MYLEX®
MOVING DATA SMARTER

PCI RAID Controller Quick Installation Guide

DAC960PG™ and DAC960PJ™ PCI to Ultra SCSI RAID Controllers

P/N: 775034-02
08P4084

DAC960PG™ and DAC960PJ™ Quick Installation Guide

PCI to Ultra SCSI RAID Controllers

Part Number 775034-02
08P4084

© Copyright 2000 Mylex Corporation.
All Rights Reserved.

All contents of this manual are copyrighted by Mylex Corporation. The information contained herein is the exclusive property of Mylex Corporation and shall not be copied, transferred, photocopied, translated on paper, film, electronic media, or computer-readable form; or otherwise reproduced in any way, without the express written permission of Mylex Corporation.

Greetings

Thank you for purchasing the Mylex DAC960PG™ or DAC960PJ™ controller. This manual describes the installation of the Mylex DAC960PG/PJ controllers. Requests for technical information about this and other Mylex Corporation products should be made to your Mylex authorized reseller or Mylex sales representative.

Please Notice

IBM, Mylex, RAID EzAssist, DAC960PG, and DAC960PJ are trademarks or registered trademarks of International Business Machines corp. and its subsidiaries. Microsoft, MS-DOS, and Windows are registered trademarks of Microsoft Corporation. Novell is a registered trademark of Novell Corporation. LSI and Symbios Logic are registered trademarks of LSI Logic Corporation. Other names that are trademarks may be used herein for the purpose of identifying the products or services of their respective owners. Unless otherwise noted, companies, names, and data used in examples herein are fictitious.

Our Policy

Although reasonable efforts have been made to assure the accuracy of the information contained herein, this publication could include technical inaccuracies or typographical errors. Mylex Corporation expressly disclaims liability for any error in this information, and for damages, whether direct, indirect, special, exemplary, consequential or otherwise, that may result from such error, including but not limited to loss of profits resulting from the use or misuse of the manual or information contained therein (even if Mylex Corporation has been advised of the possibility of such damages). Any questions or comments regarding this document or its contents should be addressed to Mylex Corporation at the address shown on the cover.

The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law:

MYLEX CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Some states do not allow disclaimer of express or implied warranties or the limitation or exclusion of liability for indirect, special, exemplary, incidental or consequential damages in certain transactions; therefore, this statement may not apply to you. Also, you may have other rights which vary from jurisdiction to jurisdiction.

Information in this publication is subject to change without notice and does not represent a commitment on the part of Mylex Corporation. Changes may be made periodically to the information herein; these changes will be incorporated in new editions of the publication. Mylex Corporation reserves the right to make improvements and/or changes at any time in the product(s) and/or program(s) described in this publication.

It is possible that this publication may contain reference to, or information about, Mylex Corporation products (machines and programs), programming or services that are not announced in your country. Such references or information must not be construed to mean that Mylex Corporation intends to announce, provide, or make available such Mylex products, programming, or services in your jurisdiction.

Regulatory Information

The DAC960PG and DAC960PJ comply with the following regulatory agencies:

Federal Communications Commission

The FCC information statements are in Appendix E of the *DAC960PG and DAC960PJ Installation Guide*.

Community of Europe

The CE information statements are in Appendix E of the *DAC960PG and DAC960PJ Installation Guide*.

Underwriters Laboratories

WARNING

This controller is furnished with a nonvolatile RAM (NVRAM) chip that uses a sealed lithium battery/crystal module. Replace the module only with the same or equivalent type recommended by the manufacturer. Dispose of the used battery/ crystal module according to the manufacturer's instructions. Never incinerate a battery as it could explode and cause serious injury.

Table of Contents

Hardware Installation

Introduction 1
Performing an Installation 1
Connectors, Jumpers 2
Installing the DAC960 into the System 3
What to Do Next 5

Hardware Installation

Introduction

The DAC960PG and DAC960PJ are versatile PCI to Ultra SCSI RAID controllers. This quick installation guide assumes that the user is familiar with controller, disk drive, and RAID terminology.

Performing an Installation

WARNING

To avoid electrical shock, do not attempt to perform this hardware installation with power on. Disconnect the system from the electrical wall outlet.

Connectors and Jumpers

Up to three Ultra SCSI channels are supported on the controller. The SCSI connector locations are shown in Figure 1.

All the jumpers should normally be set to their default settings. See Table 1 for default jumper settings. Jumper locations are shown in Figure 1.

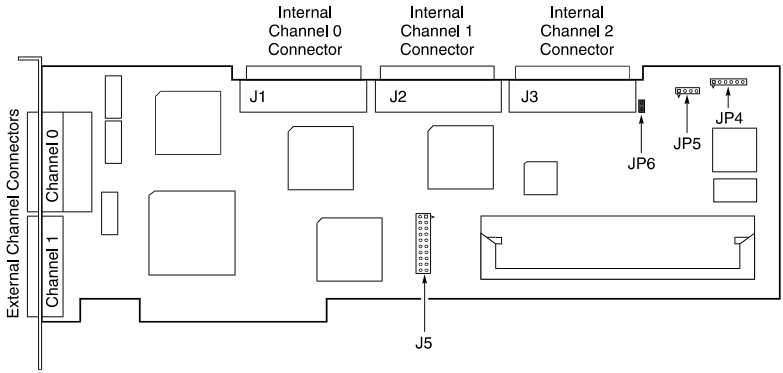

Figure 1. DAC960PG/PJ with Component Locations

Table 1. Jumper and Connector Descriptions

Jumper	Description	Default Setting
JP4	Header for optional front panel LED	–
JP5	Serial Port Connector	–
JP6	maintenance – do not use	Installed
J5	Intelligent Battery Backup connector – If an IBBU is not installed, a loopback plug must be installed in this socket.	Installed at factory

Installing the DAC960PG or DAC960PJ into the System

1. With the power off, plug the DAC960PG or DAC960PJ controller into an available PCI slot (see Figure 2).

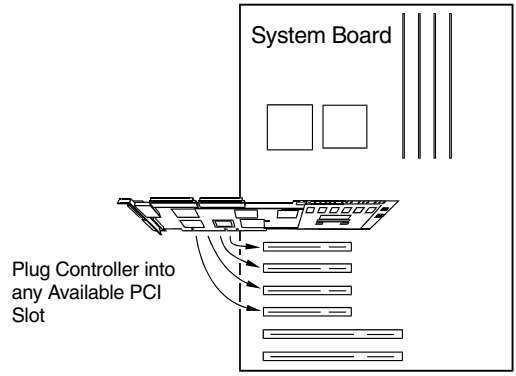

Figure 2. Plugging the DAC960PG or DAC960PJ into a PCI Slot

2. Set the SCSI ID on each internal drive to a unique address between 0 and 15, but do not use address 7, as it is reserved for the controller. See the documentation that comes with your drives for instructions on how to do this.

> ⚠ ***Caution***
>
> If internal and external drives are used, be sure that no drive addresses are duplicated. External SCSI cabinets usually automatically assign drive addresses according to where in the cabinet the drives are located.

3. *Disable* termination on all drives connected to the controller. See the documentation that comes with your drives for instructions on how to do this.
4. *Enable* termination power on all drives connected to the controller. See the documentation that comes with your drives for instructions on how to do this.

5. Set the SCSI ID for each external disk drive to a unique address between 0 and 15, but do not use address 7 (reserved for the controller). Do not duplicate SCSI IDs used by internal drives designated for the same channel. For information on how to set SCSI IDs, refer to the disk drive documentation.

   If you are using an external SCSI cabinet, please see the ***Caution*** note above.

6. Connect a wide, high-density, 68-pin SCSI ribbon cable to the internal SCSI connectors on the DAC960PG or DAC960PJ controller, and connect the other cable connectors to any internal SCSI drives as required (see Figure 3).

7. Connect an active terminator to the end of the SCSI ribbon cable at the end farthest from the controller (see Figure 3).

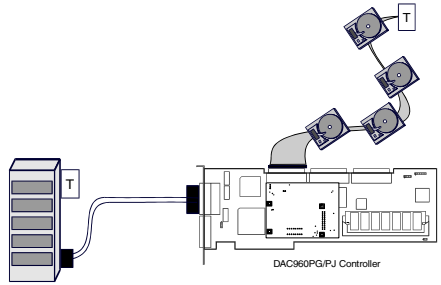

Figure 3. Connecting Internal and External Drives

8. Connect a wide, round, 68-pin Very High Density Connector Interface (VHDCI) cable to the external SCSI connector on the DAC960PG or DAC960PJ controller, and connect the other end of the cable to an external drive cabinet as required (see Figure 3). External drive cabinets usually have termination built into the end of the SCSI bus. Check the documentation that comes with your drive cabinet to be sure this is the case. If not, use an active terminator at the end of the bus.

Note

The DAC960PG or DAC960PJ controller automatically determines whether or not its own on-board termination is required and automatically enables or disables on-board termination as necessary.

Figure 4 shows a completed, typical installation of the DAC960PG or DAC960PJ controller.

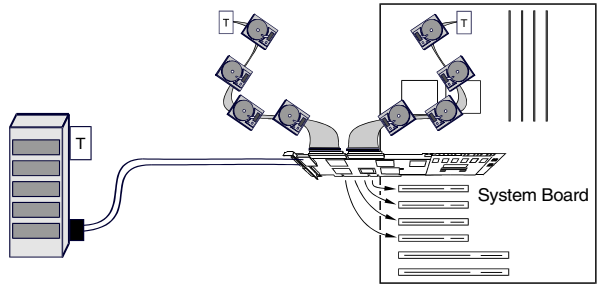

Figure 4. DAC960PG or DAC960PJ in a Typical Installation

The hardware portion of the installation is complete.

What to Do Next

1. Use RAID EzAssist to create an automatic or a custom RAID Configuration.

   Refer to the *RAID EzAssist Configuration Utility Quick Configuration Guide,* or *RAID EzAssist Configuration Utility User Reference Guide*.

2. Install the DAC960PG or DAC960PJ controller drivers appropriate for your server's network operating system.

   Refer to the *PCI Disk Array Controller Drivers Installation Guide and User Manual*.

CORPORATE OFFICE
34551 Ardenwood Boulevard, Fremont, CA 94555-3607
Tel: 510.796.6100
Domestic Sales Fax: 510.745.8016
International Sales Fax: 510.745.7521
www.mylex.com

WARRANTY REGISTRATION CARD

To validate your warranty and receive any future updates concerning your product, you must complete and return this Warranty Registration Card within 10 days of purchase. (Please Print)

NAME: _____ COMPANY: _____

ADDRESS: _____ CITY: _____

STATE: _____ ZIP CODE: _____ COUNTRY: _____

TELEPHONE: _____ FAX NO: _____ E-MAIL: _____

DATE PURCHASED: _____ MODEL NO: _____ SERIAL NO: _____

PURCHASED FROM: _____

ADDRESS: _____ CITY: _____

STATE: _____ ZIP CODE: _____ COUNTRY: _____

In order for Mylex to better serve your needs, please complete the following:

1. How did you first learn about MYLEX products?
   - ❑ Advertisement (Name of Pub)_____ ❑ Article Review ❑ Friend
   - ❑ Retailer_____ ❑ Salesperson ❑ Other

2. Where will this product be used?
   - ❑ Home ❑ Workplace

3. What other brands, if any, did you consider? _____

4. Please indicate the most common uses of your system:
   - ❑ Personal ❑ Business ❑ Graphics (CAD/CAM or Business Graphics) ❑ Accounting ❑ Digital Video
   - ❑ Data Retrieval ❑ Multi-User ❑ Multi-Tasking ❑ Database

5. Which factor most influenced your purchase?
   - ❑ Company Reputation ❑ Price ❑ Features (List)_____ ❑ Performance

6. What does your computer system include? (Please specify brand and model)
   - ❑ System Unit_____ ❑ Peripherals _____
   - ❑ Monitor_____ ❑ Operating System _____

7. What add-ons or peripherals are you most considering for future purchase? _____

8. What best describes your occupation?
   - ❑ Management/Administration ❑ Sales/Service ❑ Technical-Scientific/Engineering ❑ MIS ❑ Other_____

9. Do you have any comments or suggestions? _____

10. Have you ever purchased Mylex products in the past?
    - ❑ Yes ❑ No
    - If yes, which products? _____

11. Who purchased this product?
    - ❑ Individual ❑ Company

P/N: 772062-00 3-99 Printed in U.S.A.

Place
Postage
Here

Mylex Corporation
Customer Service Dept.
34551 Ardenwood Blvd.
Fremont, CA 94555-3607