intel.

Intel[®] Server Board SE7221BA1-E

Tested Hardware and Operating System List

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Enterprise Platforms and Services Marketing

Revision History

| Date | Revision Number | Modifications |
|----------------|--------------------|---|
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| Jan 13, 2005 | 1.0 | Initial Release |
| Mar 02, 2005 | 1.1 | Add Maxtor HDD and WD, Seagate HDD, and similar NIC added |
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1. Introduction

This document is intended to provide users of the Intel® server board SE7221BA1-E 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 adapters, peripherals, and operating systems are tested or until the Intel® server board SE7221BA1-E 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 for those adapters and peripherals under the specified system configuration (System BIOS and Firmware revisions) and operating systems versions with which they were tested.

1.1 Test Overview

Testing performed on the Intel® server board SE7221BA1-E 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.
 - o 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
 - o 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.
 - o Clients remain connected to the server system.
 - o Industry standard test suites run to completion with zero errors reported.

All Intel® server board SE7221BA1-E testing was performed using the Intel® server chassis SC5250-E.

2. Intel® Server Board SE7221BA1-E Base System Configurations

The following table lists the base system configurations tested. Base system configurations will change as new revisions of the Intel® server board SE7221BA1-E are released and/or new system BIOS are cut onto the board in the factory. Each base system configuration is assigned an identifier number that is referenced in the tables throughout this document. New base system 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 Configuration Identifier # | Board Type | PBA Number | BIOS Revision | Notes |
|--|-------------|------------|---------------|-------|
| 1 | SE7221BA1-E | C83389-200 | BIOS 0155 | |
| 2 | SE7221BA1-E | C83389-303 | BIOS 0213 | |

3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® server board SE7221BA1-E. Each of the listed operating systems was tested for compatibility with Intel® server board SE7221BA1-E base system configuration listed in Section 2 of this document. 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. 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 System | Base System Configuration Tested & Type of Testing | Notes |
|---|--|-----------------------|
| Microsoft Windows* XP Professional | 1 | |
| Microsoft Windows XP EM64T | 1 | |
| Red Hat Desktop | 1 | |
| Red Hat Enterprise Linux 3.0 | 1 | |
| Red Hat Enterprise Linux 4 UP1 | 1 | |
| Red Hat Enterprise Linux 4 UP1 64bit | 1 | |
| Red Hat Enterprise Linux 3.0 (EM64T) | 1 | |
| Microsoft Windows* 2003 Enterprise Addition Server | 1 | |
| Microsoft Windows 2003 SP1 EM64T | 1 | |
| Microsoft Windows* 2000 Advanced Server | 1 | Install and boot only |
| SuSE Linux Enterprise Server 9.0 | 1 | Install and boot only |
| SuSE Linux Enterprise Server 9.0 (EM64T) | 1 | Install and boot only |
| Novell Netware 6.5 | 1 | Install and boot only |
| Red Hat Advanced Server 2.1 | 1 | Install and boot only |

3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® server board SE7221BA1-E. 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 | Intel [®] Server SE7221BA1-E SID# TBD | OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/hwdq/hcl/search.asp (Search on SE7221BA1-E) http://developer.intel.com/design/servers/whql.htm |
| | | |
| | | |

4. Adapters and Peripherals

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 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. |
| ND | This adapter or peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not suported under this operating system. |
| IHVT (IHV Tested) | The 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 and devices listed in this document, regardless of whether the drive or device was tested in an Intel lab or not. IHV test reports remain the property of the IHV (Intel cannot provide copies of these reports). |
| SA (Similar Adapter) | This adapter is supported, but not tested. This adapter model has not been tested with this server board, but Intel will support it based on successful testing of a similar adapter from the same adapter family. Intel has high confidence that this adapter will function correctly with the server board. This adapter uses the same firmware and drivers, and has a nearly identical system interface to another adapter of the same family that has been successfully tested with this server board. In addition, Intel has secured IHV commitment to support the similar adapters equally. Customers should always test adapters as part of the final system configuration prior to deployment. All installation guidelines for the tested adapter also apply to the similar 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 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.

Adapters and Peripherals



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 on-board controllers when not booting from the controller or needing to use its built in utilities.

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|------------------|-----------------------------------|-----------------------------|----------------|---|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| I PCI RAID | | | | | | | | | | | | |
| Intel | SRCU41L | SRCU41L | PCI-64/66 | 1 chan, U320 RAID | | 1 | 1 | | | | | |
| Intel | SRCU42L | SRCU42L | PCI-64/66 | 1+1chan, U320, IOP303, LPPCI-MD2 | | 1 | 1 | 2 | 2 | 2 | 2 | |
| Promise | FastTrak S150 SX4060 | FastTrak S150 SX4060 | PCI-32/66 | 2 channels (4 PATA drives), RAID 0, 1, 5, 10. Like adapter to FT S150 SX4 | 1 | | | | | | | |
| ICP vortex | GDT8524RZ | GDT8524 RZ | PCI-64/66 | (2int, 2ext), U320 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| LSI Logic | MegaRAID SCSI 320-1 (520-1) | MegaRAI D SCSI 320-1 | PCI-64/66 | 1 channel, U320 RAID | | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| LSI Logic | MegaRAID SCSI 320-2 (518) | MegaRAI D SCSI 320-2 | PCI-64/66 | | | SA | SA | | | | | SA |
| 4.2 PCIe RAID | | | | | | | | | | | | |
| Intel | SRCU42E | SRCU42 E | PCI Express | 2 channel, U320 RAID, x8 PCI Express, 2 ext. 68, 2 int. 68 HDD, 53C1030, Dobson IOP | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| LSI Logic | MegaRAID SCSI 320-2E | MegaRAI D SCSI 320-2E | PCI Express | 2 channel, U320 RAID, x8 PCI Express, 2 ext. 68, 2 int. 68 HDD, 53C1030, Dobson | | | 1 | | | | | |
| 3 PCI SCSI | | | | | | | | | | | | |
| Adaptec | ASR-2100S | ASR- 2100S | PCI-32/33 | 1chan, U160, i960RS | 1 | 1 | 1 | 2 | 2 | | | 1 |
| Adaptec | ASR-2200S | ASR- 2200S | PCI-64/66 | 2 channel, U320 RAID(Same base card as 2120S) | 1 | 1 | 1 | | | | | 1 |
| Adaptec | ASC-29160 | ASC- 29160 | PCI-64/66 | 1channel U160, 7892 chip | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Adaptec | ASC-39160 | ASC- 39160 | PCI-64/66 | 2 channel U160 SCSI, 7899 chip | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |

Adapters and Peripherals

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|-------------------------|------------------------|----------------------------|-----------|---|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| Adaptec | ASC-39320A | ASC- 39320A | PCI-X133 | 2 channel U320 SCSI, 7902B0 chip 2 external / 2 internal connectors | 1 | 1 | 1 | | | 2 | 2 | |
| LSI Logic | LSI20160 | LSI20160 | PCI-32/33 | 1 channel U160 SCSI, 1000 chip | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| LSI Logic | LSI22320-R | LSI22320 -R | PCI-X133 | 2 channel U320 SCSI, 1030 chip | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| LSI Logic | LSI20320-R | LSI20320 -R | PCI-X133 | | SA | SA | SA | | | | | SA |
| Adaptec | ASC- 29320ALP | ASC- 29320AL P | PCI-X133 | 1 channel U320 SCSI, 7901B chip 1 external / 1 internal | 1 | 1 | 1 | 2 | 2 | 2 | 2 | |
| 4.4 PCI SATA RAID | | | | | | | | | | | | |
| Intel | SRCS14L | SRCS14L | PCI-64/66 | 4 channel SATA RAID 1.0, RAID 0, 1, 5, 10 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Intel | SRCS16 | SRCS16 | PCI-64/66 | 6-port | 1 | 1 | 1 | | | | | 1 |
| Promise | FastTrak S150 SX4 | FastTrak S150 SX4 | PCI-32/66 | 4 channel, RAID 0, 1, 5, 10 | 1 | 1 | | | | | | |
| Adaptec | AAR- 2410SA | AAR- 2410SA | PCI-64/66 | 4-port, SATA 1.0, RAID 0, 1. 2x Silicon Image w/Zion | 1 | 1 | 1 | | | | | |
| ICP vortex | GDT8546RZ | GDT8546 RZ | PCI-64/66 | 4 channel, SATA RAID 1.0, RAID 0, 1, 10, 5 | 1 | 1 | 1 | | | | | 1 |
| ICP vortex | GDT8586RZ | GDT8586 RZ | PCI-64/66 | 8 channel, SATA RAID 1.0, RAID 0, 1, 10, 5; 4 x Silicon Image w/ IOP 303 | 1 | 1 | 1 | | | | | 1 |
| LSI Logic | MegaRAID SATA 150-6 | MegaRAI D SATA 150-6 | PCI-64/66 | 6 channel, SATA RAID 1.0, RAID 0, 1, 10, 5 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| AMCC/3ware | 9500-8 | 9500-8 | PCIX-66 | 8 channel SATA 1.0, RAID 0, 1, 10, 5. PCIX-66 version of 8506-x series | 1 | 1 | | | | | | |
| .5 PCI NIC | | | | | | | | | | | | |
| Intel | PILA8470D3 | PRO/100 + S Server | PCI-32/33 | 10/100baseT + Security | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Intel | PILA8472C3 | PRO/100 + Dual Port | PCI-64/66 | 10/100baseT, Dual port | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|--------------|-----------------|---|----------------|--|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| Intel | PILA8472C3 | PRO/100 + Dual Port | PCI-64/66 | Gainesville, 10/100baseT, Dual port | | | | 2 | 2 | 2 | 2 | |
| Intel | PWLA8391M T | PRO/100 0MT desktop | PCI-32/66 | 10/100/1000 base T | 1 | 1 | 1 | | | | | 1 |
| Intel | PWLA8391G T | PRO/100 0GT desktop | PCI-32/66 | 10/100/1000 base T | SA | SA | SA | | | | | SA |
| Intel | PWLA8490M T | PRO/100 0MT Gigabit Server Adapter | PCI-X133 | 10/100/1000baseT, Copper, No bridge | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Intel | PWLA8490X T | PRO/100 0XT Gigabit Server Adapter | PCI-X133 | Barrow, 10/100/1000BaseT | 1 | 1 | 1 | | | | | 1 |
| Intel | PWLA8492M T | PRO/100 0MT Dual Port Gigabit Server Adapter | PCI-X133 | 10/100/1000baseT, Dual Port, Copper, No bridge | 1 | 1 | 1 | 2 | 2 | | | 1 |
| | | | | | | | | | | | | |
| 3COM | 3C980C- TXM | EtherLink Server 10/100 PCI Managed | PCI-32/33 | 10/100baseT | 1 | 1 | 1 | | | 2 | | 1 |
| D-Link | DGE-550T | GigaExpr ess DGE- 550T | PCI66 | 10/100/1000 LAN, PCI using the Marvell 88E1000 PHY, No Win2003 support | 1 | 1 | 1 | | | | | |
| 6 PCle NIC | | | | | | | | | | | | |
| Intel | EXPI9300PT | PRO/100 0 PT Desktop Adapter | PCI Express | | | | | 2 | 2 | 2 | 2 | |
| Intel | EXPI9400PT | Intel® PRO/100 0 PT Server Adapter | PCI Express | Glyndon, 1 port 1000Base-T, 1Gb Ethernet, PCI Express | | | | 2 | 2 | 2 | 2 | |

Adapters and Peripherals

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|-----------------------|------------------|--|-----------------|--|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| Intel | EXPI9402PT | Intel® PRO/100 0 PT Dual Port Server Adapter | PCI Express | Redwater, 2 port 1000Base-T, 1Gb Ethernet, PCI Express | | | | 2 | 2 | 2 | 2 | |
| Syskonnect | SK-9E21D | SK- 9E21D | PCI Express | 10/100/1000 LAN, based on Marvell 88E8050 YukonEC | 1 | 1 | 1 | 2 | 2 | 2 | | |
| .7 PCI FC storage | | | | | | | | | | | | |
| Emulex | LP10000DC | LP10000D C-M2 | PCI-X133 | Dual Channel 2Gb FC controller Universal PCI-LP/RP Optical | 2 | 1,2 | 1 | 2 | 2 | 2 | 2 | |
| Emulex | LP9802DC | LP9802D C-FC | PCI-X133 | Dual Channel 2Gb FC Optical controller | | | 1 | | | | | |
| Emulex | LP9002L | LP9002L- FC | PCI-64/66 | Single Channel 2Gb FC Optical controller | 1 | 1 | 1 | | | | | |
| 8 PCle FC storage | | | | | | | | | | | | |
| Emulex | LP10000ExD C | LP10000E xDC-M2 | PCI Express | Dual Channel 2Gb FC, PCI Express | 1 | 1 | 1 | | | | | |
| QLogic | QLE2362 | QLE2362 | PCI Express | 2Gb Single channel PCI Express HBA - LC Multi-mode Optic | 1 | 1 | 1 | | 2 | 2 | 2 | |
| 9 Modems | | | | | | | | | | | | |
| 3СОМ | USR 3453B | V.Everyth ing 56K Analog Corporate Modem | RS-232 | | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Hayes | Hayes | Accura V.92 | RS-232 | | 1 | | | | | | | |
| 4.10 Video | | | | | | | | | | | | |
| ATI | RADEON 7500 | RADEON 7500 | PCI-32/33 | PCI video with dual monitor support | 1 | 1 | 1 | | | | | |
| Matrox | G2+/DUALP- PL | G200 MMS | PCI-32/33 | PCI video with dual monitor support | 1 | 1 | 1 | | | | | |
| 11 USB/PS2 Devices | | | | | | | | | | | | |
| LOGITECH | 930582-0121 | Optical mouse | PS/2 and USB | mouse | 1 | 1 | 1 | | | | | 1 |
| LOGITECH | 967233-0121 | Internet Navigator | PS/2 and USB | keyboard | 1 | 1 | 1 | | | | | 1 |

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|------------------------------|--|------------------------------------|-----------------|---|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| <u>MICROSOFT</u> | | Intellimou se Optical | PS/2 and USB | mouse | 1 | 1 | 1 | | | | | 1 |
| Keytronic | E06101USB- C | E06101U SB-C | USB | keyboard | | 1 | | | | | | |
| <u>Keytronic</u> | PRO Pilot | PRO Pilot | PS/2 | keyboard | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| RAINBOW | SRB10741/E RB01221 | Sentinel Duo Hardware Key | USB | | 1 | 1 | | | | | | |
| <u>IBM</u> | 22P9025 | 22P9025 | USB | IBM 256MB USB 2.0 memory key | 1 | 1 | 1 | | | | | 1 |
| Logitech Optical Mouse | Logitech Optical Mouse | | | | | | | 2 | 2 | 2 | 2 | |
| <u>Lexar</u> | Lexar Media | Jump drive pro | USB | 256 Jump Drive Pro USB 2.0 | 1 | 1 | 1 | | | | | 1 |
| 12 CDROM Drives | | | | | | | | | | | | |
| <u>TEAC</u> | CD-552EA94 | CD-552E | ATA | DMA mode2 52x | | 1 | | 2 | 2 | 2 | 2 | |
| SAMSUNG | SC-152 | SC-152 | ATA33 | UDMA 52x | 1 | 1 | 1 | | | | | 1 |
| PLEXTOR | PX- W4012TS/SW | PlexWrite r 40/12/40 S | SCSI-UW | Internal SCSI CD-RW | 1 | 1 | 1 | | | | | 1 |
| PLEXTOR | PX-W4012TA | PX- W4012TA | IDE | | 1 | | | | | | | |
| TDK | VeloCD CD- RW | AI- 481648B | IDE | CD-RW | 1 | | | | | | | |
| <u>IOMEGA</u> | 32721 | CD-RW- DVD- ROM 48x24x48 | USB | USB 2.0/1.1 CDRW 16xDVD-ROM | 1 | 1 | 1 | | | | | 1 |
| <u>Plextor</u> | PlexWriter/ Premium-U - 52/32/52 | PlexWrite r/ Premium- U | USB | USB 2.0/1.1 CDRW | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| TEAC | CDW540E/K IT/USB2 | CDW540 E/KIT/US B2 | USB | External CD Writer (40x12x48 USB 2.0/1.1) used as CD- ROM) | 1 | 1 | 1 | | | | | 1 |
| 4.13 DVD Drives | | | | | | | | | | | | |
| SAMSUNG | <u>SN-324B</u> | 24x10x24 | ATA | | 1 | 1 | 1 | | | | | 1 |
| PLEXTOR | PX-712SA | 48x24x48 | SATA | Rewriteable +/- RW | 1 | 1 | | 2 | 2 | | | |
| SAMSUNG | SD-616 | SD-616 | ATA33 | | 1 | 1 | 1 | | | | | 1 |

Adapters and Peripherals

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|---------------------|-----------------|---|-----------|---|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| <u>SAMSUNG</u> | SD- 816BRPS | SD- 816BRPS | IDE | | 1 | | | | | | | |
| <u>Sony</u> | DRU-510A | DRU- 510A | ATA33 | | 1 | 1 | 1 | | | | | 1 |
| TOSHIBA | SD-M1712 | SD- M1712 | ATA33 | | 1 | 1 | 1 | | | | | 1 |
| PIONEER | DVD-305S | DVD- 305S | SCSI-N | | 1 | 1 | 1 | | | | | 1 |
| <u>Sony</u> | DRU-510A | DRU- 510A | ATA33 | | | | | 2 | 2 | 2 | 2 | |
| <u>Sony</u> | DRX-510UL | DRX- 510UL | USB2.0 | | 1 | 1 | 1 | | | | | 1 |
| 4.14 Tape Drives | | | | | | | | | | | | |
| SONY* | SDX- 700C/BM | AIT-3 Desktop | SCSI-U160 | | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| Sony | SDX-250V | AITE(20G B) SCSI Tape Drive | SCSI | IHVT, completed with Adaptec ASC-29160N - PCI | | 1 | | | | | | |
| Sony | SDX-260V | AITE(20G B) ATAPI Tape Drive | ATAPI | IH√T | | 1 | | | | | | |
| Sony | SDX-450V | AIT1T(40 GB) SCSI Tape Drive | SCSI | IHVT, completed with Adaptec ASC-29160N - PC | | 1 | | | | | | |
| Sony | SDX-460V | AIT1T(40 GB) ATAPI Tape Drive | ATAPI | IHVT | | 1 | | | | | | |
| Sony | SDX-550V | AIT2T(80 GB) SCSI Tape Drive | SCSI | IHVT, completed with Adaptec ASC-29160N - PC | | 1 | | | | | | |
| Sony | SDX-560V | AIT2T(80 GB) ATAPI Tape Drive | ATAPI | IHVT | | 1 | | | | | | |

| Manufacturer | Model Number | Model Name | Interface | Comments | Microsoft Windows XP | Microsoft Windows 2003 | RedHat Linux 3.0 update3 | WinXP 64bit | Win2003 64bit | RedHat Linux 4.0 update1 | RedHat Linux 4.0 update1 64bit | Redhat Linux 3.0 update3 EM64T |
|----------------------------|-----------------|---------------------------------------|-----------|---|-------------------------|---------------------------|-----------------------------|-------------|---------------|-----------------------------|--------------------------------------|--------------------------------------|
| Sony | SDX-700V | AIT3(100 GB) SCSI Tape Drive | SCSI | IHVT, completed with Adaptec ASC-29160N - PCI | | 1 | | | | | | |
| Sony | SDX-900V | AIT4(200 GB) SCSI Tape Drive | SCSI | IHVT, completed with Adaptec ASC-29160N - PCI | | 1 | | | | | | |
| Sony | SAITe1300SS | SAITe1300 SS | SCSI | IHVT, completed with Adaptec ASC-29160N - PCI | | 1 | | | | | | |
| Certance | STU4200LW-s | Certance LTO Ultrium 1 | SCSI-U2 | | | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| QUANTUM | TRS23BA- YF | Super DLT, SDLT320 | SCSI-U2 | | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 |
| 15 Remova ble Drives | | | | | | | | | | | | |
| TEAC | FD-235HF | FD- 235HF | FLOPPY | 3 1/2" floppy disk | 1 | 1 | 1 | | | | | 1 |
| <u>TEAC</u> | FDO5PUB | FDO5PU B | USB | 3½" Floppy, USB | 1 | 1 | 1 | | | | | 1 |
| <u>Maxtor</u> | S01J250 | 5000XT | USB | 250 GB USB 2.0/1.1 and firewire hard drive | | 1 | | | | | | |
| 4.16 KVM | | | | | | | | | | | | |
| Avocent | 1160ES | 1160ES | PS/2 | 16 port keyboard mouse video switch | 1 | 1 | | | | | | 1 |

5. Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel® server board SE7221BA1-E 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* XP |
| 2 | Microsoft Windows* 2003 Enterprise Server |
| 3 | RedHat Linux 3 update3 |
| 4 | RedHat Linux 3 update3 EM64T |
| 5 | Mircrosoft Windows XP 64bit |
| 6 | Microsoft Windows* 2003 Enterprise Server 64bit |
| 7 | Redhat Linux 4 update 1 |
| 8 | Redhat Linux 4 update 1 64bit |

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. | | | | |
|-------------------------------|--|--|--|--|--|
| 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) | The hard disk drive is supported, but not tested. This hard drive model/capacity has not been tested with this server board, but Intel will support it based on successful testing of a larger capacity hard drive from the same hard drive family. Intel has high confidence that this hard drive will function correctly with the server board. This drive uses 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. Given the fact that a larger capacity hard drive from the same drive family has successfully completed testing on this server board, this particular hard drive capacity point will not be tested. | | | | |

| Manufacturer | Product Family | Model Number | Interface | RPM | Drive size (GB) | Notes |
|------------------|----------------|--------------|-----------|-----|--------------------|-------|
| SCSI Hard Drives | | | | | | |
| Fujitsu | MAT3073NC | MAT3073NC | SCSI/U320 | 10K | 73 | |
| Maxtor | Atlas | Atlas 10K V | SCSI/U320 | 10K | 300 | |

Hard Disk Drives

| Manufacturer | Product Family | Model Number | Interface | RPM | Drive size (GB) | Notes | |
|-------------------|----------------------|------------------------------------|-----------|------|--------------------|-------|--|
| | | Genesis, 8D300L0 | | | | | |
| Maxtor | Atlas | Atlas 10K V Genesis, 8D300J0 | SCSI/U320 | 10K | 300 | | |
| Maxtor | Atlas | Atlas 10K V Genesis, 8D147J0 | SCSI/U320 | 10K | 147 | | |
| Maxtor | Atlas | Atlas 10K V Genesis, 8D073J0 | SCSI/U320 | 10K | 73 | | |
| Maxtor | Atlas | Atlas 15K II 8E036J0 | SCSI/U320 | 15K | 36 | | |
| Maxtor | Atlas | Atlas 15K II 8E073J0 | SCSI/U320 | 15K | 73 | | |
| Maxtor | Atlas | Atlas 15K II 8E147J0 | SCSI/U320 | 15K | 147 | | |
| Seagate | Cheetah 10K.6 | ST3146807LC | SCSI/U320 | 10K | 146 | | |
| Seagate | | ST318452FC | SCSI/U320 | 10K | 18 | | |
| Seagate | Cheetah 15K.3 | ST318453LC | SCSI/U320 | 15K | 18 | | |
| Seagate | Cheetah 10K.7 | ST3300007LC | SCSI/U320 | 10K | 300 | | |
| Seagate | Cheetah 10K.7 | ST3300007LW | SCSI/U320 | 10K | 300 | | |
| Seagate | Cheetah 15K.3 | ST336753LC | SCSI/U320 | 15K | 36 | | |
| Hitachi | 10K300 (Python-A) | HUS103030FL3 800 | U320 | 10K | 300 | | |
| Hitachi | 10K300 (Python-A) | HUS103014FL3 800 | U320 | 10K | 147 | | |
| Hitachi | 10K300 (Python-A) | HUS103073FL3 800 | U320 | 10K | 73 | SD | |
| Hitachi | 15K147 (Viper-A) | HUS151414VL3 800 | U320 | 15K | 147 | | |
| Hitachi | 15K147 (Viper-A) | HUS151436VL3 800 | U320 | 15K | 36 | | |
| Hitachi | 15K147 (Viper-A) | HUS151473VL3 800 | U320 | 15K | 73 | SD | |
| Parallel ATA (PAT | A) Hard Drives | | | | | | |
| Seagate | ST380013A | Barracuda 7200.7 | ATA/100 | 7200 | 80 | | |
| Seagate | ST380021A | | ATA/100 | 7200 | 80 | | |
| Seagate | ST3250823A | Barracuda 7200.8 | ATA/133 | 7200 | 300 | | |
| Western Digital | WD1200BB | Caviar | ATA/100 | 7200 | 120 | | |
| Western Digital | WD1600JB- 00HBB0 | Caviar XL80II | ATA/100 | 7200 | 160 | | |

Hard Disk Drives

| Manufacturer | Product Family | Model Number | Interface | RPM | Drive size (GB) | Notes |
|------------------|---------------------|-----------------------------------|------------|----------------|--------------------|---------|
| | | | | | | |
| Serial ATA (SATA |) Hard Drives | | | | | |
| Hitachi | HDS724040KL SA80 | Deskstar 7K400 | SATA/150 | 7200 | 400 | |
| Hitachi | HDT722525DL A380 | Deskstar T7K250 (Vancouver-IV) | SATA/150 | 7200 | 250 | |
| Hitachi | HDS724040KL SA80 | Deskstar 7K400 (Kurofune-I) | SATA/150 | 7200 | 400 | |
| Hitachi | HDS725050KL A360 | Deskstar 7K500 (Kurofune-II) | SATA-II | 7200 | 500 | |
| Hitachi | HDS728040PL AT20 | Deskstar 7K80 (Pathfinder) | SATA/150 | 7200 | 80 | |
| Hitachi | HDT722516DL A380 | Deskstar T7K250 (Vancouver-IV) | SATA/150 | 7200 | 160 | SA |
| Maxtor | 6Y060M0 | DiamondMax Plus 9 | SATA/150 | 7200 | 60 | |
| Western Digital | WD360GD | WD Raptor | SATA/150 | 10K | 36 | |
| Western Digital | WD740GD | WD Raptor | SATA/150 | 10K | 74 | |
| Western Digital | WD Caviar | WD2500JD- | 0.4.7.4.50 | SATA /150 7200 | 250 | |
| | XL80 II | 00HBB0 SATA | SATA/150 | | 250 | |
| Western Digital | WD4000KD- 22NAB0 | WD Caviar XL100 | SATA/150 | 7200 | 400G | 5,6,7,8 |