Technical Description

FCC Model: 80073
IC Model: 80073RX
Description: Covert OPS Recon Tracker
Frequency: 2407 – 2470MHz

The brief circuit description is listed as follows:

The Equipment Under Test (EUT) is a 2.4GHz transceiver (i.e. Receiver) for a Recon Tracker. The EUT is powered by 3.0V (1.5V X 2) AAA size battery. It is designed to operate frequency range in the 2407-2470 MHz with 1MHz channel spacing. It is a fix channel used for communication between Tracker and Receiver after pairing. It has ON/OFF switch, a Mute Key and five green LED lights. The EUT can be paired with the Tracker while they are both ON. The number of the flashing LED lights and the beeping sound can indicate the distance between the Tracker and the Receiver.

Antenna gain: 0dBi
Nominal rated field strength: 88.8 dBμV/m at 3m
Maximum allowed field strength of production tolerance: +/- 3dB

A7125 (U1)
A7125 is a high performance and low cost 2.4GHz ISM band wireless transceiver. It integrates high sensitivity receiver (-90dBm @2Mbps), high efficiency power amplifier (up to 3dBm), frequency synthesizer and base-band modem. In typical system, A7125 is used together with MCU (microcontroller) with very few external passive components. A7125 supports both FIFO mode and direct mode that contains clock recovery circuit CKO pin to MCU.
A7125 supports very fast settling time (90 us) for frequency hopping system. For packet handling, A7125 has built-in separated 64-bytes TX/RX FIFO (could be extended to 256 bytes) for data buffering and burst transmission, CRC for error detection, FEC for 1-bit data correction per code word, RSSI for clear channel assessment, data whitening for data encryption/decryption, thermal sensor for monitoring relative temperature. Those functions are very easy to use while developing a wireless system. All features are integrated in a small QFN 4X4 20 pins package.

JL8PE53 (U1)
The JL8PE53 series is a family of low-cost, high speed, high noise immunity, EPROM/ROM-based 8-bit CMOS microcontrollers. It employs a RISC architecture with only 42 instructions. All instructions are single cycle except for program branches which take two cycles. The easy to use and easy to remember instruction set reduces development time significantly.
The JL8PE53 series consists of Power-on Reset (POR), Brown-out Reset (BOR), Power-up Reset Timer (PWRT), Oscillator Start-up Timer(OST), Watchdog Timer, EPROM/ROM, SRAM, tri-state I/O port, I/O

pull-high/open-drain/pull-down control, Power saving SLEEP mode, real time programmable clock/counter,
Interrupt, Wake-up from SLEEP mode, and Code Protection for EPROM products. There are three oscillator
configurations to choose from, including the power-saving LP (Low Power) oscillator and cost saving RC oscillator.
The JL8PE53 address 1K×13 of program memory.
The JL8PE53 can directly or indirectly address its register files and data memory. All special function registers including the program counter are mapped in the data memory.