

## Technical Description

Model: A8017RX

Description: Ner Nstrike Combat Creatures Terradrone

Frequency: 2402 – 2480MHz

The brief circuit description is listed as follows:

The Equipment Under Test (EUT) is a 2.4GHz transceiver of RC toy Combat Creature. The EUT is powered by DC6.0V (4 X 1.5V) AA batteries. It is designed to operate frequency hopping system in 2402– 2480MHz with 36 physical frequency channels and 16 logical hopping channels when communication with corresponding transceiver (i.e. Controller).

After Switched ON and pairing with controller, the EUT can be controlled to moving forward/backward and rotate the launcher to any direction and adjust the angle of launcher and fire a dart by Controller.

36 physical channels are shown on below table.

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 2402 | 2404 | 2406 | 2410 | 2412 | 2414 | 2416 | 2418 | 2420 |
| 2422 | 2424 | 2426 | 2428 | 2432 | 2434 | 2436 | 2438 | 2440 |
| 2442 | 2444 | 2446 | 2448 | 2450 | 2454 | 2456 | 2458 | 2460 |
| 2462 | 2464 | 2466 | 2468 | 2470 | 2472 | 2476 | 2478 | 2480 |

Antenna gain: 0dBi

Nominal rated field strength: 99.9dB $\mu$ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

### **A7123 (U2)**

A7123 is a low cost 2.4GHz ISM band wireless transceiver. The device is provided in a 32-lead plastic QFN5X5 package and is designed as a complete GFSK transceiver up to 3Mbps/1Mbps data rate. The chip features a fully programmable frequency synthesizer with integrated VCO circuitry.

### **TRD16P160B (U1)**

A 16bit MCU to decoder/encoder the receiving signal from U2 in order to control the motor drive.

### **TX6240-2.5V (U4)**

Voltage Regulator

### **MX612 (U5 to U7)**

Motor Drive

FCC ID: RS4-A8017RX

IC: 4502A-CCA8017RX