

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Car Unit) for a RC Car. The sample supplied operated on 33 channels, normally at 2420 - 2465MHz. The channels are shown in below table.

2420	2421	2423	2424	2425
2426	2427	2428	2430	2434
2436	2437	2438	2439	2440
2441	2442	2443	2444	2445
2446	2451	2452	2453	2454
2455	2456	2457	2458	2459
2460	2461	2465		

The EUT is powered by 1 x 3.7V Lithium-ion battery. After switching on the EUT, the car will be moved forward or backward and turned left and right based on the switches pressed in the controller.

The RF function is disabled during charging as declared by client.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 100.6dB μ V/m at 3m (Peak), 75.2dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (PAN2416AV) acts as MCU
2. Y1 acts as 16MHz Oscillator
3. L1, L2, C2, C4 and C14 act as antenna matching circuit
4. U2 and U3 act as motor driver
5. U4 acts as voltage regulator
6. U5 act as charging IC.