IBM System x3850 X5 and x3950 X5

Breakthrough innovation for smarter computing

Highlights

- Unmatched flexibility to meet changing workload demands

- Balanced systems for virtualization, database and enterprise workloads

- Workload-optimized systems with customizable configurations for target workloads

- Achieve greater performance and utilization at a lower total cost

- Keep consolidated workloads up and running with mainframe-inspired reliability

- Easy-to-own, simplified power and systems management with an energy-smart design and remote access

Tailored to your workload demands

With rising costs, increasing workloads and demands for 24×7 availability, there's no room in your organization for underutilized or unreliable servers. Built on the latest next generation of enterprise IBM® X-Architecture® technology and Intel Xeon processors, the IBM System x3850 X5 offers superior performance and unbeatable reliability within an energy- and wallet-friendly design. Best of all, it offers ultimate flexibility to help you get what you need, when you need it.

The x3950 X5 offers simple-to-deploy, preconfigured systems that are optimized for specific workloads. The x3950 X5 database optimized systems offer the right balance of processing power, memory, and eXFlash high-performance storage technology for your database workloads. x3950 X5 virtualization optimized systems with embedded VMware vSphere Hypervisor come standard with MAX5 for unmatched memory capacity, allowing you to increase the size and quantity of your virtual machines. The x3950 X5 SAP High Performance Analytics Appliance (HANA) helps provide super-charged analytics performance for businesses who need timely answers to vital business questions.

Grow as your business grows

The x3850 X5 server allows freedom of choice with extremely flexible configurations plus memory expansion capabilities. A modular building block design lets you customize your system for current needs while

providing the ability to react to changing workloads. Expand from a two-processor system up to four processors. Add a second system to create an eight-processor system. Start with two memory DIMMs and expand up to 192 with a dual-node system and two MAX5 memory expansion options. Reallocate resources as your environment changes. The x3850 X5 meets your needs today, while providing an easy, cost-effective upgrade path to change your environment when you're ready.

Do more with your investments

Six-, eight- and ten-core processor options and expanded memory capacity let you manage memory-intensive applications with higher utilization and greater throughput and bandwidth. Consolidate older servers on one industry-leading IBM X-Architecture eX5 system for a lower total cost. Optimize your investments with more and larger virtual machines per server and lower licensing costs, while achieving greater business productivity.

Consolidate with confidence

A long-time leader in reliability, many of the features IBM pioneered with earlier generations of X-Architecture have now become industry standards. The x3850 X5 continues to build on this leadership, enabling you to consolidate workloads without sacrificing availability or your peace of mind. OnForever™ features such as redundant power and cooling help minimize the potential for catastrophic business disruption. Other features include enhanced IBM Memory ProteXion for greater data integrity, memory mirroring and Predictive Failure Analysis for increased system uptime.

Breakthrough innovation for smarter computing with the x3850 X5

Own and operate with ease

Consolidated single points of management and an energy-smart design help reduce the time and money needed to run your system. Advanced light path diagnostics and around-the-clock remote access management facilitate ease of use and proactive problem-solving. In addition, IBM Systems Director Active Energy Manager™ helps monitor, measure and manage power consumption to lower the energy draw and costs.

Select configurations of the x3850 X5 are part of the IBM Express Portfolio™ designed to meet the needs of small and midsized businesses. Easy to manage, Express models and configurations vary by country.

IBM System x3850 X5 at a glance

Form factor/height	Rack/4U per chassis
Processor (max)	Intel Xeon up to 2.4 GHz (10-core)/1066 MHz memory access
Number of processors (std/max)	2/4 per node (optional 2-node support)
Cache (max)	Up to 30 MB
Memory (std/max)	32 GB/2.0 TB max PC3-10600 DDR3L, up to 3.0 TB with MAX5
Expansion slots	7 total PCIe half-length
Disk bays (total/hot-swap)	8/8 2.5" Serial Attached SCSI (SAS) or 16/16 SAS SSD
Maximum internal storage	4.8 TB per chassis (supports 8 × 73.4 GB, 146.8 GB, 300 GB, 500 GB and 600 GB SAS hard disk drives, 8 × 160 GB and 500 GB SATA hard disk drives, or 16 × 50 GB and 200 GB solid state drives)
Network interface	10 Gbps Fibre Channel over Ethernet Dual Channel Converged Network Adapter, integrated dual Gigabit Ethernet with TCP-IP off-load engine, 10 Gbps Ethernet
Power supply (std/max)	1975 W 220 V 2/2
Hot-swap components	Power supplies, fans, hard disk drives and solid-state-drives
RAID support	Integrated RAID-0, -1; optional RAID-5, -6
Systems management	Alert on LAN 2, Automatic Server Restart, IBM Systems Director, IBM ServerGuide, Integrated Management Module (IMM), light path diagnostics (independently powered), Predictive Failure Analysis on hard disk drives, processors, VRMs, fans and memory, Wake on LAN, Dynamic System Analysis, QPI Faildown
Operating systems supported	Microsoft Windows Server 2008 (Standard, Enterprise and Data Center Editions 64-bit), 64-bit Red Hat Enterprise Linux, 64-bit SUSE Enterprise Linux, (Server and Advanced Server), VMware vSphere Hypervisor
Limited warranty	3-year customer replaceable unit and onsite limited warranty

For more information

World Wide Web

U.S. **ibm.com**/systems/x

Canada **ibm.com**/ca/en/systems/x