MIO-3140 Mini-PCI to SATA Storage Module Startup Manual

Introduction

Advantech introduces its new MIO module, MIO-3140 with Mini-PCI interface for advanced internal storage application. Parallel ATA is the primary internal storage interconnect for the desktop, connecting the host system to peripherals such as hard drives, optical drives, and removable hard drive devices.

Serial ATA is the next -generation internal storage interconnect, designed to replace parallel ATA technology. For simple RAID application, the Mini-PCI card can be connected to the Mini-PCI on a motherboard. With a 32-bit PCI bus, a data rate of 33 MHz allows up to 133 MB/sec of data transfer.

The Mini-PCI card can be adopted into most PC-based platforms without requiring any additional charges.

Packing list

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

- 1 MIO-3140 Mini-PCI storage module
- 1 Startup manual
- 1 CD ROM for MIO-3140 Driver/Utility
- 1 CD-ROM or disks for utility, drivers and manual (in PDF format)
- 1 SATA cable
  - mini jumper x 10 pcs p/n: 1700071000

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.)

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-3140 series Rev. A1.

Part No.2006314000 1st Edition
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Specifications

- Supports up to 2 SATA devices
- Supports SATA RAID 0, 1
- Compatible with miniPCI rev1.0, miniPCI Type IIIA
- Compliant with Serial ATA 1.0 specifications
- Compliant with PCI Specification, revision 2.3.
- OS Drivers Support Windows 2000, Windows XP

Mechanical and Environmental

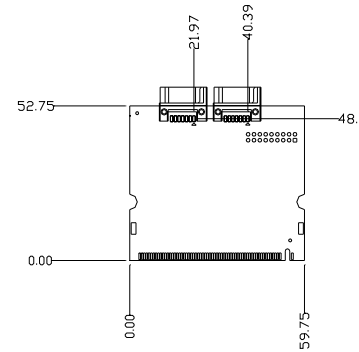
- **Power consumption:** +3.3 V @ 500 mA (Chip)
- **Power requirement:** +3.3 V @ +/- 5% tolerance on power supply
- **Size:** 59.6mm x 52.75mm
- **Operating Temperature:** 0 ~ 60°C
- **Storage Temperature:** -40~85°C

Jumpers & Connectors

Connectors on the board link it to external devices, such as hard disk drives, a keyboard or expansion bus connectors. In addition, the board has a number of jumpers that allow you to configure your system to suit your application.

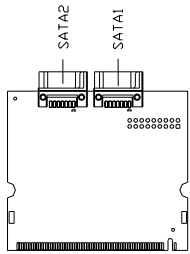
The table below lists the function of each of the jumpers and connectors.

Jumpers	
Label	**Function**
SATA1/2	SATA1/2 Connector
J2	INT SW

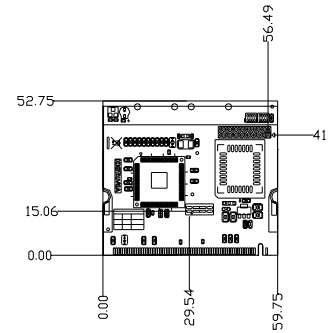


Mechanical Drawing (component side)

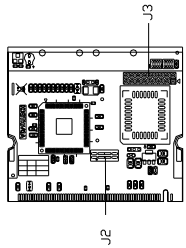
Board Layout



Locating connector (component side)



Mechanical Drawing (solder side)



Locating connector (solder 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.