Think. Think again.
Whatever your preconceptions about minicomputer systems, think again. We did. And developed a simple, new architecture and operating system that eliminates the redundancy and wasted memory inherent in traditional minis that echo big-computer design philosophy. The result is cost-saving efficiency.

Because no other mini has been designed for multiprogramming, no other mini can offer the performance of a Mini DataCenter.

Code and data are handled in separate modules. By dividing program elements into those that will change and those that do not, codes can be shared among all users while each maintains his own unique data space. Result. No memory is wasted.

Virtual memory is provided by a user-determined form of code segmentation. This approach permits a program to be larger than the main memory and avoids the thrashing between disk and memory that often results when segmentation is totally machine determined. The 3000CX automatically eliminates swap out of segments that are in frequent use.

A hardware-implemented variable stack design sharply reduces the amount of memory required to execute programs. No data area is wasted by unused sub-routines. The data stack also provides variable-size arrays; re-entrant code, recursive programming, and an extremely efficient method of parameter passing to sub-routines.

Performance from architecture designed for efficient software.

A 32 bit LSI ROM microprocessor is at the heart of every Mini DataCenter. This microprocessor implements 182 instructions, has a cycle time of 179 nano-seconds, utilizing overlapped microinstructions to provide both extreme speed and power — as many as 5.27 million operations per second.

Add to this, interleaved memory modules for faster access, CPU and I/O processor designed for greater throughput and bus-oriented architecture for modularity.

Program size is kept small because of the very efficient code generation resulting from a strong instruction set, specifically designed to implement high-level languages. The subroutine call process is unusually fast because the microcode — not the user — shoulders the burden of determining whether code segments are in disk or memory. Program design is simplified because many features of the instruction set are reflected in the syntax of the programming languages.

The result is difficult to accept at first: a system that provides a range of operating features on a par with large-scale data systems.

At a fraction of the cost, it extends the capabilities of a major data system outward to users who want the features and convenience of a large system, but whose problems don't require the full brute force capabilities of a costly major system. In the corporate environment, it permits EDP management to shift time-consuming lower-priority management demands out of the central system's work flow with measurable savings in time and cost. Able to communicate with other HP computers and with major IBM systems, while performing other batch and
interactive tasks, a 3000CX Mini DataCenter can form the basis of powerful distributed systems that enhance the reach, versatility and value of the corporate-level effort.

Priced between $99,500* and $203,500.* Don't look for the competition. There isn't any.

In fact, at any price, you'll find few systems that offer a single operating system for concurrent execution of batch, real-time and time-share with a common file system for all.

Few systems let you work simultaneously in any mode from multiple interactive terminals concurrently. Or let you do it in RPG, COBOL, FORTRAN, BASIC and SPL at the same time; even mixing languages in the same program. Or permit terminal accessed input-output spooling.

Few systems implement virtual memory and code-sharing programming in hardware.

Few systems offer decimal arithmetic and extended precision floating point as time saving microprocessor features. Or come with a built-in debug and trace to cut program check-out time in half.

Few systems offer you as extensive an array of peripherals and input options available from the manufacturer.

No other system offers a BASIC interpreter plus a full BASIC compiler with execution as much as 10 times faster than those attainable with incremental compilers.

And, of course, no other system offers you the worldwide Hewlett-Packard delivery and maintenance network, the HP guarantee, or HP's tradition of quality.

Write for complete information.
Or phone your nearby HP field engineer. You work for a living. It's time you found out about a computer system that does.

*Domestic USA prices only.

HP minicomputers. They work for a living.

HEWLETT PACKARD
Sales and service from 172 offices in 65 countries.
1501 Page Mill Road, Palo Alto, California 94304
22511