



eXtremeRAID™ Quick Installation Guide

**eXtremeRAID 3000
PCI Fibre Channel
RAID Controller**





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Regulatory Information

The eXtremeRAID™ 3000 complies with the following regulatory agencies:

FC Federal Communications Commission

The FCC information statements are in Appendix F of the eXtremeRAID 3000 Installation Guide.

CE Community of Europe

The CE information statements are in Appendix F of the eXtremeRAID 3000 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.

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Hardware Installation

Introduction

The eXtremeRAID 3000 is a very versatile PCI to Fibre Channel RAID controller with an internal Ultra2 SCSI, LVD channel. There are many possible hardware configurations. 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.

PCI Hot Plug

Please refer to Appendix D in the *eXtremeRAID 3000 Installation Guide* for instructions on how to use the PCI Hot Plug feature.

Connectors, Jumpers, and LEDs

There are two Fibre external channels supported on the controller. There is one Ultra2 SCSI internal channel that is supported on the controller. The SCSI and Fibre connector locations are shown in Figure 1.

The back side of the controller has eight LEDs that are active indicators while the controller is running. Please see Figure 2 for the complete identification and location of the LEDs.

All the jumpers should normally be set to their default settings. Jumper locations are shown in Figure 3. Please see Table 1 for default jumper descriptions.

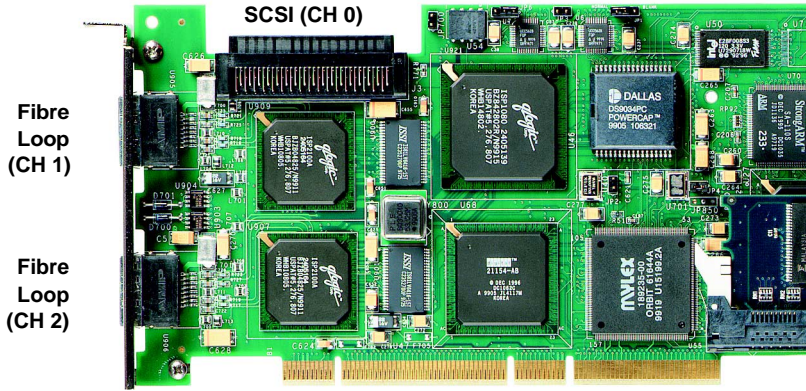


Figure 1. eXtremeRAID 3000 Controller with Channel Connectors

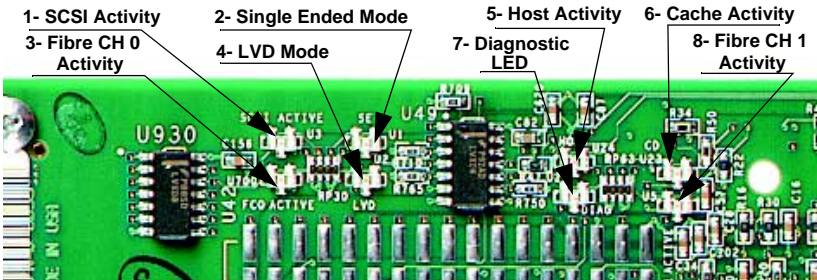


Figure 2. eXtremeRAID 3000 with LEDs (back)

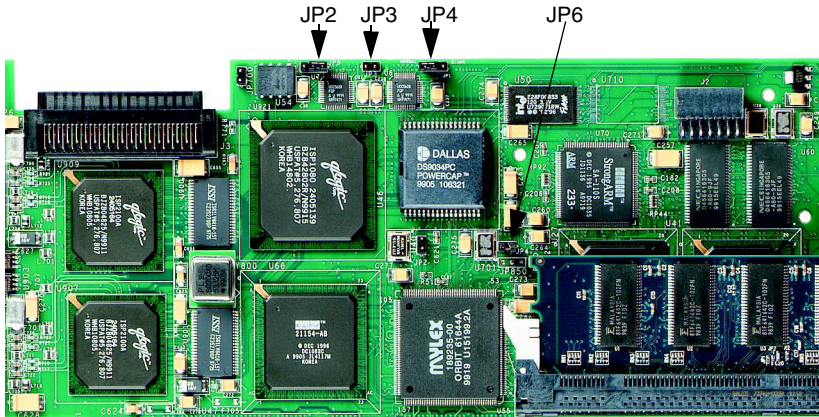


Figure 3. eXtremeRAID 3000 Controller with Jumpers (front)

Table 1. Jumper Descriptions

Jumper	Description	Default Setting
JP2	pins 1–2 for Arm Proc, pins 2–3 for I2O	1–2
JP3	Mylex manufacturing diagnostics – do not use	off
JP4	pins 1–2 normal , pins 2–3 normal mode	1–2
JP6	maintenance – do not use	off

Installing the eXtremeRAID 3000 into the System Board

1. With the power off, plug (install) the controller firmly into any 32 bit or 64 bit PCI slot, and wear a ground wrist strap as shown in Figure 4. Notice that the black handle must fit into the side slot for a proper fit. (refer to Figure 4).

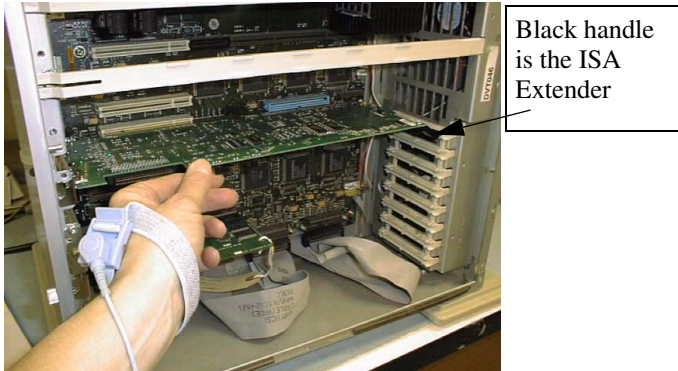


Figure 4. Plugging the eXtremeRAID 3000 into a PCI Slot

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

Be sure to use a Fibre Channel Cabinet for the Fibre disk drives. Do not mix SCSI and Fibre disk drives in the same cabinet. There is no termination for Fibre drives.

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

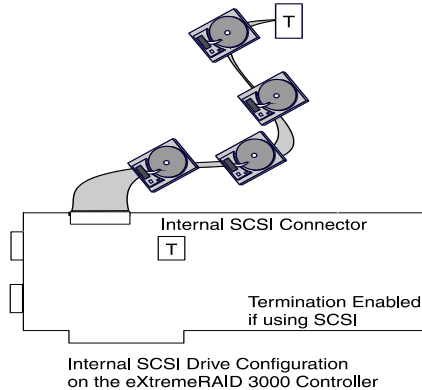


Figure 5. Internal SCSI Configuration and Termination

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 connector on the eXtremeRAID 3000 controller and connect the other cable connectors to any SCSI devices as required (see Figure 5). eXtremeRAID 3000 always has the on-board SCSI termination enabled.
7. Connect an active terminator to the end of the SCSI ribbon cable at the end farthest from the controller (see Figure 5).

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 eXtremeRAID 3000 terminator is set to be ON.

8. Connect a Fibre cable, with the High Speed Serial Data Connector (HSSDC), to either one or both of the external Fibre connectors on the eXtremeRAID 3000 controller. Connect the other end of the Fibre cable, with a 9-Pin DSUB connector, to other devices or to a Fibre Channel Cabinet external drive cabinet, as required (see Figure 6).

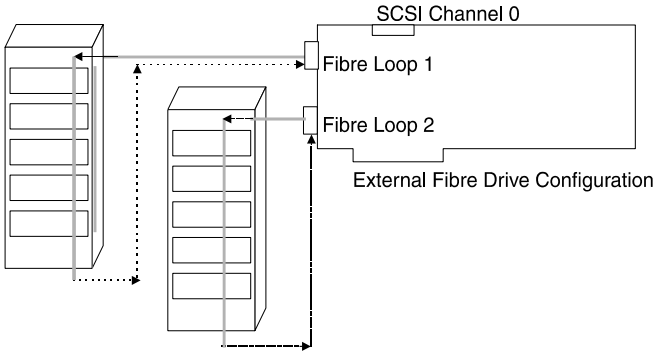


Figure 6. External Fibre Drive Configuration

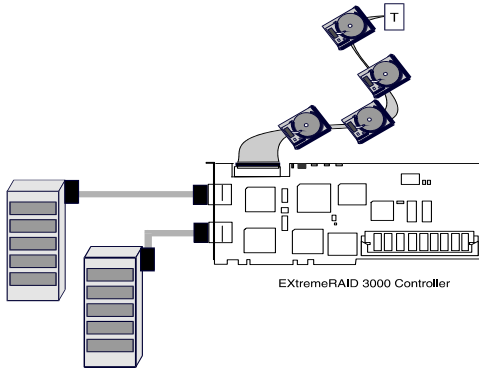


Figure 7. eXtremeRAID 3000 in a Typical Installation Using Fibre and SCSI Connectors

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 3000 controller drivers appropriate for your server's network operating system.

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



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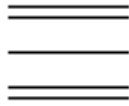
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