

Intel[®] Entry Server Board SE7230CA1-E

Tested Hardware and Operating System List



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Revision History

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1. Introduction

This document is intended to provide users of the Intel® Entry Server Board SE7230CA1-E with a list of the operating systems and peripherals tested by Intel on this server platform.

This document will continue to be updated as new peripherals operating systems are tested or until the Intel® Entry Server Board SE7230CA1-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.

The peripherals specified in this document may or may not have been tested on all available board/riser combinations that make up the SE7230CA1-E product family. Intel will provide support for the peripherals listed when used within this family of products.

The SE7230CA1-E product family consists of the following server building blocks and integrated systems:

| Product Code | Product Description |
|---------------------|---|
| SE7230CA1-E BCAHBB | Intel Server Board SE7230CA1-E - Horizontal Power Connector |
| SE7230CA1-E BCAVBB | Intel Server Board SE7230CA1-E - Vertical Power Connector |

1.1 Test Overview

Testing performed on the Intel® Entry Server Board SE7230CA1-E is divided under two separate categories:

- Basic Operating System Installation Testing
- Peripheral Compatibility testing and System 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. 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 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 Peripheral Compatibility and Stress Testing

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 Peripheral Compatibility and Stress testing process consists of three areas: Base Platform, Peripheral 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.

Stress Testing: This test sequence uses configurations for a minimum 48-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 Peripheral Compatibility and Stress Testing

Intel commits to provide the following level of customer support for operating systems that receive 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 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 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 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.

2. Base System Definitions

The following table lists the base system configurations tested for a given validation test run. Each specific product/system software combination tested is assigned a Base System Identifier Number. These numbers are used in the lists of peripherals referenced in the following sections. Support for the listed peripherals is only provided for the base systems and operating systems on which they were tested.

The peripherals specified in this document may or may not have been tested on all available board/riser combinations that make up the SE7230CA1-E product family. However, Intel will provide support for the peripherals listed when used within this family of products

This table is updated when a new test run is performed and a new product/system software combination was used.



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

| Base System Configuration Identifier # | Product Family | BIOS Revision |
|--|----------------|---------------|
| 1 | SE7230CA1-E | 1180 |

3. Supported Operating Systems

The following table provides a list of supported operating systems for the Intel® Server Board **SE7230CA1-E**. Each of the listed operating systems was tested for compatibility with Intel® Entry Server Board SE7230CA1-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 Peripheral Compatibility and Stress testing. For information on the support commitments for Basic Installation Testing vs. 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 SE7230CA1-E. 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* 2003 Server Enterprise Edition SP1 EM64T | Base Config # - 1 Compatibility & Stress | Intel's testing was completed with Microsoft Windows Server 2003 Enterprise Edition, EM64T. The Intel Server Board SE7230CA1-E supports the operating system portion Microsoft Windows Server 2003 Enterprise Edition, EM64T. The application portion is not tested or supported |
| Red Hat Enterprise Linux 4.0 AS Update2 EM64T | Base Config # - 1 Compatibility & Stress | |
| Microsoft Windows* 2003 Server Enterprise Edition SP1 | Base Config # - 1 Basic Installation | |
| Red Hat Enterprise Linux 4.0 AS Update2 | Base Config # - 1 Basic Installation | |
| SuSE Linux Enterprise Server 9 SP2 EM64T | Base Config # - 1 Basic Installation | |
| SuSE Linux Enterprise Server 9 SP2 | Base Config # - 1 Basic Installation | |

3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® server board **SE7230CA1-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 Edition EM64T | Intel® SE7230CA1-E Server | OEM must request certification by Microsoft for their specific product. http://www.microsoft.com/whdc/hcl/default.mspx http://developer.intel.com/design/servers/whql.htm |
| Red Hat* Enterprise Linux 4U2 EM64T | Intel® SE7230CA1-E Server | Red Hat checks Intel's results, certifies (if appropriate), and posts the certificate on their web site. Customer can leverage the Intel certification, if customer product meets the operating system vendor standard. https://hardware.redhat.com/hwcert/index.cgi |

4. Peripherals

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. All integrated on-board devices are tested by default and are therefore not included in the following tables.

The following notations are used in the tested peripherals table below to indicate the support level that Intel provides for a particular peripheral under a particular operating system:

| | |
|-------------------------------|--|
| Number (i.e. 1) | This 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 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 peripheral has not been tested under this operating system and is not supported under this operating system. |
| ND | This peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not supported under this operating system. |
| IHVT (IHV Tested) | This peripheral was tested according to Intel-approved guidelines and test procedures by the Independent Hardware Vendor (IHV) that manufactured this peripheral. Intel provides the same level of support for all the peripherals listed in this document, regardless of whether this peripheral 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 | Model Number | Model Name | Interface | Comments | Microsoft* Windows* 2003 EE / SBS 2003 | Microsoft* Windows* 2003 EE EM64T | Redhat enterprise Linux 4 U2 | Redhat enterprise Linux 4 U2 EM64T | SuSE Linux 9 SP2 EM64T | SuSE Linux 9 SP2 |
|-----------------------------|------------------|-------------------------------------|-----------|--------------|--|---|------------------------------------|--|---------------------------|---------------------|
| 4.1 Input Devices | | | | | | | | | | |
| Logitech | 930582-0121 | Optical mouse | USB | Mouse | 1 | 1 | 1 | 1 | 1 | 1 |
| Microsoft | B75-00092 | Intellimouse Optical | USB | Mouse | 1 | 1 | 1 | 1 | 1 | 1 |
| Logitech | Y-BP62A | Ultra-Flat Keyboard | USB | Keyboard | 1 | 1 | 1 | 1 | 1 | 1 |
| 4.2 Modems | | | | | | | | | | |
| 3COM | USR3453B | V.Everthing 56K Analog Cor.Modem | Modem | Serial Modem | NT | 1 | NT | 1 | NT | NT |
| 4.3 DVD-RW Drives | | | | | | | | | | |
| Addonics | AEPDVRW888 UM | AEPDVRW888UM | USB2.0 | DVD-RW | 1 | 1 | 1 | 1 | 1 | 1 |
| Lite On | LSC-24082KX | LSC-24082KX | USB2.0 | DVD-RW | 1 | 1 | 1 | 1 | 1 | 1 |
| Sony | DRX-720UL | DRX-720UL | USB2.0 | DVD-RW | 1 | 1 | 1 | 1 | 1 | 1 |
| 4.4 Removable Drives | | | | | | | | | | |
| Iomega | SKU 33136 | Micro Mini™ 1GB Drive | USB 2.0 | USB-key | 1 | 1 | NT | 1 | NT | NT |
| Lexar | JD1GB-80-231 | 1GB USB Flash Drive | USB 2.0 | USB-key | 1 | NT | 1 | NT | NT | NT |
| Mitsumi | D353FUE | D353FUE | USB 2.0 | USB-Floppy | 1 | 1 | 1 | NT | NT | NT |
| Sony | PCGA-UFD5 | VAIO External USB floppy | USB 2.0 | USB-Floppy | 1 | 1 | 1 | NT | NT | NT |
| TEAC | FD-O5PUB | FD-O5PUB | USB 2.0 | USB-Floppy | 1 | 1 | 1 | NT | NT | NT |
| 4.5 KVM | | | | | | | | | | |
| Avocent | AV1400 | AutoView | PS2/USB | KVM | 1 | 1 | 1 | 1 | 1 | 1 |

5. Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel® Entry Server Board SE7230CA1-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* 2003 Server Enterprise Edition SP1 EM64T |
| 2 | Red Hat Enterprise Linux* 3.0 4.0 U2EM64T |
| 3 | SuSE Linux 9 SP2 EM64T |
| 4 | Microsoft Windows* 2003 Server Enterprise Edition SP1 |
| 5 | Red Hat* Enterprise Linux 4.0 U2 |
| 6 | SuSE Linux 9 SP2 |

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. |
| 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). |

Intel® Entry Server Board SE7230CA1-E

| Manufacturer | Model Number | Product Family | Interface | RPM | Drive size (GB) | Tested Operating Systems | Notes |
|--------------------------------------|-----------------|-----------------------|----------------|-------|-----------------|--------------------------|-------|
| Serial ATA (SATA) Hard Drives | | | | | | | |
| Seagate | ST3160812AS | Barracuda 7200.9 | SATA/300 | 7200 | 160 GB | 1,3,4,5,6 | |
| Seagate | ST3400832AS | Barracuda 7200.8 | SATA/150 | 7200 | 400 GB | 1,2,3,4,5,6 | |
| Western Digital | WD3200SD-01KNB0 | Caviar XL107RE | SATA/150 | 7200 | 320GB | 1,2,3,4,5,6 | |
| Western Digital | WD740GD | WD Raptor | SATA/150 | 10000 | 74GB | 1,2,3,4,5,6 | |
| Hitachi | HDS725050KLA360 | Deskstar 7K500 (RoHS) | SATA/300 | 7200 | 250GB | SD | |
| USB Hard Drives | | | | | | | |
| Maxtor | E01G300 | Maxtor One Touch II | USB Hard drive | | | 1,2,4,5 | |