

USER'S GUIDE

POWERDOMAIN CONTROL UTILITY

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▼▼▼▼ PowerDomain Control Utility

User's Guide



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Using the PowerDomain Control Utility

The PowerDomain Control utility enables you to do the following for all installed Adaptec accelerator cards—directly from your computer's desktop:

- Obtain additional SCSI controller information
- Set termination
- Update a SCSI controller's firmware by programming its flash ROM
- Set parity options
- Select an initiator SCSI ID
- Reset SCSI default values
- Set target options, including synchronous transfer rate, SCSI disconnect, wide negotiation, and Ultra SCSI transfer

This user's guide provides instructions for using the PowerDomain Control utility.

Opening the PowerDomain Control Utility

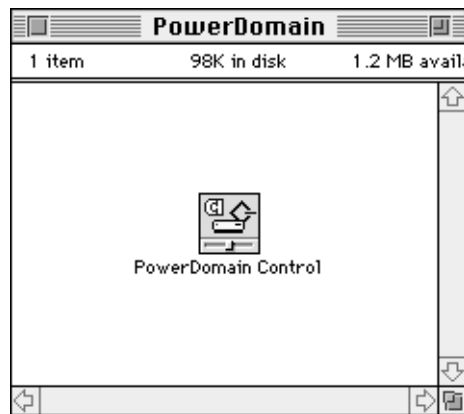
Before you begin this procedure, make a back-up copy of the *PowerDomain Control Utility* disk supplied with your Adaptec accelerator card. Then store the original disk in a safe place.

If you need information about making a back-up copy or about performing any other basic procedure, refer to your user documentation or request assistance from someone who knows how to use MacOS systems.

To open the PowerDomain Control utility

- 1 Insert the back-up copy of the PowerDomain Control *Utility* disk into the floppy disk drive.

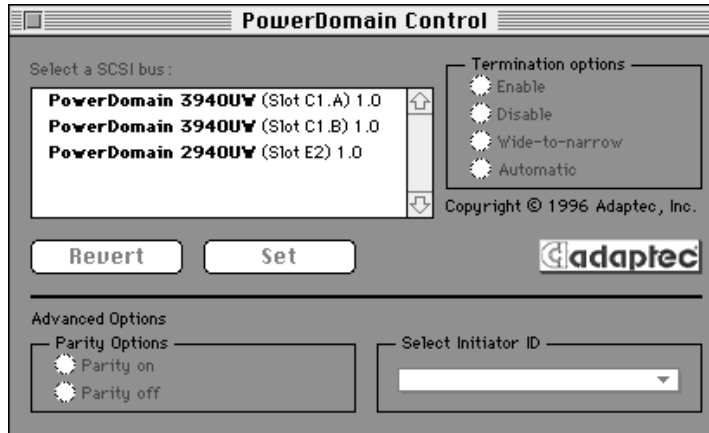
A window similar to the following appears. (If the window doesn't appear, double-click the PowerDomain Control disk icon on your desktop.)



- 2 If you see a Read Me icon, double-click it and follow the instructions in the document that appears. Unless instructed otherwise, go to the next step.
- 3 Drag the PowerDomain Control application icon onto your system hard disk drive, and place it in the folder of your choice.
- 4 Eject the back-up disk, and put it away.

- 5 Double-click the PowerDomain Control icon.

The PowerDomain Control window appears. This window contains a list of all Adaptec accelerator cards installed in your computer.



Using the PowerDomain Control Utility

Use the PowerDomain Control utility to obtain additional SCSI controller information, set SCSI termination, update flash ROM, set parity options, select an initiator SCSI ID, reset SCSI default values, set video buffer, and set target options for all Adaptec accelerator cards installed in your system.

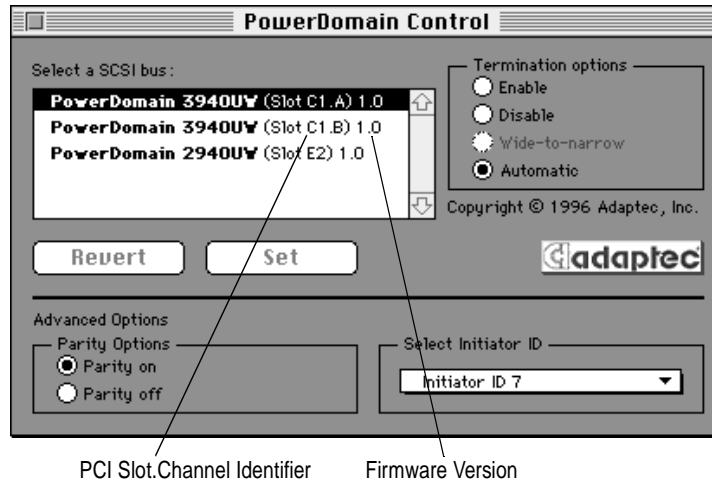
Obtaining Additional SCSI Controller Information

To obtain additional SCSI controller information

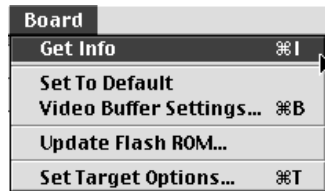
- 1 From the Select a SCSI bus list, click the accelerator card for which you want additional SCSI controller information.

The item becomes highlighted.

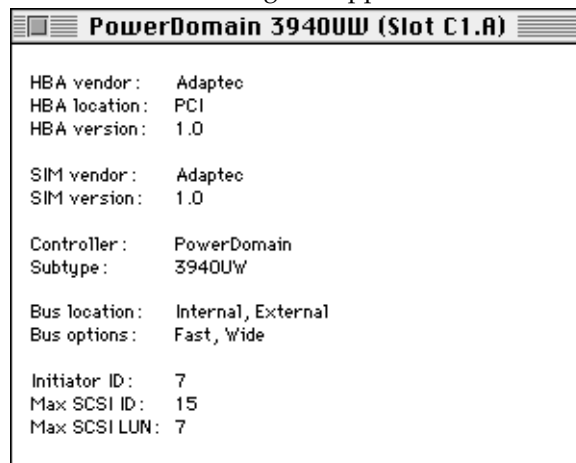
The information in parentheses identifies the PCI slots on your motherboard in which Adaptec accelerator cards are installed. (An .A or .B next to the slot identifier indicates the channel on Adaptec dual channel accelerator cards.) The 1.0 indicates the firmware version of the card.



- 2 While the PowerDomain Control window is active, choose Get Info from the Board menu or press Command-I.



The Information dialog box appears.



Using the PowerDomain Control Utility

The table below defines each item in the Information dialog box.

Information Item	Definition
HBA ¹ vendor	The name of the vendor of the selected SCSI bus
HBA location	The location of the selected SCSI bus
HBA version	The version number of the selected SCSI bus
SIM ² vendor	The name of the vendor of the driver for the selected SCSI bus
SIM version	The version number of the driver for the selected SCSI bus
Controller	The family to which the controller of the selected SCSI bus belongs
Subtype	The model of the controller of the selected SCSI bus
Bus location	The available connectors on the selected SCSI bus
Bus options	The options supported by the selected SCSI bus
Initiator ID	The initiator SCSI ID of the selected SCSI bus
Max SCSI ID	The maximum SCSI ID number supported by the selected SCSI bus (e.g., a SCSI bus with a maximum SCSI ID of 7 supports 8 SCSI IDs, numbered 0–7)
Max SCSI LUN ³	The maximum LUN number supported by the selected SCSI bus (e.g., a SCSI bus with a maximum LUN of 7 supports 8 LUNs, numbered 0–7)

¹ Host bus adapter

² SCSI interface module

³ Logical unit number

Repeat steps 1 and 2 to obtain additional SCSI controller information on any other Adaptec accelerator cards installed in your system.

Setting Termination

The PowerDomain Control utility provides the following termination options:

- **Enable**

Click this button to enable termination on the SCSI chain highlighted in the Select a SCSI bus list.

- **Disable**

Click this button to disable termination on the SCSI chain highlighted in the Select a SCSI bus list.

- **Wide-to-narrow**



Note: Some Adaptec accelerator cards do not support this option. Refer to the card's installation guide to see if it is supported.

When you click the Wide-to-narrow button, only the Wide SCSI lines of the selected bus are terminated at the SCSI accelerator card.

- **Automatic**

When you click the Automatic button, the PowerDomain Control utility determines the termination setting for the selected SCSI chain. This setting works for most SCSI device configurations.

PowerDomain Termination

Termination is initially set to Automatic on Adaptec accelerator cards. In most cases, Automatic works correctly. Refer to your card's installation guide for situations in which you might change the setting.

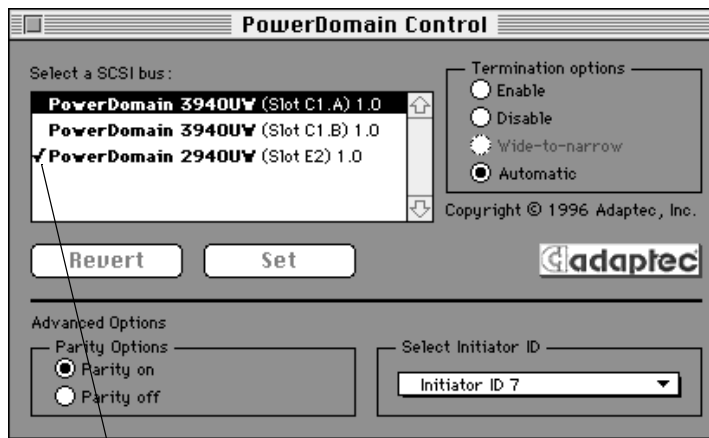
To set termination for an Adaptec accelerator card

- 1 From the Select a SCSI bus list, click the accelerator card (or channel) for which you want to set termination.

The item becomes highlighted.

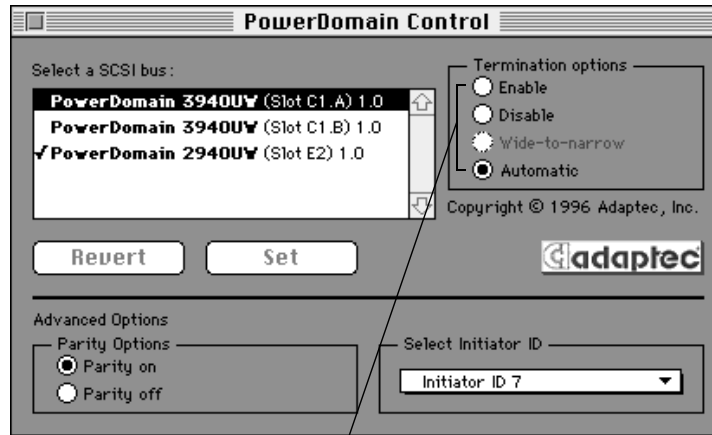


Note: A check mark to the left of the selected SCSI bus indicates that any changes you made to that bus have not yet been saved.



Check Mark

- 2 Select the Termination option by clicking the appropriate button.



Termination Options

Updating Flash ROM

Updating Flash ROM is used to update the firmware for the selected Adaptec accelerator cards.



Note: Some Adaptec accelerator cards do not support updating of the flash ROM. Refer to the card's installation guide to determine if this option is supported.

You can recognize firmware files by their distinctive icon, such as the one shown below.



PowerDomain 3940UW Firmware



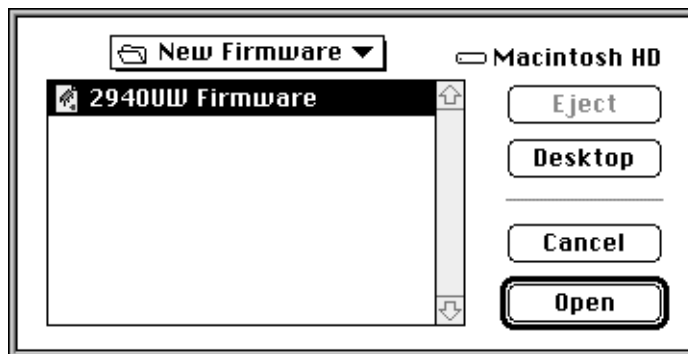
Note: Adaptec will distribute new versions of the firmware files as they become available.

To update flash ROM

- 1 Choose Update Flash ROM from the Board menu.

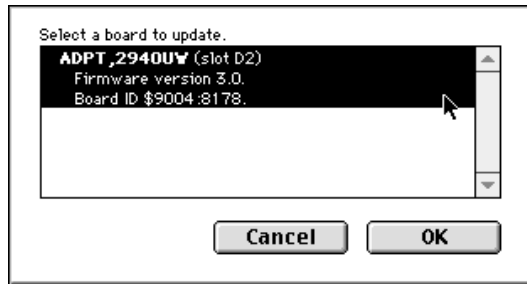


The following dialog box appears:



- 2 Click the file that contains the most recent version of the PowerDomain firmware, and click Open.

A list of the Adaptec accelerator cards installed in your system will appear in a dialog box similar to the following. This dialog box also contains the number of the slot in which the accelerator card is installed and the current firmware version.



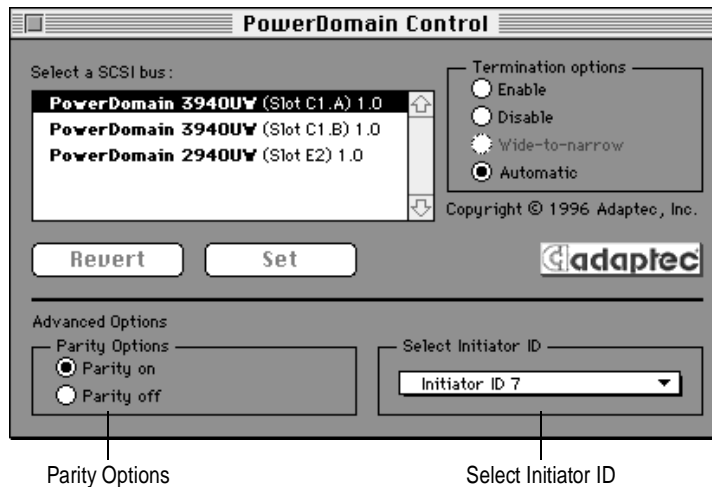
Note: Only Adaptec accelerator cards that are flashable with the selected firmware appear in the list.

- 3 Click the accelerator card you want to update, and then click OK.
A progress bar appears.
- 4 When the update is complete, restart your system for the new firmware to take effect.

Setting Advanced Options

Parity Options

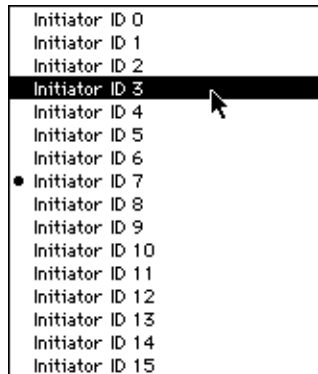
Click Parity on to enable parity checking. Click Parity off to disable parity checking. Parity Options are set to Parity on for most SCSI devices. (A check mark to the left of the selected SCSI bus indicates that any changes you made to that bus have not yet been saved.)



Select Initiator ID

The Initiator ID is the ID of the SCSI accelerator card. This setting is usually 7. However, if another device is set to 7 and its setting cannot be changed, the Initiator ID option enables you to change the accelerator card's ID. Some software might not work correctly when this ID is not set to 7.

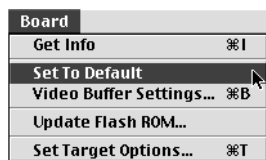
To change the Initiator ID, select an Initiator ID from the Select Initiator ID menu. The current Initiator ID is indicated by a filled circle on the left. (A check mark to the left of the selected SCSI bus indicates that any changes you made to that bus have not yet been saved.)



Note: The number of Initiator IDs that appear is dependent on the Adaptec accelerator card. Refer to the card's installation guide to determine the number of IDs that are supported.

Setting Defaults

To reset all controls for the selected SCSI accelerator card to their default values, choose Set To Default from the Board menu.



Target Options

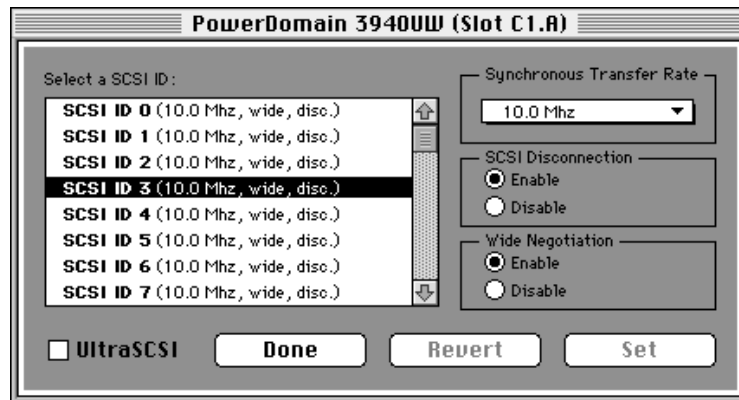
A *target* is a device attached to a SCSI bus and identified by a target ID. Target ID numbers range from 0 to 7 for narrow devices and from 0 to 15 for wide devices.

To access the target options

- 1 Select the bus for which you want to set the target options.
- 2 Choose the Set Target Options command from the Board menu.



The Target Options dialog box appears. The title of the window indicates which bus is selected. [In this documentation, the window is titled PowerDomain 3940UW (Slot C1.A) because that bus was selected.]

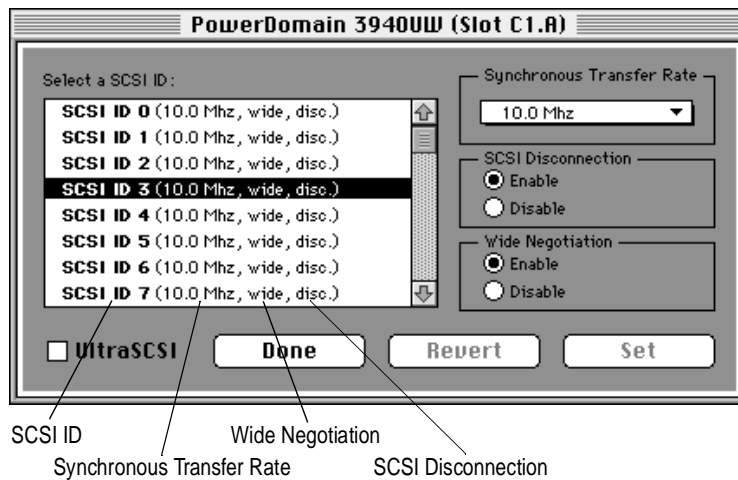


Target Options Dialog Box

Select a SCSI ID List

This list contains the following information for the selected target:

- **SCSI ID**
- **Current Synchronous Transfer Rate.** This setting is either async (asynchronous), indicating that synchronous negotiation is disabled, or *nn* MHz, where *nn* is the transfer rate (for example, 10 MHz).
- **Current Wide Negotiation.** If this setting is wide, Wide Negotiation is enabled. If the setting is narrow, Wide Negotiation is disabled.
- **Current SCSI Disconnection.** If this setting is disc, SCSI Disconnection is enabled. If the setting is no-disc, SCSI Disconnection is disabled.

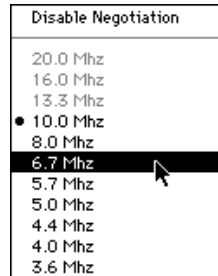


Synchronous Transfer Rate

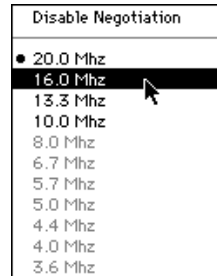
Normally, the transfer rate is negotiated between the SCSI accelerator card and the device connected to it. However, some very old devices might require that the transfer rate be changed before these devices will operate correctly.

To specify the maximum synchronous transfer rate the SCSI accelerator card will accept from the selected device during negotiation, choose an item from the Synchronous Transfer Rate menu.

Using the PowerDomain Control Utility



**Synchronous Transfer
Rate Menu:
UltraSCSI Not Selected**



**Synchronous Transfer
Rate Menu:
UltraSCSI Selected**

The current synchronous transfer rate is indicated by a filled circle on the left. Dimmed options are not available with the current UltraSCSI setting. (A check mark to the left of the selected target indicates that any changes you made to that target have not yet been saved.)



Note: If you choose Disable Negotiation, the SCSI accelerator card will not initiate synchronous negotiation with the selected SCSI device.

SCSI Disconnection

This option determines whether the SCSI accelerator card will allow the selected SCSI device to disconnect from the SCSI bus (sometimes called *disconnect/reconnect*). While the SCSI device is temporarily disconnected, the SCSI bus can be used for other operations.

Click Enable to enable SCSI Disconnection; click Disable to disable SCSI Disconnection. (A check mark to the left of the selected target indicates that any changes you made to that target have not yet been saved.)

Wide Negotiation

Wide Negotiation is normally negotiated between the SCSI accelerator card and the device connected to it. However, some old devices might not work correctly with Wide Negotiation enabled.

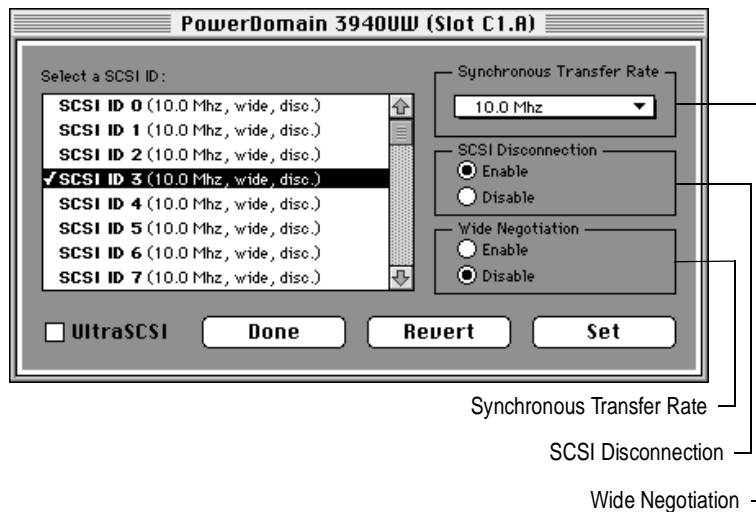


Note: Some Adaptec accelerator cards do not support Wide Negotiation. Refer to your card's installation guide to determine if it is supported.

Click Enable to enable Wide Negotiation; click Disable to disable Wide Negotiation. (A check mark to the left of the selected target indicates that any changes you made to that target have not yet been saved.)



Note: If Wide Negotiation is disabled, all data transfers will run at narrow speeds.



UltraSCSI

UltraSCSI provides faster bus transfer rates when used with UltraSCSI devices.

To enable or disable UltraSCSI transfers for the selected bus (in the PowerDomain Control window), click the UltraSCSI checkbox. A checkmark indicates that UltraSCSI is enabled.

When switching between UltraSCSI and Fast SCSI, all the target settings revert to their defaults.

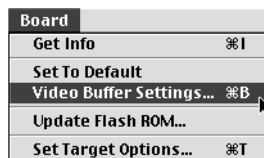


Video Buffer Settings

To configure the rate at which data is transferred on Adaptec accelerator cards so that the cards work efficiently with other PCI devices installed on your MacOS computer, choose Video Buffer Settings from the Board menu. The PCI devices that benefit from these settings include video capture/playback boards and other devices that require a high demand on the PCI bus.

To adjust the video buffer settings

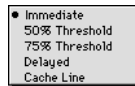
- 1 Choose the Video Buffer Settings from the Board menu.



The following dialog box appears:



2 Select the PCI Bus mode.



The PCI bus mode is the rate at which data is sent by the FIFO (First In First Out) buffer on Adaptec accelerator cards. There are five user configurable PCI BUS Mode settings and by default the boards are set to immediate. This feature is important because it allows the Adaptec accelerator cards to alter the frequency it requires access to the PCI bus, optimizing its performance with other PCI boards on the bus. This is especially significant for performance with Video capture boards, which need more time and bandwidth on the bus to execute their instructions.

Saving Settings

Target Options Dialog Box

When you have made all your changes in the Target Options dialog box

Done

Click Done to return to the PowerDomain Control window.

Revert

Click Revert to restore all target options to their last-saved settings.

Set

Click Set to save the current target option settings. (A check mark to the left of the selected SCSI bus indicates that any changes you made to that bus have not yet been saved.)



Note: The Revert and Set functions are applied only to SCSI IDs in the Select a SCSI ID list that are preceded by a check mark.

PowerDomain Control Window

When you have made all your changes in the PowerDomain Control window

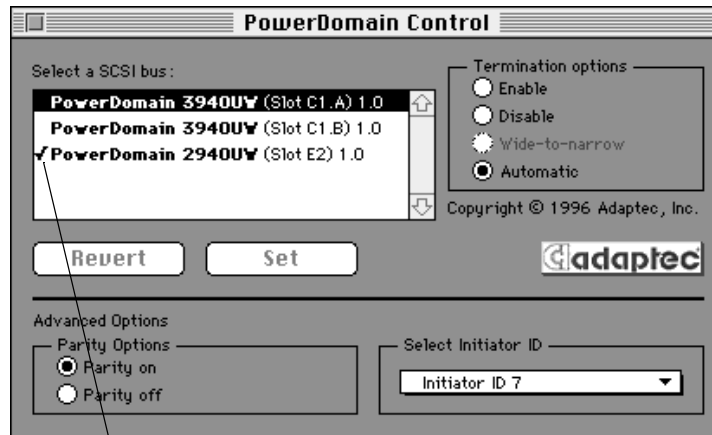
- Revert**

Click Revert to restore all PowerDomain Control window settings (not target options settings) as they were when you last opened the PowerDomain Control window or when you last clicked Set.
- Set**

Click Set to save all settings in the PowerDomain Control window to the memory on the accelerator card. (A check mark to the left of the selected target indicates that any changes you made to that target have not yet been saved.)



WARNING: The Revert and Set functions are applied only to accelerator cards in the Select a SCSI bus list that are preceded by a check mark.



Check Mark

Using Balloon Help

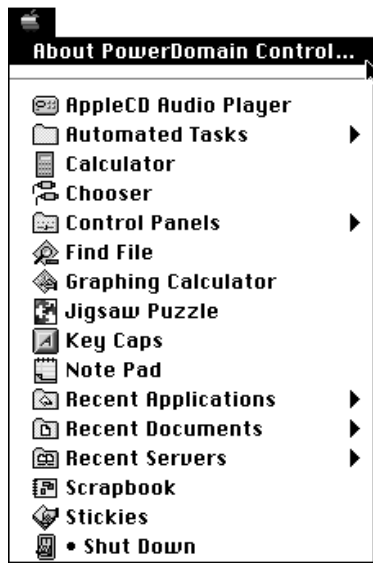
The PowerDomain Control utility fully supports Balloon Help. Refer to your computer user documentation for instructions on using Balloon Help.



Getting Information about the PowerDomain Control Utility

The *about* box provides information about the PowerDomain Control utility, such as version number and copyright date.

To access the about box, choose About PowerDomain Control from the Apple menu.



Quitting the PowerDomain Control Utility

The following about box appears.



To dismiss the about box, click in it.

Quitting the PowerDomain Control Utility

There are two ways to quit the PowerDomain Control utility:

- 1 Choose Close from the File menu when the PowerDomain Control window is active. (If the PowerDomain Control window is not active, choosing the Close command will close whichever window *is* currently active.)



- 2 Choose Quit from the File menu.



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