

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Guitar Unit) for a Bluetooth 5.0 Guitar. BLE function has been disabled. The sample supplied operated on 79 channels, normally at 2402 - 2480MHz. The channels are separated with 1MHz spacing.

The EUT is powered by 3 x 1.5V AA batteries. After switching on the EUT, the Guitar will be playing songs based on the paired smartphone.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 96.2dB μ V/m at 3m (Peak), 85.3dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 acts as MCU
2. U1 (H04J28B) act as BT Module
3. U3 acts as BLE Module
4. U5 (GPY0030C) acts as audio circuit.
5. Y1 acts as 24MHz Oscillator
6. C3, L1 and L2 act as antenna matching circuit
7. Q1 acts as amplifier.
8. U2 acts as SPI Flash chip set.