

HEWLETT-PACKARD

MICRO 3000 and MICRO 3000XE

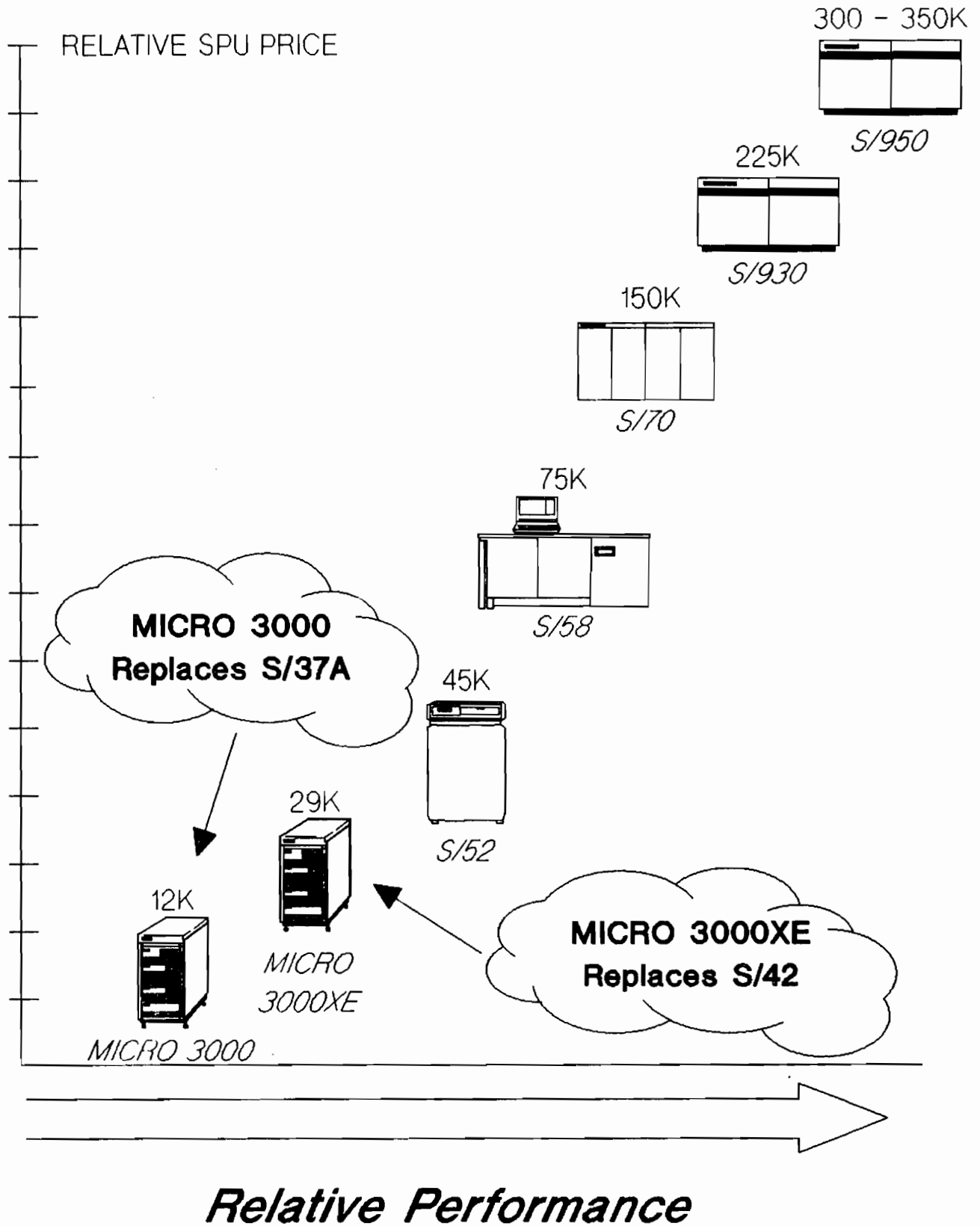
HP 3000

Sales Guide



Internal Use Only

HP3000 FAMILY



MICRO 3000 and MICRO 3000XE Highlights

A quick look at the key facts

MICRO 3000

MICRO 3000XE

Product

- o Replaces the Series 37
 - lower price than Series 37
 - similar performance to Series 42
 - o Up to 16 users
 - o NMOS III VLSI processor for high performance
 - o HP Easytime - menu-driven interface for simplified system operation
 - o Factory integrated hardware and software for easy installation
- o Replaces the Series 42
 - similar performance
 - 30% lower price
 - o Up to 56 users
 - o NMOS III VLSI processor with 128Kb cache
 - o Cost-effective field upgrade for installed S/37s

Competition

- o IBM "Baby" 36
 - o DEC MicroVAX II
 - o DG MV2000 DC
 - o Wang VS 5
 - o Nixdorf
 - o Altos
- o IBM System/36
 - o DEC MicroVAX II
 - o DG MV2000 DC
 - o Wang VS 6
 - o Nixdorf



Pricing

- o Entry System = \$21,350 (\$20,925 F.B.P.)
 - SPU with 2Mb
 - 81Mb disc
 - cartridge tape
 - console
 - 8 ports
 - HP Easytime
 - o Full size system = \$26,950 (\$26,525 F.B.P.)
 - SPU with 4MB
 - 130Mb disc
 - rest same as above
 - o SPU only with 2Mb = \$12,000 (\$11,860 F.B.P.)
 - o 100% quota and commission for VAR sales
 - o 0.75 functional units
 - o Series 37 level software pricing
- o SPU with 2Mb = \$29,500 (\$29,325 F.B.P.)
 - o Effective SPU price in special marketing package = \$25,960 (\$25,785 F.B.P.)
 - o Special marketing package provides discounts on system components
 - o Field upgrade from Series 37
 - CPU only = \$8,500 (\$8,480 F.B.P.)
 - CPU with 2Mb = \$15,500 (\$15,460 F.B.P.)
 - CPU with 4Mb = \$22,500 (\$22,460 F.B.P.)
 - I/O Extender = \$8,000 (\$7,980 F.B.P.)
 - o Significant savings on memory and I/O Extender with field upgrades until April 30, 1987
 - o 100% quota and commission for VAR sales
 - o 1.25 functional units
 - o Series 37 level software pricing

Availability

- o System - December '86 (UB-Delta-1)
 - o HP Easytime - Q3 FY87 (UB-Delta-3)
- o System - December '86 (UB-Delta-1)

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

TABLE OF CONTENTS

I. Chapter 1 -- Overview	I
A. Introducing MICRO 3000	1
B. Introducing MICRO 3000XE	2
C. New Systems Technology	3
D. New Software Technology	4
E. More Than New Processors	5
F. More Than New Products	6
G. Attractive MICRO 3000 Support Services	7
H. Choosing the Right System	8
I. Series 37 Performance Booster	9
MICRO 3000XE Field Upgrade Promotion	9
J. New Series 52 and Series 58 Field Upgrades	10
K. The New HP3000 Family	11
II. Chapter 2 -- Target Markets	II
A. Target Markets	12
B. The Branch Office Market	13
C. Departmental Computing Market	15
D. Small Business Market	17
III. Chapter 3 -- Performance	III
A. Performance Summary	18
B. Outstanding Performance	19
C. Memory Multiplies Performance	21
D. Performance Improvement for Installed S/37s	22
IV. Chapter 4 -- Competition	IV
A. Competitive Summary	23
B. Win by Knowing the Competition	24
1. HP beats the IBM System 36	24
2. HP beats DEC's MicroVax II	25
3. Clear superiority over Data General and Wang	26
4. Superior technology beats the competitors	27
C. MICRO 3000 Systems: List Price Comparison	28
D. MICRO 3000 Systems: Cost of Ownership Comparison	29
E. Competitive Specifications	30

CONTENTS

V. Chapter 5 -- Ordering and Configuring the MICRO 3000	V
A. Product Choices	32
B. MICRO 3000 Product Structure	33
C. Ordering Instructions	35
D. Ordering Examples	37
E. Configuration Information	40
F. MICRO 3000 Maximum Configurations	41
G. Supported Peripherals	42
VI. Chapter 6 -- Ordering and Configuring the MICRO 3000XE	VI
A. Product Choices: Three Ways to Order	43
B. Full Product Structure	44
C. SPU Ordering Example	46
D. Marketing Package System	47
1. Structure	47
2. Putting the Right Package Together	48
3. Ordering Instructions	50
4. Ordering Example	51
E. Upgrade	52
1. Promotion and Ordering Instructions	52
2. Ordering Examples	53
F. Configuration Information	54
G. Supported Peripherals	56
VII. Chapter 7 -- HP3000 Product Line Pricing Update	VII
A. Upgrade Pricing Update	57
B. Series 52 and Series 58 Field Upgrades	58
VIII. Chapter 8 -- Questions and Answers	VIII
A. General	59
B. MICRO 3000	61
C. MICRO 3000XE	63
D. Series 52 and Series 58 Field Upgrades	65
IX. Chapter 9 -- Appendices	IX
A. Appendix A	66
Detailed Configurations for Performance Chapter	66
B. Appendix B	67
Detailed Pricing for Competition and Target Market Chapters	67
C. Appendix C	75
Literature list and part numbers	75



Chapter 1

Overview

- **Introducing MICRO 3000**
- **Introducing MICRO 3000XE**
- **New Systems Technology**
- **New Software Technology**
- **More Than New Processors**
- **More Than New Products**
- **Attractive MICRO 3000 Support Services**
- **Choosing the Right System**
- **"Series 37 Performance Booster"**
MICRO 3000XE Field Upgrade Promotion
- **New Series 52 and 58 Field Upgrades**
- **The New HP3000 Family**

Introducing MICRO 3000

A Series 37 replacement and much more!

A new entry level system for the HP3000 family

MICRO 3000 has been engineered to MORE THAN REPLACE the Series 37. A lower price, significantly improved performance, simple ordering and start-up, and enhanced user interface make the MICRO 3000 the LOWEST COST, HIGHEST PERFORMANCE, EASIEST TO USE entry level HP3000 ever!

Priced below the Series 37

With an additional I/O slot, more disc storage and greater performance, the 2Mb MICRO 3000 is comparably priced to the 1Mb Series 37A. When compared to the 2Mb Series 37A, the MICRO 3000 has a 21% lower cost!

The cost advantage is just as significant against our competition. The MICRO 3000 costs 10% less than IBM's System 36 and 15% less than the DEC MicroVAX II for comparable capability and performance.

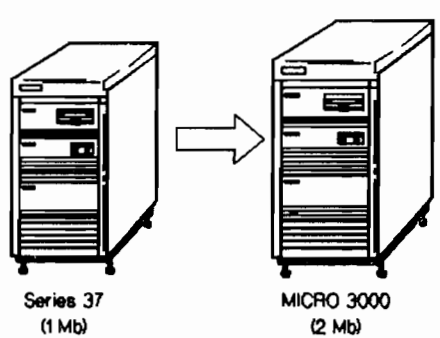
New state-of-the-art hardware technology

The MICRO 3000 offers performance similar to the Series 42 through the use of a new custom NMOS III VLSI processor chip and 1Mbit RAMs on the CPU board. This technology increases reliability and thus provides bottom line benefits with reduced support costs. This faster CPU is complemented by disc caching and new higher performance disc drive technology.

Simplicity at it's best

MICRO 3000 is much more than just an excellent price/performance engine. It's a whole new concept in ease-of-use from system installation to system operation. The SPU, disc drive, tape drive, and FOS come assembled and configured from the factory through the new Integrated System Shipment (ISS) program. System operation is simplified for novice users through HP Easytime, a new menu-driven interface for MPE.

**MICRO 3000:
MUCH MORE THAN A SERIES 37 REPLACEMENT**



Series 37 (1 Mb) → **MICRO 3000 (2 Mb)**

- **Priced 22% below a 2Mb Series 37 and at \$21,350 includes:**
 - Console
 - 67Mb Tape
 - 2Mb Memory
 - HP Easytime
 - 81Mb Disc
 - 8 Ports
- **Series 42 Performance**
- **State of the Art Technology**
 - NMOS III VLSI CPU
 - 1 Megabit RAMs
 - Disc caching standard
- **Easiest HP 3000 to install, operate, and use!**
 - Menu-driven interface
 - Pre-assembled system
 - No dedicated console required
- **New higher capacity and higher performance disc drives**

Introducing MICRO 3000XE

A Series 42 replacement in an office package at a lower cost!

A Series 42 replacement

The MICRO 3000XE has the configurability and performance to provide a new system in the Series 42 market place. With similar point-to-point terminal maximums, equivalent INP support, and increased memory capacity, the MICRO 3000XE offers customers a lot of system in a small office package.

Priced below the Series 42

The MICRO 3000XE SPU comes standard with 2Mb and is available in a specially priced promotion which provides a flexible cost-effective system solution. With this promotion, the MICRO 3000XE costs 30% less than a comparably configured Series 42 SPU. Add to this the Series 37 level software pricing and lower maintenance costs and you have a system that can't be beat! The MICRO 3000XE costs 10% less than DEC's MicroVAX II.

New technology provides Series 42 performance

As with the MICRO 3000, the capability and performance of the new system is achieved by the

use of state-of-the-art technology. A 128Kb CPU Cache (same size as the Series 70) is integrated with the MICRO 3000 NMOS III VLSI processor and offers new levels of performance. New 1 MBit RAM's provide 4Mb memory boards which increases maximum memory support to 8Mb. This expanded memory, combined with disc caching, offers excellent performance in larger configurations.

Attractive upgrade for installed Series 37s

MICRO 3000XE's office package (same SPU cabinet as the Series 37) is more than convenient; it's an exciting upgrade opportunity for thousands of Series 37 systems in the installed base. Simple card swaps are available for all 37A and 37XE customers starting at \$8.5K (U.S. List). An introductory promotion can save customers up to \$11,000 on this CPU upgrade when combined with additional memory and an I/O extender.

THE EXPANDABLE MICRO 3000XE

Series 42

Replaces

Series 37 (A or XE)

Upgrades

MICRO 3000XE

- Series 42 performance
- Series 42 configurability in office package
- Lower cost than the Series 42
 - 30% lower SPU price
 - Series 37 level software pricing
 - Series 37 software support pricing
 - 70% lower BMMC
- Simple field upgrade for installed Series 37s

	MICRO 3000XE	Series 42
pt-to-pt	56	60
INPs	3	3
Max Memory	8Mb	3Mb

New Systems Technology

Outstanding price/performance through advanced hardware technology

The high performance of the MICRO 3000 and MICRO 3000XE is achieved through the use of state-of-the-art CPU and memory technology.

NMOS III VLSI CPU

At the heart of these new systems is an NMOS III VLSI processor chip. This is the same hardware technology used in the Series 950 and delivers both high performance and high reliability. In fact, the CPU chip of the MICRO 3000 systems is the most dense NMOS III chip HP has ever developed!

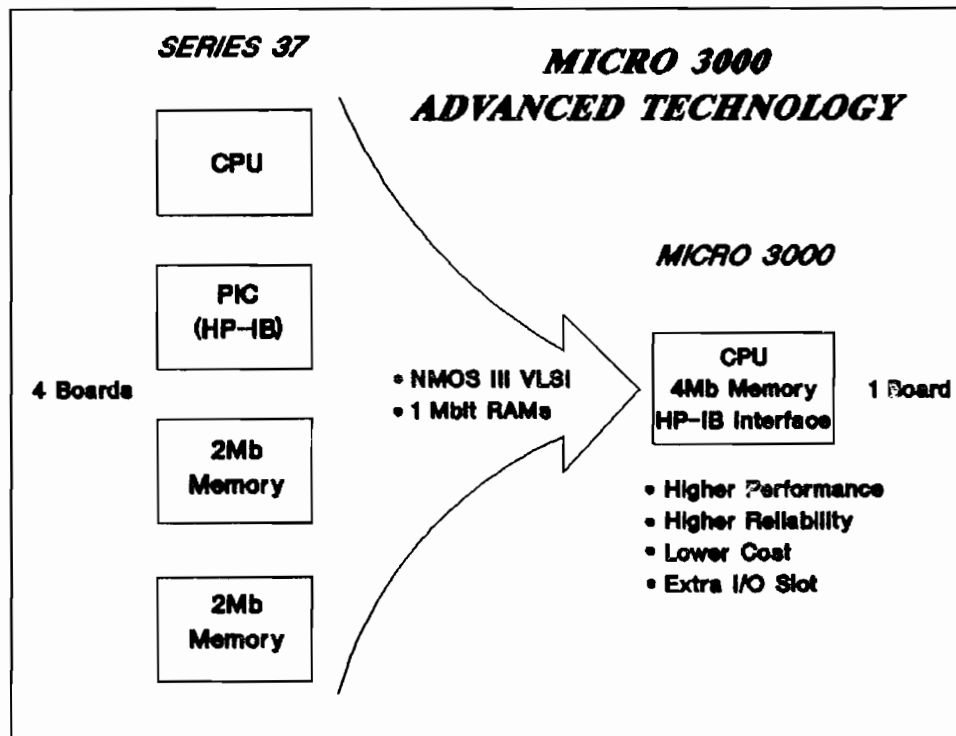
1 Megabit RAM technology

The MICRO 3000 systems also use advanced 1 Megabit RAMs to expand main memory capacity. This allows us to offer 8Mb maximum memory on the MICRO 3000XE using two 4Mb memory boards.

Putting it all together

The MICRO 3000 takes this NMOS III CPU chip and new memory technology and combines it with a VLSI version of the HP-IB Interface on a single board. This single board replaces as many as four boards on the Series 37! Both a 2Mb and 4Mb version of this combined CPU, memory, and I/O board are available. In addition to lower cost and higher reliability than the Series 37, this new board provides customers with an extra I/O slot for system expansion.

For MICRO 3000XE, the NMOS III CPU chip is combined with a 128Kb memory cache on the CPU board. This cache is the same size and organization as the cache on the Series 70. This new high performance CPU board, along with the separate 4Mb memory board for the MICRO 3000XE, provides an attractive field upgrade for existing Series 37 systems.



New Software Technology

HP Easytime: Simplified system operation for the MICRO 3000

HP Easytime provides a simple, menu-driven interface for MPE on the MICRO 3000 system. It allows novice customers to begin using and managing the system with minimal training. Instead of needing to learn the MPE command syntax, they can perform basic system operations by merely responding to a series of simple menus.

Three types of users

There are three types of target users for HP Easytime:

- * "General Users" who need to perform basic tasks such as managing printouts and files.
- * "Operators" who, in addition to user tasks, can access commands to perform system backup and disc management.
- * "System Administrators" can perform all tasks, including system configuration and account management.

Reduced operational costs

HP Easytime reduces the cost of operating the system by:

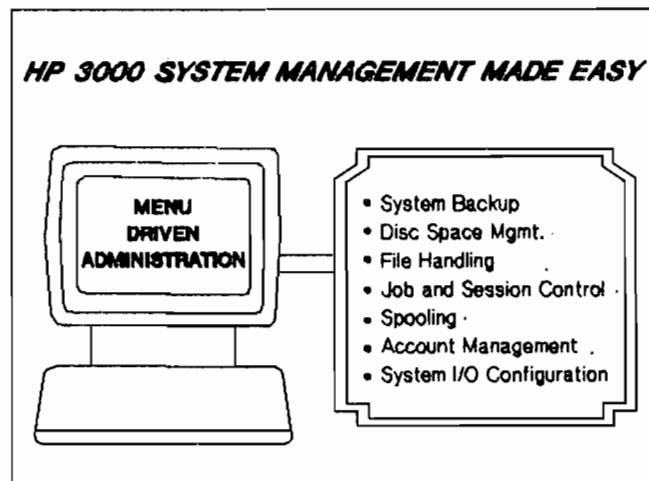
- * Eliminating the requirement for a full time operator.
- * Eliminating the need for a dedicated system console.
- * Computer-based training which simplifies user training.

To ensure successful system implementation, system operator/manager training is still required for an HP support contract.

Only supported on MICRO 3000

At first release, HP Easytime is only supported on the MICRO 3000 - NOT on the MICRO 3000XE or larger HP3000 systems. This is due to the limited size of system configurations which HP Easytime can support. Future releases of HP Easytime will expand support for the entire HP3000 family.

HP Easytime is supported on the UB-Delta-3 release of MPE-V/E which will be available in Q3 FY87. It must be ordered for uncoordinated delivery with every MICRO 3000 order, and it comes at no cost to the customer.



More Than New Processors!

New mass storage products to meet the special demands of the market!

Providing new high performance office environment disc drives

- o HP 7957 - A high performance, low cost replacement for the 7945!
 - * 81Mb - 47% higher capacity
 - * 20-50% higher performance
 - * \$5,200 U.S. List
 - * Over 40% reduction in cost/megabyte
 - * Ideal for the office

- o HP 7958 - A full replacement for the 7914 in a 7945 package!
 - * 130Mb
 - * Equal or better performance
 - * \$7,700 U.S. List
 - * Over 40% reduction in cost/megabyte
 - * Ideal for the office - allows up to 260Mb in the MICRO 3000 cabinet

Note: Return credit promotions make new disc and tape offerings even more attractive.

Providing high capacity and performance to match the midrange systems capabilities of the MICRO 3000 systems

- o HP 7936/7937 - New high capacity discs in a small package!
 - * 307Mb and 571Mb capacity
 - * \$13,500 and 17,600 U.S. List
 - * 41% reduction in cost/megabyte

Providing a range of backup solutions

- o HP 9144 - The cartridge tape solution for customers who don't need unattended backup is now supported up to 307Mb. Backup will take typically less than three hours.
- o HP 35401 - Cartridge tape autochanger provides unattended backup for up to 504Mb.
- o HP 7974/7978 - The 1/2 inch tape solutions for your high capacity needs.

NEW DISCS	7957	7958	7936	7937
DISC CAPACITY	81Mb	130Mb	307Mb	571Mb
U.S. LIST (FBP)	\$5,200 (\$5,125)	\$7,700 (\$7,590)	\$13,500 (\$13,250)	\$17,600 (\$17,350)
COST/MB	\$64	\$59	\$44	\$31

More Than New Products!

New programs to meet the special demands of the market!

For MICRO 3000:

Integrated System Shipment (ISS)

Making it easy to sell, order, and install

Providing the right solution for the MICRO 3000 market place means more than having the right set of products. It means making it easy to sell and deliver the complete solution. With the MICRO 3000, HP puts it all together!

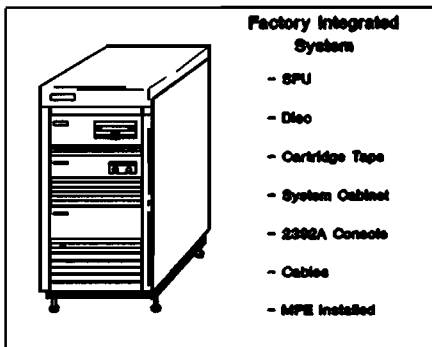
Easy to order and sell

ISS makes ordering the system easy because one product number includes the SPU, disc drive, cartridge tape, system cabinet, 2392A console, and cables.

Easy assembly and installation

The MICRO 3000 system comes directly from the factory fully assembled on a single pallet. Only the console and manuals are in separate packages. In addition, MPE comes pre-installed on the system disc. Installation (included) consists simply of:

1. Uncrating the cabinet
2. Connecting the system console
3. Plugging in the power
4. Turning the power on
5. You're up and running!



For MICRO 3000XE:

Marketing Package System

Providing the total system at the right price

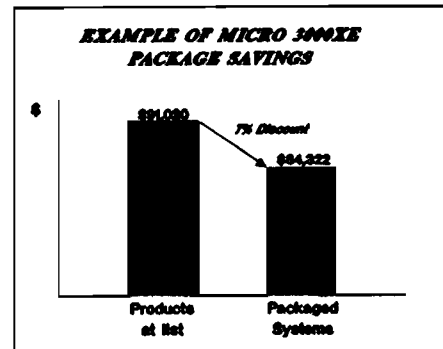
Providing a flexible solution to match the capability of the MICRO 3000XE means taking advantage of the wide range of system peripherals HP has to offer. In addition, it has to be at the right price. With MICRO 3000XE, we've provided both.

The MICRO 3000XE marketing package system

Besides the new low price of the SPU, a special marketing package is available which bundles SPU, memory, disc, tape, terminals, and terminal ports at up to an 18% discount from list. The products included are:

- * New or Upgrade MICRO 3000XE
- * 2 to 6Mb memory add on
- * 130, 307, or 571Mb disc
- * 9144, 35401, or 7974 tape
- * ATP/M ports (8 ports max)
- * 2392A terminals (8 max)

(More information is available in the configuration and ordering section of this guide.)



Attractive MICRO 3000 Support Services!

MICRO 3000's high reliability and new entry-level support services mean low support costs

Industry leadership support

Hewlett-Packard support is an extremely powerful selling tool. With HP's reputation as an industry leader and new support services for entry level customers, it is easier to close MICRO 3000 and MICRO 3000XE sales.

Low maintenance costs

The use of VLSI technology in the MICRO 3000 systems leads to high reliability and lower maintenance costs. For example, the \$56 BMMC and \$70 SMMC of the MICRO 3000XE is 70% lower than that of a 2Mb Series 42!

New Startup Response Center Support

There is a new level of service designed to meet the needs of entry level customers during the first year of support. This service combines on-site implementation assistance and on-site problem resolution assistance during the first 3 months of support with 12 months of Response Center Support (RCS) for telephone assistance and support material updates.

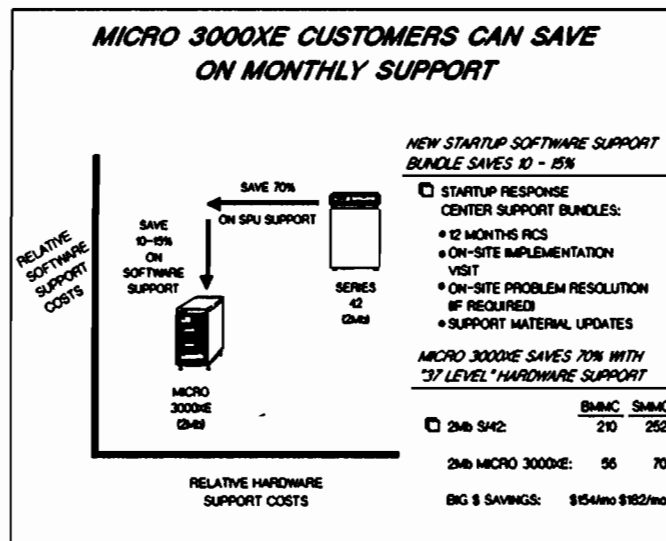
Standard software support services

Also available for the MICRO 3000 and MICRO 3000XE:

- Account Management Support for personalized on-site assistance.
- Response Center Support for telephone assistance.
- Software Materials Subscription for mailed software documentation and periodical updates.

Other services and training

- Free Orientation Classes (U.S. Only): 1 day workshop, Managing Your System Installation.
- Hardware and Software Installation: on-site installation *is included*.
- System Administration Training: 4 day course on day-to-day system operation.
- Hardware Maintenance Services: a range of response times and coverage options are available.



Choosing the Right System

Choose between the MICRO 3000 and the MICRO 3000XE based on configurability needs. Choose the Series 52 when higher performance is needed.

The choice of the best system for your customer will depend on their needs for performance, configurability, and cost.

MICRO 3000 vs. MICRO 3000XE

Both MICRO 3000 and MICRO 3000XE offer customers Series 42 performance in similar configurations. The MICRO 3000 is the lowest priced choice for customers who need a maximum of 16 terminal ports or a maximum of 1 INP and 1 LAN link. Choose the MICRO 3000XE for customers who need larger configurations today or expect their needs to grow. With up to 8Mb of main memory support, it can handle a larger number of concurrent users or applications.

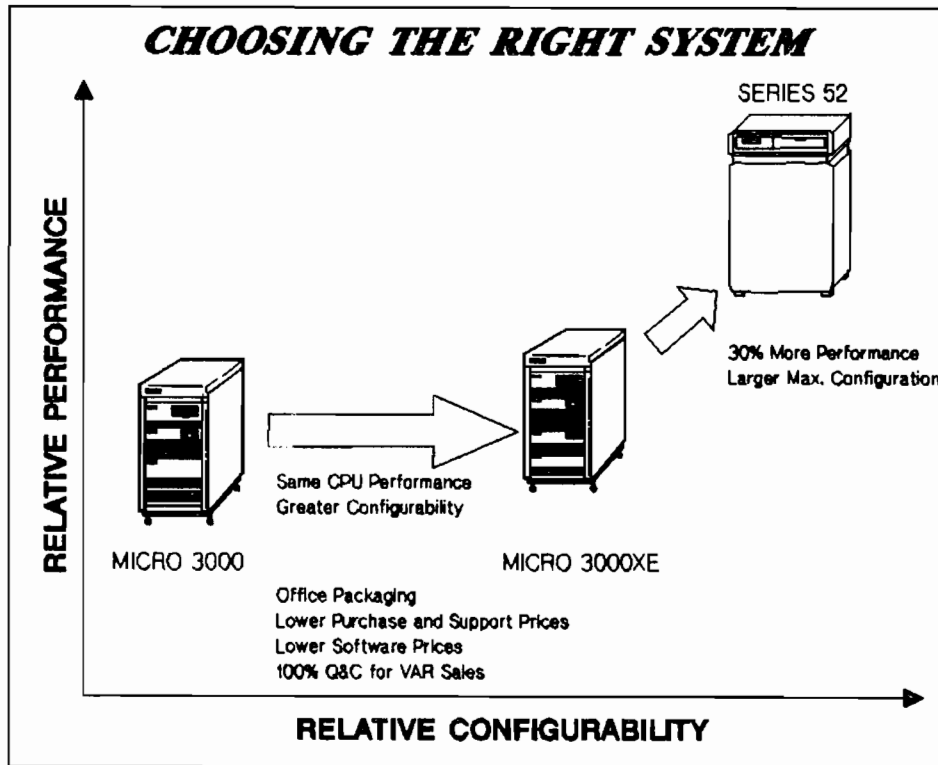
MICRO 3000XE vs. Series 52

The Series 52 offers 30% higher performance than the MICRO 3000XE for support of a larger number of users or applications. While both

systems have comparable maximums for individual devices (e.g. terminals, INPs), the Series 52 has more I/O slots and therefore can support an overall larger number of devices.

The MICRO 3000XE, on the other hand, offers a lower cost solution through a lower list price, lower support prices, and lower software pricing. It also offers the advantage of office environment packaging in smaller configurations with office-environment peripherals. This advantage will go away, however, in larger configurations with non-office-environment peripherals, such as 7936/7937 disc drives or 7974/7978 tape drives.

The MICRO 3000XE will also be a very attractive choice for sales through VARs because it qualifies for the more aggressive discount schedule and the 100% quota and commission credit of the Entry System Commercial VAR program.



"Series 37 Performance Booster" MICRO 3000XE Field Upgrade Promotion

Specially priced field upgrades for installed Series 37s

Tailored to meet Series 37 customer needs

The "Series 37 Performance Booster" program offers special reduced prices on memory and I/O expansion components when purchased in conjunction with a field upgrade to the MICRO 3000XE. This promotion allows your customers to add memory and the I/O extender when upgrading their CPU at just over HALF THE COST of adding them later.

Aggressively priced CPU upgrade to the MICRO 3000XE

The CPU portion of the field upgrade to the MICRO 3000XE is very affordable at \$8,500 U.S. List (\$8,480 F.B.P.). The upgrade consists of a single board swap and requires installation of UB-Delta-1 MIT.

Buy memory and CPU together...and save!

To balance the increased processing power of the MICRO 3000XE and achieve optimal performance, our performance testing shows that many customers will want to add additional memory. Normally, 2Mb and 4Mb memory additions would be offered at 18% below list price with the CPU upgrade.

As part of this introductory promotion, customers may purchase memory along with their CPU upgrade and receive **ADDITIONAL** discounts of \$2,500 to \$4,500 on top of the normal 18% discount. Return credits for 1/2Mb, 1Mb, and 2Mb Series 37 memory boards give your customers additional incentives to take advantage of this offer.

I/O extenders for Series 37A customers

For Series 37A customers upgrading to the MICRO 3000XE, the I/O extender would normally be offered at 30% below list with the upgrade. During this promotion, an **ADDITIONAL** \$2,000 discount on the I/O extender is available when purchased as part of the upgrade.


Use This Special Promotion to Close Business in the First Half

Introductory promotion period:

- * Orders: December 1 - April 30, 1987
- * Shipments: By July 31

Direct mail, ads in Interact magazine and the "MICRO 3000XE Upgrade Information Sheet" will help spread the word to your customers.

**SERIES 37 CUSTOMERS CAN SAVE
ON MICRO 3000XE UPGRADES
(DEC 1 - APR 30)**

<i>Installed Series 37</i>	<i>Upgrades to MICRO 3000XE During Promotion</i>	<i>U.S. List</i>	<i>Promo List</i>	<i>Savings*</i>
	MICRO 3000XE CPU	\$8,500	\$8,500	0
	or MICRO 3000XE CPU + 2Mb Memory =	\$15,500	\$13,000	\$2,500
	or MICRO 3000XE CPU + 4Mb Memory =	\$22,500	\$18,000	\$4,500
	or MICRO 3000XE CPU + 4Mb Memory + I/O Extender =	\$30,500	\$24,000	\$6,500

* Additional savings of \$2,500 and \$4,500 available for second 2Mb or 4Mb memory board.

New Series 52 and Series 58 Field Upgrades

Introducing the Series 52 & 58 field upgrades with 4Mb standard

Series 39/40/42 to Series 52 Field Upgrade orderable December 1

Now, your Series 39/40/42 customers can have the power of the Series 52 and 4Mb of memory for ONLY \$32,500. In addition to a new 4Mb memory board, the new Series 52 Field Upgrade includes CPU boards, disc caching, and a nameplate. This means more memory and a lower price than the 42XP Field Upgrade!

New Low Price and More Memory for the Series 58 Field Upgrade effective December 1

Your Series 44/48 customers can move to the power of a Series 58 for a new low price of \$32,500. The new Series 58 Field Upgrade will include twice as much memory (4Mb). That's a savings of \$18,000 over the previous price!

Attractive Memory Options

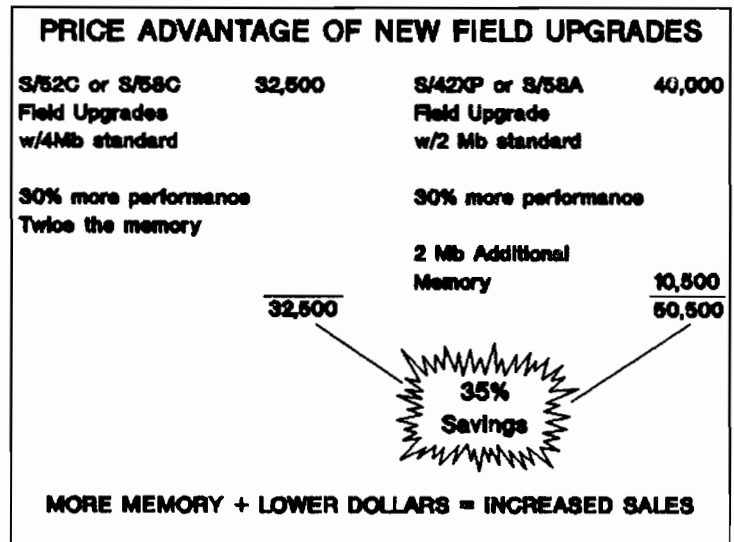
Options are available for purchasing additional 2Mb or 4Mb memory modules at a reduced price.

Customers who decide to take advantage of these options may choose to return 1Mb boards for return credit (30161AN). A maximum of three 1Mb boards can be returned when purchasing a S/52 or S/58 field upgrade.

256Kb and 512Kb memory modules are not supported on the S/52 and S/58 field upgrades. Return credits (30171AN and 30092AN) are available for these memory modules. A maximum of four 256Kb modules may be returned when purchasing a Series 52 or eight 256Kb module for a Series 58 field upgrade.

Easy Installation

For customers already using MPE V/E T-Delta-5 or UB-MIT, the Series 52 and Series 58 field upgrade can be installed in only one hour. This means your customers can get increased performance with minimal interruption of their operations.



The New HP3000 Family

New systems across the product line provide excellent price/performance

The HP3000 family continues to offer customers a broad range of performance and system expansion capability while maintaining software compatibility.

of the Series 52, 70, and 900 Series systems, provides us with a strong price/performance position across the entire family.

The addition of the MICRO 3000 and MICRO 3000XE, combined with the recent introductions

<i>SYSTEMS</i>							
	<i>MICRO 3000</i>	<i>MICRO 3000XE</i>	<i>52</i>	<i>58</i>	<i>70</i>	<i>930</i>	<i>950</i>
Main Memory	2-4Mb	2-8Mb	4-8Mb	4-8Mb	8-16Mb	16-24Mb	32-64Mb
Maximum Workstations	16	56	92	152	400	400	TBD
Maximum Disc Capacity	2.2Gb	4.5Gb	4.5Gb	4.5Gb	13.7Gb	13.7Gb	TBD
Maximum Datacomm Links							
- INP	1	3	3	7	24	TBD	TBD
- LAN	1	1	1	1	1	2	TBD
SPU Price (U.S. List)	\$12K	\$29K	\$45K	\$75K	\$150K	\$225K	\$300-350K



Chapter 2

Target Markets

- **Target Markets**
- **Branch Office Market**
- **Departmental Computing Market**
- **Small Business Market**

Target Markets

Meeting the computing needs of both large and small companies

The target markets for the MICRO 3000 and MICRO 3000XE include both major or target accounts and small to medium businesses. For large companies, these systems are ideal for the automation of branch offices and departments. Combined with our new OA and networking products, they deliver customers an integrated solution to their business computing needs.

VAB's will also find these new systems attractive engines for delivering application solutions to small to medium businesses.

MARKET NEEDS

BRANCH OFFICE

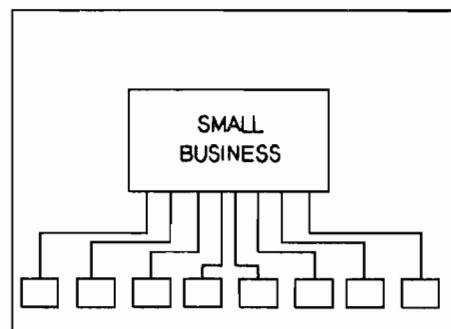
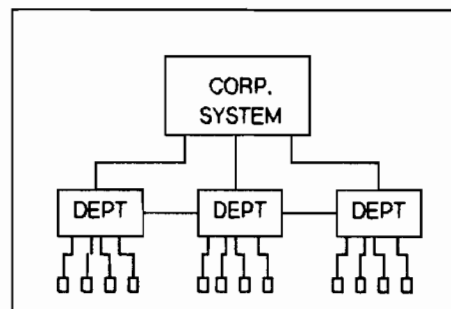
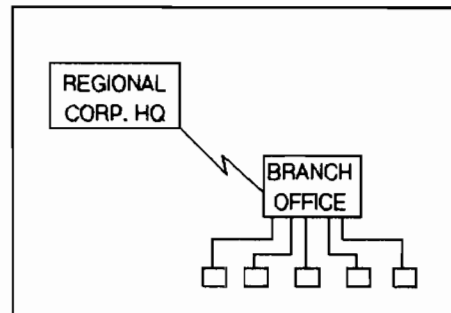
- Lowest priced solution a must
- Heavy use of datacomm
- Scalable hardware
- Simple on-site operation

DEPARTMENTAL COMPUTING

- High performance
- High configurability
- Office/database applications
- Heavy datacomm use
- LAN support
- Cost-effective solution

SMALL-MEDIUM BUSINESS

- Low cost solution
- Value added solutions
- Simple on-site operation



The Branch Office Market

Growing market that plays to HP's strengths

What is the Branch Office Market?

The branch office market consists of the sales offices, warehouses, stores, and dealerships of the Fortune 1000. The objective of these companies is automation to improve information access and control. Examples are: sales force productivity, inventory control (distribution), and tracking of assets (rental cars to rental video tapes). This application moves data and information between the geographically distributed branch offices and the regional or corporate headquarters. By automating this key portion of its business, the company can improve its competitive position. Most Fortune 1000 companies are aware of the need to "tie in" the branch offices and the automation of sales, service, and distribution is a strategic market for Hewlett-Packard.

Who do you sell to?

The primary specifier and influencer on a branch office purchase decision is the corporate MIS department. They typically are responsible for recommending, implementing, and supporting the Branch Office Network. Usually corporate MIS's concerns center around control of the network and ensuring good MIS practices at the branch offices, while minimizing the resources required to support these remote users.

It plays to HP's strengths

Branch office is a specific type of Distributed Data Processing and the customer's needs match well to HP's strengths.

- o Scalable Hardware: Most branch offices vary in size and the customer will need systems which will support from 2 users to hundreds of users. The HP3000 family can do this

smoothly from the MICRO 3000s to the 900 Series.

- o Compatible Software: The customer will need to "automate" a specific application, e.g. quotes, at all the branches. Thus, the same application software must run on both small and large systems. MPE's compatible operating environment meets this need.
- o Data Base Management: The task of gathering data from multiple locations and making it available to headquarters and other branches in summary and usable form demands a DBMS. This is a key strength for HP and an advantage over both IBM and DEC.
- o Data Communications: Geographically dispersed branch offices will be linked via data communications to allow information to flow quickly to where it is needed. The HP3000's are able to exist in a wide variety of networks (SNA, X.25, Bisync) and our Network Services provide the functionality required for branch offices.
- o PC Integration: Most companies already have PCs in their branch offices. HP's Office Productivity Service allows those PCs to become more useful by integrating them into the 3000 network and providing access to information and central resources.
- o Reliability and Support: Customers are entrusting a major element of their business to this network of branch offices. Ensuring that the systems are up and running regardless of location is extremely important. HP has a strong track record of providing highly reliable systems.

The Branch Office Market

New systems make HP the top choice

With the introduction of the new entry level HP3000 systems, we have an even stronger offering for the needs of the branch office:

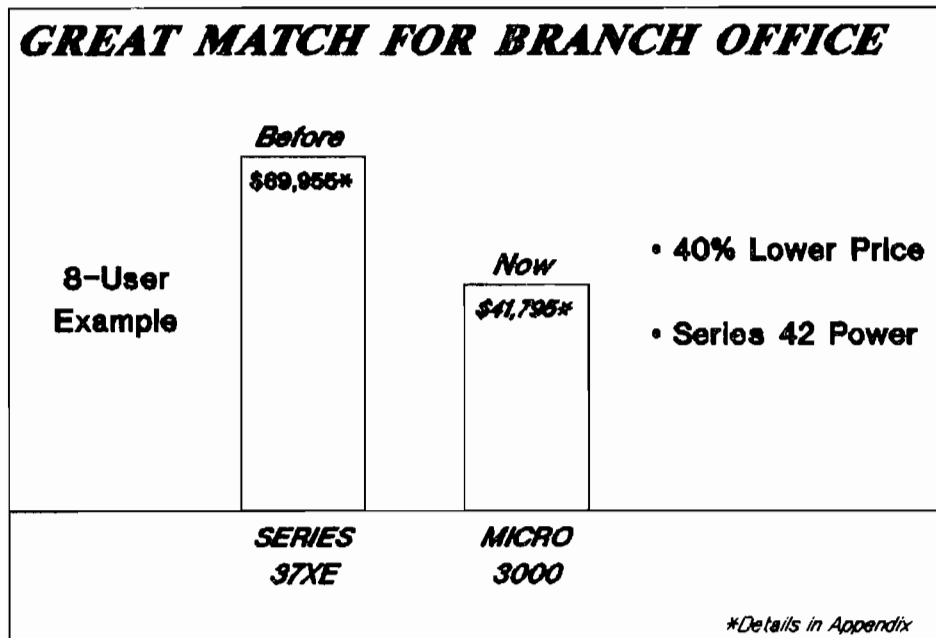
- o Price: The MICRO 3000 systems are priced 10%-15% below IBM and DEC. Branch office sales involve multiple systems and HP becomes increasingly attractive as the number of branches grow.
- o Performance: The MICRO 3000 systems have the power to easily perform data-communications, OA, and customer applications, simultaneously.
- o Ease-of-Use: HP Easytime allows the branch office to use a MICRO 3000 system with minimal training or expertise in day-to-day operations. This is key to corporate MIS because it reduces their training of the branch personnel and speeds up implementation.
- o Office Environmental: Special rooms, power, and air-conditioning become a major expense if required in every branch office. The

MICRO 3000 systems do not require special considerations. This is especially important in small branch offices which may be leased facilities.

- o Series 37A Limitation Eliminated: The Series 37A could not support both Data Communications (INP) and the memory or ports necessary for many branch offices. This forced many customers into the Series 37XE. The MICRO 3000 has eliminated this limitation. It supports 4Mb, an INP and either 16 ports or 8 ports and a LAN. This reduces some branch office configuration prices by 40%.

Rewards are great

The market has a long sales cycle and tough competition, but the rewards are high. It's a sale involving multiple systems and providing a continual stream of additional systems, upgrades, and add-ons.



Departmental Computing Market

Delivering integrated DP and OA solutions

What is the Departmental Computing Market?

Departmental computing is an extension of traditional DDP to include smaller departments (10 to 30 users) and OA. This is a high growth market due to the proliferation of PCs and the availability of lower cost systems which are easier to use and don't require special facilities. The system purchase is still justified to automate a specific application, but office automation and networking are important considerations.

Who do you sell to?

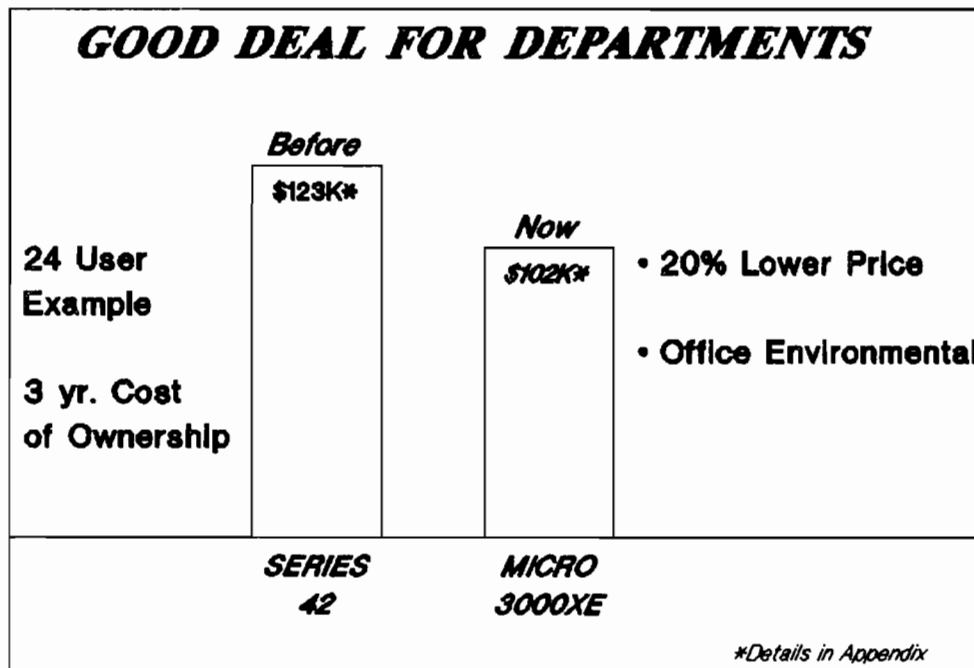
The MIS department is the primary influencer on this purchase. This may be limited to a "short" list of vendors from which the department manager may select. Both MIS and the department manager specify the purchase. Either MIS or an ISV will provide the application software.

DDP is HP's strength

DDP is a natural fit for the HP3000. Our strengths in information management, networking, PC integration, and on-line transaction processing match the needs of departmental systems.

Smaller departments are now open

- o Price/Performance: The MICRO 3000 systems bring the cost of high performance systems down to within the reach of small departments.
- o Office Environment: The system price is only part of the cost. Because the MICRO 3000 systems do not require special power, air-conditioning, or office space, the total cost is lower by thousands of dollars.
- o Ease-of-Use: Reducing the need for a skilled operator is a fundamental requirement for small departments. They normally cannot afford an EDP specialist to support users. HP Easytime, on the MICRO 3000, meets this requirement.



Departmental Computing Market

OA solutions give a bigger edge

- o PC Integration: Most departments already have some PCs in use and HP's PC integration products (Office Productivity Services) will increase the effectiveness of those PCs through resource sharing and better access to information.
- o Information Access: *A key differentiator for HP.* Allows the PC user to pull data from the 3000 data base into their PC and manipulate it or update the 3000's data base without knowing IMAGE. A very powerful tool that our competition can't match.
- o StarLAN: We provide both 802.3 LAN and StarLAN support. This provides the customer with a choice of LANs.

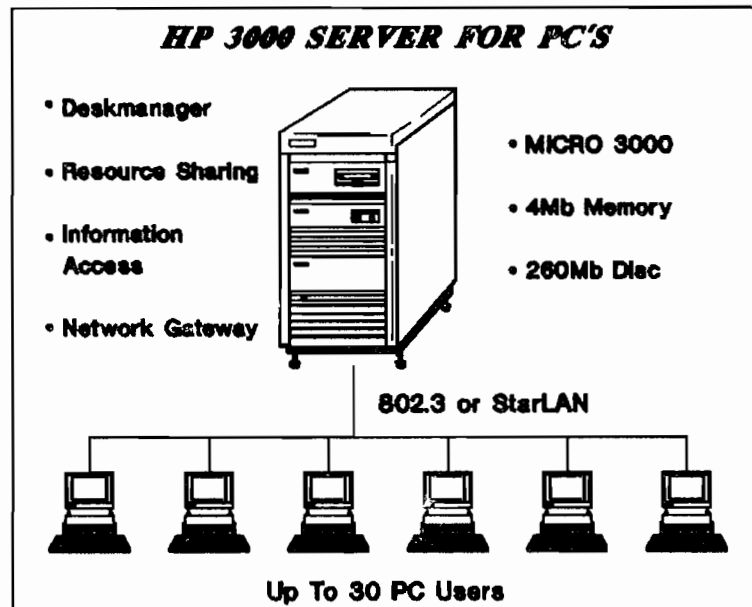
LAN. It offers superior functionality and a more cost-effective solution than DEC with their latest "PC ALL-IN-ONE" announcement. (See PPC III Sales Guide for more information)

- o PC Server Functions: The MICRO 3000 systems can provide central printer, disc, and back-up services to networked PCs via Resource Sharing.
- o Communications: Central HPDeskManager for PCs via AdvanceMail.
- o Network Gateway via terminal emulation.
- o Information Access: Maintain a larger central IMAGE data base on the MICRO 3000 systems that is accessible to PC users without knowing IMAGE.

MICRO 3000 is a PC server and more

Recent performance testing shows that the MICRO 3000 can support easily up to 30 PC users via a

The MICRO 3000 system provide *all* the services the PC user really needs and are great systems for departmental computing..



Small Business Market

Working with VABs to reach new customers

What is the Small Business Market?

It's the doctors, lawyers, contractors, etc. Another way to look at it is that it's all the businesses which are *not* HP's target or major accounts. The owner/managers of these businesses need to solve a key problem specific to their business/industry.

The HP-VAB team meets the owners needs

- o Office Environment: Reduces the cost of installation and reduces the time to implement.
 - o Series 37 Software Pricing: HP system software (compilers, OA, networking) is attractively priced for the small business.
 - o Ease-of-Use: HP Easytime reduces end-user training and allows a novice operator to be productive quickly. HP Easytime is designed to allow VARs and ISVs to integrate it into their applications. ISS simplifies system installation.
- o Industry Expertise: The Value-added-Remarketer (VAR) or Independent Software Vendor (ISV) knows the customer's specific industry and provides a turn-key solution to their critical application (e.g. patient accounting, client accounting, or project accounting).
 - o System Reputation: HP's reputation for quality products and the people to back them gives the small business owner the assurance that an investment in HP will be protected both today and tomorrow.
 - o Application Support: The VAB provides the necessary implementation, training and follow-up support of the small business to ensure the customer is utilizing the application properly and receiving maximum benefit from it.
 - o System Support: HP provides quality support to ensure that the system hardware and FOS is cost-effectively maintained.

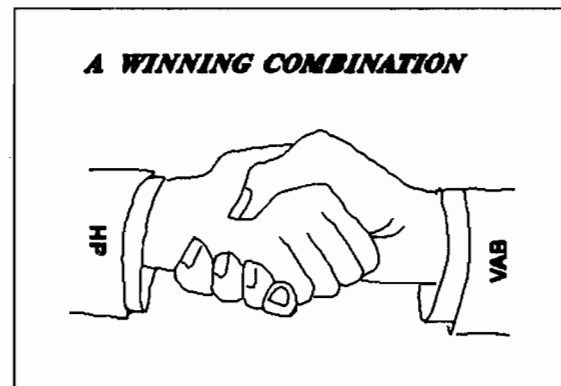
The new systems fit the market

- o Performance: The MICRO 3000 has the power to support multiple applications simultaneously. The MICRO 3000XE is capable of supporting a larger number of users.
- o Competitive Pricing: The MICRO 3000 systems are priced below IBM and DEC which is a key advantage in this price-sensitive market.

Policies and programs to fit the market

In addition to the excellent price/performance and ease-of-use offered by the MICRO systems, our marketing policies and programs provide a winning formula for the small business market.

- o HP sales reps earn 100% quota and commission for MICRO 3000 and MICRO 3000XE systems sold through VARs.
- o Both systems are on the aggressive A-3L discount schedule so VARs earn more on every sale.
- o HP's VAB program is rated #1 in the industry by the recent VAR Business survey.





Chapter 3

Performance

- Performance Summary
- Outstanding Performance
- Memory Multiplies Performance
- Performance Improvement for Installed S/37s

Performance Summary

Performance recommendations

Both MICRO 3000 processors are similar to the Series 42 in performance. Equivalently configured MICRO 3000s and Series 42s will give similar results in response time and system throughput for the same application. The 4 to 8 Mb configurations of the MICRO 3000XE will typically outperform the 3 Mb maximum of the Series 42.

Adding Memory Improves Performance

2Mb comes standard on both MICRO 3000s for CPU intensive applications and lightly loaded systems. Performance measurements indicate that these stronger processors are able to utilize 4 Mb for the MICRO 3000, and, 6 or even 8 Mb on the MICRO 3000XE in transaction processing applications, particularly running datacomm. The typical customer will see improvements when upgrading from 2Mb to 4Mb.

Disc Caching Improves Performance

A key reason that more memory can be utilized is that disc caching is now standard on both the MICRO 3000 and MICRO 3000XE. Caching utilizes available memory to reduce disc I/Os. 4Mb is the recommended minimum to see a performance boost from disc caching.

NEW Disc Drives Improve Performance

The new entry level disc drives give MICRO 3000 systems a big boost. These higher capacity 7957 and 7958 drives have the performance of the 7914 in the small system footprint. In addition, the new larger 7936 and 7937 discs provide even more capacity and performance.

Existing S/37 Customers Can Improve Performance

Powerful, flexible and cost effective upgrades are available for the S/37 customer to match their needs.

- * CPU performance limited - upgrade CPU board to MICRO 3000XE
- * Memory limited - add both processor and memory for significant performance improvement
- * Need expansion too - The S/37A customer can add an expansion bay to the system
- * Disc limited - add new 7957, 7958, 7936, or 7937 disc drives

With so many performance options to choose from, it is difficult to state a typical system range of improvement. Overall system throughput similar to a S/42 can be achieved by addressing the most constrained resources; CPU, memory and disc.

The next few pages present the key measures of performance for two different application loads. More detailed information will also be contained in the upcoming issues of Performance News Notes.

Outstanding Performance

Performance similar to a Series 42 in manufacturing benchmark

The manufacturing application benchmark is a FORTRAN based transaction processing application for manufacturing functions. The manufacturing application software contains modules for inventory management, material flow, and finance (accounts payable/receivable).

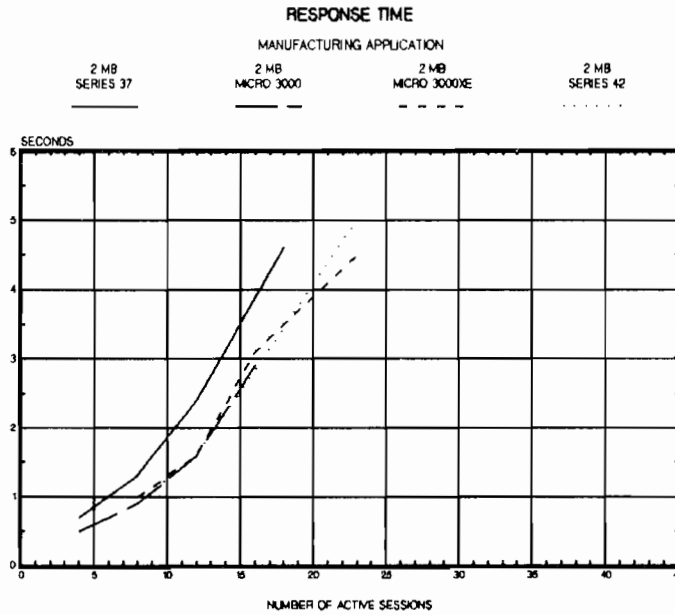


Fig 1

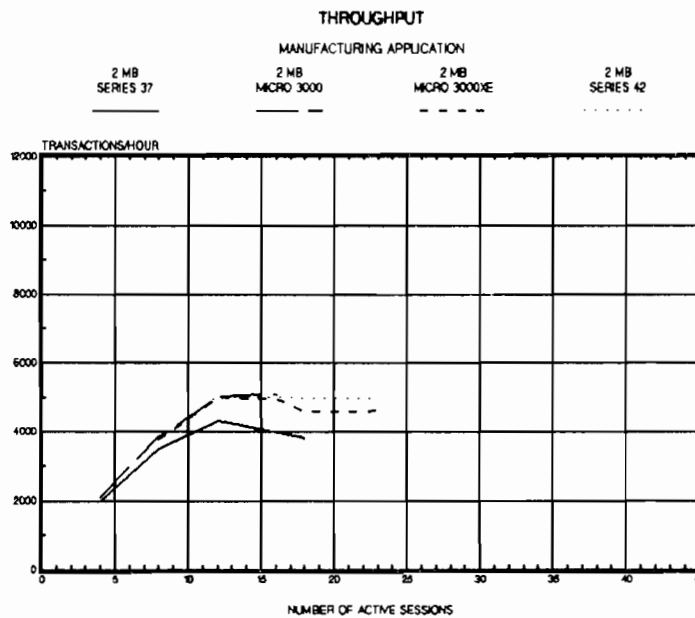


Fig 2

Outstanding Performance

Performance similar to a Series 42 in EDP benchmark

The EDP benchmark is an interactive benchmark using programs developed by HP. The software consists of three scripts, two of which access a common IMAGE database. The third script simulates a COBOL programmer's environment.

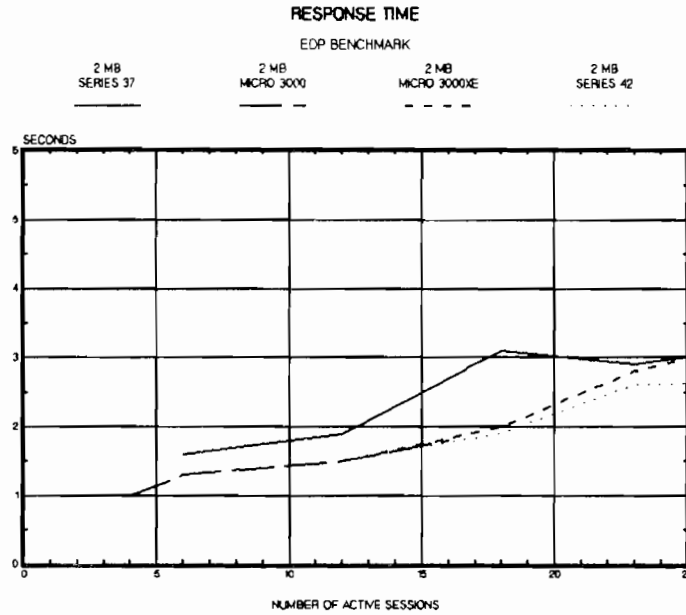


Fig 3

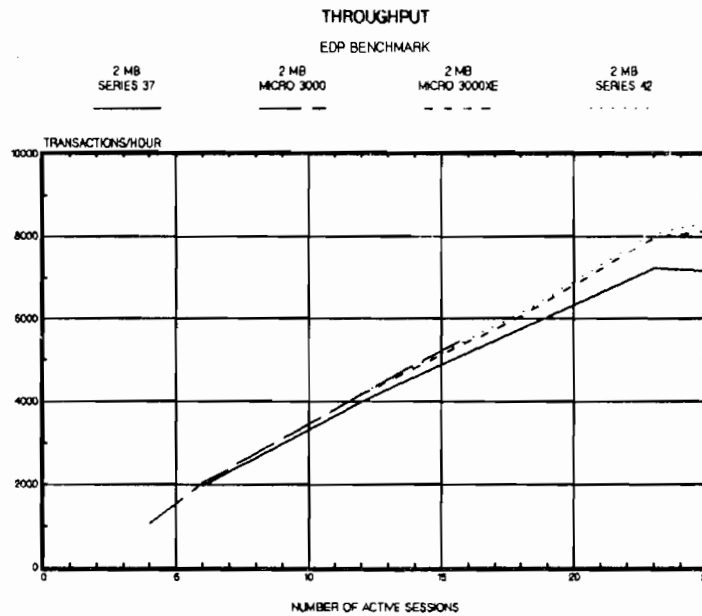


Fig 4

Memory Multiplies Performance

Adding memory pushes outstanding performance even higher

In the manufacturing application, adding memory to the MICRO 3000 provides significant performance improvement under heavy loads and allows you to take advantage of disc caching.

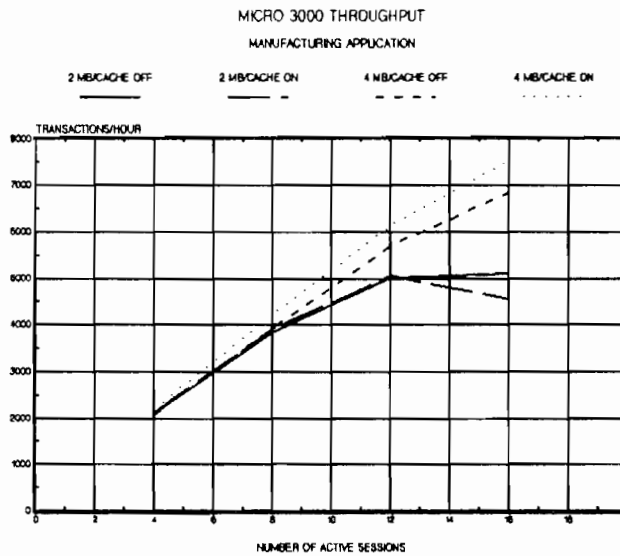


Fig 5

In the same manufacturing application adding memory to the MICRO 3000XE also provides significant performance improvement under heavy loads and allows you to take advantage of disc caching.

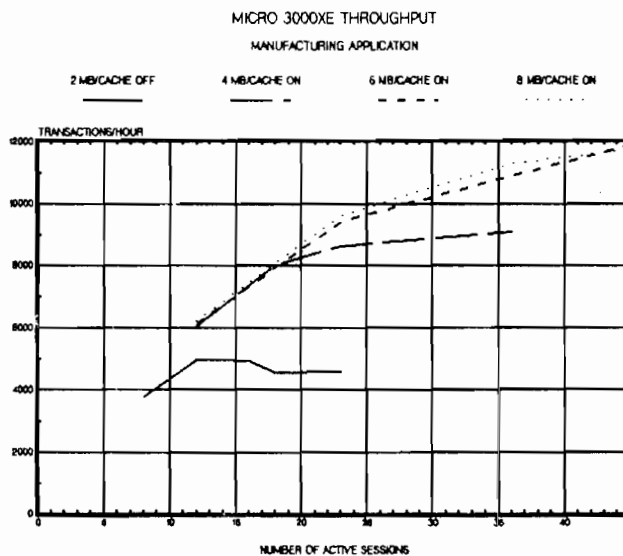


Fig 6

Performance Improvement for Installed S/37s

Simple, powerful, and cost effective upgrades make the most of existing S/37s

Upgrades from S/37s to MICRO 3000XEs are available as single card swaps. You can select the processor alone which in this application improves the throughput, or you can select the processor with additional memory which provides significant performance improvement.

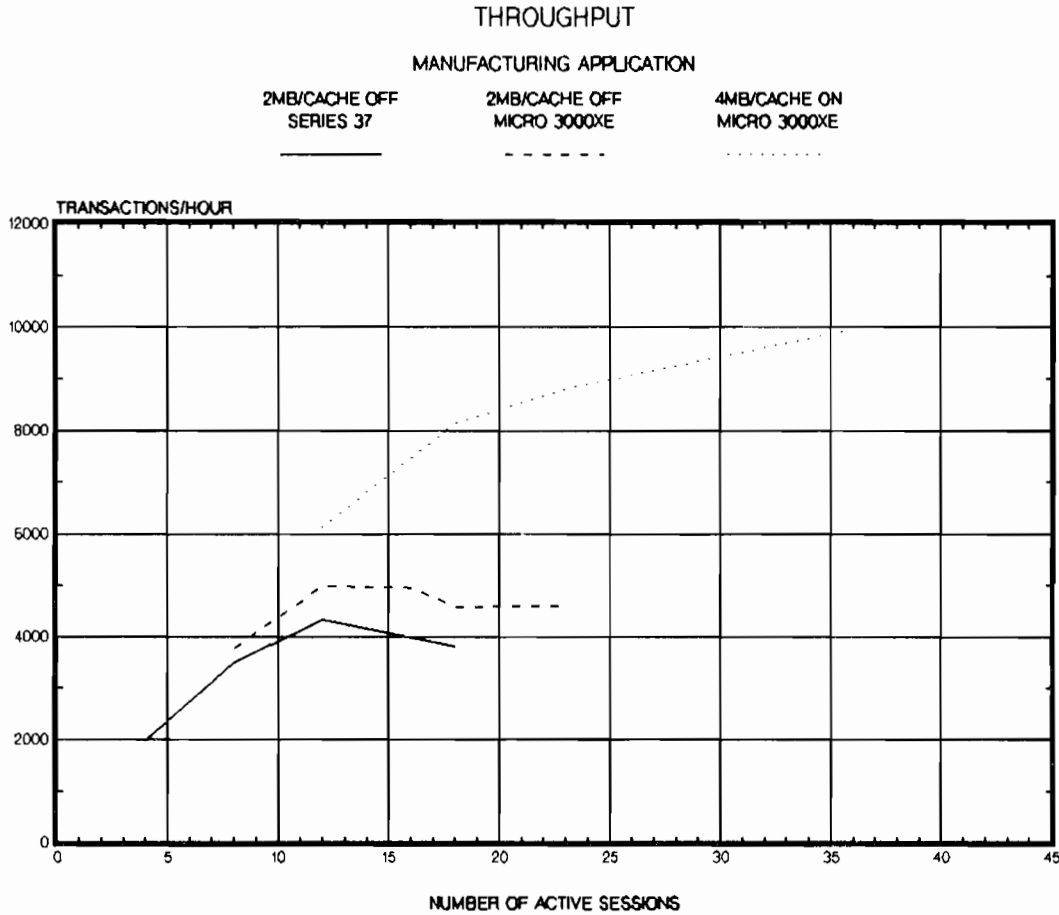


Fig 7

Upgrading the Series 37 processor alone provides additional system throughput. In this application, the higher performance processor quickly runs into a memory bottleneck, limiting overall system throughput. When an additional 2 Mb of memory is added, throughput soars.

Take advantage of the introductory promotional discounts available when processor and memory are selected together.

Chapter 4

Competition

- **Competitive Summary**
- **Win by Knowing the Competition**
- **MICRO 3000 Systems: List Price Comparison**
- **MICRO 3000 Systems: Cost of Ownership Comparison**
- **Competitive Specifications**

Competitive Summary

Win with price/performance and total solutions

Tailor your sales presentation - Depending on the specific competitor for an entry level system, the focus of your presentation may vary, but the result will be the same: an HP3000 sale.

Against IBM - Focus on price/performance and the benefits of a broad family with compatible software.

Against DEC - Highlight entry level price point (HP is lower), cost of ownership (HP is much lower), price/performance for on-line transaction processing, and integrated data base management.

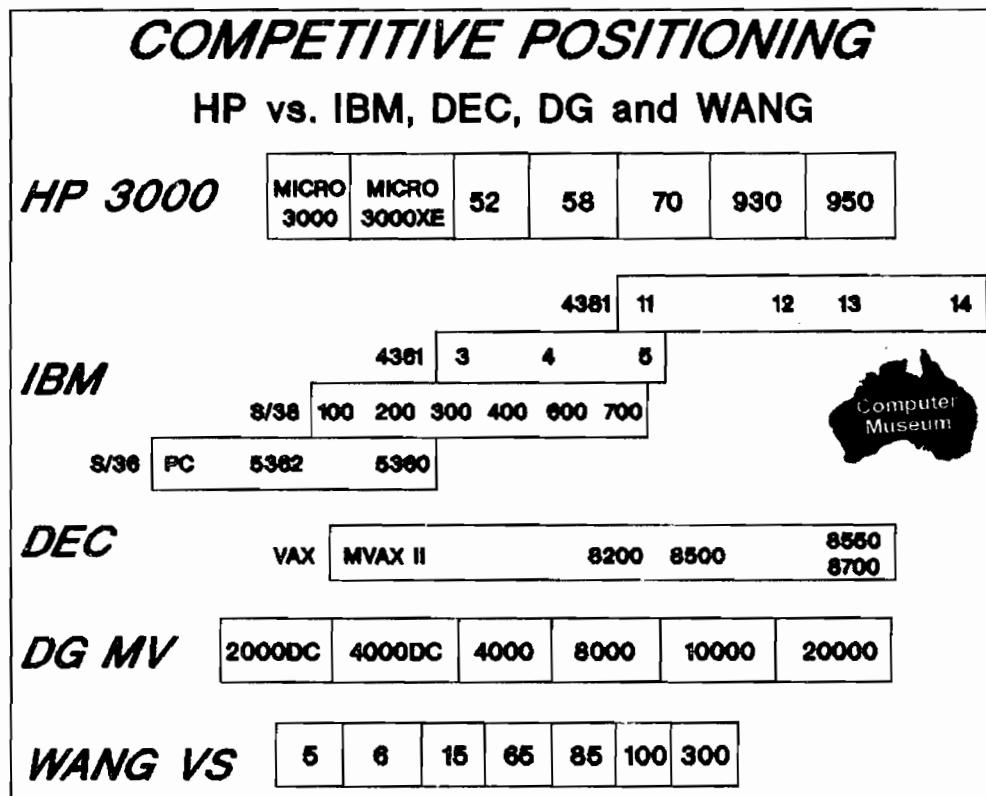
Against DG - Our sales and support reputation, and strong, very successful VAR program provide a winning total solution.

Against Wang - Our integrated information management solution, including network compatibility with IBM, and HP's solid corporate reputation are lockouts.

HP has the strongest product line - When a broad family of compatible commercial machines are required to deliver,

- aggressive entry level pricing,
- excellent on-line transaction processing performance, and
- fully integrated information management solutions ...

no one has a stronger commercial product line than Hewlett-Packard.



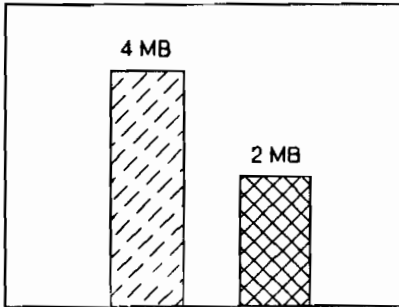
Win by Knowing the Competition

HP beats the IBM System 36

MICRO 3000 vs. IBM "Baby" 36

**Lower price
Higher performance**

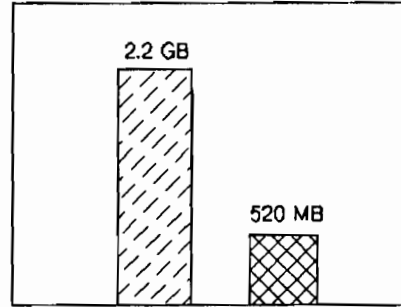
More memory supported



MICRO 3000 IBM 'BABY' 36

MICRO 3000 provides twice the main memory capacity of the Baby 36.

More disc capacity



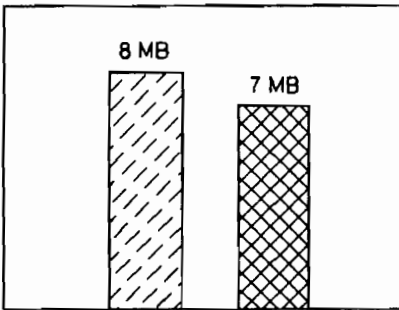
MICRO 3000 IBM 'BABY' 36

MICRO 3000 provides 4 times the disc capacity of the Baby 36.

MICRO 3000XE vs. IBM System 36

**Higher performance
Comparable price**

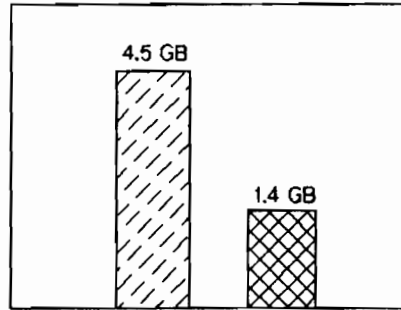
More memory supported



MICRO 3000XE IBM SYSTEM 36

MICRO 3000XE provides more main memory than the System 36.

More disc capacity



MICRO 3000XE IBM SYSTEM 36

MICRO 3000XE provides 3 times the disc capacity of the System 36.

HP Advantages

- Full HP3000 growth path
- Full powerfail capability
- Powerful TurboIMAGE database
- Easy tape backup

IBM Advantages

- IBM name
- Simple installation
- Dealer channel
- Better support pricing

IBM Disadvantages

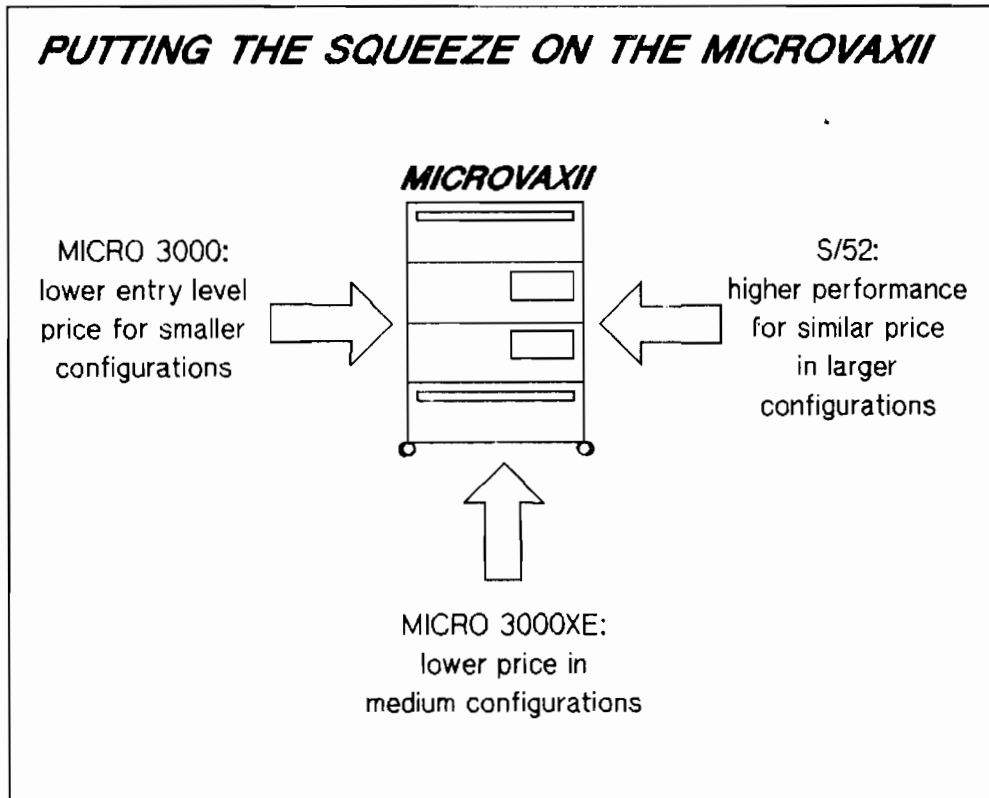
- Poor backup
- Difficult upgrade
- No IBM database

MICRO 3000 systems have more performance and cost less.

Win by Knowing the Competition

HP beats DEC's MicroVax II

HP's entry level and mid-range systems provide your customers a superior choice over the MicroVAX II. Whether it's price, configurability, or performance, HP has the right solution.



HP vs. DEC MicroVAX II

HP Advantages

- Real entry-level price advantage
- Bundled, superior database
- Lower cost support pricing
- Lower entry point
- Requires less memory
- Optimized for transaction processing

DEC Advantages

- Perceived price advantage
- Perceived performance advantage
- Networking
- All-in-One momentum
- Large VAR channel
- Large installed base

DEC Disadvantages

- High support pricing
- Poor COBOL performance
- Poor database
- High memory usage

New MICRO 3000 systems offer better price/performance than MicroVAX II.

Win by Knowing the Competition

Clear superiority over Data General and Wang

HP vs. Data General MV2000 DC

HP Advantages

Better PC integration
Better support
Better database
Better VAR program
Financial strength

DG Advantages

Easy installation
Good price/performance
Flexible discounting

DG Disadvantages

Not considered
major competitor
Channel limited
Poor reputation as a
"business partner"
Poor support reputation

When competing against DG, focus on HP's total solution.

HP vs. Wang VS 5,6

HP Advantages

Strong data processing
capability
Network compatible
with IBM
Strong VAR program
Better support
Financial strength

Wang Advantages

Installed base
Office automation
leverage

Wang Disadvantages

Poor VAR program
Poor track record of
deliverables
Weak integrated
information management
Poor reputation among
MIS managers

HP's ability to integrate DP and OA makes HP the preferred choice over Wang.

Win by Knowing the Competition

Superior technology beats the competitors

HP vs. ALTOS

HP Advantages

Larger storage capabilities
(Altos limited to 3x80Mb disc)
Higher connectability
available in MICRO 3000XE
HP3000 compatible growth path

Altos Advantages

Suitable for small businesses
Emphasizes price leadership
Good reputation as
a multi-user micro-
computer vendor

Altos Disadvantages

Limited experience in
selling department systems
Limited range of peripherals
No direct sales channel
Lack of established quality image

MICRO 3000 and MICRO 3000XE offer superior price performance.

HP vs. NIXDORF

HP Advantages

Better connectability
HP3000 compatible growth path
Better office system integration
Power fail recovery

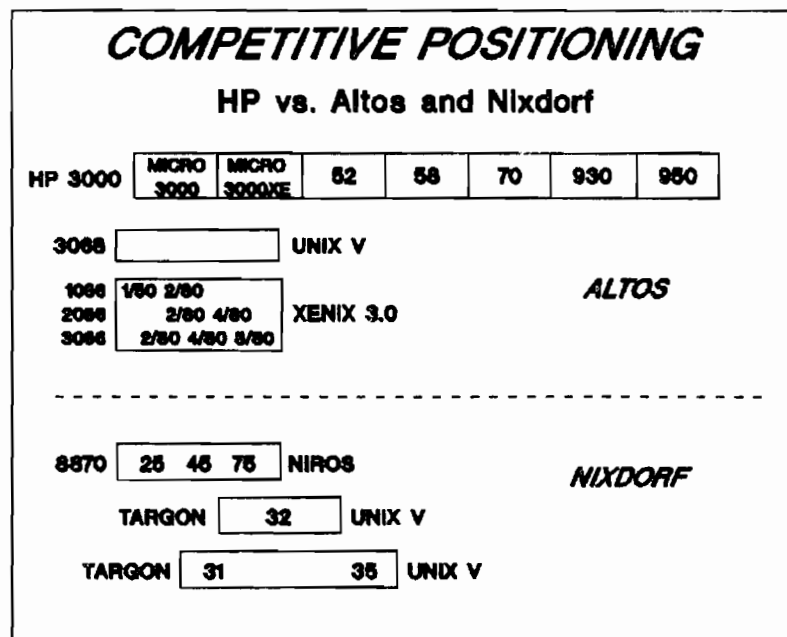
Nixdorf Advantages

Success in vertical markets
Complete system solutions
Expertise in
telecommunications

Nixdorf Disadvantages

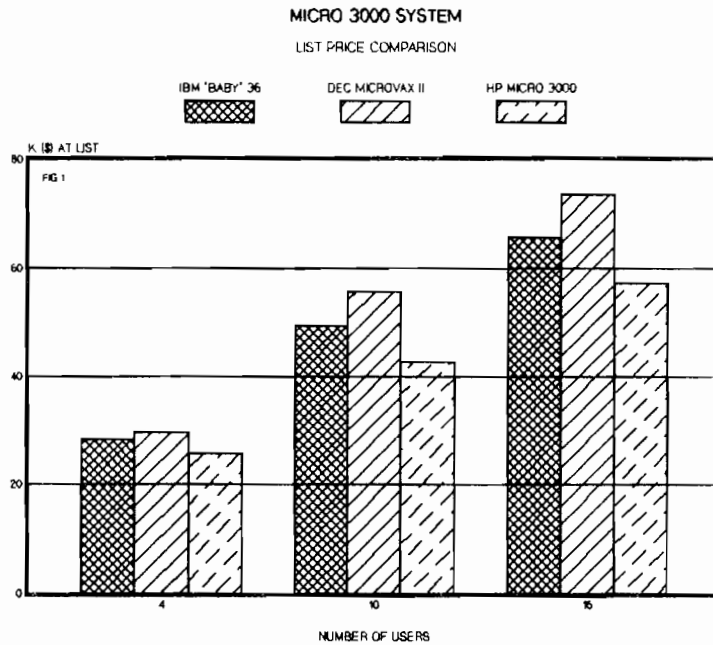
Weak information
management software
Software updates and extensions
expensive and slow
8870 architecture outdated

HP's MICRO 3000 and MICRO 3000XE offer a total solution with superior hardware and compatibility that allows for growth.



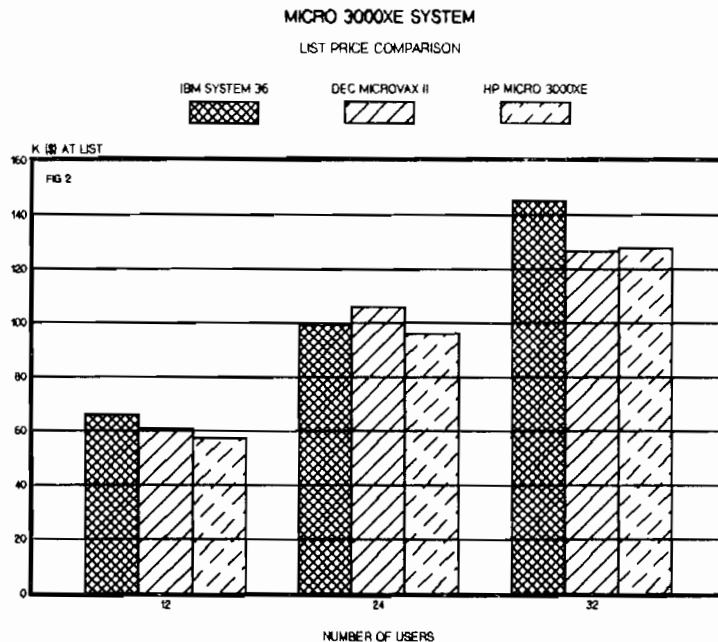
MICRO 3000 Systems: List Price Comparison

Against our major competition, HP's price is a major advantage



MICRO 3000: 9% to 15% lower than IBM

15% to 30% lower than DEC

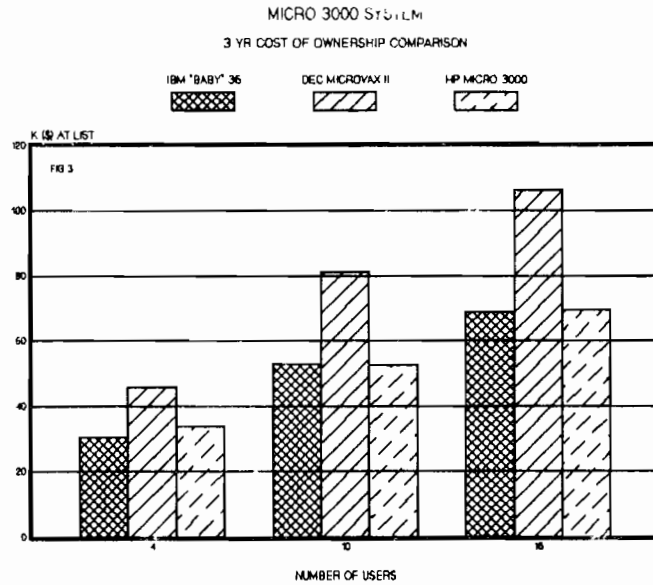


MICRO 3000XE: 4% higher to 15% lower than IBM, 10% lower to 1% higher than DEC

Pricing details in Appendix B

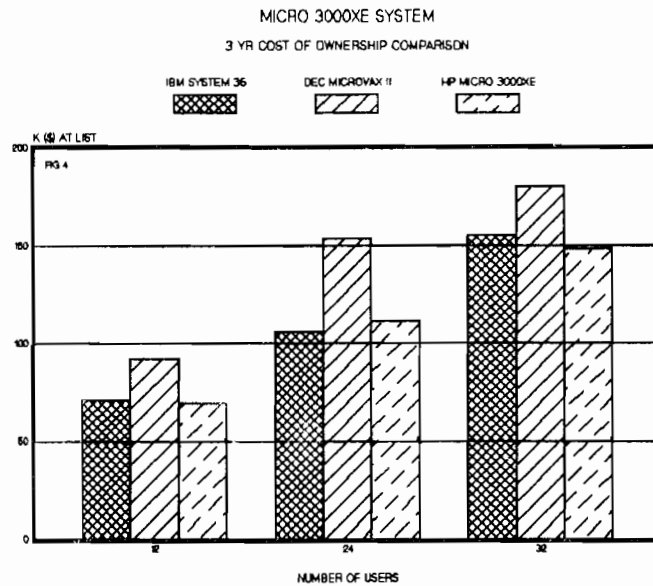
MICRO 3000 Systems: Cost of Ownership Comparison

Against DEC, take advantage of HP's superior support services and support pricing



MICRO 3000: 1% lower to 9% higher than IBM

26% to 35% lower than DEC



MICRO 3000XE: 5% lower to 5% higher than IBM, 18% to 28% lower than DEC

Pricing details in Appendix B

Competitive Specifications

The features of the MICRO 3000 systems compare favorably against IBM...

FEATURE	HP MICRO 3000	HP MICRO 3000XE	IBM PC-36	IBM BABY 36	IBM SYSTEM 36
MAIN MEMORY	2-4	2-8	1	1-2	1-7
CENTRAL PROCESSOR	16 Bit	16 Bit	16 Bit	16 Bit	16 Bit
MAX. NUMBER OF USERS (PT-PT)	16	56	16	28	56
COMPATIBLE UPGRADES	Yes	Yes	No	No	No
MEMORY CPU CACHE	No	Yes	No	No	No
DISC STORAGE	2.2Gb	4.5Gb	80Mb	520Mb	1.4Gb
CUSTOMER INSTALLABLE	No	No	Yes	Yes	No
MENU USER INTERFACE	Yes	No	Yes	Yes	Yes
STANDARD BACKUP DEVICE	1/4" cart.	1/4" cart.	Floppy	Floppy	Floppy
INTEGRATED SHIPMENT	Yes	No	Yes	Yes	No
POWER FAIL RECOVERY	Yes	Yes	No	No	No
SUPPORTS 1/2" TAPE	Yes	Yes	No	No	Yes

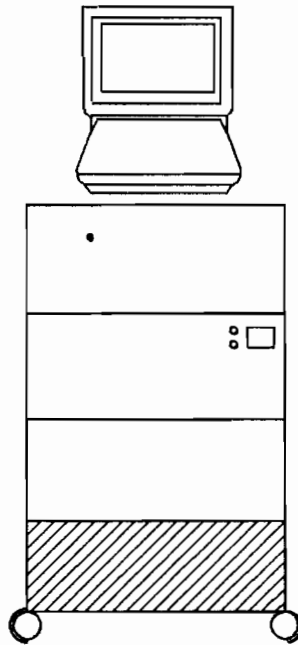
Competitive Specifications (cont'd)

...And against DEC, Wang and DG too!

FEATURE	DEC MicroVAX II	WANG VS5	WANG VS6	DG MV2000 DC
MAIN MEMORY	1-17	1-2	1-4	2-5
CENTRAL PROCESSOR	32 Bit	32 Bit	32 Bit	32 Bit
MAX NUMBER OF USERS (PT-PT)	41	8 (16 dev)	8 (24 dev)	24
COMPATIBLE UPGRADES	Yes	Yes	Yes	Yes
MEMORY CPU CACHE	No	No	Yes	No
DISC STORAGE	4Gb	2.6Gb	2.6Gb	240Mb
CUSTOMER INSTALLABLE	No	Yes	Yes	Yes
MENU USER INTERFACE	No	No	No	Yes
STANDARD BACKUP DEVICE	1/2" cart.	Floppy	Floppy	1/4" cart.
INTEGRATED SHIPMENT	Yes	Yes	Yes	Yes
POWER FAIL RECOVERY	No	No	No	No
SUPPORTS 1/2" TAPE	Yes	Yes	Yes	No

Chapter 5

Ordering and Configuring the MICRO 3000



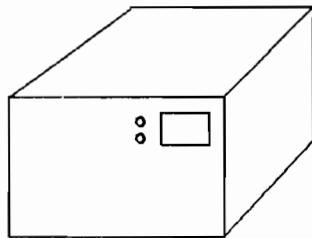
- Product choices
- Product structure
- Ordering instructions
- Ordering examples
- Configuration information
- Supported peripherals

MICRO 3000

Product choices

The theme is simplicity - it comes 3 ways

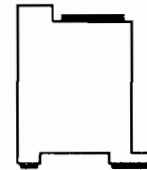
I. Standalone for custom configurations and big deals



U.S. LIST F.B.P.
\$12,000 \$11,860

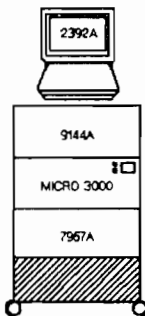
SPU
2 Mb on CPU
HP-IB interface on CPU
System cabinet
Optimized manuals
HP installation
Must order ATP/M and
HP Easytime separately

+



Can have
4 Mb on CPU

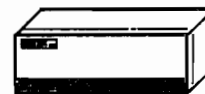
II. Entry-level system: Lowest priced HP3000 system (orderable with a single product number)*



U.S. LIST F.B.P.
\$21,350 \$20,925

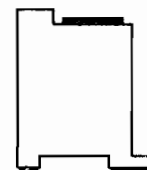
Console
HP Easytime
67 MB cartridge tape
2 MB main memory
8 ports
81 MB disc drive
Expansion space

+



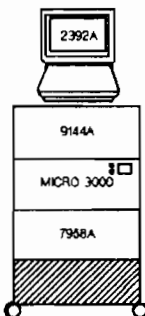
Add on
Disc Drive
81 Mb or 130 Mb

+



Add on ATP/M
w/ Opt. 125

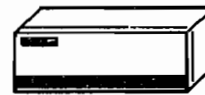
III. Full size system: Provides 4 MB memory + 130 MB disc (also with a single product number)*



U.S. LIST F.B.P.
\$26,950 \$26,525

Console
HP Easytime
67 MB cartridge tape
4 MB main memory
8 ports
130 MB disc drive
Expansion space

+



Add on
Disc Drive
81 Mb or 130 Mb

+



Add on ATP/M
w/ Opt. 125

* MPE and HP Easytime are ordered under separate product numbers.

MICRO 3000

MICRO 3000 product structure

Standalone Processor

PRODUCT #	DESCRIPTION	F.B.P.	U.S. LIST
32535A	HP MICRO 3000 System Processor Unit, including 2 MB main memory and system cabinet. ATP/M terminal controller (40290A) must be ordered separately. DUS comes standard on cartridge tape. MPE media product (51450A) must be ordered separately. HP Easytime user interface (35303A) must be ordered separately, UNCOORDINATED. HP site prep and installation is included.	11,860	12,000
opt 015	200-240 VAC System Operation	0	0
opt 051	DUS on magnetic tape media	0	0
opt 510	4 MB memory upgrade	4,000	4,000

Entry Level System (ISS)

PRODUCT #	DESCRIPTION	F.B.P.	U.S. LIST
32535E	HP MICRO 3000 Entry Level System. Includes 32535A with 2 MB main memory and system cabinet, 7957A (81 MB disc drive), 9144A (67 MB cartridge tape drive), 2392A (console with cable), and ATP/M terminal controller with opt 125 (8 direct connect ports including 4 modem). MPE media product (51450A) must be ordered separately and requires an OVERRIDE of the supplying division to D500. HP Easytime user interface (35303A) must be ordered separately, UNCOORDINATED. HP installation is included. HP site prep is not necessary with the standard ISS system. If additional HP-IB devices are ordered, site prep must be purchased separately.	20,925	21,350
opt 001	Add on ATP/M with opt 125	2,650	2,700
opt 007	Add on 7957A disc drive (81 MB)	5,125	5,200
opt 008	Add on 7958A disc drive (130 MB)	7,590	7,700
opt 015	200-240 VAC System Operation	0	0

MICRO 3000

MICRO 3000 product structure (continued)

Full Size System (ISS)

PRODUCT #	DESCRIPTION	F.B.P.	U.S. LIST
32535F	HP MICRO 3000 Full Size System. Includes 32535A with 4 MB main memory and system cabinet, 7958A (130 MB disc drive), 9144A (67 MB cartridge tape drive), 2392A (console with cable), and ATP/M terminal controller with opt 125 (8 direct connect ports including 4 modem). MPE media product (51450A) must be ordered separately and requires an OVERRIDE of the supplying division to D500. HP Easytime user interface (35303A) must be ordered separately, UNCOORDINATED. HP installation is included. HP site prep is not necessary with the standard ISS system. If additional HP-IB devices are ordered, site prep must be purchased separately.	26,525	26,950
opt 001	Add on ATP/M with opt 125	2,650	2,700
opt 007	Add on 7957A disc drive (81 MB)	5,125	5,200
opt 008	Add on 7958A disc drive (130 MB)	7,590	7,700
opt 015	200-240 VAC System Operation	0	0

2 to 4 Mb Memory Upgrade

PRODUCT #	DESCRIPTION	F.B.P.	U.S. LIST
30535A	HP MICRO 3000 4 MB upgrade product. Only a 4 MB processor board is supplied (no box or cabinet). The 2 MB MICRO 3000 processor must be returned. HP installation is included.	7,480	7,500

HP Easytime

PRODUCT #	DESCRIPTION	F.B.P.	U.S. LIST
35303A	HP Easytime user interface. Includes software, computer based training, and HP Easytime reference manual. This product is only available on MICRO 3000 (32535A/E/F).	400	400
opt 635	For use on MICRO 3000 only.	-400	-400

MICRO 3000

Ordering instructions

Orders in the Backlog

All systems particularly Series 37, 37XE and Series 42 orders which have not shipped by December 1, 1986 are eligible for the new MICRO 3000. **We recommend you cancel and re-enter an order for one of these new MICRO 3000 systems.** Cancel and re-enters will be required prior to shipment for those orders that will be converting. Timely processing of these re-enters will be crucial for all orders since credit and rebills will NOT be permitted. Contact the factory Order Processing department regarding order placement on the MICRO 3000 prior to December 1. No current promotions apply.

Terms and Conditions

1. All additional products ordered with the MICRO 3000 ISS can be ordered as a coordinated shipment, and all products can appear on the same section of the order with the exception of HP Easytime (35303A). HP Easytime **MUST** be ordered with MICRO 3000 systems on a separate section and **MUST** be ordered UNCOORDINATED. "UNCOORDINATED" will be required until HP Easytime availability is the same as that for the SPU (estimated 3Q FY87).

NOTE: MICRO 3000 ISS systems (32535E/F) include the ATP/M (40290A, opt 125) but do not include the MPE Media Product (51450A and associated options) which **MUST** be ordered on the same section. **OVERRIDE** the SUPPLYING DIVISION to D500 when **ORDERING** the 51450A MEDIA PRODUCT.

2. The MICRO 3000 "Standalone" SPU includes the system cabinet and 2 MB of main memory. HP Easytime **MUST** be ordered with MICRO 3000 systems on a separate section and **MUST** be ordered UNCOORDINATED. All additional products may be ordered as a coordinated shipment.

NOTE: The MPE Media Product (51450A and the associated options) as well as the ATP/M (40290A, and cable option) are not included with the standalone SPU (32535A) and **MUST** be ordered separately.

3. 32535E and 32535F include the ATP/M (40290A, opt 125 which consists of 8 direct connect ports including 4 modem). One additional ATP/M can be ordered with the system via option 001 (40290A opt 125), with the MICRO 3000 ISS systems, or as a separate product from the supplying division (5200). A maximum of 2 ATP/Ms are supported on these systems.
4. A maximum of ONE option 007 OR option 008 may be ordered with either MICRO 3000 ISS system.
5. Additional products can be ordered at full list price and may be coordinated by placing them on the same section as the MICRO 3000.
6. Special instructions **MUST** state "MICRO 3000 ISS" when ordering the 32535E/F products.
7. The following discounts apply (OEM, VEU, EU, Demo development, and educational) to the net system price. MICRO 3000 systems qualify for .75 functional units.
8. Standard delivery requirements apply (shipment within 6 months after order date).

MICRO 3000

Ordering instructions

9. The 30535A, 32535A, 32535E, and 32535F will be on the Corporate price list (CPL) as of December 1, 1986.
10. European ordering instructions will be issued by HPSA.
11. Your Order Processing contacts for any questions regarding ordering instructions are:

Dave Padilla: (Telnet) 786-4723 or (916) 786-8000 x4723

Terry Jones: (Telnet) 786-4798 or (916) 786-8000 x4798

HPDESK Location: HP/D500/20

MICRO 3000

EXAMPLE

Ordering examples

1. MICRO 3000 "ISS" Entry Level System

(4 User system example: MICRO 3000 SPU W/2 MB main memory, 1 ATP/M, 81 MB disc drive, 67 MB tape drive, and 4 terminals)

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
SECTION 1:					
1	32535E	HP MICRO 3000 Entry Level System. Includes 32535A with 2 MB main memory and system cabinet, 7957A (81 MB disc drive), 9144A (67 MB cartridge tape drive), 2392A (console with cable), and ATP/M terminal controller with opt 125 (8 direct connect ports including 4 modem).	D500	20,925	21,350
1	51450A	HP3000 MPE V/E Media Product (FOS)	* D500	0	0
1	opt 022	Media on cartridge tape	* D500	0	0
1	opt 200	Latest FOS version	* D500	0	0
1	opt 606	HP MICRO 3000 SPU	* D500	0	0
3	2392A	Display terminal	D300		4,125
3	opt 301	U.S. modem cable (40242M)	D300		255
SECTION 2:					
1	35303A	HP Easytime user interface	B200	400	400
1	opt 635	For use on 32535 systems	B200	-400	-400

HP INSTALLATION IS INCLUDED

TOTAL PRICE: 25,730

NOTE: HP Easytime MUST be ordered UNCOORDINATED and on a separate section.

* OVERRIDE the SUPPLYING DIVISION to D500 when ORDERING

** These are supplying divisions for the U.S.

MICRO 3000

EXAMPLE

Ordering examples (continued)

2. MICRO 3000 "ISS" Full Size System

(10 User system example: MICRO 3000 SPU W/4 MB main memory,
2 ATP/Ms, 260 MB disc capacity, 67 MB tape drive and 10 terminals)

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
SECTION 1:					
1	32535F	HP MICRO 3000 Full Size System. Includes 32535A with 4 MB main memory and system cabinet, 7958A (130 MB disc drive), 9144A (67 MB cartridge tape drive), 2392A (console with cable), and ATP/M terminal controller with opt 125 (8 direct connect ports including 4 modem).	D500	26,525	26,950
1	opt 001	Add on ATP/M with opt 125	D500		2,700
1	opt 008	Add on 7958A disc drive (130 MB)	D500		7,700
1	51450A	HP3000 MPE V/E Media Product (FOS)	* D500	0	0
1	opt 022	Media on cartridge tape	* D500	0	0
1	opt 200	Latest FOS version	* D500	0	0
1	opt 606	HP MICRO 3000 SPU	* D500	0	0
9	2392A	Display terminal	D300		12,375
9	opt 301	U.S. modem cable (40242M)	D300		765

SECTION 2:

1	35303A	HP Easytime user interface	B200	400	400
1	opt 635	For use on 32535 systems	B200	-400	-400

HP INSTALLATION IS INCLUDED

TOTAL PRICE: 50,490

NOTE: HP Easytime MUST be ordered UNCOORDINATED and on a separate section.

NOTE: Only ONE option 007 OR 008 may be ordered.

* OVERRIDE the SUPPLYING DIVISION to D500 when ORDERING

** These are supplying divisions for the U.S.

MICRO 3000

EXAMPLE

Ordering examples (continued)

3. MICRO 3000 "standalone" system

(16 User Example: MICRO 3000 SPU W/4 MB main memory, 2 ATP/Ms, 571 MB Disc drive, 1600 BPI tape drive, and 16 terminals)

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
SECTION 1:					
1	32535A	HP MICRO 3000 System Processor Unit. Includes 2 MB main memory, system cabinet, HP site preparation, and installation.	D500	11,860	12,000
1	opt 051	DUS on magnetic tape	D500	0	0
1	opt 510	Increase memory to 4 MB	D500	4,000	4,000
1	51450A	HP3000 MPE V/E Media Product (FOS)	5007	0	0
1	opt 051	Media on magnetic tape	5007	0	0
1	opt 200	Latest FOS version	5007	0	0
1	opt 606	HP MICRO 3000 SPU	5007	0	0
2	40290A	ATP/M	5200		5,400
2	opt 125	(8 direct connect including 4 modem)	5200		0
16	2392A	Display terminal	D300		22,000
16	opt 301	U.S. modem cable (40242M)	D300		1,360
1	7937H	571 MB disc drive	4800		17,600
1	7974A	1600 BPI magnetic tape drive	5800		14,000
SECTION 2:					
1	35303A	HP Easytime user interface	B200	400	400
1	opt 635	For use on 32535 systems	B200	-400	-400

HP SITE PREP AND INSTALLATION IS INCLUDED

TOTAL PRICE: 76,360

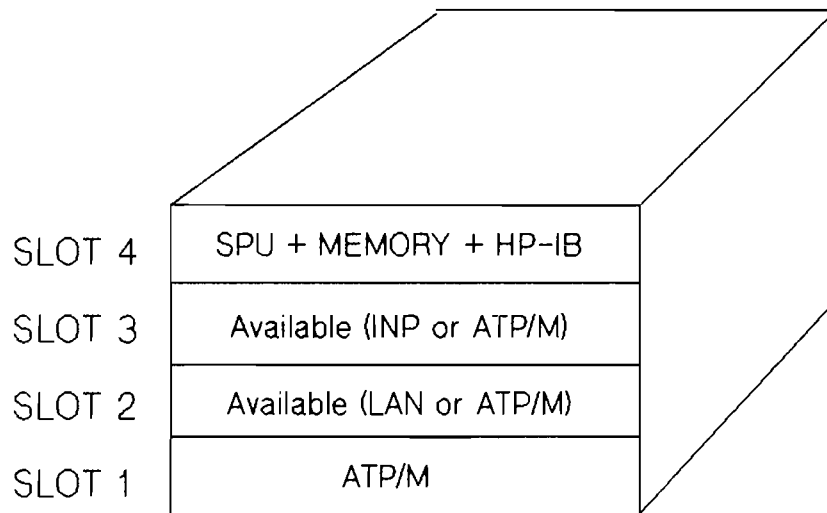
NOTE: HP Easytime MUST be ordered UNCOORDINATED and on a separate section.

** These are supplying divisions for the U.S.

MICRO 3000

Configuration information

MICRO 3000 STANDALONE PRODUCT



Things to remember . . .

. . . about memory

No add-on memory arrays are supported

. . . about datacomm

Maximum of 2 ATP/Ms (first must go in slot 1)

Maximum of 1 LAN (must go in slot 2)

Maximum of 1 INP (must go in slot 3)

May have LAN and INP simultaneously (note slot configuration)

No ATP/37s (TIC, 30460A) are supported

. . . about peripherals

Maximum of 6 HP-IB devices (including INP)

No PICs (30459A) are supported



MICRO 3000

MICRO 3000 maximum configurations

Device	Minimum	Maximum
Memory (Mbytes) **	2	4
HP-IB peripheral interfaces **	1	1
INP	0	1
LAN	0	1
ATP/M	1	2
Terminals		
Direct connect ports	4	16
Modem ports	1	8
Multipoint	0	0
TOTAL PORTS	8	16
Discs		
7957A	0	4
7958A	0	4
7936H/XP	0	4
7937H/XP	0	4
TOTAL DISC DRIVES	1	4
Tapes		
9144A	0	2
7974A	0	2
7978B	0	2
35401A	0	2
TOTAL TAPE DRIVES	1	2
Printers		
2563A/B	0	2
2564B	0	2
TOTAL HP-IB PRINTERS ++	0	2
Serial Printers		
2563A/B	0	3
2564B	0	3
2932A/2934A	0	3
2603A	0	3
2686A/D	0	1
TOTAL SERIAL PRINTERS ++	0	3

** Since the memory is on the SPU board, no add on memory boards are supported. The configuration is fixed at either 2 or 4 Mb. Additionally, no add-on HP-IB interface boards are supported.

++ At least one printer (serial or HP-IB) must be configured on the system.

NOTE: Not all Series/37 peripherals are supported on the MICRO 3000.

MICRO 3000

Supported peripherals

DISCS

7957A (81 MB)
7958A (130 MB)
7936H/XP (307 MB)
7937H/XP (571 MB)

TAPES

9144A (67 MB cartridge tape drive)
35401 (1/4" cart tape autochanger)
7974A (1600 BPI magnetic tape drive)
7978B (6250 BPI magnetic tape drive)

LINE PRINTERS

2563A/B (300 LPM, RS232 & HP-IB)
2564B (600 LPM, RS232 & HP-IB)

SERIAL PRINTERS

2932A (200 CPS dot matrix)
2934A (200/67/40 CPS NLQ dot matrix)
2603A (48 CPS daisywheel)
2686A/D (Laserjet)

TERMINALS

2392A
2393A
2394A
2397A
2622A
2628A

DATA CAPTURE TERMINALS

3081A (Industrial Workstation Terminal)
39800A (Programmable bar code reader)
39801A (Bar code reader)

PERSONAL COMPUTERS

HP150A/B/C
Vectra (All models)
HP110 (Not supported as a console)
HP110 Plus (Not supported as a console)

DATACOMM DEVICES

2334A X.25 Cluster Controller

MODEMS

35016A remote support modem
39301A Fiber optic multiplexer

PLOTTERS

7440A 8-pen
7470A 2-pen graphics, A size
7475A 6-pen graphics, B size
7550A 8-pen

NOTE: Although HP does not specifically warrant or repair IBM PCs or PC clones, with the AdvanceLink 2392 product, these PCs appear to the HP3000 as a 2392 terminal. As long as AdvanceLink 2392 continues to support these PCs, please consider the IBM PC (and therefore clones too) to be valid workstations for the MICRO 3000.

Chapter 6

Ordering and Configuring the MICRO 3000XE

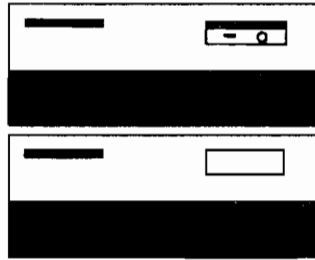
- Product choices: three ways to order
- Full product structure
- SPU ordering example
- Marketing package system
 - structure
 - putting the right package together
 - ordering instructions
 - ordering example
- Upgrade
 - promotion and ordering instructions
 - ordering examples
- Configuration information
- Supported peripherals

MICRO 3000XE

Product choices: three ways to order

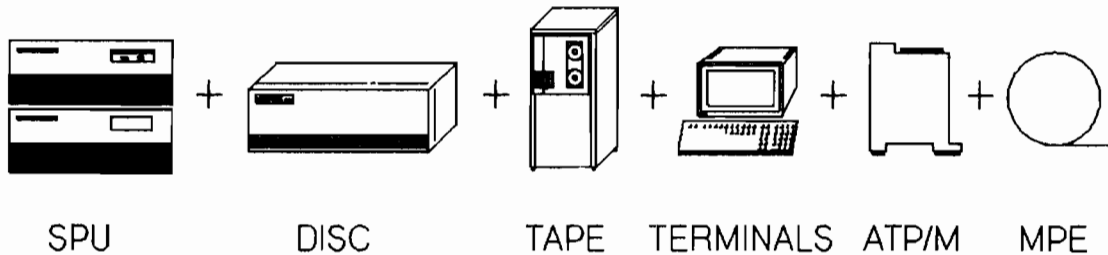
I. Standalone processor

- for custom configurations



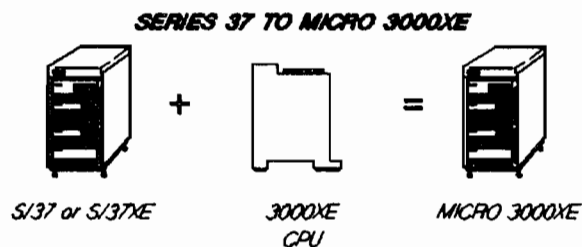
II. Marketing package system

- a complete system with a choice of different peripherals
- discounts up to 18% on individual components
- the preferred choice for most customers



III. Field upgrades from Series 37 systems

- includes new CPU with memory and I/O
- CPU field upgrade \$8,500
- "Series 37 Performance Booster" promotional discount encourages add-on memory and I/O sales



37
2.01785 (Factor)
 upgrade

MICRO 3000XE

Full product structure

Standalone processor

		F.B.P.	U.S. LIST
32545A	MICRO 3000XE System Processor Unit, including 2MB of memory and PIC. DUS option 22 or 51 must be specified. Terminal controller ATP/M must be ordered separately.	29,325	29,500
015	200-240 VAC system Operation	0	0
022	DUS software on cartridge tape media	0	0
051	DUS software on 1600 bpi tape media	0	0
510	Expands memory to 4 MB	7,000	7,000

Box swap upgrade

		F.B.P.	U.S. LIST
32545AH	Upgrade to MICRO 3000XE with 2 MB memory and PIC. DUS option 22 or 51 must be specified. Terminal controller ATP/M must be ordered separately.	29,325	29,500
015	200-240 VAC System Operation	0	0
022	DUS software on cartridge tape media	0	0
051	DUS software on 1600 bpi tape media	0	0
510	Expands memory to 4 MB	7,000	7,000
601	Upgrade from pre-Series II or HP 2000 w/128Kb	-1,000	-1,000
602	Upgrade from Series II w/128 Kb	-1,000	-1,000
603	Upgrade from Series III w/256 Kb	-3,000	-3,000
605	Upgrade from S/33A/B w/256Kb, 2649E	-2,000	-2,000
606	Upgrade from S/33C/U w/256Kb, 2649E	-2,000	-2,000
607	Upgrade from S/30A/B w/256 Kb, 2649E	-2,000	-2,000
608	Upgrade from S/30C/U w/256 Kb, 2649E	-2,000	-2,000
613	Upgrade from Series III w/256 Kb and 30341A HP-IB adapter	-3,500	-3,500

S/37 to MICRO 3000XE field upgrade

		F.B.P.	U.S. LIST
30545A	HP 3000 Series 37 to MICRO 3000XE upgrade. Provides a CPU upgrade from S/37A or S/37XE to MICRO 3000XE. Selecting I/O Extender option 250 will bring a S/37A to the full connectability of the MICRO 3000XE. Memory may be required to bring the S/37 to the 2MB capacity required by MICRO 3000XE. A total quantity of two of any combination of memory options may be ordered.	8,480	8,500
015	200-240 VAC System Operation	0	0
022	DUS software on cartridge tape media	0	0
051	DUS software on 1600 bpi tape media	0	0
250	I/O Extender box for S/37A	7,980	8,000
502	Adds 2 MB memory	6,980	7,000
503	Adds 4 MB memory	13,980	14,000

MICRO 3000XE

Full product structure

MICRO 3000 to MICRO 3000XE field upgrade

		F.B.P.	U.S. LIST
30545AX	MICRO 3000 (2MB) to MICRO 3000XE upgrade. Includes MICRO 3000XE SPU with 2 MB of memory and PIC. Does not include system cabinet. DUS option 22 or 51 must be specified.	18,425	18,500
015	200-240 VAC system Operation	0	0
022	DUS software on cartridge tape media	0	0
051	DUS software on 1600 bpi tape media	0	0
510	Expands memory to 4 MB	7,000	7,000
633	Upgrade from 4 MB MICRO 3000	-4,000	-4,000

I/O Extender

		F.B.P.	U.S. LIST
30545AE	I/O Expansion box for 5-slot MICRO 3000XE (upgraded from S/37A without extender option).	11,480	11,500
015	200-240 VAC system Operation	0	0

In addition to establishing the above new product, the existing S/37A Extender product with 1 MB memory (32450BH) will be reduced to \$15.5K, bringing the extender without memory down to \$11.5K.

Memory products

		F.B.P.	U.S. LIST
30462A	2 MB memory module for S/37 and MICRO 3000XE (existing product, new price)	8,480	8,500 <i>17000</i>
30482A	4 MB memory module for MICRO 3000XE	16,980	17,000
30461AN	Return credit for 1/2 Mb card for S/37 (existing product)	-500	-500
30456AN	Return credit for 1 Mb card for S/37 (existing product)	-1,200	-1,200
30462AN	Return credit for 2 Mb card for S/37 and MICRO 3000XE. (existing product)	-2,400	-2,400
30482AN	Return credit for 4 Mb card for MICRO 3000XE	-4,800	-4,800

MICRO 3000XE

EXAMPLE

SPU ordering example

Standalone MICRO 3000XE

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
1	32545A	HP MICRO 3000XE (2 MB)	D500	29,325	29,500
1	opt 022	DUS software on cartridge tape media	D500	0	0
	or opt 051	DUS software on magnetic tape media	D500	0	0
1	51450A	HP3000 MPE V/E Media Product (FOS)	5007	0	0
1	opt 022	Media on cartridge tape	5007	0	0
	or opt 051	Media on magnetic tape	5007	0	0
1	opt 200	Latest FOS version	5007	0	0
1	opt 607	HP MICRO 3000XE SPU	5007	0	0
2	40290A	ATP/M	5200		5,400
	opt 125		5200		0
TOTAL PRICE:					34,900

** These are supplying divisions for the U.S.

Terms and Conditions

1. Remember that additional products may be ordered on the same section.
2. MPE media products **MUST** be ordered on the same section.
3. The order **MUST** be coordinated.
4. Remember that the ATP/M (40290A) and MPE Media Product (51450A) and associated options must be ordered.

MICRO 3000XE

Marketing package system structure

Required Products (must order the minimum from each set to receive any discount)

MIN	MAX	DESCRIPTION	PRODUCT #	SUPPLYING DIVISION	U.S. LIST	M05 DISCOUNTS
1	1	*MICRO 3000XE 2Mb	32545A	D500	\$29,500	\$ -3,540
		or *MICRO 3000XE Upgrade 2MB	32545AH	D500	\$29,500	\$ -3,540
1	1	51450A MPE Media		5007	0	NONE
	opt 051	MPE on magnetic tape		5007	0	
	opt 200	Latest version		5007	0	
	opt 607	MICRO 3000XE SPU		5007	0	
1	1	130Mb Disc Drive	7958A	4800	\$ 7,700	NONE
	or	307Mb Disc Drive	7936H	4800	\$13,500	NONE
	or	571Mb Disc Drive	7937H	4800	\$17,600	NONE
1	1	ATP/M (8 Ports)	40290A	5200	\$ 2,700	\$ -405
1	8	Display Terminal Cable	2392A	D300	\$ 1,375	\$ -206
			Opt. 3xx	D300	85	NONE
1	1	Cartridge Tape Drive	9144A	C600	\$ 3,500	\$ -525
	or	Cart. Tape Chgr.	35401A	C600	\$ 7,000	\$ -350
	or	1/2" Tape Drive	7974A	5800	\$14,000	\$ -700

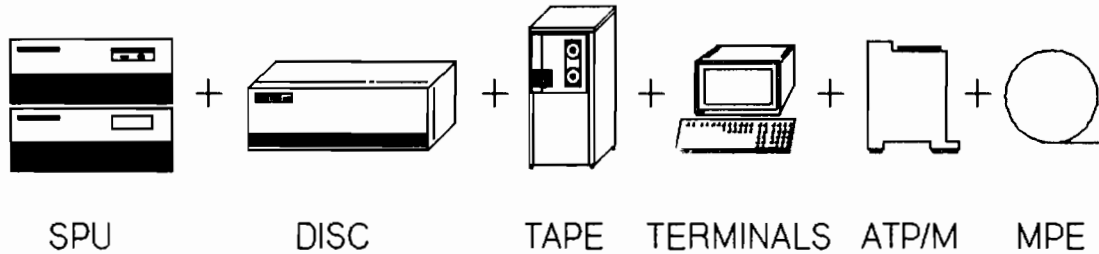
* The option 510 (expands the system to 4 MB) is available in this package though no discount is given. Additional memory may also be ordered.

Optional "MICRO 3000XE" Products

MIN	MAX	DESCRIPTION	PRODUCT #	SUPPLYING DIVISION	U.S. LIST	M05 DISCOUNT
0	1	2Mb Memory Module	30462A	5600	\$ 8,500	\$ -1,500
	or	4Mb Memory Module	30482A	5600	\$17,000	\$ -3,000

MICRO 3000XE Marketing Package System

Putting the right package together



QUESTION	WHAT TO ORDER	APPROPRIATE M05 DISCOUNT
1. Which SPU? (must order one)		
New system?	32545A	- \$3,540
Box swap upgrade?	32545AH	- \$3,540
2. How much memory?		
2 Mb?	standard	0
4 Mb?	option 510	0
6 Mb?	30482A	- \$3,000
8 Mb?	option 510 & 30482A	- \$3,000
3. Which system disc? (must order one)		
7958 130 Mb? —	7958A	0
7936 307 Mb? —	7936H	0
7937 571 Mb?	7936H	0
4. Which backup device? (must order one)		
1/4" cartridge tape?	9144A	- \$ 525
1/4" autochanger?	35401A	- \$ 350
1/2" 1600 BPI?	7974A	- \$ 700

MICRO 3000XE Marketing Package System

By choosing the correct components

QUESTION	WHAT TO ORDER	APPROPRIATE M05 DISCOUNT
5. How many 2392A terminals? (must order 1 for console)		
1-8?	2392A + cable option 3xx	- \$ 206 ea
9-56?	2392A + cable option 3xx	0
6. How many ports? (must order 1, ATP/M has 8 ports)		
8 ports	40290A + interface opt 1xx	- \$ 405
add'l ports	40290A + interface opt 1xx	0
7. How many PICs?		
1?	standard	0
2 or 3?	30459A	0
8. How to order MPE?		
Which media?	51450A	0
1/4" cartridge tape?	opt 022	0
or		
1/2" magnetic tape?	opt 051	0
Which MIT version?		
latest version?	opt 200	0
or		
UB Delta 1?	opt 320	0
MICRO 3000XE CPU	opt 607	0
9. Other products?		
Coordinated delivery	same order section	
or		
Uncoordinated delivery	separate order section	

MICRO 3000XE

Marketing package system ordering instructions

Orders in the Backlog

All systems, particularly Series 37, 37XE, and Series 42 orders which have not shipped by December 1, 1986 are eligible for the new MICRO 3000XE. **We recommend you cancel and re-enter an order for one of these new MICRO 3000XE systems.** Cancel and re-enters will be required prior to shipment for those orders that will be converting. Timely processing of these re-enters will be crucial for all orders since credit and rebills will NOT be permitted. (Contact the factory Order Processing department regarding order placement of a MICRO 3000XE prior to December 1.)

Terms and Conditions

1. The "Marketing Package System" **MUST** be ordered as a coordinated shipment, and all products must appear on the same section of the order.

NOTE: The MPE Media Product (51450A and the associated options) as well as the ATP/M (40290A opt 125) are not included in the SPU and **MUST** be ordered as part of the package.

2. Additional products can be ordered at the full list price and may be coordinated on the same section with the MICRO 3000XE (32545A or 32545AH).
3. Up to eight 2392A terminals are eligible to be ordered as part of the M05 promotional package. Additional terminals may be ordered at full list price.
4. Options may be added at full list price to any of the products ordered in the package.
5. Special instructions **MUST** state "MICRO 3000XE MPS" on orders eligible for the promotional discount.
6. The following discounts apply (OEM, VEU, EU, Demo Development, and educational) to the net system price. MICRO 3000XE systems qualify for 1.25 functional units.
7. Standard delivery requirements apply (shipment within 6 months after order date).
8. This promotion will become effective December 1, 1986. In order for your customer to be eligible for the package, an order must be placed by May 31, 1987.
9. European ordering instructions will be issued by HPSA.
10. Your Order Processing contacts for any questions regarding ordering instructions are:

Lois Kawata: (Telnet) 786-5554 or (916) 786-8000 x5554

Bryan McGruder: (Telnet) 786-4114 or (916) 786-8000 x4114

HPDESK Location: HP/D500/20

MICRO 3000XE

EXAMPLE

Marketing package system ordering example

Ordering example for MICRO 3000XE Marketing Package System

(12 user system example: 4 MB of memory, 571 MB disc space and magnetic tape unit)

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION *	F. B. P.	U. S. LIST
1	32545A	HP MICRO 3000XE SPU	D500	29,325	29,500
1		M05 promotional adjustment	D500		-3,540
1	opt 051	MPE media on magnetic tape	D500		0
1	opt 510	4 MB Memory	D500	6,980	7,000
2	40290A	ATP/M terminal controller	5200		5,400
	opt 125	(8 direct connect ports including 4 modem).			0
1	M05	Promotional adjustment	5200		-405
1	7937H	571 MB Disc drive	4800		17,600
1	7974A	1600 BPI tape drive	5800		14,000
1	M05	Promotional adjustment	5800		-700
12	2392A	Display terminal	D300		16,500
8	M05	Promotional adjustment	D300		-1,648
12	opt 301	U.S. modem cable	D300		1,020
1	51450A	MPE Media	5007		0
	opt 051	MPE on magnetic tape	5007		0
	opt 200	Latest version	5007		0
	opt 607	MICRO 3000XE SPU	5007		0
TOTAL PRICE:					84,727

* These are supplying divisions for the U.S.

This is a savings of \$6,293 off the list price of the system and peripherals associated with the promotion package.

MICRO 3000XE

Upgrade promotion and ordering instructions

"Series 37 Performance Booster" promotion

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F. B. P.	U. S. LIST	M05 DISC
1	30545A	HP MICRO 3000XE CPU upgrade	D500	8,480	8,500	
	opt 250	Extender	D500	7,980	8,000	-2,000
	opt 502	Add 2 MB	D500	6,980	7,000	-2,500
	opt 503	Add 4 MB	D500	13,980	14,000	-4,500

** These are supplying divisions for the U.S.

Terms and Conditions

1. The 30545A will be on the CPL as of December 1, 1986.
2. In order for your customer to be eligible for the upgrade promotion, an order must be placed by April 30, 1987 and shipment must occur prior to July 31 or within 6 months of the order date, whichever comes first.
3. Additional products can be ordered at the full list price and may be coordinated by placing them on the same section with the MICRO 3000XE upgrade (30545A).
4. Special Instructions MUST state "S/37 PERFORMANCE BOOSTER PROMO" on orders eligible for the promotional discount.
5. A maximum of two memory options (mix or match) may be ordered and will be eligible for the promotional discount.
6. Return removed CPU boards to Division C100 (FRD).
7. Return removed memory boards to Division C100 (FRD) if return credit for memory is ordered.
8. The following discounts apply (OEM, VEU, EU, Demo Development, and educational) to the net system price.
9. Special European ordering instructions will be issued by HPSA.
10. Your Order Processing contacts for any questions regarding ordering instructions are:

Lois Kawata (Telnet) 786-5554 or (916) 786-8000 X5554
Bryan McGruder (Telnet) 786-4114 or (916) 786-8000 X4114

HPDESK Location: HPD500/20

MICRO 3000XE

EXAMPLE

Upgrade ordering examples

1. Series 37 to MICRO 3000XE upgrade

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
1	30545A	HP MICRO 3000XE Upgrade	D500	8,480	8,500
1	opt 022	MPE media on cartridge tape	D500	0	0
	or opt 051	MPE media on magnetic tape	D500	0	0
TOTAL PRICE:					8,500

** These are supplying divisions for the U.S.

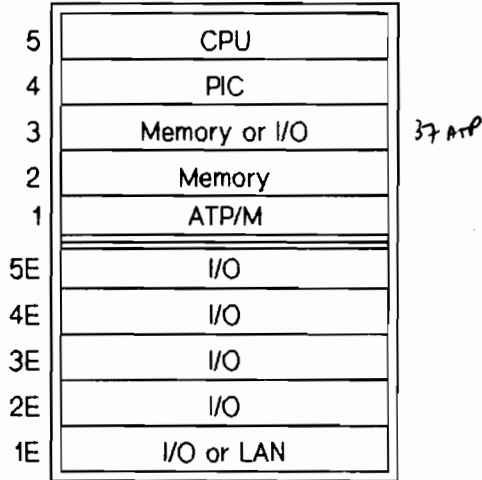
2. Series 37A (1 Mb) to MICRO 3000XE (4 Mb) upgrade

QTY	NUMBER	DESCRIPTION	SUPPLYING DIVISION **	F.B.P.	U.S. LIST
1	30545A	HP MICRO 3000XE Upgrade	D500	8,480	8,500
1	opt 022	MPE media on cartridge tape	D500	0	0
1	opt 250	I/O Extender Box	D500	7,980	8,000
		M05 Promotional adjustment	D500		-2,000
1	opt 503	Adds 4 MB memory	D500	13,980	14,000
		M05 promotional adjustment	D500		-4,500
1	30456AN	Return credit for 1 MB	C100		-1,200
TOTAL PRICE:					22,800

** These are supplying divisions for the U.S.

MICRO 3000XE

Configuration information



Maximum Supported Configuration

- Memory - 8 MBytes
- HP-IB Controllers (PIC) - 3
- INP - 3
- LAN - 1
- Terminals - 56
- Discs - 8
- Tapes - 4
- Printers - 4
- Serial printers - 8
- ATP/M's - 7
- ATP37's - 4 (Upgrade Only)

Things to remember . . .

. . . about the CPU

The CPU always goes in slot 5 of the SPU.

. . . about memory

S/37 1 Mb memory boards are supported in upgraded S/37s only. S/37 2 Mb memory boards and the new 4 Mb board are supported in the MICRO 3000XE.

1st memory board goes in slot 2, and the 2nd memory board (if applicable) goes in slot 3. They are supported as configured below:

slot#	Memory Capacity					
	2Mb	2Mb	4Mb	4Mb	6Mb	8Mb
2	1	2	2	4	4	4
3	1	-	2	-	2	4

. . . about datacomm

One ATP/M must always be placed in slot 1 of the SPU.

When upgrading from a S/37, an INP or an ATP/M with right-hand connectors may not be installed above an ATP37.

LAN always goes in slot 1E of the I/O extender unless the system is an upgraded S/37A without an extender. In that case, the LAN goes in slot 3.

. . . about peripherals

The maximum number of high speed PICs is 2.

The maximum number of PICs is 3 (with the 3rd PIC only used to connect INPs).

The maximum number of HP-IB devices per high speed PIC is 6.

. . . miscellaneous

A PIC, INP, or ATP/M may be placed in any available slot designated I/O above.

MICRO 3000XE

Maximum configurations

	MICRO 3000XE 5-slot Upgrade	MICRO 3000XE 10-slot		MICRO 3000XE 5-slot Upgrade	MICRO 3000XE 10-slot
Memory (Mbytes)	8	8	PRINTERS		
HPIB Controllers (PIC)	2	3	2563A	4	4
INP	1	3	2564B	4	4
LAN	1	1	2565A	4	4
			2566A/B	4	4
TERMINALS			2567B	4	4
Direct-Connect	16*	56*	2680A	2	2
Modem	8*	28*	2686A/D	2	2
Total	16*	56*	2688A	2	2
			Max HP-IB Printers	4	4
DISCS			SERIAL PRINTERS		
7914	8	8	2932A	8	8
7914ST	2	2	2933A	8	8
7914CT	2	2	2934A	8	8
7933H/XP	8	8	2686A/D	2	2
7935H/XP	8	8	2687	2	2
7945A	4	4	2601	8	8
7957A	4	4	2602	8	8
7958A	4	4	2603	8	8
7936H/XP	8	8	2563A	3	3
7937H/XP	8	8	2564B	2	2
Max Disc Drives	8	8			
TAPES					
7974A	4	4			
7978A	4	4			
9144A	4	4			
35401A	2	2			
Max Tape Drives	4	4			

* Only if all ATP/M boards are installed. Mixture of ATP37's and ATP/M's will reduce the maximum terminal/modem count.

MICRO 3000XE

Supported peripherals

DISCS

7914P/ST/CT (132 MB)
7933/5 (H/XP) (404 MB)
7945A (55 MB)
7957/8 (A) (81/130 MB)
7936/7 (H/XP) (307/571 MB)
9895A flexible disc drive (obsolete)

TAPES

7974A (1600 BPI magnetic tape drive)
7978A/B (6250 BPI magnetic tape drive)
9144A (67 MB cartridge tape drive)
35401A (1/4 " cart tape autochanger)

LINE PRINTERS

2563/5 (A)
2564/7 (B)
2566A/B

LASER PRINTERS

2680/8 (A)
2686A/D

SERIAL PRINTERS

2932/3/4 (A) (2933A obsolete)
2686A/D (Laserjet)
2687
2601/02/03 (2601/02 to be obsoleted)
2563A
2564B

TERMINALS

2392/3/4/7 (A)
2622/3 (A)
2624/5/8

PERSONAL COMPUTERS

HP150A/B/C
Vectra (all models)
HP110 (not supported as console)
HP110 Plus (not supported as console)

DATA CAPTURE TERMINALS

3081A industrial workstation terminals
39800A programmable bar code readers
39801A bar code readers

DATACOMM DEVICES

2334A X.25 cluster controller

MODEMS

35016A remote support modem
39301A fiber optic multiplexer

PLOTTERS

7440A 8 pen
7470A 2 pen graphics, A size
7475A 6 pen graphics, B size
7550A 8 pen, B size
7580B drafting, D size
7585B drafting, E size

NOTE: Although HP does not specifically warrant or repair IBM PCs or PC clones, with the AdvanceLink 2392 product, these PCs appear to the HP3000 as a 2392 terminal. As long as AdvanceLink 2392 continues to support these PCs, please consider the IBM PC (and therefore clones too) to be valid workstations for the MICRO 3000XE.

Chapter 7

HP3000 Product Line Pricing Update

- Upgrade Pricing Update
- Series 52 and Series 58 Field Upgrades

Upgrade Pricing Update

Return credit pricing changes and additions

Changes effective November 1, 1986

As previously announced, return credits for the Series III, 44, and 48 systems have been reduced. These changes were effective November 1, and apply towards box swap upgrades to the Series 58, Series 70, and Series 930.

New upgrades effective January 1, 1987

Consistent with HP's tradition of providing a growth path to higher performance, return credits for the MICRO 3000 and the MICRO 3000XE will be added to the Series 52, Series 58, Series 70 and Series 930 as box swap upgrades.

Upgrade From:	Upgrade To:			
	52	58	70	930
MICRO 3000				
- 2Mb	(4.0)	(5.0)	(8.0)	(8.0)
- 4Mb	(7.0)	(8.0)	(12.0)	(12.0)
MICRO 3000XE				
- SPU without Memory	(8.0)	(10.0)	(15.0)	(15.0)
- 5 Card *	(7.0)	(8.0)	(12.0)	(12.0)

* Upgrade from Series 37A

Changes effective February 1, 1987

We are adjusting the upgrade pricing on the Series 68, 70, and Series 930 as of February 1, 1987.

These changes are to provide consistency in our upgrade strategy between these systems and to align the return credits with our current system pricing.

Series 68 changes

Effective February 1, 1987, Series 68 upgrade credits will be adjusted to be consistent with those of the Series 70. No new upgrade credit options will be added to the Series 68.

Series 68 Box Swap Upgrade:

Upgrade from Series III + 30341A	-6,000
Upgrade from Series III w/256Kb	-5,000
Upgrade from Series 40	-11,650
Upgrade from Series 42	-15,000
Upgrade from Series 44	-13,000
Upgrade from Series 48	-19,000
Upgrade from Series 42XP w/2Mb	-24,000
Upgrade from Series 58 w/4Mb	-30,000
Upgrade from Series 58 w/2Mb	-28,000

Series 70 and Series 930 changes

As of February 1, 1987 we will be lowering the return credits for the Series 40, Series 42XP and the Series 58 towards the Series 70 and the Series 930. Encourage your customers to take advantage of the current higher return credits to close sales now!

Series 70, 930 Box Swap Upgrades:

Upgrade from Series 40	-11,650
Upgrade from Series 42XP w/2Mb	-24,000
Upgrade from Series 58 w/2Mb	-28,000

Return credit options for the Series 52 and the 4Mb Series 58 will be added to the Series 70 and the Series 930 on the February 1 CPL.

New Upgrade Options To Series 70, 930:

Upgrade from Series 52 w/2Mb	-24,000
Upgrade from Series 52 w/4Mb	-26,000
Upgrade from Series 58 w/4Mb	-30,000

Series 52 and Series 58 Field Upgrades

Ordering information

S/52 Field Upgrade

		F.B.P.	U.S. LIST
30552C	Series 39/40/42 to Series 52 Field Upgrade with new SPU and 4Mb memory	32,400	32,500
022	DUS on cartridge tape	0	0
042	Price adjustment for disc caching	-2,500	-2,500
196	Delete 4Mb memory	-10,000	-10,000
502	Add 2Mb memory	10,490	10,500
503	Add 4Mb memory	17,990	18,000

S/58 Field Upgrade

		F.B.P.	U.S. LIST
30558C	Series 44/48 to Series 58 Field Upgrade with 4Mb memory	32,400	32,500
048	Price adjustment for disc caching	-2,500	-2,500
196	Delete 4Mb memory	-10,000	-10,000
502	Add 2Mb memory	10,490	10,500
503	Add 4Mb memory	17,990	18,000

Memory Return Credits

		F.B.P.	U.S. LIST
30161AN	Return credit for 1 Mb memory for S/39/4X (maximum of 3 1Mb memory modules may be returned when purchasing S/52 or S/58 field upgrades)	- 1,800	-1,800
30171AN	Return credit for 256 Kb memory for S/39/4X	-200	-200
30092AN	Return credit for 512 Kb memory for S/39/4X	-400	-400
	(maximum of 4 256 Kb memory modules may be returned when purchasing a S/52 field upgrade)		
	(maximum of 8 256 Kb memory modules may be returned when purchasing a S/58 field upgrade)		



Chapter 8

Questions and Answers

- **General**
- **MICRO 3000**
- **MICRO 3000XE**
- **Series 52 and Series 58 field upgrades**

Questions and Answers

General

Q. What functional units and discount schedules apply to the MICRO 3000 and the MICRO 3000XE?

A. The MICRO 3000 has .75 and the MICRO 3000XE has 1.25 functional units. Both SPUs and the integrated systems are on the A1, A1(V), A-3L and A-3L(V) exhibits for VARs. As well, both systems can be found on the aggressive "A" schedule.

Q. What level of HP software pricing will apply to the MICRO 3000 systems?

A. Both the MICRO 3000 and the MICRO 3000XE will utilize Series 37 software pricing levels. Many of the descriptions on the CPL may not reflect the MICRO 3000 names in December, but will be updated over time. Feel confident in quoting the Series 37 prices to your MICRO 3000 and MICRO 3000XE customers.

Q. What LANs are supported on the MICRO 3000 and MICRO 3000XE?

A. Currently these systems support the same LANs as the larger HP3000's (IEEE 802.3). This is supported on both a thick and thin cable. In addition, the just announced StarLAN is supported via an interface card directly into both the MICRO 3000 systems.

Q. Are T-MIT or earlier MITs supported on the MICRO 3000 systems?

A. Due to microcode changes necessary to support the new processors, only UB Delta 1 and later releases of MPE V/E are able to support the MICRO 3000 and MICRO 3000XE.

Q. Do we support the new 4 Mb memory board on installed Series 37s?

A. No, due to microcode differences, the 4 Mb memory board is only supported on the MICRO 3000XE.

Q. How do the MICRO 3000 systems fit into our strategy for 900 series systems?

A. We have focused our initial 900 series systems on the high-end of the product line to provide customers with a growth path to higher performance. This is also the area where the extended addressing and other new capabilities of HP Precision Architecture have the greatest benefit to customers. Over the next few years, we will extend the 900 series upward in performance and downward in price; first to the midrange and then to the entry level systems. Both MICRO 3000 systems use advanced NMOS III technology to provide excellent price/performance and the MICRO 3000 uses HP Easytime to provide enhanced ease-of-use. They provide us with a strong entry level system offering for the next several years and they are software compatible with larger 900 series systems.

Questions and Answers

General

- Q. What other HP3000 software is supported on the MICRO 3000 and MICRO 3000XE?
- A. Both systems are fully functional members of the HP3000 Family. As such, they support the full range of HP3000 software. Check the individual product data sheets for the current list of supported software.
- Q. Is one 7937 disc (571Mb) and a 1/4" tape cartridge autochanger (35401A) a supported configuration? For "unattended" backup?
- A. Yes, this configuration is supported. To be supported as an "unattended" backup configuration, the maximum disc capacity that can be backed up is 504Mb.

Questions and Answers

MICRO 3000

- Q. Are factory integrated systems available for the MICRO 3000 with 2 Mb main memory and the 130 Mb disc or with 4Mb main memory and the 81Mb disc drive?
- A. No, all factory integrated systems are 2Mb main memory with 81Mb disc capacity, and 4Mb main memory with 130Mb disc capacity. These configurations were chosen to meet the primary market needs. It is difficult to provide total configuration flexibility and still keep the costs down to provide the attractive prices these systems carry. Of course, customers can customize the exact configuration they desire by ordering the standalone SPU (32535A). The 81Mb or the 130Mb disc drives may be added to either the 32535E or 32535F as an additional drive.
- Q. Since the ATP/M supports option 103 and 105 in addition to option 125, can these options be substituted in the 32535E or 32535F systems?
- A. No, although option 103 and 105 are supported on the MICRO 3000 and can be ordered with the standalone SPU (32535A), we have standardized the ISS systems to include only option 125. A second ATP/M may be ordered from the supplying divisions with any available option.
- Q. Can the 1/4" tape cartridge autochanger (35401A) be substituted for the 9144A tape cartridge drive in either of the factory integrated systems (32535E or 32535F)?
- A. No, at present this configuration has not passed our shipping tests for the packaging materials. We will further test this configuration with packaging materials designed to include this device in Integrated System Shipments (ISS) in the future.
- Q. The configuration diagrams show that slots 2 and 3 can contain an ATP/M. Can both of these contain an ATP/M, along with slot 1, for a 24 port configuration?
- A. No, the supported configuration limit for point-to-point ports is 16. For customers that require greater point-to-point connectability the MICRO 3000XE is the right choice. Since MICRO 3000 supports a LAN connection, customers can configure up to 30 personal computers on the LAN and therefore obtain increased connectability. Contact your field specialist regarding the performance impact of these configurations.

Questions and Answers

MICRO 3000

Q. What does the MICRO 3000 do to future sales of the Series 37A?

A. Since the MICRO 3000 has significantly greater performance and a lower price than the Series 37A, we anticipate that all Series 37A customers will convert their orders to the MICRO 3000 and we will not see additional S/37A orders. We will however maintain the Series 37A on the Corporate Price List for special situations and contracts that will need to be honored over the next 3-6 months.

Q. Is HP Easytime available on other HP3000 systems?

A. Currently, HP Easytime is only available on the MICRO 3000. HP Easytime was designed specifically for the novice user that typifies the MICRO 3000 customer. At initial release, HP Easytime is restricted to small system configurations due to its ability to handle only one peripheral per device class. A follow-on project has been initiated to increase the capabilities of HP Easytime so that it will be effective on more complex and larger configurations of HP3000's. Our goal is to eventually support HP Easytime on the full HP3000 Family (including Precision Architecture systems).

Questions and Answers

MICRO 3000XE

- Q. Why is a field upgrade from the Series 37 only available to the MICRO 3000XE and not to the entry level MICRO 3000?
- A. The MICRO 3000 has a different backplane than the Series 37 and MICRO 3000XE. This means any upgrade would have to be a full box swap. Series 37 customers have the option to either increase processor power, main memory, or connectivity through the MICRO 3000XE upgrades. And with the "Series 37 Performance Booster" upgrade promotion, these customers can save up to \$11,000 if they order before April 30, 1987.
- Q. Are the 1/2Mb, 1Mb or 2Mb memory boards of the Series 37 supported in the MICRO 3000XE?
- A. Both the 1Mb and 2Mb memory boards are supported in the MICRO 3000XE. The 2Mb board will co-exist with either another 2Mb board or with the new 4Mb memory board. The 1Mb board is supported only with another 1 Mb board in an upgrade of a Series 37 (total memory=2Mb). Your customer may decide to use this memory configuration or return the 1Mb boards for credit and order additional 2Mb or 4Mb memory boards. The 1/2Mb memory boards are NOT SUPPORTED in the MICRO 3000XE because they can not co-exist with the other memory boards.
- Q. What is the duration of the MICRO 3000XE Marketing Package System, and does it apply to box swap upgrades?
- A. Yes, it applies to box swap upgrades and even though it is structured as a 6 month promotion, our intent is to establish a more permanent structure.
- Q. What is the relative performance improvement when upgrading from a Series II, III, 30 or 33?
- A. This depends upon the customer's specific application and on what extent they also increase memory size and the type of new peripherals they install. Using the Series 42 as a rough rule of thumb, the typical customer should see substantial improvement.
- Q. What is the relative performance improvement when upgrading a Series 37 to the MICRO 3000XE?
- A. The MICRO 3000XE CPU speed is 50-60% faster than the Series 37 CPU. System level performance improvement will depend on the specific application and configuration. See the performance section of this document and the November '86 issue of Performance News Notes for more information.
- Q. If my Series 37A customer upgrades to a MICRO 3000XE without the I/O Extender, can the extender be added later?
- A. Yes, but... it would cost more. The I/O Extender sells for \$8K with the upgrade (option 250), and during the promotion period sells for \$6K. If your customer waits to add the extender later as an add-on product (#30545AE), the cost is \$11.5K. A savings of \$5.5K is a good reason to select the I/O Extender during the upgrade promotion period.

Questions and Answers

MICRO 3000XE

- Q. If my Series 37 customer is not on UB Delta 1, is it required, and if so, can I upgrade the MIT at the same time that I upgrade the hardware to a MICRO 3000XE?
- A. UB Delta 1 is required when upgrading a Series 37 to the MICRO 3000XE. Hardware and MIT can be upgraded at the same time but it is not recommended. Rather, upgrade the MIT first to ensure system stability prior to upgrading the hardware.
- Q. How is the MICRO 3000 to MICRO 3000XE upgrade different than a box-swap upgrade?
- A. The MICRO 3000XE uses the same system cabinet as the MICRO 3000. Therefore, the customer retains their system cabinet and only the SPU's are exchanged.

Questions and Answers

Series 52 and Series 58 field upgrades

- Q. Is it in my customer's best interest to return their 1 Mb and 2 Mb memory boards when upgrading to the Series 5X?
- A. For optimal performance, customers will want to use their existing 1 Mb and 2 Mb memory boards with the Series 5X Field Upgrade, up to the maximum supported memory configuration of 8 Mb. If their memory exceeds 8 Mb, return credits are available as Part Number 30161AN for 1 Mb and Part Number 30173AN for 2 Mb boards.
- Q. How does the Series 52 Field Upgrade differ from the Series 42XP?
- A. Besides the lower price and more memory there is no difference. The Series 42XP memory support has been increased from 6 Mb to 8 Mb to provide consistency with the Series 52.
- Q. My customer has a Series 42XP on order. How can I change the order to a Series 52 Field Upgrade?
- A. You can cancel the Series 42XP order and re-enter the order for a Series 52 Field Upgrade. This also holds for customers with an order in the backlog for a Series 58A Field Upgrade. You should cancel that order and re-enter the order for the new Series 58 Field Upgrade (P/N 30558C).

Chapter 9

Appendices

- **Appendix A - Detailed Configurations for Performance Chapter**
- **Appendix B - Detailed pricing for Competition and Target Market chapters**
- **Appendix C - Literature list and part numbers**

APPENDIX A

Detailed configurations for performance chapter

See November Issue of Performance News Notes for Complete Performance Information

Figure 1

Series 37	MICRO 3000	MICRO 3000XE	Series 42
2Mb Memory	2Mb Memory	2Mb Memory	2Mb Memory
2 - 7914	2 - 7914 *	2 - 7914	2 - 7914
U-MIT*	U-MIT*	U-MIT*	U-MIT*
Cache off	Cache off	Cache off	Cache off

Figure 2 Same as Figure 1

Figure 3 Same as Figure 1

Figure 4 Same as Figure 1

Figure 5

MICRO 3000	MICRO 3000	MICRO 3000	MICRO 3000
2Mb Memory	2Mb Memory	4Mb Memory	4Mb Memory
2 - 7914 *	2 - 7914 *	2 - 7914 *	2 - 7914 *
U-MIT*	U-MIT*	U-MIT*	U-MIT*
Cache off	Cache on	Cache off	Cache on

Figure 6

MICRO 3000XE	MICRO 3000XE	MICRO 3000XE	MICRO 3000XE
2Mb Memory	4Mb Memory	4Mb Memory	4Mb Memory
2 - 7914	2 - 7914	2 - 7914	2 - 7914
U-MIT*	U-MIT*	U-MIT*	U-MIT*
Cache off	Cache on	Cache on	Cache on

Figure 7

Series 37	MICRO 3000XE	MICRO 3000XE
2Mb Memory	2Mb Memory	2Mb Memory
2 - 7914	2 - 7914	2 - 7914
U-MIT*	U-MIT*	U-MIT*
Cache off	Cache off	Cache off

* Not supported configuration - special factory test. MICRO 3000 and MICRO 3000XE require UB Delta 1.

NOTE: 7914 discs have comparable performance of 7957, 7958.

APPENDIX B

Competitive pricing details: Competition chapter MICRO 3000 (Figures 1 and 3)

4 Users	LIST	SMMC SUP/mo
MICRO 3000 2Mb	21,350	34
ATP/M	incl	8
Memory 2Mb	std	0
Disc 7957 (81Mb)	incl	35
Tape 9144 (67Mb)	incl	14
Terms 1 2392	incl	6
3 2392 & cable	4,380	18
MPE (RCS)		130
HP Easytime	incl	0*
LIST		\$25,730 245

3 year cost of ownership = \$33,815

16 Users	LIST	SUP/mo
MICRO 3000 4Mb	26,950	41
ATP/M 8 port	incl	8
8 port exp	2,700	8
Memory 4Mb	std	0
Disc 7958 (130Mb)	incl	37
7957 (81Mb)	5,700	35
Tape 9144 (67Mb)	incl	14
Terms 1 2392	incl	6
15 2392 & cable	21,900	90
MPE (RCS)	0	130
HP Easytime	incl	0*
LIST		\$57,250 369

3 year cost of ownership \$69,427

10 Users	LIST	SMMC SUP/mo
MICRO 3000 4Mb	26,950	41
ATP/M 8 port	incl	8
8 port exp	2,700	8
Memory 4Mb std	std	
Disc 7958 (130Mb)	incl	37
Tape 9144 (67Mb)	incl	14
Terms 1 2392	incl	6
9 2392 & cable	13,140	54
MPE (RCS)	0	130
HP Easytime	incl	0*
LIST		\$42,790 298

3 year cost of ownership = \$52,624

* Pricing yet to be determined

APPENDIX B

Competitive pricing details: Competition chapter IBM S/36 (Figures 1 and 3)

4 Users			10 Users		
	LIST	SMMC SUP/mo		LIST	SMMC SUP/mo
5362 - B02 1Mb	17,625	70	5362 - B04 1Mb	27,625	105
Term port	std	0	Term port	std	0
Memory 1Mb	std	0	Memory 1Mb add 1Mb	3,500	0
Disc (60Mb)	std	0	Disc (120Mb)	std	
Backup diskette 1/4" tape	800	3	Backup diskette 1/4" tape	800	3
4 Terms w/warranty	5,180	0	10 Terms w/warranty	12,950	0
SSP	4,000	0	SSP	4,000	0
Sys Util	600	0	Sys Util	600	0
<hr/>			<hr/>		
	LIST	\$28,205 73		LIST	\$49,475 108

3 year cost of ownership = \$30,614

3 year cost of ownership = \$53,039

16 Users		
	LIST	SUP/mo
5362 - C02 1Mb mem	21,625	75
Term port exp	2,000	4
Memory 1Mb add 1Mb	3,500	0
Disc (60Mb) 200 Mb + cntrlr	12,500	15
Backup 1 diskette 1/4" tape	800	3
16 Terms w/warranty	20,720	0
SSP	4,000	0
Sys Util	600	0
<hr/>		
	LIST	\$65,745 97

3 year cost of ownership \$68,946

APPENDIX B

Competitive pricing details: Competition chapter DEC MicroVAX II (Figures 1 and 3)

4 Users	LIST	SMMC SUP/mo	10 Users	LIST	SMMC SUP/mo
DH630 - Q2 2Mb	21,280	198	DH630 - Q3 3Mb	29,130	247
Memory 2Mb	std		Port Exp	680	11
Disc (71Mb)	std		Memory (3Mb)	std	
Backup (95Mb)	std		add (2Mb)	5,000	36
Terms 4 VT220	4,380	48	Disc (71Mb)	std	
VMS	4,000	240	add (71Mb)	4,050	38
			Backup (95Mb)	std	
	LIST	\$29,660 486	Terminals 10 VT220	10,950	120
3 year cost of ownership		\$45,698	VMS	6,000	320
				LIST	\$55,810 772

3 year cost of ownership \$81,286

16 Users	LIST	SUP/mo
DH630 - Q4 5Mb	43,480	429
Port Exp	1,520	15
Memory (5Mb)	std	
add (2Mb)	5,000	36
Disc (217Mb)	std	
Tape (95Mb)	std	
Terminals 16 VT220	17,520	192
VMS	6,000	320
	LIST	\$73,520 992

3 year cost of ownership \$106,756

APPENDIX B

Competitive pricing details: Competition chapter MICRO 3000XE (Figures 2 and 4)

12 Users			24 Users		
	LIST	SMMC SUP/mo		LIST	SMMC SUP/mo
MICRO 3000XE 2Mb	25,960	70	MICRO 3000XE 2Mb	25,960	70
ATP/M - 2	4,995	16	ATP/M - 3	7,695	24
7958 (130Mb) Disc	7,700	37	Memory (2Mb)	7,000	-13
9144 (67Mb) Tape	2,975	14	PIC add	1,900	8
12 2392A Terminals	15,872	72	7936 (307Mb) Disc	13,500	42
MPE (RCS)	0	145	35401 Autochanger	6,650	34
	<u>LIST</u>	<u>\$57,502 354</u>	24 2392A Terminals	33,392	144
3 year cost of ownership	\$69,184		MPE (RCS)	0	145
				<u>LIST</u>	<u>\$96,097 454</u>

3 year cost of ownership \$111,079

32 Users	LIST	SUP/mo
MICRO 3000XE SPU 2Mb	25,960	70
ATP/M - 4	10,395	32
Memory add (4Mb)	14,000	11
7937 (571Mb) Disc	17,550	42
PIC	1,900	8
7974 Reel to Reel tape	13,300	100
32 2392A Terminals	45,072	192
MPE (RCS)	0	145
	<u>LIST</u>	<u>\$128,177 600</u>

3 year cost of ownership \$147,977

APPENDIX B

Competitive pricing details: Competition chapter IBM S/36 (Figures 2 and 4)

12 Users	LIST	SMMC SUP/mo	24 Users	LIST	SMMC SUP/mo
5360 D13 1Mb	43,000	150	5360 D14 2Mb	57,500	194
Port exp	2,000	4	Port exp	2,000	0
Memory	std		Memory add 1Mb	3,500	0
Disc 200 Mb	std		Disc 400Mb	std	
1/4" cart tape	800	3	1/4" cart tape	800	3
12 Terms w/warranty	15,540	0	24 Terms w/warranty	31,080	0
SSP	4,000	0	SSP	4,000	0
Sys Util	600	0	Sys Util	600	0
<hr/>			<hr/>		
	LIST	\$65,940 157		LIST	\$99,480 197

3 year cost of ownership \$71,121

3 year cost of ownership \$105,981

32 Users	LIST	SUP/mo
5360 D15 1Mb std	75,000	242
Port exp	2,000	4
Memory add 3Mb	10,500	0
Disc 600Mb	std	
Reel to Reel tape	11,660	68
32 Terms w/warranty	41,440	0
SSP	4,000	0
Sys Util	600	0
<hr/>		
	LIST	\$145,200 314

3 year cost of ownership \$155,562

APPENDIX B

Competitive pricing details: Competition chapter DEC MicroVAX II (Figures 2 and 4)

12 Users	LIST	SMMC SUP/mo	24 Users	LIST	SMMC SUP/mo
Base SPU 3Mb	14,200	95	Base SPU 7Mb	27,345	120
Port exp	3,040	30	Port exp	4,560	45
Memory add 1Mb	3,500	72	Memory add 2Mb	5,000	100
Disc 2 RD53	10,190	76	Disc 4 RD53	18,290	152
Tape	3,490	22	Tape	9,000	150
12 VT220	13,140	120	24 VT220	26,280	288
VMS	7,000	320	VMS	9,000	390
DBMS	6,550	200	DBMS	6,550	200
LIST \$61,110 935			LIST \$106,025 1,445		

3 year cost of ownership \$91,965

3 year cost of ownership \$153,710

32 Users	LIST	SUP/mo
Base SPU 7Mb	27,345	120
Port exp	6,080	60
Memory add 6Mb	8,500	172
Disc LA81	20,640	95
Tape TV80	13,500	200
32 VT220	35,040	384
VMS	9,000	390
DBMS	6,550	200
LIST \$126,655 1,621		

3 year cost of ownership \$180,148

APPENDIX B

Branch office price comparisons used in Target Market chapter

8 USER SYSTEM

BEFORE (S/37XE)			AFTER (MICRO 3000)		
	LIST	SUPPORT		LIST	SUPPORT
SPU-2mb	\$33,600	\$73	SPU-4mb		41
ATP/M	2,700	8	ATP/M		8
Disc (7914)	13,850	65	Disc (7958)	26,950	37
Tape (9144)	3,500	14	Tape (9144)		14
Console (2392)	1,460	6	Console (2392)		6
INP	3,025	29	INP	3,025	29
Terminals (7)	10,220	42	Terminals (7)	10,220	42
Datacomm S/W	1,600	25	Datacomm S/W	1,600	25
MPE (RCS)	0	130	MPE (RCS)	0	130
			HP Easytime	0	0*
	<u>\$69,955</u>	<u>\$392/mo</u>		<u>\$41,795</u>	<u>\$332/mo</u>

3 year cost of ownership \$82,891

3 year cost of ownership \$52,751

* Pricing yet to be determined

APPENDIX B

DDP price comparisons used in Target Market chapter

24 USER SYSTEM

BEFORE (S42 w/promo)			AFTER (MICRO 3000XE)		
	LIST	SUPPORT		LIST	SUPPORT
SPU-2mb	\$30,450	\$214	SPU-2mb	\$25,960	\$70
Add 2mb	10,500	68	Expand to 4mb	7,000	-11
ADCC	1,720	10	3 - ATP/M	7,695	24
2 - ATPs	12,340	74	Add PIC	1,900	8
24 Terminals	33,240	144	24 Terminals	33,392	144
Disc (7933)	24,160	94	Disc (7936)	13,500	50
Tape (7974)	11,000	100	Tape (7974)	13,300	100
MPE (RCS)	0	155	MPE (RCS)	0	145
	<u>\$123,410</u>	<u>\$859/mo</u>		<u>\$102,747</u>	<u>\$530/mo</u>

3 year cost of ownership \$151,757

3 year cost of ownership \$120,237

APPENDIX C

Literature list and part numbers

	PART NUMBER
MICRO 3000 and MICRO 3000XE Sales Guide	5954-8866
MICRO 3000 Data Sheet	5954-8867
MICRO 3000XE Data Sheet	5954-8868
MICRO 3000XE Upgrade Information Sheet	5954-8869
MICRO 3000 and MICRO 3000XE Audio tape	5954-8872
HP Easytime Sales Training Guide	5954-6241
HP Easytime Data Sheet	5954-6239
VAR Small Business Brochure	5954-7476
MICRO 3000s Major Account Brochure	5954-7478





HEWLETT
PACKARD

Business Computing Systems

Printed in U.S.A. 10/86
5954-8866