

MIO-3121 Mini-PCI to 4 COM Module Startup Manual



Introduction

Advantech introduces its new MIO module, MIO-3121 with Mini-PCI interface, an advanced 4 COM interface connection hub. Fully compliant to PCI local bus specification 3.0. UARTs fully S/W compatible with 16C550-type devices. MiniPCI Type III Interface

Packing list

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

- 1 MIO-3121 Mini-PCI to 4 COM Module
- 1 Startup manual
- 1 CD ROM for MIO-3121 Driver
- 1 FLAT CABLE 40P-2.0mm D-SUB p/n: 1700000447 9P(M)/IDC 45cm

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(Acrobat is a trademark of Adobe.)

Specifications

- Mini PCI Type III Interface
- Chipset: OxmPCI954
- Four 16C950 High performance UART channels
- 8-bit Pass-through Local Bus (PCI Bridge)
- IEEE 1284 Compliant SPP/EPP/ECP Parallel port
- Efficient 32-bit, 33 MHz MiniPCI interface, fully compliant to PCI Local Bus specification 3.0 and PCI Power Management Specification 1.1
- UART up to 20MHz with the crystal oscillator
- 3.3V operation (5V tolerance on selected I/Os) Connector: 40pins 2.0mm 20X2 Box Header
- UART operation up to 60Mbps via external clock source. Up to 20MHz with the crystal oscillator
- OS support: Win98, 2000, XP, NT4.0, Vista

Mechanical and Environmental

- **Power Supply Voltage:** 5V and 12V
- **Size:** 59.75mm x 52.75mm
- **Operating Temperature:** 0°C ~ 60°C (32°F ~ 140°F)
-40°C to 85°C (-40°F ~ 185°F)in Storage
- **Operating Humidity:** 0% to 90% relative humidity, non-condensing
- **Compliance Certifications:** CE; 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-3121 series Rev. A1.

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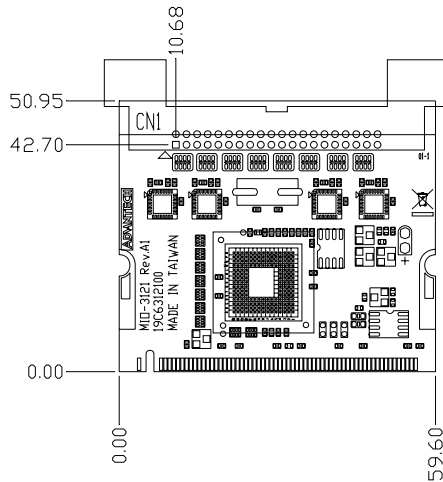
Jumpers & Connectors

The table below lists the function of each of the jumpers and connectors

CN1: COM 1~4 Connector

Pin	Signal	Pin	Signal
1	COM3_DCD#	2	COM3_DSR
3	COM3_RXD	4	COM3_RTS#
5	COM3_TXD	6	COM3_CTS#
7	COM3_DTR#	8	COM3_RI
9	GND	10	GND
11	COM2_DCD#	12	COM2_DSR#
13	COM2_RXD	14	COM2_RTS#
15	COM2_TXD	16	COM2_CTS#
17	COM2_DTR#	18	COM2_RI
19	GND	20	GND
21	COM1_DCD#	22	COM1_DSR#
23	COM1_RXD	24	COM1_RTS#
25	COM1_TXD	26	COM1_CTS#
27	COM1_DTR#	28	COM1_RI
29	GND	30	GND
31	COM0_DCD#	32	COM0_DSR#
33	COM0_RXD	34	COM0_RTS#
35	COM0_TXD	36	COM0_CTS#
37	COM0_DTR#	38	COM0_RI
39	GND	40	GND

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!



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.

Achtung!