

## Operational Description

The transmission data modulated the MCU(RT3052) which gets a digital modulation then passing through the MCU, working with 40MHz crystal for producing a signal to the RF module circuit carrying wave amplified by the amplifier and filter circuit unit, through the antenna then transmit out as 2412MHz to 2462MHz

- 1、CPU: U1, The RT3052 SOC combines Ralink's 802.11n draft compliant 2T2R(RT3050:1T1R) MAC/BBP/2.4G ISM band Transceiver , a high performance 384MHz MIPS24KEc CPU core, 5 - port integrated 10/100 Ethernet switch/PHY; An 40MHZ crystal(U2) for CPU`S reference frequency,
- 2、SDRAM: U8, U7 Hynix HY57V281620FTP-H CMOS Synchronous DRAM, 16M Byte (16M X 16bit X 2PCS)
- 3、FLASH: U6 MXIC KH29LV320(160)CBTC-70G/MX29LV160CBTC-70G 4M Byte FLASH, used for store firmware and user`s setting;
- 4、PA: U10,U12 RichWave RTC6691, Freq.Range:2.4GHz-2.5GHz. PA For transmitter, Gain:33.5db (Max);
- 5、LNA: Q1,Q2, SirenZa SGA8343Z, Freq.Range:2.4GHz-2.5GHz. LNA For RF receiver, Gain:17db (Max);
- 6、BPF:U9,U11,BF2012-E2R4DAA, Freq.Range:2.4GHz-2.5GHz, IL@BW:2.5~3db;
- 7、RF Switch: U13,U15, Skyworks AS179-92, transmit /receive SPDT Switch;
- 8、Power part: U16 and U14, CP2894 Step-Down PWM Converter, used for transfer DC8~14V to DC3.3V and DC1.5V ; ; U25 SE8117TALF LDO used for transfer DC3.3V to DC2.0V;