

# HP 9000 Series 800 Model 840 Computer System



More Performance Today,  
Greater Competitive  
Advantage Tomorrow





*Choosing the right  
computer vendor  
just became easier*



*Answering the following questions used to require  
a number of trade-offs:*

- *How can I tie existing computers together to provide for my computing needs of the future?*
- *How can I develop applications so they are portable between different types of computers?*
- *How can I avoid the cost of redoing applications as my computer system needs evolve?*
- *How can I be sure the computer family I invest in today will grow as my needs grow?*

*The HP 9000 Model 840, with Hewlett-Packard's new Precision Architecture and an industry-standard operating system, eliminates trade-offs and provides powerful answers to your computing questions.*

*The best way to use computers in a multi-vendor environment is to build on an industry-standard operating system and tie them together via standard communications. Just as important are standard data bases, languages and graphics. Developing applications based on these standards ensures portability across different computers, freeing you from dependence on any one vendor.*

*In order to preserve your investment in existing applications, a new computer system should provide compatibility and powerful migration tools. To make the most of future software investments, you need to build on a lasting foundation. A computer architecture that will cost-effectively support a wide range of compatible computer systems now and in the future.*

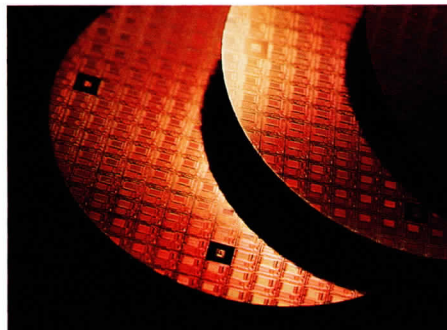


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## ***HP Precision Architecture: A solid foundation***



**HP Precision Architecture provides addressing space for your most ambitious application programs plus growth for your future computing needs.**



Since your investment in software is also an investment in a computer architecture, you want to choose an architecture that will last. Hewlett-Packard's Precision Architecture, the heart of the Model 840, was designed to make the most of your software investment.

HP Precision Architecture is a reduced complexity, 32-bit architecture. For increased speed and efficiency, the instruction set is simplified and implemented directly in CPU hardware, a feature typically found only in high-performance, high-priced mainframes. Because of its reduced complexity, HP Precision Architecture is scalable over a wide range of computing products and applications.

In addition, HP Precision Architecture provides the addressing space necessary to manage your most ambitious application programs. It removes the constraints imposed by previous architectures on program size and efficiency. With the potential to address over 18 million trillion bits of data, you'll never run out of address space.

The simplicity, flexibility and scalability of HP Precision Architecture allows your computing power to grow with your needs. You can depend on HP Precision Architecture to deliver lasting value as your computing requirements change.

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## *HP 9000 Model 840 breaks new ground without breaking your budget*

The Model 840 extends the performance range of HP 1000 real-time automation computers and HP 9000 engineering computers. This means your current systems can go on working for you even as you add HP Precision Architecture systems to meet your ever-increasing demands for computing power.

The strength of the Model 840 is a result of two basic elements: HP Precision Architecture and the HP-UX operating system. These elements work together to give you more flexibility and greater performance at a very affordable price.

### **HP Precision Architecture: Simpler is better**

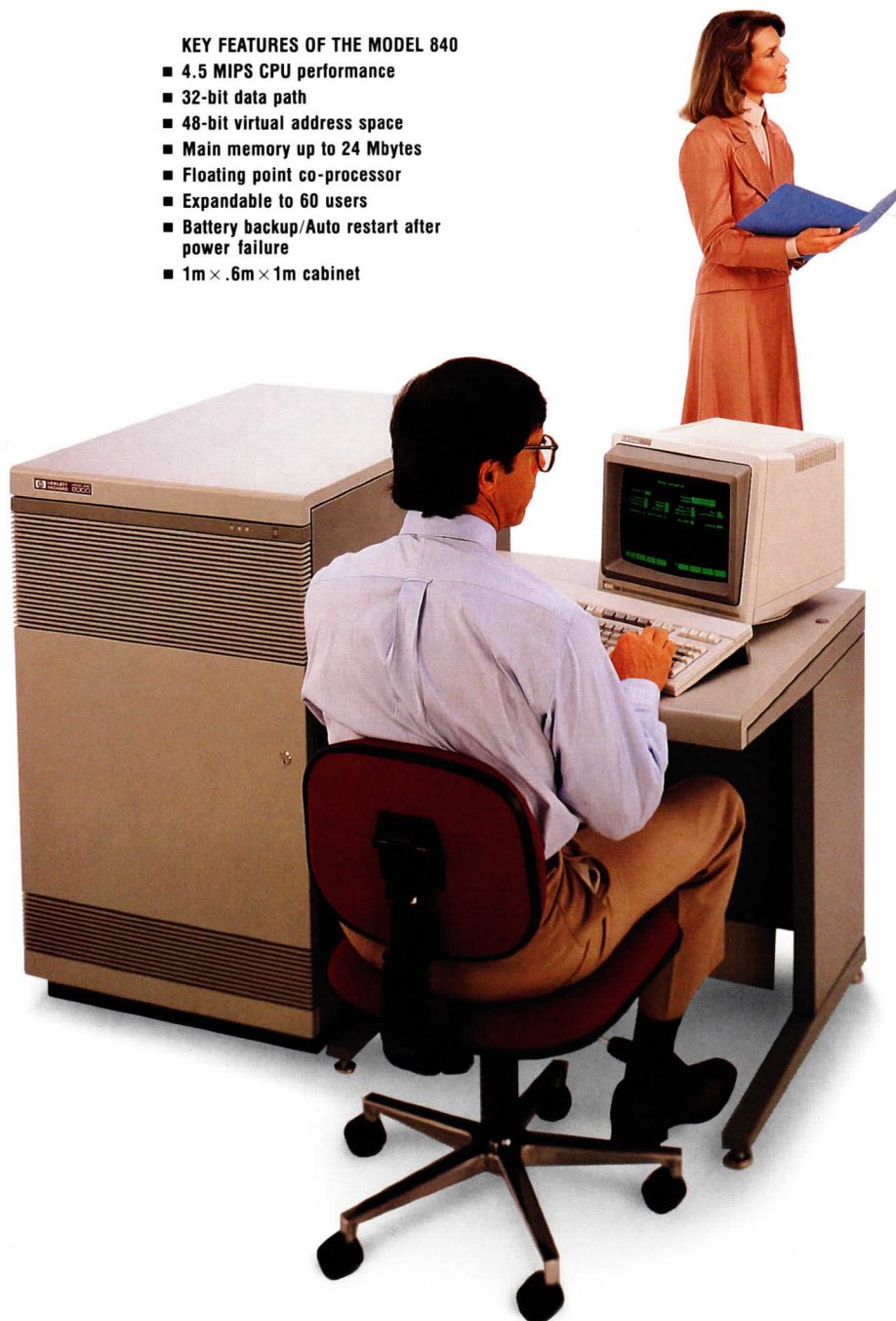
The simplicity of HP Precision Architecture means the Model 840 executes instructions directly, and in less time, so your computations are done faster. Reduced complexity also means the Model 840 has fewer components and higher reliability than comparable systems. The result: no special power and cooling is required, and monthly maintenance bills are lowered.

### **HP-UX: Compatibility plus**

The operating system on the Model 840 is HP-UX, a flexible, general-purpose operating system that can handle a wide variety of work loads simultaneously. HP-UX is fully compatible with AT&T's UNIX\* System V Interface

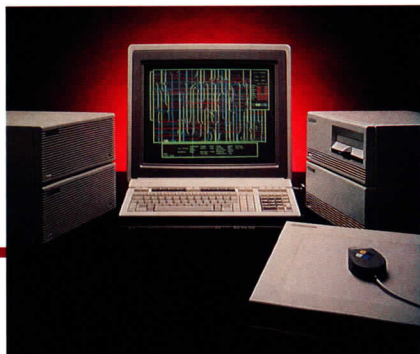
#### **KEY FEATURES OF THE MODEL 840**

- 4.5 MIPS CPU performance
- 32-bit data path
- 48-bit virtual address space
- Main memory up to 24 Mbytes
- Floating point co-processor
- Expandable to 60 users
- Battery backup/Auto restart after power failure
- 1m x .6m x 1m cabinet



\*UNIX is a trademark of AT&T in the U.S.  
and other countries.





The Model 840 is an extension of the HP 9000 engineering computer family which includes the Integral PC, Series 300 (shown here) and Series 500 workstations.

Definition (SVID) Issue I. Without compromising SVID compatibility, HP has developed features which extend the operating system's functionality.

Backed by our years of real-time systems experience, HP-UX includes a complete set of real-time features. It is the only UNIX-compatible operating system using kernel pre-emption to improve real-time response and predictability.

HP-UX also provides native language support, so you can market your solutions worldwide in 16 languages without developing and maintaining separate code. And automatic power-fail recovery, a unique feature of HP-UX that no other UNIX system can equal. The Model 840 will automatically recover from a short power failure in less than one minute.

HP-UX also provides a set of migration tools and documentation to aid HP 1000 customers in adapting RTE software to run under HP-UX. And with the inherent compatibility of HP-UX, software can easily be ported from HP 9000 engineering workstations to the Model 840.



As the high-end extension of the HP 1000 A-Series family of real-time automation computers, the Model 840 also has a complete set of real-time features comparable to other A-Series computers.

*A powerful extension  
to the HP 1000 and  
HP 9000 families that  
complements your  
current HP system*

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## *Industry standards protect your investment*

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Building on standards allows you to integrate computer systems from different vendors now and in the future. You can offer your major customers the industry standard they require: a UNIX operating system, HP-UX.

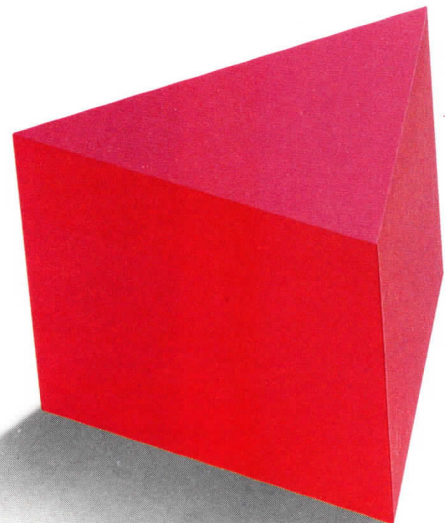
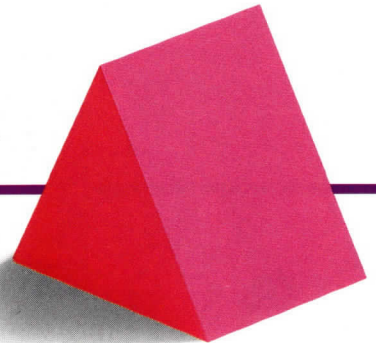
On the Model 840, standards start with the HP-UX operating system. Since HP-UX adheres to an industry standard, your software investment is protected. Applications can be easily ported between different UNIX systems, freeing you from the restrictions of a single computer vendor. The Model 840 with HP-UX will move quickly and smoothly into your existing UNIX environment.

Hewlett-Packard's commitment to standards extends to data bases, networks, graphics and languages. HP's ALLBASE is a sophisticated database management system that provides both relational and network (IMAGE) data access in a single product to make you more productive. The relational interface is compatible with IBM's Structured Query Language (SQL), a de facto standard. ALLBASE provides a growth path from IMAGE/1000 II and HP SQL on the HP 9000. And to save time and money developing data base

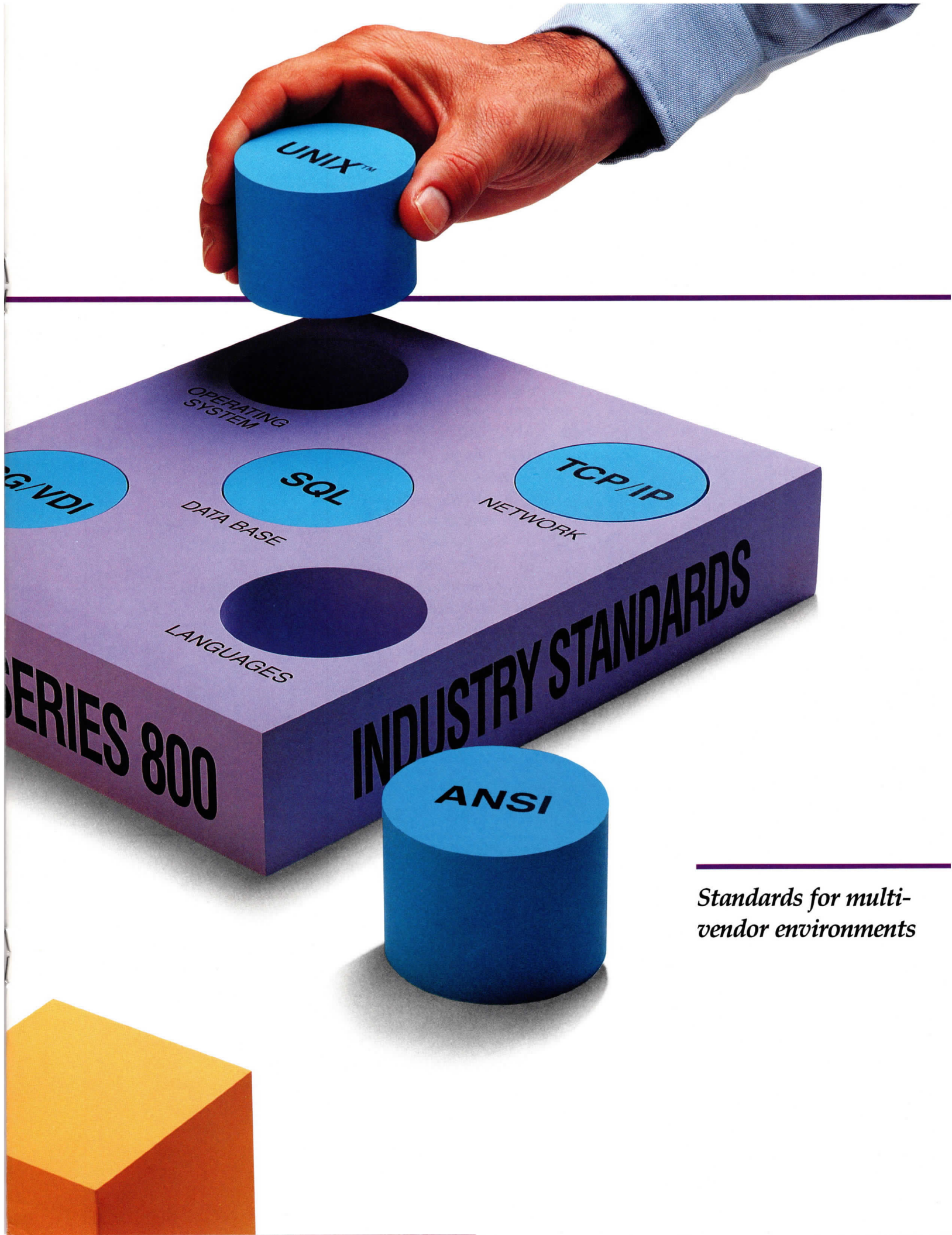
oriented applications, you can use HPtoday — a fourth generation application language.

High-performance networking products provide a smooth communication link between computers from HP and other vendors. The Model 840 supports ARPA/Berkeley networking over TCP/IP, for research and engineering customers working in a multi-vendor environment. HP's AdvanceNet networking system, built on the ISO Model, links HP computers together.

Languages and powerful 2-D and 3-D graphics tools are based on industry standards as well. You can choose from FORTRAN '77, C or Pascal. The Model 840 gives you the security of industry standards to protect your investment.







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*Standards for multi-  
vendor environments*



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## *Putting the power of the Model 840 to work for you*

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The Model 840's combination of high performance and affordability makes it an excellent choice for a variety of computer-aided engineering, scientific and manufacturing applications. Its versatility makes it the ideal computing engine for tasks requiring heavy computation, large data base management and real-time monitoring.

In scientific environments, the Model 840 can serve a department of research scientists, performing tasks such as data capture, simulation, image processing and statistical analysis.

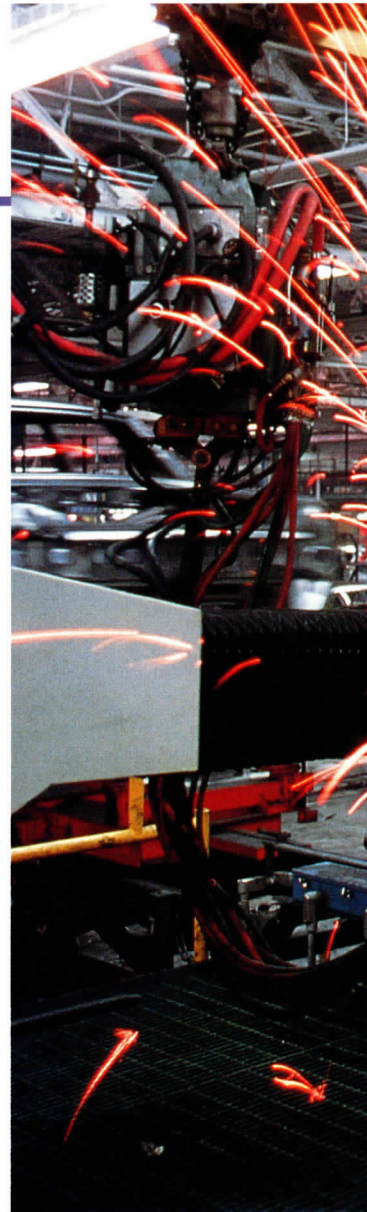
For engineering applications, the Model 840 provides the computation power necessary to perform circuit simulation, finite element analysis, PC board auto-routing and project management.

In manufacturing, the power of the Model 840 can be used to tie together machine and cell controllers with higher-level, plant-management systems. Its real-time capability, support of industry standards and powerful ALLBASE data base make the Model 840 uniquely qualified for area-management tasks such as computer-aided process planning and quality decision management.

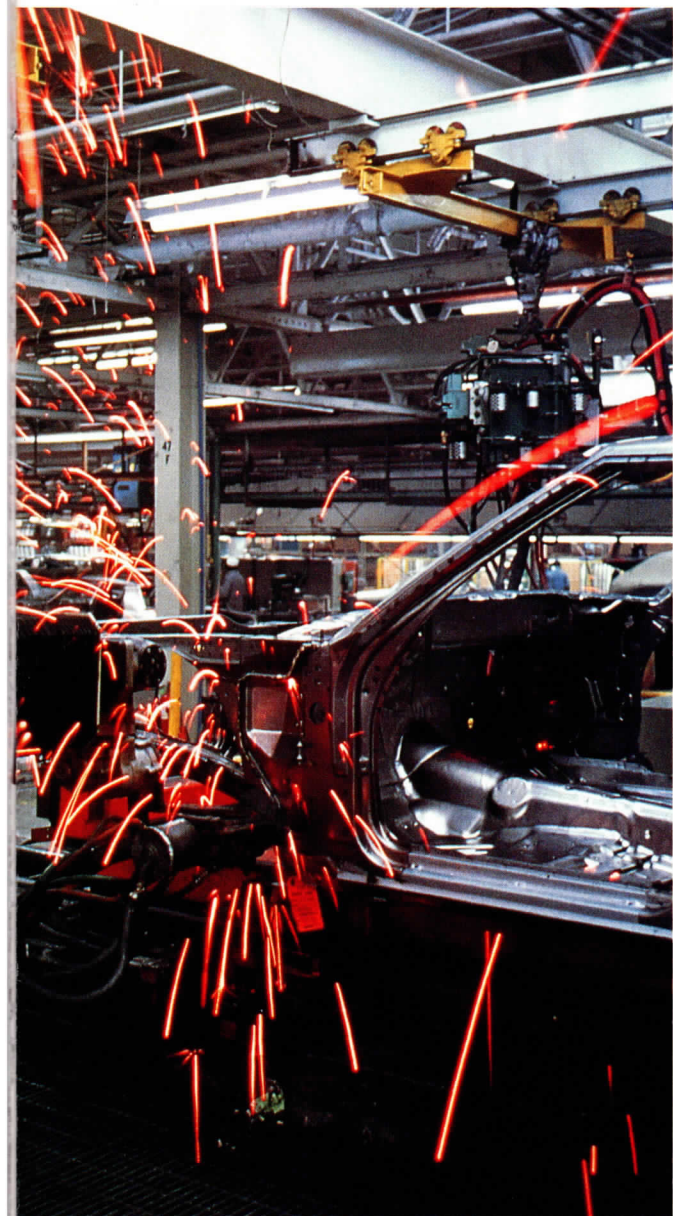
If you're developing your own software, the Model 840 with HP-UX features a flexible UNIX programming environment with powerful tools and utilities to increase programmer productivity and speed development.



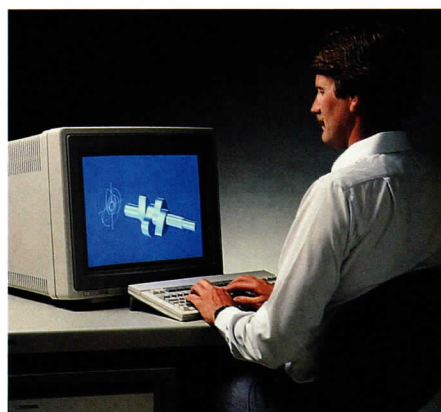
In scientific environments, the computing power of the 840 can be used to easily accelerate operations like Fast Fourier Transforms, while controlling several other processes.



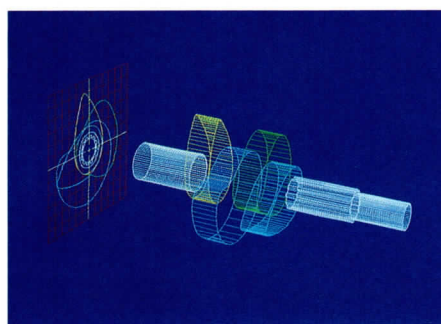




The Model 840 can be used in manufacturing to link machine or cell controllers with plant management systems for fully integrated factory information systems.



By networking an HP 9000 Series 500 to the Model 840, you can free the Series 500 for interactive tasks, while the Model 840 does additional heavy computation.



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*High performance  
computing for your  
challenging  
applications*

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## Working with HP

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HP customer support begins with premier technology and innovative products, plus a worldwide network of offices in 72 countries. Our support personnel include experts to evaluate your overall computing needs and help you solve problems.

HP's customizable array of support services for the Model 840 includes Contractual Hardware Maintenance Services, Software Subscription Services, HP ASSIST products for applications implementation aid and Response Center Support for fast answers to your questions.

In addition, we offer a complete series of training courses on HP products and HP customer applications. These courses are taught by experienced professionals in over 50 training centers worldwide. On-site training and custom training are also available.

Because we design quality into our products, you can enjoy a proven level of reliability that helps guarantee your system's long-term, low-cost performance. Over the past five years, HP has been rated #1 in support and overall customer satisfaction more consistently than any other company in a survey by Datapro Corporation.

In addition to computers, HP offers you a complete family of peripherals including printers, plotters, terminals and more. Since these products are designed to work together, you benefit from single-source support.

By choosing HP as your computer vendor you can take advantage of our winning combination of innovative products, worldwide support services and complete training courses. Call your local HP sales office or one of the HP regional offices listed on the back page today. Find out how the Model 840's features can increase your computing performance today and provide you with a greater competitive advantage for the future.



**HP's customizable support services allow you to choose the level of service and support your company needs — often at half the cost of our competitors.**





HP customer support is often just a phone call away. If you contract for our Response Center Support, experienced software and hardware engineers are available by phone to help you resolve problems.



*You choose the support services you need*

For more information about the Model 840 with HP Precision Architecture and HP-UX operating system, see your local Hewlett-Packard sales representative or contact the HP sales office nearest you.

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