

**WL-1201M**  
**IEEE 802.11b**  
**Wireless LAN USB Module**  
**Hardware Installation Guide**

Version 1.0

## **REGULATION INFORMATION**

The WLAN USB Module must be installed and used in strict accordance with the manufacturer's instructions. This module device complies with the following radio frequency and safety standards.

### **FCC (Federal Communications Commission)**

This module device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. This module device may not cause harmful interference.
2. This module device must accept any interference that may cause undesired operation.

### ***FCC Radiation Exposure Statement***

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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

The 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 instruction, may cause harmful interference to radio communication. However, there is no grantee 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.

Notice: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification not expressly approved by the party responsible could void the user's authority to operate the device.

Warning: When installing the WLAN USB Dongle, the ferrite shall be placed on the USB cable for compliance.

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## 1 Introduction

Thanks for you purchasing Wireless Local Area Network (WLAN) USB module. You are about to install a networking system that is not only fast and powerful, but also easy to set up and simple to maintain. In a short time you and those in your network will be able to share a local printer and files, access the Internet, and roam about the office wire-freely.

Using radio frequency (RF) technology, WLAN devices transmit and receive data over the air, minimizing the need for wired connections. Thus, WLAN combine data connectivity with user mobility, and, through simplified configuration, enable movable LANs.

This wireless networking solution has been designed for both large and small businesses, and it is scalable so that you can easily add more users and new network features as your business grows.

This installation guide will assist you in installing the WLAN USB module.

## 2 Technical Specification for WLAN USB Module.

Product Name	WLAN USB Module
Standard	IEEE802.11b
Frequency Band	2.400GHz ~ 2.4835GHz unlicensed ISM band
Spread Spectrum	DSSS (Direct Sequence Spread Spectrum)
Modulation method	DQPSK/DBPSK/CCK
Data Rate	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Operation mode	Peer-to-Peer Access Point (need Access Points)
Antenna	External antenna.
RF Output Power	Max 8dBm.
Receive Sensitivity	Operating at 11Mbps: Better than $10^{-5}$ BER @ -80dBm
Operating Range	Up to 200 m, depending on surrounding environment.
Security	64-bit or 128-bit WEP (Wired Equivalent Privacy)
Operating system supported	Windows 98, Windows ME, Windows 2000, Windows XP, Linux
Management	Windows-based utility for configuration and status monitoring
Regulation	FCC part 15 for North America
I/O Interface	USB port
LED(option)	ACTIVE(ACT) , POWER(PWR)
Dimension	90(L) x 75(W) x 15(H) mm
Weight	43 g (approximate)
Input Power	5V DC
Operating Temperature	0 ~ 50°C (operation)
Storage Temperature	-20 ~ 70°C
Humidity	5 ~ 90% (non-condensing)

### **3 Installation**

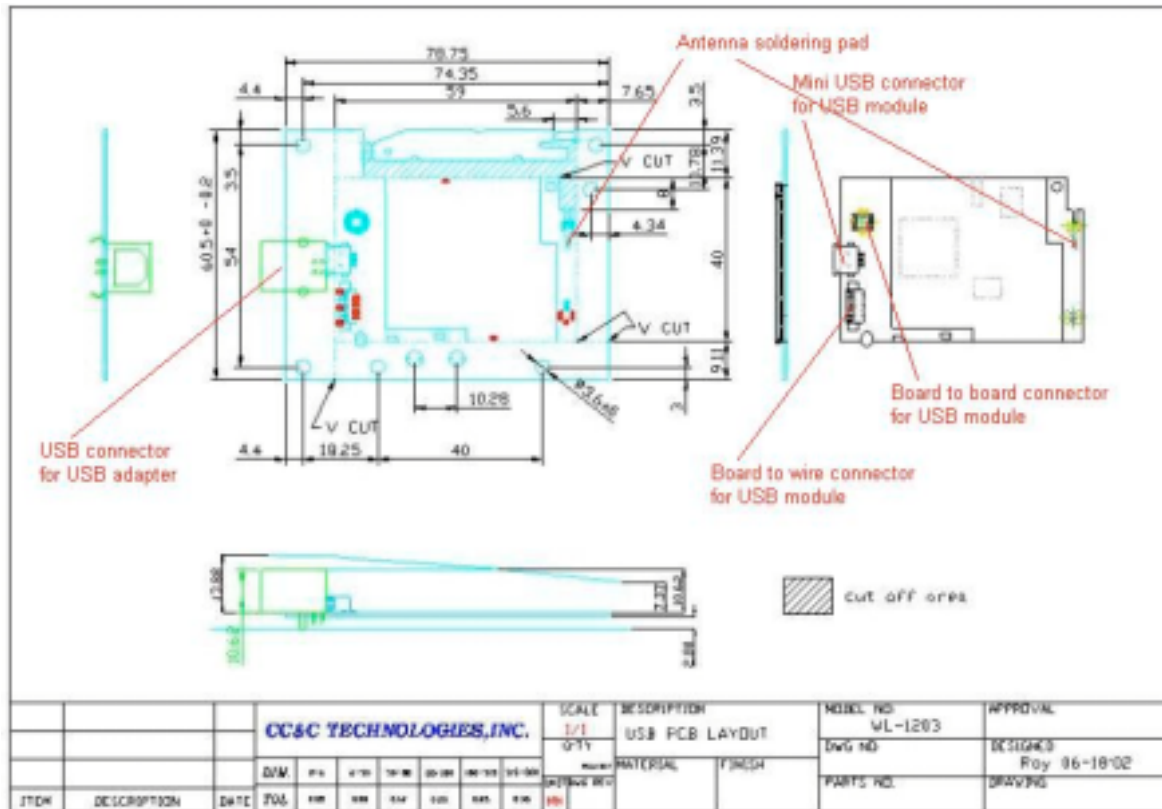
This section describes the procedures for installing the Wireless LAN USB module on your product/system.

#### **Before You Start**

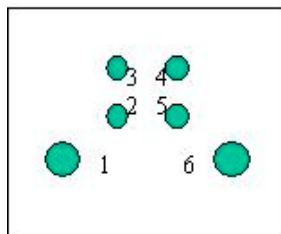
Before installation, please check your system in advance and ensure it meets the minimum requirements as described below.

- Processor: Intel Celeron / Pentium II /Pentium III / Pentium IV; AMD Duron / Athlon
- Operating System: Microsoft Windows 98 / ME / 2000 / XP/ Linux
- System memory: 32MB at least.
- Hard Drive Free Space: 5MB.

## 4 PCB Drawing and module Mounting.

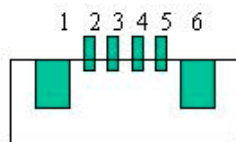


Connector PIN assignment:



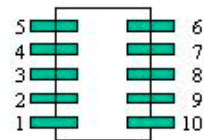
### USB

- Pin No.  
 1. GND  
 2. D+  
 3. D-  
 4. +5V  
 5. GND  
 6. GND



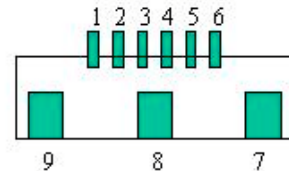
### Mini USB

- Pin No.  
 1. GND  
 2. +5V  
 3. D-  
 4. D+  
 5. GND  
 6. GND



### Board to Board

- Pin No.  
 1. GND  
 2. D-  
 3. GND  
 4. D+  
 5. GND  
 6. +5V  
 7. +5V  
 8. NULL  
 9. +5V  
 10. +5V



### Board to Wire

- Pin No.  
 1. +5V  
 2. D-  
 3. D+  
 4. GND  
 5. LED1  
 6. LED2  
 7. GND  
 8. GND  
 9. GND