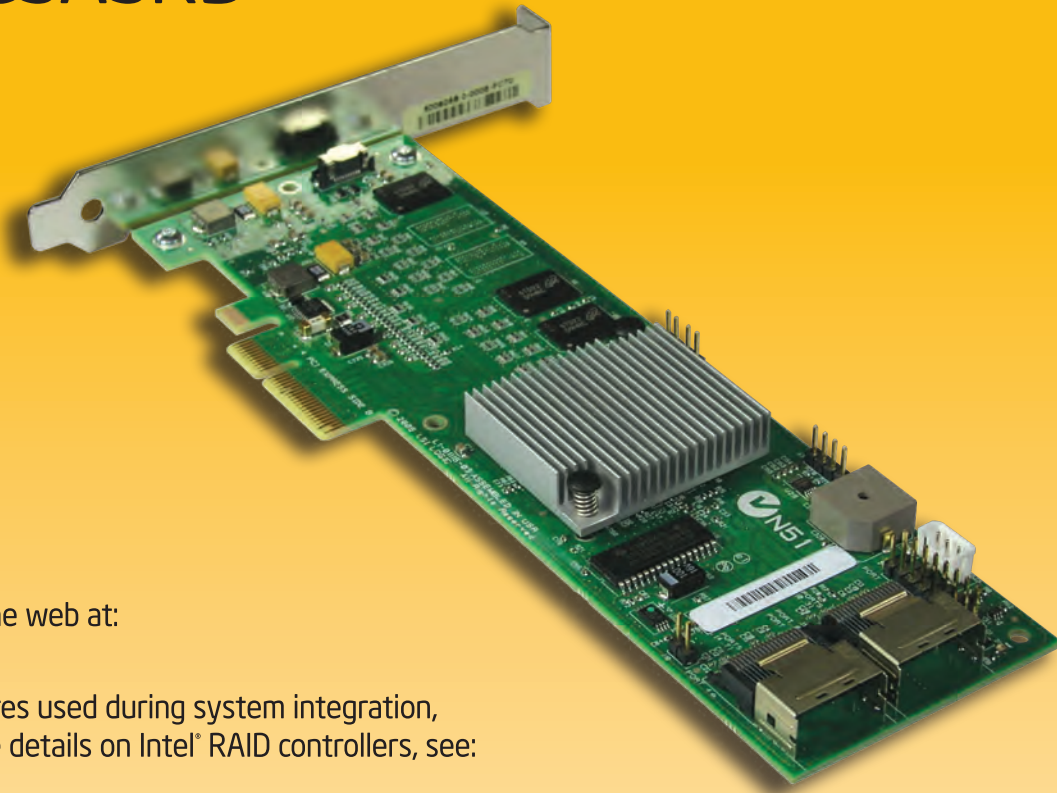


# Intel® RAID Controller SRCASRB Quick Start User's Guide



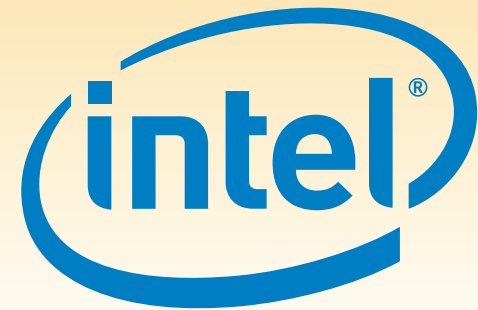
This guide contains step-by-step instructions for installing the Intel® RAID Controller SRCASRB and information on using the BIOS setup utility to configure a single logical drive array and install the driver into the operating system.

For more advanced RAID configurations, or to install with other operating systems, please refer to the Hardware User's Guide.

These guides and other supporting documents (including a list of supported server boards) are also located on the web at: <http://support.intel.com/support/motherboards/server>.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, see your Hardware Guide for complete ESD procedures. For more details on Intel® RAID controllers, see: [www.intel.com/go/serverbuilder](http://www.intel.com/go/serverbuilder).

Read all cautions and warnings first before starting your RAID Controller integration.



## Choosing the Right RAID Level

RAID	Diagram	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

### Warning

Read all caution and safety statements in this document before performing any of the instructions. Also see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm> for complete safety information.

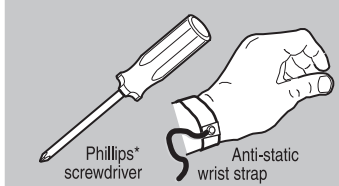
### Warning

Installation and service of this product should only be performed by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

### Caution

Observe normal ESD (Electrostatic Discharge) procedures during system integration to avoid possible damage to server board and/or other components.

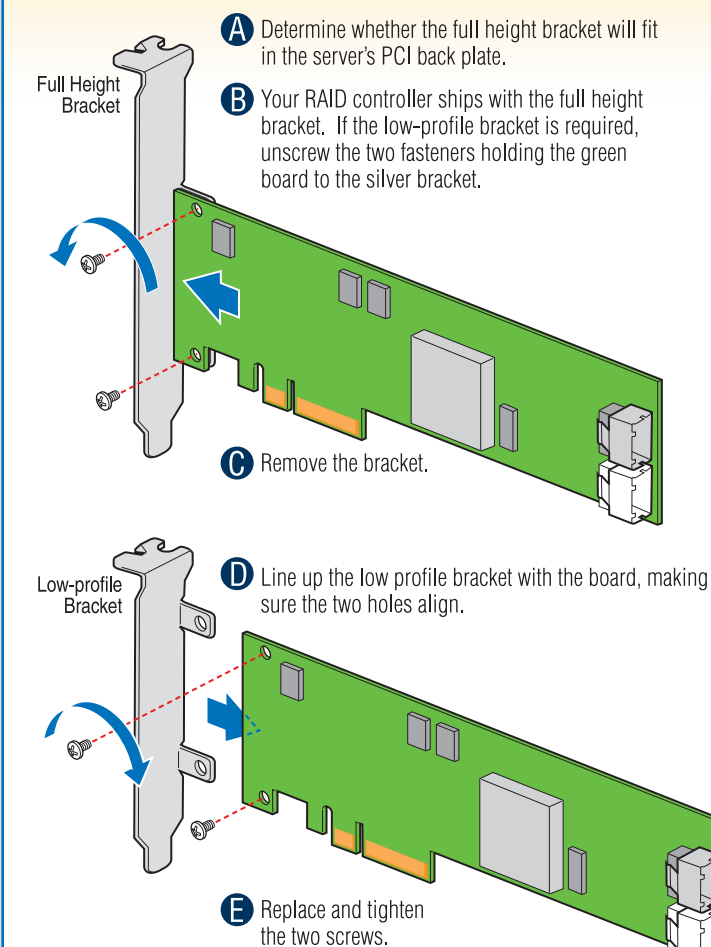
### Tools Required



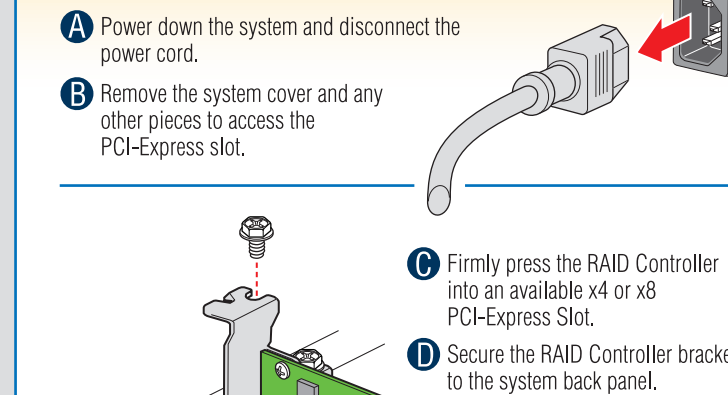
### What you will need to begin

- SAS/SATA 3.0 hard disk drives
- Intel® RAID Controller SRCASRB
- Server board with an x4 or x8 PCI Express\* slot
- Intel® RAID Controller SRCASRB Resource CD
- Operating system installation media: Microsoft Windows Server 2003\*, Microsoft Windows 2000\* Advanced Server, Red Hat\* Linux or SUSE Linux Enterprise Server

## 1 Check the Bracket Height



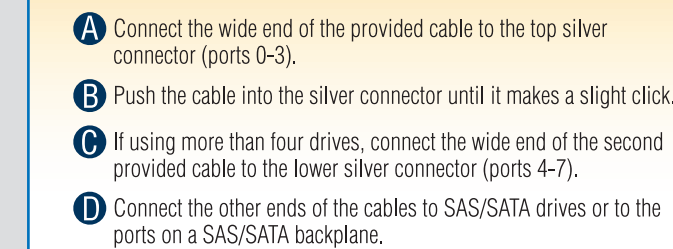
## 2 Install the RAID Controller



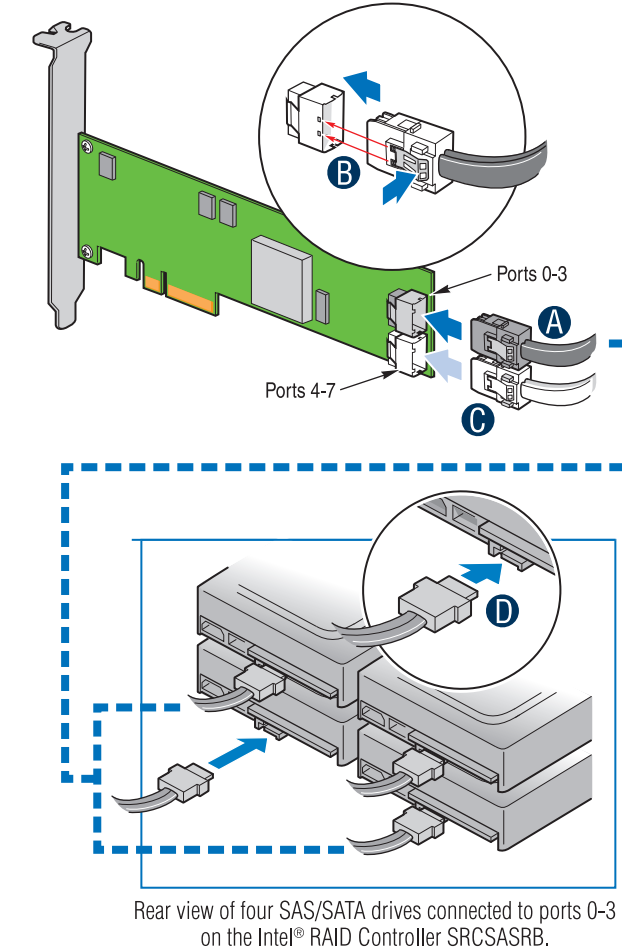
### Audible Alarm Information

For information about the audible alarm and how to silence or disable it, see the reverse side of this document.

## 3 Connect the RAID Controller



Notes: Both non expander backplanes (one cable per drive) and expander backplanes (one or two total cables) are supported. Drive power cables (not shown) are required.



Go to Step 4 on Side 2

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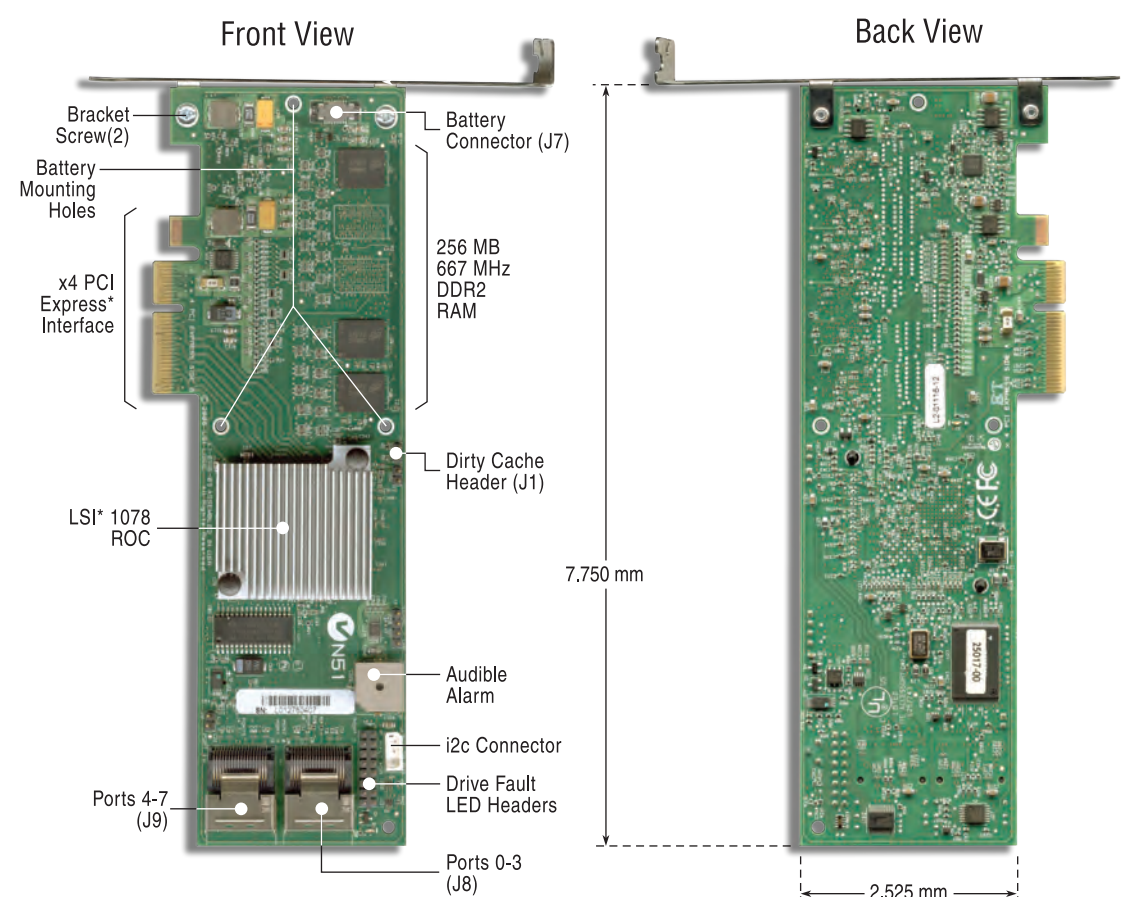
For more information on Intel's added-value server offerings, visit the Intel® ServerBuilder website at: [www.intel.com/go/serverbuilder](http://www.intel.com/go/serverbuilder).

<sup>1</sup>Available only to Intel® Channel Program Members, part of Intel® e-Business Network.

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- Support Information and much more

## Intel® RAID Controller SRCASRB Reference Diagram



D92002-001



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