

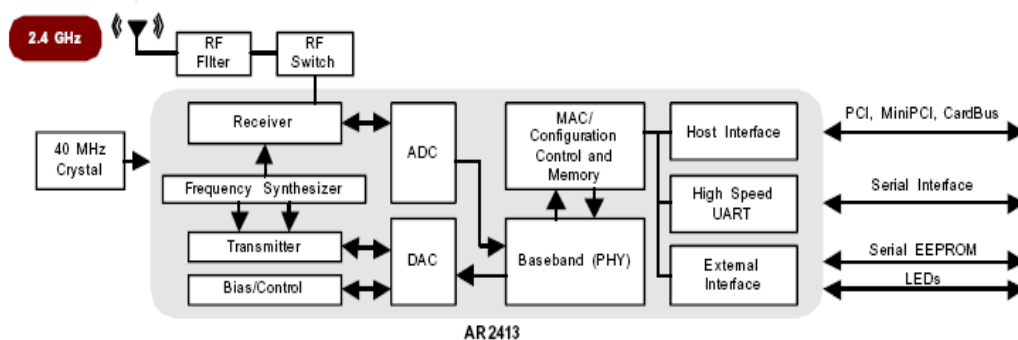
WT-MA801 Product Manual

-----54Mbps Wireless Network Mini PCI Adapter

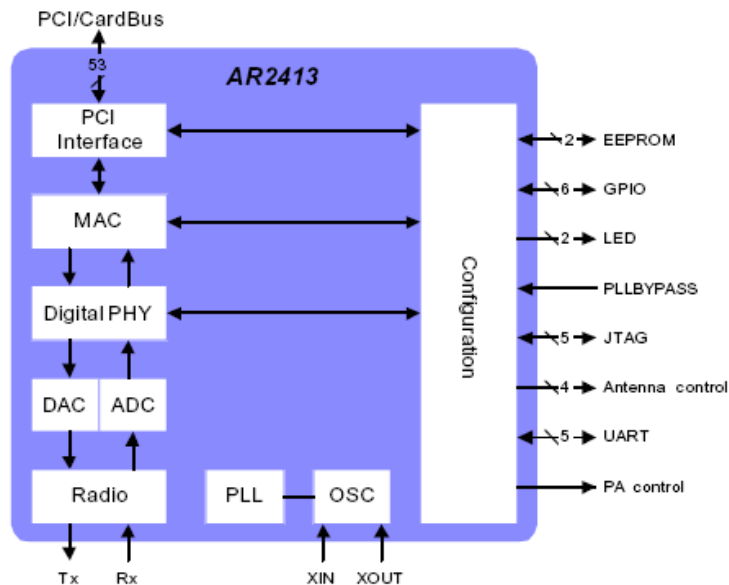
Product Description

54Mbps Wireless Network Mini PCI Adapter is fully compatible with IEEE 802.11b and IEEE 802.11g standards. Its auto-sensing capability allows high packet transfer rate up to 54Mbps for maximum throughput, or dynamic range shifting to lower speeds due to distance or operating limitations in an environment with a lot of electromagnetic interference. It can also interoperate with all the 11Mbps wireless (802.11b) products. Your wireless communications are protected by WPA/WPA2 encryption for high security.

AR2413 System block diagram:



Functional block diagram of the AR2413:



Product Features

- ✓ Complies with IEEE 802.11g, IEEE 802.11b standards
- ✓ Supports 64/128/152-bit WEP, complies with 128 bit WPA standard(TKIP/AES), supports MIC, IV Expansion, Shared Key Authentication, IEEE 802.1X
- ✓ Supports 54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps wireless LAN data transfer rates
- ✓ Provides Mini PCI interface
- ✓ Supports Ad-Hoc and Infrastructure modes
- ✓ Supports roaming between access points when configured in Infrastructure mode
- ✓ Ease to configure and provides monitoring information
- ✓ Supports Windows 98SE, ME, 2000, XP, Vista

Product Specifications

Protocol and Standards	IEEE 802.11g; IEEE 802.11b; CSMA/CA with ACK
Interface	Mini PCI
Radio Data Rate	54/48/36/24/18/12/9/6/11/5.5/3/2/1Mbps (Auto Rate)
Frequency	2.412GHz ~ 2.462GHz (US & Canada) 2.412GHz ~ 2.472GHz (Europe) 2.412GHz ~ 2.484GHz (Japan)
Spread Spectrum	DSSS
Transmission Distance	Indoor up to 100m, outdoor up to 300m (Standard transmission distance, it is limited in an environment). Indoor up to 200m, Outdoor up to 830m (Adopt 2x to 3x eXtended Range™ WLAN transmission technology, it is

	limited in an environment)
Modulation	1M DBPSK; 2M DQPSK; 5.5M, 11M CCK; 6M, 9M, 12M, 18M, 24M, 36M, 48M, 54M OFDM;
Receive Sensitivity@PER	54M: -68dBm@10% PER; 11M: -85dBm@8% PER; 6M: -88dBm@10% PER; 1M: -90dBm@8% PER; 256K: -105dBm@8% PER
Transmit Power	18-20dBm / 11Mbps 13-15dBm / 54Mbps
Security	64/128/152 bit WEP; WPA/WPA2; WPA-PSK/WPA2-PSK (TKIP/AES)
Power Consumption	Typically 430mA in full Transmit (TX), 330mA in full Receive (RX)
Safety & Emission	FCC, CE
Dimensions	60x45x3.3 mm (2.4x1.8x0.13 in.)
Environment	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing
Operating System	Windows 98SE/ME/2000/XP/Vista

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 20cm between the radiator & your body.

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