

# WL84E Wireless N Mini PCI-E Adapter User Manual

Ver: 1.0

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## **Chapter 1 Introduction**

The WL84E Wireless N Mini PCI-E Adapter complies with IEEE 802.11n (Draft 2.0), IEEE 802.11a, IEEE 802.11g, and IEEE 802.11b standards. Wireless transmission rates can reach up to 300Mbps. This product supports 64/128-bit WEP encryptions and DFS in requires 5-GH bands, as well as WPA/WPA2 and WPA-PSK/WPA2-PSK encryptions and mechanisms in addition to the adapter's QSS (Quick Secure Setup) feature, allowing users to quickly and easily configure wireless security. This product can also simultaneously operate bandwidth intensive applications such as voice and video. Applications using a lot of bandwidth that are sensitive to interruptions such as voice and video applications are given priority in order to assure quality. It also works well with other 11g and 11n protocol wireless products

### 1.1 Features

- Complies with IEEE 802.11n(draft 2.0), IEEE 802.11a, IEEE 802.11g, IEEE 802.11b standards
- Provides Mini PCI-E interface
- ◆ 20/40MHz interoperable channels dramatically increase performance
- Up to 300Mbps data transfer rate in 802.11n mode of operation
- Supports Wi-Fi Protected Security (WPS), supports 64/128-bit WEP, complies with 128 bit WPA standard(TKIP/AES), supports MIC, IV Expansion, Shared Key Authentication, IEEE 802.1X
- Simple Configuration and monitoring
- Supports Roaming technology, guaranteeing efficient wireless connections.
- Simple and easy to use user manageable software for a relaxed easy configuration of wireless client.
- Compatible with 802.11g and 11b equipment, Intel Centrino Compatibility tested
- Supports Windows XP/Vista ,Win7 、Linux OS

### **1.2 Environmental**

- Storage Temperature: -40oC ~70oC
- Operating Temperature : 0oC ~40oC
- Operating Humidity: 10% ~90% RH Non-condensing

### 1.3 Package

- One WL84E WLAN Card
- WL84E Manual
- WL84E Drives and Manual on CD-ROM

### **Chapter 2 Installation**

#### 2.1 Hardware Installation

To install the adapter, follow these steps listed below:

1. Turn off your desktop PC and disconnect the power.

2. Remove your PC case and locate an available PCI slot on the mianboard. Remove the metal slot cover on the back of the PC. Check with your computer manufacturer for instructions if needed.

3. Slide the PCI Adapter into the PCI slot. Make sure that all of its pins are touching the slot's contacts. Once the adapter is firmly in place, secure its fastening tab to your PC's chassis with a mounting screw. Then, close your PC case.

4. Reconnect your PC's power and turn on your desktop PC.

#### 2.2 Software Installation

#### 2.2.1 Overview

The Adapter's Setup Wizard will guide you through the Installation procedure for Windows 2000, XP and Vista. The Setup Wizard will install the WL84E Wireless N Client Utility (11NWCU) and drivers.

When you install the hardware prior to before installing the software, the system will prompt "Found New Hardware Wizard", click **Cancel**, and run the Setup Wizard program on the CD-ROM.

The Setup steps for Windows 7, XP and Vista are very similar. The following setup steps are for Windows XP.

#### 2.2.2 Software Installation for Windows XP

1. Insert the Resource CD into your CD-ROM drive, and open the folder with the same name as your product. Then double-click Setup.exe in the proper folder according to your operating system to start the installation. After that, Figure 2-1 will appear. You can click **Cancel** to end the installation in the screen above.



Figure 2-1

2. Soon, Figure 2-2 will display after a moment. Click Next to continue.



Figure 2-2

3. After that, you should choose a Setup type. It is recommended that you select **Install Client Utilities and Driver**. Select **Install Driver Only** to install driver only, and select **Make Driver Installation Diskette(s)** to make the diskette(s) as the installation driver (shown in Figure 2-3). Click **Next** to continue.

| Athero        | s Vireless N Client Utility   |  |
|---------------|---|--|
| Setu<br>Se    | <b>IP Type</b><br>lect the setup type that best suits your needs.                             |  |
| Cli           | ck the type of setup you prefer.  | - Devision   |
| In<br>In<br>M | stall Client Utilities and Driver<br>stall Driver Only<br>ake Driver Installation Diskette(s) | Choose this option to install the<br>driver and client utilities. This is<br>the recommended option. |
| InstallShield |   |  |
|               |   | < <u>B</u> ack <u>N</u> ext > Cancel   |

Figure 2-3

4. Click **Browse** to change the destination location for the software, then click **Next** in the screen below (shown in Figure 2-4).

| Atheros                     | Vireless W Client Utility   |  |
|-----------------------------|---|--|
| <b>Choose</b><br>Select     | e Destination Location<br>t the folder where the installation program will install the files. |  |
| The in                      | nstallation program will install the client utilities in the following location:              |  |
| Des<br>C:\<br>InstallShield | tination Folder<br>\ Atheros\Atheros Wireless N Client Utility Browse                         |  |
|                             | < <u>B</u> ack <u>N</u> ext > Cancel  |  |

Figure 2-4

5. After that, select the program folder, you should create a new folder name or select one from the **Existing Folders** list. It is recommended that you keep the default setting. Click **Next** to continue the installation.

| Atheros Vireless N Client Utility  |
|--|
| Select Program Folder<br>Select a program folder.  |
| The installation program will add program icons to the Program Folder listed below. You may<br>enter a new folder name or select one from the Existing Folders list. |
| Program Folder:  |
| Atheros\Atheros Wireless N Client Utility  |
| Existing Folders:  |
| CoreIDRAW S<br>CoreIDRAW Graphics Suite 12   |
| EONE!  |
| Nicrosoft Uffice   |
| Snaglt 7   |
| SolidConvertPDF  |
| TP-LINK  |
|  |
| InstallShield  |
| < <u>B</u> ack <u>N</u> ext > Cancel   |

Figure 2-5

6. Choose configuration tool, if you are not sure, please leave it default. Then click **Next** to continue.

| Atheros Vireless N Client Utility                         | ×      |
|---|--------|
| Choose Configuration Tool                                 |        |
| Which tool will you use to configure your client adapter? |        |
| Atheros Wireless N Client Utility and Supplicant.         |        |
| O Third-Party Supplicant                                  |        |
|   |        |
|   |        |
|   |        |
|   |        |
| InstallShield   |        |
| < <u>B</u> ack <u>N</u> ext                               | Cancel |

Figure 2-6

7. Click **OK** to continue the Installation on the screen below.



Figure 2-7

8. Wait a while for the setup as shown in Figure 2-8.

| Atheros Vireless N Client Utility  |
|--|
| Setup Status   |
| Atheros Wireless N Client Utility is configuring your new software installation. |
| Installing the driver files  |
| C:\temp\devcon.exe   |
|  |
|  |
|  |
|  |
| InstallShield  |
| Cancel   |

Figure 2-8

#### Note:

For Windows XP, the Setup Wizard will notify you of how to proceed with the installation during these steps (shown in Figure 2-9). Our drivers have been tested thoroughly, and are able to work with the operating system. Click **Continue Anyway** to continue the Installation.



Figure 2-9

9. After all the steps above, you will see the screen below, click **Finish** to complete the installation.



Figure 2-10

#### FCC WARNING

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.

NOTE 1: Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE 2: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### IMPORTANT NOTE: FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

IEEE 802.11b or 802.11g, 802.11n operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

Antennas must be installed to provide 20 cm separation distance from the transmitting antenna to the body of the user during normal operating condition. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Only those antennas filed under FCC ID: TK4-10-WLE200NX can be used with this device. When the module is installed in the final system where the antenna location is less than 20 cm separation distance to the body of user, additional equipment authorization must be applied.

FCC ID label on the final system must be labeled with "Contains FCC ID: TK4-10-WLE200NX" or "Contains transmitter module FCC ID: TK4-10-WLE200NX".

In the user guide, final system integrator must be ensure that there is no instruction provided in the user guide to install or remove the transmitter module.

# Since the device operates in the 5.15-5.25GHz band, this device will be restricted to indoor operation only in this frequency band.