

# MIO-3120 Mini-PCI Interface to Wireless 802.11b/g Communication Module Startup Manual



## Introduction

Advantech introduces its new MIO module, MIO-3120 with Mini-PCI interface for advanced Wireless 802.11b/g Communication Module. 802.11b/g WLAN module enables high-speed 54Mbps wireless connections to satisfy the bandwidth needs of the most demanding enterprise, public access and home WLAN user.

## Packing list

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 MIO-3120 Mini-PCI interface to Wireless 802.11b/g Communication Module
- 1 Startup manual
- 1 CD ROM for MIO-3120 Driver

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Note 1: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: [www.adobe.com/products/acrobat/readstep2.html](http://www.adobe.com/products/acrobat/readstep2.html)(Acrobat is a trademark of Adobe.)

## Specifications

### Radio

- **Frequency Band:** 2400-2483.5MHz( for US, Canada); 2400-2483.5MHz( for Europe); 2400-2497MHz( for Japan)
- **Operating Channel:** IEEE 802.1b, Direct Sequence Spread Spectrum, IEEE 802.11g, Orthogonal Frequency Division Multiplexing:11 Channels( US, Canada); 13 Channels( Europe); 14 Channels( Japan)
- **Modulation Type:** QPSK, BPSK, CCK, OFDM
- **Data Rate:** Up to 54Mbps
- **Antenna:** Internal with diversity function
- **Radiation Power:** 13-17Bm at maximum radiation direction
- **Power Consumption:** 802.11b: 250 mA@3.3V, 802.11g: 230mA@3.3V; Listening: 190mA@3.3V
- **Receiver Sensitivity:** Min -71dBm@54Mbps, PER<8%; Min -84dBm@11Mbps, PER<8%
- **Compliant:** FCC Part 15 B, C

### Media Access / Baseband

- **Chip:** VT6655
- **Media Access Protocol:** CSMA/ CA( Collision Avoidance) with ACK
- **Host Interface:** Support Full 32Bit PCI Standard

### Driver Supporting

- **Operating System:** Windows: 98SE/ Me/ NT/ 2000/ XP/ 2003 Ser., Linux( 2.4.x/2.6.x), CE( 4.2/5.0b)

### Mechanical and Environment

- **Size:** 64.7x44.6x3.8mm
- **Weight:** 20g
- **Operating Temperature:** 0°C to 50°C in Operating; -20°C to 70°C in Storage
- **Operating Humidity:** 0% to 70% in Operating; 0% to 95% Non-condensing in Storage
- **Compliance Certifications:** Wi-Fi, FCC

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

<http://www.advantech.com/eplatform>

For technical support and service, please visit our support website at:

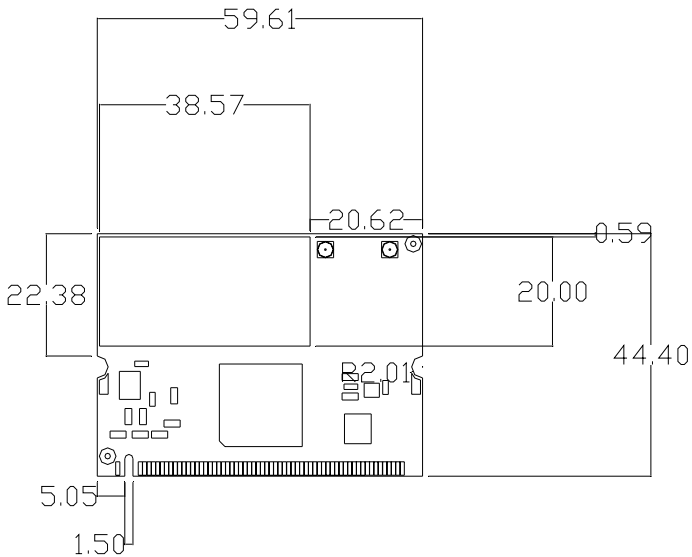
<http://www.advantech.com/support>

This manual is for the MIO-3120 series Rev. A1.

Part No.2006312000

1st Edition  
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## Board Layout



*Mechanical Drawing (component side)*

## FCC

*This device complies with the requirements in 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*

*This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this device in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. The user is advised that any equipment changes or modifications not expressly approved by the party responsible for compliance would void the compliance to FCC regulations and therefore, the user's authority to operate the equipment.*

### Caution!



**Achtung!**

*There is a danger of a new battery exploding if it is incorrectly installed. Do not attempt to recharge, force open, or heat the battery. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.*