



WLAN61xx EB CF Evaluation Kit

User's Guide

V0.5

3/08/2006

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Document Revision Control

Revision	Date	Remarks
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V0.2	7/17/2005	Preliminary release
V0.3	10/28/2005	Document updated with new driver release and User Interface update.
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1 Introduction

WLAN61xx EB is SyChip's NextGen 802.11g WLAN module. WLAN61xx EB module has many advantages over the previous 6060, 6065 and 6061 products. It is similar in size (15.90x12.70x1.79) and has lower power consumption. It's upgraded to support 802.11g instead of 802.11b. It also supports multiple host interfaces such as SDIO and CF. Check with SyChip for the datasheet.

WLAN61xx EB CF EVK from SyChip Inc provides a platform for evaluating SyChip WLAN61xx embedded modules.

WARNINGS:

THIS EQUIPMENT COMPLIES WITH PART 15 OF THE FCC RULES. ANY CHANGE OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS DEVICE MUST BE INSTALLED IN A LOCATION THAT IS NOT ACCESSIBLE TO THE GENERAL PUBLIC. INSTALL THE DEVICE SO THAT THE ANTENNA IS MORE THAN 20 cm FROM UNSUSPECTING PERSONNEL. FAILURE TO INSTALL THIS DEVICE AS DESCRIBED WILL RESULT IN A FAILURE TO COMPLY WITH FCC RULES FOR RF EXPOSURE AND IS DISCOURAGED. ONLY ANTENNAS APPROVED WITH THE DEVICE MAY BE USED. NO EXTERNAL ANTENNAS MAY BE USED. THIS DEVICE MAY NOT BE CO-LOCATED WITH OTHER TRANSMITTERS WITHOUT FURTHER APPROVAL BY THE FCC.

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 UNDESIRE OPERATION.

THE ENGINEERING SAMPLES ARE NOT FOR COMMERCIAL USE. THEY ARE FOR INTERNAL LAB ENVIRONMENT ONLY. AS SUCH, THEY MAY OPERATE OVER THE COMPLETE 802.11b SPECTRUM (i.e. CH. 1-14).

THIS EQUIPMENT IS NOT INTENDED TO OPERATE WITHIN 20cm OF THE HUMAN BODY.

Note: 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 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.

2 Evaluation Kit Contents

The WLAN61xx EB CF EVK package contains the following contents:¹

- A test board with antennas and a WLAN61xx EB CF embedded module
- Two 1" coaxial cable jumper ended with Hirose W.FL plugs for the RF connections from the module to the antennas
- A WLAN61xx EB CF module driver software and documentation CDROM



Figure 1 61xx CF EVK (actual layout may vary)

3 Supported Evaluation Environment

3.1 System Connection

The following figure displays the WLAN61xx EB EVK setup connection to a host device.

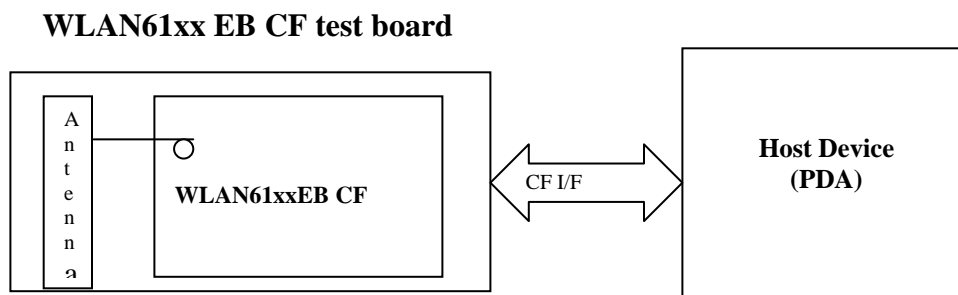


Figure 2 WLAN61xxEB CF EVK setup connection

3.2 Devices and Operating Systems

The WLAN61xxEB CF embedded module has been qualified by SyChip Inc to support the following devices:

- Win CE4.2/Pocket PC2003 and Win CE.Net 5.0 with CF interface.

Note: This evaluation card does not represent a reference design for the WLAN61xxEB modules. For detailed hardware design and timing considerations, contact SyChip customer support.

¹ Based on the customer request, the contents may change.

4 Driver Setup for Pocket PCs

Along with the WLAN61xxEB EVK package, there is a User's Manual for Pocket PCs.

Based on the evaluation platform you use, refer to the appropriate sections in the enclosed document for installation and usage instructions. The manual provides easy to follow step-by-step directions. Anyone can set up and configure a laptop computer or a Pocket PC to communicate with a host or enterprise hub following these steps. Some information will be needed about the network hub to enable communications. If you do not know your ESSID or your encryption algorithm, contact your in-house IT support person or system administrator.

4.1 Installing driver on Pocket PCs

The current way to install the driver on a Microsoft based Pocket PC is to run an installation (.CAB) file inside the Pocket PC. You can also run an installer program (.EXE) on a PC while connecting your Pocket PC via ActiveSync.

4.1.1 Using CAB file installation via SD memory card

1. Insert the CD with SyChip driver software into the CDROM drive of your notebook computer. Copy SYEBCE4_XX.CAB file from the CD to the SD memory card.
2. Insert the SD memory card into the SD Slot of the Pocket PC, use the File Explorer on the Pocket PC and navigate to the memory card location. Click on the SYEBCE4_XX.CAB file to start installation.

4.1.2 Using CAB file installation via sync cable

1. Copy the SYEBCE4_XX.CAB² file from the CD to the Pocket PC after ActiveSync is established.
2. Use the File Explorer on the Pocket PC and navigate to the CAB file location. Click on the SYEBCE4_XX.CAB file to start installation.

4.1.3 Using InstallShield via sync cable from a PC

1. From My Computer on your desktop find CD drive that holds the WLAN61xx driver software, and run the SYEBCE4_XX.exe executable file.
2. Follow the on-screen instructions to finish the installation procedures.
3. Disconnect the sync cable

4.2 Uninstalling the SyChip driver Software

To remove the program, follow *Settings->system-> Remove Programs* on the mobile device. Select the "SyChip Cheetah WLAN CF Card function" and click "Remove".

Note: if the WLAN61xxEB EVK card is inserted and in service, you will get an error message. Please remove the card before uninstalling the software.

² If it is for Magneto, use SYEBCE5_XX.CAB; for CE.Net 4.20, use SYEBCN4_XX.CAB, accordingly.

4.3 WLAN Setup using connection manager in PPC 2003

The connections manager (WZC) in Windows CE 4.20 or PPC2003 plays a generic role for managing various network connections.

4.3.1 Automatic network detection

- The PPC 2003 connection manager scans for wireless networks periodically. If it detects any network and has not connected to any network yet, it will first try to connect to one of the preferred networks. If such a network is not available or the connection manager cannot connect to any preferred network due to invalid WEP key, it will popup a window and shows a list of networks for you to choose. See Figure 3. If you don't see the network of your choice, click on *Settings* to get to the detailed configuration window (Figure 6).

Note: If the connection manager is able to connect to a network automatically, the Network Detection Window (Figure 3) will not appear, and you can follow the steps described in Section 4.3.2 to access the connection manager.

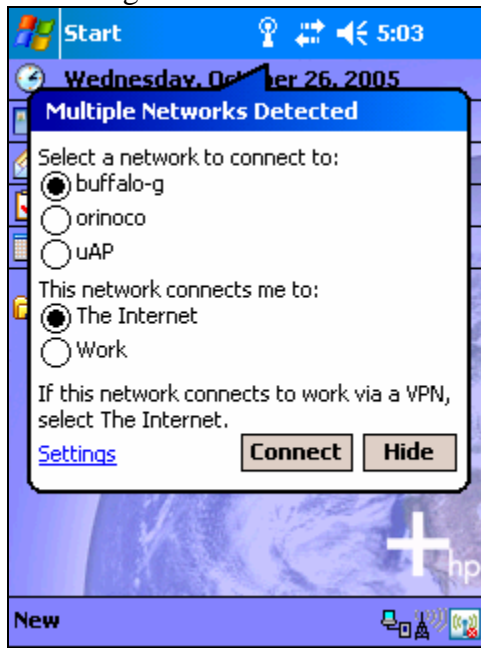


Figure 3 Network Detection

- Select your network and what the network will connect to. In most cases, you should select *The Internet*. If you are connecting to work network, select *Work*.
- Now click on *Connect*. If WEP is disabled, then the connection should be established, otherwise, a window will popup for you to enter the WEP key. Enter the WEP key then click on *Connect*. See Figure 4. The connection should be established.

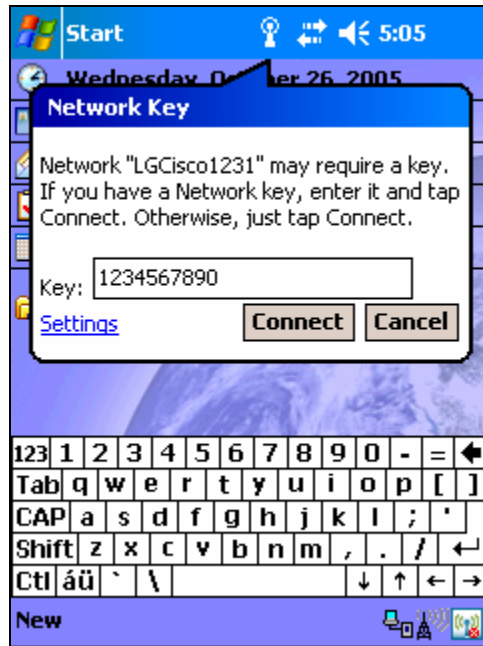



Figure 4 WEP key entry

4.3.2 Accessing the connection manager

Click on the Connectivity icon  to bring up the connection manager. See Figure 5.

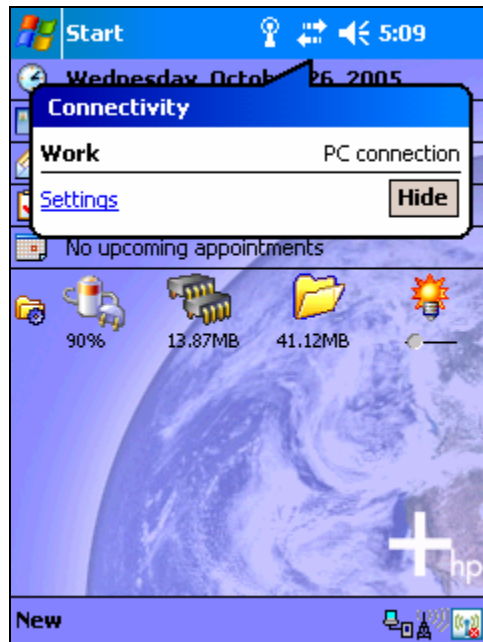


Figure 5 Connectivity Settings

4.3.3 Advanced Connections

Click on *Settings* link, and select *Advanced tab*. You will see the following screen. Alternatively, you can follow *Start->Settings->Connections->Connections icon ->Advanced Tab* to get to the same screen, as shown by Figure 6.

A list of Access Points and their connectivity/availability status will appear on the screen

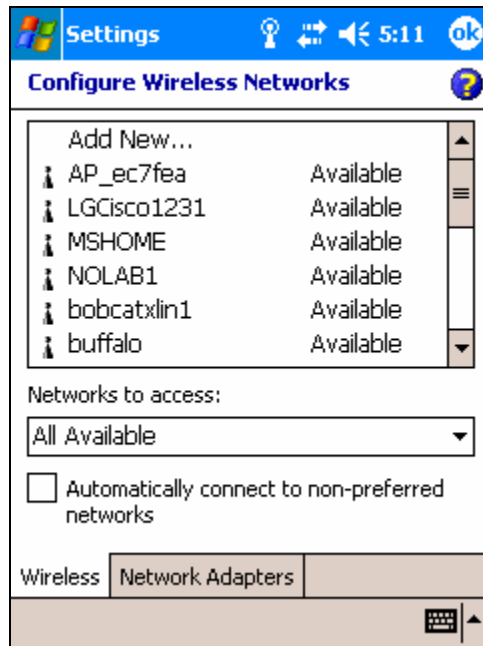


Figure 6 Configure Wireless Networks

4.3.4 WEP Key Entry

Click on the AP you want to connect to, a configuration screen will appear. Then select the *Network Key* tab. See Figure 7.

If WEP is enabled on the AP, from the Data Encryption drop-down list, select “WEP”. Now you need to obtain the WEP key and key index from your network administrator, put the key string in the textbox labeled “Network key”, and select the *Key index* from the choice box (the default key index is 1). If WEP is not enabled, select “Disabled” from the Data Encryption drop down list. Click on OK to return to the previous screen (Figure 6).



Figure 7 Configure Network Authentication

4.3.5 Connecting to an AP

Tap and hold on the AP entry you wish to connect to, and select *Connect* option on the popup menu as shown in Figure 8. The red LED on the WLAN61xxEB EVK should start to blink, indicating it is trying to associate, and eventually turn red steadily, which means it is connected successfully. The screen will also be updated to show the new connection. See Figure 9.

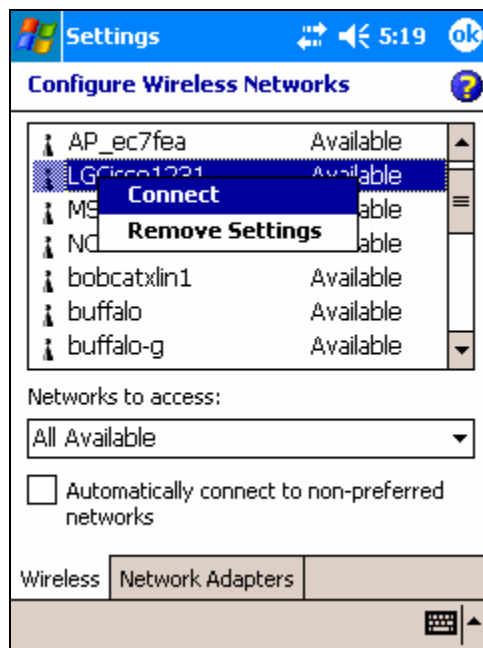


Figure 8 Connecting to an AP

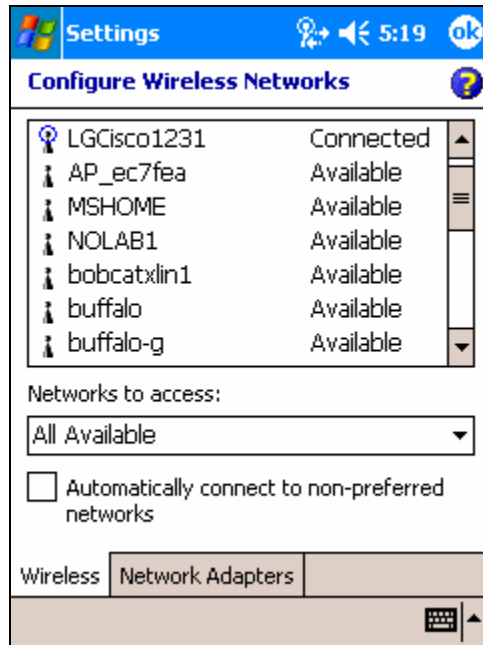


Figure 9 Connection to a new AP

4.3.6 Verifying network connectivity

If the Pocket PC is not connected with a host PC via a sync cable, then the Connectivity icon indicates the WLAN connection is properly established. You can also check on the *Network Adapters* tab to check if the IP address obtained from DHCP is correct. See Figure 10, click “*SyChip Cheetah 802.11 CF Card*” to see the IP address information (Figure 11).

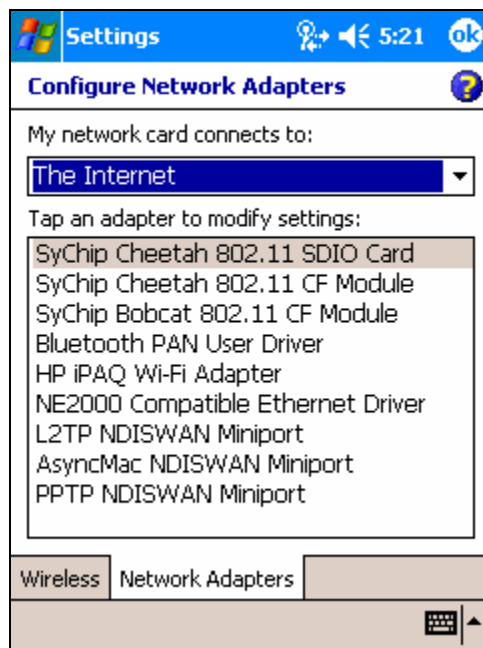


Figure 10 Network Adapter Status

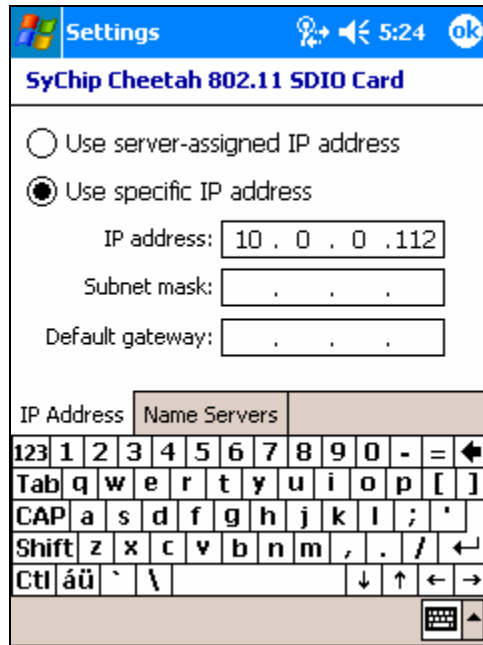


Figure 11 IP Address

4.3.7 Peer-to-peer mode

Peer-to-peer mode is also known as the “Ad-Hoc” mode. There are two ways for your device to connect to other devices in peer-to-peer mode. The first way is that you create an Ad-Hoc network on your device, and then allow other devices to connect to yours by joining the network. The second way is simply connect your device to an existing Ad-Hoc network if such a network is already created by the peer device.

4.3.7.1 Creating an Ad-Hoc network from your device

1. Get to the *Configure Wireless Networks* screen as shown in Figure 6. Change the *Networks to access* choice box to *Only computer-to-computer*. Select *Add New Settings...* under *Wireless networks*. See Figure 12.

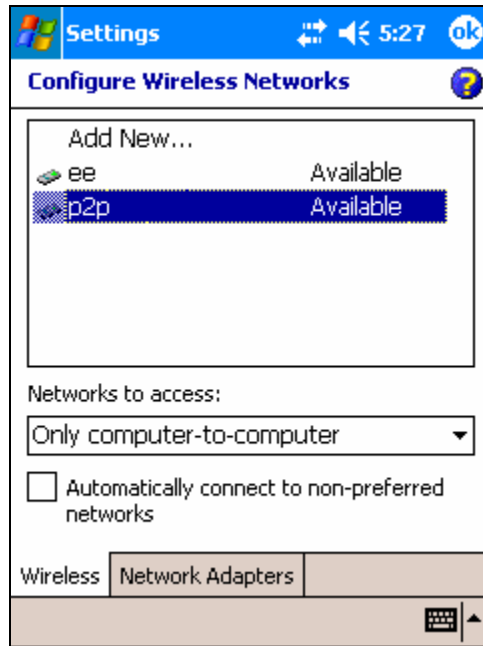


Figure 12 Configuring an Ad-Hoc network

2. Type in the network name in the *Network Name* field (*txttest*, for example). Then check the box *This is a device-to-computer (Ad-Hoc) connection*.

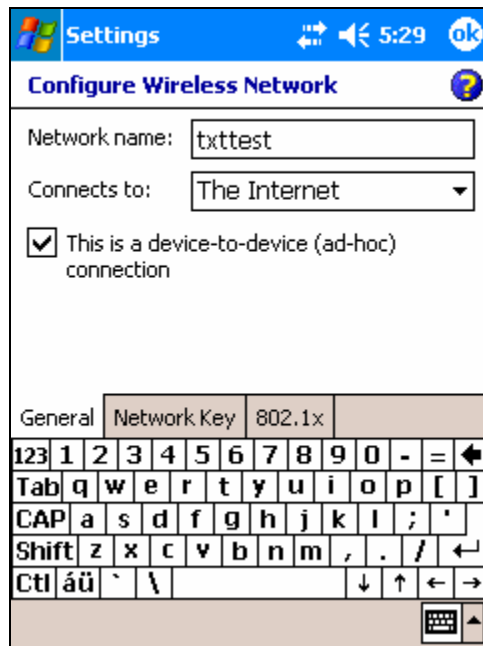


Figure 13 Creating a new Ad-Hoc network

3. OK to go back to the previous screen. Click and hold the network name and select *connect*.

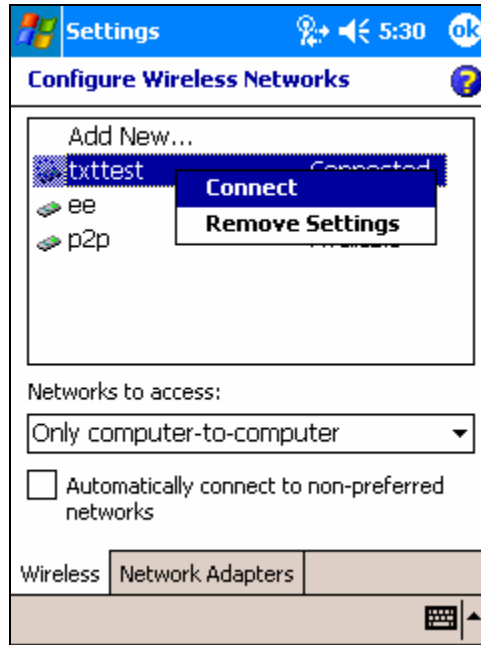


Figure 14 Connecting to the Ad-Hoc network

4. Now the new Ad-Hoc network has been created, and it is visible to other WLAN devices. Your device is connected to the Ad-Hoc network as shown in Figure 15.

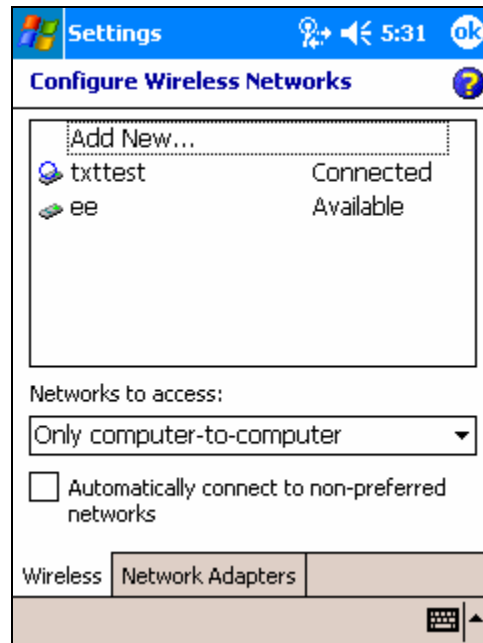


Figure 15 Connected to the Ad-Hoc network

4.3.7.2 Connecting other devices to the Ad-Hoc network

Once the Ad-Hoc network is created, it is available for other devices to join. To join the network, go to the *Configure Wireless Networks* screen (Figure 14) using a second device. Repeat step 3 (Figure 14) and step 4 (Figure 15), the second device should now be connected to the newly created Ad-Hoc network, e.g. *txtst*. You can go to the *Network Adapters* screen (Figure 10) to find the devices' IPs. You can add more devices to the Ad-Hoc network by performing the same procedure so that they form a closed network among themselves.

4.4 WLAN Setup using Cheetah WLAN UI

To Setup WLAN using Cheetah WLAN UI, one can traverse the menu Start/Settings/Connection tab, and find the Cheetah WLAN utility icon. Tap on it to launch the configuration UI.

Note: The Cheetah WLAN UI is still evolving. The features and the exact layout are subject to change without notice. User comments are welcome during this stage.

4.4.1 Status Tab

The status screen shows important parameters about the CF card as shown in (Figure 16)

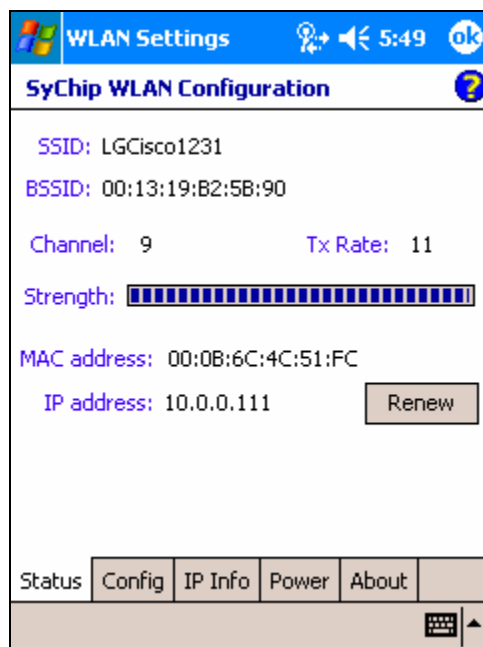


Figure 16 Status tab

4.4.1.1 Information Fields

- **SSID**

Shows the Network Name and the MAC address of the access point the card is associated with in the AP mode. Or it shows the Network Name and the MAC address of the creator of IBSS which the card is joined into in the Peer-to-Peer (Ad-Hoc) mode.

- **Channel**

Shows the RF channel currently being used by the card.

- **TX Rate**


Shows the current transmit rate. This can be 1Mb/s, 2Mb/s, 5.5Mb/s, or 11 Mb/s.

- **Strength**

Gives signal strength of the receiver in both percentage and graphical display.

- **IP Address** – IP address of the card or module

Note: Check with your network administrator for IP configuration information.

-  **Help** button: open a context sensitive help window.

4.4.1.2 Operation Buttons

Click this button in toggle to disable/enable the radio link from the card.

- **Renew IP**

Click this button to reapply IP address from DHCP server when automatic DHCP is enabled.

4.4.2 Configuration Tab

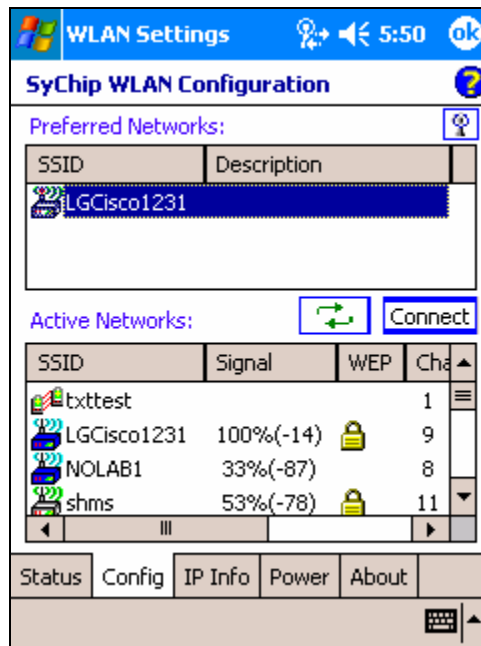


Figure 17 Configuration window

This window (Figure 17) provides:







- 1) Periodically updated scanning results in the Active SSIDs window that lists all the access points and peer stations available around the host.
- 2) A configuration tool that enables you to create and edit SSID profiles for your station to associate or join with.

4.4.2.1 Information Fields

- Preferred Networks

On the top of the window is a list of preferred profiles one has created, or added from the Active SSIDs table below. It will start searching for the APs to associate with in the order of the listed profiles. This table is blank after the initial SyChip software installation. It can be kept blank with no automatic association preference. For each profile in the table, one can make changes by pressing and holding on a profile: New, Edit, Delete, Up, and Down.

A drop-down menu will be displayed with the above 5 items as shown in Figure 18:

-  **New:** create a profile (for detailed info see Section 4.4.2.3).
-  **Edit:** modify a profile (for detailed info see Section 4.4.2.3).
-  **Delete:** delete a selected profile
-  **Up:** move the highlighted profile up to increase the automatic association priority.
-  **Down:** move the highlighted profile down to decrease the automatic association priority.
-  **WZC:** jump to the Windows Zero Configuration window.

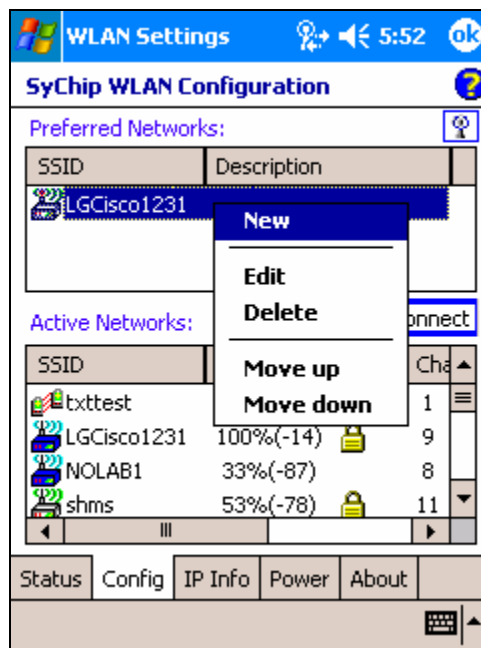





Figure 18 Information Fields


- **Active Networks**

The Active SSIDs table lists all the access points or peer stations (creator of IBSS) in the vicinity with each record displaying the following six fields (The table may not display all the fields on the screen. Use horizontal scroll bar to check all):

- ❖ **SSID** – Network Name of the access point or peer station. An associated icon shows whether it is an access point , or a peer station .
- ❖ **Signal** – Signal Strength in percentage for that SSID.
- ❖ **WEP** – WEP key status. ( stands for WEP Key required, otherwise WEP Key not required).
- ❖ **Channel** – The channel being used and the **SupRate** – Supported data rate of the access point or the peer station.
- ❖ **BSSID (MAC Addr)** – BSSID or MAC Address of the access point or the peer station.

4.4.2.2 Operation Buttons

-  **WZC**

By clicking  **WZC**, then Click on one of the available networks to add the selected (highlighted) profile into the Preferred Profile table. If the SSID has WEP Key On, the Settings window will pop up for you to enter the WEP Method, Encryption Key, and Key ID. Click OK button in the Settings window after finishing the configuration, and the SSID with its profile will be added into the Preferred Profiles window. No window will pop up when adding an SSID with WEP Key Off. It will be added into the Preferred Profile table directly at the click on Add button.

- **Connect**

Click this button to associate/join your station with the SSID you selected. This SSID can be either from the Preferred Profile or from the Active SSIDs table. When Applied, the Status tab window will display the status of the wireless connection. If the association fails, an automatic search for another AP in the preferred profile list will take place, trying to associate in the order of your preference.

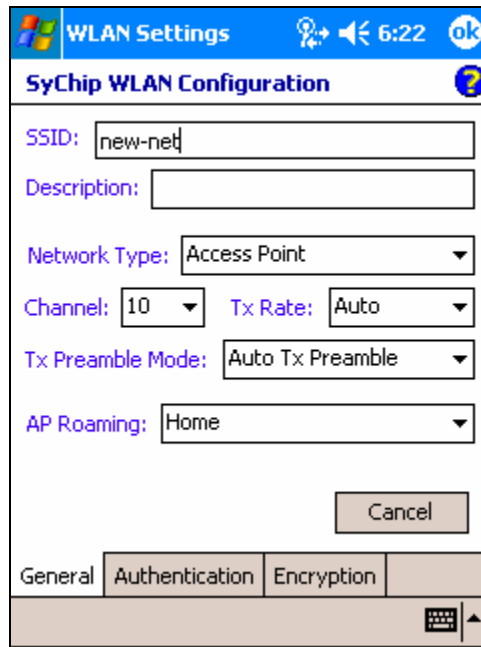
-  **Refresh**

Click this button to start a new search for all available access points or peer stations in the vicinity.

-  **Help**: open a context sensitive help window.

4.4.2.3 Profile Settings Window

4.4.2.3.1 Network Profile Window



The screenshot shows the 'SyChip WLAN Configuration' window. At the top, it says 'WLAN Settings' with a status bar showing signal strength, volume, and time (6:22). Below the title bar, there's a 'SyChip WLAN Configuration' header with a help icon. The main area contains several fields: 'SSID:' with the value 'new-net', 'Description:' (empty), 'Network Type:' set to 'Access Point', 'Channel:' set to '10', 'Tx Rate:' set to 'Auto', 'Tx Preamble Mode:' set to 'Auto Tx Preamble', and 'AP Roaming:' set to 'Home'. A 'Cancel' button is located below these fields. At the bottom, there are tabs for 'General', 'Authentication', and 'Encryption', with 'General' being the active tab. A keyboard icon and a scroll arrow are also visible at the bottom right.

Figure 19 Network profile window

To create a new profile to the preferred list one can click the **New** button (described in Section 4.4.2.1) without selecting (highlighting) any existing profile. An Add New Preferred SSID window will pop up as shown in Figure 19.

To modify a profile one can select (highlight) a profile and click the **Edit** button. A Modify Existing Preferred SSID window will pop up as shown in Figure 19, except that the SSID, Type, TX Rate, and Channel fields are unchangeable in AP mode, whereas TX Rate and Channel fields can be changed in Peer-to-Peer mode.

The information fields and operation buttons are listed as follows:

- **SSID:** Enter the Network Name of the access point or peer station of your choice. *Check with your network administrator for Network Name (SSID).*
- **Description:** Any description on this network.
- **Network Type:** Choose from **Peer-to-Peer** or **Access Point** in the pull down menu. **Access Point** (AP) mode is also called “Infrastructure” mode. **Peer-to-Peer** (P2P) mode is used for communication between two (or more) radio stations (cards) without an access point.
- **Channel:** Channel. Scroll to select a channel for communication.
- **Tx Rate:** Choose 1Mb, 2 Mb, Auto 1/2 Mb, 5.5 Mb, 11 Mb for P2P connection, or Fully Auto for AP connections from the menu. The transmit rate is Fully Automatic by default.

- **Preamble Mode**

- ❖ **Long TX Preamble** – Where Sync field consists of 128 bits.
- ❖ **Short TX Preamble** – Where Sync field consists of 56 bits.
- ❖ **Auto TX Preamble** – Automatically change between long and short preamble mode transmission based on the AP configurations. This is the default Preamble Mode.

Note: A Preamble consists of a Synchronization (Sync) field and a 16-bit Start Frame Delimiter (SFD) field.

- **AP Roaming:** Used for wireless client roaming between APs. From the option menu choose **Home or Enterprise** and tap on OK button. By increasing the values from Home to Enterprise, your WLAN card roams easier from one AP to another (with the same SSID in the same network) depending on the APs' relative signal strength.
- **OK** - Tap on this button to make the change.
- **Cancel** - Tap on this button to close the window without saving or modification.

4.4.2.3.2 Authentication Tab

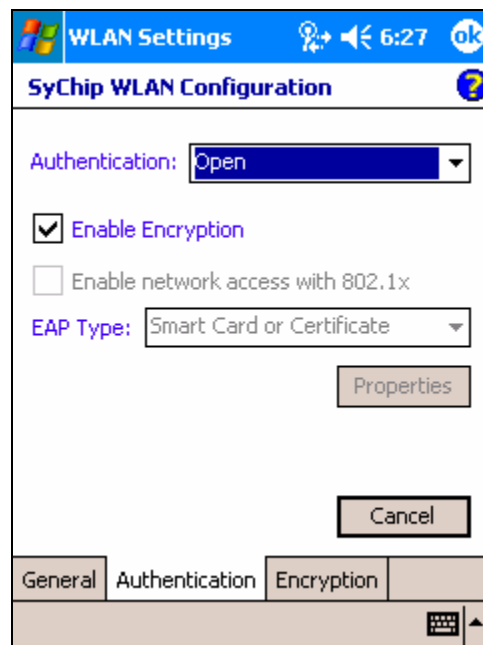


Figure 20 Authentication tab

- **Enable authentication & encryption** – Check this box allows you to enter security keys and enable 802.1x
- **Authentication Algorithm** - Five options, only configurable when WEP Method is enabled.
 1. **Open** - Should match AP's WEP setting for "Open."
 2. **Shared** - Should match AP's WEP setting for "Shared."
 3. **Auto Switch**- Automatically matches AP's setting.
 4. **WPA³** - Need network certificate for authentication.
 5. **WPA-PSK** - Need Pre-Shared Key for access.
- **Encryption** - Five options for WEP Key encryption.
 1. **64 bit (HEX)** - 10 characters configurable in Hexadecimal
 2. **64 bit (ASCII)** - 5 characters configurable in ASCII
 3. **128 bit (HEX)** - 26 characters configurable in Hexadecimal
 4. **128 bit (ASCII)** - 13 characters configurable in ASCII
 5. **TKIP** - Only used when WPA is selected.



NOTE: **HEX** - Hexadecimal number set of 16 digits from 0-9, and from A(a)-F(f). **ASCII** - Any printable ASCII characters.

- **Key Index** - Four options can be selected: Key 1, 2, 3, and 4. The default is Key 1.
- **Network Key** - Input character set depending on WEP method and key format.
- **Enable network access with 802.1X** - Check the box if access to the network needs group authentication. From the pull-down menu select the 802.1X security standard, **PEAP** or **Smart Card (TLS)**. Tap on the **Properties** button to choose the certificate that applies. To access a 802.1x network you need to enroll and get the personal certificate first. Use the Certificate Enrollment program⁴ in your PDA to provide the domain name, server name, user name and password required by the authentication server. This security feature is available on Pocket PC 2003.
- **OK** - Tap on this button to make the change.
- **Cancel** - Tap on this button to close the window without saving or modification.

³ WPA security implementation is targeted at enterprise markets only. In order to activate, a certificate enrollment program must be installed from the company's IT department in order to obtain the user's personal certificate.

⁴ See above.

4.4.2.3.3 Encryption Tab

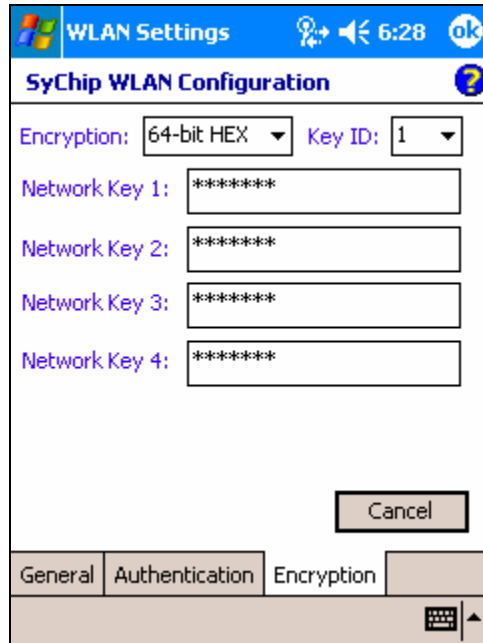


Figure 21 Encryption Tab

4.4.3 IP Info Tab

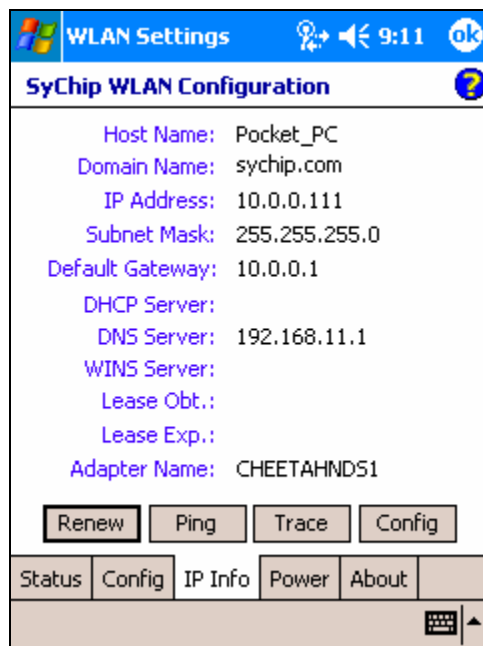


Figure 22 IP address information

4.4.3.1 Information fields

This tab show all related IP address information including DHCP, DNS, WINS server and gateway etc. for advance users.

4.4.3.2 Operation Buttons

- **Renew** – Renew IP address from DHCP server for this NIC card.
- **Ping** – Ping another IP/Host address in the network (Figure 23).
 - **IP Address/Host Name:** Enter an IP address or host name to ping. When a host address (eg. www.yahoo.com) is entered, the **Resolve target name** box needs to be checked.
 - **Size (Bytes):** Choose from pull down menu from 32 to 8192 with 32 as the default.
 - **Timeout (ms):** Defaulted to 500, can be increased or decreased from the spin button.
 - **Resolve target name:** Check it if a **host name** is entered. This allows the software to translate host address to IP address.
 - **Ping:** Click on this button to ping the IP address/Host Name entered in the input field.
 - **Infinite:** check this box to keep pinging the target
 - **Ping Statistics Field:** Shows the pinging IP address and the pinging results.

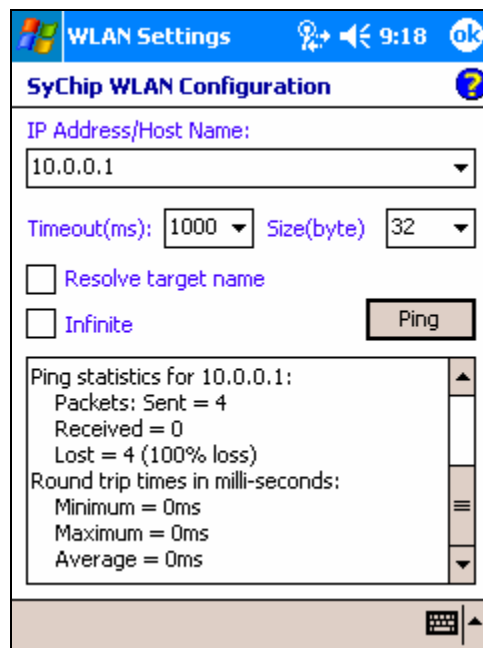


Figure 23 Ping Function

- **Trace** – Trace all nodes in the route to a ping destination for their ping response. 3 pings are made to each node.

- **IP Address/Host Name:** Enter an IP address or host name to ping. When a host address (eg. www.yahoo.com) is entered, the **Resolve target name** box needs to be checked.
- **Timeout for each reply (ms):** Default is 2000, can be increased or decreased from the spin button.
- **Maximum number of hops:** Default is 10, can be increased or decreased from the spin button.
- **Resolve target name:** Check it if a **host name** is entered. This allows the software to translate host address to IP address.
- **Trace:** Click on this button to start trace.
- **Trace Statistics Field:** Shows the trace IP addresses/domain names and the pinging results. * means timeout for that ping.

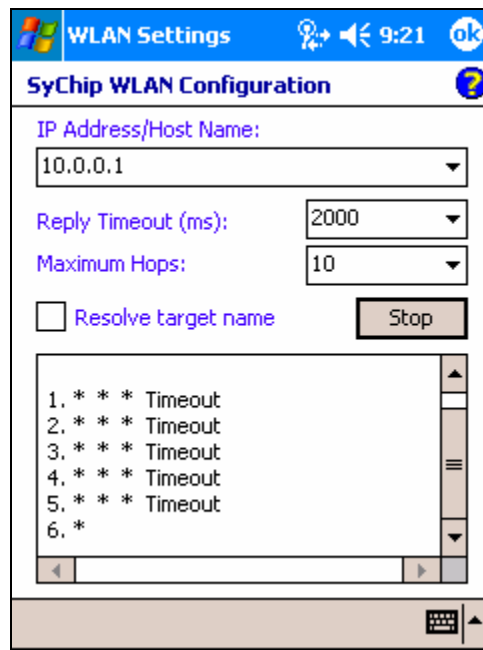


Figure 24 Trace Function

- **Config** – Configure static IP address. Use **server-assigned IP address** is the default setting. If static IP is desired, this page should be used to configure it. Check **Use static IP address** and enter related information.

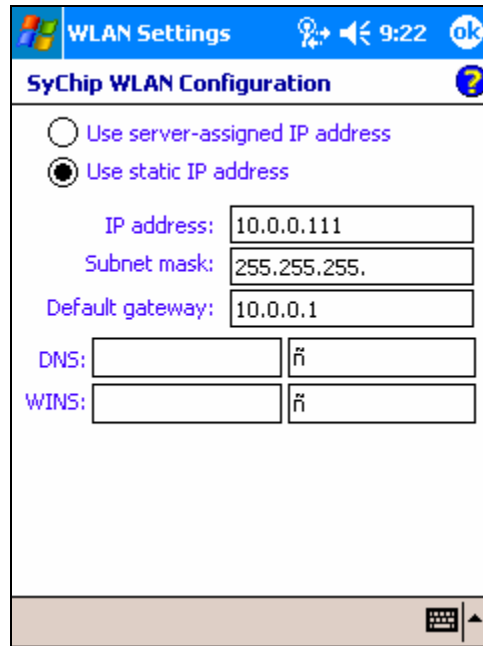


Figure 25 IP configuration

4.4.4 Power Settings Tab

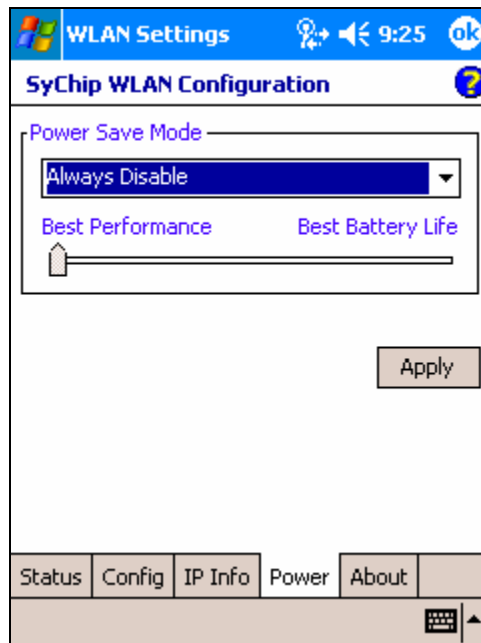


Figure 26 Advanced Settings Window

4.4.4.1 Information fields and buttons

- **Power Save Mode**

- ❖ **Disable** – Choosing this option will disable the power save mode.
- ❖ **Always Enable** – Choosing this option will have the power save mode always enabled. This is the default setting.
- ❖ **Auto Enable** – When internal battery is being used it will be in Power Save mode; when external power supply is being used the Power Save mode will be disabled automatically.

- **Performance/Power Sliding Bar**

Move the bar to balance between the performance of the WLAN card and length of the battery life. Default is set to Best Performance. Not operable if the Power Save Mode is **Disable**. The leftmost position on the sliding bar (*Best Performance*) indicates that the WLAN station will listen to every beacon from the associated AP. The default beacon interval is 100 ms for most APs. When the knob is dragged to the right-hand-side, the station will listen to the beacon in multiple beacon intervals depending on the position on the slide bar. The rightmost position (*Best Battery Life*) indicates the beacon interval is 10 times of AP's beacon interval, i.e. 1000 ms when the beacon interval is set to 100ms. For the Sliding bar to take effect, the *Power Save Mode* needs to be either *Always Enable* or *Auto Enable*, and you need to click on the *Apply* button.

- **Apply Button**

Apply the change to new card setting.

-  **Help** button

Open a context sensitive help window.

4.4.5 About Tab

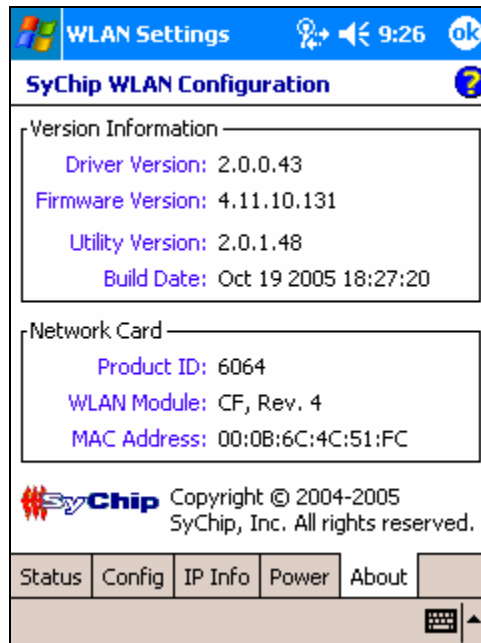


Figure 27 About Window

This tab provides information about the version number and time of the build for Network Driver, Configuration Utility and firmware, the MAC address / Serial Number of the CF card.

5 Troubleshooting

The following scenarios could be encountered when using the WLAN61xxEB in a Pocket PC or notebook computer:

- **WLAN61xxEB CF card is not recognized**

The device displays an Unrecognized Card dialog box when the test board is inserted.

This means the WLAN61xxEB driver was not loaded or was loaded incorrectly. If this is the case, the driver files require reinstallation. Refer to Section 4.1.

- **A valid IP address is not obtained**

1. Check with system administrator for proper configuration settings.
2. Reset the Pocket PC or restart the computer and reinsert the test board for changes to the IP address to take effect.

6 Contact Information

Customer Support

SyChip Inc provides its customers with prompt and accurate customer support. If the SyChip Customer Support specialists cannot solve a problem, access to all technical disciplines within SyChip becomes available for further assistance and support. SyChip Customer Support responds to calls by email, telephone or fax within the time limits set forth in individual contractual agreements. When contacting SyChip Customer Support, please provide the following information:

- Serial number of the unit
- Model number or product name
- Software type and version number
- Order number

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