FCC　ID : NUSTMW1052

Annex P　　User's Manual (Draft)

User's Manual
(Draft)

TOKO INC.

2.4GHz Wireless LAN Mini-PCI Card　　Model:TMW1052

1. FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to 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.

This equipment has been tested and found to comply with the limits for a Class B Personal Computer and Peripheral, 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 dose 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 or more 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 equipment has been tested to comply with the limits for a Class B personal computer and peripheral, pursuant to Subpart B of Part 15 of FCC Rules. Only peripherals(computer input/output devices, terminals, printers, etc.) certified (DoC) or verified to comply with Class B limits may be attached to this equipment. Operation with non-certified (DoC) or non-verified personal computer and/or peripherals is likely to result in Interference to radio and TV reception. The connection of a unshielded equipment interface cable to this Equipment will invalidate the FCC Certification of this device and may cause interference levels which Exceed the limits established by FCC for equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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

3. Feature

- Support for 11, 5.5, 2 and 1 Megabit Per Second (Mbps) Data Rates.
- Supports the IEEE 802.11 Direct Sequence Specification.
- Driver Supports Microsoft® Windows® 98, 2000, Me, Xp. ※1
- Advanced RAKE Receiver Design with Decision Feedback Equalizer.

※1 Microsoft® and Windows® and Windows NT® are registered trademarks of Microsoft Corporation.

4. Specifications

- Absolute Maximum Ratings

Supply Voltage. . . . . −0.3V to 4.0V (Max)

Storage Temperature ※2 . . . . - 10℃ to 60℃

　　※2 All temperature references refer to ambient conditions.

- Operating Conditions

Temperature Range . . . . 0℃ TA 55℃

Supply Voltage Range . . . . 3.0V to 3.6V

Caution: These are the absolute maximum ratings for the Mini-PCI product.

Exceeding these limits could cause permanent damage to the card.

- Electrical Specifications

Test Conditions: Supply Voltage (VCC) = 3.3V, Ambient Temperature (TA) = 25℃, Unless Otherwise Specified

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
MECHANICAL	Mini-PCI Card Type Ⅲ				
CURRENT CONSUMPTION					
Continuous Transmit Mode		−	325	380	mA
Continuous Receive Mode	Receiving Valid Packets	−	200	225	mA
Mini-PCI LOGIC LEVELS					
Input HIGH Voltage	Vcc=Max,Min	0.7Vcc	−	−	V
Input LOW Voltage	Vcc=Min,Max	−	−	0.3Vcc	V
Output HIGH Voltage	Iol=2mA,Vcc=Min	0.9Vcc	2.6	−	V
Output LOW Voltage	Iol=2mA,Vcc=Min	−	0.05	0.1Vcc	V
Input Leakage Current	Vcc=Max, Input=0V or Vcc		0.1	1.0	μA
Mini-PCI LOADING CAPACITANCE					
Input Capacitance		−	5	10	pF
Output Capacitance		−	5	10	pF
RF SYSTEM SPECIFICATIONS					
Center Frequency Range		2412	−	2462	MHz
Transmitter Power Output		−	15.7		mW
Receive Sensitivity	5.5Mbps, 8% PER	−	−87	−	dBm
	11Mbps, 8% PER	−	−83	−	dBm
Maximum Receive Level	PER <8%	−3	+3	−	dBm
Image Rejection	PER 8%	−	NA ZIF	−	dB
IF Rejection	PER 8%	−	NA ZIF	−	dB
Adjacent Channel Rejection	PER <8%	−	40	−	dB
Data Rate (Physical Layer)		−	1, 2, 5.5, 11	−	Mbps

5. Installation
　① The following work is done with card(TMW1052) not inserted in PC.
　② Setup.exe in Driver CD ROM is executed.
　③ Please input the key to setting utility according to the instruction displayed on the screen.
　④ The message of the purport by which PC is rebooted is displayed.
　　 Please reboot PC.
　⑤ Please insert card(TMW1052) in PC.
　⑥ The installation of the driver is automatically completed.
　⑦ The networks and communication channel and the communication mode are set.
　⑧ Please set the network according to the manual of OS.
　⑨ The communication mode and the communication channel are set by utility in the task tray.
　　 The communication mode is set in "Adhoc". The communication channel is made the same
　　 as the other party of the communication set . Channels which can be set are from 1 to 11.