

A powerful and highly versatile system for enterprise business processing



IBM System i 570



The IBM System i™ 570 is designed for the challenges faced by mid-sized and large enterprises that need a powerful and highly versatile system for enterprise business processes and applications. Based on scalable POWER6 processor technology and featuring the highly efficient i5/OS operating environment, the System i 570 platform is ideally suited for the deployment of your most critical applications. It offers exceptional business resiliency, high security and low operations costs—a combination that can help you focus your IT staff on supporting new business initiatives and growth. The i570 also features advanced virtualization technologies designed to promote high systems utilization and efficient power usage.

Highlights

- ***Designed to support business growth with a modular, scalable system architecture***
- ***Supports efficient business processing with the i5/OS® operating environment***
- ***Promotes high system utilization and efficient power usage***
- ***Delivers outstanding application performance with IBM® POWER6™ processors***
- ***Flexible deployment options for production and business resilience systems***

Modular, scalable system architecture to support business growth

The System i 570 offers a scalable, modular hardware architecture and helps support balanced growth from a 1- to 4-way configuration up to a full 16-way system. The i570 server is packaged in 4-way, 4U building block nodes or modules. Each node supports four POWER6 4.7 GHz processor cores along with cache, memory, media, I/O adapters, efficient power and cooling to create a balanced, extremely high-performance rack-mount system. Up to four nodes can be configured in a 19-inch rack as a single SMP server. This building block approach is designed to allow the i570 to scale in a way that balances memory, I/O capacity, processing power and bandwidth.

Supports efficient business processing with the i5/OS operating environment

Large enterprises rely on an efficient IT infrastructure to support business-critical applications. They need to know that their systems and business processes are deployed to meet the highest service levels defined by their business units. They also need to know that these systems can be adapted to handle every new business opportunity. IBM i5/OS has a highly scalable and virus resistant architecture with a proven reputation for exceptional business resiliency.

The i5/OS operating environment integrates a trusted combination of relational database, security, Web services, networking and storage management capabilities. Running applications based on the i5/OS integrated operating environment has helped large enterprises

over many years to focus on innovation and delivering new value to their business, not just on managing their data center operations. i5/OS supports over 5,000 solutions from over 2,500 ISVs.

Promotes high system utilization and efficient power usage

The i570 system with the i5/OS operating environment promotes high system utilization and power efficiency by using virtualization capabilities to run multiple business processes and applications reliably and securely together. In a study of large enterprises using multiple operating systems, IBM found utilization rates on i5/OS-based systems were over 10 times that of Intel®-processor based servers and over twice as high as UNIX® and other mid-range based systems¹. The high rate of i5/OS utilization is achieved through the use of a

variety of proven virtualization technologies, such as subsystems (multiple workloads managed in a single operating system image) and logical partitions (multiple workloads managed in independent operating system images).

The i570 system can run multiple operating systems and application environments on POWER6 processors simultaneously—including IBM i5/OS, Linux®, IBM AIX 5L™, Java™, IBM WebSphere® and IBM Lotus® Domino® software. With the capacity to support up to ten dynamic logical partitions (LPARs) per processor, the i570 helps drive down the operating costs and high power requirements of solutions that rely on one application per server. A new Integrated Virtual Ethernet adapter comes standard with every system, further reducing deployment costs and improving system flexibility.

Delivers outstanding application performance with IBM POWER6 processors

Based on IBM's fastest POWER6 processors—the sixth generation of IBM POWER™ architecture, running at 4.7 GHz—the new System i model 570 capitalizes on the POWER6 chip's breakthroughs in performance and energy conservation.

It is designed to enable you to easily and effectively upgrade your processing capacity while leveraging existing software investments. Each i570 system incorporates an initial, POWER6 n-way hardware configuration that serves as a foundation for affordable, seamless expansion options, including Capacity on Demand processor and memory activations and additional 1/4-way POWER6 nodes.

Flexible deployment options for production and business resilience systems

The System i 570 with POWER6 processors is packaged in two simple Editions: an i5/OS Edition ideal for production applications, and a Capacity BackUp (CBU) Edition that adds multiple business resilience options.

The i5/OS Edition is designed to perform as a primary production system and is offered in a 1/4-way, 2/8-way or 4/16-way configuration. It also includes valuable Optimum Care services and education vouchers, including a new onsite Availability Assessment offer on 4/16-way 570 configurations.

The Capacity BackUp Edition is designed as a secondary system to support various business resilience solutions and is offered in a 1/4-way, 1/8-way and 2/16-way configuration.

System i POWER6 570 at a glance

Edition	1/4-way i5/OS Edition 1/4-way CBU Edition	2/8-way i5/OS Edition 1/8-way CBU Edition	4/16-way i5/OS Edition 2/16-way CBU Edition
Processor	4.7 GHz POWER6	4.7 GHz POWER6	4.7 GHz POWER6
Processor CPW i5/OS Edition	5500 – 21200	10800 – 40100	20100 – 76900
Processor CPW CBU Edition	5500 – 21200	5500 – 40100	10800 – 76900
5250 OLTP CPW	0 to maximum	0 to maximum	0 to maximum
Memory (max)	192 GB	384 GB	768 GB
Disk capacity (max)	154 TB	232 TB	387 TB
Disk drives (max)	546	822	1374
i5/OS	Included ²	Included ²	Included ²
Software tier	P30	P30	P30
Windows Server^{®3}, Linux, IBM AIX[®] capable	Yes	Yes	Yes
iSCSI adapters (max)	42	84	168
Integrated xSeries[®] Servers (max)	36	48	48
Integrated xSeries Adapters (max)	16	32	57
Rack-optimized design	Yes	Yes	Yes
Micro-partitions (max LPARS – i5/OS, AIX, Linux)	40	80	160
High speed link (HSL) or 12X loops (max)	2	4	8
I/O towers/drawers (max)	12	24	48
PCI card slots (max)	173	346	692

For more information

To learn more about the IBM System i 570 contact your IBM representative, IBM Business Partner or visit the following Web site:

ibm.com/systems/i



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¹ Source: Comparing IBM System i Annual Operating Costs in Large Enterprises. Summary of IBM Customer IT Optimization Studies 2002-2006. An IBM White Paper, August 2006

² One i5/OS processor license is included. Other processor licenses available as required.

³ Via an iSCSI adapter, Integrated xSeries Adapter or Integrated xSeries Server