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# eXtremeRAID™
# Quick Installation Guide

## eXtremeRAID 1100
## PCI to Ultra2 SCSI
## RAID Controller

P/N: 775031-02
08P4083

# eXtremeRAID™ Quick Installation Guide

## eXtremeRAID 1100 (DAC1164P™) PCI to Ultra2 SCSI RAID Controller

Part Number 775031-02
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Thank you for purchasing the Mylex eXtremeRAID™ 1100 controller. This manual describes the installation of the Mylex eXtremeRAID 1100 controller. Requests for technical information about this and other Mylex Corporation products should be made to your Mylex authorized reseller or Mylex sales representative.

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## Regulatory Information

The eXtremeRAID™ 1100 (DAC1164P™) complies with the following regulatory agencies:

### Federal Communications Commission

The FCC information statements are in Appendix F of the *eXtremeRAID 1100 (DAC1164P) PCI to Ultra2 SCSI RAID Controller Installation Guide*.

### Community of Europe

The CE information statements are in Appendix F of the *eXtremeRAID 1100 (DAC1164P) PCI to Ultra2 SCSI RAID Controller 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
Connectors, Jumpers, and LEDs ..... 1
Installing the eXtremeRAID 1100 (1164P) into the System Board ..... 3
What to Do Next ..... 5

# Hardware Installation

## Introduction

The eXtremeRAID 1100 (DAC1164P) is a very versatile PCI to Ultra2 SCSI, LVD RAID controller. There are many possible hardware configurations. There are many possible hardware configurations. This quick installation guide assumes that the user is familiar with controller, disk drive, and RAID terminology.

**WARNING**

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

### Connectors, Jumpers, and LEDs

Up to three Ultra2 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.

The controller has 15 LEDs that are active indicators while the controller is running. The LEDs indicate termination type and status, SCSI activity, cache status, diagnostic status, and host activity. The LED locations and meanings are shown in Figure 1.

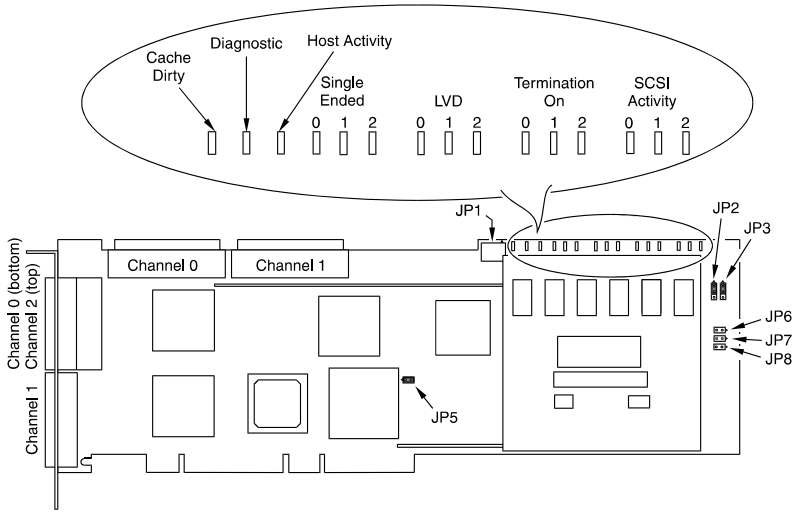


**Figure 1. eXtremeRAID 1100 (1164P) with Component Locations**

***Table 1. Jumper and Connector Descriptions***

| Jumper | Description | Default Setting |
|---|---|---|
| JP1 | serial port connector | – |
| JP2 | pins 1–2 for Arm Proc, pins 2–3 for I2O | 1–2 |
| JP3 | pins 1–2 normal , pins 2–3 blank ROM mode | 1–2 |
| JP5 | must be installed | on |
| JP6 | maintenance – do not use | off |
| JP7 | ROM emulator – do not use | off |
| JP8 | Mylex manufacturing diagnostics – do not use | off |

# Installing the eXtremeRAID 1100 (1164P) into the System Board

1. With the power off, plug the eXtremeRAID 1100 (1164P) controller into an available 32-bit or 64-bit PCI slot (refer to Figure 2). Using a 64-bit PCI slot (when available) will optimize performance.

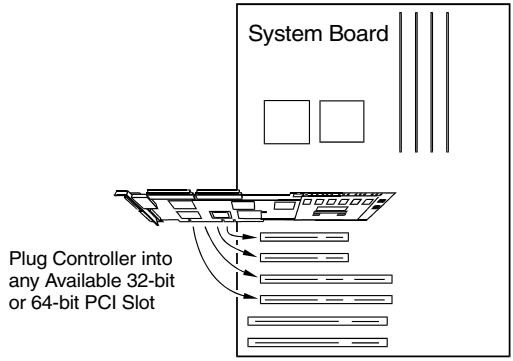


**Figure 2. Plugging the eXtremeRAID 1100 (1164P) into a PCI Slot**

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, see the ***Caution*** note above.

6. Connect a wide, high-density, 68-pin SCSI ribbon cable to the internal SCSI connectors on the eXtremeRAID 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).

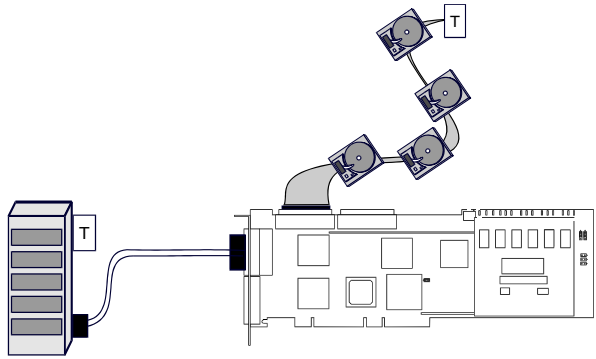


**Figure 3. Connecting Internal and External Drives**

8. Connect a wide, round, 68-pin Very High Density Connector Interface (VHDCI) cable to the external SCSI connector on the eXtremeRAID 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. See 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 eXtremeRAID 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 is an example of a typical, completed installation.

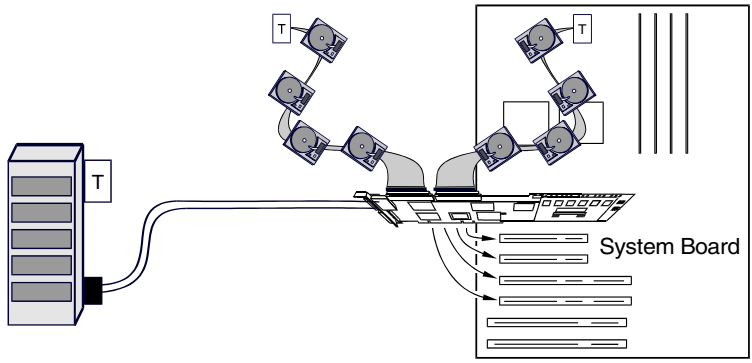


**Figure 4. eXtremeRAID 1100 (1164P) in a Typical Installation**

The hardware portion of the installation is complete.

Please see the following section titled “What to Do Next.”

## 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 eXtremeRAID 1100 (1164P) controller drivers appropriate for your server’s network operating system available on CD-ROM.

   Refer to the *PCI Disk Array Controller Drivers Installation Guide and User Manual* available on CD-ROM.

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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: _____

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2. Where will this product be used?
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4. Please indicate the most common uses of your system:
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   - ❑ Data Retrieval ❑ Multi-User ❑ Multi-Tasking ❑ Database

5. Which factor most influenced your purchase?
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6. What does your computer system include? (Please specify brand and model)
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   - ❑ Monitor_____ ❑ Operating System _____

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