

# AsantéFAST™ 10/100

PCI Ethernet Adapter  
Installation Guide



# **AsantéFAST™ 10/100**

## **PCI Ethernet Adapter Installation Guide**

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# 1

## Introduction

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### Conventions

This manual describes the installation procedures for the following product:

- AsantéFAST 10/100 adapter for PCI

It also applies to two platforms:

- PC compatible
- Apple Power Macintosh

Most of the information applies to both products and platforms. When the information is specific to a product or platform, it is noted in the heading for the section or subsection.

### AsantéFAST 10/100 Adapter for PCI

The AsantéFAST 10/100 adapter for PCI gives you all-in-one compatibility to 10BASE-T and 100BASE-TX Ethernet networks for both PCI-based PC and Power Macintosh computers. It's ideal for resource intensive CAD/CAM, client-server database, multimedia, pre-press, mission-critical, and server applications.

Install the AsantéFAST 10/100 adapter on your existing 10Mbps (10BASE-T) network to take advantage of the high-performance design and high-speed PCI bus right from the start. Then, when it's time to switch to 100Mbps (100BASE-TX), simply plug the cable into an AsantéFAST 100 hub or other 100BASE-TX-compliant hub and your adapter is automatically ready to run at the 100Mbps speed. A single RJ-45 port and drivers support both 10 and 100Mbps operations.

Using NWay™ auto-negotiation, the adapter senses the hub speed and configures the adapter accordingly. For added ease-of-use, the AsantéFAST 10/100 adapter has four LED lights for instant troubleshooting.



## AsantéFAST 10/100 adapter for PCI Features

- 32-bit bus mastering design allows maximum throughput without loading the host CPU.
- Installs easily with plug-and-play auto-configuration through the PCI BIOS (system ROM).
- Easily visible LEDs indicate 10Mbps operation, 100Mbps operation, Link integrity and Data traffic.
- NWay™ auto-negotiation determines 10Mbps operation, 100Mbps operation, or full duplex operation automatically.
- Supports full duplex mode for 20 or 200Mbps operation.
- 100% compliant with IEEE 802.3 10BASE-T and 802.3u 100BASE-TX Ethernet standards.
- Supports major network operating systems for PC and Power Macintosh platforms.
- Jumperless and switchless operation.
- Compliant with PCI specifications, version 2.0.

## Package Contents

Please make sure that you have the following items:

- AsantéFAST 10/100 adapter for PCI
- Installation Guide (this manual)
- Release Notes
- Registration Card
- One Driver Disk which includes the following software for both PCI-based PC and Power Macintosh computers:
  - Device drivers for popular network operating systems
  - Driver-dependent supporting files
  - Diagnostic utility software
  - Driver installation documents

△ Note: The included Driver Disk is DOS formatted. Apple Computer's System 7.5 OS can read the installation program and the driver from this disk. To use this disk on PCI-based Power Macintosh computers, make sure that you do not disable the System Extensions during power-up and that PC Exchange is enabled in the Extensions Manager.

## PCI Local Bus

The PCI (Peripheral Component Interconnect) local bus is an industry standard, high-performance bus designed for high I/O throughput. The 32-bit PCI bus runs at a maximum of 33MHz, while handling a maximum data transfer rate of 132 MBytes/second.

One of the advantages of the PCI bus is that it is processor-independent. The Asanté PCI adapters are capable of working with both PCI-based PC and Power Macintosh computers. PCI devices are also self-configuring, making them very easy to install and use.

The Asanté PCI adapters use 32-bit bus mastering architecture allowing maximum throughput with low CPU utilization.

**Δ Important:** The PCI bus slot used must support bus-mastering operations.

# 2

## Installing the Asanté PCI Adapter

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### Installing the Adapter

The following instructions explain how to install the Asanté PCI adapter.

△ **Note:** You do not need to set any jumpers or switches on the adapter.

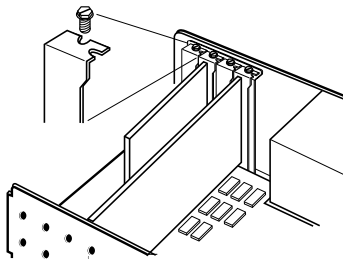
1 Turn the power off and remove the computer cover.

△ **Important:** A network adapter is sensitive to static electricity and must be handled carefully. If you do not handle the adapter properly, you can damage it and/or your system.

2 Align the adapter's edge connector with a PCI bus slot.

△ **Important:** The PCI bus slot used must support bus-mastering operations.

3 Push the adapter down into the slot until the adapter locks into place as shown below.



4 Replace the computer cover.



## Connecting the Adapter to the Network

The AsantéFAST 10/100 adapter provides a single RJ-45 port for connecting the adapter to your network. Using NWay™ auto-negotiation, the adapter senses the hub's speed and sets the adapter to run at either 10Mbps or 100Mbps. See *Configuring 10Mbps, 100Mbps or Full Duplex Operation* on page 2-3 for more details.

The AsantéNIC-PCI adapter provides both RJ-45 and AUI ports for your network. Easy on-screen configuration lets you select the port to use.

△ **Important:** Connection to a 100BASE-TX hub for 100Mbps operation requires a Category 5 unshielded twisted-pair (UTP) cable. The maximum length from the 100BASE-TX hub to the adapter is 100 meters. Connection to a 10BASE-T hub for 10Mbps operation requires a Category 3, 4, or 5 UTP cable.

## Connecting a UTP Cable

To connect your UTP cable to the network using the RJ-45 connector, follow the instructions below:

- 1 Plug the RJ-45 connector on one end of your UTP cable into the adapter's RJ-45 port.
- 2 Plug the other end of your UTP cable into the network hub or wall socket connected to a network hub.
- 3 Turn the computer power on.

## Configuring the Adapter

### Self-Configuring the Adapter

One of the advantages of PCI is that all of its devices are self-configuring. The Asanté PCI adapter is designed to utilize this feature.

To configure the adapter, plug it into a PCI slot with bus-mastering capability. During system initialization at power-up, the PCI BIOS (system ROM) configuration software automatically selects an unused interrupt line and I/O addresses for use with the adapter. You do not need to set interrupts, I/O addresses, jumpers, or switches to configure the adapter.

### Computers without the Self-Configuring Feature

Early versions of PCI BIOS do not support the PCI specification, version 2.0. To successfully install the adapter in computers without the self-configuring feature, you may need to modify IRQ jumper settings on the computer's motherboard and/or modify the PCI BIOS setup with the setup utility that came with your computer system. Refer to your computer manuals for information on changing the BIOS setup for a PCI bus.

- △ **Note:** Check with your computer manufacturer to see if your computer properly supports the PCI Specification, version 2.0.
- △ **Note:** It is recommended that you verify the PCI configuration using the PCI BIOS setup utility after installing the adapter. Check that your PCI configuration does not conflict with other bus configuration.

## Configuring 10Mbps, 100Mbps, or Full Duplex Operation

The AsantéFAST 10/100 adapter supports the NWay auto-negotiation feature. NWay auto-negotiation allows the connected devices to automatically configure to the highest performance mode of operation. The hierarchy of this mode of operation is listed below:

- 100BASE-TX Full Duplex
- 100BASE-TX
- 10BASE-T Full Duplex
- 10BASE-T

After power-up initialization, the adapter automatically connects at the appropriate speed (10Mbps or 100Mbps) and/or full duplex without user intervention. The full duplex operation can only be configured with a hub or a switch product that supports it.

If you are initially planning to use the adapter to run at 10Mbps speed, when you are ready to upgrade to 100Mbps (100BASE-TX), it will not be necessary to modify the configuration or settings. The same driver will run in both 10Mbps or 100Mbps speed. Another benefit of NWay auto-negotiation is that a connection will not occur without a common mode of operation between connecting devices. This preserves network integrity and minimizes network downtime.

## Testing the Adapter

Conducting a test is recommended after performing a first-time installation of the adapter. A successful test performance ensures that the adapter is operating properly. A diagnostic program for testing the adapter is included on the Driver Disk. This program runs a number of tests and indicates the results with PASS or FAIL.

Please refer to Chapter 4 for instructions on how to use the diagnostic program.

# 3

## Installing Network Drivers

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### Network Operating Systems Supported

After installing, configuring and testing the Asanté PCI adapter, you are ready to install network drivers and work with your network operating system.

The network operating systems supported are:

#### PC Networks

- Novell NetWare
- Microsoft Windows for Workgroups
- Microsoft Windows 95
- Microsoft Windows NT
- Microsoft LAN Manager
- NDIS- and ODI-compliant operating systems

#### Power Macintosh Networks

- Apple System 7.5 or higher
- AppleShare
- Novell NetWare for Macintosh
- AppleTalk
- MacTCP

This chapter describes driver installation in the following environments:

#### PC Networks:

- Novell NetWare 3.x Client
- Novell NetWare 4.x Client
- Microsoft Windows for Workgroups
- Microsoft Windows NT Workstation

#### Power Macintosh Networks:

- Power Macintosh Open Transport Driver



## Other Operating Systems

In general, the adapter supports a network operating system (NOS) that works with NDIS and ODI drivers. For instructions on installing and configuring the adapter with other operating systems, refer to the INSTALL.DOC files in each specific NOS sub-directory on the Driver Disk.

△ **Note:** The same installed driver can be used for 10Mbps or 100Mbps operation with the AsantéFAST 10/100 adapter.

## Installing Network Specific Drivers

### Novell NetWare 3.x Client

This section explains how to install Novell NetWare version 3.x ODI client software.

- 1 Create a directory named NETWARE on your C drive by typing the following command at the DOS prompt:  
MD C:\NETWARE
- 2 Insert the Asanté Driver Disk into drive A.
- 3 Copy the following files to the NETWARE directory on your C drive:  
  
COPY A:\NETWARE\NW3.X\CLIENT\NET.CFG C:\NETWARE  
COPY A:\NETWARE\NW3.X\CLIENT\ASANTPCI.COM C:\NETWARE  
COPY A:\NETWARE\NW3.X\CLIENT\LSL.COM C:\NETWARE  
COPY A:\NETWARE\NW3.X\CLIENT\IPXODI.COM C:\NETWARE  
COPY A:\NETWARE\NW3.X\CLIENT\NETX.COM C:\NETWARE
- 4 Check your CONFIG.SYS file to make sure that the following line appears:  
DEVICE=C:\DOS\SETVER.EXE  
If the line doesn't appear, type it in, then save the file.  
  
△ **Note:** The SETVER.EXE file must be in the C:\DOS directory.
- 5 Remove the Driver Disk from the floppy drive.
- 6 Restart your computer.

- 7 To run NetWare, type the following four commands, (in the following sequence) at the C:\NETWARE prompt:

```
LSL
ASANTPCI
IPXODI
NETX
```

- 8 Change to the network drive (usually F), and log in to the network.
- 

## Novell NetWare 4.x Client

This section explains how to install Novell NetWare version 4.x client software.

- 1 Run the NetWare Client Install program that came with Netware 4.x. Follow the instructions for the first three steps of the NetWare Client Install program as required.
- 2 At step 4, press Enter to install the driver for your adapter.
- 3 Insert the Asanté Driver Disk into the drive when prompted, then type the following:  

```
A:\NETWARE\NW4.X\CLIENT
```
- 4 Press Enter.  
The Network Board window appears.
- 5 Select **Asanté PCI Network Adapter** and press Enter.  
  
The settings for the Asanté PCI Network Adapter window appear. It displays the selected settings for Base I/O Port, Hardware Interrupt, and Media Frame Type. You do not need to modify these settings.
- 6 Press **ESC** to continue.
- 7 At step 5, press Enter to continue with the NetWare installation.

- 8        Insert the appropriate NetWare Client Install disk when prompted.
  - 9        Press Enter to exit to the DOS prompt.
  - 10       Restart the computer to load the network drivers.
  - 11       To log in to the network, type the following:  
F:login
- 

## Microsoft Windows for Workgroups

This section explains how to install the drivers to use your adapter with Windows for Workgroups. The instructions assume that you have previously installed Windows for Workgroups 3.11 on the computer.

- 1        Start Windows for Workgroups.
- 2        From the Program Manager, double-click the **Network group** icon.
- 3        Double-click the **Network Setup** icon.  
The Network Setup window appears.
- 4        Click the **Networks...** button.  
The Networks window appears.
- 5        Click the radio button to Install Microsoft Windows Network.
- 6        Click the radio button for No additional network.
- 7        Click **OK** or press Enter.
- 8        Click the **Drivers...** button.
- 9        Click the **Add Adapter...** button.  
The Add Network Adapter window appears.
- 10       Select **Unlisted or Updated Network Adapter** from the list.
- 11       Click **OK** or press Enter.  
The Install Driver window appears.

- 12        Insert the Asanté Driver Disk into drive A.
- 13        Type the following in the text box:  
          A:\WFW  
          (The text A:\ may already be provided for you.)
- 14        Click **OK** or press Enter.  
          The Unlisted or Updated Network Adapter window appears. Asanté PCI  
          Network Adapter is listed in the window.
- 15        Click **OK** or press Enter.  
          The Network Drivers window appears.
- 16        Click the **Close** button.  
          The Network Setup window appears.
- 17        Click **OK** or press Enter.  
          The Microsoft Windows Network Names window appears. Your User Name,  
          Workgroup, and Computer Name may already appear in the text boxes.
- 18        Type your User Name, Workgroup, and Computer Name if necessary.
- 19        Click **OK** or press Enter.  
          The Install Driver window appears.
- 20        Insert the requested disk from the Windows for Workgroups disk set into  
          drive A when prompted, then click **OK**.
- 21        Insert the requested disk from the Windows for Workgroups disk set into  
          drive A when prompted, then click **OK**.
- 22        Insert the Asanté Driver Disk into drive A when prompted.
- 23        Type the following in the text box:  
          A:\WFW  
          (The text A:\ may already be provided for you.)
- 24        Click **OK** or press Enter.  
          A message appears stating that Network Setup has modified the CONFIG.SYS,  
          AUTOEXEC.BAT, and SYSTEM.INI files.

- 25 Click **OK** or press Enter.  
The Windows Setup window appears.
  - 26 Click the button that restarts your computer.
- 

## Microsoft Windows NT Workstation

This section explains how to install the driver to use your adapter with Microsoft Windows NT. The instructions assume that you have previously installed Windows NT on your computer.

- △ **Note:** For instructions on installing the driver to use the adapter with Microsoft Windows NT Advanced Server, refer to the INSTALL.DOC file in the specific Windows NT subdirectory.
- 1 Start Windows NT.
  - 2 Open the **Main** group window and double-click the **Control Panel**.
  - 3 Double-click the **Network** icon.  
The Network Settings window appears.
  - 4 Select **Add Adapter**.  
The Add Network Adapter window appears.
  - 5 Select the <Other> **Requires Disk From Manufacturer** option, then click Continue.
  - 6 Insert the Driver Disk into drive A and type the following at the Insert Disk window:  
  
A:\NT31 (if you're using Windows NT version 3.1) or  
A:\NT35 (if you're using Windows NT version 3.5)
  - 7 Press Enter.  
The Select OEM Option window appears with AsantéFAST 10/100 Adapter or AsantéNIC-PCI Adapter as options.
  - 8 Select the appropriate PCI adapter.

- 9 Click **OK**.  
The AsantéFAST 10/100 Adapter Setup window or AsantéNIC-PCI Adapter Setup window appears with Connection Type highlighted.
  - 10 Select the appropriate Connection Type from the drop-down menu.
  - 11 Click **OK**.  
The files are copied to the hard drive and then the Network Settings window reappears.
  - 12 Click **OK** to complete the installation.
  - 13 Restart the computer.
- 

## Power Macintosh Open Transport Driver

The Driver Disk includes Asanté's Open Transport PCI device driver for the Power Macintosh. Asanté's Open Transport driver supports AppleTalk and TCP/IP protocols simultaneously.

This section explains how to install the Open Transport driver for the adapter on your PCI-based Power Macintosh.

△ **Important:** To use the Driver Disk on your Power Macintosh, make sure that you do not disable the System Extensions during power-up and that PC Exchange is enabled in the Extensions Manager.

- 1 Insert the Asanté Driver Disk into the floppy drive and double-click the **Driver Disk** icon.
- 2 Double-click on the **Power Macintosh** folder.
- 3 Double-click the **AsantéFAST Installer** icon and click OK when the Installer banner appears.
- 4 The Easy Install dialog box appears.

△ **Important:** To properly install the Open Transport driver, you must use the Installer program. Do not drag the files to the System Folder; doing so may not install the files properly.

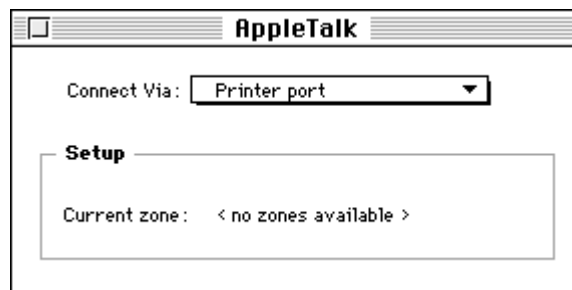
5 Click the **Install** button.  
The Installer program examines your Macintosh and installs the appropriate driver.

6 Click the **Restart** button when the message appears stating that the installation was successful.

After successfully installing the adapter and the driver, you need to configure the AppleTalk control panels on the Macintosh.

7 Select **Control Panels** from the Apple Menu.

8 Select **AppleTalk** from the Control Panels submenu.  
The AppleTalk control panel appears.



9 Open the **Connect Via:** drop-down menu and select the Ethernet slot number where the adapter is installed.

10 Close the AppleTalk control panel, then click **Save**.

△ **Note:** To verify the Ethernet connection, use the Chooser. This displays the availability of network printers, file servers, and/or shared disks, verifying that you are connected to the network. If you do not see network devices in the Chooser, check that at least one of the other network devices is powered on before assuming there's a problem with your Ethernet connection.

# 4

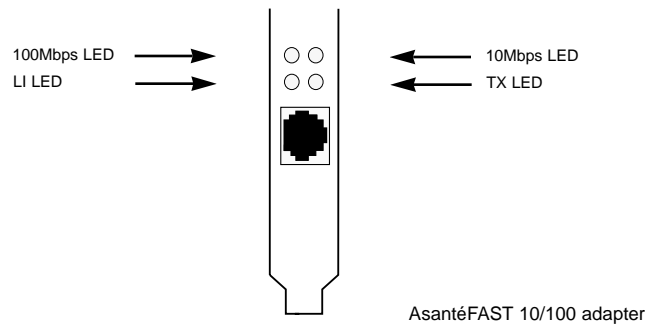
## Troubleshooting

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### LED Indicators

#### Overview

The figure below shows the LED indicators that illustrate the presence of Link Integrity (LI), Data Traffic (TX), 100Mbps operation and 10Mbps operation for installation verification and diagnostic purposes.



## Link Integrity LED (AsantéFAST 10/100 )

The green Link Integrity (LI) LED indicates a valid connection to the network. If link integrity is not detected, there is a link failure and the LI LED will be off. The transmit and receive functions of the adapter also will be disabled.

State	Description
On	<ul style="list-style-type: none"><li>• Normal data packets are received or link integrity is detected</li></ul>
Off	<ul style="list-style-type: none"><li>• No unshielded twisted-pair cable is connected</li><li>• No power source to hub</li><li>• Unshielded twisted-pair cable is faulty</li><li>• Unshielded twisted-pair wire exceeds the recommended length</li></ul>

## Data Traffic LED

The amber Data Traffic (TX) LED indicates the activity (transmit data) status of the adapter controller board. The LED should blink when data packets are being transmitted from the cable.

State	Description
Blinking	<ul style="list-style-type: none"><li>• Data packets being transmitted</li></ul>
Off	<ul style="list-style-type: none"><li>• Power off</li><li>• No data packets being transmitted</li></ul>

## 100Mbps Operation LED

The green 100Mbps (100) LED indicates the configuration of the adapter for 100Mbps (100BASE-TX) operation.

State	Description
On	<ul style="list-style-type: none"><li>Configured for 100Mbps operation.</li></ul>
Off	<ul style="list-style-type: none"><li>Not configured for 100Mbps operation.</li></ul>

## 10Mbps Operation LED

The amber 10Mbps (10) LED indicates the configuration of the adapter for 10Mbps (10BASE-T) operation.

State	Description
On	<ul style="list-style-type: none"><li>Configured for 10Mbps operation.</li></ul>
Off	<ul style="list-style-type: none"><li>Not configured for 10Mbps operation.</li></ul>

△ **Note:** When the computer powers up, the 10Mbps Operation LED light comes on as the default. Once the device driver has been loaded into memory and the appropriate network speed is automatically sensed, the 10 or 100 Mbps LED will be lit.

## Using the Diagnostic Program

The diagnostic program runs diagnostic tests to help you identify problems on the adapter and provides configuration information on your adapter.

### PC Diagnostic Program

To run the diagnostic program on your PC, follow the procedure below.

- 1           Insert the Asanté Driver Disk into drive A.
- 2           At the DOS prompt, type the following command:  
          A:\UTILITY\DIAGPCI
- 3           Press Enter.  
          A window appears displaying a warning message.
- 4           Press C to continue (or ESC to abort the diagnostic program).  
          The diagnostic program searches for adapters installed in your computer system. A screen appears displaying the adapters found.
- 5           Select the appropriate adapter (by using the UP or DOWN arrow key) from the list and press Enter.  
  
          A screen appears displaying the following menu options:
  - Loopback Tests** — tests the adapter by sending packets across the components for loopback tests.
  - Adapter Status** — displays the adapter configuration information such as PCI slot number, base I/O address, interrupt line, media type, network speed, and Ethernet node address.
  - Go Back to previous screen
- 6           Select **Loopback Tests** and press Enter.  
          The program runs a series of tests. The results are displayed after each test with a PASSED or FAILED indication.

- 7        When the tests finish, verify the results to make sure that all tests passed.  
  
          △ If a test fails, check that the adapter is seated properly in a PCI bus-mastering slot or try installing the adapter in a different PCI slot and run the tests again.
  - 8        Press any key to return to the menu option screen.  
  
          To use the Adapter Status menu command to display the adapter configuration information, follow the procedure below; otherwise, skip to step 11.
  - 9        Select **Adapter Status** and press Enter.  
  
          The diagnostic program reads the configuration information from the adapter and displays this information on the screen.  
  
          △ **Note:** For AsantéFAST 10/100 only, if the Network Speed status is shown as Unknown, it may be that the network cable is not connected or is bad.
  - 10       Press any key to return to the menu option screen.
  - 11       Select **Exit to DOS** and press Enter.
- 

## Power Macintosh Diagnostic Program

To run the diagnostic program on your Power Macintosh:

- 1        Open the Apple Menu and select **Control Panels**.
- 2        Select **AppleTalk** from the Control Panels submenu.  
          The AppleTalk control panel appears.
- 3        Select **Printer port** from the Connect Via: drop-down menu.
- 4        Close the AppleTalk control panel, then click **Save** to save changes.

- 5        Insert the Asanté Driver Disk into the floppy drive and double-click the diskette icon to open it.
- 6        Double-click the **Power Macintosh** folder icon.
- 7        Double-click the **Utility Folder** icon.
- 8        Double-click the **Asanté Troubleshooter for PCI** icon to start the program.
- 9        Click **OK** in the Troubleshooter start-up screen.  
The Troubleshooter loads and displays the main window with the following tests:
  - Loopback Test** — verifies the operation of the network interface circuitry and the adapter by transmitting and receiving special packets.
  - Ping-Pong Test** — verifies communication with another Macintosh on the network.
  - Bandwidth Utilization Test** — calculates the total bandwidth utilization of the network.
- 10       Click the checkboxes to select the Loopback Test, the Ping-Pong Test, and the Bandwidth Utilization Test.
- 11       Click the highlighted slot number where the adapter is installed.
- 12       Click the **TEST** button to start the test sequence.  
If the Bandwidth Utilization Test is selected, press any key to stop packet collection. When the tests finish, the test results are displayed in the Troubleshooter window.
- 13       Verify the results to make sure that all tests passed.  
△ If a test fails, check that the adapter is seated properly in a PCI slot or try installing the adapter in a different PCI slot and run the tests again.
- 14       Click **QUIT** in the Troubleshooter window or select Quit from the menu bar.
- 15       Open the Apple Menu and select **Control Panels**.

- 16 Select **AppleTalk** from the Control Panels submenu. The AppleTalk control panel appears.
  - 17 Open the Connect Via: drop-down menu and select the Ethernet slot number where the adapter is installed.
  - 18 Close the AppleTalk control panel.
  - 19 Click **Save** to save changes.
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## Asanté Driver Local Statistics (ADLS) Program

To run the Asanté Driver Local Statistics (ADLS) program on your Power Macintosh to display the configuration information on the adapter, follow the procedure below.

- 1 Insert the Asanté Driver Disk into the floppy drive and double-click the diskette icon to open it.
- 2 Double-click the **Power Macintosh** folder icon.
- 3 Double-click the **Utility Folder** icon.
- 4 Double-click the **Asanté ADLS for PCI** icon to start the program.  
  
The ADLS window appears, displaying the following adapter configuration information: driver version, PCI slot number, adapter type, AppleTalk version, transmit status and receive status.
- 5 Verify the configuration information on the adapter.
- 6 Select **Quit** from the menu bar to close the ADLS program.

# A

## Specifications

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### AsantéFAST 10/100 Adapter

#### Systems Supported

- PCI Local Bus PCs
- PCI-based Power Macintosh computers

#### Interface Connections

- Single RJ-45 (Using NWay auto-negotiate 10BASE-T or 100BASE-TX operation)

#### Bus Supported

- PCI, 32-bit bus mastering

#### LAN Drivers Available

- PC: ODI and NDIS drivers
- Power Macintosh: Open Transport

#### LEDs

- 4 LEDs indicate link integrity, data traffic, 10Mbps operation, and 100Mbps operation

#### 100BASE-TX Link Specifications

- Cable: 2 pairs of Category 5 unshielded twisted-pair or shielded twisted-pair (ISO 11801 or ANSI/EIA/TIA 568A)
- Maximum Length: 100 m (328 ft.) computer to wiring closet. Maximum network diameter 205 m (672 ft.) without bridging or routing

#### Power Requirements

- +5 volts @ 0.8 Amp. maximum

#### Environmental Conditions

- Temperature: 0oC to 50oC
- Relative Humidity: 5% to 85% non-condensing

#### Standards Compliance

- IEEE 802.3u 100BASE-TX
- IEEE 802.3 10BASE-T
- PCI 2.0 specifications
- FCC Part 15J Class A
- CE Class B



# B

## Technical Support

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### Contacting Technical Support

To contact Asanté Technical Support:

Telephone	(800) 622-7464
Fax	(801) 566-3787
Fax-Back	(800) 741-8607
E-mail	support@asante.com
Worldwide Web Site	<a href="http://www.asante.com">http://www.asante.com</a>

### Technical Support Hours

6:00 AM to 5:00 PM Pacific Time USA, Monday-Friday





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