

17WFM21

Description of Operation

General Description

The 17WFM21 WI-FI module design is a highly integrated MIMO wireless LAN (WLAN) used for high speed wireless local network access. The card is built with 2T2R capable RF/baseband single chip.

The 17WFM21 WI-FI module design implements multiple input, multiple output (MIMO) orthogonal frequency division multiplexing (OFDM) with 2 transmit and 2 receive paths and is compatible with 802.11 a/b/g/n specifications.

For legacy compatibility, direct sequence spread spectrum (DSSS), complementary code keying (CCK) and OFDM baseband processing are included to support all 802.11b, and 802.11g data rates. Differential phase shift keying modulation schemes, DBPSK and DQPSK with data scrambling capability, are available along with complementary code keying to provide the data rates of 1, 2, 5.5 and 11Mbps with long or short preamble. The high speed FFT/IFFT paths, combined with BPSK, QPSK, 16QAM, and 64QAM modulation of the individual subcarriers and rate compatible punctured convolutional coding with coding rate of 1/2, 2/3, 3/4, and 5/6, provides the maximum data rate of 54 Mbps and 300 Mbps phy rate for IEEE 802.11g and 802.11n MIMO OFDM respectively. Module has no DFS (Dynamic Frequency Selection) and is only a DFS Client.

1. Antenna Characteristic

1.1. Antenna Gains

	2.4 Ghz	5 Ghz low band (5180 to 5320) (ch 36-64)	5 Ghz medium band (5500 to 5700) (ch100-140)
Antenna 0	3.4 dBi	2.97 dBi	3.69 dBi
Antenna 1	2.12 dBi	3.7 dBi	3.68 dBi

- Dimensions

