Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Skateboard Unit) for a RC Skateboard. The sample supplied operated on 36 channels, normally at 2423 - 2462MHz. The channels are shown in below table.

2423	2424	2425	2426	2427
2428	2429	2430	2433	2434
2435	2436	2437	2438	2439
2440	2441	2442	2443	2444
2445	2446	2448	2450	2451
2452	2453	2454	2455	2456
2457	2458	2459	2460	2461
2462		·	·	

The EUT is powered by 2 x 3.7V Lithium-ion batteries. After switching on the EUT, the skateboard will be moved forward or backward and turned left and right based on the switches pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 99.5dBµV/m at 3m (Peak), 78.3dBµV/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

- 1. U1 (2416AF-SOP14) acts as main board MCU
- 2. U2 (KC9102/PMS132B) acts as steering engine MCU
- 3. Y1 acts as 16MHz Oscillator
- 4. L3 and C19 act as antenna matching circuit
- 5. U3 (7533) acts as stabilivolt in main board
- 6. U1 (LY6206A33M) acts as stabilivolt in steering engine
- 7. U2 (SA8323) acts as motor driver in main board
- 8. U3 (SA8311S) acts as motor driver in steering engine
- 9. U4 (CN3302) acts as charging IC.