CPU, and R27, C104, C105 constitute the resonant circuit of CY101.