

# MiniPCI WLAN Card

## OEM installation Manual

### Version 0.1

#### ***0-Introduction***

The Intersil ISL38000M WLAN NIC is a complete wireless high speed Network Interface Card (NIC) utilizing the Intersil PRISM GT ® chip set. It conforms to the IEEE 802.11g protocol and operates in the 2.45 GHz ISM frequency bands.

It provides a complete reference design evaluation platform of hardware and software to system providers or integrators requiring wireless data communications capability and is ideal for integration into computer platforms.

- Fully compliant with the IEEE 802.11g WLAN standards
- FCC Certified Under Part 15 (pending) to Operate in the 2.45 Bands
- Support for 54, 48, 36, 24, 18, 12, 9, and 6 Mbps OFDM, 11 and 5.5 Mbps CCK and legacy 2 and 1 Mbps data rates
- Driver Supports Microsoft Windows ® 98/SE, ME, XP and 2000 (SR1)

#### ***1-OEM Installation procedure***

##### ***1.1 Installing the miniPCI card into the host PC Notebook***

a-open miniPCI slot cover of host PC Notebook housing

b-insert miniPCI card into miniPCI slot

c-connect the host PC notebook antennas to the miniPCI card antenna connectors (Hirose type UFL connector)

d-close miniPCI slot cover of host PC Notebook housing

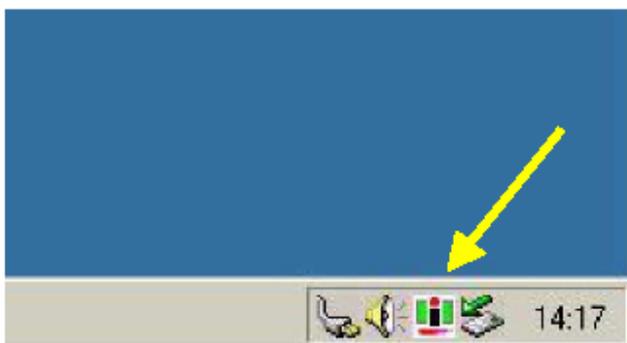
##### ***1.2 Installing the software drivers***

a-Start windows

b-When windows detects new hardware and asks for drivers, point to directory where the Intersil driver is located (for example floppy drive, cdrom , harddisk) to install.

c-after drivers are installed, restart windows

d-the Intersil WLAN icon will appear in system tray on the bottom right of the screen (see yellow arrow in fig. 01)



fig, 01: Intersil WLAN icon

e-double click the Intersil WLAN icon to open the WLAN settings, the following window will appear (see fig.02)

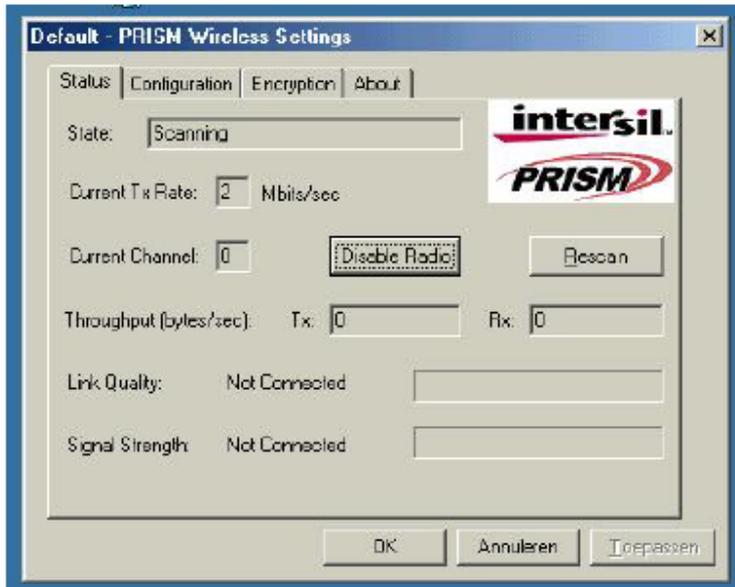


fig. 02: Intersil WLAN settings window

f-click on configuration tab and select which type of network is required (access point or Peer-to-peer mode), see fig. 03.

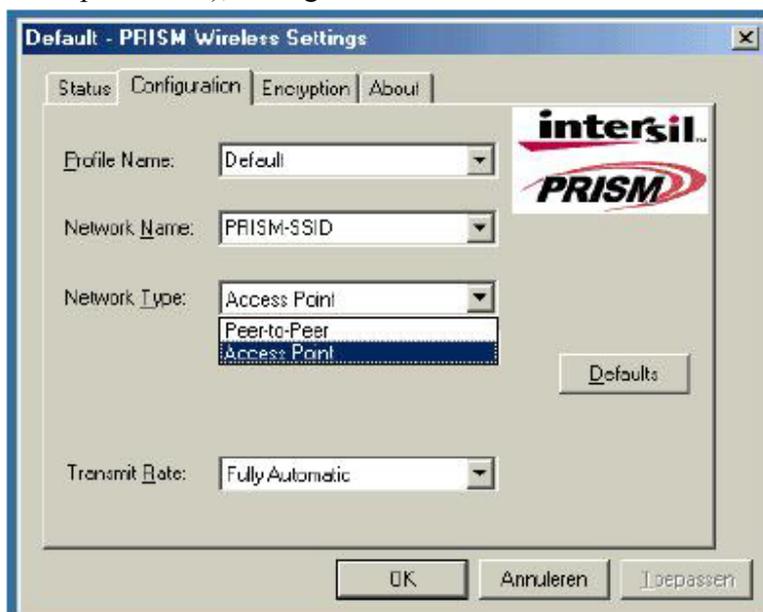


fig. 03: WLAN network type setting window

g-select what TX rate is required (default setting is fully automatic) see fig. 04.

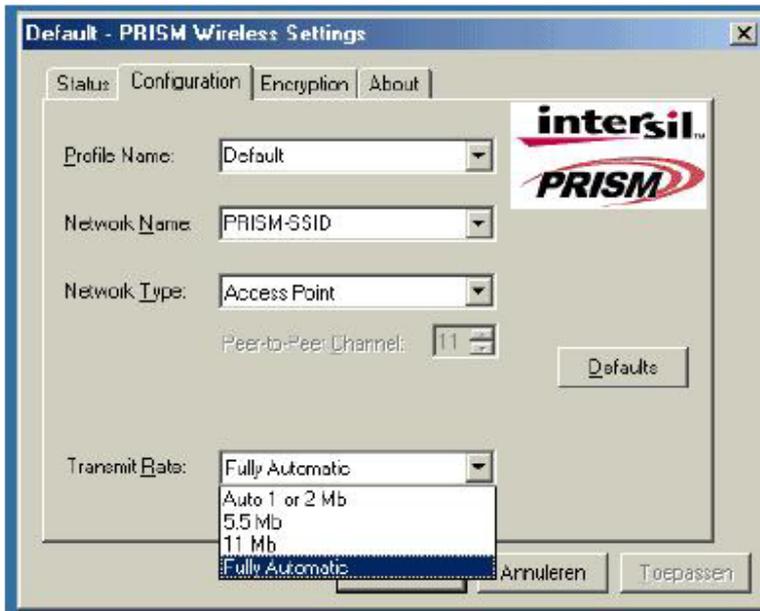


fig. 04: WLAN tx rate setting window

h-select what encryption type is required, 64 or 128 bit WEP (default setting is disabled) see fig. 05.

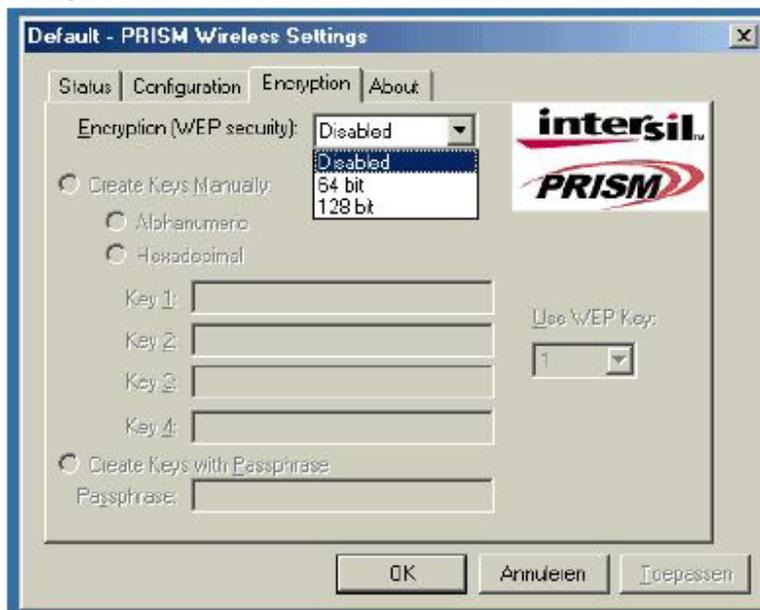


fig. 05: WLAN encryption rate setting window

i-click on the status tab to see the connection status (fig.06).

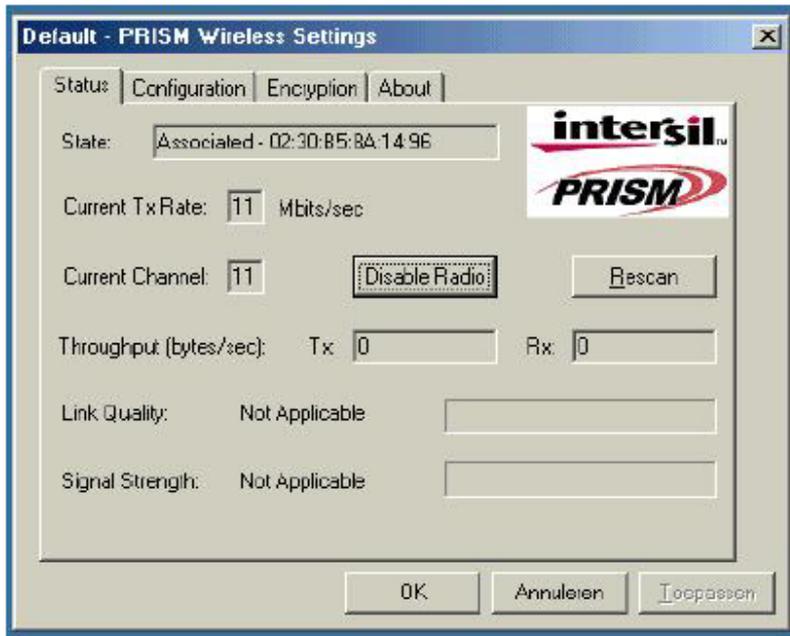


fig. 06: WLAN network status

j-click on the about tab to see the software drivers versions and MAC address (fig.07).



fig. 07: WLAN driver and MAC address information

### ***1.3 Wireless LAN installation guide lines and Authorization for use***

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications made to this device that are not expressly approved by Intersil may void the user's authority to operate the equipment. Intersil is not responsible for any radio or television interference caused by unauthorized modification of this device, or the

substitution or attachment of connecting cables and equipment other than specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Intersil and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

The use of Wireless LAN devices may be restricted in some situations or environments for example:

- \* On board of airplanes, or
- \* In an explosive environment, or
- \* In case the interference risk to other devices or services is perceived or identified as harmful.

In case the policy regarding the use of Wireless LAN devices in specific organizations or environments (e.g. airports, hospitals, chemical/oil/gas industrial plants, private buildings etc.) is not clear, please first verify authorization to use these devices prior to operating the equipment.

### ***2-Technical Specifications***

**Radio Technology** IEEE 802.11g Turbo (DSSS and OFDM)

**Operating Frequency** 2400-2497MHz ISM band

**Modulation Schemes** DQPSK, DBPSK, CCK, 16 QAM, 64 QAM

**RF Channel Availability** 11 channels for United States (2412 MHz to 2462 MHz)

13 channels for Europe (2412 MHz to 2472 MHz)

13 channels for Japan (2412 MHz to 2472 MHz), channel 14 only available in DSSS mode (11 Mbps max)

**Data Rate** Support for 54, 48, 36, 24, 18, 12, 9, and 6 Mbps OFDM, 11 and 5.5 Mbps CCK and legacy 2 and 1 Mbps data rates

**Media Access Protocol** CSMA/CA with ACK

**Transmitter RF Output Power** < 18.0 dBm EIRP (typical) including antenna gain

**Antenna Type** Internal diversity antennas with 1 dBi rated gain

**Operating Voltage** 3.3 VDC via PC host miniPCI slot

**Interface** miniPCI formfactor 3A

**Device driver Support** Microsoft® Windows® NT, 2000, ME, and XP

### ***3-Regulatory information***

#### **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. This Class B digital apparatus complies with Canada ICES-003. 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.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices) any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**"Alpha Networks Inc. declare that WMP-G03 (IEEE 802.11g Mini PCI Card) is limited in CH1~CH11 by specified firmware controlled in USA."**

This device complies with Part 15 of the FCC Rules and Canadian Standard RSS-210. 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.

#### **Statement Needed to be Shown on End Product**

Since this module is installed inside the end product, the end product should be affixed a label on visible area showing that this product contain a RF module, and also its FCC ID.

#### **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.

This device is intended only for OEM integrators under the following conditions:

1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and

2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as the 2 conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

**IMPORTANT NOTE:** In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and Obtaining a separate FCC authorization.

#### **End Product Labelling**

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ADSL modems, and similar equipment). The final end product must be labeled in a visible area with the following: “ Contains TX FCC ID: RRK2003120027-1 ”.

**Manual Information That Must be Included**

The users manual for end users must include the following information in a prominent location “

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”