Intel[®] Server Board SE7501BR2

Tested Hardware and Operating System List



Revision 4.5

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Enterprise Platforms and Services Marketing

Revision History

Date	Revision Number	Modifications							
January 2003	1.0	1 st release							
January 2003	1.1	Added additional supported drives and updated Installation Guideline 6.12							
April 2003	1.2	Added Installation Guideline 6.13							
May 2003	2.0	Revised to reflect the Q1'03 validation results.							
July 2003	2.1	Added additional supported drives							
October 2003	2.2	Added Seagate 15K.3 and Hitachi Ultrastar 15K73 hard drives							
October 2003	3.0	Revised to reflect the Q3'03 validation results.							
November 2003	3.1	Revised SuSE Linux [†] 8.2 support for QLA2342 from SA to NT							
April 2004	3.2	Revised SATA hard drives information							
August 2004	4.0	Revised to reflect the Q1'04 validation results							
August 2004	4.1	Added Maxtor [†] Atlas 15K II hard drives							
October 2004	4.2	Added Maxtor Atlas 10K V hard drives							
November 2004	4.3	Added Hitachi [†] Ultrastar 10K300 hard drives							
December 2004	4.4	Added Fujitsu [†] AL-9LE and AL-9LX hard drives							
January 2005	4.5	Removed Emulex* LP9802DC support under Novell NetWare* 6.5.							

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ii Revision 4.5

Table of Contents

1.	Introdu	ction	5
	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
2.	Intel [®] S	erver Board SE7501BR2 Base System Configurations	8
3.	Suppor	ted Operating Systems	9
	3.1	Operating System Certifications	10
4.	Adapte	rs and Peripherals	11
	4.1	PCI SCSI	13
	4.2	PCI RAID	14
	4.3	PCI MROMB	16
	4.4	PCI Fibre Channel	17
	4.5	PCI NIC	18
	4.6	Modems	20
	4.7	Keyboard and Mouse Devices	20
	4.8	CDROM Drives	21
	4.9	DVD Drives	22
	4.10	Tape Drives	23
	4.11	Removable Drives	24
	4.12	KVM	25
	4.13	Graphic	25
5.	Hard Di	sk Drives	27
	5.1	USB Hard Disks Drives	28
	5.2	ATA Hard Disks Drives	28
,	5.3	SATA Hard Disks Drives	30
,	5.4	SCSI Hard Disks Drives	31
6.	Installa	tion Guidelines	34
	6.1	Windows [†] 2000 Advanced Sever Recognizes Only 4 GB of Memory	
	6.2	Hyper-threading Issues With Novell NetWare [†] 6	34
	6.3 Executed	Configuration Utility for the QLogic [†] QLA2200 Fibre Channel Adapter Cannot 34	Be
	6 4	System Time Is Changed After Loading Novell [†] Netware 6 Operating System	35

6.5	Cannot install OpenUnix* 8 with Adaptec ASR-2010S [↑] controller	35
6.6 controller	Netware 6.0 installation from SCSI CDROM / DVD drive using on-board SCSI 35	
6.7	Turbolinux [†] Server 7 does not enable support for U320	36
6.8 7901 on-be	Disabling the Adaptec's [†] ASC39320 adapter option ROM also disables the AIC-oard SCSI controller	36
6.9	Novell Netware [†] 6 Support Pack 2 does not support DMA mode	36
6.10	Cannot install Emulex [†] LP9402 Linux RedHat [†] 8.0 driver by "insmod" command.	37
6.11 8.0	Cannot install drivers for LSI [†] 20320-R SCSI controller when installing OpenUnix 37	
6.12	$IBM^\daggerU320\;HDDs$ not recognized by SRCMRU and SRCZCR Raid controllers	37
6.13 operating s	IDE hard drives larger than 128GB in size are not recognized at full size in certai systems	n 38
6.14 works prop	LSI [†] 22320-R does not work on PCI 100Mhz (#1, #2) slots of SE7501BR2 but perly on the other slots(PCI 64/66 and 32/33)	38
6.15 installed o	SE7501BR2 always tries network boot first when 3COM [†] 3C996B-T NIC is n PCI 64/66 or 32/33 slot and option ROM of the slot is enabled	38
6.16	Novell NetWare* 6.5 Emulex* LP9802DC driver fails to load	38

iv Revision 4.5

1. Introduction

This document is intended to provide users of the Intel® server board SE7501BR2 with a guide to the different operating systems, adapter cards, and peripherals tested by Intel on this platform.

This document will continue to be updated as new add-in cards, peripherals, and operating systems are tested until the Intel server board SE7501BR2 is no longer in production. Each new release of the document will present updated information as well as continue to provide the information from previous releases.

Intel will only provide support to those add-in cards and peripherals under the specified system configuration (System BIOS and firmware) and operating systems and versions to which they were tested.

1.1 Test Overview

Testing performed on the Intel server board SE7501BR2 is classified under two separate categories: Basic Installation Testing, and Adapter / Peripheral Compatibility and Stress Testing.

1.1.1 Basic Installation Testing

Basic installation testing is performed with each supported operating system. Basic installation testing validates that the server board can install the operating system and that the base hardware feature set is functional. A small set of peripherals is used for installation purposes only. No add-in adapter cards are tested. Testing includes network connectivity and running of proprietary and industry standard test suites.



The latest version of an operating system signifies the latest supported version at the time of the actual test run. Each new release of this document may have a newly supported release of a given operating system. Previous releases of a supported operating system may not be tested beyond the basic installation test process.

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. Vendors will not be required by Intel 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 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, on-board 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, Adapter Compatibility, and Stress.

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 will require a complete test restart.

1.1.2.1 Support Commitment for Adapter / Peripheral Compatibility and Stress Testing

Intel commits to 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 particular 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, on-board 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.



For operating systems, adapter cards, and peripherals not listed in this document, there is no support commitment. Intel will consider support requests on a case-by-case basis.

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:

- 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 with zero errors reported.
 - Clients remain connected to the server system.
 - Industry standard test suites run to completion with zero errors reported.

All Intel server board SE7501BR2 testing was performed using the Intel Server Chassis SC5200.

2. Intel[®] Server Board SE7501BR2 Base System Configurations

The following table lists the base configurations tested. Base configurations will change as new revisions of the Intel® server board SE7501BR2 are released and/or new system BIOS and BMC firmware are introduced onto the board in Intel's factory. Each base configuration is assigned an identifier number that is referenced in the tables throughout this document. New base configurations are added with each new release of this document.



Intel will only provide support for adapters and peripherals under the specified base system configuration and operating systems versions with which they were tested.

Base System Identifier #	Board Type	Part Number	BIOS Revision	BMC Firmware Revision	SC5200 HSC Firmware Revision	Notes
1	SE7501BR2	A95686-501	P01-0041	Ver 1.08	Ver 0.10	
2	SE7501BR2	A95686-501	P04-0047	Ver 1.11	Ver 0.10	
3	SE7501BR2	A95686-501	P13-0072	Ver 1.17	Ver 0.10	
4	SE7501BR2	A95686-505	P16-0075	Ver 1.18	Ver 0.10	

3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel[®] server board SE7501BR2. Each of the listed operating systems was tested for compatibility with a base Intel server board SE7501BR2 configuration. Operating system compatibility testing verifies that the operating system will install and function with all on-board devices.

The following table also indicates whether each operating system received Basic Installation Testing, or Adapter / Peripheral Compatibility and Stress Testing. For information on the support commitments for Basic Installation Testing vs. Adapter / Peripheral Compatibility and Stress Testing, please reference Section 1 of this document.

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.



Operating systems supported by Intel® Server Management software or LANDesk* Client Manager software may be different than the operating systems supported by the Intel Server Board SE7501BR2. Please reference the Readme and User Guide documents that are included as part of each Intel Server Management and LANDesk* Client Manager distribution for operating systems that are supported by that release.

Operating System	Base System Configuration Tested & Type of Testing	Notes
Microsoft Windows [†] Server 2003 Enterprise Edition / Microsoft Windows Small Business Server 2003	Configuration 3 – Compatibility & Stress Configuration 4 – Compatibility & Stress	Intel's testing was completed with Microsoft Windows Server 2003 Enterprise Edition. The Intel Server Board SE7501BR2 supports the operating system portion of Microsoft Windows Small Business Server 2003 only. The application portion is not tested or supported.
Microsoft Windows 2000 Advanced Server, Service Pack 3 / Microsoft Small Business Server 2000	Configuration 1 – Compatibility & Stress Configuration 2 – Compatibility & Stress Configuration 4 – Compatibility & Stress	Intel's testing was completed with Microsoft Windows 2000 Advanced Server. The Intel Server Board SE7501BR2 supports the operating system portion of Microsoft Small Business Server 2000 only. The application portion is not tested or supported.
Microsoft Windows NT [†] 4.0 Enterprise Edition, Service Pack 6a	Configuration 1 – Basic Installation	
Red Hat Enterprise Linux [†] 3.0 AS	Configuration 4 - Compatibility & Stress	
Red Hat Linux [†] 9.0	Configuration 3 – Compatibility & Stress	
Red Hat Linux 8.0	Configuration 1 –	

Operating System	Base System Configuration Tested & Type of Testing	Notes
	Compatibility & Stress	
Red Hat Linux 7.3	Configuration 1 – Basic Installation	
SuSE Linux [†] 9.0	Configuration 4 – Compatibility & Stress	
SuSE Linux 8.2	Configuration 3 – Compatibility & Stress	
Novell Netware [†] 6.5	Configuration 4 – Compatibility & Stress	
Novell NetWare 6.0, Overlay CD support pack 3	Configuration 3 – Compatibility & Stress	
Novell NetWare 6.0, Support Pack 2	Configuration 1 – Compatibility & Stress	
Novell NetWare 5.1, Support Pack 5	Configuration 1 – Basic Installation	
Caldera OpenUnix [†] 8.0, MP 4	Configuration 3 – Compatibility & Stress	
Caldera OpenUnix 8.0, MP 3	Configuration 1 – Compatibility & Stress	
Turbolinux [†] 7.0	Configuration 1 – Compatibility & Stress	

3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify on the SE7501BR2 Server board. 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 [†] 2000 Advanced Server	Intel® SE7501BR2 Server SID# 651460	OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/hwdq/hcl/search.asp (Search on SE7501BR2) http://developer.intel.com/design/servers/whql.htm

Operating System	Certification Listing	Comments
		Novell checks Intel's test results, certifies (if appropriate), and posts the certificate on their web site.
Novell NetWare [†] 6.0	Intel® SE7501BR2	Customer can leverage the Intel certification, if customer product meets the operating system vendor standard.
	Server	Certification can be found at:
		http://developer.novell.com/nss/nss_profile.jsp?product_key=87861
		Caldera checks Intel's results, certifies (if appropriate), and posts the certificate on their web site.
		Certification can be found at:
Caldera OpenUnix [†] 8.0	Intel® SE7501BR2 Server	http://wdb1.caldera.com/chwp/owa/hch_model_display?f_company_id=191&f_category_id=1&f_model_id=88149 &f_os_id=92&f_release_id=318&f_cert_value=CT&f_stat_us=ALL&f_search_os=92&f_mode=Public&f_search_scr_een_url=&f_type_name=Clock+Speed&f_model_det_val_ue=CT&f_skin_id=
		SuSE checks Intel's test results, certifies (if appropriate), and posts the certificate on their web site.
SuSE Linux [†] 8.2	Intel® SE7501BR2 Server	Certification can be found at:
	33.13.	http://www.suse.de/de/business/certifications/certified_hardware/intel/se7501br2/index.html

4. Adapters and Peripherals

Add-in adapter-card, 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 configurations used to validate each device. The adapters are divided into categories based on their functionality. All integrated on-board devices are tested by default and are therefore not included in the following tables.

Note that not all adapter cards were tested under all operating systems. The following notation is used in the tested adapters and peripherals table below to indicate the support level that Intel provides for a particular adapter under a particular operating system:

Number (i.e. 1)	This adapter or peripheral has been tested and is supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
Number in brackets (i.e. [1])	This adapter or peripheral has been tested, but is NOT supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
NT	This adapter or peripheral has not been tested under this operating system and is not supported under this operating system.

Number (i.e. 1)	This adapter or peripheral has been tested and is supported under the specific configuration identified in the Base System Configurations Table in Section 2 of this document.
ND	This adapter or peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not supported under this operating system.
SA	This adapter has not been tested by Intel under this operating system, but it is supported in this OS based on this adapter deemed as a subset of a successfully tested superset adapter listed right-above. Intel has determined that these adapters use the same FW and drivers and have nearly identical system interface. In addition, Intel has secured IHV commitment to support the adapters equally. All guidelines for the superset adapter apply to this subset adapter.

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 is 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.



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

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
4.1 P	4.1 PCI SCSI															
Adaptec [†]		ASC- 29160N		NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	ND	
Adaptec		ASC-29160		NT	NT	NT	NT	NT	NT	SA	SA	SA	SA	SA		
Adaptec		ASC- 29160LP		NT	NT	NT	NT	NT	NT	SA	SA	SA	SA	SA		
Adaptec		ASC-39160		3*,4	4	4	4	3	3	1,2,4	1	1	1	1	ND	*Sometimes, onboard 100Mb network's error message is appeared in event log of Windows 2003 but not critical.
Adaptec		ASC-39320		SA	SA	SA	SA	SA	SA	1,2	1	1	1	1*	2	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Adaptec		ASC- 39320D-R		3,4	4	4	4	3	3	4	SA	SA	SA	SA	SA	
Adaptec	ASC29320 LP-R	ASC29320L P-R		3,4	4	4	4	3	3	4	SA	SA	SA	SA	SA	
LSI Logic [†]		LSI20160		SA	SA	SA	SA	SA	SA	1,2	1	1	1	1	2*	* Must use driver v.2.05.00
LSI Logic	LSI20160L	LSI20160L		3,4	4	4	4	3	3	4	SA	SA	SA	SA	SA	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
														1**		* Refer to installation Guideline 6.14 ** Testing passed using LSI
LSI Logic		LSI22320-R		3*,4	4	4	4	3*	3*	1,2,4	1	1	1**	*	ND	Open Unix driver 1.03.17 only. *** OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
LSI Logic		TI6200U3LP		NT	NT	NT	NT	NT	NT	1	1	1	1	1	NT	
1.011:-		I Ologogo B			0.4				0.4	4.0	_		4+	4++		* Testing passed using LSI Open Unix driver 1.03.19 only.
LSI Logic		LSI20320-R		SA	SA	SA	SA	SA	SA	1,2	1	1	1*	1**	2	** OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
4.2 P	CI RAID	1					<u> </u>									
Intel®	SRCU31	BOXSRCU3 1A		NT	NT	NT	NT	NT	NT	1,2	1,2	1,2	1,2	1	2	
Intel	SRCU31L	BOXSRCU3 1LA		NT	NT	NT	NT	NT	NT	1,2	1,2	1,2	1,2	1	2	
Intel	SRCU32	SRCU32U		3,4	4	4	4	3	3	1,2,4	1,2	1,2	1,2	1	2	
Intel	SRCU42L	SRCU42L		3,4	4	4	4	3	3	1,2,4	1,2	1,2	1,2	1*	2	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Intel	SRCU42X	SRCU42X		4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Intel	SRCS14L	SRCS14L		3,4	4	4	4	3	3	2,4	2	2	2	NT	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Intel	SRCS16	SRCS16		4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
ICP Vortex [†]		GDT8623RZ		NT	NT	NT	SA	SA	SA	1,2	1	1	1	1	ND	
ICP vortex	GDT8514 RZ	GDT8514RZ		3	NT	NT	4	3	3*	NT	NT	NT	NT	NT	NT	* The driver for SuSE Linux [†] of this adapter is not supported by vendor but used OS embedded drivers
ICP vortex	GDT8524 RZ	GDT8524RZ		4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
LSI Logic [†]	Enterprise 1600	MegaRAID 471		NT	NT	NT	NT	NT	NT	[1]	[1]	[1]	[1]	[1]	NT	Card is not supported
LSI Logic	Elite 1600	MegaRAID 493		3,4	4	4	4	3	ND	1,2,4	1	1	1	1	2	
LSI Logic	Express 500	MegaRAID 475		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
LSI Logic		MegaRAID 320-2		3,4	4	4	4	3	3*	2,4	NT	NT	NT	NT	ND	* The driver for SuSE Linux [†] of this adapter is not supported by vendor but used OS embedded drivers
Promise [†]		FastTrack S150 SX4		4	[4]	[4]	NT	NT	NT	4	NT	NT	NT	NT	NT	
Adaptec		ASR-2110S		3	[4]	[4]	4	3	3	1,2	1	1	1	1	2	
Adaptec		ASR-2200S		3*,4	[4]	4	4	3	3	2	2	[2]	[2]	NT	[2]	* In event log of Microsotf Windows [†] Server 2003 Enterprise Edition, a message "at least one service or driver failed during system start up" is displayed when using this adapter for booting.

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Adaptec		ASR-2120S		SA	NT	SA	SA	SA	SA	NT	SA	NT	NT	NT	NT	
Adaptec		AAR- 2410SA		4	4	4	NT	NT	NT	4	NT	NT	NT	NT	NT	
Adaptec		ASR-3410S		3	NT	NT	NT	3	3*	1,2	1	1	1	1	2	* The driver for SuSE Llinux [†] of this adapter is not supported by vendor but used OS embedded drivers
3Ware [†]	8500-4	8500-4		3,4	4	4	NT	3	3	4	NT	NT	NT	NT	NT	
3Ware	Escalade	7500-8		NT	NT	NT	NT	NT	NT	1,2	1	ND	ND	1	2	
4.3 F	PCI MRO	MB														Refer to Installation Guideline 6.12
Intel®		SRCMRU		NT	NT	NT	NT	NT	NT	1	1	1	1	1*	NT	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Intel		SRCZCR		3,4	4	4	4	3	3	1,2,4	1,2	1,2	1,2	1*	2	Refer to Installation Guideline 6.12 * OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Adaptec [†]		ASR-2010S		3,4	4	4	ND	3	3	1,2,4	1	ND	1**	1*	2	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch. ** Refer to Installation Guideline 6.5

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
4.4 P	Cl Fibre	Channel														
Qlogic [†]		QLA2200/66		3,4	4	NT	4	3	3	1,2,4	1	1	1	1	2	
Qlogic		QLA2340		3	SA	NT	SA	3	3**	1,2	ND	1	ND	1*	ND	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch. ** The driver for SuSE Llinux [†] of this adapter is not supported by vendor but used OS embedded drivers
Qlogic		QLA2342		4	4	NT	4	SA	NT	4	NT	SA	NT	SA	NT	
Emulex [†]		LP9002		3,4	[4]	NT	4	NT	NT	1,2,4	ND	[1]	ND	ND	ND	
Emulex		LP9802DC		3*,4	4	NT	NT**	NT	NT	4	NT	NT	NT	NT	NT	* Emulex LP9802DC's BIOS is not upgraded from 1.61a1 -> 1.63a2 ** Refer to installation Guideline 6.16
Emulex		LP952LP	-	SA	NT	NT	NT	NT	NT	SA	NT	NT	NT	NT	NT	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Emulex		LP9402		NT	NT	NT	NT	NT	NT	1*,2*	1*	[1]	ND	1**	ND	* When using Emulex BIOS 1.62A1 and FW 3.90A7, system and Option ROM utility will report controller as Emulex LP9002. This is a cosmetic issue with no ill side effects with card configuration or OS installation. ** OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
4.5 P	CI NIC															
Intel®	PRO/100+	PILA8470D3		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
intelo	S Server PRO/100+	FILA0470D3		3,4	7	4	7	3	3	1,2,4	'	'	'	'	2	
Intel	S Server	PILA8470C3		SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	
Intel	PRO/100+ Dual Port	PILA8472C3		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Intel	PRO/1000 XT	PWLA8490X T		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Intel	PRO/1000 XTL	PWLA8490X TL		SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	
Intel	PRO/1000 MF	PWLA8490 MF		SA	SA	SA	SA	SA	SA	1,2	1	1	1	1	2	
Intel	PRO/1000 MT	PWLA8490 MT		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Intel	PRO/1000 F	PWLA8490S X		NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
Intel	PRO/1000 T	PWLA8490T		NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
Intel	PRO/1000 XF	PWLA8490X F		SA	SA	SA	SA	SA	SA	1,2	1	1	1	1	2	
Intel	PRO/1000 XFL	PWLA8490X FL		SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	
Intel	PRO/1000 MF Dual Port	PWLA8492 MF		SA	SA	SA	SA	SA	SA	1,2	1	1	1	1	2	
Intel	PRO/1000 MT Dual Port	PWLA8492 MT		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Intel	PRO/1000 MT Quad Port Server Adapter	PWLA8494 MT		3,4	4	4	4	3	3	4	NT	NT	NT	NT	NT	
3COM [†]	Etherlink Server 10/100 PCI Managed	3C980C- TXM		3,4	4	4	4	3	3	1,2,4	1	1	1	1	[2]	
3СОМ	Etherlink 10/100 PCI	3C905C-TX- M		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
3СОМ	Gigabit Server Adapter	3C996B-T		NT	NT	NT	NT	NT	NT	[1]	[1]	[1]	[1]	[1]	NT	Card is not supported
зсом	3C996B-T (purchase d after 9/30/2003)	3C996B-T (purchased after 9/30/2003)		3*,4*	4*	4*	4*	3*	3*	4*	NT	NT	NT	NT	NT	* Refer to installation Guideline 6.15
Dlink [†]		DFE- 530/TX+		3	4	4	4	3	3	1,2,4	1	1	ND	1	2	
4.6 N	Jodems 56K V.92 Performan ce Pro	USR5610B	PCI	4	4	4	NT	NT	NT	1,2,4	1	NT	ND	1	2	
зсом	Performan ce Pro Modem	3CP5610A	PCI	3	NT	NT	NT	3	3	NT	NT	NT	NT	NT	NT	
зсом	56K V.Everythi ng Corporate Modem	3CP3453	Ext.	3,4	4	4	NT	3	3	1,2,4	1	NT	1	1	2	
4.7 K	Keyboard	and Mou	ise Dev	vices												
Keytronic †	PRO Pilot Keyboard		PS2	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Keytronic	USB Keyboard	E06101USB -C	USB	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Logitech [†]	Internet Navigator Keyboard	Internet Navigator Keyboard	USB / PS2	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Logitech	Optical Mouse		USB / PS2	3	NT	NT	NT	3	3	1,2	1	1	1	1	2	
Microsoft	Intellimous e Optical Mouse	X05-92654	USB / PS2	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
4.8 C	DROM D	Drives														* Read installation guidelines
Plextor [†]		PX-40TSUW	SCSI	NT	NT	NT	NT	NT	NT	1,2	1	1*	1	1	2	* Read installation guidelines found in section 6 for Netware 6.0
		DV.														installation procedures.
Plextor		PX- W4012TS/S W	SCSI	4	4	4	4	NT	NT	2,4	NT	NT	NT	NT	2	
Plextor		Plexwriter 40x12x40U	USB	NT	NT	NT	NT	NT	NT	1,2	1	ND	ND	1	2	
Plextor	PX- W4824TU/ SW	PlexWriter 48/24/48U	USB	3	NT	NT	NT	3	3*	NT	NT	NT	NT	NT	NT	* SuSE Llinux [†] 8.2 is not installed from USB device.
Plextor		Premium-U- 52/32/52	USB	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Samsung †		SN-124Q	IDE	3	NT	NT	NT	3	3	1,2	1	1	1	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Samsung		SC-152	IDE	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
IOMEGA		CD-RW 24x10x40	USB	NT	NT	NT	NT	NT	NT	1	1	ND	ND	1	NT	
IOMEGA		CD-RW 48x24x48	USB	3	NT	NT	NT	3	3*	2	NT	NT	NT	NT	2	* SuSE Llinux [†] 8.2 is not installed from USB device.
IOMEGA		32721	USB	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
LG [†]		GCE-8240B U2-12X	USB	NT	NT	NT	NT	NT	NT	1,2	1	ND	ND	1	2	
Mitsumi [†]		CRMC- FX5401W	IDE	3,4	4	4	NT	3	3	1,2,4	1	1	1	1	2	
Mitsumi	SR244W1	SR244W1	IDE	3,4	4	4	4	3	3	4	NT	NT	NT	NT	NT	
TEAC [†]		CDWF540/K IT	USB	[4]	[4]	[4]	[4]	NT	NT	1,2	1	ND	ND	1	2	
TEAC		CD540E	IDE	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
TEAC		CD552E	IDE	NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
TEAC	CD-232E	CD-232E	IDE	3,4	4	4	4	3	3	4	NT	NT	NT	NT	NT	
TEAC	CDWF540 /KIT	CDWF540/K IT	USB	3	NT	NT	NT	3	3*	NT	NT	NT	NT	NT	NT	* SuSE Llinux [†] 8.2 is not installed from USB device.
4.9 D	OVD Drive	es														
Toshiba [†]		SD-C2612	IDE	NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
Toshiba		SD-M1401	SCSI	3,4	4	4	4	3	3	1,2,4	1	1*	1	1	2	* Read installation guidelines found in section 6 for Netware 6.0 installation procedures.

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Toshiba		SD-M1612	IDE	3	NT	NT	NT	3	3	1,2	1	1	1	1	2	
Toshiba	SD-R2412	SD-R2412	IDE	3	NT	NT	NT	3	3	NT	NT	NT	NT	NT	NT	
Toshiba		SD-M1712	IDE	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Pioneer [†]		DVD-305S	SCSI	3,4	4	4	NT	3	3	1,2,4	1	1*	1	1	2	* Read installation guidelines found in section 6 for Netware 6.0 installation procedures.
Pananso nic [†]		SR-8177-B	IDE	3,4	4	4	4	3	3	2,4	NT	NT	NT	NT	2	
Pananso nic		CW-8123B	IDE	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Samsung †		SD-616	IDE	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Sony [†]	DRU-510A	DRU-510A	IDE	3,4	4	4	4	3	3	4	NT	NT	NT	NT	NT	
Sony	DRX- 510UL	DRX-510UL	USB	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Hewlett Packard [†]	DVD Writer	200i	IDE	NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
Liteon [†]	LSD-081	LSD-081	IDE	3,4	4	4	4	3	3	4	NT	NT	NT	NT	NT	
TEAC		DV-28E-BP3	IDE	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
4.10 T	ape Driv	es														
Sony [†]		SDX- S500C/BM	SCSI	3	4	4	4	3	3	1,2	1	1	ND	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
Sony		SDX- S700C/BM	SCSI	3,4	4	4	4	3	3	2,4	NT	NT	NT	NT	2	
Seagate [†]	SCORPIO N 40 DDS4 DAT	STD2401LW -S	SCSI	4	4	4	4	NT	NT	1,2,4	1	ND	1	1	2	
Quantum †	Super DLT SDLT320	TRS23BA- YF	SCSI	3	4	4	[4]	3	3	1,2	1	1	1	1	2	
4.11 R	Removab	le Drives														
TEAC [†]		FD-235HF Floppy Drive	Floppy	3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
TEAC		FDO5PUB Floppy Drive	USB	3,4	4	4	4	3	3	1,2,4	1	ND	ND	1	2	
Fujitsu [†]		MCJ3230SS MO Drive 2.3GB	SCSI	NT	NT	NT	NT	NT	NT	1	1	1	1	1	NT	
Fujitsu		MCJ3230AP MO Drive 2.3GB	АТА	NT	NT	NT	NT	NT	NT	1	1	ND	ND	1	NT	
IOMEGA †		ZIP-IDE250	IDE	NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
IOMEGA	ZIP 750 MB USB 2.0	32324	USB	3,4	4	4	NT	3	3	1,2,4	1	ND	ND	1	2	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
IOMEGA	MiniUSB Drive 128MB	32548	USB	3,4	4	4	4	3	3	2,4	NT	NT	NT	NT	2	
IBM [†]		22P9025	USB	4	4	4	4	NT	NT	4	NT	NT	NT	NT	NT	
Sony [†]	VAIO External Floppy Drive	PCGA-UFD5	USB	3,4	4	4	4	3	3	1,2,4	1	ND	ND	1	2	
M- Systems [†]		DiskOnKey 128MB	USB	NT	NT	NT	NT	NT	NT	1	1	ND	ND	1	NT	
Rainbow [†]	Hardware Key	Sentinel Duo	USB	3,4	ND	ND	ND	NT	NT	1,2,4	[1]	[1]	[1]	[1]	NT	
SanDisk [†]		SDCZ2-256	USB	4	[4]	[4]	NT	NT	NT	4	NT	NT	NT	NT	NT	
4.12 K	(VM															
Avocent [†]		1160ES		3,4	4	4	4	3	3	1,2,4	1	1	1	1	2	
Belkin [†]	Omniview PRO	F1D108- OSD		NT	NT	NT	NT	NT	NT	1,2	1	1	1	1	2	
Belkin	Omniview PRO2	F1DA108T		3,4	4	4	4	3	3	2,4	NT	NT	NT	NT	2	
4.13	Fraphic															
ATI [†]	RADEON 7000	RADEON 7000		3,4	4	4	4	3	3	[4]	NT	NT	NT	NT	NT	

Manufac turer	Model Name	Model Number	Interface	Microsoft Windows [†] Server 2003 Enterprise Edition	Red Hat Enterprise Linux [†] 3.0 AS	SuSE Linux [†] 9.0	Novell Netware [†] 6.5	Red Hat Linux [†] 9.0 Professional	SuSE Linux [†] 8.2	Microsoft Windows [†] 2000 AS	Red Hat [†] Linux 8.0	Novell Netware [†] 6.0	Caldera OpenUnix [†] 8.0	Turbolinux [†] 7.0	SuSE Linux [†] 8.1	Comments
ATI	RADEON 7500	RADEON 7500		3	NT	NT	NT	3	3	NT	NT	NT	NT	NT	NT	

5. Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel[®] server board SE7501BR2 by Intel in its validation labs and/or by individual drive vendors. The following operating system identifiers are used in the table to specify which OS each drive was tested under.

Identifier number	Operating System						
1	Microsoft Windows [†] 2000 Advanced Server						
2	Red Hat [†] Linux 8.0						
3	Novell NetWare [†] 6.0 Overlay CD with support pack 3						
4	Caldera OpenUnix [†] 8.0 MP4						
5	Turbolinux [†] 7						
6	Turbolinux [†] 8						
7	SuSE Linux [†] 8.1						
8	Microsoft Windows [†] Server 2003 Enterprise Edition						
9	Red Hat Linux [†] 9.0						
10	SuSE Linux [†] 8.2						
11	Red Hat Enterprise Linux 3.0 AS						
12	SuSE Linux 9.0						
13	Novell Netware 6.5						
14	Caldera OpenUnix [†] 8.0 MP5						

Note that not all hard drives were tested under all operating systems. The following notation is used in the tested hard drives table below to indicate the support level that Intel provides for a particular hard drive with a particular operating system:

Number (i.e. 1)	This hard drive has been tested and is supported under the operating system identified by the operating system identification number.
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Number in brackets (i.e. [1])	This hard drive has been tested, but is NOT supported under the operating system identified by the operating system identification number.
SD (Similar Drive)	This hard drive model/capacity was not tested with this server board, but it is supported on corresponding operating systems based on successful testing of a larger capacity hard drive from the same hard drive family. This drive has been determined to use the exact same firmware and drivers as a larger capacity hard drive that has been successfully tested with this server board. The only difference between this drive and the one that was used in testing is the storage capacity. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested or not. Customers should always test hard drives as part of the final system configuration prior to deployment.
IHVT (IHV Tested)	The hard disk drive was tested according to Intel-approved guidelines and test procedures by the Independent Hardware Vendor (IHV) that manufactured the drive. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested in an Intel lab or not. IHV test reports remain the property of the IHV (Intel cannot provide copies of these reports).

Manufacturer	Product Family	Model Number	Interface	RPM	Drive Size (GB)	Tested Operating Systems	Comments
5.1 USB	Hard Disks Driv	/es					
Addonics [†]	Combo Hard Drive Kit	AEMED35AUM	USB			1,2,5,7,8,9,10 ,11,12,13	
Maxtor [†]	3000LE	USB2040	USB		40	1,[2],5,7	
Maxtor	S01J250	5000XT	USB		250	1,8,9,10,11,1 2,13	
5.2 ATA	Hard Disks Driv	es es					
Hitachi [†]	Deskstar 120GXP	IC35L120AVVA07	ATA 100	7200	120	1,2,3,4,5,7	
Hitachi	Deskstar 120GXP	IC35L100AVVA07	ATA 100	7200	100	SD	
Hitachi	Deskstar 120GXP	IC35L080AVVA07	ATA 100	7200	80	SD	
Hitachi	Deskstar 120GXP	IC35L060AVVA07	ATA 100	7200	60	SD	

Hitachi	Deskstar 120GXP	IC35L040AVVA07	ATA 100	7200	40	SD	
Hitachi	Deskstar 120GXP	IC35L020AVVA07	ATA 100	7200	20	SD	
Hitachi	Deskstar 180GXP	IC35L180AVV207	ATA 100	7200	180	1,2,3,4,5,7,8, 9,10,11,12,13	Refer to installation Guideline 6.13
Hitachi	Deskstar 180GXP	IC35L120AVV207	ATA 100	7200	120	SD	
Hitachi	Deskstar 180GXP	IC35L090AVV207	ATA 100	7200	80	SD	
Hitachi	Deskstar 180GXP	IC35L060AVV207	ATA 100	7200	60	SD	
Hitachi	Deskstar 180GXP	IC35L030AVV207	ATA 100	7200	30	SD	
Hitachi	Deskstart 7K250	HDS722516VLAT80	ATA 100	7200	160	1,8,11,12,13	
Hitachi	Deskstart 7K250	HDS722512VLAT80	ATA 100	7200	120	SD	
Maxtor [†]	D740X	6L080J4	ATA 133	7200	80	1,2,3,4,5	
Maxtor	D740X	6L060J4	ATA 133	7200	60	SD	
Maxtor	D740X	6L040J4	ATA 133	7200	40	SD	
Maxtor	D740X	6L020J4	ATA 133	7200	20	SD	
Maxtor	DiamondMax Plus 9	6Y200P0	ATA 133	7200	200	1,2,3,4,5,8,9, 10,11,12,13	
Maxtor	DiamondMax Plus 9	6Y160P0	ATA 133	7200	160	SD	
Maxtor	DiamondMax Plus 9	6Y120P0	ATA 133	7200	120	SD	
Maxtor	DiamondMax Plus 9	6Y080P0	ATA 133	7200	80	SD	
Maxtor	DiamondMax Plus 9	6Y060P0	ATA 133	7200	60	SD	
Maxtor	DiamondMax Plus 9	6Y160P0	ATA 133	7200	160	2,7	
Maxtor	D540X	4G160J8	ATA 133	5400	160	1,2,3,4,5	Refer to installation Guideline 6.13
Maxtor	D540X	4G120J6	ATA 133	5400	120	SD	
Maxtor	D540X	4D080H4	ATA 133	5400	80	SD	
Maxtor	D540X	4D060H3	ATA 133	5400	60	SD	
Maxtor	D540X	4D040H2	ATA 133	5400	40	SD	
Maxtor	D540X	4D020H1	ATA 133	5400	20	SD	

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Samsung [†]	Spinpoint P40	SP8004H	ATA 100	7200	80	1,2,3,4,5,7	
Samsung	Spinpoint P40	SP4002H	ATA 100	7200	40	SD	
Seagate [†]	Barracuda ATA IV	ST380021A	ATA 100	7200	80	1,2,3,4,5,7	
Seagate	Barracuda ATA IV	ST360021A	ATA 100	7200	60	SD	
Seagate	Barracuda ATA IV	ST340016A	ATA 100	7200	40	SD	
Seagate	Barracuda ATA IV	ST320011A	ATA 100	7200	20	SD	
Seagate	Barracuda ATA V	ST120023A	ATA 100	7200	120	1,2,3,4,5	
Seagate	Barracuda ATA V	ST160023A	ATA 100	7200	160	1,8,11,12,13	
Seagate	Barracuda ATA V	ST380023A	ATA 100	7200	80	SD	
Seagate	Barracuda ATA V	ST360015A	ATA 100	7200	60	SD	
Seagate	Barracuda ATA V	ST340017A	ATA 100	7200	40	SD	
Western Digital [†]	Caviar	WD800BB	ATA 100	7200	80	1,2,3,4,5	
Western Digital	Caviar	WD600BB	ATA 100	7200	60	SD	
Western Digital	Caviar	WD1200BB	ATA 100	7200	120	2,7,8,9,10,11, 12,13	
Western Digital	Caviar Special Edition	WD2000JB	ATA 100	7200	200	1,2,3,4,5,7,8, 9,10,11,12,13	Refer to installation Guideline 6.13
Western Digital	Caviar Special Edition	WD1800JB	ATA 100	7200	180	SD	Refer to installation Guideline 6.13
Western Digital	Caviar Special Edition	WD1200JB	ATA 100	7200	120	SD	
5.3 SATA	Hard Disks Dr	ives		•			
Seagate [†]	ST3160023AS	Barracuda Serial ATA VI	SATA	7200	160	1,8,9,10, 11,12,13	
Seagate	ST3120023AS	Barracuda 5 SATA	SATA	7200	120	8,9,10	
Western Digital [†]	WD360GD	WD Raptor	SATA	10K	36	8,9,10	
Maxtor [†]	6Y120M0	DiamondMax Plus 9	SATA	7200	120	1,8,9,10,11, 12,13	

5.4 SC	SI Hard Disks D	rives					
Fujitsu [†]	МАМ	MAM3367MC	SCSI-U160-SCA	15K	36	1,2,3,4,5*,7	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Fujitsu	MAM	MAM3184MC	SCSI-U160-SCA	15K	18	SD	
Fujitsu	MAN	MAN3367MC	SCSI-U160-SCA	10K	36	1,2,3,4,5,7	
Fujitsu	MAN	MAN3184MC	SCSI-U160-SCA	10K	18	SD	
Fujitsu	MAP	MAP3147NC	SCSI-U320-SCA	10K	147	1,2*,3*,4*,6*,8 ,9*,10*,11,12, 13	*IHVT
Fujitsu	MAP	MAP3735NC	SCSI-U320-SCA	10K	73	SD	
Fujitsu	MAP	MAP3367NC	SCSI-U320-SCA	10K	36	SD	
Fujitsu	MAS	MAS3735NC	SCSI-U320-SCA	15K	73	1,3*,4*,8,9*, 10*,11,12,13	*IHVT
Fujitsu	MAS	MAS3367NC	SCSI-U320-SCA	15K	36	SD	
Fujitsu	MAS	MAS3184NC	SCSI-U320-SCA	15K	18	SD	
Fujitsu	AL-9LE	MAT3073NC	SCSI-U320-SCA	10K	73	1,2,3,6,8,14	IHVT (Firmware Rev 0105)
Fujitsu	AL-9LE	MAT3147NC	SCSI-U320-SCA	10K	147	1,2,3,6,8,14	IHVT (Firmware Rev 0105)
Fujitsu	AL-9LE	MAT3300NC	SCSI-U320-SCA	10K	300	1,2,3,6,8,14	IHVT (Firmware Rev 0105)
Fujitsu	AL-9LX	MAU3036NC	SCSI-U320-SCA	15K	36	1,2,3,6,8,14	IHVT (Firmware Rev 0102)
Fujitsu	AL-9LX	MAU3073NC	SCSI-U320-SCA	15K	73	1,2,3,6,8,14	IHVT (Firmware Rev 0102)
Fujitsu	AL-9LX	MAU3147NC	SCSI-U320-SCA	15K	147	1,2,3,6,8,14	IHVT (Firmware Rev 0102)
Hitachi [†]	Ultrastar 36Z15	IC35LO36UCPR15	SCSI-U160-SCA	15K	36	1,2,3,4,5,7,8, 9,10	
Hitachi	Ultrastar 36Z15	IC35LO18UCPR15	SCSI-U160-SCA	15K	18	SD	
Hitachi	Ultrastar 146Z10	IC35L146UCDY10	SCSI-U320-SCA	10K	146	1,2,3,4,5*,7,8, 9,10,11,12,13	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Hitachi	Ultrastar 146Z10	IC35L073UCDY10	SCSI-U320-SCA	10K	73	SD	
Hitachi	Ultrastar 146Z10	IC35L036UCDY10	SCSI-U320-SCA	10K	36	SD	

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Hitachi	Ultrastar 146Z10	IC35L018UCDY10	SCSI-U320-SCA	10K	18	SD	
Hitachi	Ultrastar 15K73	HUS157373EL3800	SCSI-U320-SCA	15K	73	1,2,3,4	IHVT
Hitachi	Ultrastar 15K73	HUS157336EL3800	SCSI-U320-SCA	15K	36	SD	IHVT
Hitachi	Ultrastar 15K73	HUS157373EL3600	SCSI-U320-68pin	15K	73	SD	IHVT
Hitachi	Ultrastar 15K73	HUS157336EL3600	SCSI-U320-68pin	15K	36	SD	IHVT
Hitachi	Ultrastar 10K300	HUS103030EL3800	SCSI-U320-SCA	10K	300	1,2,3,9,14	IHVT
Hitachi	Ultrastar 10K300	HUS103014EL3800	SCSI-U320-SCA	10K	147	1,2,3,9,14	IHVT
Hitachi	Ultrastar 10K300	HUS103073EL3800	SCSI-U320-SCA	10K	73	1,2,3,9,14	IHVT
Hitachi	Ultrastar 10K300	HUS103036EL3800	SCSI-U320-SCA	10K	36	1,2,3,9,14	IHVT
Hitachi	DK32EJ	DK32EJ-14	SCSI-U320-SCA	10K	147	1,8,11,12,13	
Hitachi	DK32EJ	DK32EJ-72	SCSI-U320-SCA	10K	72	1,8,11,12,13	
Hitachi	DK32EJ	DK32EJ-36	SCSI-U320-SCA	10K	36	1,8,11,12,13	
Maxtor [†]	Atlas 10K III	KW018J2	SCSI-U160-SCA	10K	18	1,2,3,4,5,7	
Maxtor	Atlas 10K III	KU073J8	SCSI-U320-SCA	10K	73	1,2,3,4,5*,7	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Maxtor	Atlas 10K III	KU036J8	SCSI-U320-SCA	10K	36	SD	
Maxtor	Atlas 10K IV	8B146J0	SCSI-U320-SCA	10K	146	1,2*,3*,4*,8,9* ,10*,11,12,13	*IHVT
Maxtor	Atlas 10K IV	8B074J0	SCSI-U320-SCA	10K	73	SD	IHVT
Maxtor	Atlas 10K IV	8B036J0	SCSI-U320-SCA	10K	36	SD	IHVT
Maxtor	Atlas 10K V	8D300J0	SCSI-U320-SCA	10K	300	1,2,3,14	IHVT (uCode=QSJNS0)
Maxtor	Atlas 10K V	8D147J0	SCSI-U320-SCA	10K	147	1,2,3,14	IHVT (uCode=QSJNS0)
Maxtor	Atlas 10K V	8D073J0	SCSI-U320-SCA	10K	73	1,2,3,14	IHVT (uCode=QSJNS0)
Maxtor	Atlas 15K	8C073J0	SCSI-U320-SCA	15K	73	2,7,8,9,10	
Maxtor	Atlas 15K	8C036J0	SCSI-U320-SCA	15K	36	SD	
Maxtor	Atlas 15K	8C018J0	SCSI-U320-SCA	15K	18	SD	
Maxtor	Atlas 15K II	8E147J0080311	SCSI-U320-SCA	15K	147	1,2,3,14	IHVT (uCode=RSJNX0)

Maxtor	Atlas 15K II	8E073J0040111	SCSI-U320-SCA	15K	73	1,2,3,14	IHVT (uCode=RSJNX0)
Maxtor	Atlas 15K II	8E036J0020111	SCSI-U320-SCA	15K	36	1,2,3,14	IHVT (uCode=RSJNX0)
Seagate [†]	Cheetah 10K.6	ST3146807LC	SCSI-U320-SCA	10K	146	1,2,3,4,5*,7,8, 9,10,11,12,13	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.
Seagate	Cheetah 10K.6	ST373307LC	SCSI-U320-SCA	10K	73	SD	
Seagate	Cheetah 10K.6	ST336307LC	SCSI-U320-SCA	10K	36	SD	
Seagate	Cheetah 15K.3	ST373453LC	SCSI-U320-SCA	15K	73	1,2*,3*,4*,8,9* ,10*,11,12,13	*IHVT
Seagate	Cheetah 15K.3	ST336753LC	SCSI-U320-SCA	15K	36	SD	IHVT
Seagate	Cheetah 15K.3	ST318453LC	SCSI-U320-SCA	15K	18	SD	IHVT
Seagate	Cheetah X15 – 36LP	ST336732LC	SCSI-U320-SCA	15K	36	1,2,3,4,5*,7	* OS installed on IDE HDD. U320 SCSI used for data storage only with OS patch.

6. Installation Guidelines

6.1 Windows[†] 2000 Advanced Sever Recognizes Only 4 GB of Memory.

Issue When using 4 x 2 GB DIMMs for a total of 8 GB of memory, POST reports the

total memory present correctly as 8192 MB, but Windows 2000 Advanced Server only sees ~4GB. The total memory present reported by Windows was checked by bringing up the System Properties window and verifying the total

memory displayed on the General Tab.

Implication Memory above 4GB not being recognized.

Workaround The /PAE option must be enabled in the ARC path in the boot.ini file in order

for Windows 2000 to recognize memory above 4.0GB (e.g.

multi(0)disk(0)rdisk(0)partition(2)\WINNT="Windows 2000 Advanced Server"

/PAE /basevideo /sos)

Status No Fix.

6.2 Hyper-threading Issues With Novell NetWare[†] 6

Issue NetWare 6.0 SP1 version exhibits several issues with Hyper-threading.

Implication Hyper-Threading not working correctly.

Workaround The OS vendor released Support Pack 2 which includes updates to the ACPI

files and addresses the Hyper-threading issue.

Status Fixed in NW 6 SP2

6.3 Configuration Utility for the QLogic[†] QLA2200 Fibre Channel Adapter Cannot Be Executed

Issue When pressing <Alt>-Q to enter the configuration utility of the QLA2200

adapter, the system is halted. System halts regardless of fibre channel HDDs presence. Other QLogic† Fiber Channel adapters work fine (QLA2300).

Implication Cannot configure Adapter via <Alt>-Q hotkey.

Workaround None.

Status Fixed in adapter's ROM BIOS 1.73, and Firmware 2.01.35

6.4 System Time Is Changed After Loading Novell[†] Netware 6 Operating System

Issue When loading Netware* 6, the system time is changed under Netware* and in

BIOS Setup as well. This issue is reproducible and occurs with relation to DST (Daylight Saving Time) option. Only when DST is enabled, time is changed by 1-hour under the OS and in CMOS every time the OS is loaded. OS vendor has

been contacted

Implication System time changed by OS to incorrect time.

Workaround Set system time after OS installation

Status Fixed in Novell Netware 6 Support Pack 2

6.5 Cannot install OpenUnix* 8 with Adaptec ASR-2010S[†] controller

Issue: Installation of OpenUnix 8 fails on system configured with ASR-2010S

controller, as system cannot find PS2 mouse. If user decides to continue ignoring that error, after the system reboot it requires second CD-disc but will

not detect discs any more.

Implication Cannot install OS when using this adapter

Workaround Utilize alternate adapter

Status OS Fixed on Adaptec's ASR-2010S Open Unix 8 driver ver 7.1.3.

6.6 Netware 6.0 installation from SCSI CDROM / DVD drive using onboard SCSI controller

Issue: During a Netware 6.0 installation the following error may be seen when

installing the OS from a SCSI CDROM or DVD drive when attached to the

onboard SCSI controller:

**error messages.

ERROR: Driver "GDTX000.EXE' is not installed

GDT ASPI Manager not installed!
Error: Unabled to find a loadable driver

Refer to readme.txt

Implication: OS installation failure

Workaround: The DOS driver for the onboard SCSI controller (AIC-7901) is not provided on

the Netware 6 installation CDROM. To workaround this issue, it is necessary to create a bootable floppy diskette with the file ASPI320.SYS (DOS driver for onboard AIC-7901 SCSI). For detailed instructions, please refer to the README.TXT file included with the on-board SCSI NW6 driver files.

After both the ASPI320.SYS driver and ASPICD.SYS are loaded from the bootable floppy disk, the onboard SCSI controller and the SCSI CDROM

should be detected. From the Netware 6 installation CDROM type "install" to begin the OS installation. The OS should install without any further issues.

Status: No fix.

6.7 Turbolinux[†] Server 7 does not enable support for U320

Issue Turbolinux Server 7 with kernel 2.4.9 does not provide inherent U320 support.

There is no Turbolinux-specific driver for the onboard AIC-7901 U320 controller;

there is only Linux source code.

Implication Cannot install OS to Hard drives connected to the onboard U320 SCSI

controller or any U320 SCSI adapter.

Workaround The only way to get U320 support in TLS7 is to patch the kernel to 2.4.18.

TLS7 cannot be installed on a drive on the U320 controller; U320 can be used

only for data.

Status Turbolinux Server ver 8.0 fixes this issue.

6.8 Disabling the Adaptec's[†] ASC39320 adapter option ROM also disables the AIC-7901 on-board SCSI controller

Issue With the onboard AIC-7901 SCSI controller enabled, when the Adaptec's

ASC39320 (Bios 4.10.1) option ROM is disabled (F2), all SCSI hard disks connected to the on-board SCSI disappear as the on-board controller is also

disabled.

Implication User may encounter that hard drives connected to the onboard SCSI controller

are not visible when switching back and forth between an onboard and add-on

SCSI controllers.

Workaround None

Status This issue is not an anomaly, this is how the SCSI option ROMs work.

Adaptec's scheme requires a "master" channel that takes control, scans all busses, and either stays resident (if enabled) or removes itself and reports nothing to the BIOS (if disabled). When switching back and forth between controllers, it is important to ensure an enabled channel is still the master, and that the settings desired are still available. If the ASC39320 is configured as the master and needs to be disabled, then the onboard AIC-7901 must be configured as the "master" before disabling the slot that the ASC39320 resides

in.

6.9 Novell Netware[†] 6 Support Pack 2 does not support DMA mode

Issue NW6 SP2 still does not support DMA mode on ATA device; OS only supports

PIO mode

Implication Installed DMA drives will run in PIO mode only as opposed to DMA mode.

Workaround None.

Status Fixed driver in Support Pack 3.

6.10 Cannot install Emulex[†] LP9402 Linux RedHat[†] 8.0 driver by "insmod" command

Issue Attempting to install RHL 8.0 drivers on Emulex LP9402 by "insmod lpfcdd"

command results on the following warning error:

"Warning: The module you are trying to load(lpfcdd.o) is compiled with a gcc version 2 compiler, while the kernel you are running is compiled with a gcc

version 3 compiler. This is known to not work."

Implication Cannot install driver via insmod command.

Workaround Install drivers with "insmod lpfcdd -f" command instead.

Status Fixed on Emulex's LP9402 Red Hat 8.0 driver version 4.21.g.

6.11 Cannot install drivers for LSI[†] 20320-R SCSI controller when installing OpenUnix 8.0

Issue Cannot install drivers for LSI 20320-R SCSI controller when installing

OpenUnix 8.0. Attempt results on warning message and/or kernel panic from

the operating system.

Impllication OS installation fails.

Workaround None.

Status Issue root caused to LSI SCSI controller driver. LSI released version 1.03.19

which addressed this issue.

6.12 IBM[†] U320 HDDs not recognized by SRCMRU and SRCZCR Raid controllers

Issue IBM U320 SCSI hard drivers are not recognized by the Intel SRCMRU and

SRCZCR RAID controllers when installed in the SE7501BR2 server board.

Implication Cannot install any OS.

Workaround Ensure to use IBM hard drives with firmware S25F or later.

Status HDDs were found to disconnect (without reconnecting) due to the way the hard

drive firmware implements domain validation. This issue has been addressed

on IBM HDD firmware S25K.

6.13 IDE hard drives larger than 128GB in size are not recognized at full size in certain operating systems

Issue Some operating systems recognize only the first 128GB of hard disk space on

IDE drives larger than 128GB in size.

Implication Operating system does not have access to entire drive space; the OS is limited

to the first 128GB of hard disk space.

Workaround None.

Status Fixed in server board BIOS P05-0051.

6.14 LSI[†] 22320-R does not work on PCI 100Mhz (#1, #2) slots of SE7501BR2 but works properly on the other slots(PCI 64/66 and 32/33)

Issue LSI22320-R does not work on PCI 100Mhz slots(#1, #2) of SE7501BR2.

Implication LSI22320-R cannot be installed on PCI 100Mhz slots(#1, #2) of SE7501BR2.

Workaround Install LSI22320-R on other PCI slots(PCI 64/66 and PCI32/33).

Status No fix.

6.15 SE7501BR2 always tries network boot first when 3COM[†] 3C996B-T NIC is installed on PCI 64/66 or 32/33 slot and option ROM of the slot is enabled

Issue SE7501BR2 always tries network boot first when 3C996B-T NIC is installed on

PCI 64/66 or 32/33 slot and option ROM of the slot is enabled, even if it's not

the 1st Boot Device configured in BIOS Boot Device Priority settings.

Implication SE7501BR2 does not boot from the 1st Boot Device(configured in BIOS Boot

Device Priority settings) firstly.

Workaround Disable option ROM of the PCI slot where 3C996B-T is installed when

3C996B-T is installed on PCI 64/66 or 32/33 slot and the system is not

expected to boot from network.

Status No fix.

6.16 Novell NetWare* 6.5 Emulex* LP9802DC driver fails to load

Issue: The Emulex* LP9802DC PCI-X fibre channel host adapter works as expected

when installed in the Intel® SE7520AF2 server board with Microsoft Windows* and supported Linux configurations. However, when the adapter is installed with NetWare* 6.5, the driver is not recognized by this operating system. NetWare fails to recognize both driver versions 2.00c and 2.02g. The

likely source for this failure is a conflict between the NetWare operating system

and the PCI-X bridge chip that is used on the LP9802DC adapter.

Implication: The Emulex LP9802DC adapter driver is not recognized by Novell NetWare*

6.5.

Workaround: The Emulex LP10000DC adapter is a compatible, next generation

bridgeless solution, which offers the same feature set with increased performance, works as expected under Novell NetWare 6.5 and has been

validated as a supported adapter on current Intel platforms.

Status: Intel is currently working with Emulex to investigate a fix for this issue.