

FW5301 Product Manual

1 Introduction

FW5301 is the IEEE 802.11b/g USB Mini Card which is based on Ralink RT2070 solution.

The RT2070 is a highly integrated MAC/BBP and 2.4GHz RF single chip. It fully complies with IEEE802.11b/g standards, delivers reliable, cost-effective, feature rich wireless connectivity at high throughput from an extended distance. Optimized RF architecture and baseband algorithms provide superb performance and low power consumption. The intelligent MAC design deploys a highly efficient USB engine and hardware data processing accelerators without overloading the host processor. The RT2070 is designed to support standard based features in the areas of security, quality of service and international regulation, giving users the greatest performance anytime in any circumstance.

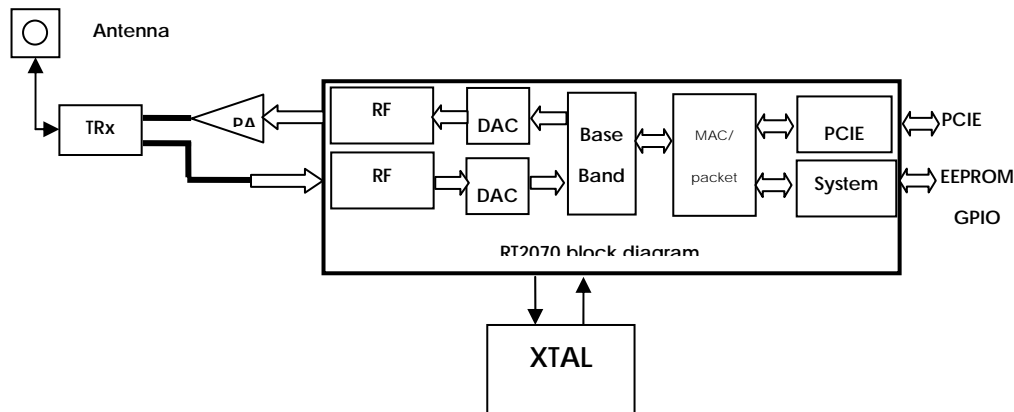
2 Key Features

- USB 2.0 Mini Card
- Complies with IEEE802.11b/g for high speed wireless connection.
- Low power consumption and high performance.
- Bluetooth Co-existence
- Low Power with Advanced Power Management
- Enhanced wireless security
- Operating System-Windows Vista, XP, 2000, ME, 98SE, Linux and Mac OS X.

3 Applications

- Notebook, MID, UMPC, Netbook

4 Block Diagram



5 General specifications

Model Name	FW5301
Product Description	IEEE 802.11b/g USB Mini Card
Chipset	Ralink RT2070
Host Interface	USB2.0
Dimension	51mm X 30mm X 3.0mm
Operating Conditions	
Voltage	3.3V+/-5%
Temperature	0~+70℃
Electrical Specifications	
Frequency Range	2.4GHz ISM Bands 2.412-2.462GHz,
Modulation	802.11b: CCK(11,5.5Mbps), DQPSK(2Mbps), DBPSK(1Mbps) 802.11g: OFDM
Output Power	14+/-1.5dBm
Receiver Sensitivity	<-65dBm
Power consumption	See the test result for details
Operating Range	Open space: ~100m; Indoor: ~50m (depend on environment and antenna performance)
Operation system compatibility	Windows Vista, XP, 2000, ME, 98SE, Linux and Mac OS X

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 2.5cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.