

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Stakeboard Unit) for a RC Skateboard. The sample supplied operated on 71 channels, normally at 2405 - 2475MHz. The channels are separated with 1MHz spacing.

The EUT is powered by 1 x 3.7V Lithium-ion battery. 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 81.7dB μ V/m at 3m (Peak), 69.2dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. IC1 (CP254AC) acts as MCU
2. X1 acts as 16MHz Oscillator
3. L1, C1 and C2 act as antenna matching circuit
4. IC3 acts as motor driving circuit
5. IC2 acts as voltage regulator
6. IC5 acts as charging IC.