



# **PROXMB82 nimiPCI Module User's Guide**

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## INTRODUCTION

The Proxim PROXMB82 miniPCI module implements an IEEE 802.11a/b/g/n wireless LAN (WLAN) with DFS Master function. MIMO operation is implemented using three transmit and three receive chains per the 802.11n standard.

The device will be marketed under brand name: PROXMB and model: PROXMB82.

This module may be installed in PC and host processor systems using approved external antennas. The module may be configured for 2.4 GHz or 5 GHz operation USING THE Web Server function provided by Atheros Communications Inc. Please, refer to Atheros' driver User Manual instructions for details.



## CONFIGURATION

This section provide procedures for connecting and configuring the AP. Configuration can be performed either from a web browser accessing the build-in web server, or by entering commands using the command line interface (CLI). For detailed information on using the server refer to “AP Web Server and for using CLI, refer to detailed operational guide provided by Atheros for the chipset.

### AP Initial Configuration

Configure the AP for its Service Set Identifier (SSID) unique to the application. This configuration can be done either through a web browser with access to the build-in AP web server, or by commands using the command line interface (CLI).

#### WEB Browser

Follow these steps to configure the channel frequency and SSID using a web browser:

1. Launch a web browser (Netscape Navigator or Internet Explorer are examples of commonly used web browsers).
2. From the HPC, enter the IP address that is assigned to the AP as the URL address, for example `http://192.168.1.1`.
3. Select the Access Point Web Server hotlink.
4. A dialog box appears requesting login authorization. When prompted, enter the following information to log in:  
  
Login: **Admin** (case-sensitive)  
Password: 5up
5. Click OK to complete the login process. The 5 GHz Statistics window will appear.
6. Select the Configuration hotlink from the navigation menu. The system Configuration window will appear.
7. Enter the SSID (name or address) for the AP in the SSID field. The SSID must be 1-32 characters in length.



To configure a single SSID to have more than one AP in a single SSID, specify a unique System Name for each AP within that single SSID. Note that range of available channels will be automatically determined by factory settings.

Note that the radio channel is specified using the IEEE 802.11 a standard. For example, channel 48 is the equivalent of 5.240 GHz. The channel number is derived as:

$$\text{Channel Number} = \frac{\text{Channel Frequency (in MHz)} - 5000 \text{ MHz}}{5\text{MHz}}$$

8. Click Update to commit the changes.
9. After all configuration changes are complete, reboot the AP to enable them. To reboot AP, click on the REBOOT AP button that appears.

For detailed information on using the server refer to “AP Web Server” and for using CLI refer to “AP Command-Line Interface” provided in Appendixes A and B of Atheros MPCPI Module User’s Guide.



## FCC Requirements for Operation in the United States

This device is restricted to **indoor** use only due to its operation in 5150 to 5250 MHz and 5470 to 5725 MHz frequency ranges in accordance with latest FCC regulations.

Host systems using Porxim Firmware with this 802.11 a/b/g/n 3x3 MIMO nimiPCI module to be sold in the United States do not have country code settings and are factory configured to only operate on the channels allowed by the FCC. Master devices with a US SKU that contain the 802.11 a/b/g/n Radio module are limited to the following operating channels:

- 1 -11 (2412 to 2462 MHz) in the 2.4 GHz band
- 36 – 64 (5180 to 5320 MHz) in the 5150 to 5350 MHz band
- 100 – 116 (5500 to 5580 MHz) and 132 – 140 (5660 to 5700 MHz) in the 5470 to 5725 MHz band
- 149 – 165 (5745 to 5825 MHz) in the 5725 to 5825 MHz band

High power radars may use the 5250 to 5350 MHz and 5470 to 5725 MHz frequency ranges in your area. Such radar stations can cause interference and damage to this device. This radio module implements a radar detection function which may cause interruption of normal operation when radar signal is detected.

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.

### RF Exposure

To ensure compliance with FCC RF exposure requirements, the antennas used for this device **must** be installed to provide a separation distance of at least 20 cm from all persons.