

COMPAQ SYSTEMPRO



COMPAQ

It simply works better.

COMPAQ SYSTEMPRO

Breakthrough performance and expandability, customized to the demands of network servers and multiuser systems.

Compaq, the world leader in high-performance personal computers, now extends the boundaries of personal computing to bring an unprecedented combination of system performance and expandability to multiple users. Introducing the COMPAQ SYSTEMPRO Personal Computer System.

Every aspect of the COMPAQ SYSTEMPRO has been optimized to meet the demanding requirements of network servers and multiuser hosts.

First and foremost, the COMPAQ SYSTEMPRO is designed to deliver unprecedented total system performance. Its breakthrough system processor design enables you to work with both 386 and 486 technology. It also provides the unmatched capability to work with multiple processors for maximum performance.

The COMPAQ SYSTEMPRO takes full advantage of 32-bit input/output technology through Extended Industry Standard Architecture (Extended ISA or EISA) and innovative drive arrays. And system throughput is maximized through its exclusive COMPAQ Flexible Advanced Systems Architecture.

Equally important, the COMPAQ SYSTEMPRO delivers massive expandability, so it can be customized for a wide variety of environments. It also gives you the unique capability to actually increase performance as your needs grow, protecting your investment.

This unprecedented combination allows you to meet today's most demanding connectivity applications such as advanced local area networking, communications bridges and gateways, or multiuser transaction processing. It also provides a high-performance platform to take advantage of the powerful new generation of client-server applications. Applications that improve departmental productivity by sharing more information faster.

Moreover, you get all this performance and expandability while maintaining compatibility with the

thousands of industry-standard software packages and peripherals. So the COMPAQ SYSTEMPRO fits seamlessly into your company's connectivity plans.

The power of flexibility

Networks and multiuser systems are used for a variety of applications, placing a variety of processing demands on the server or host. In all cases, users need a system that provides instantaneous response.

That's why the COMPAQ SYSTEMPRO is engineered with a flexible system processor design that takes full advantage of both 33-MHz 386 and future 33-MHz 486 processor technology. So you can match processing performance to your application needs, now and in the future.

Initial models offer a powerful 386/33 System Processor that's built around a 33-MHz 386 microprocessor and optimized with a 64-Kbyte cache memory design that delivers zero wait states 98% of the time. The system also supports optional 33-MHz 387 and Weitek 3167 co-processors to speed numeric calculations.

This powerful system processor design drives processor-intensive software



more than twice as fast as the 20-MHz IBM PS/2 Model 80, even surpassing most minicomputers.

It also gives you the exclusive capability to take full advantage of advanced 33-MHz 486 processor technology as it becomes available. Technology that nearly doubles the computing power of the 33-MHz 386 processor. This means your investment in the COMPAQ SYSTEMPRO is fully protected—because you're ready for tomorrow's application demands now.

Even higher performance through multiprocessing

Performance in the COMPAQ SYSTEMPRO can grow to the highest level possible by adding a second processor to complement the existing one. This Compaq innovation allows the COMPAQ SYSTEMPRO to split tasks between the two system processors, so users can retrieve information faster and work with the most processor-intensive applications.

COMPAQ multiple system processors provide the greatest personal computing performance growth path ever. For example, adding the COMPAQ 386/33 System Processor Board increases computing potential by *nearly two times*. Better yet, the multiprocessing design of the COMPAQ SYSTEMPRO also supports 486 technology, so you can tap the power of two 486 processors for *up to four times* the computing power of a single 33-MHz 386 processor.

These multiple processors are supported by the leading network and multiuser operating systems, including Novell NetWare 386, SCO UNIX System V/386 and COMPAQ LAN MANAGER 386/486. This lets you run the thousands of industry-standard networking and multiuser applications faster and without modification. As a result, you don't have to buy new applications or retrain users.

An architectural landmark

The high-performance processing features in the COMPAQ SYSTEMPRO are brought together by COMPAQ Flexible Advanced Systems Architecture with Multiprocessing Support. Flex/MP allows simultaneous processing and I/O activity, so every component

works at its maximum speed. And nothing slows your company down.

Accelerated I/O performance

Input/output performance is vital to systems that support multiple users. That's why the COMPAQ SYSTEMPRO employs a powerful EISA I/O bus to complement the innovative processor design.

EISA I/O performance is accelerated through intelligent 32-bit bus master operations that transfer data to system memory in burst rates up to 33 megabytes per second, independent of the system processor. So users have faster access to their data.

The design of the COMPAQ SYSTEMPRO lets you take advantage of multiple 32-bit EISA boards to achieve maximum I/O performance. For example, you can add up to six 32-bit network interface controllers to deliver the highest possible network server throughput. You can choose 32-bit network interface controllers from several manufacturers such as Novell, Proteon, and Standard Microsystems.

The COMPAQ SYSTEMPRO is also compatible with the thousands of advanced industry-standard expansion boards, giving you the largest selection of expansion options available in the PC industry.

Breakthrough storage performance and reliability

Users in connected environments demand rapid access to vast quantities of information as well as reliable protection of critical data. That's why the COMPAQ SYSTEMPRO is the first PC designed



with innovative drive array technology—where data is distributed across a series of synchronized fixed disk drives that are addressed as a higher-performing unit.

Managed by the new COMPAQ 32-Bit Intelligent Drive Array Controller, drive arrays transfer data up to four times faster than nonarrayed drive systems. They also provide the capability to simultaneously respond to multiple data requests. So your data is ready when you are.

COMPAQ drive arrays also support the most comprehensive range of data protection capabilities, including drive mirroring, duplexing and a new feature, data guarding. Data guarding provides the utmost in data protection while using only 25% of array storage to protect data, leaving more room for user storage.

A secure investment

The COMPAQ SYSTEMPRO is designed to keep your investment safe by providing clear growth paths for performance and expansion. It's the first PC to deliver "performance scalability"—meaning performance actually *increases* as options are added. So you have the power to meet today's needs and even more power when your needs grow more complex.

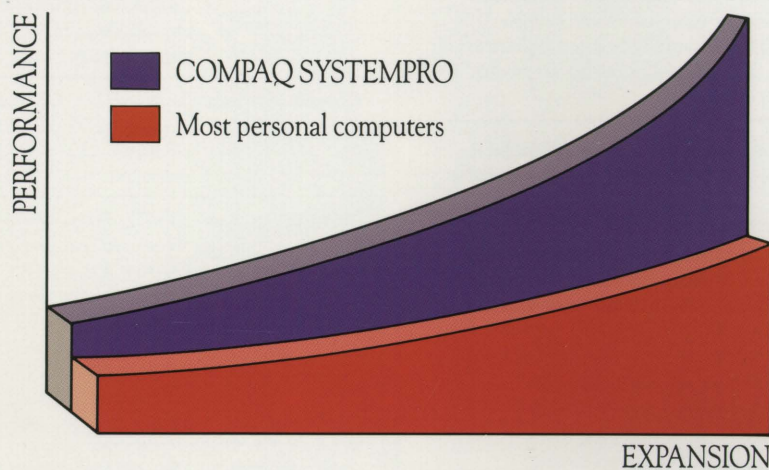
For example, the addition of a second system processor gives you the greatest computing potential of any system available. This capability is critical when you add applications to the server or host that require maximum computing power—such as shared departmental databases, or communications bridges and gateways. You also have the power to utilize 486 technology to meet future needs.

Drive arrays are also scalable. Configuring additional drives boosts both performance and capacity. You

can even add multiple 32-bit network interface controllers to support more users while improving network user response time.

The comprehensive design of the COMPAQ SYSTEMPRO accommodates massive expandability in all key areas:

- Four megabytes of memory are standard and can be expanded to an astounding 256 megabytes without using an EISA slot. This provides room to hold more applications and larger disk caches.
- A total of 11 expansion slots provide a growth path to support more high-performance expansion boards.
- There's room for up to 11 storage devices, with a total internal capacity of 1.68 gigabytes.
- External storage devices can be added for a total capacity of up to 4.28 gigabytes.



On most PCs, performance remains relatively constant when options are added. The new COMPAQ SYSTEMPRO is "scalable," meaning performance increases when options are added.

- Two tape drives can be used for unattended backup of over one gigabyte of data.

Simply put, you'll have more room to grow. And more room to perform.

Open for business

Compaq is committed to giving you the freedom to build powerful computing solutions using the best products offered by multiple vendors. An open choice is a powerful choice.

That's why the high-performance design of the COMPAQ SYSTEMPRO is fully compatible with the industry-standard operating systems, hardware and software applications multiple users depend on.

Compaq is also committed to giving your system support that's more than equal to the task. A worldwide network of Authorized Dealers is uniquely qualified to analyze your company's needs and devise powerful solutions built around high-performance COMPAQ products.

Specifications

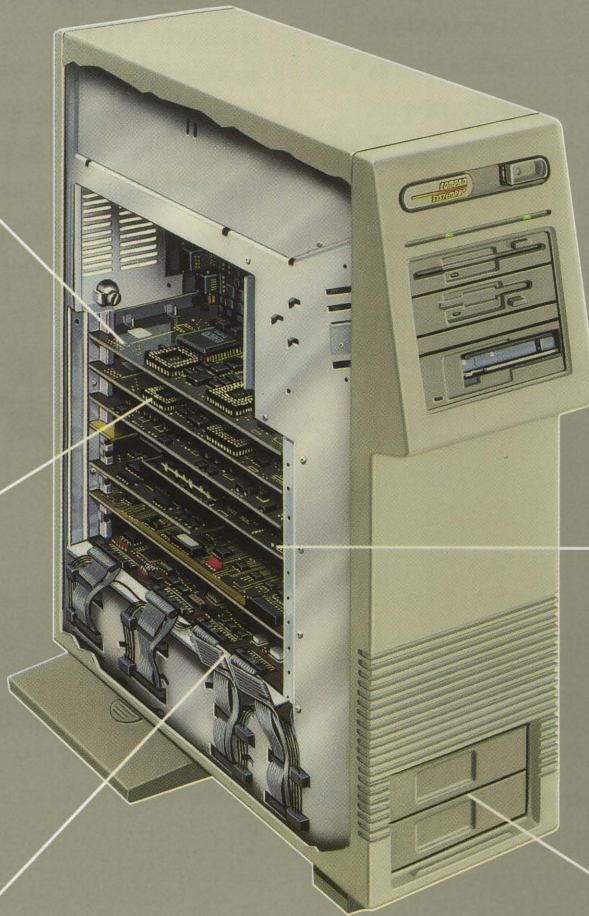
System Processor Design:	Flexible support for 33-MHz 386 and 486 processor technology; support for two system processors.	Keyboard:	COMPAQ Enhanced Keyboard.
386/33 System Processor on All 386-based Models:	32-bit 33-MHz 386 microprocessor; 33-MHz 82385 Cache Memory Controller with 64 Kbytes of high-speed static RAM; separate sockets for optional 33-MHz Intel 387 and 33-MHz Weitek 3167 numeric coprocessors.	Display Controllers:	Integrated Video Graphics System (standard); high-resolution video connector; VGA pass-through (standard); Advanced Graphics 1024 Board (optional); Advanced Graphics 1024 Memory Board (optional).
Multiprocessor Options:	COMPAQ 386/33 System Processor Board; compatible with Novell NetWare 386, SCO UNIX System V/386 and COMPAQ LAN MANAGER 386/486.	Display Options:	16-inch (40.6 cm) Advanced Graphics Color Monitor; 14-inch (35.5 cm) COMPAQ Video Graphics Color Monitor; 12-inch (30.5 cm) Video Graphics Monochrome Monitor.
Compatibility:	Runs the most popular software and hardware products designed for industry-standard personal computers; EISA expansion bus compatible with powerful 8-/16-/32-bit expansion boards.	Software Utilities:	COMPAQ EISA Configuration Utility; COMPAQ Expanded Memory Manager; disk cache software.
System Architecture:	COMPAQ Flexible Advanced Systems Architecture with Multiprocessing Support integrates multiple system processors, a separate 32-bit processor/memory bus and the 32-bit EISA I/O bus for highest possible system throughput.	Security:	External keylock protects internal components; power-on password and keyboard password prevent unauthorized system use.
Expansion Slots:	Total of 11 expansion slots; seven 8-/16-/32-bit EISA and four 32-bit processor/memory; eight slots available on all models.	Reliability:	COMPAQ 32-Bit Intelligent Drive Array Controller supports drive array mirroring and data guarding under all operating system environments. Controller duplexing supported by leading network operating system suppliers.
Memory:	4 megabytes of 32-bit memory standard, expandable to 256 megabytes. Shared system memory design with 80-ns enhanced page memory; maximum memory configuration flexibility.	Communications Options:	Supports 32-bit EISA network interface controllers from Novell, Proteon, Standard Microsystems, and others, as well as 8-/16-bit ISA network interface controllers.
Memory Options:	32-Bit 6-Socket Memory Expansion Board; 32-Megabyte Dual-Socket Memory Module; 8-Megabyte Dual-Socket Memory Module; 8-Megabyte Single-Socket Memory Module; 2-Megabyte Single-Socket Memory Module.	Other Options:	33-MHz 387 numeric coprocessor; 33-MHz Weitek 3167 numeric coprocessor; COMPAQ LAN MANAGER 386/486; MS OS/2 Version 1.2 as published by Compaq; MS-DOS Version 4; MS-DOS Version 3; COMPAQ 2400-Baud Internal Modem (U.S. and Canada); 15-MHz ESDI controller; 525-MB, 320-MB, 250-MB and 150-MB Tape Cartridges; COMPAQ SYSTEMPRO Technical Reference Guide.
Disk Storage Devices:	840-Megabyte 4-Drive Array (standard); 420-Megabyte Drive Array Pair (standard and optional); 240-Megabyte Drive Array Pair (standard); 210-Megabyte Fixed Disk Drive (optional); 120-Megabyte Fixed Disk Drive (optional); drive array expansion to 1.68 GB; Fixed Disk Expansion Units, Models 650 and 300; 650-Megabyte Fixed Disk Drive (optional); 320-Megabyte Fixed Disk Drive (optional); 300-Megabyte Fixed Disk Drive (optional); 11 mass storage device positions; combined internal and external storage up to 4.28 GB.	Warranty:	One-year limited warranty.
Additional Storage Devices:	5 ¹ / ₄ -inch 1.2-Megabyte Diskette Drive (one standard, second optional); 5 ¹ / ₄ -inch 360-Kbyte Diskette Drive (optional); 3 ¹ / ₂ -inch 1.44-Megabyte Diskette Drive (optional); 320-/525-Megabyte Tape Drive (optional); 150-/250-Megabyte Tape Drive (optional); supports second 320-/525-Megabyte Tape Drive (optional).	Physical Specifications:	23.8" H x 20.3" D x 7.6" W (60.5cm H x 51.6cm D x 19.2cm W).
Standard Interfaces:	One Parallel Printer Interface and two Buffered Asynchronous Communications Interfaces (serial); Pointing Device (mouse) Interface.	<h2>Standard Configurations</h2>	
		Model 386-840:	386/33 System Processor Board; 4 megabytes of system memory; COMPAQ 32-Bit Intelligent Drive Array Controller; 840-Megabyte 4-Drive Array (4 x 210 MB); six 8-/16-/32-bit EISA slots and two 32-bit processor/memory slots available.
		Model 386-420:	386/33 System Processor Board; 4 megabytes of system memory; COMPAQ 32-Bit Intelligent Drive Array Controller; 420-megabyte 2-drive array (2 x 210 MB); six 8-/16-/32-bit EISA slots and two 32-bit processor/memory slots available.
		Model 386-240:	386/33 System Processor Board; 4 megabytes of memory; COMPAQ 32-Bit Intelligent Drive Array Controller; 240-Megabyte 2-Drive Array (2 x 120 MB); six 8-/16-/32-bit EISA slots; and two 32-bit processor/memory slots available.

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The COMPAQ SYSTEMPRO system processor design gives you the unmatched flexibility to utilize both 33-MHz 386 and 33-MHz 486 processor technology.

The COMPAQ SYSTEMPRO is the first PC to support multiple system processors, providing up to four times the computing power of a single 33-MHz 386 system processor.

Innovative drive array technology and the COMPAQ 32-bit Intelligent Drive Array Controller distribute data across a series of synchronized drives that are addressed as a single unit—significantly improving performance and data reliability.



The system can be configured with up to 11 storage devices, choosing from a range of high-performance, high-capacity fixed disk, tape and diskette drives for a total internal capacity of 1.68 gigabytes.

A total of 11 expansion slots. Four 32-bit processor/memory slots expand RAM to 256 MB. Seven EISA slots support powerful new 32-bit expansion boards and existing 8-/16-bit expansion boards.

The lower storage area holds eight of the eleven storage devices, giving your system room to grow along with your needs. The front access panel can be removed for easy access to two of the storage devices.

The COMPAQ Flex/MP system architecture supports multiple system processors, a separate 32-bit processor/memory bus and the 32-bit EISA I/O bus. This innovative design optimizes system throughput while maintaining compatibility with industry-standard hardware and software.