

Low Profile Serial ATA 2 Port PCI Host

1. Introduction

This Low Profile Serial ATA 2 Port PCI Host Adapter is a PCI to dual Serial ATA host controller board which can support Low profile PCI and regular size PCI both. It provides a 32bit, 33/66 MHz PCI interface on the host side and dual, fully compliant Serial ATA ports on the device side to access SATA storage media such as hard disk drive, floppy disk drive, CD-ROM, CD-RW, DVD-ROM.

The board can be used to upgrade your desktop computer to have dual Serial ATA Channels. It accepts host commands through the PCI bus, processes them and transfers data between the host and Serial ATA devices. The board should be connected to SATA target device and will take the data, serialize it and output it for transmission over the SATA interface. The board can control two independent Serial ATA channels. Each channel has its own Serial ATA bus and will support one Serial ATA device.

The board supports a 32-bit 66 MHz PCI bus revision 2.2 and the Serial ATA Generation 1 transfer rate of 1.5 Gb/s (150 MB/s).

It comes completely with drivers for Windows 98, Windows Millennium, Windows NT 4.0, Windows 2000 and XP.

2. Features

2.1 PCI Interface

- Compliant with PCI Specification, revision 2.2
- Integrated PCI DMA engines
- 32 bit, 33/66MHz fully compliant PCI host interface

2.2 High Speed Serial ATA Interface

- USB specification revision 2.0 compliant
- Dual high speed Serial ATA interface ports, each supporting 1st generation Serial ATA data rates (1.5Gb/s)
- Fully compliant with Serial ATA 1.0 specifications
- Supports Spread Spectrum in receiver
- Independent 256-byte FIFOs (32 bit * 64 deep) per Serial ATA channel for host reads and writes

3. Package Contents

- Low Profile Serial ATA 2 Port PCI Host Adapter
- This Users Manual
- Driver Diskette
- Regular Size PCI Bracket

4. Driver Installation

4.1 Windows® 98 Installation

- For New Windows 98/98 SE Systems
 1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, follow Microsoft procedures to install Windows accordingly.
 2. Once Windows has been installed, double click **My Computer/Control Panel/System**, then click **Device Manager**.
 3. Double click **Other Devices** then **PCI RAID Controller**.
 4. Click **Driver** tab, then **Update Driver**.
 5. Insert the Driver diskette and click **Next**.
 6. Select **Search for a better driver than the one ...**option and click **Next**.
 7. Check **Specify a location**, uncheck the other boxes, type in **A:** and click **Next**. Click **Next** and then **Finish**.
 8. Remove the Driver diskette and click **Yes** to restart Windows to complete driver installation.
- For Existing Windows 98/98 SE Systems
 1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, boot up Windows.
 2. At the **Add New Hardware Wizard**, click **Next**.
 3. Select **Search for the best driver for your device** option and then click **Next**.
 4. Insert the Driver diskette, check **Specify a location**, uncheck the other boxes, type in **A:**, and click **Next**.
 5. Click **Next** and then **Finish** respectively.
 6. Remove the Driver diskette and restart Windows to complete driver installation

4.2 Windows® ME Installation

■ For New Windows ME Systems

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, follow Microsoft procedures to install Windows accordingly.
2. Once Windows has been installed, click **My Computer**, then click **Properties**. Click **Device Manager** tab
3. Double click **Other Devices** then **PCI RAID Controller**.
4. Click **Driver** tab, then **Update Driver**.
5. Insert the Driver diskette, check **Specify the location of the driver (advanced)** and click **Next**
6. Select **Search for the better driver** option, check **Specify a location**, uncheck **Removable Media**, type in **A:**, and click **Next**.
7. Click **Next** and then **Finish**.
8. Remove the Driver diskette and click **Yes** to restart Windows to complete driver installation

■ For Existing Windows ME Systems

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, boot up Windows
2. At the **Add New Hardware Wizard**, check **Specify the location of the driver (advanced)**, and click **Next**.
3. Insert the Driver diskette, check **Specify a location**, uncheck the other boxes, type in **A:**, and click **Next**
4. Click **Next** and then **Finish**.
5. Remove the Driver diskette and restart Windows to complete driver installation

■ Verification of the Proper Installation for Windows 98/98SE/ME or Existing Windows ME Systems

1. Double click **My Computer/Control Panel/System**. Click **Device Manager** tab
2. Double click **SCSI Controllers**, **Silicon Image Sil-3112 Serial ATA Controller** should be listed
3. Highlight **Silicon Image Sil-3112 Serial ATA Controller** and click **Properties**. A message *This device is working properly* is displayed in the dialog box, the driver has been correctly installed. If any error message is displayed, remove **Silicon Image Sil-3112 Serial ATA Controller** and restart your system

4.3 Windows NT 4.0 Driver Installation

- **For New NT 4.0 Systems**

1. After the Serial ATA PCI Host Adapter and attached drives are configured, follow Microsoft procedures to install Windows accordingly.
2. At the **Windows Set-up** screen, press **F6** to specify and add the driver.
3. Press **S**, select **Other**, then press **Enter**.
4. Insert the Driver diskette and press **Enter**.
5. Select **Silicon Image Sil-3112 Serial ATA Controller Driver** and press **Enter**.
6. Press **Enter** to continue and follow on-screen instructions to complete Windows NT 4.0 installation..

- **For Existing Windows NT 4.0 (in old ATA channel) System**

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, boot up Windows. Double click **My Computer/Control Panel/SCSI Adapters**, then click the **Drivers** tab.
2. Click **Add...** then **Have Disk....**
3. Insert the Driver diskette into the floppy drive and type in **A:**, then click **OK**.
4. Highlight **Silicon Image Sil-3112 Serial ATA Controller** and click **OK**.
5. Remove the Driver diskette and restart Windows.

- **Verification of the Proper Installation for Windows NT 4.0**

1. Double click **My Computer/Control Panel/SCSI Adapters**.
2. Highlight **Silicon Image Sil-3112 Serial ATA Controller** and click **Properties**. *This device is working properly* is displayed in the dialog box, the driver has been correctly installed.

4.4 Windows 2000 Driver Installation

- **For New Windows 2000 Systems**

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, follow Microsoft procedures to install Windows accordingly.
2. At the **Windows Set-up** screen, press **F6** to specify and add the driver
3. Insert the Driver diskette. Press **S**, then press **Enter**.
4. Select **Silicon Image Sil-3112 Serial ATA Controller Driver** and press **Enter**.
5. Press **Enter** to continue and follow on-screen instructions to complete installation

- **For Existing Windows 2000 (in old Ata channel) Systems**

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, boot up Windows
2. At the **Found New Hardware Wizard**, click **Next**.
3. Select **Search for a suitable driver for my device (recommended)** and click **Next**
4. Insert the Driver diskette into the floppy drive, check **Specify a location**, uncheck the other boxes, click **Next**, type in **A:**. Click **OK** and then **Next** to continue.
5. If the **Digital Signature Not Found** message appears, click **Yes**. (**Note** If prompted for Windows 2000 CD-ROM, insert the CD and click **OK**. Type in **D:\I386**, click **OK** and **Finish**. (assuming **D:** is your CD-ROM drive))
6. Click **Finish**, remove the Driver diskette and click **Yes** to restart Windows to complete driver installation

4.5 Windows XP Driver Installation

- **For New Windows XP Systems**

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, follow Microsoft procedures to install Windows accordingly.
2. At the **Windows Set-up** screen, press **F6** in order to specify and add the driver.
3. Insert the Driver diskette. Press **S** then press **Enter**.
4. Select **Silicon Image Sil-3112 Serial ATA Controller Driver** and press **Enter**
5. Press **Enter** to continue and follow on-screen instructions to complete Windows XP installation. **Note:** When the **Software Installation** warning pops up, click **Yes**. And when the **Hardware Installation** warning pops up, click **Yes** again.

- **For Existing Windows XP (in old Ata channel) Systems**

1. After the *Serial ATA PCI Host Adapter* and attached drives are configured, boot up Windows
2. At the **Found New Hardware Wizard**, check **Install from a list or specific location (advanced)**, then click **Next**.
3. Insert the Driver diskette. Check **Include this location in the search**, uncheck the other box, type in **A:**, and click **Next**.
4. When a warning message pops up, click **Continue Anyway**, then click **Finish**.
5. Remove the Driver diskette and restart Windows.

- **Verification of the Proper Installation for Windows 2000/XP**

1. Double click **My Computer/Control Panel/System**.
2. Click **Hardware** then click **Device Manager**
3. Double click **SCSI and RAID Controllers**, then double click **Silicon Image Sil-3112 Serial ATA Controller** to display driver properties.
4. A message ***This device is working properly*** is displayed in the dialog box, the driver has been correctly installed.

5. Technical Support

If you encounter any technical problem, please contact us through:

Taiwan First Line Electronics Corp.

**No. 40, Chung-Shan Road, Tu-Cheng Industrial Area, Taipei Hsian,
Taiwan, R.O.C.**

Web site: www.bafo.com.tw

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