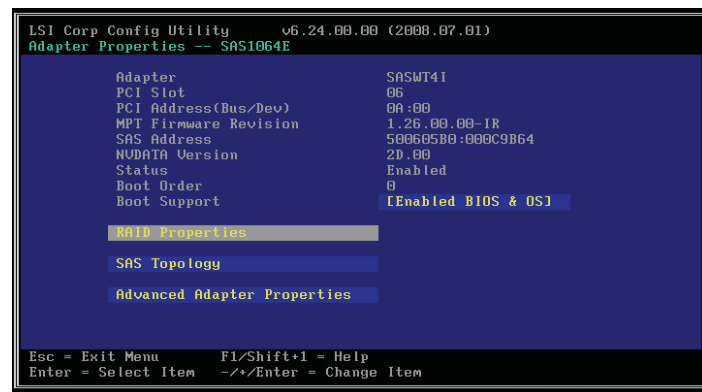


### 3 (Cont.) Use the LSI MPT SAS BIOS Configuration Utility\* to Create a RAID Virtual Drive

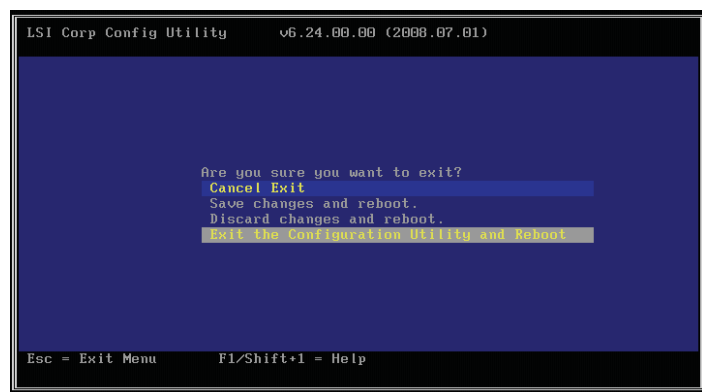
9 Select **Save changes then exit this menu**, then press **<Enter>**.



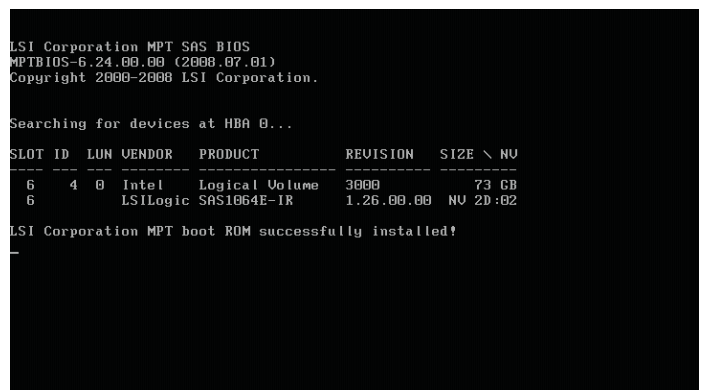
10 After the RAID array is created, the following screen will appear. Press **<Esc>** to return to the main menu.



11 Choose **Exit the Configuration Utility and Reboot** and press **<Enter>** to reboot the system.



12 During system reboot, verify that Logical Volume is displayed in the Product column.



Creation of a RAID volume is now complete.

### 4 Install the Server Operating System

Microsoft Windows Server 2008\* /  
Microsoft Windows Server 2003\* /  
Microsoft Windows 2000\* /  
Advanced Server Installation

#### Microsoft Windows Server 2008\*

- 1 Start the installation by booting from the Microsoft Windows\* DVD-ROM.
- 2 Select **Load Driver** when prompted to select a location to install Microsoft Windows\*, then click **Next**.
- 3 Insert the disk containing the Microsoft Windows\* device driver when prompted and press **<Enter>**.
- 4 When choosing to load the driver from a USB Flash Drive, the INF path must be provided.
  - Highlight the Microsoft Windows\* device driver, then click **Next**.
  - Continue the Microsoft Windows\* installation procedure.

#### 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 Microsoft Windows Server 2003\* or Microsoft 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 the Microsoft Windows Server 2003\* or Microsoft Windows 2000\* Advanced Server installation driver disk (created in step 1 above).
  - Press **<Enter>** to select the "Installation Driver" and continue with the Microsoft 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 Intel® 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.
- 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

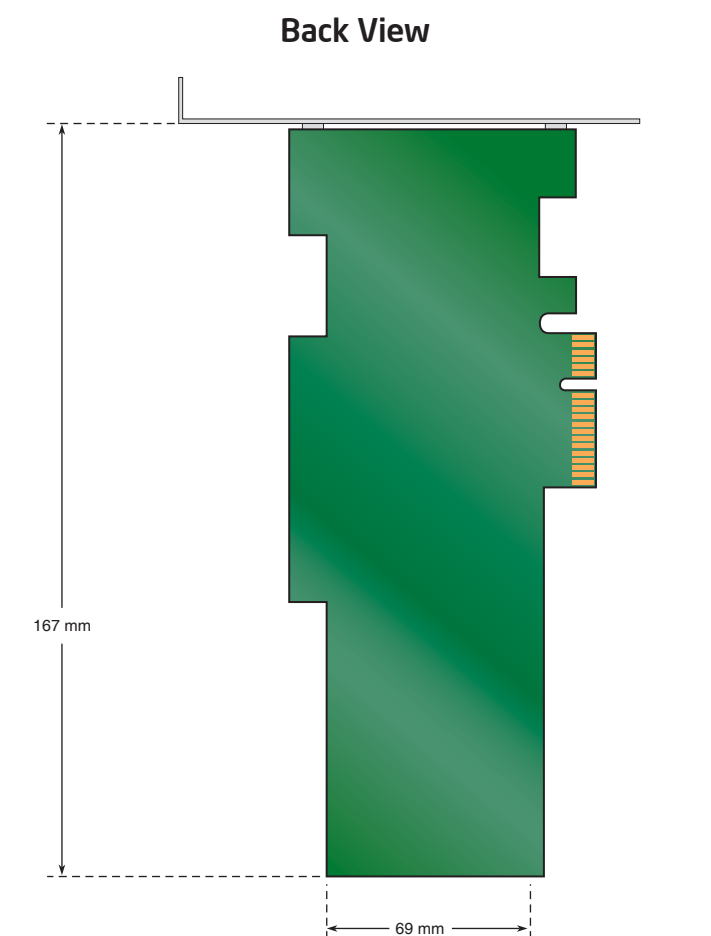
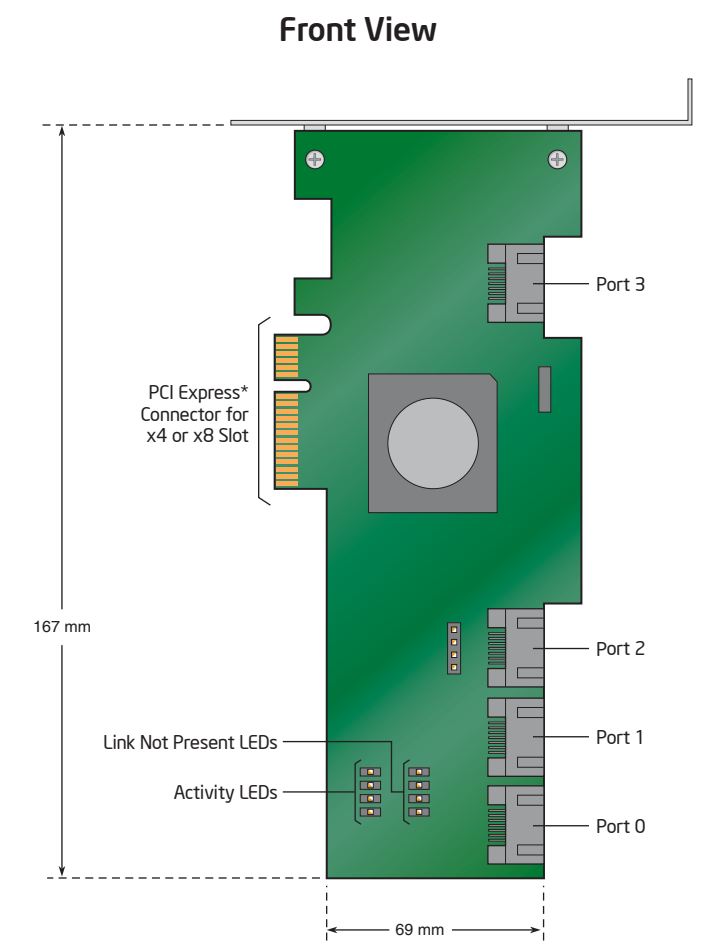
Choose Start | Programs | RAID WebConsole | RAID WebConsole 2 to launch the RAID Web Console 2 application. For details, see the Software Guide.

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

#### Creating Installation Media

- 1 Insert the Resource CD.
  - 2 Non-Microsoft 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", 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 SASWT4I Diagram



#### Choosing the Right RAID Level

|                      |  |  |  |
|----------------------|--|--|--|
| <b>RAID 0 (IS)</b>   |  | Minimum Disks: 2<br>Read performance: Excellent<br>Write performance: Excellent<br>Fault tolerance: None   | Striping of data across multiple drives in an array. This provides high performance, but no data protection.   |
| <b>RAID 1 (IM)</b>   |  | Number of Disks: 2<br>Read performance: Excellent<br>Write performance: Good<br>Fault tolerance: Excellent | 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.         |
| <b>RAID 1E (IME)</b> |  | Minimum Disks: 3<br>Read performance: Excellent<br>Write performance: Good<br>Fault tolerance: Excellent   | Enhanced disk mirroring, meaning that all data on one disk is duplicated on other disks. This is a high availability solution, but only half the total disk space is usable. |