Circuit Description

1. Function operation kit such as SW and CH input opeartion codes to Control MCU (U1), U1 through RF MCU （U6）Configure & control RF module with 4 wire SPI connection.
2. RF module inplements digital baseband process including support for channel configuration, packet handling, and data buffering.
3. RF module's transmitting part is based on a direct synthesis of the RF frequency part with an external 16M Crystal Oscillator(X2) .RF module outputs 2.4G 0dbm signal first with GFSK modulation, then PA part of RF module amplifies signal to 10dbm.
4. The received RF signal is amplified by the lownoise amplifier (LNA) and down-converted in quadrature (I and Q) to the intermediate frequency (IF).
5. Transmitting and Receiving signals all pass through sets of LC match circuit linking to a 50Ω omnidirectional antenna which provides about 2dbi gain. The ground of antenna is linked to the ground of RF control system.