

U2 the 40 MHz crystal oscillator provides the base clock source of U1 Wireless LAN network interface controller's operating. U1 drives reference differential clock for modulator and demodulator of embedded RF transceiver.

U1 combines a MAC and 2T2R capable based 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. The Equipment shall be simultaneous transmission at the chain 0 and chain 1 for 802.11g and 802.11n HT20 or HT40, 802.11b mode shall be transmission only by single chain (chain 0 or chain 1).

Through the antenna then transmit out 2412MHz to 2462MHz (for US, and 2412MHz to 2472MHz for EU) for 802.11b/g/n-HT20 transmission mode and 2422MHz to 2452MHz (for US, and 2422MHz to 2462MHz for EU) for 802.11n-HT40 transmission mode.

Data Rate:

802.11b: 1, 2, 5.5, 11Mbps;

802.11g: 6, 9, 12, 24, 36, 48, 54Mbps;

802.11n: (20MHz) MCS0-15, Support up to 150Mbps

(40MHz) MCS0-15, Support up to 300Mbps

Modulation:

BPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)

Antenna, Ground, and Power Source

There are two external 2.4GHz band antenna with reversed SMA connector. Whole system power source is fed with DC 12Volt by DC interface.