IBM System x3550 M4 server servers include Intel Xeon multicore processors

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At a glance

IBM® System x3550 M4 server servers deliver power, scalability, control, and serviceability for dynamic high-performance computing applications:

- Ultrathin, high-availability, and rack-optimized for 1U platform
- High-speed DDR-3 SDRAM Registered DIMMs standard; 24 DIMM slots that support up to 384 GB maximum memory with 16 GB optional DIMMs, or up to 768 GB of memory with LRDIMMs with the ability to run two DIMMs per channel at 1600 MHz with supported 1600 MHz RDIMMs
- Support for up to eight hot-swap, 2.5-inch SAS/SATA HDDs or SSD or up to three hot-swap, SAS/SATA 3.5-inch HDDs or three 3.5-inch hot-swap, SAS/SATA HDDs
- Up to two x16 PCIe 3.0 slots on two processor servers
- 550-watt ac or 750-watt ac or 750-watt dc auto-ranging power supplies
- Integrated systems management processor
- Integrated quad Gigabit Ethernet ports for high I/O capacity, plus two optional embedded 10 GbE ports
- One serial port (16550A-compatible)
- USB ports
  - The 2.5-inch model has seven (two front, four back, and one internal).
  - The 3.5-inch model has eight (three front, four back, and one internal).
- Two video ports (front and rear)

Overview

This 1U-high, rack-optimized server features extreme frequency, optimized performance, and systems management for business-critical applications and cloud deployments built on IBM X-Architecture® .

Optimized for performance

New, innovative, energy-smart design with powerful high-performance processors, a large capacity of high-performing DDR3 memory, and a no-compromise feature set ideal for business-critical applications and cloud deployments:

- Up to two eight-core powerful Intel™ XEON E5-2600 series processors
- Twenty-four DIMM (RDIMM/UDIMM/LRDIMM) slots that enable you to deploy up to 384 GB of DDR3 SDRAM Registered DIMM memory, or up to 768 GB of

memory with LRDIMMs, fast memory bandwidth with the ability to run two DIMMs per channel at 1600 MHz with supported 1600 MHz[1] RDIMMs
- Integrated slotless 6 Gbps hardware RAID-0, -1, -10; optional RAID-5, -50 or -6, -60 (model dependent) and up to 1GB Flashback cache
- Support for up to eight hot-swap, 2.5-inch SAS/SATA HDDs or SSD or up to three hot-swap, SAS/SATA 3.5-inch HDDs
- Highly functional chipset optimized for better application computing for general business workloads
- Integrated Quad Gigabit Ethernet ports for high I/O capacity, and optional two embedded 10 GbE ports
- One PCIe 3.0 x16 slot plus one PCIe x8/x16 or optional PCIX slot that help provide flexibility, greater performance with long-term investment protection
- New energy-efficient design incorporating 550-watt ac or 750-watt ac 750-watt dc power supplies, up to twelve cooling fans (six banks of counter-rotating dual fans) and energy-efficient planar components to help lower operational costs
- Equivalent NEBS 1/ETSI compliance for both ac and dc power supply, compliant with 80 PLUS Platinum and ENERGY STAR (when available and model dependent)

Manage with efficiency

High-availability, manageability, and serviceability features help diagnose problems quickly, even from remote locations:

- IBM Systems Director Active Energy Manager™ for advanced datacenter power notification and management to help achieve lower heat output and reduced cooling needs
- Snoop filters to boost processor performance
- Integrated slotless SAS controller for up to eight 2.5-inch, hot-swap HDD bays
- Memory mirroring, configurable using Unified Extensible Firmware Interface (UEFI) setup
- iMM2 systems management processor with optional Feature on Demand (FoD) remote presence
- Monitoring and control of operating status and key server components
- PFA on selected components that warns of problems before they occur
- Fast and easy servicing through innovative light path diagnostics, improved onboard diagnostics, and LED diagnostic panel

Excellent RAS and outstanding uptime for an improved business environment

- Redundant, hot-swap components make it easy to replace failures without taking your system down.
  - Hot-swap, redundant fans with calibrated vectored cooling to keep components cool, and simplified fan replacement
  - Hot-swap, redundant power supplies to help reduce downtime
  - Hot-swap, RAID protection disk help secure your data and reduce downtime
- Predictive Failure Analysis provides advanced warning on processors, memory, disks, fans, power supplies and VRMs
- Provides drop-down light path diagnostics panel, gives information about a failing component without open chassis or interrupting system operation, expedites hardware repairs to dramatically reduce service time
- IBM Director and web support
- Three-year, customer replaceable unit (CRU) and on-site labor[1,] limited warranty[2;] optional warranty service upgrades available

IBM Express® models

New System x® configurations are added to the IBM Express Portfolio™ , designed and priced to meet the needs of mid-sized businesses. Reliable and easy to manage, Express models and configurations vary by country. They further enhance the ease

of doing business with IBM by offering a robust portfolio of products supported by aggressive pricing and simplified incentives.

The latest System x Express models consist of relevant system configurations for the System x3550 M4 servers.

System x Express servers deliver robust capabilities while taking into account limited resources and budgets. Find the right hardware for your business needs today, while helping to protect your investments with flexible, scalable products that can grow with your business.

1 You may be asked certain diagnostic questions before a technician is sent.

2 For information on IBM Statement of Limited Warranty, contact your IBM representative or reseller. Copies are available upon request.

Key prerequisites

Monitor, USB keyboard, and USB mouse

Note: PS/2-style keyboard and mouse are not supported.

Planned availability date

March 16, 2012

Description

System x3550 M4 server

The System x3550 M4 server features Intel Xeon™ multicore processors that support internal processing speeds of up to 3.3 GHz[3,] and processing operations to memory up to 1600 MHz.

High-performance server subsystems

The System x3550 M4 server expands the new server line by adding a higher level of processor power. This high-throughput, two-way multicore network server offers excellent performance and scalability when you add memory and a second processor. It incorporates powerful Xeon processors with up to 20 MB L3 cache. The advanced transfer L3 cache is integrated onto the processor and runs at the same clock speed. The advanced transfer cache is a result of a 'backside bus' 256 bits wide. It features a quad-wide cache line that can transfer four 64-bit cache line segments at one time to deliver full-speed capability. The cache is eight-way set associative.

Two Intel Xeon processor connectors are standard on the system board to support installation of a second processor. Up to 20M cache, and up to two 8.0 GT/s QuickPath interconnect (QPI) with new Hyper Threading and Intel Turbo Boost Technology 2.0. High-speed PC3 DDR3 Advanced Memory Feature DIMMs run at up to 1600 MHz DRAM clock speed and offer maximum 12800 MBps bandwidth, processor-to-memory subsystem performance. The x3550 M4 server uses the Intel E5-2600 processor with Chipkill technology to maximize throughput from processors, to memory, to the 32-bit and 64-bit PCI buses.

3 GHz and MHz denote the internal and/or external clock speed of the microprocessor only, not application performance. Many factors affect application performance.

Additional features

- Up to 16-core processing achieved with a second processor of equal speed and processor type
- System board containing 24 DIMM (UDIMM/RDIMM/LRDIMM/HCDIMM) connectors supporting 4 GB, 8 GB, and 16 GB DDR3 PC3-12800 SDRAM ECC RDIMMs with:
  - DDR3 memory for improved performance
  - Up to 384 GB of system memory using 16 GB optional DIMMs or up to 768 GB of memory with 32 GB LRDIMMs
  - Support two DIMMs per channel at 1600 MHz with supported 1600 MHz RDIMMs
- Up to two PCIe 3.0 slots, below is detail PCIe slots information Client order single processor model, can select following PCI slots:
  - Two PCIe 3.0 slots - One PCIe 3.0 x16 low profile and one x8 half length, full height (stand models)
  - Client can optional PCIX half length, full height to replace x8 half length, full height slot
  - With 2nd CPU population, client can optional buy x16 half length, full height PCIe 3.0 slot to replace x8 half length, full height slot
- On standard models, four 2.5-inch bays or three 3.5-inch bays to support optional SAS/SATA HDDs and one bay to support an optical drive for 2.5-inch models
- Intel i350-AM4 Quad-port Gbit Ethernet on board and embedded 10 GbE Dual-port options (on a reserved connector). The embedded card supports Emulex in GA, and will support different brands of cards like Emulex, QLogic, and Mellanox with different protocols like 10Gb SFP+ or 10baseT or Infiniband.
- Equivalent NEBS 1/ETSI compliance for both ac and dc power supply, compliant with 80 PLUS Platinum and ENERGY STAR (when available and model dependent)

The System x3550 M4 server offers solid system throughput from processor, to memory, to bus, to disk-intensive I/O. These features, combined with multicore capability, make the x3550 M4 server an excellent choice for a stand-alone or clustered general-business application, file, and print server.

High-availability and serviceability features

The System x3550 M4 server subsystem delivers excellent reliability and serviceability features:

- Support for light path diagnostics with viewable drop-down panel, Wake on LAN, and PXE
- Up to six hot-swap dual-motor cooling fans
- Up to eight 2.5-inch HS HDDs with optional upgrade kit
- Chipkill memory that basically distributes information covered by error correction coding across separate memory chips; if any of the chips fail, the data can in many cases still be reconstructed from the remaining chips, and the system can continue running
- ECC L3 cache processors to help improve data integrity and help reduce downtime
- PFA on HDD options, memory, power supply, and fans (when Remote Supervisor Adapter is installed), to help alert the system administrator of imminent component failure
- Worldwide voltage-sensing, 550-watt ac or 750-watt ac or 750-watt dc high-efficiency hot-plug power supply options
- IBM Integrated Management Module Advanced Upgrade (Feature on Demand (FoD)) to enable the remote presence and blue-screen capture features
- Integrated Management Module systems management processor that supports:
  - Automatic server restart (ASR)
  - Fan monitoring and control
  - Power supply monitoring

  - Temperature monitoring
  - Voltage monitoring
  - Power® on/off, reset sequencing
  - LED controls (onboard diagnostics support with light path LED)
  - Remote power control
  - Local firmware update
  - Error logging
- Information LED panel for visual indications of system well-being
- Onboard diagnostics with an LED map to locate a failing component, helping reduce downtime and service costs
- Support for virtual floppy (with optional IBM Integrated Management Module Advanced Upgrade) which enables a user to easily direct a remote host to boot, and use standard instructions stored anywhere on the network
- Easily accessible system board, adapter cards, processor, and memory
- CPU failure recovery in configurations, which:
  - Forces the failed processor offline
  - Reboots the server automatically
  - Generates alerts
  - Continues operations with the working processor

Expandability and growth

The System x3550 M4 server packs a lot of function and storage capacity into a 1U 19-inch rack-drawer package, yet it is amazingly easy to upgrade and service. Functions such as SVGA video, SAS, and full-duplex 10 Gbs Ethernet are integrated on the system board. Features include:

- Rack-drawer models designed for 19-inch-wide by 28-inch-deep industry-standard rack enclosures, such as the NetBAY42 SR
- Up to two PCIe 3.0 adapter card slots available; one PCIe x16 plus slot, one PCIe x8/x16 (with 2nd processor) or PCIx slot (optional)
- System board optional upgrades (PCI slot not required)
  - IBM Integrated Management Module Advanced Upgrade. Remote presence function can be enabled by Feature on Demand (FoD).
- Support for up to 9 TB of internal data storage, using three 3 TB 3.5-inch SATA HDDs

Systems management

iMM2: The System x3550 M4 includes an integrated Management Module that provides industry-standard Intelligent Platform Management Interface (IPMI) 2.0-compliant systems management. The IMM comes standard, and shares one of the four onboard Ethernet ports for access. The IMM can be accessed using software that is compatible with IPMI 2.0 (for example xCAT). The IMM is implemented using industry-leading OSA firmware and applications in conjunction with the Integrated Management Module.

Features and benefits:

- Monitoring:
  - System voltages
  - Battery voltage
  - System temperatures
  - Fan speed control
  - Fan tachometer monitor
  - Good power signal monitor

  - System ID and planar version detection
  - System power and reset control
  - NMI detection (system interrupts)
  - SMI detection and generation (system interrupts)
  - Serial port text console redirection
  - System LED control (power, HDD, activity, alerts, and heartbeat)
- An embedded web server that gives you remote control from any standard web browser. No additional software is required on the remote administrator's workstation.
- For users who are accustomed to a command-line interface (CLI), the ability of the administrator to use the CLI from a Telnet session to perform some of the functions that can be performed from the web server.
- Secure Socket Layer (SSL) and Lightweight Directory Access Protocol (LDAP).
- Built-in LAN and serial connectivity that supports virtually any network infrastructure.
- Multiple alerting functions to warn systems administrators of potential problems through email, IPMI PETs, and SNMP.

With video compression now built into the adapter hardware, the adapter allows the greater screen sizes and refresh rates that are becoming common in the marketplace. This feature helps enable the user to display server activities from power-on to full operation remotely with remote user interaction at virtually any time.

IBM Integrated Management Module Advanced Upgrade (FoD)

The optional IBM Integrated Management Module Advanced Upgrade delivers advanced control and monitoring features to manage your IBM System x3650 M4 server at virtually any time, from virtually any place. The key can be enabled by FoD. This key enables easy console redirection with text and graphics, and keyboard and mouse (operating system must support USB) support over the system management LAN connections.

With video compression now built into the adapter hardware, it is designed to allow the greater screen sizes and refresh rates that are becoming standard in the marketplace. This feature allows the user to display server activities from power-on to full operation remotely, with remote user interaction at virtually any time.

IBM Director

The System x3550 M4 server also features IBM Director, a powerful, highly integrated, systems-management software solution built on industry standards and designed for ease of use. Exploit your existing enterprise or workgroup-management environments, and use rich security to access and manage physically dispersed IT assets more efficiently over the Internet. It can help reduce costs through potentially:

- Reduced downtime
- Increased productivity of IT personnel and users
- Reduced service and support costs

IT administrators can view the hardware configuration of remote systems in detail, and monitor the usage and performance of critical components such as processors, HDDs, and memory.

IBM Director includes a portfolio of integrated server tools that work with the systems management monitoring functions. Typical functions and monitoring capabilities can include:

- PFA-enabled, critical hardware components
- Temperature

- Voltage
- Fan speed
- Light path diagnostics

IT administrators have comprehensive, virtual on-site control of System x servers with the ability to remotely:

- Access the server, often regardless of its status
- Inventory and display detailed system and component information
- View server bootup during POST
- Browse and delete logs of events and errors
- Reset or power cycle the server
- Monitor and set thresholds on server health including:
  - Operating system load
  - POST time-out
  - Voltage
  - Temperature
- Set proactive alerts for critical server events including PFA on:
  - Memory
  - HDDs
  - Power supplies
  - Fans
- Define automated actions, such as:
  - Send email or page to an administrator.
  - Run a command or program.
  - Send an error message to the IBM Director console.
- Flash UEFI
- Monitor and graph the use of server resources, such as:
  - Memory
  - Processor
  - HDDs
- Identify potential performance bottlenecks and react to prevent downtime

IBM Director Agent integrates into leading workgroup and enterprise systems management environments through upward integration modules (available from IBM and third parties). Advanced management capabilities built into System x servers are available through:

- Tivoli® Enterprise and Tivoli NetView®
- Computer Associates Unicenter TNG
- HP OpenView
- Microsoft™ SMS
- BMC Patrol
- NetIQ

IBM Active Energy Manager

IBM Active Energy Manager offers direct monitoring of power consumption and thermal load of your server through IBM Director. You can monitor power consumption to track utilization of energy resources. IBM Active Energy Manager is a leading solution on the market providing users with the combination of intelligence and features needed to effectively monitor power consumption in the datacenter. Active Energy Manager, an extension to IBM Director systems management software, allows clients to "meter" actual power usage and trend data for any single

physical system or group of systems. Developed by IBM Research, Active Energy Manager utilizes IBM-developed monitoring circuitry to help identify how much actual power is being used and the temperature of the system. The software is available across the new IBM System x servers, as well as its BladeCenter® line of systems. With Active Energy Manager, the user can understand the actual power draw.

With the addition of the optional IBM Integrated Management Module Advanced Upgrade, the IT administrator achieves comprehensive, virtual on-site control of System x servers through the ability to remotely:

- Access the server, in many cases regardless of the status
- Inventory and display detailed system and component information
- View server bootup during POST
- Browse and delete logs of events and errors
- Reset or power cycle the server
- Run diagnostics, SCSI, and RAID setup during POST
- Monitor thresholds on server health, including:
  - Operating system load
  - POST time-out
  - Voltage
  - Temperature
- Set proactive alerts for critical server events, including PFA on:
  - Memory
  - Fans
  - HDDs
  - Power supplies
- Define automated actions, such as:
  - Send an email or a page to an administrator
  - Run a command or program
  - Send an error message to the director console
- Manage flash UEFI
- Monitor and graph the utilization of server resources, such as:
  - Memory
  - Processor
  - HDDs
- Identify potential performance bottlenecks and react to prevent downtime
- Monitor, manage, and configure RAID subsystems without taking them off line

Advanced Configuration and Power Interface (ACPI)

ACPI is an open industry specification that defines a flexible and extensible hardware interface for the system board. Software designers use this specification to integrate power management features throughout a computer system, including hardware, the operating system, and application software. This integration enables Microsoft Windows™ to determine which applications are active, and handle all of the power management resources for computer subsystems and peripherals.

World-class support tools and programs

The System x3550 M4 server tools and programs can make ownership a positive experience. From the start, IBM programs help you purchase servers, get them running, and keep them running. IBM can help your company maintain ownership of technology leadership network servers.

- The server purchase includes a three year, customer replaceable unit (CRU) and on-site service, limited warranty; optional warranty service upgrades are available.
- The ServerProven® program lets you confidently configure your server with various devices and operating systems. This web-based program provides compatibility information from actual testing of the System x3550 server with various adapters and devices.
- Electronic support on the web offers additional support in an easy-to-use format.

  http://www.ibm.com/servers/eserver/serverproven/compat/us/

Standard System x3550 M4 configurations

Model number	Processor	Memory	HDD GT/s	HDD Interface	HDD	Other
7914A2x	1.8 GHz Cache: 10 MB	4 GB	6.4	SAS/SATA H1110	2.5-in	Open bay hot-swap 1 x 550W
7914B2x	2.4 GHz Cache: 10 MB	4 GB	6.4	SAS/SATA M1115	2.5-in	Open bay hot-swap 1 x 550W
7914C2x	2.0 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA M1115	2.5-in	Open bay hot-swap 1 x 550W
7914C4x	2.0 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA H1110	3.5-in	Open bay hot-swap 1 x 550W
7914D2x	2.3 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA M5110 + 512 MB Flash	2.5-in	Open bay hot-swap 1 x 550W
7914F2x	2.5 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA M5110 + 512 MB Flash	2.5-in	Open bay hot-swap 1 x 550W
791452x	1.8 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 550W
7914G2x	2.0 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 550W
7914H2x	2.2 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 550W
791462x	2.4 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 550W
7914J2x	2.6 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 550W
7914L2x	2.7 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash	2.5-in	Open bay hot-swap 1 x 750W

Note: The model "x" designation is geography-dependent and is spelled out explicitly in the **Product number** section.

Express models

SEO Number	Processor	Memory	HDD GT/s	HDD Interface	HDD	Other
7914EAU	2.4 GHz Cache: 10 MB	4 GB	6.4	SAS/SATA M1115 Multiburner	2.5-in	Open bay hot-swap 1 x 550W
7914EBU	2.0 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA M5110 + 512 MB Flash Multiburner	2.5-in	Open bay hot-swap 1 x 550W
7914ECU	2.3 GHz Cache: 15 MB	8 GB	7.2	SAS/SATA M5110 + 512 MB Flash Multiburner	2.5-in	Open bay hot-swap 1 x 550W
7914EDU	2.0 GHz Cache: 20 MB	8 GB	8.0	SAS/SATA M5110 + 1 GB Flash Multiburner	2.5-in	Open bay hot-swap 1 x 550W

Accessibility by people with disabilities

A US Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

http://www.ibm.com/able/product_accessibility/index.html

Product positioning

The System x3550 M4 server is a part of the System x rack-optimized server line. This two-socket server delivers Intel Xeon mullticore high speed processors and excellent server function in an ultrathin, rack-optimized, 1U footprint.

Optimized for speed

The System x3550 M4 server offers new levels of fast Intel Xeon multicore processors with up to 8.0 GT/s and lower power for usiness-critical applications and cloud deployments. This server is uniquely optimized for better application computing with a highly functional chipset and twenty-four DIMM slots for a maximum of 384 GB of DDR-3 SDRAM Registered DIMM memory, or up to 768 GB of memory with LRDIMM

Innovation comes standard

- Application efficiency increases with snoop filters that free up cache and improve processor performance.
- Supercharged TOE optimizes system performance by offloading protocol processing.
- A drop-down light path diagnostics panel improves in-rack manageability and allows easy problem identification.

Ultimate fault-tolerant protection

- A memory mirroring feature enables you to increase memory reliability.
- A SAS controller with RAID-0, -1, -10, -5, and -50 on hot-swap SAS models helps safeguard your data at no additional cost.

Target applications

- General purpose computing
- Database, ERP, Mail, and web 2.0 applications
- Business-critical applications and cloud deployments
- Finance trading applications
- High-Performance computing

Statement of general direction

IBM plans to add the following enhancements to the x3550 M4 offering in the future:

- Support up to eight 2.5 inch SSDs for high IOPS applications.
- Support for a 750-watt dc power supply.
- Support for additional brands and networking protocols on our mezzanine cards (for example: 10 GbE, SFP+, BaseT, and Infiniband) from other manufacturers (for example, Emulex, QLogic, and Mellanox).
- Support for 16 Gb HBA cards.
- Support Emulex Embedded VFA III FCoE/iSCSI License for IBM System x (FoD).
- Equivalent NEBS 1/ETSI and ENERGY STAR compliance.

IBM statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at the sole discretion of IBM . Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Product number

The following are features already announced for the 7914 machine type:

Description	MT	Model	Feature
7914-AC1	7914	AC1	
7914-MC1	7914	MC1	
QLogic 10Gb SFP+ SR Optical Transceiver	7914	AC1 MC1	0064
Brocade 10Gb SFP+ SR Optical Transceiver	7914	AC1 MC1	0069
Description	MT	Model	Feature
7914-AC1	7914	AC1	
7914-MC1	7914	MC1	
QLogic 10Gb SFP+ SR Optical Transceiver	7914	AC1 MC1	0064
Brocade 10Gb SFP+ SR Optical Transceiver	7914	AC1 MC1	0069
NetXtreme II 1000 Express G Ethernet Adapter- PCIe	7914	AC1 MC1	1485
Brocade 10Gb CNA for IBM System x	7914	AC1 MC1	1637
Emulex 4Gb FC Single-Port PCI-E HBA for IBM System x	7914	AC1 MC1	1698
Emulex 4Gb FC Dual-Port PCI-E HBA for IBM System x	7914	AC1 MC1	1699
EMEA Long Leadtime Configurations	7914	AC1 MC1	1763
Hungary CHW plant 9SH	7914	AC1 MC1	1764
Guad CHW plant 9KQ	7914	AC1 MC1	1765
ISTC CHW 9K2	7914	AC1 MC1	1766
RTP CHW 9NR	7914	AC1 MC1	1767
Offload Manufacturing to Guadalajara HVEC	7914	AC1 MC1	1768
Offload Manufacturing to RTP HVEC	7914	AC1 MC1	1769
Offload Manufacturing to ISTC	7914	AC1 MC1	1770
Routing for AP Foxconn	7914	AC1 MC1	1771
Capacity Scheduling Service	7914	AC1 MC1	1772
Custom SLA Scheduling Service	7914	AC1 MC1	1796
2U Bracket for NetXtreme II 1000 Express Ethernet Adapter	7914	AC1 MC1	2048
2U Bracket for NetXtreme II 1000 Express Quad Port Ethernet Adapter	7914	AC1 MC1	2141
Custom Asset Tagging - Standard	7914	AC1	2200

		MC1	
Custom Asset Tagging - Enhanced	7914	AC1	2201
		MC1	
Custom Image Load - Server	7914	AC1	2204
		MC1	
Custom Media Shipgroup	7914	AC1	2206
		MC1	
Request for Global Trade Number (UPC or EAN)	7914	AC1	2207
		MC1	
Custom Software/Firmware Setting - Standard	7914	AC1	2208
		MC1	
Custom Software/Firmware Setting - Enhanced	7914	AC1	2209
		MC1	
Custom RAID Configuration	7914	AC1	2212
		MC1	
Custom Labeling	7914	AC1	2220
		MC1	
Custom Palletization	7914	AC1	2221
		MC1	
Request for a new Vendor Logo Hardware	7914	AC1	2247
		MC1	
Request for an existing IBM Feature	7914	AC1	2248
		MC1	
Request for an existing Public RPQ	7914	AC1	2249
		MC1	
RAID Configuration	7914	AC1	2302
		MC1	
Rack Installation of 1U Component	7914	AC1	2305
		MC1	
Department of Defense UID Label	7914	AC1	2320
		MC1	
2U Bracket for Brocade 10Gb CNA for IBM System x	7914	AC1	2492
		MC1	
PRO/1000 PF Server Adapter	7914	AC1	2975
		MC1	
NetXtreme II 1000 Express Dual Port Ethernet Adapter	7914	AC1	2995
		MC1	
Rack 01	7914	AC1	3101
		MC1	
Rack 02	7914	AC1	3102
		MC1	
Rack 03	7914	AC1	3103
		MC1	
Rack 04	7914	AC1	3104
		MC1	
Rack 05	7914	AC1	3105
		MC1	
Rack 06	7914	AC1	3106
		MC1	
Rack 07	7914	AC1	3107
		MC1	
Rack 08	7914	AC1	3108
		MC1	
Rack 09	7914	AC1	3109
		MC1	
Rack 10	7914	AC1	3110
		MC1	
Rack 11	7914	AC1	3111
		MC1	
Rack 12	7914	AC1	3112
		MC1	
Rack 13	7914	AC1	3113
		MC1	
Rack 14	7914	AC1	3114
		MC1	
Rack 15	7914	AC1	3115
		MC1	
Rack 16	7914	AC1	3116
		MC1	
Rack 17	7914	AC1	3117
		MC1	
Rack 18	7914	AC1	3118
		MC1	

Rack 19	7914	AC1 MC1	3119
Rack 20	7914	AC1 MC1	3120
Rack 21	7914	AC1 MC1	3121
Rack 22	7914	AC1 MC1	3122
Rack 23	7914	AC1 MC1	3123
Rack 24	7914	AC1 MC1	3124
Rack 25	7914	AC1 MC1	3125
Rack 26	7914	AC1 MC1	3126
Rack 27	7914	AC1 MC1	3127
Rack 28	7914	AC1 MC1	3128
Rack 29	7914	AC1 MC1	3129
Rack 30	7914	AC1 MC1	3130
Rack 31	7914	AC1 MC1	3131
Rack 32	7914	AC1 MC1	3132
Rack 33	7914	AC1 MC1	3133
Rack 34	7914	AC1 MC1	3134
Rack 35	7914	AC1 MC1	3135
Rack 36	7914	AC1 MC1	3136
Rack 37	7914	AC1 MC1	3137
Rack 38	7914	AC1 MC1	3138
Rack 39	7914	AC1 MC1	3139
Rack 40	7914	AC1 MC1	3140
Rack 41	7914	AC1 MC1	3141
Rack 42	7914	AC1 MC1	3142
Rack 43	7914	AC1 MC1	3143
Rack 44	7914	AC1 MC1	3144
Rack 45	7914	AC1 MC1	3145
Rack 46	7914	AC1 MC1	3146
Rack 47	7914	AC1 MC1	3147
Rack 48	7914	AC1 MC1	3148
Rack 49	7914	AC1 MC1	3149
Rack 50	7914	AC1 MC1	3150
Rack 51	7914	AC1 MC1	3151
Rack 52	7914	AC1 MC1	3152
Rack 53	7914	AC1 MC1	3153
Rack 54	7914	AC1 MC1	3154
Rack 55	7914	AC1 MC1	3155

Rack 56	7914	AC1 MC1	3156
Rack 57	7914	AC1 MC1	3157
Rack 58	7914	AC1 MC1	3158
Rack 59	7914	AC1 MC1	3159
Rack 60	7914	AC1 MC1	3160
Rack 61	7914	AC1 MC1	3161
Rack 62	7914	AC1 MC1	3162
Rack 63	7914	AC1 MC1	3163
Rack 64	7914	AC1 MC1	3164
Rack location U01	7914	AC1 MC1	3201
Rack location U02	7914	AC1 MC1	3202
Rack location U03	7914	AC1 MC1	3203
Rack location U04	7914	AC1 MC1	3204
Rack location U05	7914	AC1 MC1	3205
Rack location U06	7914	AC1 MC1	3206
Rack location U07	7914	AC1 MC1	3207
Rack location U08	7914	AC1 MC1	3208
Rack location U09	7914	AC1 MC1	3209
Rack location U10	7914	AC1 MC1	3210
Rack location U11	7914	AC1 MC1	3211
Rack location U12	7914	AC1 MC1	3212
Rack location U13	7914	AC1 MC1	3213
Rack location U14	7914	AC1 MC1	3214
Rack location U15	7914	AC1 MC1	3215
Rack location U16	7914	AC1 MC1	3216
Rack location U17	7914	AC1 MC1	3217
Rack location U18	7914	AC1 MC1	3218
Rack location U19	7914	AC1 MC1	3219
Rack location U20	7914	AC1 MC1	3220
Rack location U21	7914	AC1 MC1	3221
Rack location U22	7914	AC1 MC1	3222
Rack location U23	7914	AC1 MC1	3223
Rack location U24	7914	AC1 MC1	3224
Rack location U25	7914	AC1 MC1	3225
Rack location U26	7914	AC1 MC1	3226
Rack location U27	7914	AC1 MC1	3227
Rack location U28	7914	AC1 MC1	3228

Rack location U29	7914	AC1 MC1	3229
Rack location U30	7914	AC1 MC1	3230
Rack location U31	7914	AC1 MC1	3231
Rack location U32	7914	AC1 MC1	3232
Rack location U33	7914	AC1 MC1	3233
Rack location U34	7914	AC1 MC1	3234
Rack location U35	7914	AC1 MC1	3235
Rack location U36	7914	AC1 MC1	3236
Rack location U37	7914	AC1 MC1	3237
Rack location U38	7914	AC1 MC1	3238
Rack location U39	7914	AC1 MC1	3239
Rack location U40	7914	AC1 MC1	3240
Rack location U41	7914	AC1 MC1	3241
Rack location U42	7914	AC1 MC1	3242
2U Bracket for Emulex 4Gb Single-Port PCI-X or PCI-E HBA for Sys x	7914	AC1 MC1	3563
2U Bracket for Emulex 4Gb Dual-Port PCI-X or PCI-E HBA for Sys x	7914	AC1 MC1	3564
2U Bracket for QLogic 4-Gbps FC Single-Port PCI-E HBA	7914	AC1 MC1	3565
2U Bracket for QLogic 4-Gbps FC Dual-Port PCI-E HBA	7914	AC1 MC1	3566
QLogic 4Gb FC Single-Port PCIe HBA for IBM System x	7914	AC1 MC1	3567
QLogic 4Gb FC Dual-Port PCIe HBA for IBM System x	7914	AC1 MC1	3568
QLogic 8Gb FC Single-port HBA for IBM System x	7914	AC1 MC1	3578
QLogic 8Gb FC Dual-port HBA for IBM System x	7914	AC1 MC1	3579
Emulex 8Gb FC Single-port HBA for IBM System x	7914	AC1 MC1	3580
Emulex 8Gb FC Dual-port HBA for IBM System x	7914	AC1 MC1	3581
Brocade 8Gb FC Single-port HBA for IBM System x	7914	AC1 MC1	3589
Brocade 8Gb FC Dual-port HBA for IBM System x	7914	AC1 MC1	3591
5m LC-LC Fiber Cable	7914	AC1 MC1	3704
25m LC-LC Fiber Cable	7914	AC1 MC1	3705
IBM 3M SAS Cable	7914	AC1 MC1	3707
IBM 1M SAS Cable	7914	AC1 MC1	3708
IBM USB Conversion Option Pack	7914	AC1 MC1	3756
IBM Single Cable USB Conversion Option (UCO)	7914	AC1 MC1	3757
Virtual Media Conversion Option	7914	AC1 MC1	3758
0.6m Yellow Cat5e Cable	7914	AC1 MC1	3791
1.5m Yellow Cat5e Cable	7914	AC1	3792

		MC1	
3m Yellow Cat5e Cable	7914	AC1	3793
		MC1	
10m Yellow Cat5e Cable	7914	AC1	3794
		MC1	
25m Yellow Cat5e Cable	7914	AC1	3795
		MC1	
0.6m Green Cat5e Cable	7914	AC1	3796
		MC1	
1.5m Green Cat5e Cable	7914	AC1	3797
		MC1	
3m Green Cat5e Cable	7914	AC1	3798
		MC1	
10m Green Cat5e Cable	7914	AC1	3799
		MC1	
25m Green Cat5e Cable	7914	AC1	3800
		MC1	
0.6m Blue Cat5e Cable	7914	AC1	3801
		MC1	
1.5m Blue Cat5e Cable	7914	AC1	3802
		MC1	
3m Blue Cat5e Cable	7914	AC1	3803
		MC1	
10m Blue Cat5e Cable	7914	AC1	3804
		MC1	
25m Blue Cat5e Cable	7914	AC1	3805
		MC1	
Brocade 4Gb FC Single-port HBA for IBM System x	7914	AC1	3885
		MC1	
Brocade 4Gb FC Dual-port HBA for IBM System x	7914	AC1	3886
		MC1	
2U bracket for Emulex 8Gb FC Single-port HBA for System x	7914	AC1	4047
		MC1	
2U bracket for Emulex 8Gb FC Dual-port HBA for System x	7914	AC1	4048
		MC1	
2U bracket for QLogic 8Gb FC Single-port HBA for System x	7914	AC1	4049
		MC1	
2U Bracket for NetXtreme II 1000 Express Dual Port Ethernet Adapter	7914	AC1	4055
		MC1	
2.5" HDD Filler Bezel	7914	AC1	4069
		MC1	
IBM UltraSlim Enhanced SATA DVD-ROM	7914	AC1	4161
		MC1	
IBM UltraSlim Enhanced SATA Multi-Burner	7914	AC1	4163
		MC1	
IBM Serial Conversion Option (SCO)	7914	AC1	5340
		MC1	
IBM Virtual Media Conversion Option Gen2 (VCO2)	7914	AC1	5341
		MC1	
QLogic 10Gb CNA for IBM System x	7914	AC1	5751
		MC1	
NetXtreme II 1000 Express Quad Port Ethernet Adapter	7914	AC1	5766
		MC1	
Intel Ethernet Dual Port Server Adapter I340-T2 for IBM System x	7914	AC1	5767
		MC1	
Intel Ethernet Quad Port Server Adapter I340-T4 for IBM System x	7914	AC1	5768
		MC1	
2U Bracket for QLogic 10Gb CNA for IBM System x	7914	AC1	5787
		MC1	
Select Storage devices - no IBM-configured RAID required	7914	AC1	5977
		MC1	
Select Storage devices - IBM-configured RAID	7914	AC1	5978
		MC1	
IBM 6Gb SAS HBA	7914	AC1	5982
		MC1	
SOFS Solution Code MFG Instruction	7914	AC1	6124

		MC1	
SAP-BWA Solution Code MFG Instruction	7914	AC1	6125
		MC1	
InfoSphere-BWA Solution Code MFG Instruction	7914	AC1	6126
		MC1	
GMAS Solution Code MFG Instruction	7914	AC1	6127
		MC1	
IBW-SSD Solution Code MFG Instruction	7914	AC1	6128
		MC1	
Cloudburst Solution Code MFG Instruction	7914	AC1	6129
		MC1	
SoNAS Solution Code MFG Instruction	7914	AC1	6130
		MC1	
1.5m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	7914	AC1	6201
		MC1	
2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable	7914	AC1	6204
		MC1	
Line cord - 4.3M, 10A/125V, C13 to NEMA 5-15P (US)	7914	AC1	6207
		MC1	
Line cord - 2.8m, 220-240V, C13 to CEI 23-16 (Italy/Chile)	7914	AC1	6217
		MC1	
Line cord - 2.8m, 10A/250V, C13 to IRAM 2073 (Argentina)	7914	AC1	6222
		MC1	
Line cord - 2.8m, 125V, C13 to NBR 6147 (Brazil)	7914	AC1	6223
		MC1	
4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	7914	AC1	6263
		MC1	
2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	7914	AC1	6311
		MC1	
2.8m, 10A/120V, C13 to NEMA 5-15P (US) Line Cord	7914	AC1	6313
		MC1	
Rack power cable - 2.0m, 125-250V, C13 to IEC 320-C14 (WW)	7914	AC1	6316
		MC1	
Line cord - 1.8m, 10A/250V, C13 to NEMA 6-15P (US)	7914	AC1	6351
		MC1	
Line cord - 1.8M 10A/250V C13 2P+Gnd (Brazil)	7914	AC1	6364
		MC1	
Line cord - 1.8M, 10A/125V, C13 to NEMA 5-15P (US)	7914	AC1	6369
		MC1	
Line cord - 2.8m, 10A/250V, C13 to NEMA 6-15P (US)	7914	AC1	6372
		MC1	
Line cord - 4.3MA 10A/125VA C13 - 2P+Gnd (Brazil)	7914	AC1	6403
		MC1	
IBM CMA for Ball Bearing and Universal Slides	7914	AC1	6473
		MC1	
Brazil 10A/250V C13 to NBR 14136 2.8m line cord	7914	AC1	6532
		MC1	
Line Cord - 1.8M, 10A/125V C13 2P+Gnd (Brazil)	7914	AC1	6599
		MC1	
Primary Array 2 HDDs	7914	AC1	7008
		MC1	
Primary Array 3 HDDs	7914	AC1	7009
		MC1	
Primary Array 4 HDDs	7914	AC1	7010
		MC1	
Primary Array 5 HDDs	7914	AC1	7011
		MC1	
Primary Array 6 HDDs	7914	AC1	7012
		MC1	
Primary Array 7 HDDs	7914	AC1	7013
		MC1	
Primary Array 8 HDDs	7914	AC1	7014
		MC1	
Secondary Array 2 HDDs	7914	AC1	7015

		MC1	
Secondary Array 3 HDDs	7914	AC1 MC1	7016
Secondary Array 4 HDDs	7914	AC1 MC1	7017
Secondary Array 5 HDDs	7914	AC1 MC1	7057
Secondary Array 6 HDDs	7914	AC1 MC1	7058
2U Bracket for IBM 6Gb SAS HBA	7914	AC1 MC1	7478
2U bracket for QLogic 8Gb FC Dual-port HBA for System x	7914	AC1 MC1	7550
2U Bracket for Brocade 8Gb FC Single-port HBA for IBM System x	7914	AC1 MC1	7594
2U Bracket for Brocade 8Gb FC Dual-port HBA for IBM System x	7914	AC1 MC1	7595
China Warranty	7914	AC1 MC1	7599
2U Bracket for Brocade 4Gb FC Single-port HBA for IBM System x	7914	AC1 MC1	7633
2U Bracket for Brocade 4Gb FC Dual-port HBA for IBM System x	7914	AC1 MC1	7634
Grouped Product	7914	AC1 MC1	7830
Customer Solution Center Services	7914	AC1 MC1	7831
e1350 Special Bid Solution Component	7914	AC1 MC1	7929
No HDD Selected	7914	AC1 MC1	8026
Consolidate Shipment	7914	AC1 MC1	8031
e1350 Solution Component	7914	AC1 MC1	8034
Compute Node	7914	AC1 MC1	8036
Management Node	7914	AC1 MC1	8037
Storage Node	7914	AC1 MC1	8038
TAA Compliant Order	7914	AC1 MC1	8067
General Racking Solution	7914	AC1 MC1	8072
No SATA HDD Selected	7914	AC1 MC1	8080
No 2.5" SAS HDD Selected	7914	AC1 MC1	8081
No 3.5" SAS HDD Selected	7914	AC1 MC1	8082
No Publications Selected	7914	AC1 MC1	8086
4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM	7914	AC1 MC1	8648
8GB (1x8GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	7914	AC1 MC1	8923
2GB (1x2GB, 1Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	7914	AC1 MC1	8940
4GB (1x4GB, 1Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	7914	AC1 MC1	8941
4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9A ECC DDR3 1333MHz LP RDIMM	7914	AC1	8942

		MC1	
Integrate in manufacturing	7914	AC1	8971
		MC1	
Ship Uninstalled (Safety)	7914	AC1	8972
		MC1	
Hot Spare	7914	AC1	9013
		MC1	
Memory Sparing	7914	AC1	9016
		MC1	
Enable Memory Mirroring	7914	AC1	9017
		MC1	
Storage Subsystem ID 01	7914	AC1	9170
		MC1	
Storage Subsystem ID 02	7914	AC1	9171
		MC1	
Storage Subsystem ID 03	7914	AC1	9172
		MC1	
Storage Subsystem ID 04	7914	AC1	9173
		MC1	
Storage Subsystem ID 05	7914	AC1	9174
		MC1	
Storage Subsystem ID 06	7914	AC1	9175
		MC1	
Storage Subsystem ID 07	7914	AC1	9176
		MC1	
Storage Subsystem ID 08	7914	AC1	9177
		MC1	
Storage Subsystem ID 09	7914	AC1	9178
		MC1	
Storage Subsystem ID 10	7914	AC1	9179
		MC1	
Storage Subsystem ID 11	7914	AC1	9180
		MC1	
Storage Subsystem ID 12	7914	AC1	9181
		MC1	
Storage Subsystem ID 13	7914	AC1	9182
		MC1	
Storage Subsystem ID 14	7914	AC1	9183
		MC1	
Storage Subsystem ID 15	7914	AC1	9184
		MC1	
Storage Subsystem ID 16	7914	AC1	9185
		MC1	
Storage Subsystem ID 17	7914	AC1	9186
		MC1	
Storage Subsystem ID 18	7914	AC1	9187
		MC1	
Storage Subsystem ID 19	7914	AC1	9188
		MC1	
Storage Subsystem ID 20	7914	AC1	9189
		MC1	
Preload Specify	7914	AC1	9200
		MC1	
Windows Specify	7914	MC1	9201
Red Hat Specify	7914	AC1	9202
SuSE Specify	7914	AC1	9203
Drop-in-the-Box Specify	7914	AC1	9205
		MC1	
No Preload Specify	7914	AC1	9206
		MC1	
VMWare Specify	7914	AC1	9207
		MC1	
Preload by Hardware Feature Specify	7914	AC1	9220
		MC1	
2U Bracket for Emulex 10GbE Virtual Fabric Adapter for IBM System x	7914	AC1	9297
		MC1	
Software Application (Not Preinstalled) Specify	7914	AC1 MC1	A0UF
Advanced Grouping	7914	AC1	A102
		MC1	
System x Cluster Upgrade	7914	AC1	A103

		MC1	
NVIDIA Quadro 600	7914	AC1 MC1	A13K
8GB (1x8GB, 4Rx8, 1.35V) PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM	7914	AC1 MC1	A14E
Broadcom NetXtreme II Dual Port 10GBaseT Adapter for IBM System x	7914	AC1 MC1	A18Y
2U Bracket for Broadcom NetXtreme II Dual Port 10GBaseT Adapter	7914	AC1 MC1	A190
IBM 1TB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD	7914	AC1 MC1	A1AV
IBM 3.5" Hot Swap Filler	7914	AC1 MC1	A1FD
IBM 3.5" Simple Swap Filler	7914	AC1 MC1	A1FE
IBM System x3550 M4 2.5" Base Without Power Supply	7914	AC1 MC1	A1H3
IBM System x3550 M4 3.5" Base Without Power Supply	7914	AC1 MC1	A1H4
IBM System x 750W High Efficiency Platinum AC Power Supply	7914	AC1 MC1	A1H5
IBM System x 550W High Efficiency Platinum AC Power Supply	7914	AC1 MC1	A1H6
IBM System x3550 M4 Planar	7914	AC1 MC1	A1H9
x3550 M4 WW Packaging	7914	AC1 MC1	A1HA
x3550 M4 System Level Code	7914	AC1 MC1	A1HB
x3550 M4 Fan Filler	7914	AC1 MC1	A1HC
x3550 M4 Agency Label GBM	7914	AC1 MC1	A1HD
x3550 M4 Power Supply Filler	7914	AC1 MC1	A1HF
x3550 M4 4x 2.5" HDD Assembly Kit	7914	AC1 MC1	A1HG
x3550 M4 3.5" HS Assembly Kit	7914	AC1 MC1	A1HH
x3550 M4 PCIe Riser Card 1 (1 x16 LP Slot)	7914	AC1 MC1	A1HJ
x3550 M4 PCIe Gen-III Riser Card 2(1 x8 FH/HL Slot)	7914	AC1 MC1	A1HK
x3550 M4 PCIe Gen-III Riser Card 2(1 x16 FH/HL Slot)	7914	AC1 MC1	A1HL
x3550 M4 PCIX Riser Card 2 (1 PCIX FH/HL Slot)	7914	AC1 MC1	A1HM
x3550 M4 plus 4x 2.5" HDD Assembly Kit	7914	AC1 MC1	A1HN
System Documentation and Software-US English	7914	AC1 MC1	A1HP
System Documentation and Software-Spanish	7914	AC1 MC1	A1HS
System Documentation and Software-BRAZIL PORTUGUESE	7914	AC1 MC1	A1HU
ServeRAID M5100 Series 512MB Cache/RAID 5 Upgrade for IBM System x	7914	AC1 MC1	A1J3
ServeRAID M5100 Series 512MB Flash/RAID 5 Upgrade for IBM System x	7914	AC1 MC1	A1J4
IBM System x Lightpath Kit	7914	AC1 MC1	A1LF
Intel Xeon Processor E5-2603 4C 1.8GHz 10MB Cache 1066MHz 80W	7914	AC1	A1LG

		MC1	
Intel Xeon Processor E5-2609 4C 2.4GHz 10MB Cache 1066MHz 80W	7914	AC1 MC1	A1LJ
Intel Xeon Processor E5-2620 6C 2.0GHz 15MB Cache 1333MHz 95W	7914	AC1 MC1	A1LK
Intel Xeon Processor E5-2630 6C 2.3GHz 15MB Cache 1333MHz 95W	7914	AC1 MC1	A1LL
Intel Xeon Processor E5-2640 6C 2.5GHz 15MB Cache 1333MHz 95W	7914	AC1 MC1	A1LM
Intel Xeon Processor E5-2650 8C 2.0GHz 20MB Cache 1600MHz 95W	7914	AC1 MC1	A1LN
Intel Xeon Processor E5-2660 8C 2.2GHz 20MB Cache 1600MHz 95W	7914	AC1 MC1	A1LP
Intel Xeon Processor E5-2680 8C 2.7GHz 20MB Cache 1600MHz 130W	7914	AC1 MC1	A1LQ
Intel Xeon Processor E5-2667 6C 2.9GHz 15MB Cache 1600MHz 130W	7914	AC1 MC1	A1LR
Intel Xeon Processor E5-2650L 8C 1.8GHz 20MB Cache 1600MHz 70W	7914	AC1 MC1	A1LS
Addl Intel Xeon Processor E5-2603 4C 1.8GHz 10MB 80W W/Fan	7914	AC1 MC1	A1LT
Addl Intel Xeon Processor E5-2609 4C 2.4GHz 10MB 80W W/Fan	7914	AC1 MC1	A1LV
Addl Intel Xeon Processor E5-2620 6C 2.0GHz 15MB 95W W/Fan	7914	AC1 MC1	A1LW
Addl Intel Xeon Processor E5-2630 6C 2.3GHz 15MB 95W W/Fan	7914	AC1 MC1	A1LX
Addl Intel Xeon Processor E5-2640 6C 2.5GHz 15MB 95W W/Fan	7914	AC1 MC1	A1LY
Addl Intel Xeon Processor E5-2650 8C 2.0GHz 20MB 95W W/Fan	7914	AC1 MC1	A1LZ
Addl Intel Xeon Processor E5-2660 8C 2.2GHz 20MB 95W W/Fan	7914	AC1 MC1	A1M0
Addl Intel Xeon Processor E5-2680 8C 2.7GHz 20MB 130W W/Fan	7914	AC1 MC1	A1M1
Addl Intel Xeon Processor E5-2667 6C 2.9GHz 15MB 130W W/Fan	7914	AC1 MC1	A1M2
Addl Intel Xeon Processor E5-2650L 8C 1.8GHz 20MB 70W W/Fan	7914	AC1 MC1	A1M3
Mellanox ConnectX-2 Dual Port 10GbE Adapter for IBM System x	7914	AC1 MC1	A1M4
IBM Integrated Management Module Advanced Upgrade	7914	AC1 MC1	A1ML
ServeRAID M1115 SAS/SATA Controller for IBM System x	7914	AC1 MC1	A1MZ
x3550 M4 3.5" SS Assembly Kit	7914	AC1 MC1	A1N5
2U Bracket for Mellanox ConnectX-2 Dual Port 10GbE Adapter	7914	AC1 MC1	A1NQ
IBM 250GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD	7914	AC1 MC1	A1NX

IBM 500GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD	7914	AC1 MC1	A1NZ
IBM 1TB 7.2K 6Gbps NL SAS 2.5" SFF HS HDD	7914	AC1 MC1	A1P3
16GB (1x16GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM	7914	AC1 MC1	A1QT
10A/250V C13 to NEMA 6-15P 2.8m line cord	7914	AC1 MC1	A1RF
ServeRAID M5110 SAS/SATA Controller for IBM System x	7914	AC1 MC1	A1WW
ServeRAID M5100 Series 1GB Flash/RAID 5 Upgrade for IBM System x	7914	AC1 MC1	A1WY
ServeRAID M1100 Series Zero Cache/RAID 5 Upgrade for IBM System x	7914	AC1 MC1	A1X1
ServeRAID M5100 Series Zero Cache/RAID 5 Upgrade for IBM System x	7914	AC1 MC1	A1X2
ServeRAID M5100 Series RAID 6 Upgrade for IBM System x	7914	AC1 MC1	A1X3
ServeRAID H1110 SAS/SATA Controller for IBM System x	7914	AC1 MC1	A1XL
IBM System x Gen-III Slides Kit	7914	AC1 MC1	A228
IBM System x Gen-III CMA	7914	AC1 MC1	A229
IBM System x Universal Slides Kit	7914	AC1 MC1	A22B
Super Cap Cable 875MM	7914	AC1 MC1	A22C
x3550 M4 ODD Cable	7914	AC1 MC1	A22D
ServeRAID M5100 Series Battery Kit for IBM System x	7914	AC1 MC1	A22E
950MM Cable for ServRAID M5100 Series Battery Kit	7914	AC1 MC1	A22G
Emulex Dual Port 10GbE SFP+ Embedded VFA III for IBM System x	7914	AC1 MC1	A22J
IBM 1TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	7914	AC1 MC1	A22P
IBM 3TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	7914	AC1 MC1	A22S
IBM 2TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	7914	AC1 MC1	A22T
IBM 500GB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	7914	AC1 MC1	A22U
IBM 3TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	7914	AC1 MC1	A22V
IBM 2TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	7914	AC1 MC1	A22W
IBM 1TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	7914	AC1 MC1	A22X
IBM 500GB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	7914	AC1 MC1	A22Y
4GB (1x4GB, 2Rx8, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM	7914	AC1 MC1	A24L
IBM 1TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	7914	AC1 MC1	A26M
IBM 900GB 10K 6Gbps SAS 2.5" SFF HS HDD	7914	AC1 MC1	A282
IBM 300GB 15K 6Gbps SAS 2.5" SFF HS HDD	7914	AC1 MC1	A283
4GB (1x4GB, 1Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM	7914	AC1 MC1	A28Z

32GB (1x32GB, 4Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP LRDIMM	7914	AC1 MC1	A291
8GB (1x8GB, 2Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM	7914	AC1 MC1	A292
Intel Xeon Processor E5-2670 8C 2.6GHz 20MB Cache 1600MHz 115W	7914	AC1 MC1	A2B2
Intel Xeon Processor E5-2630L 6C 2.0GHz 15MB Cache 1333MHz 60W	7914	AC1 MC1	A2B3
Intel Xeon Processor E5-2643 4C 3.3GHz 10MB Cache 1600MHz 130W	7914	AC1 MC1	A2B4
Addl Intel Xeon Processor E5-2670 8C 2.6GHz 20MB 115W W/Fan	7914	AC1 MC1	A2B5
Addl Intel Xeon Processor E5-2630L 6C 2.0GHz 15MB 60W W/Fan	7914	AC1 MC1	A2B6
Addl Intel Xeon Processor E5-2643 4C 3.3GHz 10MB 130W W/Fan	7914	AC1 MC1	A2B7
Label KC	7914	AC1 MC1	A2CM
Intel x520 Dual Port 10GbE SFP+ Adapter for IBM System x	7914	AC1 MC1	A2EC
IBM Blank USB Memory Key for VMWare ESXi Downloads	7914	AC1 MC1	A2G0
Intel Xeon Processor E5-2665 8C 2.4GHz 20MB Cache 1600MHz 115W	7914	AC1 MC1	A2GN
Addl Intel Xeon Processor E5-2665 8C 2.4GHz 20MB 115W W/Fan	7914	AC1 MC1	A2GP
Configuration ID 01	7914	AC1 MC1	A2HP
Configuration ID 02	7914	AC1 MC1	A2HQ
Configuration ID 03	7914	AC1 MC1	A2HR
Configuration ID 04	7914	AC1 MC1	A2HS
Configuration ID 05	7914	AC1 MC1	A2HT
Configuration ID 06	7914	AC1 MC1	A2HU
Configuration ID 07	7914	AC1 MC1	A2HV
Configuration ID 08	7914	AC1 MC1	A2HW
Configuration ID 09	7914	AC1 MC1	A2HX
Configuration ID 10	7914	AC1 MC1	A2HY
Configuration ID 11	7914	AC1 MC1	A2HZ
Configuration ID 12	7914	AC1 MC1	A2J0
Configuration ID 13	7914	AC1 MC1	A2J1
Configuration ID 14	7914	AC1 MC1	A2J2
Configuration ID 15	7914	AC1 MC1	A2J3
Configuration ID 16	7914	AC1 MC1	A2J4
Configuration ID 17	7914	AC1 MC1	A2J5
Configuration ID 18	7914	AC1 MC1	A2J6
Configuration ID 19	7914	AC1	A2J7

		MC1	
Configuration ID 20	7914	AC1	A2J8
		MC1	
Configuration ID 21	7914	AC1	A2J9
		MC1	
Configuration ID 22	7914	AC1	A2JA
		MC1	
Configuration ID 23	7914	AC1	A2JB
		MC1	
Configuration ID 24	7914	AC1	A2JC
		MC1	
Configuration ID 25	7914	AC1	A2JD
		MC1	
Configuration ID 26	7914	AC1	A2JE
		MC1	
Configuration ID 27	7914	AC1	A2JF
		MC1	
Configuration ID 28	7914	AC1	A2JG
		MC1	
Configuration ID 29	7914	AC1	A2JH
		MC1	
Configuration ID 30	7914	AC1	A2JJ
		MC1	
Configuration ID 31	7914	AC1	A2JK
		MC1	
Configuration ID 32	7914	AC1	A2JL
		MC1	
Configuration ID 33	7914	AC1	A2JM
		MC1	
Configuration ID 34	7914	AC1	A2JN
		MC1	
Configuration ID 35	7914	AC1	A2JP
		MC1	
Configuration ID 36	7914	AC1	A2JQ
		MC1	
Configuration ID 37	7914	AC1	A2JR
		MC1	
Configuration ID 38	7914	AC1	A2JS
		MC1	
Configuration ID 39	7914	AC1	A2JT
		MC1	
Configuration ID 40	7914	AC1	A2JU
		MC1	
Configuration ID 41	7914	AC1	A2JV
		MC1	
Configuration ID 42	7914	AC1	A2JW
		MC1	
Controller 01	7914	AC1	A2JX
		MC1	
Controller 02	7914	AC1	A2JY
		MC1	
Controller 03	7914	AC1	A2JZ
		MC1	
Primary Array - RAID 0	7914	AC1	A2K6
		MC1	
Primary Array - RAID 1	7914	AC1	A2K7
		MC1	
Primary Array - RAID 1E	7914	AC1	A2K8
		MC1	
Primary Array - RAID 5	7914	AC1	A2K9
		MC1	
Primary Array - RAID 6	7914	AC1	A2KA
		MC1	
Primary Array - RAID 10	7914	AC1	A2KB
		MC1	
Secondary Array - RAID 0	7914	AC1	A2KF
		MC1	
Secondary Array - RAID 1	7914	AC1	A2KG
		MC1	
Secondary Array - RAID 5	7914	AC1	A2KJ
		MC1	
Secondary Array - RAID 6	7914	AC1	A2KK
		MC1	
Secondary Array - RAID 10	7914	AC1	A2KL

		MC1	
Addl Intel Xeon Processor E5-2690 8C 2.9GHz 20MB 1600MHz 135W W/Fan	7914	AC1 MC1	A2QJ
Addl Intel Xeon Processor E5-2637 2C 3.0GHz 5MB 1600MHz 80W W/Fan	7914	AC1 MC1	A2QK
IBM 3TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	7914	AC1 MC1	A2R2
Emulex Embedded VFA III FCoE/iSCSI License for IBM System x (FoD)	7914	AC1 MC1	A2TE
IBM 2TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	7914	AC1 MC1	A2U0
IBM System x Advanced Lightpath Kit	7914	AC1 MC1	A2U6
Broadcom NetXtreme I Quad Port GbE Adapter for IBM System x	7914	AC1 MC1	A2V3
Broadcom NetXtreme I Dual Port GbE Adapter for IBM System x	7914	AC1 MC1	A2V4
x3550 M4 High Power Efficiency kit	7914	AC1 MC1	A2V6
IBM USB Memory Key for VMWare ESXi 5.0	7914	AC1 MC1	A2VC
Intel Xeon Processor E5-2690 8C 2.9GHz 20MB Cache 1600MHz 135W	7914	AC1 MC1	A2VQ
Intel Xeon Processor E5-2637 2C 3.0GHz 5MB Cache 1600MHz 80W	7914	AC1 MC1	A2VR
Broadcom NetXtreme I Quad Port GbE Adapter - 2U Bracket	7914	AC1 MC1	A2VX
Broadcom NetXtreme I Dual Port GbE Adapter - 2U Bracket	7914	AC1 MC1	A2VY
Essential Package	7914	AC1 MC1	A2WK
Enhanced Package	7914	AC1 MC1	A2WL
Elite Package	7914	AC1 MC1	A2WM
Essential Package	7914	AC1 MC1	A2WN
Enhanced Package	7914	AC1 MC1	A2WP
Elite Package	7914	AC1 MC1	A2WQ
IBM 146GB 15K 6Gbps SAS 2.5" SFF G2HS HDD	7914	AC1 MC1	A2XB
IBM 300GB 10K 6Gbps SAS 2.5" SFF G2HS HDD	7914	AC1 MC1	A2XC
IBM 600GB 10K 6Gbps SAS 2.5" SFF G2HS HDD	7914	AC1 MC1	A2XD
IBM 500GB 7.2K 6Gbps NL SAS 2.5" SFF G2HS HDD	7914	AC1 MC1	A2XE

The following are features already announced for the 3331 machine type:

Description	MT	Model	Feature
IBM System x 750W High Efficiency Platinum AC Power Supply	3331	HC1	A1H5
IBM System x 550W High Efficiency Platinum AC Power Supply	3331	HC1	A1H6
x3550 M4 PCIe Riser Card 1 (1 x16 LP Slot)	3331	HC1	A1HJ
x3550 M4 PCIe Gen-III Riser Card 2(1 x8 FH/HL Slot)	3331	HC1	A1HK
x3550 M4 PCIe Gen-III Riser Card 2(1 x16 FH/HL Slot)	3331	HC1	A1HL
x3550 M4 PCIX Riser Card 2 (1 PCIX FH/HL Slot)	3331	HC1	A1HM

x3550 M4 plus 4x 2.5" HDD Assembly Kit	3331	HC1	A1HN
Addl Intel Xeon Processor E5-2603 4C 1.8GHz 10MB 80W W/Fan	3331	HC1	A1LT
Addl Intel Xeon Processor E5-2609 4C 2.4GHz 10MB 80W W/Fan	3331	HC1	A1LV
Addl Intel Xeon Processor E5-2620 6C 2.0GHz 15MB 95W W/Fan	3331	HC1	A1LW
Addl Intel Xeon Processor E5-2630 6C 2.3GHz 15MB 95W W/Fan	3331	HC1	A1LX
Addl Intel Xeon Processor E5-2640 6C 2.5GHz 15MB 95W W/Fan	3331	HC1	A1LY
Addl Intel Xeon Processor E5-2650 8C 2.0GHz 20MB 95W W/Fan	3331	HC1	A1LZ
Addl Intel Xeon Processor E5-2660 8C 2.2GHz 20MB 95W W/Fan	3331	HC1	A1M0
Addl Intel Xeon Processor E5-2680 8C 2.7GHz 20MB 130W W/Fan	3331	HC1	A1M1
Addl Intel Xeon Processor E5-2667 6C 2.9GHz 15MB 130W W/Fan	3331	HC1	A1M2
Addl Intel Xeon Processor E5-2650L 8C 1.8GHz 20MB 70W W/Fan	3331	HC1	A1M3
IBM Integrated Management Module Advanced Upgrade	3331	HC1	A1ML
IBM System x Gen-III Slides Kit	3331	HC1	A228
IBM System x Gen-III CMA	3331	HC1	A229
IBM System x Universal Slides Kit	3331	HC1	A22B
x3550 M4 ODD Cable	3331	HC1	A22D
Emulex Dual Port 10GbE SFP+ Embedded VFA III for IBM System x	3331	HC1	A22J
Addl Intel Xeon Processor E5-2670 8C 2.6GHz 20MB 115W W/Fan	3331	HC1	A2B5
Addl Intel Xeon Processor E5-2630L 6C 2.0GHz 15MB 60W W/Fan	3331	HC1	A2B6
Addl Intel Xeon Processor E5-2643 4C 3.3GHz 10MB 130W W/Fan	3331	HC1	A2B7
Addl Intel Xeon Processor E5-2665 8C 2.4GHz 20MB 115W W/Fan	3331	HC1	A2GP
Addl Intel Xeon Processor E5-2690 8C 2.9GHz 20MB 1600MHz 135W W/Fan	3331	HC1	A2QJ
Addl Intel Xeon Processor E5-2637 2C 3.0GHz 5MB 1600MHz 80W W/Fan	3331	HC1	A2QK
Emulex Embedded VFA III FCoE/iSCSI License for IBM System x (FoD)	3331	HC1	A2TE

Single Entity Offerings (SEOs)

Description	SEO Number
IBM System x3550 M4	7914A2U
	7914B2U
	7914C2U
	7914C4U
	7914D2U
	7914F2U
	791452U
	7914G2U
	7914H2U
	791462U
	7914J2U
	7914L2U

Express models

Description	SEO Number
IBM System x3550 M4	7914EAU
	7914EBU
	7914ECU
	7914EDU

The following feature numbers are automatically added to the 5372-SWX HIPO order whenever one of the hardware system units are configured in an order

HIPO feature number	Description
A2NA	7914-AC1 Routing CodeCode
A2NB	7914-MC1 Routing Codee

Options

SEO number	Description
69Y5669	x3550 M4 PCIX Riser Card 2 (1 PCIX FH/HL Slot)
69Y5670	x3550 M4 PCIe Riser Card 2 (1 x8 FH/HL Slot)
69Y5671	x3550 M4 PCIe Riser Card 2 (1 x16 FH/HL Slot)
94Y7585	x3550 M4 PCIe Riser Card 1 (1 x16 LP Slot)
81Y6657	x3550 M4 plus 4 2.5" HDD Assembly Kit
69Y5672	Intel Xeon Processor E5-2603 4C 1.8GHz 10MB 1066MHz 80W W/Fann
69Y5674	Intel Xeon Processor E5-2609 4C 2.4GHz 10MB 1066MHz 80W W/Fann
69Y5675	Intel Xeon Processor E5-2620 6C 2.0GHz 15MB 1333MHz 95W W/Fann
69Y5676	Intel Xeon Processor E5-2630 6C 2.3GHz 15MB 1333MHz 95W W/Fann
69Y5677	Intel Xeon Processor E5-2640 6C 2.5GHz 15MB 1333MHz 95W W/Fann
69Y5678	Intel Xeon Processor E5-2650 8C 2.0GHz 20MB 1600MHz 95W W/Fann
69Y5679	Intel Xeon Processor E5-2660 8C 2.2GHz 20MB 1600MHz 95W W/Fann
94Y7547	Intel Xeon Processor E5-2665 8C 2.4GHz 20MB 1600MHz 115W W/Fann
94Y7463	Intel Xeon Processor E5-2670 8C 2.6GHz 20MB 1600MHz 115W W/Fann
69Y5680	Intel Xeon Processor E5-2680 8C 2.7GHz 20MB 1600MHz 130W W/Fann
94Y7545	Intel Xeon Processor E5-2690 8C 2.9GHz 20MB 1600MHz 135W W/Fann
94Y7464	Intel Xeon Processor E5-2630L 6C 2.0GHz 15MB 1333MHz 60W W/Fann
69Y5685	Intel Xeon Processor E5-2650L 8C 1.8GHz 20MB 1600MHz 70W W/Fann
94Y7546	Intel Xeon Processor E5-2637 2C 3.0GHz 5MB 1600MHz 80W W/Fann
94Y7465	Intel Xeon Processor E5-2643 4C 3.3GHz 10MB 1600MHz 130W W/Fann
69Y5682	Intel Xeon Processor E5-2667 6C 2.9GHz 15MB 1600MHz 130W W/Fann
94Y6668	IBM System x 550W High Efficiency Platinum AC Power Supply
94Y6669	IBM System x 750W High Efficiency Platinum AC Power Supply
81Y6821	IBM System x Gen-III Slides Kit
81Y6822	IBM System x Gen-III CMA
69Y1193	IBM System x Universal Slides Kit
69Y5681	x3550 M4 ODD Cable
90Y6456	Emulex Dual Port 10GbE SFP+ Embedded Adapter for IBM System x
90Y5178	Emulex Embedded VFA III FCoE/iSCSI License for IBM System x (FoD)
90Y3901	IBM Integrated Management Module Advanced Upgrade

Publications

The following CD-ROM is shipped with the x3550 M4 server:

- IBM Director systems management software is included.

Note: Software versions, features, and functions shipped with these systems may change as new releases become available or discontinued at any time.

The publications *System x3550 M4 server Installation and User's Guide* and *Problem Determination and Service Guide* , in US English and translation versions are available from

http://www.ibm.com/support/

Displayable softcopy publications: The product books are offered in displayable softcopy form. The displayable manuals are part of the basic machine-readable material. The files are shipped on CD-ROM. Terms and conditions for use of the machine-readable files are shipped with the files.

Services

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

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http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit

http://www.ibm.com/services/learning/index.html

Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications

Note: The model "x" designation is geography-dependent and is spelled out explicitly in the **Product number** section.

	7914A2x	7914B2x
Processor	Xeon E5-2603 4C (80w)	Xeon E5-2609 4C (80w)
Internal speed	1.8 GHz	2.4 GHz
External speed	6.4 GTS	6.4 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	10 MB	10 MB
Memory	4 GB ECC 1333 MHz RDIMM	4 GB ECC 1333 MHz RDIMM
RDIMMs	1 x 4 GB (2Gb,1Rx4,1.35V)	1 x 4 GB (2Gb,1Rx4,1.35V)
DIMM sockets	24	24
Capacity (3)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (5)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4

Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	Optional
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes
	7914C2x	7914C4x
Processor	Xeon E5-2620 6C (95w)	Xeon E5-2620 6C (95w)
Internal speed	2.0 GHz	2.0 GHz
External speed	7.2 GTS	7.2 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	15 MB	15 MB
Memory	8 GB ECC 1333 MHz RDIMM	8 GB ECC 1333 MHz RDIMM
RDIMMs	1 x 8 GB (2Gb,2Rx4,1.35V)	1 x 8 GB (2Gb,2Rx4,1.35V)
DIMM sockets	24	24
Capacity (4)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	4
Connector internal	2	1
HDD (5)		
Total bays	9 (with upgrade)	3
5.25 slim	1	0
3.5-in tape	0	0
Hot-swap (3.5-in)	0	3
Hot-swap (2.5-in)	8 (with upgrade)	0
Internal capacity	8 TB (with upgrade)	9 TB
Bays available	5 (standard)	3
5.25 slim	1	0
3.5-in tape	0	0
Hot-swap (3.5-in)	0	3
Hot-swap (2.5-in)	4	0
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	None
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes
	7914D2x	7914F2x
Processor	Xeon E5-2630 6C (95w)	Xeon E5-2640 6C (95w)
Internal speed	2.3 GHz	2.5 GHz
External speed	7.2 GTS	7.2 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	15 MB	15 MB
Memory	8 GB ECC 1333 MHz RDIMM	8 GB ECC 1333 MHz RDIMM
RDIMMs	1 x 8 GB (2Gb,2Rx4,1.35V)	1 x 8 GB (2Gb,2Rx4,1.35V)
DIMM sockets	24	24
Capacity (4)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)

5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	Optional
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes
	791452x	7914G2x
Processor	Xeon E5-2650L 8C (70w)	Xeon E5-2650 8C (95w)
Internal speed	1.8 GHz	2.0 GHz
External speed	8.0 GTS	8.0 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	20 MB	20 MB
Memory	8 GB ECC 1600 MHz RDIMM	8 GB ECC 1600 MHz RDIMM
RDIMMs	1 x 8 GB (2Gb,2Rx4,1.5V)	1 x 8 GB (2Gb,2Rx4,1.5V)
DIMM sockets	24	24
Capacity (3)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (srandard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	Optional
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes
	7914H2x	791462x
Processor	Xeon E5-2660 8C (95w)	Xeon E5-2665 8C (115w)
Internal speed	2.2 GHz	2.4 GHz
External speed	8.0 GTS	8.0 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	20 MB	20 MB
Memory	8 GB ECC 1600 MHz RDIMM	8 GB ECC 1600 MHz RDIMM
RDIMMs	1 x 8 GB	1 x 8 GB

	(2Gb,2Rx4,1.5V)	(2Gb,2Rx4,1.5V)
DIMM sockets	24	24
Capacity (3)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	Optional
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes
	7914J2x	7914L2x
Processor	Xeon E5-2670 8C (115w)	Xeon E5-2680 8C (130w)
Internal speed	2.6 GHz	2.7 GHz
External speed	8.0 GTS	8.0 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	20 MB	20 MB
Memory	8 GB ECC 1600 MHz RDIMM	8 GB ECC 1600 MHz RDIMM
RDIMMs	1 x 8 GB	1 x 8 GB
	(2Gb,2Rx4,1.5V)	(2Gb,2Rx4,1.5V)
DIMM sockets	24	24
Capacity (3)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Optional	Optional
Power supply	550 W	750 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes

System x3550 M4 Express models

	7914EAU	7914EBU
Processor	Xeon E5-2609 4C (80w)	Xeon E5-2620 6C (95w)
Internal speed	2.4 GHz	2.0 GHz
External speed	6.4 GTS	7.2 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	10 MB	15 MB
Memory	4 GB ECC 1333 MHz RDIMM	8 GB ECC 1333 MHz RDIMM
RDIMMs	1 x 4 GB (2Gb,2Rx8,1.35V)	1 x 8 GB (2Gb,2Rx4,1.35V)
DIMM sockets	24	24
Capacity (3)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	8	8
Connector internal	2	2
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Multiburner	Multiburner
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes

System x3550 M4 Express models:

	7914ECU	7914EDU
Processor	Xeon E5-2630 6C (95w)	Xeon E5-2650 8C (95w)
Internal speed	2.3 GHz	2.0 GHz
External speed	7.2 GTS	8.0 GTS
Number standard	1	1
Maximum	2	2
L3 cache (full-speed)	15 MB	20 MB
Memory	8 GB ECC 1333 MHz RDIMM	8 GB ECC 1600 MHz RDIMM
RDIMMs	1 x 8 GB (2Gb,2Rx4,1.35V)	1 x 8 GB (2Gb,2Rx4,1.5V)
DIMM sockets	24	24
Capacity (4)	384 GB	384 GB
Video	SVGA	SVGA
Memory	16 MB	16 MB
HDD controller	SAS/SATA	SAS/SATA
Channels	4	4
Connector internal	1	1
HDD (4)		
Total bays	9 (with upgrade)	9 (with upgrade)
5.25 slim	1	1
3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	8 (with upgrade)	8 (with upgrade)
Internal capacity	8 TB (with upgrade)	8 TB (with upgrade)
Bays available	5 (standard)	5 (standard)
5.25 slim	1	1

3.5-in tape	0	0
Hot-swap (3.5-in)	0	0
Hot-swap (2.5-in)	4	4
Total PCI slots (6)	2	2
PCI_E (x8)	1 (standard)	1 (standard)
PCI_E (x16)	1 (standard)	1 (standard)
System management	Standard	Standard
Ethernet controller	Four 1 Gb	Four 1 Gb
Optical drive (SATA)	Multiburner	Multiburner
Power supply	550 W	550 W
Number standard	1	1
Maximum	2	2
Hot-swap	Yes	Yes
Redundant power	Optional	Optional
Auto restart	Yes	Yes

(4) Maximum of 384 GB by using twenty-four 16 GB optional DIMMs
(5) The standard system can hold eight 2.5-inch HS HDDs. Maximum capacities are based on installation of eight 1 TB SAS HDDs with or by three 3 TB 3.5-inch SATA HDDs.
(6) PCIe is the standard feature for PCI or you may replace it with the PCI Riser Card PCI-X Option for PCI/PCI-X 133 MHz/100 MHz 64-bit, or 66/33 MHz/32 bit slots.

Note: For the latest information on supported options, refer to the Sales Manual or visit

http://www.ibm.com/servers/eserver/serverproven/compat/us/

Multi-Burner Plus Drive

- Specifications
  - DVD-ROM (6.6x-16x CAV, 4.7 GB DVD-ROM read): 9.17 - 22.16 Mbps
  - DVD-ROM (5.0x-126x CAV, 8.5 GB Dual-layer read): 6.8 - 16.62 Mbps
  - DVD-R/+R (3.3x-8X CAV, 4.7 GB DVD-R/+R read): 5.73 - 13.85 Mbps
  - DVD-R/+R (3.3x-8X CAV, 8.5 GB DVD-R/+R read): 4.58 - 11.08 Mbps
  - DVD-RW/+RW (3.3x-8X CAV, 4.7 GB DVD-RW/+RW read): 4.58 to 11.08 Mbps
  - DVD-RAM (6x-12x PCAV, 4.7 GB DVD_RAM read): 8.31 - 16.62 Mbps
  - CD-R/RW/ROM (17-40x CAV, read): 2.6 - 6.0 Mbps
  - DVD-R+R (1x -16X PCAV, 4.7 GB DVD-R/+R write): 9.9 - 22.16 Mbps
  - DVD-R/+R (2x-8X CLV, 8.5 GB DVD-R/+R Dual-layer write): 5.54 Mbps
  - DVD-RW (2x-6X CLV, 4.7 GB DVD-RW write): 8.31 Mbps
  - DVD+RW (3.3x - 8X ZCLV, 4.7 GB DVD+RW write): 4.57 - 11.08 Mbps
  - DVD-RAM (6x-16x PCAV, 4.7 GB DVD-RAM write): 8.31 - 16.62 Mbps
  - CD-RW (8-32x ZCLV, write): 4.8 Mbps
- Max burst data transfer rate: Ultra DMA Mode 4: 66.6 Mbps
- Average access times:
  - DVD-ROM including latency and error correction: 145 ms
  - DVD-RAM including latency and error correction: 175 ms
  - CD-ROM including latency and error correction: 125 ms

Video subsystem

- SVGA compatible video controller (Matrox G200eR2)
- Integrated on Integrated Management Module (iMMv2).
- Integrated on planar and connected to the PCI bus.
- DDR3 528 or 504 MHz SDRAM video memory controller.
- Video memory is not expandable.
- One DVI (Digital Video Interface) is not used.
- Avocent Digital Video Compression (with IBM Integrated Management Module Advanced Upgrade option)

Supported video modes

Width	Height	Refresh	Bpp
640	400	60, 72, 75, 85	8, 16, 32
800	600	56, 60, 72, 75, 85	8, 16, 32
1,024	768	60, 70, 75, 85	8, 16, 32
1,152	864	60	8, 16, 32
1,280	1,024	60	8, 16, 32
1,280	1,024	75, 85	8, 16
1,440	900	60	8, 16, 32
1,440	900	75, 85	8, 16
1,600	1,200	60, 65, 70, 75, 85	8, 16
1,680	1,050	60, 75, 85	8, 16

The maximum resolution of the video controller is 1600 x 1200* at 75.

*The maximum screen resoultion is not supported for all Bits per Pixel (color depth) and refresh rates. The maximum Bits per Pixel (color depth) is not supported for all resoultions and refresh rates.

Dimensions

1U Rack Drawer
- Width: 429 mm (16.9 in)
- Depth: 734 mm (28.9 in)
- Height: 43 mm (1.7 in)

Rack
- Weight: (minimum configuration) 12.7 kg (28 lb)
- Weight: (maximum configuration) 15.9 kg (35 lb)

Electrical

Models with 550-watt power supplies:

- 100 to 127 (nominal) V ac; 50 Hz or 60 Hz; 6.5 A
- 200 to 240 (nominal) V ac; 50 Hz or 60 Hz; 3.3 A
- Input kilovolt-amperes (kVA) (approximately):
  - Minimum configuration: 0.12 kVA
  - Maximum configuration: 0.66 kVA

Models with 750 W power supplies:

- 100 to 127 (nominal) V ac; 50 Hz or 60 Hz; 8.9 A
- 200 to 240 (nominal) V ac; 50 Hz or 60 Hz; 4.5 A
  - Minimum configuration: 0.14 kVA
  - Maximum configuration: 0.90 kVA

Btu output:

- Minimum configuration: 406.03 Btu/hr (AC 119 watts)
- Maximum configuration: 2900.2.Btu/hr (AC 850 watts)
- Noise level (horizontal position): 6.5 bels (operating)
- Noise level (horizontal position): 6.3 bels (idle)

Note: The noise emision level stated is the declared (upper limit) sound power level, in bels, for a random sample of machines. All measurements are made in accordance with ISO 7779 and reported in conformance with ISO 9296.

System x3550 M4 server is intended for use as rack-drawer servers and are tested and designed to operate in a horizontal position.

Standards

These systems support or comply with the following standards:

- Multiprocessor Specification (MPS) 1.4
- Peripheral Component Interconnect (PCI) specification 2.3
- Hardware-enabled to meet the International Organization for Standardization (ISO) 9241, Part 3

Equipment agency approvals and safety

- FCC - Verified to comply with Part 15 of the FCC Rules, Class A
- Canada ICES-003, issue 4, Class A
- UL/IEC 60950-1
- CSA C22.2 No. 60950-1
- NOM-019
- Argentina IEC60950-1

Operating environment

Air temperature:

- Server on: 5 C to 40 C (41.0 F to 104 F); altitude: 0 to 915 m (3,000 ft) (60W to 95W processors models)
- Server on: 10 C to 35 C (50.0 F to 95 F); altitude: 0 to 915 m (3,000 ft) (115W to 130W processors models)
- Server on: 10 C to 30 C (50.0 F to 86 F); altitude: 0 to 915 m (3,000 ft) (135W and 130W 4C processors models)
- Server off: 5 C to 45 C (41 F to 113 F)
- Shiping: -40 C to +60 C (-40 F to 140 F)

Humidity:

- For 115W to 130W processors and 135W processors models
  - Server on: 20% to 80%, Max. Dew Point 21 C, Max. rate of change 5 C/hr
  - Server off: 8% to 80%, Max. Dew Point 27 C
- For 60W to 95W processors models
  - Server on: 8% to 85%, Max. Dew Point 24 C, Max. rate of change 5 C/hr
  - Server off: 8% to 80%, Max. Dew Point 27 C
- Design to ASHRAE Class A3, ambient of 40 C, with relaxed support
  - Support cloud like workload with no performance degradation acceptable (Turbo-Off)
  - Under no circumstance, can any combination of worst case workload and configuration result in system shutdown or design exposure at 40 C

Hardware requirements

For attended installation of an operating system, this server requires a compatible:

- Keyboard
- Mouse
- HDD
- Display

Unattended or remote installation may be performed without requiring some or all of these components. Review your unattended software installation program information for specific hardware configuration requirements.

For service, the server requires a compatible:

- Keyboard
- Mouse
- HDD
- Display

When having the unit serviced, plan to have these components attached to your server either directly or indirectly via a console switch.

Software requirements

The following software products have been tested by IBM and software publishers in the latest available versions, and where appropriate, are or will soon be certified by the publisher to be compatible with the System x3550 M4 server.

Operating systems

- Microsoft
  - Microsoft Windows Server 2008 R2
  - Microsoft Windows Server 2008, Datacenter x64 Edition
  - Microsoft Windows Server 2008, Enterprise x64 Edition
  - Microsoft Windows Server 2008, Standard x64 Edition
  - Microsoft Windows Server 2008, Web x64 Edition
  - Windows HPC Server 2008
- Linux™
  - SUSE LINUX Enterprise Server 11 for AMD64/EM64T
  - Red Hat Enterprise Linux 5 Server x64 Edition

Note: For information on additional support, certification, version information, or network operating systems, visit

http://www-03.ibm.com/servers/eserver/serverproven/compat/us/

IBM makes no representation or warranty regarding third-party products, including those designated as ServerProven .

Compatibility

The System x3550 M4 server systems contain licensed system programs that include set configuration, set features, and test programs. System UEFI is loaded from a "flash" EEPROM into system memory. This UEFI provides instructions and interfaces designed to support the standard features of the x3550 M4 and to maintain compatibility with many current software programs.

For detailed information about IBM and non-IBM devices, adapters, software, and network operating systems supported with xSeries® servers, visit

http://www-03.ibm.com/servers/eserver/serverproven/compat/us/

Contact your IBM representative or IBM Business Partner, or refer to the IBM Sales Manual for information on the compatibility of hardware and software for System x servers. The Sales Manual is updated periodically as new features and options are announced that support these servers.

Limitations

- The System x3550 M4 server contains a single, configurable serial port. It can be configured to be operating-system-controlled, service-processor-controlled, or shared between the two. You can set the configuration by UEFI configuration. The default configuration from the factory is in the shared position. In the shared

position, the service processor controls the port until the operating system is running, then the operating system takes control. The service processor can regain control of the port for user-configured dial-out situations or if the operating system is not available, but operating system control cannot be reestablished without resetting the server.

- System x3550 M4 servers can address a maximum of 384 GB of system memory. All supported system memory is addressable through direct memory access. The System x3550 M4 server supports 2 GB, 4 GB, 8 GB, and optional 16 GB DDR-3 SDRAM Registered DIMMs. Different types of DIMMs can not coexist in the same system. Refer to the Planning information section for supported memory options.
- To ensure proper air flow for cooling, the System x3550 M4 server requires a rack with a perforated door, such as the NetBAY42 SR or NetBAY25 SR. An alternative is to remove the front door of rack cabinets where the door panel is of solid construction.
- Microprocessor upgrades must be of the same type and clock speed. Mixing microprocessors of different speeds or cache size is not supported.

Note: Refer to the Software requirements section for operating system limitations.

Planning information

Customer responsibilities

The System x3550 M4 server is designated as customer setup. Customer setup instructions are shipped with each system.

Configuration information

Integrated RAID-1 configuration

There are two manufacturing instructions (MI) available to allow the user to set up a RAID-1 configuration.

The two instructions are:

- Integrated Mirroring - Two HDDs required using Instruction 01R1356
- Integrated Mirroring with HotSpare - Three HDDs required using Instruction 01R1357

Cabling

Simple-swap non-RAID configuration contains cables supporting up to three 3.5-inch simple-swap non-RAID SATA drives. It does not contains any backplane.

Rack installations

System x3550 M4 server 1U rack-drawer models should be installed in a 19-inch rack cabinet designed for 28-inch deep devices, such as the NetBAY42U ER and NetBAY42U SR. Installation into some of the older Netfinity® racks (9306900, 9306910, and 9306200) requires a rack extension kit.

If a System x3550 M4 is mounted in a non-IBM rack, the rack must satisfy the following specifications:

- The rack must meet EIA-310-D standards for mounting flanges and hole locations.
- The front to rear distance of the mounting flanges must be 698.5 - 762 mm (27.5 in - 30 in.).
- The thickness of the mounting flanges must be 1.9 - 3.3 mm.
- The mounting flanges must have either 7.1 mm (.28 in.) diameter holes or 9.6-mm (.38 in.) square holes on the standard EIA hole spacing.
- The rack must have a minimum depth of 70 mm (2.76 in.) between the front mounting flange and inside of the front door for appropriate cooling.

- The rack must have a minimum depth of 157 mm (6.2 in.) between the rear mounting flange and inside of the rear door to install the server and make space for cable management.
- The minimum side-to-side clearance in the rack between the front and rear mounting flanges must be 467 mm (18.2 in.) to accommodate the width of the server and the slide mounting brackets.
- The minimum side-to-side clearance in the rack between each door and the mounting flanges must be 484 mm (19.1 in.) to accommodate the slide mounting brackets.
- The rack must include perforated front and rear doors and must not prevent the flow of cool air into or out of the rack.
- The weight-handling capacity of the rack must be able to support the maximum rack configuration, including all servers, external cables, and PDUs.
- The rack must provide proper stabilization so that the rack does not become unstable when servers are pulled out for service.

Supported memory options

The following memory options are supported:

- 49Y1397 - 8GB (1x8GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- 49Y1399 - 8GB (1x8GB, 4Rx8, 1.35V) PC3L-8500 CL7 ECC DDR3 1066MHz LP RDIMM
- 49Y1404 - 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP UDIMM
- 49Y1405 - 2GB (1x2GB, 1Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- 49Y1406 - 4GB (1x4GB, 1Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- 49Y1407 - 4GB (1x4GB, 2Rx8, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- 49Y1559 - 4GB (1x4GB, 1Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- 49Y1563 - 16GB (1x16GB, 2Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP RDIMM
- 90Y3109 - 8GB (1x8GB, 2Rx4, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- 49Y3178 - 4GB (1x4GB, 2Rx8, 1.5V) PC3-12800 CL11 ECC DDR3 1600MHz LP RDIMM
- 90Y3105 - 32GB (1x32GB, 4Rx4, 1.35V) PC3L-10600 CL9 ECC DDR3 1333MHz LP LRDIMM

Power considerations

The System x3550 M4 server includes a standard 550-watt ac or 750-watt ac hot-swap power supply.

Cable orders

Four 10/100/1000 Mbps, full-duplex Ethernet PCI controllers, standard with the System x3550 M4 server, are connected directly to an independent RJ-45 connector. The RJ-45 connector provides a 10BASET, 100BASE-TX, and 1000BASE-TX interface for connecting twisted-pair cable to the Ethernet network. Cabling is not included with the server. To connect the Ethernet controller to a repeater or switch, use an unshielded twisted pair (UTP) cable with RJ-45 connectors at both ends. For 100/1000 Mbps operation, Category 5 cabling must be used. For 10 Mbps operation, Category 3, or better, cabling must be used.

There are no additional cabling requirements, other than for system power, keyboard, mouse, and monitor connections.

Installability

The System x3550 M4 server requires about 20 minutes for installation. Installation includes unpacking, setting up, and powering on the system. Additional time is required to install an operating system, additional adapters, or features.

Packaging

Product	Package description	Boxes
System x3550 M4	System unit carton	1
	Contents	
	System unit Rack kit	
System x3550 M4	System ship group	1
	Contents:	
	Important Notices Flyer Rack Installation Instructions CD - Documentation (installation and User Guides) CD - Director	

The System x3550 M4 server system is shipped as a single package. Other items are in zipped bags or boxes.

Security, auditability, and control

Security and auditability features include:

- Power-on and privileged access password functions control access to the data and server setup program on the server.
- Set unattended boot mode allows the system keyboard to be locked to all entries except the password and at the same time allows other computers on the network to access the system disk drive.
- Selectable boot sequence can be used to prevent unauthorized installation of software or removal of data from the diskette drive.

The servers are intended to be installed in a rack and secured in a rack. It is a customer's responsibility to ensure that the server is secure to prevent sensitive data from being removed.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM . Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

http://www.ibm.com/support/electronic

Terms and conditions

Warranty period

- System - Three years
- Optional features - One year
- ServeRAID M5100 Battery - One year

  Note: The ServeRAID M5100 Battery has a one year warranty period effective on its "Date of Installation". All other product warranty terms for the machine remain unchanged.

An IBM part or feature installed during the initial installation of an IBM machine is subject to a full warranty effective on the date of installation of the machine. An IBM part or feature which replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty effective on its date of installation. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature is the same as the machine it is installed.

The following have been designated as consumables, supply items, or structural parts and therefore not covered by this warranty:

- Tape filler
- EMC blank filler
- EIA sET kit
- HDD 4 slot HS kit
- 3.5-inch top cover
- 3.5-inch mechanical chassis
- Safety cover
- 2.5-inch top cover
- 16DR M4 tape bezel
- Airflow baffle
- Gen-III slide kit
- Gen-III 1U CMA kit
- 2.5-inch mechanical chassis
- DVD blank filler
- Blank fan filler
- MISC part kit
- Battery holder
- PSU filler

- CMA Assembly Kit
- CMA, 2U/4U kit
- Remote battery tray
- Gen-III 2U CMA Kit
- Slide kit
- RAID Batteries

Warranty service

If required, IBM provides repair or exchange service, depending on the type of warranty service specified below for the machine. IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM website. Certain machines contain remote support capabilities for direct problem reporting, remote problem determination, and resolution with IBM . You must follow the problem determination and resolution procedures that IBM specifies. Following problem determination, if IBM determines On-site Service is required, scheduling of service will depend upon the time of your call, machine technology and redundancy, and availability of parts. Service levels are response-time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside normal IBM service area. Contact your local IBM representative or your reseller for country- and location-specific information.

The type of service is Customer Replaceable Unit (for example, keyboard, mouse, speaker, memory, or hard disk drive) Service and On-site Service.

Customer Replaceable Unit (CRU) Service

IBM provides a replacement CRU to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from IBM at any time on your request. A CRU is designated as being either a Tier 1 (mandatory) or a Tier 2 (optional) CRU. Installation of Tier 1 CRUs, as specified in this announcement, is your responsibility. If IBM installs a Tier 1 CRU at your request, you will be charged for the installation. You may install a Tier 2 CRU yourself or request IBM to install it, at no additional charge, under the type of warranty service designated for your Machine.

Based upon availability, a CRU will be shipped for next business day (NBD) delivery. IBM specifies in the materials shipped with a replacement CRU whether a defective CRU must be returned to IBM . When return is required, return instructions and a container are shipped with the replacement CRU, and you may be charged for the replacement CRU if IBM does not receive the defective CRU within 15 days of your receipt of the replacement.

The following parts or features have been designated as Tier 1 CRUs:

- CMOS batteries
- Hard disk drives
- Hot-swap fan
- Hot-swap AC power supply
- Memory DIMM
- Optical drive
- PCI adapter
- Power cord
- Service label
- System label
- Hyper visor USB key
- PCI riser
- RAID card without Battery

- Tape drive
- Ethernet daughter card
- Backplanes

On-site Service

At the discretion of IBM , you will receive CRU service or IBM or your reseller will repair the failing machine at your location and verify its operation. If required, On-site Repair is provided, nine hours per day, Monday through Friday excluding holidays, NBD response. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose. On-site Service is not available in all countries, and some countries have kilometer or mileage limitations from an IBM service center. In those locations where On-site Service is not available, the normal in-country service delivery is used.

International Warranty Service

International Warranty Service (IWS) is available in selected countries or regions.

The warranty service type and the service level provided in the servicing country may be different from that provided in the country in which the machine was purchased.

Under IWS, warranty service will be provided with the prevailing warranty service type and service level available for the IWS-eligible machine type in the servicing country, and the warranty period observed will be that of the country in which the machine was purchased.

To determine the eligibility of your machine and to view a list of countries where service is available, visit

http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=GCOR-3FBJK2

For more information on IWS, refer to Services Announcement 601-034, dated September 25, 2001.

Licensing

Programs included with this product are licensed under the terms and conditions of the License Agreements that are shipped with the system.

Warranty service upgrades

IBM hourly service rate classification

One

Field-installable features

Yes

Model conversions

No

Machine installation

Customer setup. Customers are responsible for installation according to the instructions IBM provides with the machine.

Graduated program license charges apply

No

Licensed machine code

IBM Machine Code is licensed for use by a customer on the IBM machine for which it was provided by IBM under the terms and conditions of the IBM License Agreement for Machine Code, to enable the machine to function in accordance with its specifications, and only for the capacity authorized by IBM and acquired by the customer. You can obtain the agreement by contacting your IBM representative or visiting

http://www-304.ibm.com/systems/support/machine_warranties/machine_code.html

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Corrections

(Corrected on April 19, 2013)
The Technical information section is revised.