IBM *@*server **iSeries**
Models 270, 820, 830, 840, 890

Highlights

- *Mainframe-class performance and scalability with innovative POWER4™ technology*

- *New tools to manage capacity and diverse workload environments*

- *Enterprise-level clustering and partitioning options for business continuity*

- *Flexible, secure management of e-business infrastructure*

Enterprise IT management made simple

Today's dynamic e-business environment demands a more powerful, scalable and flexible IT infrastructure than ever before. The IBM *@*server iSeries™ Models 270, 820, 830, 840 and the new 890 meet these demands by delivering industry-leading innovative technology in a cost-effective and easily managed server platform with intuitive enterprise-class systems management tools.

The iSeries delivers flexible capacity management to provide uninterrupted performance growth, with new Capacity Upgrade on Demand options for most iSeries Model 830, 840, and 890 servers (4-way and above).

IBM POWER4 delivers unmatched iSeries growth

The introduction of award-winning POWER4 processors in the new 32-way i890 delivers outstanding mainframe-class performance, nearly doubling the capacity of the 24-way i840.

The i890 is an integral part of the IBM *@*server product line—advanced servers that help you lower your costs, improve efficiency and speed e-business transformation. The i890 integrates IBM's innovative technology developed across all of the IBM *@*server platforms. For example, the i890 incorporates the same processors used in the most powerful pSeries™ servers available today, along with the robust hardware packaging of zSeries™.

The i890 incorporates the latest advances in RISC technology by IBM with the POWER4 processor. With two processors running at 1.3 GHz, on-chip L2 cache and new L3 cache, the i890 delivers performance gains—up to 37,400 CPW,[1] as much as an 85 percent improvement over the i840—for businesses that need a server capable of mainframe-class capacity while retaining its focus on simplicity and robust availability.

Innovative servers and new tools to manage your e-business

With a broad selection of configuration choices and upgrade paths, and with over 600 times scalability from the i270 through to i890, iSeries can meet a variety of application needs. Ranging from one to 32 processors, massive disk storage capacity of up to 72 Terabytes (TB), and up to 256 Gigabytes (GB) of memory, the iSeries servers are ideal for businesses of any size.

The iSeries product line is designed to support a wide range of business environments with varying degrees of complexity and business challenges. The iSeries offers processor features that are packaged and priced to suit

the capacity and performance needs for WebSphere®, Linux®, Lotus® Domino™, Java™, as well as other mixed transaction processing.

Capacity Upgrade on Demand (CUoD) options are now standard on select i830, i840, and i890 (4-way and above) models. This capability provides you the flexibility and options to adapt to unpredictable performance demands of new applications. It's processing power at your fingertips. You can seamlessly activate additional processing capacity on the fly without interrupting your business as you experience unexpected or rapidly growing application demands. With CUoD options on iSeries, your server can grow with your business, every step of the way.

New switch fabric support, combined with high speed fibre channel adapters, further increases storage options for iSeries by allowing it to participate in a Storage Area Network (SAN) environment.

In addition, the iSeries expands its use of hot-pluggable PCI I/O slots, allowing you to add new features as well as delivering the ability to easily perform concurrent maintenance without the requirement to restart the server.

The iSeries delivers the IBM @server Technical Support Advantage— support built right into the product that helps you keep your business running at peak availability and performance. A key component of this is the Universal Connection—a safe, very secure way for you to link to IBM over the Internet and receive useful, timely assistance that's customized for your unique system configuration. You can connect with the integrated modem provided with the base product or via a high-speed network connection.

Through automated support, proactive tools and personalized assistance, the iSeries offers world-class customized support— support that goes the extra mile to give you peace of mind.

Better management with OS/400 V5R2

With the latest release of Operating System/400® (OS/400 ®) Version 5 Release 2 (V5R2), the iSeries delivers self managing mainframe-class technology, providing simplicity to an otherwise complex world.

Continuing to build on IBM's Project eLiza™ capabilities, OS/400 V5R2 expands the use of self-configuring intuitive graphical tools to automate an extensive range of management tasks, making them simple enough for everyone to implement with a click of a mouse or a wireless device.

Project eLiza is an IBM initiative to help companies deal effectively with increased complexity. It's a blue-print for self-managing systems, aimed at creating an intelligent IT infrastructure that responds to unexpected capacity demands or system failures. This allows our customers to react more quickly to changing circumstances, realize cost efficiencies and be able to focus on their business needs.

Built into every iSeries is IBM's industry-leading relational DB2 Universal Database™ (UDB). OS/400 V5R2 supports a comprehensive set of open and SQL standards and enhanced compatibility with

IBM's DB2® family. In addition, V5R2 extends data partitioning (Independent Auxiliary Storage Pool) to support DB2 UDB on iSeries, enabling additional availability and server consolidation options. This innovative virtual storage technology allows you to perform scheduled maintenance and seamlessly switch database objects to another system, minimizing the interruptions to normal operations.

In addition, you can create multiple database images with same library names on the same server extending data consolidation options to bring multiple business units together on the same iSeries.

Application flexibility: your business, your choice

Server consolidation on the iSeries provides advanced manageability and the freedom to run a wide variety of applications utilizing Integrated xSeries™ Adapter and Integrated xSeries Server for Windows® server management, Lotus Domino, and logical partitioning capabilities for OS/400, and Linux. By consolidating applications on an iSeries, you can lower your total cost of ownership, reduce the complexity of managing your IT infrastructure and spend more time focusing on your business, not your technology.

iSeries Model Summary

	i270	i820	i830	i840	i890
Number of Processors	1–2	1–4	2–8	8–24	16–32
Processor CPW[1] (Max)	2,350	3,700	7,350	20,200	37,400
Logical Partitioning (LPAR)	Yes	Yes	Yes	Yes	Yes
Linux Ready	Yes*	Yes*	Yes	Yes	Yes
Domino Mail and Calendar Users (Max)	6,660	11,800	20,900	77,800	**
Integrated 1-way xSeries or IXS (Max)	3	12	28	32	32
External n-way xSeries or IXA (Max)	2	4	8	16	32
Disk Capacity (Max)	844GB	8TB	22TB	38TB	72TB
Main Memory (Max)	16GB	32GB	64GB	128GB	256GB
5250 Interactive CPW (Max)	70	2,000	4,550	20,200	37,400

[1] Relative performance measurements are derived from commercial processing workload (CPW) on iSeries. CPW is representative of commercial applications, particularly those that do significant database processing in conjunction with journaling and commitment control. CPW values may not be realized in all environments.

PROCESSOR CPW—Maximum relative performance for this processor feature running commercial processing workloads. This value, stated as Client/Server CPW in previous releases, can be used to compare relative performance between various processor features

INTERACTIVE CPW—Relative performance available to perform interactive workloads. The amount of interactive CPW consumed will reduce the available processor CPW by the same amount.

Default: The measure of interactive CPW available as part of the integrated offering.

Optional: The maximum measure of interactive CPW available via optional interactive features.

 * Linux is available on selected feature processors on the Models i270 and i820.

** Domino Mail and Calendar User information for the i890 will be posted on **ibm.com**/eserver/iseries by the General Availability date of the i890.

Our award-winning Linux implementation is further enhanced with OS/400 V5R2 to support the 64-bit Linux kernel in addition to enhancing the logical partitioning capabilities to allow you to dynamically move processor capacity between partitions.

Flexible, secure management of e-business infrastructure

OS/400 V5R2 introduces the industry's first self-protecting Enterprise Identity Mapping; a project eLiza initiative. This feature helps eliminate the need for users to sign onto multiple systems or applications separately. It also simplifies the development of secure, multi-tier, multi-server applications, reducing your costs of user identity, password and network administration.

You will also benefit from integrated high-performance Web-caching technology along with new adaptive transaction services designed specifically to manage multi-threaded Java and WebSphere applications.

iSeries offers you access to a global network of IBM Business Partners, who along with leading software developers offer an outstanding portfolio of e-business and enterprise applications, business-to-business (B2B), business-to-consumer (B2C), customer relationship management (CRM) and supply chain management (SCM) solutions.

iSeries is backed by a comprehensive suite of offerings and resources, available through IBM and its Business Partners, that provides value at every stage of IT implementation. These tools can help companies learn about and explore @server solutions, test possible solutions, obtain financing, plan and implement applications and middleware, manage capacity and availability, and improve performance—in essence, manage the IT environment across their entire infrastructure. The result is an easier way to handle the complexities and rapid growth of e-business.

Technology that simply works

The latest generation of iSeries servers is the result of IBM's continuing efforts to share mainframe-class technology. The iSeries's significant investment in OS/400 makes enterprise IT management simple.

For more information

Visit **ibm.com**/eserver/iseries or contact your IBM Marketing Representative or IBM Business Partner.