



# **Enterprise Server Group R440LX Supported Hardware and Operating Systems**

*Released  
Revision 1.2*

*January 1998*

Revision History		
Date	Rev	Modifications
11/97	1.0	Initial release
1/98	1.1	Removed an incompatible CDROM drive.
1/98	1.2	Added Adaptec RAID card.

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Intel has determined that the peripherals in the accompanying text meet minimum electrical, mechanical and functional compatibility with Intel's boxed R440LX motherboard. This listing is not intended to be all-inclusive, nor is it an endorsement by Intel; it only represents peripherals Intel has examined to date.

Users of this list are reminded to check with the hardware vendor to get the latest model specifications and ensure that a particular model is adequate for the user's intended purposes. This list is subject to change at any time. Check this web site regularly for updates.

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# R440LX Supported Hardware and Operating Systems Test Results

## 1. Introduction

The selection of products in these tables coincide with industry trends for the period of time the system was undergoing testing. As the market segment shifts, changes in testing procedure may occur including the addition of new equipment, updated versions of operating systems, or alterations in the configuration of product and operating system. This list, therefore, is subject to change in order to accommodate any updates and to clearly define testing.

## 2. Test Strategy

To identify any potential problems, all Intel platforms undergo rigorous testing using a selection of operating systems and adapter cards. These peripherals and operating systems have been chosen according to their high-level of acceptance within the industry and their ability to stress the system. The test suites performed on the system have been designed to validate data paths, chipset functionality, system functionality, device drivers, and operating system functionality and include tests developed by OS vendors, third-party developers, and Intel hardware and software engineering teams.

## 3. Key Specifics

The R440LX Supported Hardware/Operating System list reflects the peripherals and operating systems that were evaluated through Intel internal testing of the R440LX UP Server product. This list has been compiled from the test suites of the Enterprise Server Group's Platform Validation Lab (PVL). The following key specifics define the Hardware/Operating System combinations evaluated and the level of evaluation. A blank box indicates that the Hardware/Operating System combination has not been evaluated in testing.

### Level 1 Testing:

This represents a high-level of testing; involving many hours of continuous running with varying loads of stress placed on the server. Testing at this level involves an in-depth series of test suites, focusing on board set validation. The focus in level 1 testing is on the validation of onboard features and motherboard functionality with add-in equipment.

The systems are prepared with the complex configuration during this testing. The goal of this test is to stress the system at the highest level. All the PCI and ISA slots are filled with the SCSI/NIC adapters and six hard drives are used to run over ten different test suites. Multiple clients (minimum of thirteen) are connected to each NIC in the server and a minimum of thirty-nine clients are connected to the whole system. Tests are run between 36 and 144 hours with varying loads placed on the server system using different test suites and performing different activities.

The peripherals utilized in Level 1 testing are noted in the following tables with the number "1", signifying that combination of hardware/operating system was tested under stress and operated with no failures during in-house testing.

### Level 2 Testing:

Testing at this level is less intensive than at level one. The tests are shorter in duration, and focus is put utilizing a wide variety of add-in cards and hardware and verifying their functionality in the system. To encompass this quantity of hardware, testing time is limited. The duration of each Level 2 test is typically 8 hours. The peripherals utilized in Level 2 testing are noted in the following tables with the number "2", signifying that combination of hardware/operating system was tested and found to be functional.

**Note: A configuration that is said to pass during Intel's testing procedures does not guarantee the test is repeatable. Many factors may affect the outcome of the test that are beyond our control. The smallest differences in the configuration including, but not limited to the hardware (hard drives, clients, etc.), software, firmware, operating system, installation, and test procedures, may affect the outcome of the test.**

## CD-ROM Drives, Controllers, & FAX/Modem

	S o l a r i s v 2 . 5 . 1 M P	N e t w a r e v 3 . 1 2	W i n d o w s 9 5	S o l a r i s v 2 . 6 M P	N T S e r v e r v 3 . 5 1	N T S e r v e r v 4 . 0	N e t w a r e v 4 . 1 S M P	O S / 2 W a r p S e r v e r v 4 . 0	S C O U n i x w a r e 2 . 1 1	S C O O p e n S e r v e r v 5 . 0 . 4	N o v e l l N e t w a r e S F T I I	S C O U n i x w a r e 2 . 1 2 M P
<b>CD-ROM Drives</b>												
Hitachi CDR-8130					2	2			2			
Hitachi 1533A (IDE)							2					
Matsushita/Panasonic CR-585-B (IDE)				2	2	2				2		2
NEC CDR 273 (internal, IDE)					2							
Pinnacle Micro 10Xtreme (internal, IDE)			2		2							
Plextor PX-8PleX (internal, SCSI)	2				2					2		
Plextor PX-12PleX (internal, SCSI)					2							
Plextor PX-20TS (internal, SCSI)					2							
Sony CDU76E (internal, IDE)		2			2	2						
Sony CDU76S (internal, SCSI)					2				2			
TEAC CD-516 (internal, SCSI)					2							
Toshiba XM-3401 (internal, SCSI)		2					2					2
Toshiba XM-3501 (internal, SCSI)			2		2							
<b>Controllers</b>												
Onboard Intel 82371AB PIIx4 (PCI/IDE)	2	2	2	2	2	2	2	2	2	2	2	
Onboard Adaptec AIC-7880 SCSI	2	2	2	2	2	1	1	2	1	2	2	2
Adaptec 1540CP (ISA/SCSI)						1	1		1			
Adaptec 2940U (PCI/SCSI Ultra)						2						
Adaptec 2940UW (PCI/SCSI ultra wide)			2			1	1		1			
Adaptec 3940U (PCI/SCSI Ultra)						2						
Adaptec 3940UW (PCI/SCSI DP)						2						
BusLogic BT-958 (PCI/SCSI)			2			2						
Inito INI 910 (PCI/SCSI)			2			2						
<b>FAX/Modems</b>												
US Robotics Courier V. Everything w/ v.34	2			2		2			2			
U.S. Robotics Sportster Vi 28.8						2						

NOTE: 1 = Level 1 tested, 2 = Level 2 tested

## Floppy Drives, Hard Drives, I/O Cards

	S o l a r i s v 2 . 5 . 1 M P	N e t w a r e v 3 . 1 2	W i n d o w s 9 5	S o l a r i s v 2 . 6 M P	N T S e r v e r v 3 . 5 1	N T S e r v e r v 4 . 0	N e t W a r e v 4 . 1 1 S M P	O S / 2 W a r p S e r v e r v 4 . 0	S C O U n i x w a r e 2 . 1 1	S C O O p e n S e r v e r v 5 . 0 . 4	N o v e l l N e t w a r e S F T I I	S C O U n i x w a r e 2.1. 2 M P
<b>Floppy Drives</b>												
TEAC FD-235HF (3.5-in. 1.44MB Floppy)	2	2	2	2	2	2	2	2	2	2	2	2
TEAC FD-505 (dual 1.44/1.2MB Floppy)	2						2			2		
<b>Hard Drives</b>												
Connor CFP 2107E (SCSI)		2				1	1				2	
Connor CFP 10805S				2			2			2	2	2
Fujitsu M1606SAU (SCSI)			2			2						
Micropolis 1991WAV (SCSI)							2					
Quantum FB1080S								2				
Seagate ST15155W	2									2		
Seagate ST15150W (SCSI WIDE)						2						
Seagate 21600 (IDE)				2						2		2
Seagate ST310550 (SCSI)							1				2	
Seagate ST32140A (IDE)	2				2	2				2		
Seagate ST34371W (SCSI wide)							1					
Seagate ST31230W (SCSI Wide)							1					
Seagate ST31055W (SCSI Wide)						1	1		1			
Seagate ST32155WC						1	1		1			
Seagate ST32550N (SCSI)		2					2				2	
Seagate ST 34300R							1					
Seagate ST5108N						1			1			
Seagate ST532155WS							1					
Western Digital 31600 (IDE)						2						
Western Digital SDAC21600 (IDE)		2	2			1	1					
Western Digital WDE 2170						1	1					
Western Digital AC21000 (EIDE)			2									
<b>Keyboards</b>												
Compaq		2					2				2	
Cirque Glidepoint Keyboard						2						
KEYCAT II						2						

Kinesis					2							
Microsoft Natural					2							
NMB PS/2	2			2	2				2		2	
NMB RT-101					2	2		2				
NMB TR-6671			2		2							
<b>Mice</b>												
Logitech PS/2 Ergo Mouse	2			2	2				2		2	
Logitech PS/2 Cordless Mouse					2							
Logitech Trackman Marble Trackball					2							
Logitech M-S35			2		2							
Microsoft Natural PS/2					2	2						2
Microsoft Ergo PS/2 Mouse						2						

NOTE: 1 = Level 1 tested, 2 = Level 2 tested

## Network Interface Cards

	S o l a r i s v 2 . 5 . 1 M P	N e t w a r e v 3 . 1 2	W i n d o w s 9 5	S o l a r i s v 2 . 6 M P	N T S e r v e r v 3 . 5 1	N T S e r v e r v 4 . 0	N e t W a r e v 4 . 1 1 S M P	O S / 2 W a r p S e r v e r v 4 . 0	S C O U n i x w a r e 2 . 1 1	S C O O p e n S e r v e r v 5 . 0 . 4	N o v e l l N e t w a r e S F T I I	S C O U n i x w a r e 2 . 1 . 2 M P
<b>Network Interface Cards</b>												
Onboard Intel 82557 PCI	2	2		2	2	1	1		1	2	2	2
3Com 3C509B Etherlink III (ISA)					2	2	2	2				
3Com 3C595 Etherlink III (PCI)		2				2	2					
3Com 3C905 PCI						1	1		1			
3Com TokenLink III (ISA)		2					2					
AMD PCNet (PCI)							2					
Cogent eMaster + EM9600 (PCI)		2										
D-Link DE-220PCT					2							
IBM Token Ring 16/4 II		2			2							
IBM Token Ring Auto 16/4 ISA		2				2						
IBM Turboways ATM25						2						
IBM Auto LANStreamer (PCI)						2	2	2				
Intel EtherExpress 16		2										
Intel EtherExpress PRO FX 10 (ISA)		2					2					
Intel EtherExpress PRO 10A (PnP)					2		2					
Intel EtherExpress PRO 10 + (PCI)		2				1	1		1			
Intel EtherExpress PRO 100 (PCI)		2					2					
Intel EtherExpress PRO 100B (PCI)						1	1	2	1			
Intel EtherExpress PRO 100MSL (PCI)												2
Intel EtherExpress PRO 100SA (PCI)							2					
Intel TokenExpress 16s							2					
Intel TokenExpress PRO							2					
Madge Smart 16/4 AT Ringnode						2		2				
Madge Smart 16/4 PCI Ringnode							2	2				
Novel Eagle NE2000plus							2	2				
Olicom PCI Token-Ring 16/4		2					2	2				
Proteon 1392 Plus		2					2	2				
Racal InterLAN PCI T2		2					2					



SMC EtherEZ (ISA)					2							
SMC 9332BDT						1	1		1			
SMC TokenCard Elite (ISA)					2		2					
SMC Ultra Elite Combo 8216 (ISA)							2					
Thomas-Conrad TC5048 (PCI)		2					2					
ZNYX ZX312 EtherAction (PCI)		2										

NOTE: 1 = Level 1 tested, 2 = Level 2 tested

## Printers & Add-in cards

	S o l a r i s v 2 . 5 . 1 M P	N e t w a r e v 3 . 1 2	W i n d o w s 9 5	S o l a r i s v 2 . 6 M P	N T S e r v e r v 3 . 5 1	N T S e r v e r v 4 . 0	N e t W a r e v 4 . 1 S M P	O S / 2 W a r p S e r v e r v 4 . 0	S C O U n i x w a r e 2 . 1 1	S C O O p e n S e r v e r v 5 . 0 . 4	N o v e l l N e t w a r e S F T I I	S C O U n i x w a r e 2 . 1 . 2 M P
<b>Printers</b>												
Hewlett-Packard LaserJet 6MP					2	2	2					
Hewlett-Packard LaserJet 4 Plus						2	2		2			
Hewlett-Packard LaserJet 5MP	2									2		
Hewlett-Packard DeskJet 692P				2						2		2
<b>RAID Controllers</b>												
Adaptec AAA131, 133						2						
AMI MegaRAID 428						1	1		1			
DPT PM3334UW						1	1		1			
Mylex DAC 960PD-Ultra SCSI						1	1		1			
<b>Server Management Modules</b>												
Intel Server Management Module II						2	2		2			
<b>Sound Cards</b>												
Sound Blaster 16 Value						2						
Sound Blaster 16 Vibra						2						
Sound Blaster AWE32 (ISA, PnP)						2						
Sound Blaster AWE64 (ISA, PnP)			2			2						
<b>Speakers</b>												
Sony SRS PC50			2			2						

NOTE: 1 = Level 1 tested, 2 = Level 2 tested

## Tape Drives & Video Adapters

	S o l a r i s v 2 . 5 . 1 M P	N e t w a r e v 3 . 1 2	W i n d o w s 9 5	S o l a r i s v 2 . 6 M P	N T S e r v e r v 3 . 5 1	N T S e r v e r v 4 . 0	N e t W a r e v 4 . 1 1 S M P	O S / 2 W a r p S e r v e r v 4 . 0	S C O U n i x w a r e 2 . 1 1	S C O O p e n S e r v e r v 5 . 0 . 4	N o v e l l N e t w a r e S F T I I	S C O U n i x w a r e 2 . 1 2 M P
<b>Tape Drives</b>												
Archive Viper 2150S (SCSI, Tape)								2				
HP C15286 (SCSI)						2	2		2			
HP DAT8I (IDE)						2	2					
Seagate CTD8000H/R-S (SCSI, DAT)	2				2	2				2		
Sony SDT5200 (SCSI, DAT)					2					2		2
<b>Video Adapters</b>												
Onboard Cirrus CL-GD5446	2	2	2	2	2	2	2	2	2	2	2	2
AccelGraphics AG300 (5MB,PCI)						2						
ATI Pro Turbo 4MB (ISA)						2						
Diamond Stealth 3D 3000 (PCI)						2						
Dynamic Pictures V192 (PCI)						2						
Elsa Gloria 4						2						
Fujitsu Sapphire						2						
Matrox Millennium 3D 4MB (PCI)						2						
<b>Video Expansion Cards</b>												
Intel Smart Video Recorder (ISA)						2						
Hauppauge Win / TV			2									

NOTE: 1 = Level 1 tested, 2 = Level 2 tested