

6 Install the Server Operating System

Microsoft\* Windows\* Server 2003/ Microsoft\* Windows\* 2000 Advanced Server Installation

Step A: Install Microsoft\* Windows\* Server 2003 or Microsoft\* Windows\* 2000 Advanced Server

IMPORTANT: When the blue setup screen first appears, press **<F6>**.

- Boot the system with the Windows\* Server 2003 or Windows\* 2000 Advanced Server CD-ROM
- 2. Press **<F6>** as soon as the first blue screen appears to bypass mass storage detection.
- 3. When prompted to specify a mass storage controller:
- Select "S" to specify additional storage devices.
- Insert Microsoft\* Windows\* Server 2003 or Microsoft\* Windows\* 2000
   Advanced Server installation driver diskette (created in Step 1 of this
   Quick Start User's Guide).
- Press < Enter> to select the "Installation Driver" and continue with Windows installation.

## Step B: Install the Intel® RAID Web Console Package

Install the Intel® RAID Web Console Package from the Resource CD. For more details, see the Software Guide.

#### Step C: To manage a RAID array from within Microsoft\* Windows\*

Open your Web browser and point to http://localhost:3570. For more information, see the Software Guide.

Red Hat\* Enterprise Linux 3 Installation

**IMPORTANT:** Complete the steps on the reverse side before beginning your OS installation. If you are installing a version other than Red Hat\* Enterprise, Linux 3, refer to http://support.intel.com/support/motherboards/server for installation instructions.

#### Step A: Install Red Hat\* Enterprise Linux 3

Read the Red Hat documentation to understand the disk space / size requirements for Red Hat\*
Enterprise Linux 3

- 1. Boot the system with the Red Hat\* Enterprise Linux 3 CD-ROM
- 2. At the boot prompt, insert the Linux driver disk that you created in Step on the reverse side of this document. Type Linux dd. Press **<Enter>.**
- 3. Follow the on screen instructions to complete the installation. The RAID controller driver will be automatically detected and installed.

### Step B: Install the Intel® RAID Web Console Package

Install the Intel® RAID Web Console Package from the Resource CD. For more details, see the Software Guide.

# Step C: To manage a RAID array from within Red Hat\* Enterprise Linux 3

Open your Web browser and point to http://localhost:3570. For more information, see the Software Guide.

For other O/S installations, refer to the Software Guide or readme files on the resource CD for the driver being installed.

#### Understanding the Audible Alarm

The audible alarm will beep under two conditions: When a drive has failed, and during and following a rebuild.

The drive failure alarms are as follows:

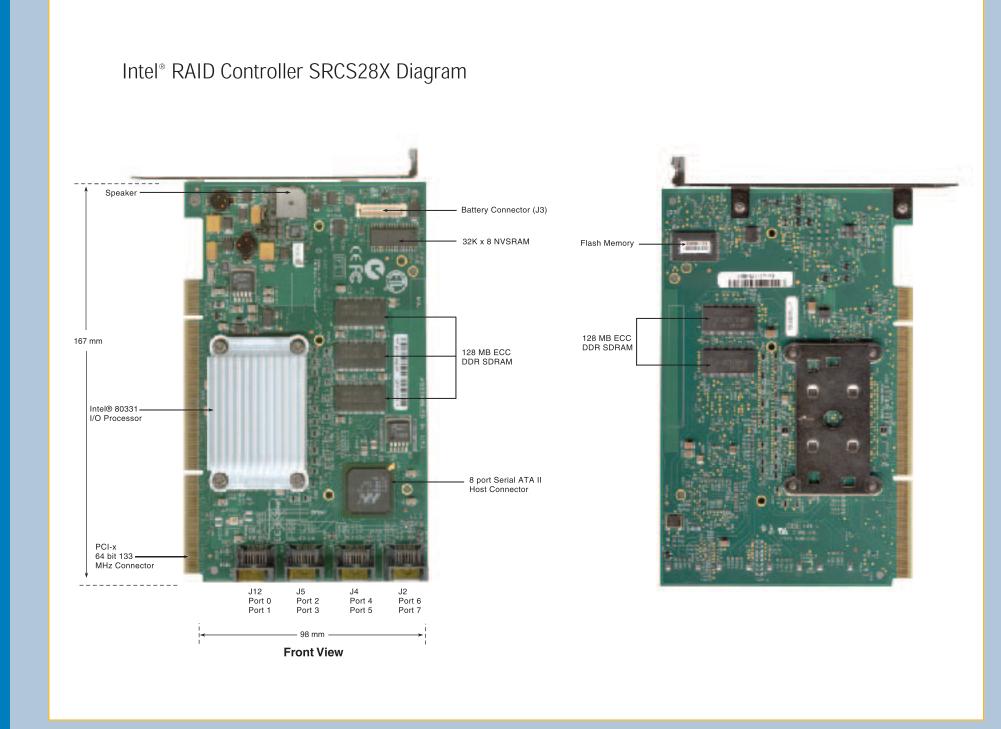
- Degraded Array: Short tone, one second on, one second off
- Failed Array: Long tone, three seconds on, one second offHot Spare Commissioned: Short tone, one second on,
- three seconds off

The drive failure tones will repeat until the problem is corrected or until the alarm is silenced or disabled.

The rebuild alarm tone remains on during the rebuild. After the rebuild completes, an alarm with a different tone will sound, signaling the completion of the rebuild. This is a one-time (non-repeating) tone.

The alarm can be *disabled* either in the BIOS Console or in the Web Console management utilities. When disabled, the alarm will not sound unless it is re-enabled in one of the utilities.

The alarm can be *temporarily silenced* either in the BIOS Console or in the Web Console management utilities. The alarm is not disabled and will sound again if another event occurs. The temporarily silenced alarm will be enabled if the system is power cycled.



#### Choosing the Right RAID Level Minimum Disks: 2 Striping of data across multiple drives in an array. This Read performance: Excellent provides high performance, but no data protection. RAID 0 Write performance: Excellent Fault tolerance: Number of Disks: 2 Disk mirroring, meaning that all data on one disk is Read performance: Excellent duplicated on another disk. This is a high availability RAID 1 Write performance: Good solution, but only half the total disk space is usable. Fault tolerance: Excellent Minimum Disks: 3 Striping with parity. Data and parity information are Read performance: Excellent spread among each drive in the array. A good RAID 5 compromise of performance, fault tolerance, and drive Write performance: Fair space utilization. Fault tolerance: Good Minimum Disks: 4 Disk mirroring and data striping that achieves a balance between the increased data availability inherent in Read performance: Excellent Write performance: Good RAID 1 and RAID 5 and the increased read performance Fault tolerance: inherent in disk striping (RAID 0). Excellent RAID 10 Each drive in the array is duplicated. This level array offers high data transfer advantages of striped arrays and increased data accessibility. Minimum Disks: 6 A RAID 50 array is a RAID 0 array striped across RAID 5 elements. Data striping of RAID 5 arrays provides increased Read performance: Excellent Write performance: Very Good read performance inherent in disk striping (RAID 0), and improved write performance along with better fault tolerance Fault tolerance: Excellent than a single RAID 5 array. RAID 50