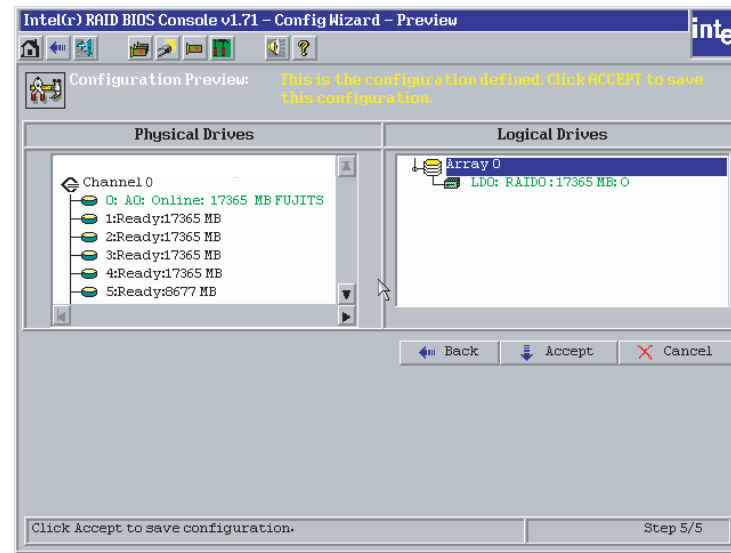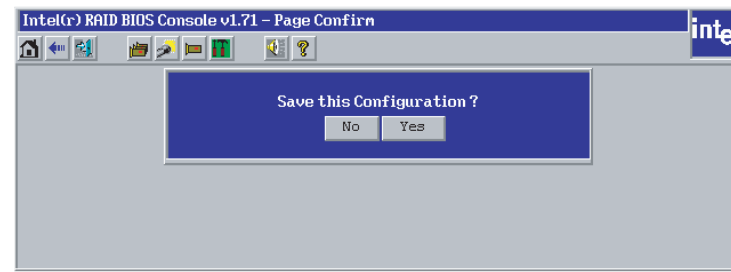**5** (Cont.) Use the Intel® RAID BIOS Console to Create a RAID Volume
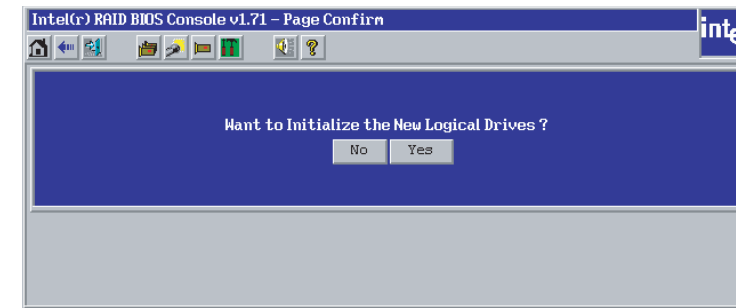
10. Click on **Accept.**

11. Click **Yes.**

12. Click **Yes**, then **Exit**.

Creation of a RAID Volume is now complete.

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6 Install the Server Operating System

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

OR

Red Hat* Enterprise Linux 3 Installation

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

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

1. 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.

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.

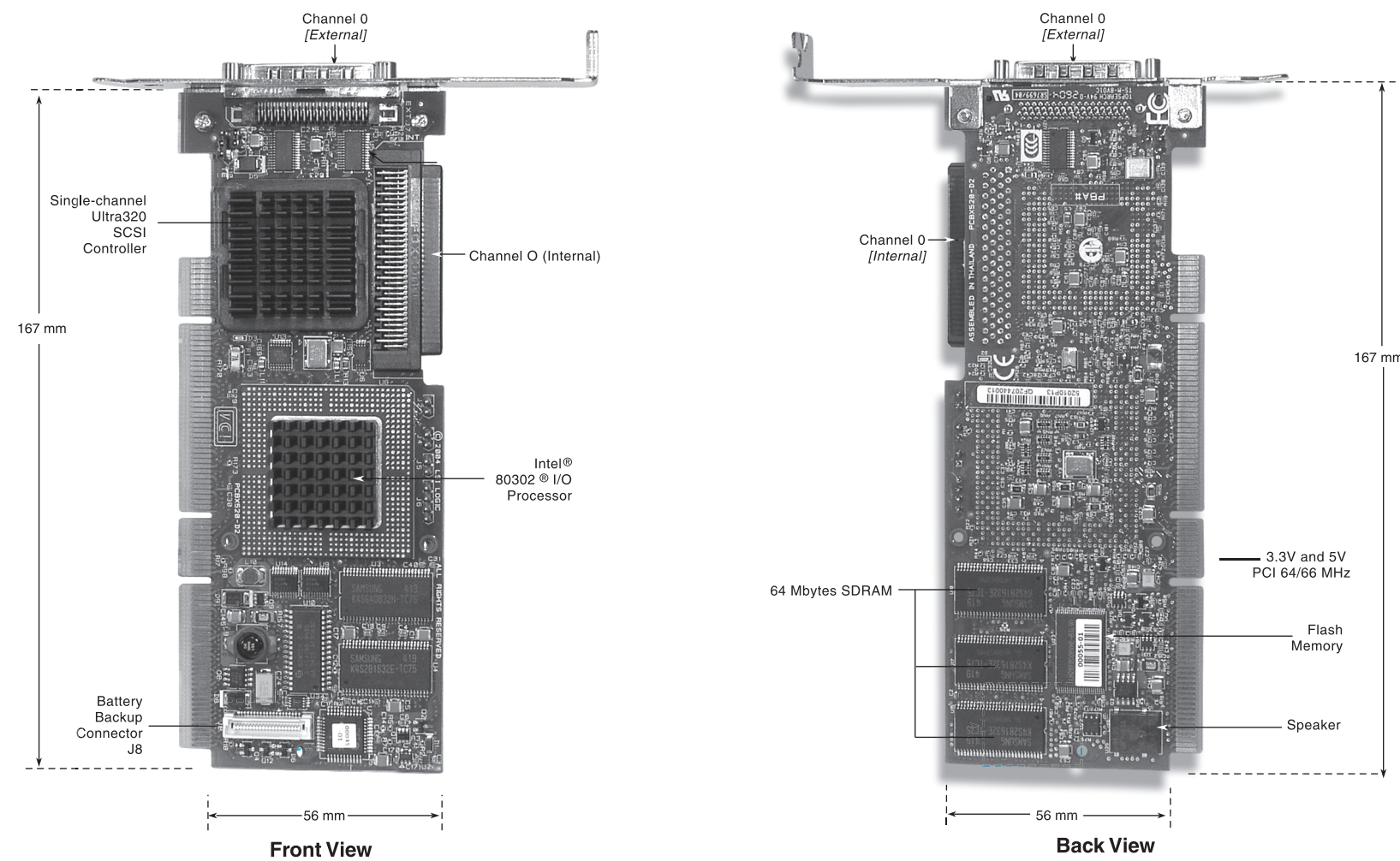**Step B:** Install the Intel® RAID Web Console Package

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.

Intel® RAID Controller SRCU41L Diagram

Front View

Back View

Choosing the Right RAID Level

RAID 0

Minimum Disks: 2	Striping of data across multiple drives in an array. This provides high performance, but no data protection.
Read performance: Excellent	
Write performance: Excellent	
Fault tolerance: None	

RAID 1

Number of Disks: 2	Disk mirroring, meaning that all data on one disk is duplicated on another disk. This is a high availability solution, but only half the total disk space is usable.
Read performance: Excellent	
Write performance: Good	
Fault tolerance: Excellent	

RAID 5

Minimum Disks: 3	Striping with parity. Data and parity information are spread among each drive in the array. A good compromise of performance, fault tolerance, and drive space utilization.
Read performance: Excellent	
Write performance: Fair	
Fault tolerance: Good	

RAID 10

Minimum Disks: 4	Disk mirroring and data striping that achieves a balance between the increased data availability inherent in RAID 1 and RAID 5 and the increased read performance inherent in disk striping (RAID 0). Each drive in the array is duplicated. This level array offers high data transfer advantages of striped arrays and increased data accessibility.
Read performance: Excellent	
Write performance: Good	
Fault tolerance: Excellent	

RAID 50

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 inherent in disk striping (RAID 0), and improved write performance along with better fault tolerance than a single RAID 5 array.
Read performance: Excellent	
Write performance: Very Good	
Fault tolerance: Excellent	