FCC ID: B4S-RF2IR IC: 19632A-RF2IR Circuit Description

The <u>16</u>MHz crystal oscillator drives the ultra low <u>power 2.4 GHz transceiver core (nRF24LE1)</u>. The modulation provided by <u>24LE1</u>. The output of <u>24LE1</u> has the matching network consisting of <u>C5, L3</u> and <u>C6</u> that limit the harmonic content and effect the proper coupling of the antenna to the output stage.

Antenna, Ground and Power Source

The antenna consists of a 6cm Antenna (including the antenna is printed at circuit board with 3cm length and 3cm long quarter wavelength Antenna.)

There is no external ground connection. The ground is only that of the printed circuit board. Electric current is supplied by a 5 Volt USB Port

Operation Descriptions

The EUT is a transceiver but acting as receiver for the IR/IF remote control operating in the 2.4GHz ISM frequency band. The transmitter is powered by a 5 Volt and the transmitting frequency is crystal controlled. The operation is achieved by different combinations of form <u>FSK</u> modulating signal on the <u>2404</u>, <u>2437</u> and <u>2470</u> MHz carrier frequencies.

The transmitter is a <u>PLL</u> transmitter. The EUT continues to transmit while <u>Key</u> is being pressed. It is <u>FSK</u> transmitter, Modulation by <u>digital data</u>; and type is <u>FSK</u> modulation.