Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Car Unit) for a RC Car. The sample supplied operated on 50 channels, normally at 2421 - 2470MHz. The channels are separated with 1MHz spacing.

The EUT is powered by 1 x 1.2V Ni-MH 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. Light will be emitted from the car when it is moving.

Antenna Type: Internal, Integral antenna
Antenna Gain: 0dBi
Nominal rated field strength is 95.0dBµV/m at 3m (Peak), 79.8dBµV/m at 3m (Average)
Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (RF2017A) acts as MCU
2. Y1 acts as 16MHz Oscillator
3. C1 and L1 act as antenna matching circuit
4. U2 (IC33A3) acts as voltage regulator.
5. Q1, Q3, Q5, Q7, R5, R6, R7, R8 and C6 acts as motor driving circuit for motor M1
6. Q2, Q4, Q6, Q8, R9, R10, R11, R12 and C7 acts as motor driving circuit for motor M2.