IBM

IBM *e*server pSeries 630 Workstation

Highlights

■ *Outstanding value in a reliable UNIX® workstation with one or two processors*

■ *Advanced graphics accelerators for excellent 3D CAD/CAM and visualization application performance*

■ *Up to 32GB memory and 587GB of internal disk storage for data- and compute-intensive tasks*

More for your money

The IBM *e*server™ pSeries™ 630 Model 6E4 UNIX workstation is designed to lower the cost of high-end design and analysis while raising levels of performance. It offers a no-compromise solution for complex mechanical computer aided design (MCAD), computer aided engineering (CAE) and geophysical visualization. The p630 Model 6E4 is also an excellent development and testing platform for 64-bit symmetric multiprocessing (SMP) applications.

Supercharged application performance

The p630-6E4 is designed for technical and graphics users who require high performance and SMP scalability. It incorporates innovative IBM copper/silicon-on-insulator POWER4™ chip technology resulting in some of the fastest 64-bit processors in the world[1].

One or two 1.2 GHz or 1.45 GHz POWER4+™ processors are incorporated on a chip with shared Level 2 (L2) cache mounted on a processor card. Also on the card is 8MB of L3 cache, which helps stage information more effectively from system memory to application programs. The processor card is packaged with the system memory to form a processor book—a sealed unit that protects the components in a rigid structure designed to provide higher reliability.

A one-way system is configured with a single processor book. A two-way system can be configured with either a two-way processor book or two one-way processor books. The latter approach results in greater performance due to the increased memory and L2/L3 cache.

With two POWER4+ processors and up to 32GB of memory, the p630-6E4 is an excellent choice for running MCAD design and analysis applications such as the CATIA suite. The Model 6E4 brings new levels of performance to CAE applications from companies such as Ansys, MSC.Software, AVL, CD/adapco, Fluent, ESI, LSTC and Mecalog.

Graphic advantages

The pSeries 630 Model 6E4 supports the POWER GXT4500P or GXT6500P graphics accelerators using two of the available PCI-X adapter slots. For high-performance 3D applications, both accelerators offer functionality and leading-edge performance in 3D texturing and lighting. For the ultimate in performance, choose the GXT6500P with hardware lighting and transform processors integrated with the accelerator. For less demanding environments, GXT4500P utilizes the host CPU to perform complex lighting and transform tasks. In addition, the p630-6E4 supports a full range of graphics input devices, including SpaceBall® and Magellan.

There when you need it

The p630-6E4 offers advanced reliability via a built-in service processor that is designed to continuously monitor the system's vital signs. It also features advanced memory technologies—ECC (error checking and correcting) and Chipkill™ memory that are designed to detect and correct most multiple bit errors; and redundant memory that dynamically replaces failing memory. These facilities help protect the system from failures that can cause unscheduled downtime.

Packed with value

The p630-6E4 features a deskside design with excellent expansion capabilities. It offers four disk and two media bays, permitting up to 587.2GB of internal disk storage. Two integrated Ethernet and two internal Ultra3 SCSI controllers free slots for other customer requirements.
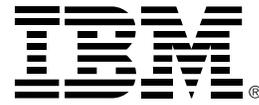
The AIX® advantage

AIX 5L™ is the IBM UNIX operating system for the p630-6E4. Tuned to maximize graphics performance for the MCAD user, AIX 5L is widely recognized for providing state-of-the-art graphics performance solutions. Included is support for Java™, OpenGL, graPHIGS and X-Windows.

For more information

To learn more, contact your IBM marketing Representative or IBM Business Partner, or visit the following Web site:

- **ibm.com**/eserver/pseries

[1] Based on SPEC CPU2000 benchmarks as of April 8, 2003 available at www.spec.org.