

Comparing the IBM eServer xSeries 440 with the xSeries 445

Positioning Information (withdrawn product)

Main

Feature	x440 server	x445 server
IBM chipset	First generation XA-32	Second generation XA-32
SMP scalability	Support configurations: <ul style="list-style-type: none"> Two-way, four-way, and eight-way using one x440 16-way SMP using two x440 chassis 	Support configurations: <ul style="list-style-type: none"> Two-way, four-way, and eight-way using one x445 16-way SMP using two x445 chassis Future 32-way support using four x445 chassis
Intel processors	Supported processors: <ul style="list-style-type: none"> Xeon MP 1.5 GHz, 1 MB L3 Xeon MP 1.9 GHz, 1 MB L3 Xeon MP 2.0 GHz, 2 MB L3 Xeon DP 2.4 GHz, 512 MB L2 (up to four-way SMP only) 	Supported processors: <ul style="list-style-type: none"> Xeon MP 2.0 GHz, 1 MB L3 Xeon MP 2.5 GHz, 1 MB L3 Xeon MP 2.8 GHz, 2 MB L3 Xeon DP 3.0 GHz, 512 MB L2 (up to four-way SMP only)
Xcel4 Server Accelerator Cache	<ul style="list-style-type: none"> 32 MB Xcel4 per four-way SMP Expansion Module 64 MB Xcel4 cache in eight-way configuration 128 MB Xcel4 cache in 16-way configuration 	<ul style="list-style-type: none"> 64 MB Xcel4 per SMP Expansion Module 128 MB Xcel4 cache in eight-way configuration 256 MB Xcel4 cache in 16-way configuration
Memory capacity	<ul style="list-style-type: none"> 512 MB and 1 GB DIMMs supported; 2 GB DIMMs by special bid only 16 GB RAM max per SMP Expansion Module Up to 32 GB RAM (64 GB in a 16-way) 	<ul style="list-style-type: none"> 512 MB, 1 GB, and 2 GB DIMMs supported 32 GB max per SMP Expansion Module Up to 64 GB (128 GB in a 16-way)
Type of memory used	<ul style="list-style-type: none"> PC133 SDRAM memory Four-way interleaving 	<ul style="list-style-type: none"> 200 MHz DDR Memory Two-way interleaving

Memory features	Active Memory includes: <ul style="list-style-type: none"> • Chipkill memory • Memory mirroring • Memory ProteXion (redundant bit steering) 	Active Memory includes: <ul style="list-style-type: none"> • Hot-add memory • Hot-swap memory • Chipkill memory • Memory mirroring • Memory ProteXion (redundant bit steering)
Internal hard drive capacity	<ul style="list-style-type: none"> • Two Ultra160 hard drive bays • Drives up to 73 GB supported (146 GB total) 	<ul style="list-style-type: none"> • Two Ultra320 hard drive bays • Drives up to 146 GB supported (292 GB total)
SCSI/RAID	<ul style="list-style-type: none"> • Adaptec dual channel Ultra160 SCSI • Optional ServeRAID for internal drives and external drives 	<ul style="list-style-type: none"> • LSI 1030 dual channel Ultra320 SCSI • Integrated RAID-1 (drive mirroring) for internal drive bays • Optional ServeRAID for internal drives and external drives
Gigabit Ethernet	<ul style="list-style-type: none"> • Single port • Broadcom BCM5700 10/100/1000 BASE-T 	<ul style="list-style-type: none"> • Dual port • Broadcom BCM5704 10/100/1000 BASE-T
PCI-X capacity	Six Active PCI-X (hot-swap) adapter slots, all 64-bit <ul style="list-style-type: none"> • Two support 33 or 66 MHz adapters • Two support 33, 66, or 100 MHz adapters, or one 133 MHz adapter and the other slot vacant • Two support 33, 66, 100, or 133 MHz adapters 	Six Active PCI-X (hot-swap) adapter slots, all 64-bit <ul style="list-style-type: none"> • Two support 33 or 66 MHz adapters • Two support 33, 66, or 100 MHz adapters, or one 133 MHz adapter and the other slot vacant • Two support 33, 66, 100, or 133 MHz adapters
RXE-100 support	Adds six or 12 PCI-X slots to the server: <ul style="list-style-type: none"> • Supported attachment to one x440 only • Sharing an RXE among two x440 servers not supported 	Adds six or 12 PCI-X slots to the server: <ul style="list-style-type: none"> • Supported sharing between two x445s • Can be shared between 2x four-way, 2x eight-way, and 2x 16-way x445 servers • Maximum one RXE-100 for each x445 server
CD-ROM	<ul style="list-style-type: none"> • 24x CD-ROM 	<ul style="list-style-type: none"> • 8x DVD-ROM
Service processor	<ul style="list-style-type: none"> • Remote Supervisor Adapter standard 	<ul style="list-style-type: none"> • Remote Supervisor Adapter standard • Future support for Remote Supervisor Adapter II
Video controller	<ul style="list-style-type: none"> • S3 Savage 4, 8 MB 	<ul style="list-style-type: none"> • ATI Rage XL, 8 MB
Serial port	<ul style="list-style-type: none"> • No stand-alone serial port includes • Can use the serial port of the Remote Supervisor Adapter 	<ul style="list-style-type: none"> • Includes a cable to route a serial port to the rear of the server, occupying a PCI slot • Can also use the serial port of the Remote Supervisor Adapter

Rack size	<ul style="list-style-type: none"> • 4U rack optimized 	<ul style="list-style-type: none"> • 4U rack optimized
Warranty	<ul style="list-style-type: none"> • 1 year, 24x7, same business day response, parts & labor 	<ul style="list-style-type: none"> • 3 year, 9x5, next business day response, parts & labor
Operating system support	<p>Supported:</p> <ul style="list-style-type: none"> • Microsoft Windows Server 2003 (Standard, Enterprise, Datacenter) • Microsoft Windows 2000 (Server, Advanced, Datacenter) • Microsoft Windows NT 4.0, Enterprise Edition • Novell NetWare 6.0 • Red Hat Enterprise Linux AS 2.1 • SuSE Linux Enterprise Server 8.0 • VMware ESX Server 1.5.2 (plans to support 2.x) • SCO UnixWare 7.1.3 	<p>Supported:</p> <ul style="list-style-type: none"> • Microsoft Windows Server 2003 (Standard, Enterprise, Datacenter) • Microsoft Windows 2000 (Server, Advanced, Datacenter) • Microsoft Windows NT 4.0, Enterprise Edition • Novell NetWare 6.0 • Red Hat Enterprise Linux AS 2.1 • SuSE Linux Enterprise Server 8.0 • VMware ESX Server 2.0 (1.5x not supported) • SCO UnixWare 7.1.3

Related product families

Product families related to this document are the following:

- [4-Socket Rack Servers](#)
- [Mission Critical Servers](#)

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