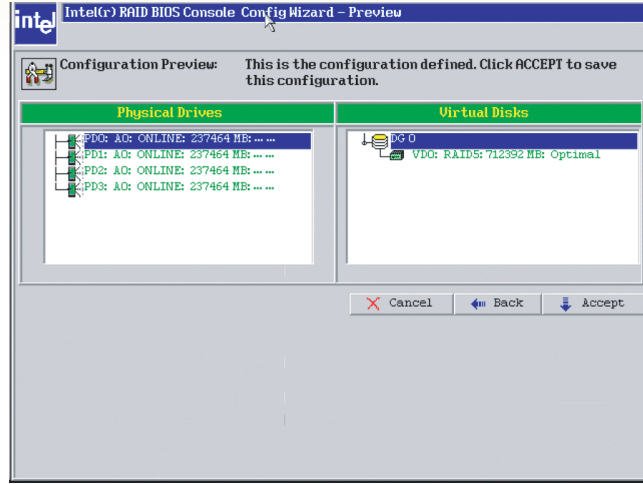
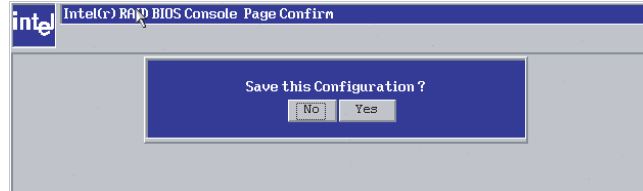


3 (Cont.) Use Intel® RAID BIOS Console 2 to Create a RAID Volume

9 Click **Accept**.



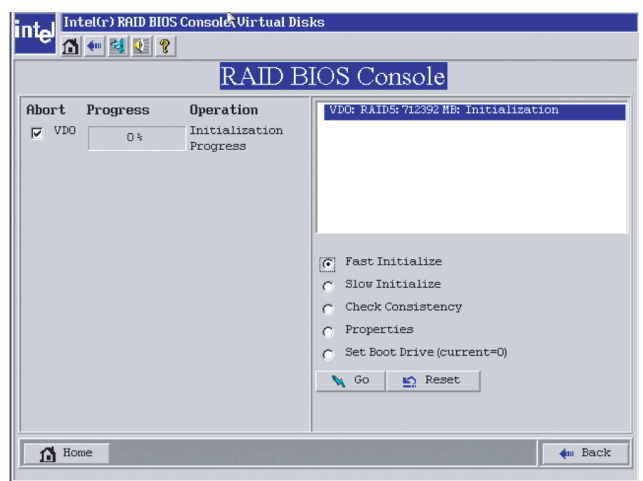
10 Click **Yes**.



11 Click **Yes**.



12 Select **Fast Initialize** to do a preliminary initialization of the drives for loading the operating system. A full initialization will occur in the background.



Creation of a RAID volume is now complete.

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 off
- Hot 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 Intel® RAID BIOS Console 2 or in the Intel® RAID Web Console 2 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 Intel® RAID BIOS Console 2 or in the Intel® RAID Web Console 2 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.

4 Install the Server Operating System

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

Install Microsoft Windows Server 2003* or Microsoft Windows 2000* Advanced Server

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

- 1 Create installation medium. See the instructions at the right.
- 2 Boot the system with the Windows Server 2003* or Windows 2000* Advanced Server CD-ROM.
- 3 Press <F6> as soon as the first blue screen appears. This will bypass mass storage detection.

- 4 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 above).
 - Press <Enter> to select the "Installation Driver" and continue with the Windows installation.

Install Intel® RAID Web Console 2

Install the Intel® RAID Web Console 2 package from the Resource CD. For details, see the Software Guide.

To manage a RAID array from Microsoft Windows*

Choose Start | Programs | RAID WebConsole | RAID WebConsole 2 to launch the RAID Web Console 2 application. For details, see the Software Guide.

OR

Linux Installation

IMPORTANT: Complete the steps on the reverse side before beginning your operating system installation. If you are installing a version other than Red Hat® Enterprise Linux, see <http://support.intel.com/support/motherboards/server> for installation instructions.

Install Red Hat® Enterprise Linux

- 1 Create installation medium. See the instructions at the right.
- 2 Read the Red Hat documentation to understand the disk space / size requirements for Red Hat® Enterprise Linux.
- 3 Boot the system with the Red Hat® Enterprise Linux CD-ROM
- 4 At the boot prompt, insert the Linux installation disk that you created in step 1 above. Type `linux cd`. Press <Enter>.
- 5 Follow the on-screen instructions to complete the installation. The RAID controller driver will be automatically detected and installed.

Install Intel® RAID Web Console 2

Install the Intel® RAID Web Console 2 package from the Resource CD. For details, see the Software Guide.

To manage a RAID array from Red Hat® Enterprise Linux

Choose Start | Programs | RAID WebConsole | RAID WebConsole 2 to launch the RAID Web Console 2 application. For details, see the Software Guide.

For other operating system installations, see the Software Guide or readme files on the Resource CD for the driver being installed.

Choosing the Right RAID Level

RAID	Minimum Physical Drives	Fail PDs Allowed	Method	Capacity	Read Speed	Write Speed	Good Usage	
0		2	NONE	Striping (speed)	100%	Excellent	Excellent	High throughput workstation
1		2 min & max	1	Mirroring (redundancy)	50%	Very good	Good	OS, apps entry level
5		3	1	Striping & distributed parity (fault tolerance)	n-1 (67-94%)	Very good	Good	Data, web/media server
6		4	2	Striping with dual distributed parity	n-2 (50-88%)	Good	Good	High fault tolerance
10		4	1 per mirror set	Striping across mirrors	50%	Very good	Good	Database, file, mail servers
50		6	1 per R5 set	Striping across R5 arrays	n-2 (67-94%)	Excellent	Very Good	Database, file, mail servers
60		8	2 per R6 set	Striping across R6 arrays	n-4 (50-88%)	Very good	Good	Critical data

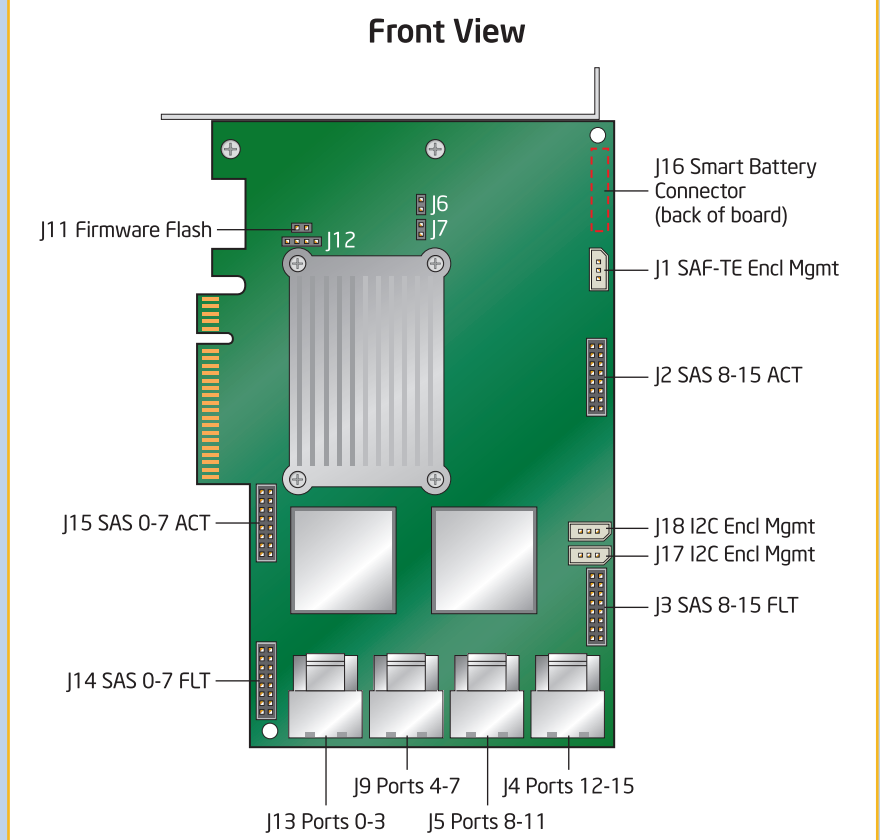
Creating Installation Media

- 1 Insert the Resource CD.
- 2 Non-Windows* system: Open the index.html file at the root of the Resource CD.
- 3 From the top menu of the Welcome screen, select "Drivers and Utilities" from the top menu, then select the appropriate operating system.
- 4 Microsoft Windows* drivers:
 - Select the driver link.
 - Open the driver.zip file to extract the driver files to a floppy disk or other user-specified location.

Linux or other operating system drivers:

- Select the driver link.
- Save the compressed driver files to a floppy disk or other user-specified location.

Intel® RAID Controller SRCASPH16I Diagram



Back View

