Functional descriptions of the transmitter circuitry for wireless timer-Aion(FKT05ZJ)

The product is mainly designed to control cameras to take photos in various modes including wired timing and wireless timing etc. its frequencies are 2.432, 2.433, 2.434, 2.435, 2.436, 2.437, 2.438, 2.439GHz, a total of 8 frequencies, using GFSK/FM modulation mode.

Functional descriptions of the main circuitry: The MCU controls the LCD to display related settings after setting timing mode and other relative functions via the functional keys.

1. **Wired timing**: The MCU controls cameras to focus or shoot based on timing mode set via camera's SHUTTER/FOCUS port.

2. **Wireless timing:** The MCU detects the actuation of the camera's shutter key and send controlling data to RF IC(U1), and the RF IC(U1) will modulate RF signal and part of the data received, then the modulated carrier signal will be launched through the antenna on the PCB.

3. **Wireless shutter**: The MCU detects the actuation of the camera's shutter key and send controlling data to RF IC(U1), the RF IC(U1) will modulate RF signal and part of the data received, then the modulated carrier signal will be launched through the antenna on the PCB.

4. **Wired shutter**: The MCU detects the actuation of the camera's shutter key, then controls attached cameras to focus or take a photo after getting through Q2, Q1 and camera's SHUTTER/FOCUS port.

5. **Status LED**: The LED status indicator is controlled by the MCU, It will flash green light when the camera is focusing and red when a photo is taking.

6. **Power:** a. It is powered by batteries, get through power switch Q3 firstly, then pressure rises to 3.0V after getting through U2, then provide power source for other circuitries.
   b. Power on: Power key(SW9) provides high level to Q4, then Q3 switches on, then the MCU provides high level to Q4 continuously.
   c. Power off: The MCU provides low level to Q4 after detecting the being-pressed actuation of the POWER key(SW9), power will turn off after loosening the POWER key.

7. Antenna Assembly Gain: Integrated PCB antenna, 0dBi gain.