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# **Intel<sup>®</sup> RAID Controller SRCZCRX**

## ***Tested Hardware and Operating System List***

**Revision 4.0**

**December, 2006**

**Enterprise Platforms and Services Marketing**

## Revision History

Date	Revision Number	Modifications
10/30/04	1.0	Initial Release
27/06/05	2.0	FW upgrade to 414B
03/25/06	2.1	Update with latest Firmware and Test information
09/20/06	3.0	Update with latest Firmware and Test information
12/20/06	4.0	Update with latest Firmware and Test information

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# Table of Contents

<b>1. Introduction .....</b>	<b>5</b>
1.1 Test Overview .....	5
1.1.1 Basic Installation Testing .....	5
1.1.2 Adapter / Peripheral Compatibility and Stress Testing .....	6
1.2 Pass/Fail Test Criteria .....	7
<b>2. Intel® RAID Controller SRCZCRX Firmware Configurations.....</b>	<b>9</b>
<b>3. Operating Systems.....</b>	<b>10</b>
3.1 Operating System Certifications .....	12
<b>4. Intel® Server Boards.....</b>	<b>13</b>
<b>5. Enclosures, PCI Adapters, and Peripherals.....</b>	<b>14</b>
5.1 External Storage .....	14
5.2 Internal Storage .....	15
5.3 CD-ROM Drives .....	15
5.4 Tape Drives .....	15
5.5 Hard Disk Controllers.....	15
5.6 SCSI RAID Controllers .....	16
5.7 Network Interface Controllers .....	16
<b>6. Hard Disk Drives.....</b>	<b>17</b>
<b>7. Installation Guidelines .....</b>	<b>21</b>
7.1 SuSE 9.1 Professional Kernel Version 2.6.5-7.75-smp Data Integrity.....	21

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# 1. Introduction

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This document provides users of the Intel® RAID Controller SRCZCRX with a guide to the operating systems, server boards, chassis, disk drives, and other peripherals that Intel tested for use with the RAID controller.

This document will be updated as additional testing is performed, or until the RAID controller is no longer in production. Each new release of the document will include the information from previous releases.

Intel will only support this RAID controller when used in a system configured with the server boards listed, and configured with the versions of RAID firmware, system BIOS / firmware, and operating system versions that were successfully tested. This RAID controller has been thoroughly tested with the Intel® server boards, Intel drive enclosures, and with the third-party devices listed in this document. However, it is not practical to test the RAID controller with every possible combination of server board, drive enclosure, hard drive, and peripheral. Sample combinations have been tested to gain added confidence in their inter-compatibility, and every device listed has been tested in one or more configurations.

## 1.1 Test Overview

Testing performed of the RAID Controller SRCZCRX is classified under two categories: Compatibility Testing and Stress Testing.

### 1.1.1 Basic Installation Testing

Compatibility testing is performed with each supported operating system. Basic compatibility testing validates that the RAID controller can be used to install the operating system and that the base hardware feature set is functional. A small set of peripherals are used for installation purposes only. No additional add in cards are tested. Testing may include network connectivity and running of proprietary and industry standard test suites.

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**Note:** *The latest version of an operating system signifies the latest supported version at the time of the actual test run. New releases of this document may include a newly supported release of a given operating system. Previous releases of a supported operating system may not be tested beyond the basic compatibility test process.*

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### 1.1.1.1 Support Commitment for Basic Installation Testing

Intel commits to provide the following level of customer support for operating systems that receive only basic installation testing:

- Intel will provide and test operating system drivers for each of the server board's integrated controllers, provided that the controller vendor has a driver available upon request. Intel does not require vendors to develop drivers for operating systems that they do not already support. This may limit the functionality of certain server board integrated controllers.
- Intel will support customer issues that involve installation and/or functionality of an operating system with the server board's integrated controllers only if a driver has been made available.
- Intel will NOT provide support for issues related to use of any add-in adapters or peripherals installed in the server system when an operating system that received basic installation testing only is in use.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, onboard controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.

### 1.1.2 Adapter / Peripheral Compatibility and Stress Testing

Adapter / Peripheral Compatibility and Stress testing is performed only on the most current release of a supported operating system at the time of a given validation run. The Adapter / Peripheral Compatibility and Stress testing process consists of three areas:

- **Base Platform:** Each base platform will successfully install a given operating system, successfully run a disk stress test, and successfully run a network stress test.
- **Adapter Compatibility:** Adapter compatibility validation (CV) testing uses test suites to gain an accurate view of how the server performs with a wide variety of adapters under the primary supported operating systems. These tests are designed to show hardware compatibility between the cards and the server platform and include functional testing only. No heavy stressing of the systems or the cards is performed for CV testing.
- **Stress Testing:** This test sequence uses configurations that include add-in adapters in all available slots, (depending on chassis used) for a minimum 72-hour test run without injecting errors. Each configuration passes an installation test, a Network/Disk Stress test, and tape backup test. Any fatal errors that occur require a complete test restart.

### 1.1.2.1 Support Commitment for Adapter / Peripheral Compatibility and Stress Testing

Intel will provide the following level of customer support for operating systems that receive Adapter / Peripheral Compatibility and Stress testing:

- Intel will provide support for customer issues with these operating systems involving installation and/or functionality of the server board with or without the adapters and peripherals listed in this document as having been tested under the operating system.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, onboard controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.
- Intel will provide and test operating system drivers for each onboard video, network, and storage controller.
- Intel will enable vendors to provide driver support for add-in adapters using these operating systems.
- Intel will go through some of the steps to achieve certification to ensure its customers do not run across any problems, but the actual certification is the responsibility of the individual customer.

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**Note:** Intel does not provide a support commitment for operating systems, adapter cards, and peripherals not listed in this document. Intel will consider support requests individually.

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## 1.2 Pass/Fail Test Criteria

For each operating system, adapter, and peripheral configuration, a test passes if specific criteria are met. Specific configurations may have had particular characteristics that were addressed on a case-by-case basis. In general, a configuration passes testing if the following conditions are met:

For each operating system, adapter, and peripheral configuration, a test passes if specific criteria are met. Specific configurations may have had particular characteristics that were addressed individually. In general, a configuration passes testing if the following conditions are met:

- The operating system installed without error.
  - Manufacturer's installation instructions or Intel's best-known methods were used for the operating system installation.
  - No extraordinary workarounds were required during the operating system installation.
  - The server system behaved as expected during and after the operating system installation.
  - Application software installed and executed normally.
- Hardware compatibility tests ran to completion without error.

- Test software suites executed successfully:
  - Test and data files were created in the correct directories without error.
  - Files copied from client to server and back compare to the original without error.
  - Clients remain connected to the server system.
  - Industry standard test suites run to completion without error.



## 2. Intel® RAID Controller SRCZCRX Firmware Configurations

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The following table lists the controller / firmware configurations tested. This document will be updated with additional configurations as new revisions of the RAID Controller SRCZCRX and/or firmware versions for that controller are released. Each configuration is assigned an identifier number which is referenced in the tables throughout this document.

Intel only supports adapters and peripherals under the specified adapter configuration and operating systems versions with which they were tested.

Base System Identifier #	Product Code	TA Number	Firmware Revision
1	SRCZCRX	C77006-001	Ver. 413Y
2	SRCZCRX	C77006-002	Ver. 414B
3	SRCZCRX		Ver. 414D
4	SRCZCRX		Ver. 414E
5	SRCZCRX		Ver. 414G

### 3. Operating Systems

The following table provides a list of supported operating systems for the Intel® RAID Controller SRCZCRX. Each operating system was tested for compatibility with RAID Controller SRCZCRX configuration listed in Section 2. Operating systems are supported only with the specified base system configuration(s) with which they were tested.

The following table also indicates whether each operating system received Basic Installation Testing, or Adapter / Peripheral Compatibility and Stress Testing. See Section 1 for information on the support commitments for Basic Installation Testing and Adapter / Peripheral Compatibility and Stress Testing.

Any variations to the standard operating system installation process are documented in the Installation Guidelines section of this document. If there are no installation guidelines noted in the following table, then the operating system installed as expected using manufacturer's installation instructions or Intel's best-known methods.

**Note:** *The operating systems listed below have been tested for compatibility with the RAID Controller SRCZCRX but the operating system and its associated driver may not have been tested for compatibility with the server board you have chosen to use. See the supported operating system list for your server board to verify operating system support compatibility with the server board.*

Ident#	Operating System	Base System Configuration Tested & Type of Testing	Notes
1	Microsoft Windows 2003*, Service Pack 1	Configuration 1, 2, 3, 4, 5 – Compatibility & Stress	
2	Microsoft Windows Server 2003* Small Business Server	Configuration 1, 2 – Basic Installation	Application portion of the package was not tested and is not supported.
3	Microsoft Windows 2000* Advanced Server, Service Pack 5	Configuration 1, 2, 3, 4, 5 – Compatibility & Stress	
4	Microsoft Windows* Small Business Server 2000	Configuration 1, 2 - Basic Installation	Application portion of the package was not tested and is not supported.
5	Microsoft Windows XP*, SP2	Configuration 1, 2, 3, 4 – Compatibility & Stress	
6	Novell* NetWare 5.1, SP8	Configuration 1 – Basic Installation	
7	Novell Netware* 6.0, SP5	Configuration 1 – Basic Installation	
8	Novell* NetWare 6.5, SP3	Configuration 1, 2, 3, 4 – Compatibility & Stress	
9	SCO* Open Server 5.0.7	Configuration 1, 2 – Basic Installation	
10	SCO* UnixWare 7.1.3	Configuration 1 – Compatibility & Stress	

Ident#	Operating System	Base System Configuration Tested & Type of Testing	Notes
11	SCO* UnixWare 7.1.4	Configuration 2 – Compatibility & Stress	
12	Red Hat* Enterprise Linux AS 3.0, U4	Configuration 1 – Compatibility & Stress	
13	Red Hat* Enterprise Linux AS 3.0, U5	Configuration 2 – Compatibility & Stress	
14	Red Hat* Enterprise Linux AS 4.0	Configuration 1, 2 – Compatibility & Stress	
15	SuSE Linux Enterprise Server 9.0, SP1	Configuration 1, 2 – Compatibility & Stress	
16	SuSE Linux Professional 9.1	Configuration 1, 2 – Basic Installation	
17	SuSE Linux Professional 9.2	Configuration 1, 2 – Basic Installation	
18	Red Hat* Linux Professional 8.0	Configuration 1 – Basic Installation	
19	Red Hat* Linux Professional 9.0	Configuration 2 – Basic Installation	
20	SuSE* Linux Enterprise Server 8.0, SP3	Configuration 1 – Basic Installation	
21	SuSE* Linux Professional 9.0	Configuration 2 – Basic Installation	
22	Microsoft* Windows* 2003, EM64T	Configuration 1, 2, 3, 4, 5 – Compatibility & Stress	
23	Red Hat* Enterprise Linux AS 3.0, EM64T, U4	Configuration 1 – Compatibility & Stress	
24	Red Hat* Enterprise Linux AS 3.0, EM64T, U5	Configuration 2 – Basic Installation	
25	Red Hat* Enterprise Linux AS 4.0, EM64T	Configuration 2 – Compatibility & Stress	
26	SuSE Linux Enterprise Server 9.0, EM64T SP1	Configuration 2 – Compatibility & Stress	
27	Microsoft Windows XP*, EM64T	Configuration 1, 2, 3, 4 – Basic Installation	
28	SuSE Linux Enterprise Server 9.1, EM64T	Configuration 1, 2, 3 – Basic Installation	
29	Red Hat* Enterprise Linux AS 3.0, EM64T, U6	Configuration 3 – Compatibility & Stress	
30	Red Hat Enterprise Linux AS 4.0, EM64T, U1	Configuration 3 – Compatibility & Stress	
31	Red Hat Enterprise Linux AS 4.0, EM64T, U2	Configuration 3, 4, 5 – Compatibility & Stress	
32	Red Hat Enterprise Linux AS 4.0, U2	Configuration 3, 4, 5 – Compatibility & Stress	
33	SuSE Linux Enterprise Server 9.0, SP2	Configuration 3, 4 – Compatibility & Stress	
34	SuSE Linux Enterprise Server 9.0, EM64T SP2	Configuration 3, 4 – Compatibility & Stress	

Ident#	Operating System	Base System Configuration Tested & Type of Testing	Notes
35	SuSE Linux Enterprise Server 9.0, SP3	Configuration 3, 4, 5 – Compatibility & Stress	
36	SuSE Linux Enterprise Server 9.0, EM64T SP3	Configuration 3, 4, 5 – Compatibility & Stress	

### 3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® RAID Controller SRCZCRX. However, the customer is responsible for their own certification from the individual operating system vendors. In many cases, the customer may leverage their operating system certifications from Intel's testing. See the "Comments" section next to each operating system in the table below for additional information. Intel's certifications, pre-certification, and operating system testing may help reduce some of the risk in achieving customer certifications with the operating system vendors.

Operating System	Certification Listing	Comments
Microsoft Windows 2003* Enterprise Server	SRCZCRX	OEM must request certification by Microsoft* or their specific product. <a href="http://www.microsoft.com/hwdq/hcl/search.asp">http://www.microsoft.com/hwdq/hcl/search.asp</a> (Search on SRCZCRX) <a href="http://developer.intel.com/design/servers/whql.htm">http://developer.intel.com/design/servers/whql.htm</a>
Microsoft Windows 2000* Advanced Server	SRCZCRX	OEM must request certification by Microsoft* for their specific product. <a href="http://www.microsoft.com/hwdq/hcl/search.asp">http://www.microsoft.com/hwdq/hcl/search.asp</a> (Search on SRCZCRX) <a href="http://developer.intel.com/design/servers/whql.htm">http://developer.intel.com/design/servers/whql.htm</a>
Novell* NetWare* 5.1 and 6.0, 6.5	SRCZCRX	Novell checks Intel's test results, certifies (if appropriate), and posts the certificate on their web site. Customer can leverage the Intel certification, if customer product meets the operating system vendor standard. <a href="http://developer.novell.com/yes">http://developer.novell.com/yes</a>

## 4. Intel® Server Boards

This list includes the Intel® Server Board software versions with which the server boards were configured at the time of testing.

Server Board	Microsoft Windows 2003*	Microsoft Windows 2000*	Microsoft Windows XP*	Red Hat* Linux v9.0	Red hat* Linux AS4.0 U2	Red hat* Linux AS3.0	Novell* NetWare v6.5	SuSE* Linux ES 9.0 SP3	SuSE* Professional9.0	Red hat* Linux AS4.0 U2 x86_64	SuSE* Linux ES 9.0 SP3 x86_64	Microsoft Windows 2003* x64	Microsoft Windows XP* x64
SE7520BD2 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X
BIOS	BMC	FRU/SDR	HSC										
P7.4	2.40	6.4.1	1.12										
SR7520JR2 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X
BIOS	BMC	FRU/SDR	HSC										
P07.x	2.40	N/A	N/A										
SE7520BD2D2 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X
BIOS	BMC	FRU/SDR	HSC										
P1.0	2.40	6.4.1	1.12										
SE7320EP2 <sup>1</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X
BIOS	BMC	FRU/SDR	HSC										
P01	N/A	N/A	N/A										

<sup>1</sup> Testing was performed on the SCSI SKU of this product.

## 5. Enclosures, PCI Adapters, and Peripherals

Enclosure, add-in card, and peripheral testing was performed on the Intel® RAID Controller SRCZCRX by Intel Labs, by independent test labs, or by the vendor. Compatibility and stress testing is performed with the latest version of an operating system at the time the validation testing occurred.

Although a large sample of configurations were tested, due to the large number of possible configurations, not all devices were tested under all operating systems, and not all possible combinations or configurations of third-party devices were tested for inter-compatibility. Customers should see the *Tested Hardware and Operating System List* for the server board to verify that the device is included for the server board as well as for the RAID controller SRCZCRX.

Add-in adapter card and peripheral compatibility and stress testing is performed with the latest version of an operating system at the time the validation testing occurred. The following table shows the operating system and base system configurations used to validate each device. The adapters are divided into categories based on their functionality. All integrated onboard devices are tested by default and are therefore not included in the following tables.

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**Note:** *Not all adapter cards and peripherals were tested under all operating systems.*

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Any variations to the standard adapter installation process or to expected adapter functionality are documented in the Installation Guidelines section of this document. If there are installation guidelines affecting a particular adapter and operating system combination, these are referenced in the following table. If there are no installation guidelines noted in the following table, then the adapter installed and functioned as expected using manufacturer's installation instructions or Intel's best-known methods.

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**Note:** *Testing of adapters cards normally is performed with unused add-in adapters and onboard controller expansion ROMs disabled in BIOS Setup. Intel recommends that customers disable the option ROM for add-in controllers and/or the onboard controllers when not booting from the controller or needing to use its built in utilities.*

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### 5.1 External Storage

**Note:** Enclosures are list ONLY if they were attached to the RAID Controller SRCZCRX.

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Dell*	PowerVault 201S		U160		1, 3, 7, 10, 11, 19, 21, 22
Dell*	PowerVault 211S		U160		1, 3, 7, 10, 11, 19, 21, 22
Dell*	PowerVault 220S		U320		1, 3, 7, 10, 11, 19, 21, 22
StorCase*	S10A155		U320		1, 3, 7, 10, 11, 19, 21, 22
StorCase*	S10A172		U320		1, 3, 7, 11, 19, 21, 22

## 5.2 Internal Storage

**Note:** Enclosures are list ONLY if they were attached to the RAID Controller SRCZCRX.

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Intel®	SC5300		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Intel®	SC5250-E		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Intel®	SC5275-E		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Intel®	SR1400		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Intel®	SR1450		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Intel®	SR2400		U320/SCA		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22

## 5.3 CD-ROM Drives

**Note:** CD-ROM drives are listed ONLY if the operating system was installed from this device.

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Sony*	CDU5211	CDU5211	IDE		1, 3, 5, 7, 9, 10, 6, 7, 8, 20, 21, 22
Panasonic*	AXXDVDFloppy	SR-8177-B	IDE		1, 3, 6, 7, 9, 10

## 5.4 Tape Drives

**Note:** CD-ROM drives are listed ONLY if the operating system was installed from this device.

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Sony*	SDX-500	SDX-500C/TB	Ultra2/wide		1, 3, 21
Sony*	PCBacker II	SDT-11000/PB	Ultra2/wide		1, 3, 21
Seagate *	SCORPION 40		SCSI DDS4 DAT		1, 3, 7, 16, 17, 21
Quantum*	DLT 8000				1, 3, 21
Sony*	SDT 9000				1, 3, 11
Seagate*	SCORPION 24	STD2401LW	DDS4 DAT		1, 3, 5, 7, 9, 11, 16, 17, 18, 20, 21, 22

## 5.5 Hard Disk Controllers

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Adaptec*	ASC-39320	ASC39320	PCI-X133		1, 3, 7, 10
Adaptec*	ASC-39160	ASC-39160	PCI-64/66		3, 5
Emulex*	LightPulse LP9402	LP9402	FC-HBA PCI64/66		1, 3, 7
LSI Logic*	LSI20160	LSI20160	PCI64/66		1, 3, 9
LSI Logic*	LSI20160L	LSI20160L	PCI-64/66		1, 3, 9
QLogic*	QLA2200L	QLA2200L	PCI-64/66		1, 3, 7, 9

## 5.6 SCSI RAID Controllers

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Adaptec*	SCSI RAID 2120S	ASR-2120S	PCI-64/66		3, 5, 6, 10
Adaptec*	SCSI RAID 2200S	ASR-2200S/64MB	PCI		1, 3, 9, 10
Adaptec*	SCSI RAID 3410S	ASR-3410S	PCI-64/66		1, 3, 6, 9, 10
ICP-Vortex*	GDT4523RZ	GDT4523RZ	PCI-32/66		3, 5, 6, 8, 10
ICP-Vortex*	GDT6523RS	GDT6523RS	PCI-32/33		3, 5, 10
ICP-Vortex*	GDT8623RZ	GDT8623RZ	PCI-64/66		1, 3, 9, 10
ICP-Vortex*	GDT8663RZ	GDT8663RZ	PCI-64/66		1, 3, 9, 10
Intel®	SRCU32	SRCU32U	PCI-64/66		1, 3, 6, 9, 11, 15, 16, 17, 18, 19, 20
Intel®	SRCU42L	SRCS42L	PCI-64/66		1, 3, 5, 7, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	SRCS16	SRCS16	PCI-64/66		1, 3, 5, 7, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	SRCU42E	SRCU42E	PCI-E		1, 3, 5, 7, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	SRCS28X	SRCS28X	PCI-X		1, 3, 5, 7, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	SRCU41L	SRCU41L	PCI-64/66		1, 3, 5, 7, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	SRCU42X	SRCU42X	PCI-X		1, 3, 5, 7, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22

## 5.7 Network Interface Controllers

Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
Intel®	PRO/100+ S Server	PILA8470D3G1P20	PCI-32/33		1, 3, 5, 7, 9, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	Pro/100 S Server	PILA8470D3G1L	PCI-32/33		3, 5, 6, 8, 10
Intel®	Pro/100 S Dual Port Server Adapter	PILA8472D3G1P	PCI64/33		1, 3, 6, 9
Intel®	PRO/1000XT Gigabit Server Adapter	PILA8490XTP20	PCI-X133		1, 3, 5, 7, 9, 11, 15, 16, 17, 18, 19, 20, 21, 22
Intel®	PRO/1000T	PWLA8490T	PCI-64/66		1, 3, 6, 9
Intel®	Pro/1000 XT Server Adapter	PWLA8490XT	PCI-X/133		3, 5, 6
Intel®	Pro/1000 XT Server Adapter	PWLA8490XTL	PCI-X/133		3, 5, 6
Intel®	Pro/1000 MF Server Adapter	PWLA8492MF	PCI-X/133		1, 3, 6, 9
Intel®	PRO/1000MT Dual Port	PWLA8492MT	PCI-X133		1, 3, 5, 7, 9, 11, 15, 16, 17, 18, 19, 20, 21, 22



Manufacturer	Model Name	Model Number	Interface	Comments	Operating System Identifier
	Server Adapter				

## 6. Hard Disk Drives

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**Note:** Hard disk drives are listed ONLY if they were attached to the RAID Controller SRCZCRX during testing.

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Enclosure, add-in card, and peripheral testing was performed on the Intel® RAID Controller SRCZCRX by Intel Labs, by independent test labs, or by the vendor. The RAID Controller SRCZCRX compatibility and stress testing is performed with the latest version of an operating system at the time the validation testing occurred. Although a large sample of configurations was tested, due to the large number of possible configurations, not all devices were tested under all operating systems, and not all possible combinations or configurations of third-party devices were tested for inter-compatibility. Customers should see the Tested Hardware and Operating System List for the server board to verify that the device is included for the server board as well as for the RAID Controller SRCZCRX.

Add-in adapter card and peripheral compatibility and stress testing will only be performed with the latest version of an operating system at the time the validation testing occurred. The following table shows the operating system and base system configurations used to validate each device. The adapters are divided into categories based on their functionality. All integrated onboard devices are tested by default and are therefore not included in the following tables.

**Note:** Not all adapter cards and peripherals were tested under all operating systems.

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Any variations to the standard adapter installation process or to expected adapter functionality are documented in the Installation Guidelines section of this document. If there are installation guidelines affecting a particular adapter and operating system combination, these are referenced in the following table. If there are no installation guidelines noted in the following table, then the adapter installed and functioned as expected using manufacturer's installation instructions or Intel's best-known methods.

**Note:** Testing of adapters cards normally is performed with unused add-in adapters and onboard controller expansion ROMs disabled in BIOS Setup. Intel recommends that customers disable the option ROM for add-in controllers and/or the onboard controllers when not booting from the controller or needing to use its built-in utilities.

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Manufacturer	Model Name	Model Number	Interface	RPM	Drive Size	Tested Operating Systems
Fujitsu*		MAP3147NC	U320	10K	147 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Fujitsu*	Allegro 5	MAG3182LC	U160/SCA	10K	18 GB	1, 3, 6, 9, 10
Fujitsu*	Allegro 7LX	MAM3184MC	U160/SCA	15K	18 GB	1, 3, 6, 7, 9, 10
Fujitsu*		MAS3184NC	U320	15K	18 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Fujitsu*	Allegro 7 LE	MAN3367MC	U160/SCA	10K	37 GB	1, 3, 6, 7, 9, 10
Fujitsu*		MAP3367NC	U320	10K	37 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Fujitsu*		MAS3367NC	U320	15K	37 GB	1, 3, 5, 7, 18, 19, 21, 22
Fujitsu*		MAP3735NC	U320	10K	73 GB	1, 3, 5, 7, 18, 19, 21, 22
Fujitsu*		MAS3735NC	U320	15K	73 GB	1, 3, 5, 7, 18, 19, 21, 22
Fujitsu*	Allegro 5 LE	MAE3091LC	U160/SCA	15K	9 GB	3, 5, 6
Hitachi*	Ultrastar 146Z10	IC35L146UCDY10	U320/SCA	10K	146 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Hitachi*	Ultrastar 10K300	HUS103030FL3800	U320/SCA	10K	300 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 10K300	HUS103014FL3800	U320/SCA	10K	147 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 10K300	HUS103073FL3800	U320/SCA	10K	73 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 15K147	HUS151414FL3800	U320/SCA	15K	147 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 15K147	HUS151473FL3800	U320/SCA	15K	73 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 15K147	HUS151436FL3800	U320/SCA	15K	36 GB	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 22, 23, 25, 27, 28, 29, 30, 31
Hitachi*	Ultrastar 146Z10	IC35L018UCDY10	U320/SCA	10K	18 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Hitachi*	Ultrastar 146Z10	IC35L036UCDY10	U320/SCA	10K	36 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Hitachi*	Ultrastar 146Z10	IC35L073UCDY10	U320/SCA	10K	73 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
IBM*	UltraStar 146ZN	IC35L146UCDY10	U320/SCA	10K	146 GB	1, 3, 6, 7, 9, 10, 11, 16, 17
IBM*	UltraStar 36Z15	IC35L018UCPR15	U160/SCA	15K	18 GB	3, 5, 6

Manufacturer	Model Name	Model Number	Interface	RPM	Drive Size	Tested Operating Systems
IBM*	UltraStar 73LZX	IC35L036UCD210	U160/SCA	10K	36 GB	1, 3, 6, 9
Maxtor*	Atlas 10K IV	8B146L0	U320/SCA	10K	146 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Maxtor*	Atlas 10K IV	8B146J0	U320/SCA	10K	146 GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Maxtor*	Atlas 10K III-U320	KU18J017	U320/SCA	10K	18 GB	1, 3, 6, 9
Maxtor*	Atlas 10K III-U320	KU18J07E	U320/SCA	10K	18 GB	3, 5, 6
Maxtor*	Atlas 10K IV	8B036L0	U320	10K	36GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Maxtor*	Atlas 10K IV	8B036J0	U320/SCA	10K	36GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Maxtor*	Atlas 10K III-U320	KU73J017	U320/SCA	10K	73GB	1, 3, 6, 9, 10
Maxtor*	Atlas 10K IV	8B073L0	U320	10K	73GB	1, 3, 5, 7, 18, 19, 21, 22
Maxtor*	Atlas 10K IV	8B073J0	U320/SCA	10K	73GB	1, 3, 5, 7, 10, 18, 19, 21, 22
Quantum*	Atlas 10K III	KW18J014	U320/SCA	10K	18GB	3, 5, 6
Quantum*	Atlas 10K III	KW36J011	U160/SCA	10K	36GB	1, 3, 6, 9
Quantum*	Atlas IV	KN09J011	U160/SCA	7.2K	9GB	1, 3, 6, 7, 9
Quantum*	Atlas IV	KN09L011	U160/Wide	7.2K	9GB	1, 3, 6, 7, 9
Seagate *	Cheetah 73	ST173404LC	U160/SCA	10K	73GB	3, 5, 6
Seagate*	Cheetah 36ES	ST318406LC	U160/SCA	10K	18GB	1, 3, 6, 7, 9, 10
Seagate*	Cheetah X15	ST318451LC	U160/SCA	15K	18GB	1, 3, 6, 7, 9, 10
Seagate*	Cheetah X15	ST318432LC	U320/SCA	15K	18GB	1, 3, 6, 7, 9, 10
Seagate*	Cheetah X15	ST318452LC	U160/SCA	15K	18GB	1, 3, 6, 9, 10
Seagate*	Cheetah 15K.3	ST318453LC	U320/SCA	15K	18GB	1, 3, 6, 7, 9, 11, 12, 16, 17
Seagate*	Cheetah 73LP	ST336605LC	U160/SCA	10K	36GB	1, 3, 6, 9, 10
Seagate*	Cheetah 10K.6	ST336607LC	U320/SCA	10K	36GB	1, 3, 6, 7, 9, 11, 16, 17, 18, 19, 20, 21, 22
Seagate*		ST336732LC	U320/SCA	15K	36GB	1, 3, 5, 7, 11, 15, 16, 17, 18, 19, 21, 21, 22
Seagate*		ST336432LC	U320/SCA	15K	36GB	1, 3, 5, 7, 11, 15, 16, 17, 18, 19, 21, 21, 22
Seagate*	Cheetah 15K.3	ST373453LC	U320/SCA	15K	73GB	1, 3, 6, 7, 9, 11, 16, 17, 18, 19, 20, 21, 22

Manufacturer	Model Name	Model Number	Interface	RPM	Drive Size	Tested Operating Systems
Seagate*	Barracuda 18XL	ST39236LC	U160/SCA	7.2K	9GB	1, 3, 6, 9, 10
Seagate*	Cheetah 18XL	ST39204LC	U160/SCA	10K	9GB	1, 3, 6, 7, 9, 10
Seagate*	Barracuda 18XL	ST39236LC	U160/SCA	7.2K	9GB	1, 3, 6, 9, 10
Seagate*	10K7	ST3300007LC	U320/SCA	10K	300GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36
Seagate*	10K7	ST3146707LC	U320/SCA	10K	146GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36
Seagate*	10K7	ST373207LC	U320/SCA	10K	73GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36
Seagate*	15K4	ST3146854LC	U320/SCA	15K	146GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36
Seagate*	15K4	ST373454LC	U320/SCA	15K	73GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36
Seagate*	15K4	ST336754LC	U320/SCA	15K	36GB	1, 3, 5, 8, 22, 27, 31, 32, 33, 34, 35, 36

## 7. Installation Guidelines

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### 7.1 SuSE 9.1 Professional Kernel Version 2.6.5-7.75-smp Data Integrity

**Issue** Silent data corruption can occur when running SuSE\* Linux 9.1 Professional with the release kernel, 2.6.4-52-smp. This problem was seen across all platforms tested including Intel and non-Intel server boards. A newer kernel version (2.6.5-7.75-smp or newer) appears to fix the issue.

Intel policy provides server board support only for the major releases of non-enterprise Linux products. This is because interim kernel releases for these operating systems require recompiling the Intel® RAID, fibre channel, ROMB, and similar non-shipping drivers. Recompiled drivers would also then need to be re-tested for compatibility when a new Linux kernel is released.

**Implication** Although a base installed is performed using SuSE Linux 9.1, the initial release of this operating system is not supported due to data integrity issues within the operating system.

**Guideline** Customers who want to use SuSE 9.1 Professional are advised to recompile the drivers using kernel 2.6.5-7.75-smp or newer, and perform their own validation testing for reliability and compatibility with their system configuration.

**Status** SuSE 9.1 is supported for basic installation only and must be updated to kernel version 2.6.5-7.75-smp or newer.