

## Circuit Description

### Main parts:

The basic system includes: Power Source, CPU, CPU's reset, crystalloid, SDRAM, NandFlash in working order.

### Function:

Audio output - CPU through the I2S interface to connect to the audio D/A chip WM9715LEFT(U10) the output stereo headphones and the output of analog audio signal TPA6204A1DRBR(U11) amplified stereo amplifier drive speakers

FM - when the FM is open, R ch & L ch audio signal pass through audio mixer and be mixed with RF VCO, VCO frequency is controlled by phase locked loop(PLL) circuit, amplified by RF AMP, and transmitted through antenna. The above function finaliad by the chip of SI4710. FM output channels can be adjusted by I2C BUS program.

LCD - 480\*272 pixel, 65536 color (16 bit) LCD, touch screen.

SD card slot - SD connections include (3.3V), insert test switch, write protection test switch, card's data.

GPS - using SE4110, to communicate with CPU through serial port.

The power of the system was supplied by built-in rechargeable 3.7V battery or car adaptor, it will be sent out to each circuit after filter by capacitance.

There is no external ground connection. The ground is only that of the printed circuit board.