PROMISE® TECHNOLOGY, INC.

SATA300 TX4302
USER MANUAL

Version 1.0

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Contents

Chapter 1: Introduction

- About This Manual, below
- Overview (page 2)
- SATA300 TX4302 Controller (page 2)
- Specifications (page 2)
- Key Features and Benefits (page 3)

Thank you for purchasing Promise Technology's SATA300 TX4302 Controller card.

About This Manual

This *User Manual* describes how to setup, use and maintain the SATA300 TX4302 Serial ATA Controller card.

This manual includes a full table of contents, chapter task lists and cross-references to help you find the specific information you are looking for.

Also included are four levels of notices:

Note

A *Note* provides helpful information such as hints or alternative ways of doing a task.

Important

An *Important* calls attention to an essential step or point required to complete a task. Important items include things often missed.

Caution

A *Caution* informs you of possible equipment damage or loss of data and how to avoid them.

Warning

A *Warning* notifies you of probable equipment damage or loss of data, or the possibility of physical injury, and how to avoid them.

Overview

The PC which you are using either already contains an SATA300 TX4302 Controller card installed by a third-party or you have acquired an SATA300 TX4302 Controller card retail product for your existing PC and plan to install the card yourself.

- For PC owners wishing to install their SATA300 TX4302 Controller card, go to "Chapter 2: Installation" on page 5.
- For PCs with an SATA300 TX4302 Controller card already installed, and you are experiencing any difficulties with the disk drives being recognized by the card, go to "Chapter 6: Support" on page 25.
- If your operating system has crashed for some reason or you have downloaded updated drivers from the Promise website (www.promise.com/support), you may wish to reinstall software drivers for the SATA300 TX4302 Controller card. See "Chapter 3: Install Drivers" on page 9.

SATA300 TX4302 Controller

Promise originally designed the SATA300 TX4302 as a cost-effective, high performance controller cards that add performance and/or reliability to PC desktops and/or servers using Serial ATA drives.

SATA300 TX4302 has four independent data channels (ports), two internal and two external, to support a maximum of four Serial ATA hard disk drives.

The SATA300 TX4302 is only a controller card. It is not capable of creating a Redundant Array of Independent Disks (RAID). For comparable products with RAID capability, consider the Promise FastTrak TX Series Serial ATA RAID Controller cards.

Specifications

- Low-profile board
- PCI Slot: 66MHz (recommended) or 33MHz
- Controller card dimensions (HWD): 2.25 x 4.69 x 0.33 inches (57 x 119 x 8 mm)
- Operating temperatures: 32° to 122°F (0°C to 50°C)
- Operating humidity: 5% to 95% non-condensing

Key Features and Benefits

The following information offers an overview of the major features of your new Promise SATA300 TX4302 Controller.

Advanced Hardware Design	
Features	**Benefits**
Supports 66MHz PCI bus motherboards (automatically backward compatible with 33MHz PCI slots)	Allows maximum data transfers of up to 266MB per second (133 MB/s in 33 MHz slot) over the bus to dramatically reduce the time to save and retrieve large files.
Supports NCQ/TCQ	Command queuing increases I/O performance by intelligent reordering data requests to access your data more quickly.
Independent data channels for Serial ATA drives	Drives can multiply their data transfer performance when striped together and each drive uses a separate data channel.
Built-in SMBus connector	Supports Promise SuperSwap 4100 and 1100 disk drive enclosures.
PCI Plug-n-Play, PCI Interrupt sharing and coexists with motherboard IDE and SCSI controllers	Easy to install; supports up to 4 Serial ATA drives on the Controller card while still supporting 4 devices on motherboard ATA controller.
Employs the latest Promise PCI Serial ATA ASIC technology	Fully supports Serial ATA specifications with 300 MB/sec timing and CRC error-checking at high speeds.
DOS based flash upgrade of BIOS and Firmware	Verifies proper file, option to backup existing file. Download and flash the latest BIOS version from the Promise website
Configuration Utility for Windows	Installed automatically, appears as a taskbar icon, use for controller monitoring, firmware upgrades, drive information and SMART status.

Compatibility	
Features	**Benefits**
Complies with PCI v2.3 Local Bus standard	Provides highest level of hardware compatibility.
Complies with SATA Specification 2.5	Provides full compatibility with first generation Serial ATA hard drives.
Compliant with PCI Bus Master standard. PCI Bus Master support	Provides 32-bit I/O and, Bus Master, and Serial ATA performance for optimal system performance.
Tested compatibility to coexist with motherboards that have integrated IDE controllers	Improves system performance and minimizes system conflicts for new and existing installations.
Features LBA support	Supports drives greater than 137 GB capacity.
Supports BIOS Boot Specification	All arrays attached to the SATA300 TX4302 Controller card appear in the BBS-compliant motherboards BIOS boot list.
Compatible with Promise SuperSwap enclosures	Provides enclosure management including fan, temperature and voltages.
Multiple OSes Supported	Windows Server 2003, XP Home and Professional

Chapter 2: Installation

- Unpack the SATA300 TX4302 Card, below
- Install the SATA300 TX4302 Card (page 6)
- Install the Disk Drives (page 7)

This section is designed to quickly get your SATA300 TX4302 Serial ATA Controller card up and running.

Unpack the SATA300 TX4302 Card

When you receive the SATA300 TX4302 card, the package should contain the items listed below:

- SATA300 TX4302 Serial ATA Controller card
- Quick Start Guide
- Two 65cm internal SATA drive cables
- Two 1m external SATA drive cables
- Low-profile mounting bracket
- CD with drivers and *SATA300 TX4302 User Manual*

If ANY of the contents are missing or appear to be damaged, please contact your dealer or distributor immediately.

	Warning
	Before installing the adapter into an existing system, backup any important or useful data. Failure to follow this accepted PC practice could result in data loss.

|	**Warning**
	The SATA300 TX4302 Controller card, like other parts of your system, is subject to damage by static electricity. Be sure that you're properly grounded (Promise recommends that you wear an anti-static strap or touch a grounded object) and that you unplug your system before installing the SATA300 TX4302.

	Note
	The SATA300 TX4302 Controller is a PCI Plug-n-Play (PnP) devices. No changes are necessary in the Motherboard CMOS Setup for resources or drive types in most applications.

Install the SATA300 TX4302 Card

The SATA300 TX4302 Controller card fits into any available PCI slot on your PC's motherboard (below):

- 32-bit PCI slot (must be PCI 2.2 or 2.3 compliant)
- The 32-bit portion of a 64-bit PCI or PCI-X slot

Attaching screw

System frame

Bracket

SATA300 TX4302
Controller card

Motherboard
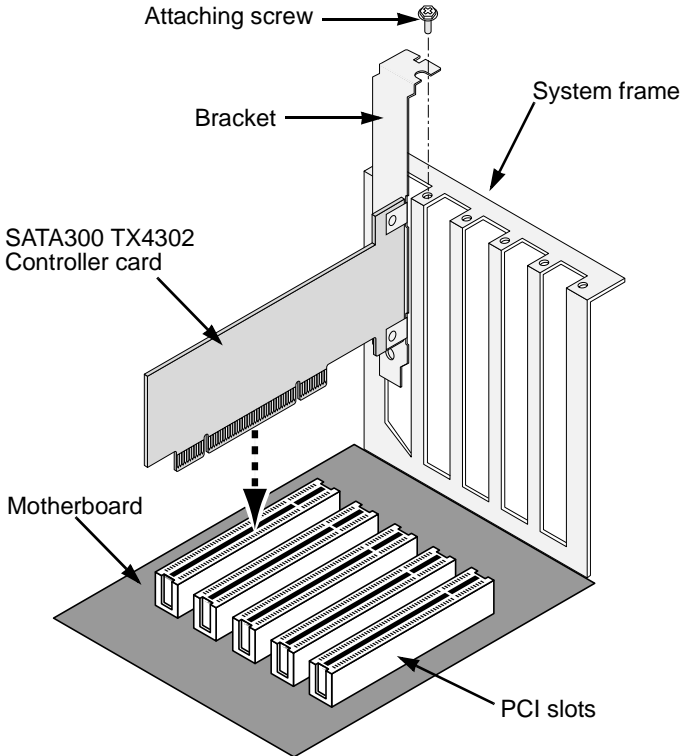
PCI slots

1. Remove the cover of your system.
2. Remove the inside slot cover of an available 32-bit PCI slot on the motherboard.
3. Install the SATA300 TX4302 card into the open PCI slot. Secure the bracket to the system's frame.

   Optional. For low-profile installations, remove the full-length bracket from the SATA300 TX4302 card and attach the low-profile bracket.
4. Fasten the controller card bracket to the system case.

Install the Disk Drives

The SATA300 TX4302 supports up to two internal Serial ATA drives and up to two external Serial ATA drives.

Caution

Use of removable disk drive enclosures other than Promise Technology's SuperSwap is not supported and may result in performance loss or other undesired results.

1. Install the disk drives into the drive bays of your system.
2. Attach the power cables to the disk drives.
3. Attach one internal Serial ATA data cable to a Serial ATA disk drive installed in your system. Then attach the other ends of the cables to the connectors on Ports 3 and 4 of the SATA300 TX4302 plus card (below).
4. Attach one external Serial ATA data cable (not included) to an external Serial ATA disk drive enclosure. Then attach the other ends of the cables to the connectors on Ports 1 and 2 of the SATA300 TX4302 plus card (below).
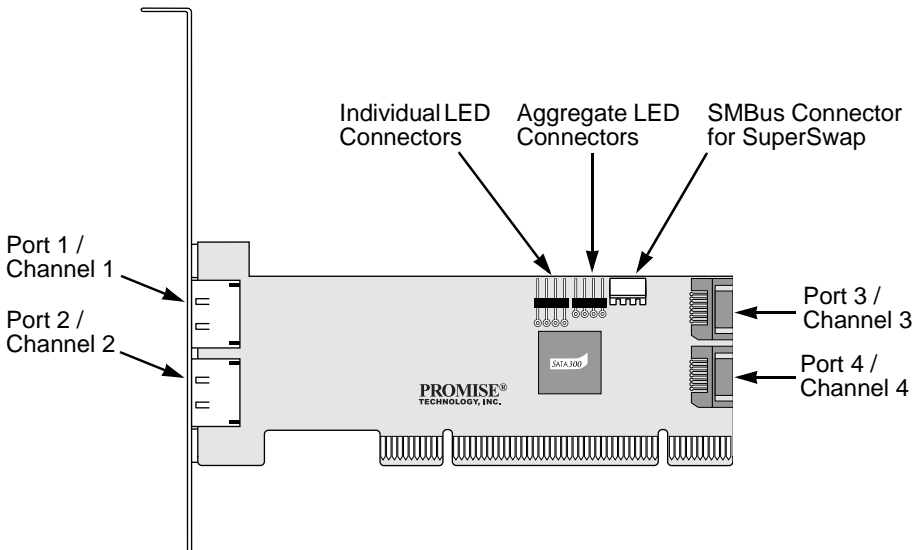
5. Attach your system case's 2- or 4-pin LED cable to the LED connector on the SATA300 TX4302 card.

Or, attach individual LED cables as indicated in the diagram below.

LED pinouts for
SATA300 TX4302

LED1 ⟶
LED2 ⟶
LED3 ⟶
LED4 ⟶
  + ⟶
All LEDs ⟶
  + ⟶
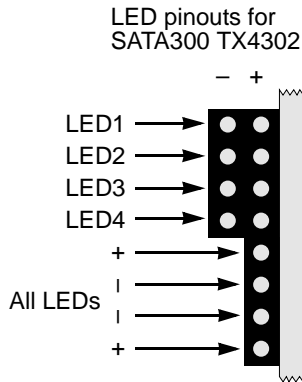
6. Optional. If you have a Promise SuperSwap enclosure in your system, attach the SMBus cable to the SMBus connectors on the SATA300 TX4302 card and the SuperSwap enclosure.

   This action is described in Chapter 2 of the SuperSwap *User Manual*.

7. Replace the cover of your system.

Chapter 3: Install Drivers

Following are driver installation procedures for the SATA300 TX4302 Controller card. Download the latest drivers from the Promise Technology website at www.promise.com/support.

Important

Promise provides 32-bit and 64-bit versions of it drivers. Be sure you select the appropriate driver for your system.

Make a Driver Diskette (Windows)

This procedure requires one write-enabled blank 3.5-inch diskette.

1. Place your blank diskette in the appropriate drive.

2. Insert the Promise CD into your CD-ROM drive.
   The display screen should open automatically.
   If the display screen does not open, click on MyComputer > CD Drive D: and
   double-click on the *Launch.exe* icon.

3. Click on the **Windows Driver** button.
   The Disk Copy Utility opens.

4. Click the **Create** button in the Utility.
   A confirmation box appears.

5. Click the **Yes** button in the confirmation box.
   The utility prepares your driver installation diskette.
   When the utility is finished, it displays a message.

6. In the message, click the **OK** button.

7. Click the **Exit** button to close the Promise CD.

8. Label the diskette "SATA300 TX4302 Driver Disk".

Windows Server 2003

New Installation

The following details the installation of the SATA300 TX4302 Serial ATA Controller drivers while installing Windows Server 2003.

1. Start the installation:
    *   Floppy Install: Boot the computer with the Windows Server 2003 installation diskettes.
    *   CD-ROM Install: Boot from the CD-ROM. Press F6 after the message "Press F6 if you need to install third party SCSI or RAID driver" appears.
2. When the Windows Server 2003 Setup window is generated, press S to specify an Additional Device(s).
3. Insert the driver diskette into drive A: and press Enter.
4. Choose *Windows Promise SATA300 TX4302 (tm) Controller* from the list that appears on screen, and then press the Enter.
5. Press S to use the driver on the floppy disk and then press Enter to continue with installation.
6. The Windows Server 2003 Setup screen will appear again saying "Setup will load support for the following mass storage devices:" The list will include "Windows Promise SATA300 TX4302 (tm) Controller".

    NOTE: If there are any additional devices to be installed, specify them now. When all devices are specified, continue to the next step.
7. From the Windows Server 2003 Setup screen, press the Enter. Setup will now load all device files and then continue the Windows Server 2003 installation.

Existing Installation

After installing the SATA300 TX4302 Serial ATA Controller card and rebooting your system, Windows Server 2003 setup will show a "Found New Hardware" dialog box. Under Windows 2003, "Mass Storage Controller" will be displayed.

1. Insert the driver diskette into the A:\ drive.
2. Choose *Install the software automatically* and press the Enter key.
3. Choose *Windows Promise SATA300 TX4302 (tm) Controller* from the list that appears on screen, and then press the Enter key.
4. If using a driver that has not been digitally signed by Microsoft, you will be asked if you want to continue the installation. Click Continue anyway.
5. When the New Hardware Wizard has finished installing the SATA300 TX4302 driver, click Finish.

Confirm Installation

1. Right-click on the My Computer icon and select Manage from the popup menu.
2. From the left panel, select Device Manager.
3. Click the "+" in front of SCSI and RAID controllers. "Windows Promise SATA300 TX4302 (tm) Controller" should appear.

Windows XP

New Installation

The following details the installation of the SATA300 TX4302 Serial ATA Controller drivers while installing Windows XP.

1. Start the installation:
   - Floppy Install: Boot the computer with the Windows XP installation diskettes.
   - CD-ROM Install: Boot from the CD-ROM. Press F6 after the message "Press F6 if you need to install third party SCSI or RAID driver" appears.
2. When the Windows XP Setup window is generated, press S to specify an Additional Device(s).
3. Insert the driver diskette into drive A: and press Enter.
4. Choose *Windows Promise SATA300 TX4302 (tm) Controller* from the list that appears on screen, and then press the Enter.
5. Press S to use the driver on the floppy disk and then press Enter to continue with installation.
6. The Windows XP Setup screen will appear again saying "Setup will load support for the following mass storage devices:" The list will include "Windows Promise SATA300 TX4302 (tm) Controller".

   NOTE: If there are any additional devices to be installed, specify them now. When all devices are specified, continue to the next step.
7. From the Windows XP Setup screen, press the Enter. Setup will now load all device files and then continue the Windows XP installation.

Existing Installation

After installing the SATA300 TX4302 Serial ATA Controller card and rebooting your system, Windows XP setup will show a "Found New Hardware" dialog box.

1. Insert the driver diskette into the A:\ drive.
2. Choose Install the software automatically and press the Enter key.
3. Choose *Windows Promise SATA300 TX4302 (tm) Controller* from the list that appears on screen, and then press the Enter key.
4. If using a driver that has not been digitally signed by Microsoft, you will be asked if you want to continue the installation. Click Continue anyway.
5. When the New Hardware Wizard has finished installing the SATA300 TX4302 driver, click Finish.

Confirm Installation

1. Right-click on the My Computer icon and select Manage from the popup menu.
2. From the left panel, select Device Manager.
3. Click the "+" in front of SCSI and RAID controllers. "Windows Promise SATA300 TX4302 (tm) Controller" should appear.

Chapter 4: Partition and Format

In order for your operating system to recognize and work with the disk drives attached to your SATA300 TX4302 Controller card, the drives must be partitioned and formatted.

- If your drives were previously partitioned and formatted they are ready to use and you can skip this chapter
- If your drives have not been partitioned and formatted, you must do that job before you can use them

The actions of partitioning and formatting create a file structure on the disk drives with which your operating system can work. In the example below, we show how this is done in Windows. A similar procedure is required for Linux PCs. However, partitioning and formatting in Linux is non-automated, therefore please refer to your system documentation for the exact procedure.
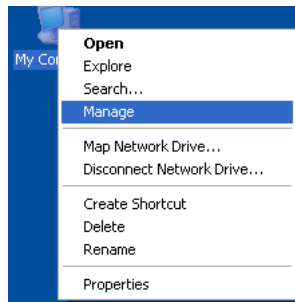
Note

If you plan to boot your computer from this array, go to Windows and Device Driver Installation under the Installation section for instructions. The instructions here are for data arrays only.

1. From the desktop, right-click on the My Computer icon and select *Manage* from the popup menu. The Computer Management window opens.
2. From the left menu, click on *Disk Management.* The Disk Management window opens with your new array identified as Disk 1. The Initialize Wizard appears automatically.
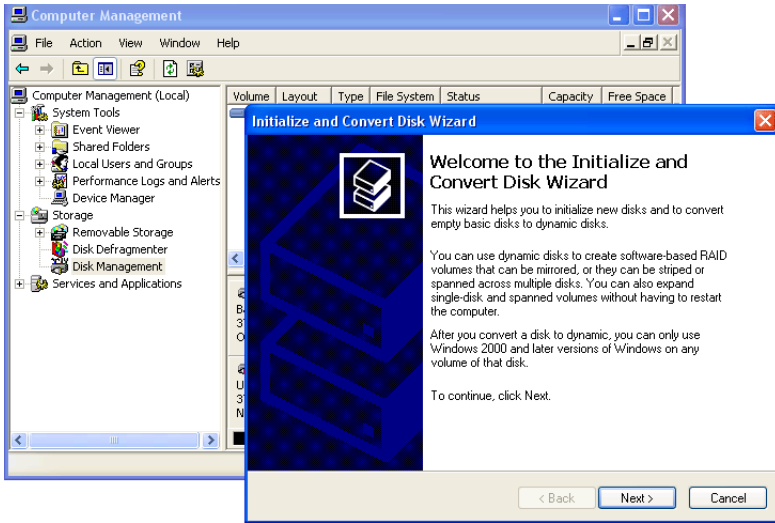
3. Click the **Next** button to start the Wizard.
4. In the following windows, select *Disk 1* to Initialize. Do not select any disks to Convert. Click the **Finish** button to Initialize the array.
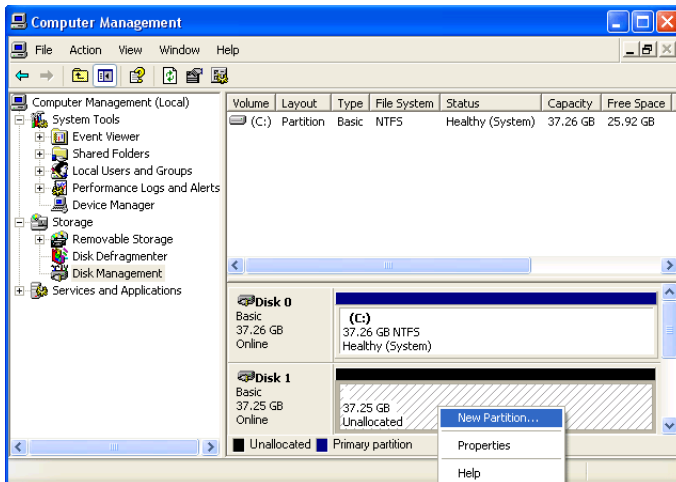
5. Right-click on the Unallocated portion of Disk 1 and select *New Partition...* from the popup menu. The New Partition Wizard appears.
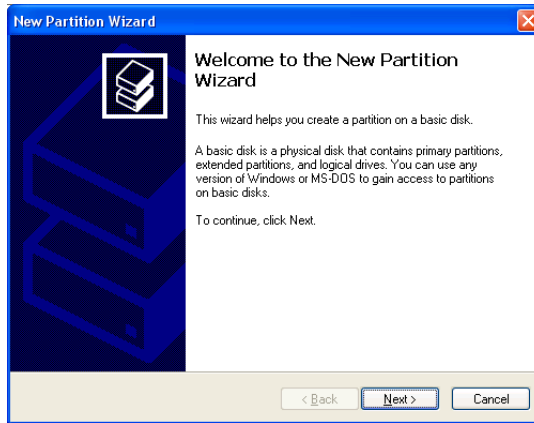
6. Click the **Next** button to start the wizard.

7. In the following windows, do the following actions. Click **Next** to move to the next window.

   • Select *Primary Partition*

   • Specify the maximum available partition size in MB

   • Assign the available drive letter of your choice

   • Choose *Format this partition* with the following settings

   • File system: NTFS

   • Allocation unit size: Default

   • Volume label: Enter your choice of name

   • Do not check "Perform a quick format" or "Enable file and folder compression"

8. Review your selections and click **Finish**. The New Partition Wizard will disappear while partitioning and formatting begin.

   This process will take some time. The Disk Management window displays the progress.
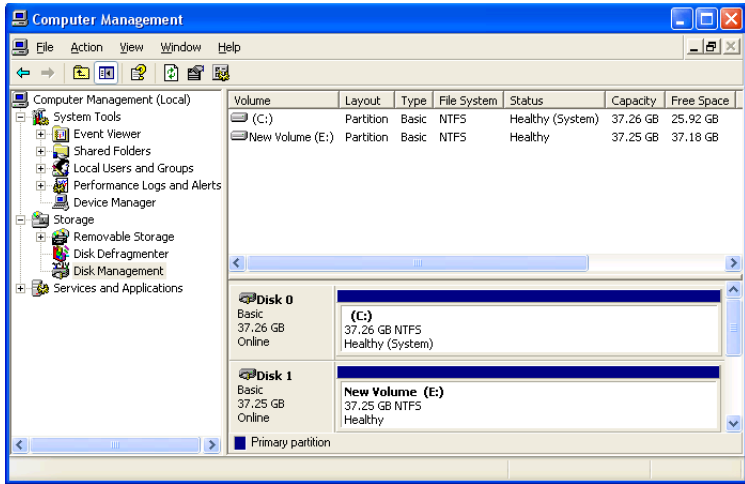
When formatting is complete, your array will appear as a hard drive in the Disk Management window (above) and the My Computer window (below).
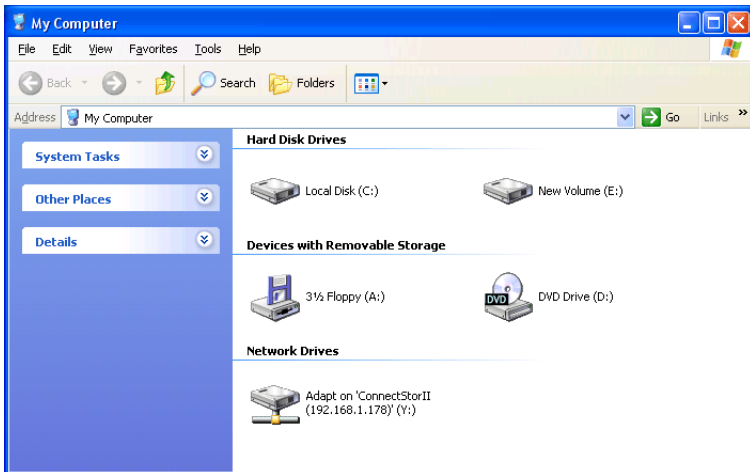
Chapter 5: PDCM

- Install PDCM, below
- Launch PDCM (page 20)
- PDCM Functions (page 21)

Promise Disk Controller Management (PDCM) is a Windows utility application that monitors Promise non-RAID controllers, such as the SATA300 TX4302, and the disk drives attached to them.

PDCM provides performance and diagnostic information, as well as TCQ/NCQ settings on the disk drives.

Install PDCM

Follow these steps to install PDCM on your Windows-based PC or Server.

1. Boot up the PC/server and launch Windows.

   If the computer is already running, exit all programs.

2. Insert the software CD into your CD-ROM drive.

3. Double-click on the Install CD's icon to open it.

4. Double-click on the Installer icon to launch it (right).

   The first WebPAM installation dialog box appears.

5. Follow the prompts in the installation dialog box.

Launch PDCM

To launch PDCM, double click on the PDCM icon on your Windows desktop (right).

The PDCM screen opens (below).
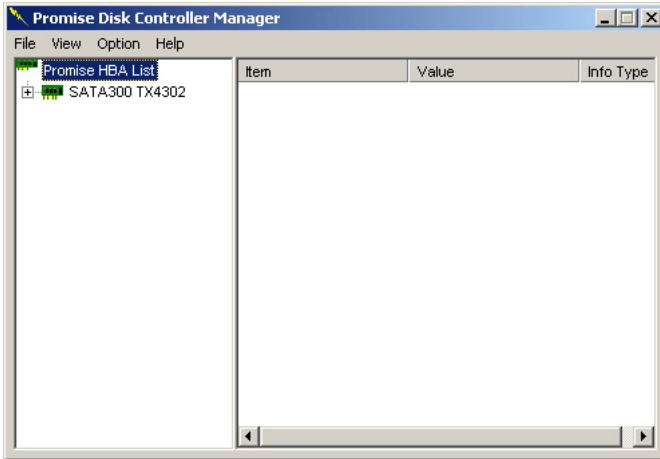
From this point, you can access PDCM functions, including:

- Controller Information (page 21)
- Disk Drive Information (page 22)
- Controller Settings (page 23)
- Menus (page 23)

PDCM Functions

Controller Information

To view information about the Controller card, click on the controller in the left pane. The information displays in the right pane.
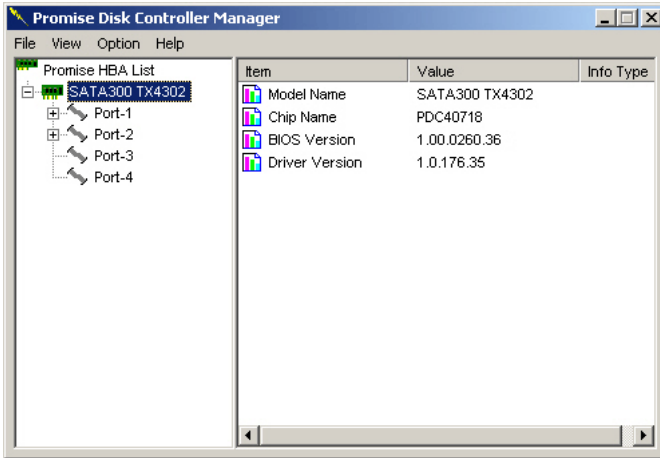
Controller information includes:

- Model Name
- Chip Name (processor model number)
- BIOS Version
- Driver Version

This information may be useful for diagnostic purposes.

Disk Drive Information

The + icon to the left of a Port number indicates that a disk drive is installed on that Port (below). On SATA300 TX4302, Ports 1 and 2 are external, Ports 3 and 4 are internal.
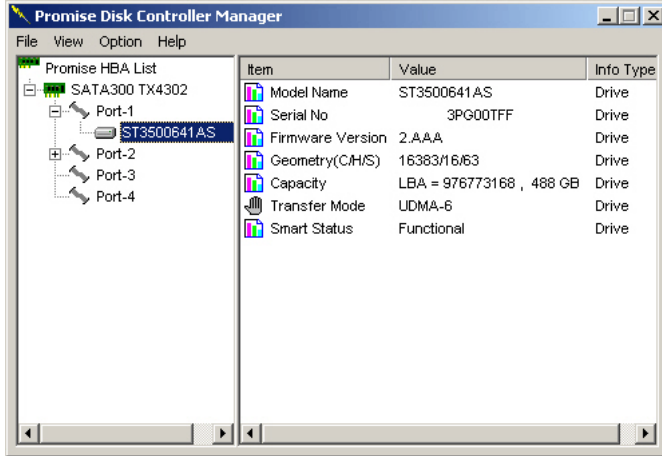
To view information about a disk drive:

1. Click on a + icon in the left panel.
2. Click on the disk drive ⬛ icon below the Port number.

The information displays in the right panel. Disk drive information includes:

- Model Name
- Serial Number
- Firmware Version
- Geometry – Cylinder / Head / Sector. Blocks addressed by location
- Capacity – Number of Logical Block Addresses and capacity in GB
- Transfer Mode – In terms of Ultra DMA equivalent
- SMART Status – Self-Monitoring, Analysis and Reporting System. Functional means there are no problems reported

This information may be useful for diagnostic purposes.

Controller Settings

The SATA300 TX4302 Controller has a Queued Command Support feature. In order to use this feature, your disk drives must support Tagged Command Queuing (TCQ) or Native Command Queuing (TCQ).

By default, the Queued Command Support feature is disabled. To enable Queued Command Support, do the following:

1. Click on the Option menu, choose *Queued Command Support* and *Enable TCQ/NCQ*.
2. Click **OK** in the popup message.
3. Reboot the PC with the SATA300 TX4302 controller.

To disable Queued Command Support, do the following:

1. Click on the Option menu, choose *Queued Command Support* and *Disable TCQ/NCQ*.
2. Click **OK** in the popup message.
3. Reboot the PC with the SATA300 TX4302 controller.

Menus

There are four menus on PDCM:

- File – Click on File and choose *Exit* to close PDCM
- View – Click on View and choose one of the following
  - *Tree Expanded* to expand the tree
  - *Tree Collapsed* to collapse the tree
  - *Refresh HBA List* to refresh the list of HBAs (Controller cards)
- Option – Click on Option and choose *Queued Command Support* to enable or disable TCQ/NCQ support on the Controller card
- Help – Click on Help and choose *About* to obtain information about this version of PDCM

Chapter 6: Support

This section is used to assist with troubleshooting conflicts and SATA300 TX4302 Controller card installation problems. Also refer to the README.TXT file on the CD for more recent information as well as "Technical Support Services" on page 30.

The section is divided into the following categories: Motherboard Issues, System CMOS Issues, Drive Errors and Operating System Errors.

Motherboard Issues

Freeing additional IRQ resources

Since the Promise card supports PCI Interrupt sharing, it is possible to use IRQs already assigned to another PCI card. Interrupt Sharing is not supported with onboard IDE controllers. If the onboard IDE controller(s) are not used, you may disable the controllers to free IRQ 14 and/or 15.

Configuring PCI IRQ resources

Setting the IRQ for a particular PCI slot will be different depending on the motherboard BIOS. This setting is usually made in the PCI Configuration and/or Plug and Play (PnP) section of the motherboard BIOS setup. There are two common methods that the motherboard BIOS uses to handle the assignment of IRQs to PCI slots:

- Specifically assigning an IRQ to a particular slot – You can tell the motherboard to use IRQ 10 for PCI slot 1, IRQ 11 for PCI slot 2, etc.
- Listing which IRQs are available to be assigned to the PCI slots – This BIOS has an option where you specify 1st Available IRQ, 2nd Available IRQ, etc. The BIOS then scans the PCI slots for PCI cards and assigns these IRQs in the order that it finds the PCI cards.

Consult your motherboard manual for information that is specific to your motherboard.

Intermittent data problems

Overclocking the PCI bus may cause the system to hang or data corruption. If you experience either of these problems and you are overclocking the PCI bus, set the PCI bus back to its normal setting to see if this is causing the errors.

System CMOS Issues

Set Motherboard CMOS Boot sequence to boot to SATA300 TX4302 Serial ATA Controller

On some Motherboard BIOS, it is necessary to set the Boot sequence to SCSI, A:, C: since the Promise card is identified as a SCSI card.

Motherboard CMOS displays C: or D: drive failure during startup

See the Drive-Related Errors section.

Using an Onboard IDE Card with SATA300 TX4302 Serial ATA Controller

If an onboard IDE controller is installed with hard disks, enable support in the Motherboard Standard CMOS Setup for the drives. Note that the onboard IDE hard drives will then be the bootable hard disk unless the system BIOS has a boot sequence setting with the option to specify booting to a different device.

Drive-Related Issues

Drives cannot be formed into an array

The SATA300 TX4302 Controllers support Serial ATA disk drives but they do not support RAID. Therefore you cannot build a RAID array with this product.

System CMOS displays C: or D: drive failure during Startup

Do not reference C: or D: in the Motherboard Standard CMOS for drives attached to the SATA300 TX4302 TX Controller. Only enter drive information in the Motherboard CMOS for drives attached to the onboard IDE controller.

Operating System-Related Issues

Promise Windows driver does not appear in Device Manager

Windows may already be listing the controller under Other Devices instead of the Hard disk controllers section. In Device Manager under Other Devices to see if it lists a PCI Card or RAID Controller. If so, highlight this listing and click on the Properties button then click on the Driver tab. Depending on your version of Windows, choose either Change Driver or Update Driver. Follow the on-screen prompts to complete installation of the driver. If Windows asks if you want to test if the device can be removed safely, click on CANCEL. Reboot the system to complete installation of the driver.

"Inaccessible Boot Device" Message Appears During Floppyless Install of Windows XP or Server 2003

The F6 key was not pressed at the appropriate time. Reboot the system, and press the F6 key when the message "Press F6 if you need to install third party SCSI or RAID driver" appears in Windows XP or Server 2003.

"No Hard Drives Found" Message Appears During CD-ROM Install of Windows XP or Server 2003

The F6 key was not pressed at the appropriate time. Reboot the system, and press the F6 key when the message "Press F6 if you need to install third party SCSI or RAID driver" appears in Windows XP or Server 2003.

Frequently Asked Questions

This section lists frequently asked questions involving pre-installation, drive issues, installation, and post-installation.

Pre-Installation

(Speed, Device Types, Capacity, Cabling)

What kind of hard drives can I use with the SATA300 TX4302 Controller card?

You can use any Serial ATA disk drive(s) on the SATA300 TX4302 Controller.

Will ACPI work with disk drives on the SATA300 TX4302 Controller card?

Yes. The SATA300 TX4302 supports ACPI.

Can I use ATAPI devices on the SATA300 TX4302 Controller card?

Yes. The SATA300 TX4302 supports Serial ATAPI devices.

Will the SATA300 TX4302 Controller card work with 66MHz PCI bus speed?

Yes. The SATA300 TX4302 Controller card is designed to accommodate the newer PCI bus speed and is backward compatible with 33MHz speeds.

How can I change the resources that the SATA300 TX4302 uses?

The SATA300 TX4302 Serial ATA Controller cards are fully PnP. This means all the resources that it uses are given to it by the PnP BIOS on the motherboard. The SATA300 TX4302 supports IRQ sharing, but this will not work unless ALL the concerned devices support the feature. If your motherboard allows you to control the assignment of these resources, you may be able to remedy the problem by:

- Changing the IRQ assignments to the PCI slots in the motherboard BIOS during boot up.
- Reset the configuration data in your CMOS. This is usually an option in the PnP section of your CMOS.
- Otherwise, switch the SATA300 TX4302 card to a different PCI slot.

Drive Issues

Do the disk drives on the SATA300 TX4302 Controller have to be the same size?

No. The disk drives connected to the SATA300 TX4302 Controller do not have to be the same size, make or model.

I already have an older Promise controller. Can I move the disk drives to my new SATA300 TX4302 controller?

Yes, provided your drives are Serial ATA disk drives.

If I have a problem with one of the drives on the SATA300 TX4302 Controller, how can I low-level format it to correct the problem?

Do NOT do this! Low-level formatting the physical drives is not only unnecessary but it generally does not correct problems commonly experienced during use, such as bad sectors or ECC/CRC.

Try running the disk drive manufacturer's diagnostic utility. The action typically requires you to connect the drive directly to the motherboard controller. If the utility cannot correct the problem, replace the disk drive.

Do I have to install disk management software on my array in order to access the full storage capacity of drives?

No! Disk management software will only complicate things. The logical drive should be fully addressable by your OS as it is. Remember that some operating systems have varying limits on the sizes of partitions and logical

drives that can be defined. Consult your OS documentation about partitioning larger drives.

What system BIOS setup settings do I use for the drives on the SATA300 TX4302 Serial ATA Controller card?

None. The drives on the SATA300 TX4302 Controller are supported by the Promise BIOS and/or OS drivers, not by your system BIOS.

Installation Issues

(Capacity, Booting)

How can I change the system boot sequence in order to boot from drives on the SATA300 TX4302 Controller?

The boot sequence is controlled by the system BIOS. As far as the system BIOS is concerned, the SATA300 TX4302 Controller and its defined arrays are categorized as a SCSI device. This allows you to set the boot sequence in your BIOS setup utility to boot from SCSI first, rather than IDE.

If there are multiple SCSI add-in controllers in the system, then the boot sequence among is determined by their PCI slot priority. PCI slot #1 will be first, slot #2 second, etc. If you want to boot from the array, put the SATA300 TX4302 Controller in the PCI slot where it will be accessed before the other SCSI controllers.

How can I change the boot sequence between a PCI SCSI card and the SATA300 TX4302 Controller?

Since all PCI devices are PnP, it is difficult to determine which device is addressed first. Some newer motherboard BIOSes have advanced options that identify devices and allow you to select which device will be assigned resources first. Otherwise you may have to physically switch the device cards on the PCI slots so that the boot device is in the highest priority slot number, as described in the previous answer.

Contact Technical Support

Promise Technical Support provides several support options for Promise users to access information and updates. We encourage you to use one of our electronic services, which provide product information updates for the most efficient service and support.

If you decide to contact us, please have the following information available:

• Product model and serial number

• BIOS and driver version numbers

• A description of the problem / situation

• System configuration information, including: motherboard and CPU type, hard drive model(s), SATA/ATA/ATAPI drives & devices, and other controllers.

Technical Support Services

Promise Online™ Web Site	http://www.promise.com/support (technical documents, drivers, utilities, etc.)

United States

E-mail Support	support@promise.com
Fax Technical Support	(408) 228-1097 Attn: Technical Support
Phone Technical Support	(408) 228-1400 option 4
If you wish to write us for support:	Promise Technology, Inc. Attn: Technical Support 580 Cottonwood Drive Milpitas, CA 95035, USA

Europe, Africa, Middle East

E-mail Support	support@promise-emea.com
Fax Technical Support	+31 (0) 40 256 9463 Attn: Technical Support
Phone Technical Support	+31 (0) 40 235 2600
If you wish to write us for support:	Promise Technology Europe B.V. Attn: Technical Support Science Park Eindhoven 5542 5692 EL Son, The Netherlands

Germany

E-mail Support	support-de@promise-emea.com
Fax Technical Support	+49 (0) 2 31 56 76 48 - 29 Attn: Technical Support
Phone Technical Support	+49 (0) 2 31 56 76 48 - 10
If you wish to write us for support:	Promise Technology Germany Attn: Technical Support Europaplatz 9 44269 Dortmund, Germany

Italy

E-mail Support	support-it@promise-emea.com
Fax Technical Support	0039 06 367 12400 Attn: Technical Support
Phone Technical Support	0039 06 367 12626
If you wish to write us for support:	Promise Technology Italy Attn: Technical Support Piazza del Popolo 18 00187 Roma, Italy

Taiwan

E-mail Support	support@promise.com.tw
Fax Technical Support	+886 3 578 2390 Attn: Technical Support
Phone Technical Support	+886 3 578 2395 (ext. 8811)
If you wish to write us for support:	Promise Technology, Inc. Attn: Technical Support 2F, No. 30, Industry E. Rd. IX Science-based Industrial Park Hsinchu, Taiwan, R.O.C.

China

E-mail Support	support-china@promise.com
Fax Technical Support	+86-10-8857-8015 Attn: Technical Support
Phone Technical Support	+86-10-8857-8085/8095
If you wish to write us for support:	Promise Technology China Attn: Technical Support Room 1205, Tower 3 Webok Time Center, No.17 South Zhong Guan Cun Street Hai Dian District, Beijing 100081, China

Limited Warranty

Promise Technology, Inc. ("Promise") warrants that for three (3) years from the time of the delivery of the product to the original end user:

- a) the product will conform to Promise's specifications;
- b) the product will be free from defects in material and workmanship under normal use and service.

This warranty:

- a) applies only to products which are new and in cartons on the date of purchase;
- b) is not transferable;
- c) is valid only when accompanied by a copy of the original purchase invoice.
- d) Is not valid on spare parts, fans, and power supplies

This warranty shall not apply to defects resulting from:

- a) improper or inadequate maintenance, or unauthorized modification(s), performed by the end user;
- b) operation outside the environmental specifications for the product;
- c) accident, misuse, negligence, misapplication, abuse, natural or personal disaster, or maintenance by anyone other than a Promise or a Promise-authorized service center.

Disclaimer of other warranties

This warranty covers only parts and labor, and excludes coverage on software items as expressly set above.

Except as expressly set forth above, Promise DISCLAIMS any warranties, expressed or implied, by statute or otherwise, regarding the product, including, without limitation, any warranties for fitness for any purpose, quality, merchantability, non-infringement, or otherwise. Promise makes no warranty or representation concerning the suitability of any product for use with any other item. You assume full responsibility for selecting products and for ensuring that the products selected are compatible and appropriate for use with other goods with which they will be used.

Promise DOES NOT WARRANT that any product is free from errors or that it will interface without problems with your computer system. It is your responsibility to back up or otherwise save important data before installing any product and continue to back up your important data regularly.

No other document, statement or representation may be relied on to vary the terms of this limited warranty.

Promise's sole responsibility with respect to any product is to do one of the following:

a) replace the product with a conforming unit of the same or superior product;

b) repair the product.

Promise shall not be liable for the cost of procuring substitute goods, services, lost profits, unrealized savings, equipment damage, costs of recovering, reprogramming, or reproducing of programs or data stored in or used with the products, or for any other general, special, consequential, indirect, incidental, or punitive damages, whether in contract, tort, or otherwise, notwithstanding the failure of the essential purpose of the foregoing remedy and regardless of whether Promise has been advised of the possibility of such damages. Promise is not an insurer. If you desire insurance against such damage, you must obtain insurance from another party.

Some states do not allow the exclusion or limitation of incidental or consequential damages for consumer products, so the above limitation may not apply to you.

This warranty gives specific legal rights, and you may also have other rights that vary from state to state. This limited warranty is governed by the State of California.

Your Responsibilities

You are responsible for determining whether the product is appropriate for your use and will interface with your equipment without malfunction or damage. You are also responsible for backing up your data before installing any product and for regularly backing up your data after installing the product. Promise is not liable for any damage to equipment or data loss resulting from the use of any product.

Return Product For Repair

If you suspect a product is not working properly, or if you have any questions about your product, contact our Technical Support Staff through one of our Technical Services, making sure to provide the following information:

- Product model and serial number (required)
- Return shipping address
- Daytime phone number
- Description of the problem
- Copy of the original purchase invoice

The technician will assist you in determining whether the product requires repair. If the product needs repair, the Technical Support Department will issue an RMA (Return Merchandise Authorization) number.

Important

Obtain an RMA number from Technical Support *before* you return the product and write the RMA number on the label. The RMA number is essential for tracking your product and providing the proper service.

Return ONLY the specific product covered by the warranty (do not ship cables, manuals, diskettes, etc.), with a copy of your proof of purchase to:

USA and Canada:	Promise Technology, Inc.
	Customer Service Dept.
	Attn.: RMA # _____
	47654 Kato Road
	Fremont, CA 94538
Other Countries:	Return the product to your dealer or retailer.
	Contact them for instructions before shipping the product.

You must follow the packaging guidelines for returning products:

- Use the original shipping carton and packaging
- Include a summary of the product's problem(s)
- Write an attention line on the box with the RMA number
- Include a copy of proof of purchase

You are responsible for the cost of insurance and shipment of the product to Promise. Note that damage incurred due to improper transport or packaging is not covered under the Limited Warranty.

When repairing returned product(s), Promise may replace defective parts with new or reconditioned parts, or replace the entire unit with a new or reconditioned unit. In the event of a replacement, the replacement unit will be under warranty for the remainder of the original warranty term from purchase date, or 30 days, whichever is longer.

Promise will pay for standard return shipping charges only. You will be required to pay for any additional shipping options (such as express shipping).