IP806MA Operation Principle

1. CPU, U7, RTL8651B have a 32-bit RISC processor integrated, operation frequency is 200MHz. It needs an external 25MHz crystal for system reference frequency. This chip is responsible to control Flash/SDRAM IC and LED. This chip also has 5 integrated 10/100 Ethernet MAC/PHY.

2. FLASH: U1, MX29LV160BBTC-90, 2Mbytes Flash, and 90ns. It is used to store the normal and test firmware.

3. Wireless
   - RC2326(U2): IEEE 802.11 b/g RFFE ISM Band, highly integrated 802.11 b/g radio Radio, fully integrated up/down converters, LNA, PA, TX detector and T/R switches

   - RC2422(U8): IEEE 802.11 b/g IQ/IF Transceiver With Dual VCO Synthesizers, Highly integrated 802.11 b/g radio IQ/IF Transceiver PLL ASIC, Fully integrated IF and RF VCOs and synthesizer

   - (U1)TNETW1130GVF Wireless MAC and Baseband processor

4. Switching Controller: It is integrated in CPU RTL8651B which provide 5 ports of ethernet interface.

5. Power part: U10, FP5452 is used to generate 3.3V and 1.8V DC voltage from 12V DC power input. 1.8V is CPU core voltage.

6. Switch button, S1, it is used to factory restore or system reboot.