# Intel<sup>®</sup> Server Board S5000PAL Adapter, Peripheral, NOS Test List



**Revision 1.2** 

March 2006

**Enterprise Platforms and Services Division** 

# Revision History

Date	Revision Number	Modifications
12/20/2005	1.0	Initial External Release
2/03/2006	1.1	Expanded hard drive lists
		Updated other peripherals
3/07/2006	1.2	Updated OS list
		Removed mislabeled Optical Drive

## **Disclaimers**

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION, OR SAMPLE.

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications.

Intel retains the right to make changes to its test specifications at any time, without notice. The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

This document contains information on products in the design phase of development. Do not finalize a design with this information. Revised information will be published when the product is available. Verify with your local sales office that you have the latest datasheet before finalizing a design.

The S5000PAL server board may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Copyright © Intel Corporation 2006.

\*Other names and brands may be claimed as the property of others.

# **Table of Contents**

1.	Introduc	etion	. 1
2.	Intel Pro	oduct Support	. 2
3.	Network	ing Operating Systems	. 3
4.	Adapter	Cards	. 4
	4.1	Fiber Channel Cards	. 4
	4.2	Network Interface Controllers (NICs)	. 4
	4.3	SCSI / SCSI RAID Controllers	. 4
	4.4	SATA / SATA RAID Controllers	. 5
	4.5	SAS / SAS RAID Controllers	. 5
	4.6	Video Controllers	. 5
5.	Periphe	rals	. 6
	5.1	Hard Disk Drives	. 6
	5.1.1	SATA Drives	. 6
	5.1.2	SAS Drives	. 7
	5.1.3	USB Drives	. 8
	5.2	CD-ROM Drives	. 8
	5.3	CD-RW / DVDROM Drives	. 8
	5.4	DVDROM Drives	. 8
	5.5	DVD±R/RW CD-R/RW Drives	. 9
	5.6	Input Devices	. 9
	5.7	Removable Media Devices	. 9
	Tape Drive	9S	. 9
6.	OS Certi	ifications1	10

< This page intentionally left blank. >

## 1. Introduction

This document is intended for use by Intel customers. It is intended to provide its readers with a list of Operating Systems, Adapters, and Peripherals Intel plans to test on the specified server platform. The items listed are not yet validated. A complete list of adapters, peripherals, and operating systems that have passed Intel's validation will be provided at the production launch of the platform.

This document does not list supported memory for the specified platform. System memory that has passed Intel validation for the specified platform board will be communicated in the platform's "Weekly Technical Update" during the Pre-production phase, then listed in the Tested Memory List for the specified platform at product launch and beyond.

The hardware listed in this document is not an all inclusive list of devices that are compatible for use on the specified platform. It provides a list of devices that Intel feels is representative of the types of devices that will be used in various platform applications targeted for this platform.

For each operating system, adapter, and peripheral configuration, a test passes if specific criteria are met. Specific configurations may have particular characteristics that will be 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 instrucions 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 subsequently 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. Intel Product Support

Intel commits to provide the following level of customer support for operating systems, adapter cards, and peripherals listed in the "Tested Hardware and Operating System List" for the specified server platform document:

- 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.
- Intel will provide support for resolution of customer issues related to the functionality of Intel® Server Control (ISC) software with the operating system, unless otherwise noted, as long as the issue is within the scope of the server management feature set supported by the server board.
- Support is defined as assistance in root causing issues, and determing 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 IHV
  for resolution, BIOS changes, firmware changes, or determing a customer acceptable
  workaround for the issue.
- Intel will enable ISM software functionality with the operating system release, unless otherwise noted.
- Intel will provide and test operating system drivers for each onboard video, network, and storage controller.
- Intel will enable IHVs 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. See Section 5 of this document for more information about
  operating system certifications.

For operating systems, adapter cards, and peripherals not listed in the "*Tested Hardware and Operating System List*" document, there is no support commitment. Intel will consider support requests on a case-by-case basis.

# 3. Networking Operating Systems

The following table lists the Networking Operating Systems Intel plans to support at product launch for the server platform specified. Additional operating systems and or listed OS revision updates may be supported as they become available post product launch.

Operating Systems	Type of Testing	Notes
Microsoft* Windows* Server 2003 Enterprise Edition R2 w/SP1	Compatibility & Stress	
Microsoft Windows* Server 2003 Enterprise Edition R2 EM64T w/SP1	Compatibility & Stress	
Red Hat* Enterprise Linux 4.0 AS w/Update 2	Compatibility & Stress	
Red Hat* Enterprise Linux 4.0 AS, EM64T w/Update 2	Compatibility & Stress	
Suse* Linux Enterprise Server 9 IA-32	Compatibility & Stress	Post SRA
Suse Linux Enterprise Server 9 IEMT64	Compatibility & Stress	Post SRA
Missassifi Missassifi and Occasion (ODA	Dania Installation	
Microsoft Windows* 2000 Advanced Server w/SP4	Basic Installation	
Novell* NetWare 6.5 w/SP5	Basic Installation	
Suse Linux Enterprise Server 9 (SP2) IA-32	Basic Installation	
Suse Linux Enterprise Server 9 IEMT64	Basic Installation	

# 4. Adapter Cards

The follow is a list of adapter cards Intel plans to test on the specified server platform. The adapters have been broken down into categories based on their functionality. All on-board devices are tested by default and are therefore not included in the following tables.

#### 4.1 Fiber Channel Cards

Vendor	Model	Model Name / Description	Interface	Form Factor
Emulex*	LP10000DC	2 Channel, 2Gb	PCI-X 133	PCI-LP/RP
Emulex	LP10000ExDC	2 Channel, 2Gb	PCI-E x4	PCI-Short
Emulex	LP11002	2 Channel, 4Gb	PCI-X 266	PCI-LP/RP
Emulex	LPe11002	2 Channel, 4 Gb	PCI-E x4	PCI-LP/RP
QLogic*	QLA2342	2 Channel, 2Gb	PCI-X 133	PCI-Short
QLogic	QLE2362	2 Channel, 2Gb, Optical, 2312 chip	PCI-E x4	PCI-Short

## 4.2 Network Interface Controllers (NICs)

Vendor	Model	Model Name / Description	Interface	Form Factor
Intel®	PILA8470D3	PRO100+ S Server	PCI-32/33	PCI-Short
Intel	PILA8472C3	Pro/100+ Dual Port	PCI-64/66	PCI-Short
Intel	PWLA8490MT	Pro/1000MT Gigabit Server	PXI-X 133	PCI-LP/RP
Intel	PWLA8492MT	Pro/1000MT Dual Port Gigabit Server	PXI-X 133	PCI-LP/RP
Intel	EXP19300PT	1 port, 1GbE	PCI-E x1	PCI-Short
Intel	EXP19400PT	1 port 1000Base-T, 1Gb	PCI-E x1	PCI-Short
Intel	EXP19402PT	2 port 1000Base-T, 1Gb	PCI-E x4	PCI-Short
Syskonnect*	SK-9E21	1 port 10/100/1000 LAN	PCI-E x1	PCI-Short
Syskonnect	SK-9E22	2 port 10/100/1000 LAN	PCI-E x4	PCI-Short

#### 4.3 SCSI / SCSI RAID Controllers

Vendor	Model	Model Name / Description	Interface	Form Factor
Intel®	SRCU42E	2-channel, U320 RAID 0,1,5,10, 50	PCI-E x8	PCI-Med
LSI*	LSI22320-R	2 channel, U320 SCSI, 1030 chip	PCI-X 133	PCI-Short

## 4.4 SATA / SATA RAID Controllers

Vendor	Model	Model Name / Description	Interface	Form Factor
Adaptec*	AAR-21610SA	16 port, (2x8 port Marvell) IOP 303	PCI-64/66	PCI-Med
Adaptec	AAR-1420SA	4 port, SATA (Marvell H2 Chip) w/SW RAID	PCI-64/66	PCI-LP/RP
AMCC/3Ware	9500S-8	8 channel SATA 1.0, RAID 0,1,10, 5	PCI-X 66	PCI-Med
Intel®	SRCS16	6 port, SATA 1.5G, RAID 0, 1, 10, 5, 50	PCI-64/66	PCI-Med
Intel	SRCS28X	8 port SATA 3.0G, RAID 0, 1, 10, 5, 50	PCI-X 133	PCI-Short
LSI Logic*	MegaRAID SATA 300- 8x	8 channel, SATA 3G, RAID 0, 1, 10, 5, 50	PCI-X133	PCI-Short

## 4.5 SAS / SAS RAID Controllers

Vendor	Model	Model Name / Description	Interface	Form Factor
Adaptec*	ASR-4805SAS	8-port SAS, RAID, 128MB DDR2, 500 MHz IOP	PCI-E x8	PCI-Med
Adaptec	ASR-4800SAS	8 port SAS, RAID, 128MB DDR2, 500 MHz IOP	PCI-X 133	PCI-Med
Adaptec	ASC-48300	8 PORT SAS, w/SW RAID	PCI-X 133	PCI-LP/RP
Intel®	SRCSAS18E	8 port SAS 3GB, RAID	PCI-E x8	PCI-MED
LSI Logic*	3442x	8 port SAS w/SW RAID, 1068 chip	PCI-X 133	PCI-LP/RP

## 4.6 Video Controllers

Vendor	Model	Model Name / Description	Interface	Form Factor
ATI*	RADEON* 7000	VGA	PCI-32/33	PCI-Med
XGI*	Volari V3XT	Volari V3XT w/128MB	PCI-32/33	PCI-Med

# 5. Peripherals

The follow is a list of peripherals Intel plans to test with specified server platform. The peripherals are divided into categories based on their functionality.

#### 5.1 Hard Disk Drives

The following hard disks are used during the operating system and adapter testing of the specified server platform. If a hard drive should fail during a test cycle, the failure will NOT delay the ship release approval of the platform. It is the responsibility of the customer to validate or qualify the hard drives they choose to ship in the platform during their evaluation period. The specific drives tested are marked as such in the "Tested" column. All other drives are assumed to have the same results as the related tested drives.

#### 5.1.1 SATA Drives

Vendor	Model	Model Name	Interface	Form Factor	Capacity / RPM	Tested
Hitachi*	HDS722516DLSA80	Deskstar T7K250	SATA 300	3.5x1	160GB 7200 RPM	
Hitachi	HDS722516DLSA80	Deskstar T7K250	SATA 300	3.5x1	250GB 7200 RPM	Х
Hitachi	HDS725050KLA360	DeskStar 7K500 (RoHS)	SATA 300	3.5x1	500GB 7200 RPM	Х
Maxtor*	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	80GB 7200 RPM	
Maxtor	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	120GB 7200 RPM	
Maxtor	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	160GB 7200 RPM	
Maxtor	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	200GB 7200 RPM	
Maxtor	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	250GB 7200 RPM	
Maxtor	6B300M0/6L300M0	DiamondMax 10	SATA 150	3.5x1	300GB 7200 RPM	Х
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	80GB 7200 RPM	Х
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	120GB 7200 RPM	
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	160GB 7200 RPM	
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	200GB 7200 RPM	
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	250GB 7200 RPM	
Maxtor	6V080E0	DiamondMax 10 (RoHS)	SATA 300	3.5x1	300GB 7200 RPM	
Maxtor	7V250S0	MaxLine III (RoHS)	SATA 300	3.5x1	250GB 7200 RPM	X
Maxtor	7V250S0	MaxLine III (RoHS)	SATA 300	3.5x1	300GB 7200 RPM	
Seagate*	ST3400832AS	Barracuda 7200.8	SATA 150	3.5x1	250GB 7200 RPM	
Seagate	ST3400832AS	Barracuda 7200.8	SATA 150	3.5x1	300GB 7200 RPM	
Seagate	ST3400832AS	Barracuda 7200.8	SATA 150	3.5x1	400GB 7200 RPM	Х
Seagate	ST3402111AS	Barracuda 7200.9	SATA-300	3.5x1	40GB 7200 RPM	
Seagate	ST3408111AS	Barracuda 7200.9	SATA-300	3.5x1	40GB 7200 RPM	
Seagate	ST3802110AS	Barracuda 7200.9	SATA-300	3.5x1	80GB 7200 RPM	
Seagate	ST3808110AS	Barracuda 7200.9	SATA-300	3.5x1	80GB 7200 RPM	

Seagate	ST3120213AS	Barracuda 7200.9	SATA-300	3.5x1	120GB 7200 RPM	
Seagate	ST3120813AS	Barracuda 7200.9	SATA-300	3.5x1	120GB 7200 RPM	Χ
Seagate	ST3160212AS	Barracuda 7200.9	SATA-300	3.5x1	160GB 7200 RPM	
Seagate	ST3160812AS	Barracuda 7200.9	SATA-300	3.5x1	160GB 7200 RPM	
Seagate	ST3200827AS	Barracuda 7200.9	SATA-300	3.5x1	200GB 7200 RPM	
Seagate	ST3250824AS	Barracuda 7200.9	SATA-300	3.5x1	250GB 7200 RPM	
Seagate	ST3300622AS	Barracuda 7200.9	SATA-300	3.5x1	300GB 7200 RPM	
Seagate	ST3300822AS	Barracuda 7200.9	SATA-300	3.5x1	300GB 7200 RPM	
Seagate	ST3400633AS	Barracuda 7200.9	SATA-300	3.5x1	400GB 7200 RPM	
Seagate	ST3400833AS	Barracuda 7200.9	SATA-300	3.5x1	400GB 7200 RPM	
Seagate	ST3500632AS	Barracuda 7200.9	SATA-300	3.5x1	500GB 7200 RPM	
Seagate	ST3500832AS	Barracuda 7200.9	SATA-300	3.5x1	500GB 7200 RPM	
Western Digital*	WD3200SD-01KNB0	Caviar XL107RE	SATA 150	3.5x1	320GB 7200 RPM	Х
Western Digital	WD400JD	WD Caviar XL80-3	SATA 300	3.5x1	40GB 7200 RPM	
Western Digital	WD800JD	WD Caviar XL80-3	SATA 300	3.5x1	80GB 7200 RPM	
Western Digital	WD1200JS-01MHB0	WD Caviar XL80-3	SATA 300	3.5x1	120GB 7200 RPM	
Western Digital	WD1600JS-01MHB0	WD Caviar XL80-3	SATA 300	3.5x1	160GB 7200 RPM	Х
Western Digital	WD2000JS	WD Caviar XL80-3	SATA 300	3.5x1	200GB 7200 RPM	
Western Digital	WD2500KS	WD Caviar XL80-3	SATA 300	3.5x1	250GB 7200 RPM	
Western Digital	WD2500JS	WD Caviar XL80-3	SATA 300	3.5x1	250GB 7200 RPM	
Western Digital	WD4000KD	WD Caviar XL100	SATA 300	3.5x1	400GB 7200 RPM	Χ
Western Digital	WD4000YR	WD Caviar XL100 RE	SATA 300	3.5x1	400GB 7200 RPM	Х

## 5.1.2 SAS Drives

Vendor	Model	Model Name	Interface	Form Factor	Capacity / RPM	Tested
Fujitsu*	MAV2036RC	AL9SE	SAS-300	2.5x1	36GB 10K RPB	Χ
Fujitsu	MAV2073RC	AL9SE	SAS-300	2.5x1	73GB 10K RPB	
Fujitsu	MAY2036RC	AL9SE	SAS-300	2.5x1	36GB 10K RPB	
Fujitsu	MAY2073RC	AL9SE	SAS-300	2.5x1	73GB 10K RPB	
Seagate*	ST936701SS	Savio 10K.1	SAS-300	2.5x1	36GB 10K RPM	X
Seagate	ST973401SS	Savio 10K.1	SAS-300	2.5x1	73GB 10K RPM	
Fujitsu	MAU3036RC	AL9LX	SAS-300	3.5x1	36GB 15K RPM	X
Fujitsu	MAU3073RC	AL9LX	SAS-300	3.5x1	73GB 15K RPM	
					147GB 15K	
Fujitsu	MAU3147RC	AL9LX	SAS-300	3.5x1	RPM	
Fujitsu	MAX3036RC	AL9LX (RoHS)	SAS-300	3.5x1	36GB 15K RPM	

Fujitsu	MAX3073RC	AL9LX (RoHS)	SAS-300	3.5x1	73GB 15K RPM	
_					147GB 15K	
Fujitsu	MAX30147RC	AL9LX (RoHS)	SAS-300	3.5x1	RPM	
	HUS151436VLS30					Χ
Hitachi*	0	Ultrastar 15K147 (RoHS)	SAS-300	3.5x1	36GB 15K	
	HUS151473VLS30					
Hitachi	0	Ultrastar 15K147 (RoHS)	SAS-300	3.5x1	73GB 15K	
	HUS151414VLS30					
Hitachi	0	Ultrastar 15K147 (RoHS)	SAS-300	3.5x1	147GB 15K	
Maxtor*	8E036S0	Atlas 15K II	SAS-300	3.5x1	36GB 15K RPM	
Maxtor	8E073S0	Atlas 15K II	SAS-300	3.5x1	73GB 15K RPM	Χ
					147GB 15K	
Maxtor	8E147S0	Atlas 15K II	SAS-300	3.5x1	RPM	
Maxtor	8K036S0	Atlas 15K II (RoHS)	SAS-300	3.5x1	36GB 15K RPM	
Maxtor	8K073S0	Atlas 15K II (RoHS)	SAS-300	3.5x1	73GB 15K RPM	
					147GB 15K	
Maxtor	8K147S0	Atlas 15K II (RoHS)	SAS-300	3.5x1	RPM	
Seagate	ST336754SS	Cheetah X15.4	SAS-300	3.5x1	36GB 15K RPM	
Seagate	ST3146854SS	Cheetah X15.4	SAS-300	3.5x1	73GB 15K RPM	
			_		147GB 15K	Χ
Seagate	ST373454SS	Cheetah X15.4	SAS-300	3.5x1	RPM	

## 5.1.3 USB Drives

Vendor	Model	Model Name	Interface	Form Factor	Capacity / RPM
Maxtor*	E01G300	Maxtor One Touch II	USB 2.0	External	300 GB 7200

## 5.2 CD-ROM Drives

Vendor	Model	Model Name	Interface	Form Factor
Mitsumi*	SR244W1	SR244W1	IDE/Slimline	5.25x0.5

## 5.3 CD-RW / DVDROM Drives

Vendor	Model	Model Name	Interface	Form Factor
Toshiba*	SD-R2212	SDR2212	IDE Slim-Line	5.25x0.5

## 5.4 DVDROM Drives

Vendor	Model	Model Name	Interface	Form Factor
Teac*	DV-28E	DV-28E	IDE Slim-Line	5.25x0.5
Toshiba*	SD-C2732	SD-C2732	IDE Slim-line	5.25x0.5

_			
			1
			1

## 5.5 DVD±R/RW CD-R/RW Drives

Vendor	Model	Model Name	Interface	Form Factor

Note: Other Vendors and Models are TBD and will be added in a later release

# 5.6 Input Devices

Vendor	Model	Model Name	Interface	Form Factor	Description
Keytronic*	E06101USB-C	E06101USB-C	USB	External	keyboard with 2 port USB hub
Keytronic	PRO Pilot	PRO Pilot	PS/2	External	keyboard
Logitech*	930582-0121	Optical mouse	PS/2 and USB	External	mouse
Logitech	967233-0121	Internet Navigator	PS/2 and USB	External	keyboard
Microsoft*	B75-00092	Intellimouse Optical	PS/2 and USB	External	mouse

#### 5.7 Removable Media Devices

Vendor	Model	Model Name	Interface	Form Factor	Description
Lexar*	JD1GB-80-231	1GB USB Flash Drive	USB 2.0	External	JumpDrive Pro 80X USB Flash Drive
		1GB Pocket Rocket		External	1GB, Read 18MB/s &
Memina*	829222120101	Flash Drive	USB 2.0		Write 15MB/s
Mitsumi*	D353FUE	D353FUE	USB 2.0	External	3.5" USB Floppy
Teac*	FD-O5PUB	FD-O5PUB	USB	External	3.5" USB Floppy

Note: Other Vendors and Models are TBD and will be added in a later release

# **Tape Drives**

Vendor	Model	Model Name	Interface	Form Factor	Description

Note: Other Vendors and Models are TBD and will be added in a later release

# 6. OS Certifications

Listed below are the operating systems that Intel will certify on the *\$5000PAL* 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		Comments
	Intel Labs	Operating System Vendor and/or OEM
Microsoft Windows* Server 2003 Enterprise Edition	Intel runs the SHDG 3.0 certification tests.	OEM must request certification by Microsoft for their specific product.
Microsoft Windows* Server 2003 Enterprise Edition, EM64T	Intel runs the SHDG 3.0 certification tests.	OEM must request certification by Microsoft for their specific product.
SuSE Linux Enterprise Server 9	Intel runs SuSE pre- certification tests.	SuSE 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 .
SuSE Linux Enterprise Server 9, EM64T	Intel runs SuSE pre- certification tests.	SuSE 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 .
Red Hat Enterprise Linux 4.0 AS	Intel runs Red Hat certification tests.	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 .
Red Hat Enterprise Linux 4.0 AS, EM64T	Intel runs Red Hat certification tests.	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 .