

Operation Description

The AP6010DN(AR9350 2.4G+AR9582 5G) is a standard indoor dual-band 2x2 MIMO access point (AP) that supports 2.4 GHz and 5 GHz frequency bands. It complies with Complies with IEEE 802.11 a/b/g/n.

Supports 2x2 MIMO, and provides a maximum rate of 300 Mbit/s for each radio. Uses Wi-Fi Multimedia (WMM) to implement priority scheduling based on the service type (voice, video, or data), and supports priority mapping on the air interface and wired interface.

RF IC AR9350-U9000:

The AR9350 is a highly integrated and feature-rich IEEE 802.11n 2x2 2.4/5 GHz System-on-a-Chip (SoC) for advanced WLAN platforms.

It includes a MIPS R74K processor, PCI Express 1.1 Root Complex and Endpoint interfaces, five port IEEE 802.3 Fast Ethernet Switch with MAC/PHY, one MII/RMII/RGMII interface, one USB 2.0 MAC/PHY, and external memory interface for serial Flash, SDRAM, DDR1 or DDR2, I2S/SPDIF-Out audio interface, SLIC VOIP/PCM interface, two UARTs, and GPIOs that can be used for LED controls or other general purpose interface configurations.

The AR9350 has two crystals X1 25 MHz and X400 40 MHz.

The operation frequency is 2412~2462MHz.

RF IC AR9582-U38:

The AR9582 is a highly integrated single-chip solution for 2.4 or 5 GHz 802.11n wireless local area networks (WLANs) that enables high-performance 2x2 MIMO with 2 Spatial Stream configuration for wireless applications demanding the highest robust link quality and maximum throughput and range. The AR9582 integrates a multi-protocol MAC, baseband processor, analog-to-digital/digital-to-analog converters (ADC/DAC), 2x2 MIMO radio transceivers, and PCI Express interface in an all-CMOS device for low power consumption and small form-factor applications.

The AR9582 implements half-duplex OFDM, CCK, and DSSS baseband process, supporting up to 150 Mbps for 20 MHz and 300 Mbps for 40 MHz channel operations, and IEEE 802.11a/b/g data rates. Additional features include Maximal Likelihood (ML) decoding, Low-Density Parity Check (LDPC), Maximal Ratio Combining (MRC), Tx Beamforming, Space Time Block Code (STBC), and On-Chip One-Time Programmable (OTP) memory. The AR9582 supports 802.11 wireless MAC protocol, 802.11i security, Rx/Tx filtering, error recovery, and 802.11e quality of service (QoS)

Data rates of up to 150 Mbps for 20 MHz channels and 300 Mbps for 40 MHz channels using reduced (short) guard interval.

Dynamic frequency selection (DFS) is required in 5GHz bands when used as an AP.

The AR9582 can support crystal X401 40MHz. The operation frequencies are 5260~5320/5500~5700/5745~5825MHz.

The 2.4G N Male antenna with antenna gain is 3dBi.

The 5G N Male antenna with antenna gain is 6.4dBi

The antenna model name is W5030.