Circuit Description

XTAL1 the 40 MHz crystal oscillator provides the base clock source of U3 Wireless LAN network interface controller's operating. U3 drives reference differential clock for modulator and demodulator of embedded RF transceiver.

U3 combines a MAC and 2T2R capable baseband and includes a USB interface for host connection. Embedded MIMO RF transceiver consists of two receivers and two transmitters used to form a complete 2.4GHz ISM band Wireless LAN application.

Antenna, Ground, and Power Source

There are two external 2412MHz to 2462MHz band on-board antenna. Besides Print circuit board provides copper plane ground, host provides a reference grounding connecting by USB interface. Whole system power source is fed with DC 5Volt by USB interface.