

HP CHANNELS

Information For Hewlett-Packard's Value-Added Businesses.

December 1986



MICRO 3000 and MICRO 3000XE
HP's newest systems for the office

HEWLETT-PACKARD
HP CHANNELS

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HP Channels is published monthly for Hewlett-Packard's value-added businesses to provide you with information about HP's products and services to help you be more successful.

For further information on any of the products and services discussed in *HP Channels*, please contact your HP sales rep.

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On the cover

HEWLETT-PACKARD
HP CHANNELS



MICRO 3000 and MICRO 3000XE
 HP's answer to entry-level office

HP CHANNELS

HP 3000 MICRO 3000 and MICRO 3000XE systems offer better than ever price/performance, ease of use, and configurability for the entry-level market. See articles beginning on page 1.

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HP Computer Museum
www.hpmuseum.net

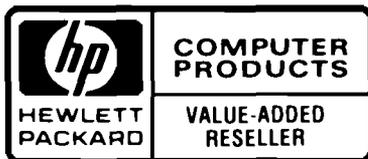
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Customer Support

General

NEW VALUE-ADDED RESELLER LOGO AVAILABLE FOR HP VARs



A new value-added reseller logo is now available for all HP VARs. This new logo replaces and updates the value-added systems and supplier (VASS) logo many of you have been using in your product literature and merchandising programs. This new logo will identify your distinctive business relationship with HP, and at the same time, maintain consistency with newly accepted industry terminology.

If you are currently using the old VASS logo in your marketing communications, we encourage you to make this change gradually. Feel free to continue using the old logo until you print new promotional materials. Before you change logos, make sure to ask your HP sales rep to order camera-ready sheets of the new logo for you (available from HP's Literature Distribution Center, P/N 5954-9039).

A new handbook entitled, *HP Plus and Value-Added Reseller Logo and Advertising Guidelines*, is now available to all value-added businesses qualified to use these logos. In the handbook you will find useful information about the proper use and specifications of the HP Plus and value-added reseller logos. The handbook also offers helpful information regarding the development and presentation of effective advertising in general. The handbook (P/N 5954-0282D) can also be ordered for you by your HP sales rep.

Business Computers

HP 3000

NEW ENTRY-LEVEL HP 3000 SYSTEMS

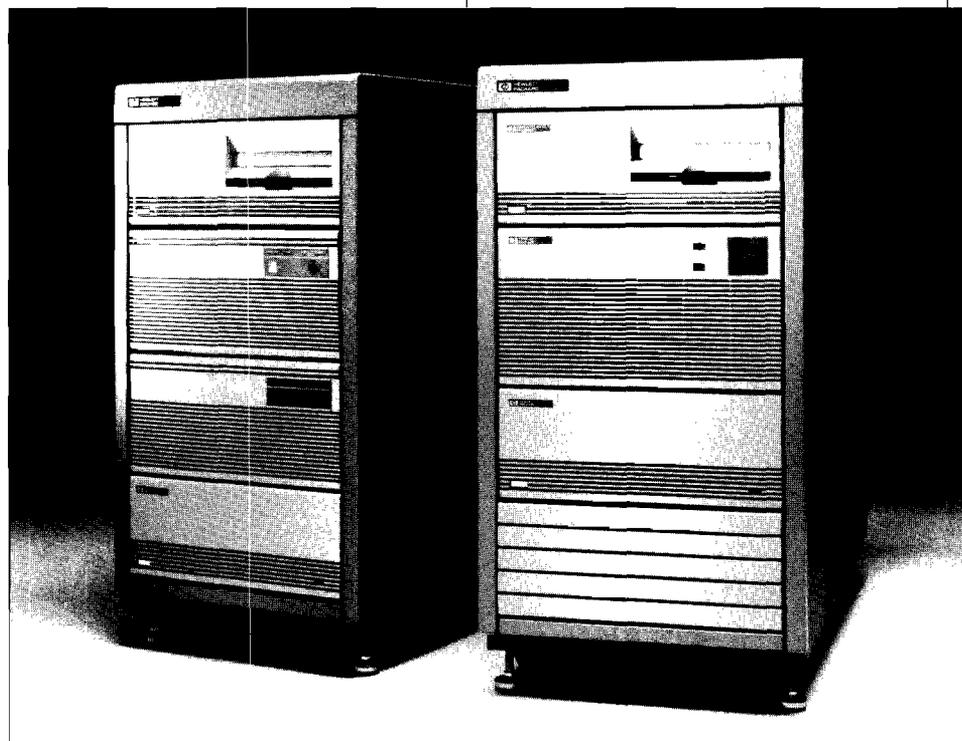
Hewlett-Packard has announced two exciting new entry-level systems, the MICRO 3000 and MICRO 3000XE. These systems are the lowest cost and highest performance entry-level HP 3000 systems ever. Both the MICRO 3000 and the MICRO 3000XE have performance similar to the Series 42, but are priced like the Series 37. In fact, these systems do much more than replace the Series 37 and 42. They provide users with better total solutions. The MICRO 3000 introduces two new ease-of-use features targeted to the entry-level market: HP Easytime (a menu-driven user interface to MPE) and ISS (integrated system shipment). The MICRO 3000XE brings the power and

configurability of a Series 42 in an office package.

MICRO 3000

The MICRO 3000, which has performance similar to a Series 42, is priced 21 percent lower than a comparably configured Series 37A (2 Mbytes of main memory). With greater configurability, users can now have an entry-level computer with 4 Mbytes of main memory, supporting 16 users, and one INP or one LAN simultaneously. Previously, this configuration was only available with the Series 37XE. The system also includes the new 81-Mbyte disc drive which provides 47 percent more capacity along with better performance than the HP 7945A.

With the MICRO 3000, users gain new ease-of-use features. ISS lets you order a complete factory-integrated system with a single product number, and the system is easy to install. (HP



installation is included.) HP Easytime adds simplicity by shielding novice users from MPE and guiding them through system functions.

MICRO 3000XE

The MICRO 3000XE replaces the Series 42 with similar performance, but at a price closer to the Series 37XE (and about 30% lower than the Series 42). *In addition, the MICRO 3000XE offers Series 42 configurability.* The MICRO 3000XE is available with up to 8 Mbytes of main memory and can support 56 users, 3 INPs, and 1 LAN. Further reducing the total costs of the solution, the MICRO 3000XE also has support and software priced at the competitive Series 37 levels. The MICRO 3000XE is available through two attractive promotions – a field upgrade for existing users and a new marketing package system for new users.

State-of-the-art technology

The key to the amazing price/performance of these two systems is the use of the advanced technology. Both the MICRO 3000 and the MICRO 3000XE use HP proprietary NMOS III VLSI processor chips, the same hardware technology used in the Series 950.

The MICRO 3000 combines this NMOS III VLSI processor chip, 2 or 4 Mbytes of main memory, and an HP-IB channel all on a single board. This translates to higher performance, higher reliability, and greater connectability all at a lower cost than the Series 37.

The MICRO 3000XE uses the same powerful NMOS III VLSI processor

and a new 128-Kbyte CPU cache (the same size and organization as the cache on the Series 70). The MICRO 3000XE boasts configurability and performance similar to the Series 42 at a 30 percent lower price, and, compared to the MICRO 3000, has significantly higher configurability. Through the use of 1-Mbit DRAM technology, the MICRO 3000XE offers an expanded memory capacity of up to 8 Mbytes utilizing two of the new 4-Mbyte memory boards. This VLSI implementation continues our commitment to lasting value by providing a simple, powerful field upgrade path for existing Series 37 users.

Ideal for office use

Both the MICRO 3000 and the MICRO 3000XE fit easily in the office environment. They run on standard power and don't require special air conditioning. Both systems are packaged in a quiet, attractive cabinet. Support pricing is affordable because of increased reliability. MICRO 3000XE users save up to 70 percent on monthly hardware support costs compared to the Series 42. Software is priced at Series 37 levels providing additional savings. The MICRO 3000 and MICRO 3000XE provide the high performance and lower costs needed to close sales in the entry-level markets.

For more information

This issue of *HP Channels* includes articles with more details on the MICRO 3000 ISS, the MICRO 3000XE promotions, and HP Easytime. We think you'll agree, these systems are the lowest cost, highest performance, entry-level HP 3000 systems ever.

These products will be introduced in the press on November 17.

HP 3000

MICRO 3000 **INTEGRATED SYSTEM** **SHIPMENT**

Providing the right solution for the entry-level market means more than having the right set of products. It means making it easy to sell and deliver the complete solution. HP puts it all together with integrated system shipment (ISS), available *only* on the MICRO 3000.

Easy to sell

With ISS, everything comes together. The system comes fully assembled from the factory with the SPU, disc drive, tape, and system cabinet all in one package. MPE is even pre-installed on the disc. The user receives three boxes – the system, console, and manuals. It looks clean and professional.

To meet the differing needs of users, HP offers two ISS solutions. The entry-level system is comparable to the current Series 37A bundle with Opt. 509 (for 2 Mbytes). More system performance, lower price, higher disc capacity, and HP Easytime make this a winning entry-level system. The full size system provides an additional 2 Mbytes of main memory (for a total of 4 Mbytes) and comes with a larger 130-Mbyte disc drive. Each system can accommodate an additional disc drive and ATP/M providing increased flexibility. One of these systems will meet your needs. (Of course, standalone SPUs are available for very large or customized configurations.)

Easy to order and install

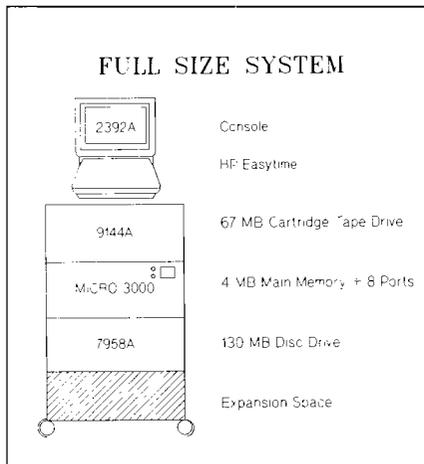
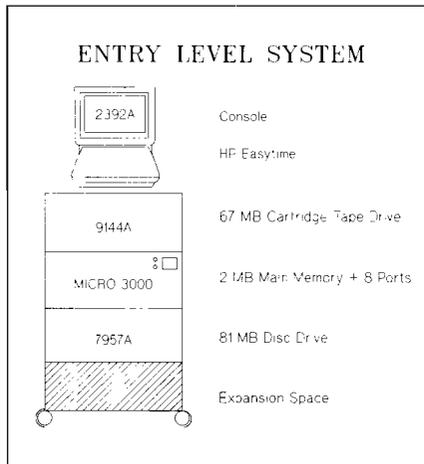
ISS simplifies ordering and installation for you. Ordering is easy because all the components of an ISS system are

Compare the MICRO 3000 with the Series 37

Features	Series 37A 1 Mbyte	Series 37A 2 Mbytes	MICRO 3000	MICRO 3000	Notes
Product No.	32459A	32459A Opt. 509	32535E	32535F	Greater performance
Memory	1 Mbyte	2 Mbytes	2 Mbytes	4 Mbytes	More standard memory
Disc drive	55 Mbytes	55 Mbytes	81 Mbytes	130 Mbytes	More capacity More performance
Tape	67 Mbytes	67 Mbytes	67 Mbytes	67 Mbytes	
Console	HP 2392A	HP 2392A	HP 2392A	HP 2392A	
ATP/M	8 port	8 port	8 port	8 port	
HP Easytime	No	No	Yes	Yes	New ease of use
Disc caching	N/A	N/A	std.	std.	

included under a single product number for each system. (Note: HP Easytime and MPE are ordered under their own product number.) Installation consists of uncrating the cabinet, connecting the console, plugging in the power, and turning the computer on. It's that easy. Once the system is on, HP Easytime allows novice users to bypass complex MPE commands through the use of easy-to-understand menus. (See "Announcing HP Easytime for MICRO 3000 Systems.")

The MICRO 3000 is much more than just an excellent engine. It's a whole new concept in ease of use, from ordering to system operations. ISS shows users how convenient and easy having an HP 3000 can be.



HP 3000

ATTRACTIVE MICRO 3000XE PROMOTIONS

HP is offering an attractive upgrade promotion which allows existing HP 3000 Series 37 users the opportunity to enjoy the benefits of the MICRO 3000XE at significant savings. The MICRO 3000XE upgrade increases processor performance 50 to 60 percent over the Series 37 processor, or comparable to a Series 42.

This upgrade is ideal for Series 37 users who need to add more users, to add additional applications, or to get better performance from their existing applications. The CPU upgrade (P/N 30545A) consists of a single board swap and is very affordable.

In most cases, users will want more than a powerful CPU; they'll need additional memory or I/O expansion to utilize the increased processing power. Both components, additional memory and I/O expansion, are available with this special promotion at just over *half* of what it would cost to add them later. The accompanying chart describes the details of this promotion.

The MICRO 3000XE Series 37 Performance Booster promotion brings high performance and cost savings to our established Series 37 customer base at a substantial savings. Additional savings can be realized when users take advantage of disc and tape drive promotions.

Orders for the Series 37 Performance Booster must be placed between December 1, 1986, and April 30, 1987, and shipments must be made by July 31, 1987.

Marketing Package System (MPS)

The MICRO 3000XE Marketing Package System provides users with a

total system at the right price. The flexible package allows new or box swap users to choose the exact combination of components that meet their needs. Users can choose between the new HP 7958A, a full replacement for the HP 7914 in an HP 7945A package, or the high-capacity HP 7936H or HP 7937Hs. The marketing package also offers a range of backup solutions including an HP 9144A 1/4-inch cartridge tape (supporting up to 307 Mbytes), 35401A cartridge tape auto-changer for unattended backup (supporting up to 504 Mbytes), and the HP 7974A 1/2-inch tape for higher capacity needs. Users can receive discounts on up to eight HP 2392A terminals or on additional main memory. See the chart for details about choices for configuring systems.

Marketing Package System

Product	Description
Required products (1 of each except terminals up to 8)	
<i>SPU</i>	
32545A or 32545AH	SPU SPU upgrade
<i>Disc</i>	
HP 7958 or HP 7936 or HP 7937	130-Mbyte disc 307-Mbyte disc 571-Mbyte disc
<i>Tape</i>	
HP 9144A or 35401A or HP 7974A	Cart. tape Cart. tape chngr. 1600 bpi tape
<i>Terminals (1-8)</i>	
HP 2392A Opt. 3xx	Terminal Cable
<i>Ports</i>	
40290A	ATP/M (8 port)
Optional products	
<i>Memory</i>	
SPU with Opt. 510 30462A 30482A	Expand to 4 Mbytes Add 2 Mbytes Add 4 Mbytes

Series 37 Performance Booster

Product	Description
Required product	
<i>SPU</i>	
30545A	CPU upgrade
Optional products	
Opt. 250 Opt. 502 Opt. 503	I/O extender Add 2 Mbytes Add 4 Mbytes

HP 3000

HP 9144A Now SUPPORTS 307 MBYTES ON NEW MICRO 3000 SYSTEMS

The supported backup capacity of the current HP 9144A cartridge tape drive has been expanded to a maximum of 307 Mbytes on the new MICRO 3000 systems. The benefit to the user is that the current HP 9144A now becomes a low-cost alternative for backing up two of the new HP 7958A (total of 260 Mbytes) or one of the new HP 7936H (307 Mbytes) disc drives.

Use of the HP 9144A will allow backup to take typically less than three hours with a reload time of less than four hours. This process requires the operator to change cartridges. For the ability to do unattended backup, specify the tape cartridge autochanger (35401A). For higher performance and/or media compatibility, the 1/2-inch reel-to-reel tape is the right backup choice.

The expanded support of the HP 9144A, coupled with the new MICRO 3000 processor and new high-capacity, small-footprint discs, results in an outstanding price/performance configuration. Imagine having Series 42 performance, 260 Mbytes of disc capacity, and the cartridge tape device in a single, office-compatible cabinet.

The new HP 9144A maximum configuration is supported on both the MICRO 3000 and MICRO 3000XE. For additional details on the MICRO 3000 systems and new disc drives, see other articles in this issue of *HP Channels*.

HP 3000

ANNOUNCING HP EASYTIME FOR MICRO 3000 SYSTEMS

Hewlett-Packard has announced HP Easytime, a menu-driven interface to MPE for the new HP MICRO 3000 systems. The program shields inexperienced computer users from the complexities of MPE and guides them through the functions necessary for the day-to-day management of the system.

The target market for HP Easytime consists of those non-computer professionals who are responsible for managing the daily administration of an HP MICRO 3000 in their workgroup, department, or in a small business. While still performing a full-time job as financial analyst, secretary, or manufacturing specialist, these professionals can now assume the added responsibility of managing the computer. System administration becomes so simple that the presence of an EDP specialist on site is no longer necessary. Also, HP Easytime eliminates the need for a dedicated system console. Applications can also be run on the console, and system operating can be done from any block-mode terminal. Integral parts of HP Easytime are a computer-based training and a user reference manual. The computer-based training (CBT) includes instructions and exercises. It introduces the novice user to the management of the system and gives first-hands-on experience on the program itself.

HP Easytime's user friendliness is ensured not only by the simple, intuitive design of the program, but also by the elimination of any "computerese" and by the availability of the product in as many as 11 languages. HP Easytime will be available in the original American-English version as well as in German, French, Italian, Spanish, Danish, Swedish, Norwegian, Finnish, Dutch, and Japanese.

Availability and pricing

At first release, HP Easytime will be available only on the HP MICRO 3000 machines. Although an integral part of this new system, initially HP Easytime will have to be ordered separately – but at no extra cost to the user. HP Easytime will be on the December 1, 1986, HP Price List and will be available for delivery during the third fiscal quarter of 1987 (May to July) with the UB-Delta-3 release of MPE-V/E – in the original version as well as localized.

HP 3000

MORE POWER FOR HP 3000 SERIES 39 AND 4X USERS

New field upgrades

On August 1, 1986, Hewlett-Packard introduced the HP 3000 Series 52, enabling users to own a new system with the performance of a Series 58 in a Series 42 package. Now Series 39, 40, and 42 owners have an attractive upgrade path to this new level of performance.

Beginning December 1, these users can upgrade to the Series 52. The new Series 52 field upgrade (P/N 30552C) includes the new Series 52 processor, disc caching, and 4 Mbytes of memory.

The Series 52 field upgrade will effectively replace the current Series 42XP field upgrade. The product is orderable as follows:

Product No.	Description
30552C	Series 39/40/42 to Series 52 field upgrade with CPU board and 4 Mbytes of memory
Opt. 022	DUS on cartridge tape
Opt. 042	Price adjustment for disc caching
Opt. 196	Delete 4-Mbyte memory
Opt. 502	Add 2-Mbyte memory
Opt. 503	Add 4-Mbyte memory

Also orderable in December, Series 44/48 users will be able to upgrade to the performance of a Series 58. The new Series 58 field upgrade (P/N 30558C) will include twice as much memory (4 Mbytes), compared to an equal configuration of the previous 30558A field upgrade.

Product No.	Description
30558C	Series 44/48 to Series 58 field upgrade with new CPU board and 4 Mbytes of memory
Opt. 022	DUS on cartridge tape
Opt. 042	Price adjustment for disc caching
Opt. 196	Delete 4-Mbyte memory
Opt. 502	Add 2-Mbyte memory
Opt. 503	Add 4-Mbyte memory

The Series 52 and 58 are supported on T-Delta-5, UB MIT, and all subsequent MITs. Users on these MITs can install the Series 52 and Series 58 field upgrades in only one hour. This means the user's operation will have only a minor interruption.

New memory options

In addition to the increased memory included in the system, users also have the option to purchase additional 2-Mbyte (Option 502) or 4-Mbyte (Option 503) memory modules with their systems to reach the maximum of 8 Mbytes. More memory allows users to take full advantage of the new processor performance.

Users who decide to take advantage of these options may choose to return 1-Mbyte boards for return credit (P/N 30161A). A maximum of three 1-Mbyte boards can be returned when purchasing a Series 52 or 58 field upgrade. Return credits are also available for the 256-Kbyte and 512-Kbyte memory modules. A maximum of four 256-Kbyte boards may be returned when purchasing a Series 52 or 58 field upgrade.

HP 3000

MORE MEMORY SUPPORTED ON HP 3000 SERIES 42XP

Do you need 8-Mbyte memory support on your HP 3000 Series 42XP? Now the Series 42XP equals the Series 52 in every way.

Series 42XP memory configuration support has increased from 6 to 8 Mbytes. With the increase in memory, the Series 52 is supported on T-Delta-5, UB, and all subsequent MITs. These enhancements enable current Series 42XP users to achieve the same performance and configuration as the recently introduced Series 52.

HP 3000

ATTENTION VALUE- ADDED BUSINESSES

All third party software suppliers, VARs, OEM, third party tools, etc., need to be made aware of the following possible impacts of MICRO 3000 and MICRO 3000XE on their software. Both processors return new CPU identification numbers to the THISCPU procedure and the PCN (Push CPU Number) instruction. If you used THISCPU in your code in order to implement processor based pricing, or for any other purpose, you need to be aware that changes might be required to recognize the new CPU numbers in order for your software to run properly on MICRO 3000 and MICRO 3000XE.

For example, in one of our Beta sites, after we installed a MICRO

3000XE we immediately encountered a situation where the tool the customer was running (the basis for their inventory and cash receipts operations that ran in a large number of HP 3000 Series 37s in their organization) halted with a message that the license agreement on the software was being violated, and that the tool was not allowed to run on this computer. The software supplier had written the program such that if anything other than a Series 37 CPU number was returned, it would display that message. Clearly we want the vendor to change their code so that this software would also run on our new processors. Both processors are positioned to replace the Series 37, and HP intends to sell them with its own internal software at the lower Series 37 prices. We feel this Beta site experience will be a fairly typical situation, though not all vendors will have the same situation or require the same solution.

All value-added businesses are recommended to examine their code for instances of this problem and if they do, to get a change or patch in place as soon as possible. (In most cases the change should be very simple, involving a few lines of code.) The goal would be for no end-user who orders one of the new processors to install it

and then be surprised that their third-party software does not work. HP reps and third parties should both be prepared to let the customers know when they buy the new systems whether their applications require modifications, and to have the fix available when the customer is ready to install. We ask each third-party supplier and VAR to pursue this aggressively to avoid customer satisfaction problems with the release of our new processors when run with your software.

Technical information

The new CPU numbers were assigned to the new processors because they had to have different WCS microcode files than the Series 37, and thus the operating system had to recognize them differently in order to handle the new files during bootup and sysdump. This should have been the only use for the unique numbers, since in every other way the new processors could be treated the same as the Series 37. (In general, application programs should be discouraged from using THISCPU, and no one should use the PCN instruction.) See the table here for new microcode file names and THISCPU and PCN return values.

System	Microcode file name	THISCPU return value	PCN return value
Series 37	SYSWCS37.PUB.SYS	6	5
MICRO 3000XE	WCSLE1.PUB.SYS	7	6
MICRO 3000	WCSLE2.PUB.SYS	8	7

HP 3000

DBCHANGE/V RELEASE UPDATE

TurboIMAGE DBchange/V, the restructuring tool for TurboIMAGE databases, has been rescheduled for release on UB-DELTA-2 MIT. The delay is necessary to add additional quality features to check and correct possible root file layout inconsistencies. DBchange/V was previously scheduled to ship on UB-MIT.

Problem description

When DBchange processes modifications to a TurboIMAGE database, it uses the root file to generate the database schema. The root file is expected to be in the same ordered format as created by DBSCHEMA. During the beta testing process for DBchange, a problem was discovered when DBchange is used on a database which has previously been restructured using ADAGER. It was necessary to delay the release of DBchange/V to add the additional functionality to check for and correct this problem if it exists.

Additionally, ADAGER has plans to modify its programs so restructuring will leave the root file consistent with DBSCHEMA.

DBchange/V is now expected to be available on UB-DELTA-2 MIT in approximately the March-April time-frame. The previously announced solution for critical HP 3000 Series 70 users is still in effect but with additional qualification by the account systems engineer.

Because of the rescheduling of DBchange, shipments of the TurboIMAGE Database Tools package, which contains Profiler and DBchange, will also be rescheduled. Special ordering instructions will follow soon for Database Tools users who wish to receive Profiler now.



HP 3000

MPE V/E T-DELTA-6 PROVIDES INCREASED OFFICE AUTOMATION CAPABILITIES

Note: The following is a reprint of an article that appeared in the November issue of HP Channels (on page 4). Those of you who read the original article were probably confused by the table which was supposed to summarize the past several MIT releases. The table printed applies to another article and was published in error. The following is a reprint of the article with the correct table.

MPE V/E T-Delta-6 is scheduled to ship to users in late October. This release of MPE V/E includes updated versions of HP DeskManager, HP List-keeper, and HP Slate products. It also includes HP File/Library and HP Schedule, which are two new products that work with the latest version of HP DeskManager (B.00.00).

T-Delta-6 contains a major upgrade for HP DeskManager, the communications backbone of the HP Personal Productivity Center (PPC). HP DeskManager has been significantly enhanced in several ways:

- As an "application manager," HP DeskManager allows you to invoke an application from within HP Desk. The applications are not limited to those supplied by HP.
- The new "interrupt/resume" feature allows users to begin an activity, hit the suspend key – check their calendar, copy information from another area, etc. – then, by touching the resume key, return to their original work exactly as they left it.
- New maintenance and administration features are included.
- Additional document converters have been added for AdvanceWrite to HP Word and HP Word/3000 to HP Word/150.

- An optional new product for HP Desk, called HP File/Library, adds the capabilities of community filing, document archiving, and keyword search for document retrieval.

- Another optional new product for HP Desk, called HP Schedule, provides the ability to examine for free time from the Calendars of designated HP Desk users. It can be used to schedule meetings or for resource selection and booking.

T-Delta-6 is the result of HP's continuing effort to provide new products to our users as quickly as possible. In order to release the newest version of HP DeskManager to waiting users, HP limited the focus of the MIT to HP DeskManager and its related products. T-Delta-6 will not be shipped "in quantity" to the installed base. It will be distributed to users that request it or order a product that was introduced on it.

HP's effort to provide these new products as quickly as possible has led to a temporary divergence between T-Delta-6 and UB-MIT. In order to introduce HP DeskManager and its related products as quickly as practical, HP was not able to "roll" the products of T-Delta-6 into UB-MIT. Instead, the products on T-Delta-6 will be rolled into UB-Delta-1, which is scheduled to release late in calendar year 1986 or early in 1987. Users migrating from T-based versions of MPE to U-based versions should be aware of certain "product trade-offs." To aid users in planning their updates, the table below summarizes the past several MIT releases.

The T-Delta-6 release of MPE V/E provides HP 3000 users with improved office functionality. It is another step in HP's continued commitment to expand the capabilities of our office products.

T-Delta-5

T-Delta-4 roll-in
HP BRW/V
Enhancements to System
Dictionary and IMF/3000

T-Delta-6

T-Delta-5 roll-in
HP Schedule
HP File/Library
HP Desk enhancements

U MIT

T-Delta-3 roll-in
Network Services
TurboIMAGE
Profiler
Extended Memory
OfficeShare LAN

UA MIT

U MIT roll-in
Series 70 Support
Performance Improvements

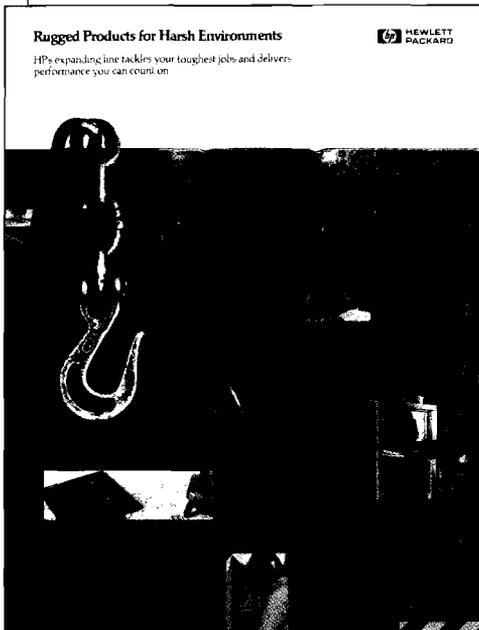
UB MIT

U MIT roll-in
UA MIT roll-in
T-Delta-5 roll-in
DMI
HP SNA Server/Access
Expanded System SL

Technical Computers

General

NEW BROCHURE PROMOTES HP'S RUGGED PRODUCTS FOR HARSH ENVIRONMENTS



Inside the brochure are six product briefs, each one describing an HP product for harsh environments.

For users interested in products designed for use on the factory floor, HP features its expanding rugged product line in a new four-color, six-page brochure/folder with pocket to hold individual product briefs. The brochure highlights HP's high-quality, reliable factory-hardened products, which meet manufacturers' most stringent requirements for workstations, and data acquisition and control products for the factory floor with an integrated perspective toward CIM.

Inside, there are six product briefs, each one describing an HP product that stands up to the elements that can shut down industrial operations – dirt, dust, heat, humidity, vibration, power spikes, and shock. HP's broad range of high-quality hardware products and powerful software tools perform in the worst conditions primarily found in the automobile, petroleum, and chemical industries.

This brochure is targeted for manufacturing managers, mid-level managers and supervisors, factory and plant automation engineers, supervisors, and product engineers in these primary industries.

You can order your copies from your HP sales rep referring to the following publication numbers.

Product No.	Literature title
5953-8752	Rugged Products for Harsh Environments brochure/folder
5953-8754	HP Vectra Industrial PC product brief
5953-8765	HP 3081A Industrial Workstation Terminal product brief
5953-8775	HP-94 Handheld Industrial Computer product brief
5953-8776	HP 48000 RTU Measurement and Control Unit product brief
5953-8787	HP 9666A Operator Interface Unit (OIU) product brief
5954-8546	HP System Enclosure product brief

General

MANUFACTURING SOLUTIONS CATALOG EXPANDED

The second edition of the *Manufacturing Solutions Catalog* (P/N 5954-6769) has been expanded to become a true solutions catalog, containing over 400 manufacturing packages running on all Hewlett-Packard computers, add-on cards for the Vectra PC, and data sheets for six rugged products from Hewlett-Packard.

This catalog is an ideal tool to help you and your customers identify and purchase the manufacturing solutions they need. Free copies of the first edition dated June 1986 are currently available from your local HP sales office. Copies of the second edition will be available beginning February 1987.

If you want to add a new manufacturing package or update an existing one for the next catalog, turn in a new HP Value Added Channels Data Kit (P/N 5953-2223) before December 19, 1986. Please contact your HP sales rep for a Data Kit and return the completed kit to them.

HP-UX Spectrum Program

F/1000 PORTED TO HP 9000 MODEL 840

A ported version of F/1000 (called F1000/HP-UX) will be included with the PORT/HP-UX migration package on the HP 9000 Model 840. (PORT/HP-UX is contained in the HP-UX product.) FORMS/HP-UX will be provided free of charge to help our HP 1000 installed base users migrate their applications that use F/1000, to the Model 840.

F1000/HP-UX is provided for migration purposes only, rather than for new

program development. F1000/HP-UX is not a native HP-UX program. It runs in an RTE emulation mode and thus requires a special PORT/HP-UX environment. Consequently, users not familiar with the RTE and PORT/HP-UX will not find F1000/HP-UX useful.

The HP 1000 RTE-6VM and RTE-A users who port their application programs that use F/1000 will be able to run those programs on the Model 840, using F1000/ HP-UX. F1000/HP-UX is also an example of a successful PORT/HP-UX application.

Contact your HP sales rep for more information.

HP 1000

HP 1000 E-SERIES COMPUTER PRICE INCREASE

Effective February 1, 1987, the price of the following E-Series computers will be increased:

Product No.	Description
2109E	E-Series computer
2113E	E-Series computer Model 60 SPU

It is important to note that only the pricing of the processors mentioned above are being increased — all other E-Series product pricing will remain the same. As usual, users will have the standard 30-day grace period in which to place an order before the new prices take effect.

Contact your HP sales rep for the new prices.

HP 1000

NEW HP 1000 A-SERIES MULTIPLEXER INTRODUCED

This latest version of the A-Series multiplexer product (P/N 12040D) delivers added features and increased performance over the existing 12040C 8-channel MUX, for the same price. Available now, the 12040D will provide all of the capabilities of the 12040C with the following added benefits:

- Support of 38.4K baud rate.
- Bidirectional X-On, X-Off flow control preventing MUX data loss.
- User-definable termination characters.
- Automatic baud rate generator configuration, port speed sensing.
- Backspace-erase editing.
- Increased overall MUX throughput.

The added features and performance improvements available with the 12040D make it much more suitable for factory floor solutions. The bidirectional flow control and increased throughput enable the user to connect to RS-232 "black boxes," in addition to standard terminal and printer devices. For a more detailed description of the performance obtainable, refer to the *12040D 8-Channel Multiplexer Performance Brief* (P/N 5954-8548).

Software compatibility

The 12040D uses the same hardware as the 12040C. All of the enhancements have been made to the firmware which operates the Z-80 microprocessor on the interface. The firmware redesign was done in parallel with a redesign of the A-Series MUX interface driver (previously IDM00). As a result, the

12040D, with the new firmware, is compatible only with the newly designed MUX interface driver, ID800. Likewise, the 12040C and previous versions of the MUX are only compatible with IDM00. Interface driver ID800 will be available as part of RTE-A Version 4.1, targeted for release in November, and will be provided in parallel with the existing interface driver, IDM00.

Very few changes will be needed for users to migrate from the existing RTE-A interface driver to the new interface driver. HP will provide an upgrade package providing the new 12040D firmware for users who wish to migrate to the new drivers, and need to convert their 12040Cs to 12040Ds. For more information about changes to RTE-A and upgrade tools available, contact your HP sales rep.

Because the 12040D is not a direct replacement for the 12040C, the 12040C will remain on the HP Price List for one year, and will not be discontinued until November 1, 1987. At that point, HP will provide a firmware downgrade kit for users who still do not wish to migrate to the new RTE-A driver.

The price of the 12040C has been increased. This price increase became effective on the November 1 HP Price List, however users are entitled to a 30-day grace period in which they can obtain the 12040C at the previous price.

To obtain a data sheet for the 12040D, contact your HP sales rep.

HP 1000

PL 65 PRODUCTS TO BE DISCONTINUED

The following software options will be removed from the HP Price List as of February 1, 1987. Please note that only the software options are being discontinued — not the software product itself.

The table below lists the options and the products affected.

Product	Opt.	Description
<i>Software options to be removed</i>		
	020	264X minicartridges
	041	1.2 Mbyte flexible disc
	042	5/4-inch minifloppy disc
<i>Products affected</i>		
92101A		BASIC/1000D for E/F
92836A		FORTAN 77
92857A		BASIC/1000
91823A		Control/1000
92860A		Symbolic Debug/1000
91711B		Diagnostic Package M/E/F
92833A		Pascal/1000
92049A		RTE Microprogramming A700
92083A		RTE Profile Monitor
92078A		RTE-A Virtual Code
92069A		IMAGE/1000
91781A		RJE/1000-II
91750A		DS/1000-IV
91782A		MRJE/1000
24398A		A-Series Peripherals Diagnostics
91732A		Datalink Software
91784A		PMF/1000
91751A		X.25 Communications
91711A		On-Line Diagnostics E/F
24612A		A/L-Series Diagnostics
92061A		RTE Microprogramming

Three software options will be discontinued for RTE-A Operating System (P/N 92077A).

Opt.	Description
050	800 cpi, nine-track mag tape
041	1.2 Mbyte flexible disc
042	5/4-inch minifloppy

For RTE-6VM (P/N 92084A), all of the H-series disc options are being discontinued due to low volume:

Opt.	Description
036	7906H/HR disc cartridge
037	7920H disc pack
038	7925H disc pack
056	7906H/7920H 800 cpi, nine-track mag tape
057	7906H/7920H 1600 cpi tape
058	7925H format, 800 cpi, nine-track mag tape
059	7925H format, 1600 cpi, nine-track mag tape

If you have any questions about these products, please contact your HP sales rep.

HP 9000

ANNOUNCING NEW HP 9000-TO-IBM DATACOM PRODUCTS

HP 9000-to-IBM communications have been dramatically improved, allowing HP 9000 Series 300 HP-UX workstations and Series 800 HP-UX minicomputers to emulate an IBM 3278 terminal on an SNA network. This emulation provides users with interactive access to the IBM mainframe's TSO, CICS, IMS, and CMS applications. Users may now access and update host-resident databases, run host applications, share expensive mainframe peripherals, take advantage of the mainframe's computing power, have access to companywide electronic mail facilities, and transfer files between the IBM mainframe and their HP-UX systems.

Product description

The HP-UX SNA products allow Hewlett-Packard 9000 Series 300 workstations and Series 800 minicomputers to perform the functions of an IBM terminal multiplexer (i.e., an IBM 3274

Cluster Controller) and several IBM terminals (i.e., IBM 3278 Model 2 Display Stations) at speeds of up to 19,200 bits per second. These new HP products can do things that real IBM 3274s and 3278s can't do, such as transfer files, copy screen images to discs or printers, provide multiple sessions, support multiple simultaneous users, and run local HP-UX applications while accessing the IBM mainframe.

Not only are these capabilities available to every user of the computer on which these products are installed, but they can also be used by other users of HP-UX systems on the LAN. If the user's configuration does not include a LAN, single Series 300 workstations can connect to the mainframe. SNA communication is provided by two sets of products — "Gateway," implies a LAN-based solution that allows sharing of a single link to the IBM host, and "Standalone," which implies a non-LAN-based solution with each system having its own link to the IBM mainframe and its own terminal emulation software.

Standalone configuration

HP-UX SNALink and HP-UX SNA3270 are used together on an HP 9000 Series 300 workstation and provide high-performance single system connections to IBM. Workstations may be configured with up to 32 active sessions.

Gateway configuration

HP-UX Gateway/SNALink and HP-UX Gateway/SNA3270 are used on an HP 9000 Series 300 on a LAN and support other Series 300 and 800 systems. By distributing the datacommunications and emulation tasks over the LAN, not only are up to 50 active sessions supported, but the gateway configuration allows the user to use a portion of an existing Series 300 as a gateway node and the remainder for productive applications — it does not have to be dedicated. In addition, the processing load is spread over the network in such a way that true gateway performance is achieved, surpassing the lower perform-

ing server capabilities offered by most workstation vendors.

Typical uses

HP-UX SNA3270 and Gateway/SNA3270, with appropriate HP-UX SNA links, make a number of applications possible:

- Program developers can use a single workstation to download host files for local editing and debugging on a powerful HP-UX machine, submit jobs to an IBM host, monitor background processing, and share work with other engineers.
- Component design engineers can now use the superior HP-UX graphic workstations to design components and send commands to IBM hosts to download drawing files via other high-speed links (such as Hyperchannel*) to computational or database servers elsewhere in the network.
- Scientific and computational engines, such as the HP 9000 Series 800, may provide its terminal users access to host-resident research libraries, test databases, or mail systems.
- Monitoring applications or processes running on several IBM hosts may be accomplished with windows and multiple SNALinks on a single workstation.

HP Ordering Information

Product No.	Description
36590A	HP-UX SNA3270 for Series 300
36592A	HP-UX SNALink for Series 300 Opt. 0A0 (2 session LUs) Opt. 0A1 (32 session LUs)
36591A	HP-UX Gateway/SNA3270 for each HP 9000 Series 300
36911A/R	for each HP 9000 Series 800 Opt. AA0 - ¼-inch Cartridge Opt. AA1 - 1600 BPI Tape
36593A	HP-UX Gateway/SNALink for Series 300 gateway system (50 session LUs)

Contact your sales rep for pricing and availability information.

*Hyperchannel is a product of Network Systems Corporation.
UNIX is a trademark of AT&T Bell Laboratories.

HP 9000

SRM 3.0 AVAILABLE

Revision 3.0 of the Shared Resource Management (SRM) system will be distributed in December. The main feature added to the operating system is a selective file backup and restore capability which replaces the previous method. The SRM operating system can find all files that have changed or been created since the last periodic full backup and copy those files to tape, floppy, or a hard disc. The backup can be scheduled to execute unattended (the new HP 35401 tape autochanger is useful for this) and can execute while the system remains on line to the users. Files can be restored selectively from the backup media as well. Also, bugs found in previous revisions of the software have been fixed and the ability to suppress the printer banners was added.

Support of the following HP peripherals has been added:

Product No.	Description
HP 9133H	22.3 Mbyte disc + floppy
HP 9133L	44.7 Mbyte disc + floppy
HP 9134H	22.3 Mbyte disc
HP 9134L	44.7 Mbyte disc
HP 9153B	20 Mbyte disc + floppy
HP 9122S/D	floppy
HP7957A	81 Mbyte disc
HP 7958A	131 Mbyte disc
HP 7933H	404-Mbyte disc
HP 7936H	307-Mbyte disc
HP 7937H	571-Mbyte disc
HP 7907A	20/20 Mbyte fixed/-removable discs
HP 7935H	404 Mbyte removable disc
HP 35401A	¼-inch tape autochanger
HP 7570A	DraftPro plotter (HP-IB)
HP 7440A	ColorPro plotter (HP-IB)

The big discs are well suited for large measurement automation situations. The small discs provide a sales advantage by bringing the entry-level system cost down significantly. Consider them primarily as starter systems with the intent of adding larger discs as needed. The floppy drives are for backup use only.

We have successfully tested two HP-IB to RS-232 converters connected to the HP LaserJet printer. They are the ICS 4834 and BusMate made by the ICS Corporation, telephone

408-263-4844. A more elegant solution is planned for the next SRM revision.

Effective on the December 1986 Corporate Price List, media options (one must be specified) have been added as follows:

Product No.	Description
50960A	SRM Server System
Opt. 022	Software on ¼-inch tape cartridge
Opt. 045	Software on 3½-inch flexible disc
98619A	SRM Operating system
Opt. 022	Software on ¼-inch tape cartridge
Opt. 045	Software on 3½-inch flexible disc
Opt. 001	Upgrade discount for trade customers who previously purchased SRM.

Software and manuals are being distributed in late December to users on the 98619A subscription services. Users not on subscription services can order the 98619A software. Either the 022 or 045 media option must be specified. Users who already have SRM can get an upgrade discount by specifying Option 001 to the 98619A. Orders for the 98619A O/S. and 50960A Server specified to ship after January 2, 1987, will be assured of receiving Rev. 3.0 software and manuals.

SRM is still selling extremely well, especially in Measurement Automation and Design Automation applications based on Series 200/300 BASIC and Pascal systems. It now is HP's largest network installed base. Approximately 20 percent of the HP 9000 Series 200/300 workstations sold connect to an SRM. More SRM projects are planned and staffed for 1987, so it continues to be a viable (and with low-cost discs supported, an even more cost-effective) enhancement to multi-workstation installations.

Contact your HP sales rep for more information.

Personal Computers

General

INTRODUCING OFFICE PRODUCTIVITY SERVICES AND PERSONAL PRODUCTIVITY SERIES

A BOS recap – applications and services

The Basic Office System (BOS) was introduced in July as a structure simplifying the sale of the HP Personal Productivity Center (PPC). BOS clarified that PPC consists of two parts: applications (Vectra Office) and services (HP DeskManager). Applications packaged in the Vectra Office Professional and Assistant Workstations are HP's solution for improving individual productivity. Services such as HP DeskManager (including HP File/Library and Schedule) improve organizational productivity through office-wide communications and information exchange. Presented in this way, PPC can be understood as a complete solution meeting both individual and organizational needs.

Completing the BOS structure

The new Resource Sharing and improved Information Access (formerly HP Access) complete the BOS structure. Now complete, the service component of PPC offers all three capabilities essential to an information system – communications, access to information, and resource sharing. The message to users remains the same: PPC consists of two parts, applications to enhance individual productivity and services to increase organizational productivity.

A sharper focus with new PPC brands

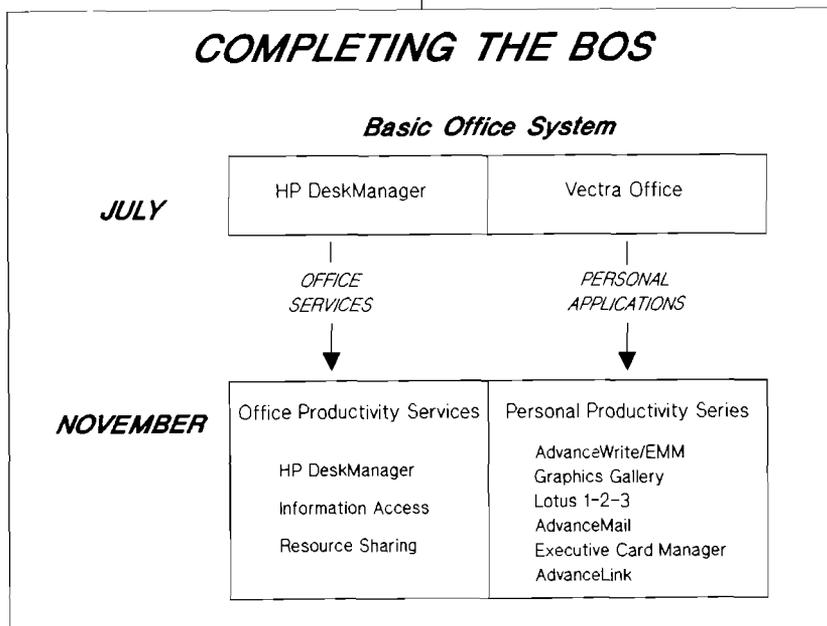
To help you better understand the BOS message of applications and services, HP is introducing two new product-line brands. PPC applications addressing individual productivity

(including AdvanceWrite, Graphics Gallery, etc.) will be collectively called the Personal Productivity Series. The service component of PPC, helping people work more effectively as a team (HP DeskManager, Information Access, and Resource Sharing), will be called Office Productivity Services. Together, the Personal Productivity Series and Office Productivity Services comprise HP's total office solution, PPC.

Selling capabilities not product names

In the past, describing the capabilities of HP's office solution was like navigating through an ever growing list of unrelated product names. With the introduction of the Personal Productivity Series and Office Productivity Services, you should find it much easier to sell PPC in terms of capabilities not product names. To make this easier, we've renamed our office products to describe the benefits they provide. HP Access has been renamed Information Access, and Resource Sharing has been introduced with a generic name. HP DeskManager retains its name as the communications component of PPC services due to its familiarity with users. Sold together or one at a time, HP DeskManager, Information Access, and Resource Sharing comprise PPC's foundation for office productivity – the key to meeting an organization's communication and information management needs. The following articles provide more information on the new Resource Sharing and enhanced Information Access products.

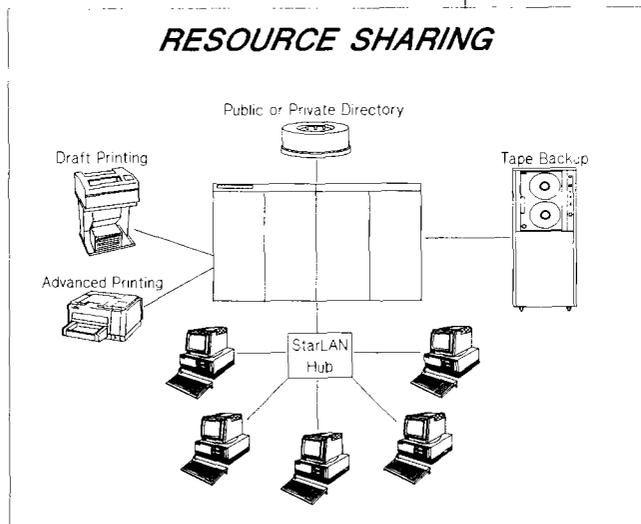
While Office Productivity Services help people work more effectively as a team, Personal Productivity Series applications help people work more effectively as individuals. The Personal Productivity Series is available on all HP PCs including Vectra PCs, Touchscreen PCs, and (for most products) The Portable. For those users with installed IBM PCs, HP's Personal Productivity Series provides a complete solution as well.



General

RESOURCE SHARING: NETWORK-WIDE RESOURCES FOR PCs

December 1 marks the debut of Resource Sharing, delivering HP 3000 peripheral resources to PCs on the OfficeShare network. Resource Sharing, part of Office Productivity Services, gives PC users shared access to files, disc space, applications, and printers. And data from all local hard discs on the network can be backed up concurrently to the same tape. Centralization of data and applications, and the efficient sharing of computer resources result in greater productivity and better PC management.



More productivity for PCs

Resource Sharing integrates PC users for increased productivity:

- PC-to-PC communications are enhanced with centralized storage of documents and spreadsheets, within reach of those who need them.
- Shared printing on high-quality and high-volume system printers is available to PC users, for improved results and faster throughput. Direct-mode printing offers complete HP LaserJet

printer functionality over the LAN, including merged text and graphics. Processed mode printing uses the technique pioneered by Print Central to allow users to print to printers throughout the network without knowing the printer type.

Improved PC management

Because of the centralized information storage and control it provides, Resource Sharing is also a key to improved PC management

- A higher ROI is achieved network-wide through the shared use of printers, discs, and tape drives.
- Disc space is better utilized when PC files are managed centrally.
- Regular backup of both local and shared discs protects valuable files and fulfills important auditing needs.

▪ Because Resource Sharing is fully MS-NET compatible, networked applications designed to that standard can be implemented for simplified version updates and control.

▪ Higher data integrity results from centralized storage of documents and spreadsheets.

Sell with MICRO 3000 and StarLAN

Resource Sharing, teamed up with StarLAN, makes the MICRO 3000 an ideal departmental server. This trio is the best new way to sell an HP 3000 in years. Resource Sharing sets a new standard for PC integration; the MICRO 3000 provides high power at a low price; and StarLAN takes advantage of existing wiring.

Availability

Full disc sharing and processed mode printer sharing are available on UB-Delta-1 MIT shipping in December. Resource Sharing will incorporate full HP LaserJet printer capabilities and local disc backup on the UB-Delta-2 MIT scheduled for mid-1987.

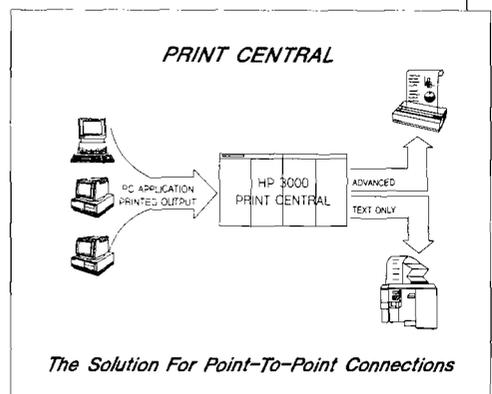
Ordering information

Product No.	Description
32597A/R	Resource Sharing Kit for host and one to ten PCs
Opt. 310	For Series 37 and MICRO 3000 Family
Opt. 315	Upgrade from Option 310 to 320
Opt. 320	For Series 39 to 70
32597L	License upgrade for one to ten additional PCs

Resource Sharing is structured to include both host and PC software in one product number. See "New Ordering Structure for Office Services," for more information.

General

NEW PRINT CENTRAL GIVES FULL HP LASERJET PRINTER SUPPORT



Print Central provides printer sharing for PC users utilizing point-to-point HP 3000 connections. With the new

enhanced Print Central (on December 1 HP Price List), users can now take full advantage of the HP LaserJet printer's powerful capabilities. Never again will users have to rely on switch-boxes, awkward transferring of files to host-based terminal applications, or scheduling time on a shared PC. With Print Central, print files can be sent from popular PC applications to HP 3000 printers as if the printers were directly attached to each person's PC.

The new Print Central gives the user full HP LaserJet printer support including integrated text and graphics. Now, shared printing of reports, presentation graphics, and even desktop publishing documents is simple. Print Central continues to support printers not typically available to PC applications for draft documents not requiring integrated graphics and sophisticated formatting.

Print Central is the ideal companion for the HP LaserJet printer. Users can utilize existing point-to-point RS-232/422 connections – there's no need for LAN connections, no redundant printer investment and no loss in HP LaserJet printer functionality.

Utilizing low-cost point-to-point connections, easy access to powerful formatting and graphic capabilities, and the flexibility to select the best printer for the job means users get the maximum benefit from their printer resources and the maximum return on their computer hardware investment.

The new enhanced Print Central has a new part number and product structure (including both host and PC software) and will be shipping on UB-Delta-2 MIT scheduled for mid-87.

Ordering information

Product No.	Description
32593A/R	Print Central Kit for host and one to ten PCs
Opt. 310	For Series 37 and MICRO 3000 Family
Opt. 315	Upgrade from Option 310 to 320
Opt. 320	For Series 39-70
32593L	License upgrade for one to ten additional PCs

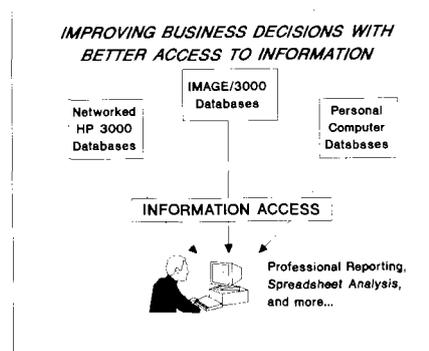
The current version of Print Central can be ordered now with product numbers 36890, 36891, and 36892. Users with support contracts will be upgraded to the enhanced Print Central at no charge.

See article entitled, "ATP Upgrade Promotion," for details of an ADCC to ATP upgrade promotion with Print Central.

General

INFORMATION ACCESS RELEASED WITH SIGNIFICANT ENHANCEMENTS

Information Access (formerly called HP Access) is on the December 1 HP Price List with a new part number and new functionality. Information Access has been enhanced with significantly better performance (40 percent overall), a new personal report writer, full HP AdvanceNet support, R:BASE™ 5000 integration, items per table expansion, and even new status and "time-to-completion" messages. Together, these enhancements provide an unprecedented level of performance, functionality, and ease of use.



Performance improvements

The December release of Information Access performs 40 percent faster than the previous release. The serial read, join, and summarize functions have improved a full 80 percent. With these performance improvements, Information Access is now as fast or faster than Query/3000 and Inform.

Report writer

Information Access has a powerful new built-in personal report writer. It's as easy to use as 1-2-3® from Lotus®, with all the functionality the most sophisticated user might need. Reports can be designed, edited, and printed by simple menu item selection. Complex statistical and cross tabulation functions can be performed easily. The personal report writer can produce preprinted forms and custom templates for one-time creation and repeated use.

Status messages, R:BASE 5000 support, items per table expansion, and full network support

Information Access now has a feature to correctly set the expectations of an end-user. Users will see a status message informing them how long their query will take and what percent is complete. In addition, Information Access now supports R:BASE 5000 and the OfficeShare Networking Family (HP StarLAN, ThinLAN, and SERIAL). This new release allows the user to select double the items per table from a database.

Information Access is a key component of Office Productivity Services. It extends the reach of the user's DP systems by delivering key business data all throughout their organization. This exciting product has been good and is now even better.

Information Access is available on UB-Delta-1 MIT shipping in December. It has been restructured to include both host and PC software in one product number.

Ordering information

Product No.	Description
32596A/R	Information Access Kit for host and one to ten PCs
Opt. 310	For Series 37 and MICRO 3000 Family
Opt. 315	Upgrade from Option 310 to 320
Opt. 320	For Series 39-70
32596L	License upgrade for one to ten additional PCs

For more information on Information Access, contact your HP sales rep.

Lotus and 1-2-3 are U.S. registered trademarks of Lotus Development Corp.

R:BASE is a U.S. trademark of Microrim, Inc.

General

HP OFFICESHARE NETWORKING FAMILY: INTEGRATION WITH PPC

The HP OfficeShare Networking Family for PCs now supports Personal Productivity Center (PPC) office automation software as well as distributed data processing applications.

The HP OfficeShare Network has grown into a more powerful and complete family of office networking solutions – the HP OfficeShare Networking Family for PCs, which now includes:

- *HP StarLAN for PCs* – the network of choice for the office, supporting HP Vectra and IBM PCs using twisted-pair wiring.
- *HP ThinLAN for PCs* – the network that integrates HP Touchscreen PCs into the powerful world of PPC software. It also supports Vectra PCs and IBM PCs over coax.
- *HP SERIAL Network for PCs* – the remote office connection for HP Touchscreen, HP Vectra, and IBM PCs.

All three networks within the OfficeShare family support the new PPC Office Productivity Services software. For example, Office Productivity Services - Resource Sharing permits PCs on any StarLAN, ThinLAN, or SERIAL Network to transparently access HP 3000 printers and discs.

In addition, the OfficeShare family also supports the Personal Productivity Series of software products that include applications such as Executive Memo-Maker and The Graphics Gallery.

Users now have support for powerful PPC software as well as support for popular PC applications.

The HP OfficeShare Networking Family for PCs offers a complete foundation for users' office automation needs.

General

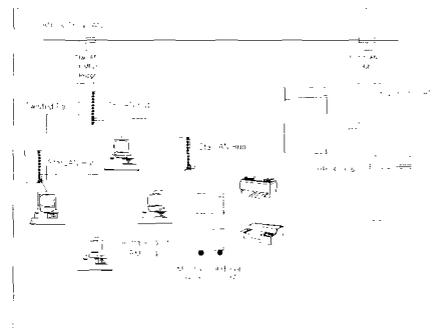
HP STARLAN FOR PPC: MAKING THE BEST CONNECTION IN THE OFFICE

HP StarLAN is Hewlett-Packard's first Local Area Network (LAN) that functions over unshielded twisted-pair wiring. HP StarLAN, a member of the HP OfficeShare Networking Family for PCs, conforms to the IEEE 802.3 Type 1BASE5 standard and is fully compatible with HP's new Personal Productivity Center.

HP StarLAN is completely compatible with HP AdvanceNet and provides a complete and integrated network with flexible growth for the future. Users can start out with a few PCs and grow to HP's largest HP 3000 with full compatibility.

HP StarLAN is ideal for the office automation user that requires information exchange, file transfer to an HP 3000, database access, electronic mail, and sharing of system peripherals such

as discs, printers, and plotters. Sharing information and peripherals will provide an efficient exchange of data and use of resources for increased productivity and lower cost.



The new HP StarLAN products

- *HP StarLAN Server Kit for Vectra PCs (P/N 50904F)* – Includes a PC interface card and software that provides file and disc sharing, printer sharing with spooling, and plotter sharing with spooling through a PC server.
- *HP StarLAN User Link Kit for Vectra/IBM PCs (P/N 50905F)* – Includes a PC interface card and software required for each user connected to the server.
- *HP StarLAN Configuration and Diagnostics Software for PCs (P/N 50906A)* – Includes software and documentation for configuring and diagnosing your PC network.
- *HP StarLAN Configuration and Diagnostics Software for PCs and HP 3000s (P/N 50912A)* – Includes software and documentation for configuring and diagnosing your PC and HP 3000 network.
- *HP StarLAN/3000 Link for MICRO 3000s and HP 3000 Series 37 (P/N 30265A)* – Includes an interface card and virtual terminal software for the HP 3000.
- *HP StarLAN Hub (P/N 27212A)* – A hardware box that is required to interconnect StarLAN interface cards.
- *HP StarLAN - 10 Mbps 802.3 Bridge (P/N 28647A)* – A hardware box used

to interconnect StarLAN networks to HP's 10 Mbps coaxial networks.

These products can be ordered as of December 1, 1986, and shipments will begin in March, 1987.

General

HP SERIAL NETWORKING — A COMMUNICATION SOLUTION FOR REMOTE PCs

HP SERIAL Network allows remote PCs to access Resource Sharing and applications on the HP 3000 from a remote location via an asynchronous connection. A remote user can communicate with the HP 3000 server node with a modem connection to an HP 3000 ATP using the Asynchronous SERIAL Network software on the HP 3000 and the HP SERIAL Network for PCs on the remote user workstation. The SERIAL Network supports the HP Vectra PCs, HP Touchscreen PCs, and IBM PC/XT/ATs.

In addition to supporting Resource Sharing, HP SERIAL Network also supports HP AdvanceLink to allow terminal emulation access to HP 3000 applications. The SERIAL Network provides file transfer for any PC end users who wish to communicate asynchronously with the HP 3000.

The HP SERIAL Network solution is for users who need a low-cost remote file transfer capability or access to Resource Sharing from a remote location. HP has provided a solution that adds the power of a minicomputer to a remote PC environment.

The SERIAL Network product is composed of: the Asynchronous SERIAL Network Link (P/N 32003A),

HP SERIAL Network PC Configuration and Diagnostics Software and License for HP 3000s (P/N 50911A/R), and either HP SERIAL Network User Link Software for HP Vectra/IBM PCs (P/N 50910F) or HP SERIAL Network User Link Software for HP Touchscreen PCs (P/N 50910A).

General

HP THINLAN FOR PCs

While StarLAN is positioned as the best method for connecting HP Vectra PCs into the PPC environment, HP ThinLAN for PCs is the means for integrating our HP Touchscreen PC installed base into the powerful world of Personal Productivity Center (PPC) office automation solutions.

HP ThinLAN for PCs is the improved version of OfficeShare Network software running over RG 58 thin coaxial cable. Included in the second release is access to PPC office automation capabilities, such as the Office Productivity Services and AdvanceMail. Additionally, many PC applications are fully supported for both the HP Vectra and Touchscreen PCs. ThinLAN has a link speed of 10 Mbits/sec and adheres to IEEE 802.3 type 10 BASE2 industry standard.

ThinLAN for PCs provides the same functionality as HP StarLAN for PCs and additionally supports HP Touchscreen PCs — giving our installed base Touchscreen PC users full access to PPC capabilities.

Included in the ThinLAN for PCs product line are server kit products for HP Touchscreen and Vectra PCs, user link kit products for HP Touchscreen PCs as well as HP Vectra and IBM PCs, a PC configuration/diagnostics software product when using PC servers, and a PC configuration/diagnostics product when using Office Pro-

ductivity Services/Resource Sharing on an HP 3000.

For more information on HP ThinLAN for PCs, please contact your sales rep.

General

OFFICESHARE NETWORKING FAMILY PROVIDES APPLICATION SUPPORT

Hewlett-Packard's OfficeShare Networking Family for PCs provides users with access to HP's distributed processing and office automation application software. Programs will behave similarly on the three members of the family: HP StarLAN, HP SERIAL Network, and HP ThinLAN.

HP's OfficeShare Family supports the Personal Productivity Series applications, popular MS[®]-DOS software programs, and third-party software written for use on networks. Users can use the powerful Personal Productivity Series applications, which provide basic office capabilities. These programs for the HP Vectra PC include: Executive Memo-Maker, AdvanceWrite III, 1-2-3[®] from Lotus[®], Executive Card Manager, The Graphics Gallery, and AdvanceLink 2392. Applications for the HP Touchscreen PC include: Executive Memo-Maker, 1-2-3 from Lotus, Executive Card Manager, and AdvanceLink.

The network also supports HP 3000 applications, with distributed processing and with host/terminal capabilities for personal computers on the network. For electronic mail capabilities, users can use AdvanceMail in conjunction with HP DeskManager. For powerful database access, users can use Information Access over the network. Using AdvanceLink, users can take advantage of terminal-based applications.

Popular MS-DOS applications and networked applications can also be used on the network for HP Touchscreens, HP Vectra PCs and/or IBM PC/XT/ATs. Examples include:

- 1-2-3 from Lotus (HP Vectra and Touchscreen PCs)
- R:BASE™ 5000 (HP Vectra and Touchscreen PCs)
- Diagraph™ (A.03.00) (HP Touchscreen PCs)
- Symphony® (Version 1.1) (HP Vectra and Touchscreen PCs)
- DATASTORE: LAN (3.23) available from Software Connection (HP Vectra and HP Touchscreen PCs)

Contact your sales rep for more information.

MS® is a U.S. registered trademark of Microsoft, Inc.

1-2-3®, Lotus®, and Symphony® are U.S. registered trademarks of Lotus Development Corporation.

R:BASE™ is a U.S. registered trademark of Microrim, Inc.

Diagraph™ is a U.S. trademark of Computer Support Corporation.

General

ANOTHER REASON TO BUY AN HP 3000: NETWORKING PCs

Now you have another reason to buy a new HP 3000. Many users need to integrate their independent, stand-alone PCs into a cohesive department or companywide integrated information management system. They want to share information easily and allow users to share powerful HP 3000 peripherals.

With Office Productivity Services/Resource Sharing and an OfficeShare network (StarLAN, ThinLAN, or SERIAL Network), users have the best integrated information management solution on the market today.

The user can be up and running quickly – increasing communications and productivity while gaining a sense that PC users are once again back in the group. Resource Sharing as well as StarLAN and ThinLAN server kits, form the background for outstanding office networking solutions.

In addition, the user can add personal computer servers to supplement the HP 3000 servers. These servers provide local file and peripheral sharing to address specific workgroup needs or to offload the HP 3000. The StarLAN server kit supports HP Vectra servers while the HP ThinLAN server kits support either Touchscreen or Vectra servers.

General

ATP UPGRADE PROMOTION

Until May 31, 1987, mid-range HP 3000 users with ADCC terminal ports can upgrade to ATPs at greatly reduced cost when they buy selected office software.

The cost of upgrading ADCC ports to ATPs has posed a major obstacle for many mid-range HP 3000 users considering HP's latest office software. ATPs are required for serial connections to many office products, including Information Access, AdvanceMail, and Print Central.

This ATP Upgrade Promotion reduces the incremental costs of upgrading to ATP ports (before purchase agreement discounts) for users installing Information Access software, depending on configuration. Users purchasing AdvanceMail or Print Central also benefit from this promotion.

The ATP Upgrade Promotion consists of an M05 discount on selected combinations office software and ATP

hardware. Users must buy one of the following office packages:

Office software

Information Access – for Series 39-7X
AdvanceMail/Vectra RTC-10
AdvanceMail/150 RTC-10
Print Central – Series 39-7X

In addition, users can take advantage of return credits on ADCC components purchasing ATPs (although returning ADCC hardware is not necessary to take part in this promotion). Up to three ADCCs can be returned for each 12-port ATP controller purchased.

The user can then purchase a 12-port ATP hardware package taking advantage of the promotional discounts on ATP hardware and office software.

Key points to remember

- This promotion is effective from December 1, 1986 through May 31, 1987.
- Only one ATP Port Controller (12 ports) is eligible for discount with each eligible Office software package purchased.
- This promotion is offered only for English-speaking countries and for English versions of the software in non-US countries.
- Special instructions *must* state "ATP Upgrade Promo" to be eligible for discount.
- Purchase agreement discounts apply to discounted price.
- Current backlog and new system sales are eligible for this promotion, as long as all other order conditions are met.

For more information on this ATP Upgrade Promotion, contact your HP sales rep.

General

NEW ORDERING STRUCTURE FOR OFFICE SERVICES

Ordering Information Access, Resource Sharing, and Print Central is now easier than ever.

Beginning December 1, 1986, joint PC/HP 3000 software products such as Information Access, Resource Sharing, and Print Central will be available in a simplified one-product-number structure. This means that users no longer need to order PC and HP 3000 components separately. The result is a simplified purchase, integrated contractual support, coordinated updates, and fewer headaches when adding incremental PCs.

Users can order Information Access, Resource Sharing, and Print Central software for a workgroup of up to 10 PCs by ordering a single product number (P/N 32596A, 32597A, or 32593A). Under this new structure, a license for 1-to-10 copies of the PC software is included with the HP 3000 software in an initial software 'kit.'

To extend this license to cover larger workgroups of 11 to 20 PCs or more, users need order only additional "license upgrade" products (P/N 32596L, 32597L, or 32593L). These license upgrades are identical to the 10-copy software licenses for standalone PC applications users will soon be able to order as part of HP's Corporate License Program (see "PC Software License Program - New Features for Entry-level Users" in this issue).

Impact of the new ordering structure

This new ordering structure changes the way users purchase Service software for their workgroup. Rather than providing single-copy packages for each PC user, the new structure more closely follows the model of terminal-based

software, where the user purchases a single package on their HP 3000 for use with a specified number of workstations. Under this new services structure, the user simply purchases a license sufficient to cover the number of PCs using the software.

Licenses and license upgrades are sold in increments of ten. Users will no longer be able to purchase single-copy packages of Information Access or Print Central. For example, users needing Information Access for 10 or fewer PCs have their needs satisfied by the 10-copy PC software license included in the Information Access (P/N 32596A) software kit. Users needing Information Access for 11 or more PCs must also purchase the License Upgrade product (P/N 32596L), providing a license for 11-to-20 PCs. Additional License Upgrades can be purchased to provide licenses for 21-to-30 PCs, and so on.

Benefits of the new ordering structure

The new ordering structure enhances users' ability to manage PC software for typical workgroups:

- MIS managers gain control over PC software. Software is delivered on a single set of media, with a single point for updates as well.
- Simplified purchase and administration of Service software. Growth can be managed more easily when adding incremental PCs to a workgroup, since software is available immediately and the need for purchase-order paperwork is less frequent.
- Standardization of software across the workgroup assures that all users are on the same version of software. Updates of HP 3000 and PC software can be coordinated from a single point.
- Reduced support costs for typical workgroups. To complement the simplified software structure, SMS and RCS support products for this software have been simplified as well, lowering the combined support costs for Service

software to a fraction of their previous costs.

For more information on this simplified structure for Information Access, Resource Sharing, and Print Central, contact your HP sales rep.

General

PC SOFTWARE LICENSE PROGRAM - NEW FEATURES FOR ENTRY-LEVEL USERS

HP's Corporate License Program for PC software allows users to license PC software in volume, simplifying the purchase and administration of PC software and providing price breaks based on the quantity purchased.

Initially introduced in early 1986, the license program has received rave reviews from customers. Now the Corporate License Program has been extended, offering new features to attract an even wider range of customers.

Even 10 PC workgroups qualify

Beginning December 1, 1986, users having as few as 10 PCs will be able to purchase licensed PC software and take advantage of quantity price reductions over purchasing single-copy packages. For users purchasing 50 copies or more, the license program remains unchanged

How the licensing program works

The Corporate License Program provides users a license to reproduce a specified number of copies of a PC software application. Licensed software is available in multiples of 10 and 50 copies. With each 10- or 50-copy license, the user receives one master disc, one right-to-reproduce license, one set of manuals for every 10 copies of software, and one right-to-use certificate for each end user. When software is ordered in multiples of 50 copies, HP



provides customized disc labels bearing the name of the user's organization.

For 10 to 40 copies,
Order 10-copy
"L" Products:

1 SET
PC DISCS
1 SET PC
MANUALS
RIGHT-TO-COPY
FOR 1-TO-10 PCS

For 50-5000 copies,
Order 50-copy
"Q" Products:

1 SET
PC DISCS
5 SETS PC
MANUALS
RIGHT-TO-COPY
FOR 1-TO-50 PCS

The Corporate License Program provides attractive price breaks to users purchasing PC software applications in quantity. In addition, the structure of the license program vastly improves the user's ability to manage the purchase and administration of PC software. It gives MIS users greater control over their software investments and helps them standardize on HP software solutions across their organization.

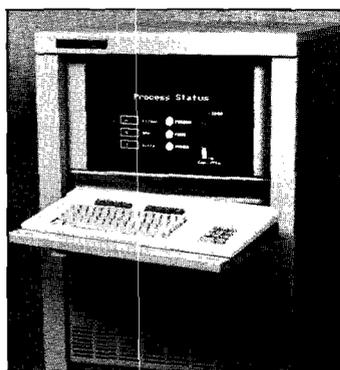
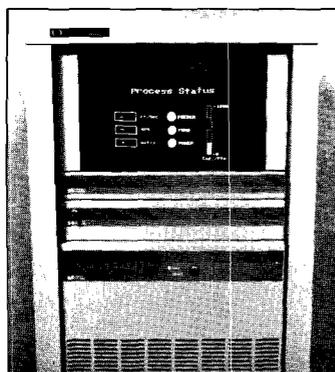
For complete information on the new extensions to HP's Corporate License Program, contact your HP sales rep.

General

THE HP 12131A KEYBOARD RACKMOUNT KIT

The HP 12131A Keyboard Rackmount Kit is a cleverly designed product ideal for racking the HP Vectra PC, HP 150/Touchscreen PC, and HP 239X keyboards in any standard 19-inch EIA rack. The kit features a swivel base, which allows the keyboard to be tucked in the rack for storage (top photo) or positioned directly in front of the rack for operator use (bottom photo). Moreover, the kit utilizes only 3.4 inches of

vertical rack space. Slide rails are included.



Desktop

INTRODUCING THE HP VECTRA PUBLISHER PC

Desktop publishing is one of the fastest growing and most exciting applications for personal computers today, with over one billion dollars of PC equipment expected to be sold by 1990. Desktop publishing simplifies the publishing process by taking the costly, complex steps involved in the traditional publishing process – typesetting, design, paste-up, and printing – and reduces the cost and time required by putting the power right on the desktop.

And because desktop publishing is so versatile, businesses both large and small can benefit from desktop publishing. Whether users need to produce proposals, reports, or newsletters, desktop publishing can help them produce professional-looking documents

without the professional prices that artists, typesetters, and printers charge.

Now HP has a new desktop publishing sales opportunity for you – announcing the HP Vectra Publisher PC.

With the new Vectra Publisher PC, users can create convincing and compelling communications right from their desktop. What's more, when the Vectra Publisher PC is teamed up with an HP LaserJet printer, Hewlett-Packard has a complete desktop publishing solution that's tough to beat.

The HP Vectra Publisher PC

The Vectra Publisher PC conveniently bundles the best hardware and software components needed for a powerful desktop publishing workstation.

The Vectra Publisher PC includes a Model 50 Vectra PC, the HP Mouse, and a choice of Monochrome or EGA displays. HP then adds Aldus PageMaker® for the PC, the leading page composition program, and Microsoft® Windows for the HP Vectra PC. Just one product number delivers a complete workstation, including monitor and software. What's more, the aggressive pricing of the Vectra Publisher PC translates into cost savings.

In addition, HP offers an MS-DOS compatible solution so users can integrate their Vectra Publisher PC into their existing office environment. And if their needs go beyond the desktop, the Vectra Publisher can communicate with larger systems, like the HP 3000.

PageMaker for the PC and Microsoft Windows from Hewlett-Packard

Aldus Corporation, the developers of PageMaker, has the largest installed base of desktop publishing software in the world. (See article entitled "HP Signs Software Distribution Agreement with Aldus Corp.," in this issue.

PageMaker is a unique page composition program which runs under

Windows. It lets users combine files from their favorite word processing and graphics programs, and then interactively place text and graphics on the screen. Different type sizes and styles, proportional spacing, merged text and graphics, and illustrations can easily be displayed on the screen and then printed out on an HP LaserJet printer.

Ordering information

Product No.	Description
72496A	HP Vectra Publisher PC, Monochrome Model 96
72497A	HP Vectra Publisher PC, EGA Model 97

Contact your HP sales rep for pricing and availability information.

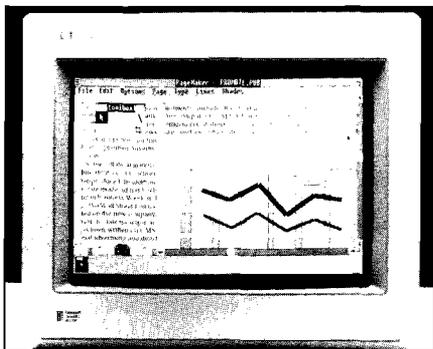
PageMaker is a U.S. registered trademark of Aldus Corp.

Microsoft Windows is a U.S. registered trademark of Microsoft Corp.

Desktop

HP SIGNS SOFTWARE DISTRIBUTION AGREEMENT WITH ALDUS CORP.

HP has reached an agreement with Aldus Corporation to distribute the best-selling PageMaker® desktop publishing software program.



Under the terms of the agreement, PageMaker will be available as part of the new HP Vectra Publisher PC. The Vectra Publisher PC will be sold through both the dealer and direct channels.

Aldus PageMaker is the most popular page composition software program in the world today, owning the largest share of market for desktop publishing software. Aldus will begin shipments of the PC version of PageMaker in January, which will coincide with HP shipments of PageMaker and the Vectra Publisher PC.

The introduction of PageMaker from HP gives us a tremendous sales opportunity in the desktop publishing market. Now users can get a complete desktop publishing solution, including the hottest desktop publishing software – PageMaker. Not even Apple can offer such a complete solution. And because PageMaker requires the power of an IBM PC AT-class machine, it provides an excellent opportunity for users to upgrade from the PC they are using today to the Vectra PC.

PageMaker's easy-to-use pull-down menus and commands mean that users don't need expertise in typesetting or graphic arts to become desktop publishing pros. In addition, PageMaker has been specifically designed to work with Microsoft® Windows, and takes advantage of Windows' diverse capabilities. Using PageMaker, text and graphics files created with word processing and graphics, programs such as Executive MemoMaker, WordStar®, 1-2-3® from Lotus®, and Graphics Gallery can be integrated into a document. And PageMaker is easy to use, because its WYSIWYG (what you see is what you get) format makes it easy to preview the final result before it's printed out.

Aldus PageMaker – a winning desktop publishing software solution from HP.

Literature

Product No.	Description
5954-7501	Aldus PageMaker for the PC from Hewlett-Packard Data Sheet

Ordering information

Product No.	Description
45964A	Aldus PageMaker for the PC from HP

PageMaker is a U.S. registered trademark of Aldus Corporation.

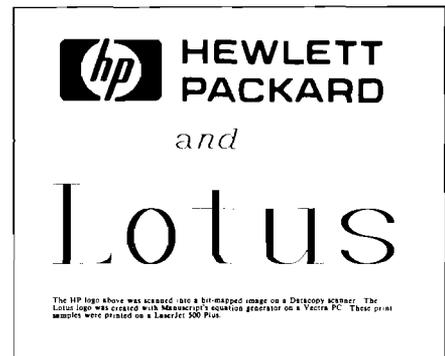
Microsoft Windows is a U.S. registered trademark of Microsoft Corporation.

WordStar is a U.S. registered trademark of MicroPro International.

1-2-3 and Lotus are U.S. registered trademarks of Lotus Development Corp.

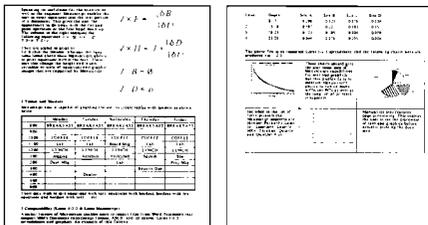
Desktop

LOTUS MANUSCRIPT: THE WORD AND DOCUMENT PROCESSOR FOR TECHNICAL PROFESSIONALS



Lotus Development Corporation recently announced Lotus Manuscript™. Manuscript is aimed at technical professionals – engineers, scientists, technicians, marketing managers, legal people – and their support staffs. It is a comprehensive system for word and document processing, allowing for mixed text and graphics on the page, support for long, structured documents, impressive print capabilities, equation

handling, and integration with 1-2-3®, from Lotus®, Symphony®, and Freelance™.



Features and benefits

Feature	Benefit
Mixed text and graphics: With Manuscript you can mix various information on a single page: text, graphics, charts, tables, diagrams, equations.	Results in high-quality proposals, manuals, technical specifications, memos, etc., without the high cost of technical publications support, typesetting, etc. No more cutting and pasting.
Powerful print formatter: You control the look of documents with capabilities for creating and editing tables and charts, fine-line spacing, and microjustification. A variety of font cartridges, point sizes, etc., can be built into a typeface list. Format information can be saved as a template file for often-generated types of documents.	All documents can now be aesthetically pleasing. The near-typeset quality will doubtlessly increase readability of your documents and get you noticed.
Long documents: Manuscript can handle documents as long as 800 pages as easily as it handles a 1-page memo. It automatically produces a table of figures, footnotes, index, and cross references.	Eliminates the need to generate multiple files and merge them at print time. Assists with document organization. Saves time.
Built-in outliner: Manuscript's integrated outliner allows you a global view of the entire document or the ability to work only on individual sections. Entire sections can be moved easily with a few keystrokes.	It helps organize the document (and the writer). It lets you write the way you think and reminds you of what you wrote in preceding sections or chapters.
Document comparison: Manuscript will compare different versions of a document and automatically highlight changes for review.	Reduces time and cost to produce a new version of any document. Only those pages that have changed need be reviewed, produced, and printed.
User interface: Manuscript employs a similar user interface to 1-2-3 from Lotus.	Reduced learning time with this industry-standard interface.
Equations and Greek symbols: Manuscript automatically generates and sizes and places (on the page) equations, as well as upper-case and lower-case Greek symbols, parentheses, and brackets.	Eliminates cutting and pasting to add these items to a document. Even for those now using a "Scientific" word processor, Manuscript provides both a powerful general-purpose editor and this special capability.
Integrations with 1-2-3 and Symphony: Manuscript imports worksheets, databases (for mail merge), and graphics from 1-2-3 and Symphony.	Reports can be more convincing and create more impact. Supporting numbers and graphs can be placed right alongside the text discussing conclusions and recommendations, not on a separate page or in a hard-to-find appendix.
Document preview: Manuscript's document preview feature allows you to see the document as it will appear from the printer.	No need for a series of time- (and paper-) consuming draft prints. The final document will look just the way you want.

Manuscript will be available through authorized Lotus dealers by the end of the year. For more information on Manuscript, call Lotus Corporation at 617-577-8500 and ask for customer support.

Lotus Manuscript: The word and document processor for technical professionals. A great new tool for users.

Lotus Manuscript is a U.S. trademark of Lotus Development Corporation.

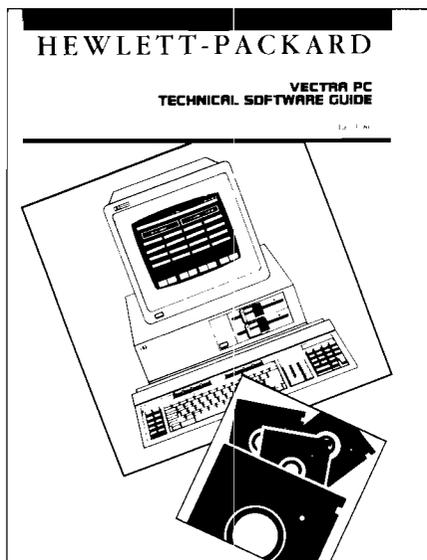
1-2-3, Lotus, and Symphony are U.S. registered trademarks of Lotus Development Corporation.

Freelance is a U.S. trademark of Graphic Communications, Inc.

Desktop

NEW HP VECTRA PC TECHNICAL SOFTWARE GUIDE

The all new and greatly expanded Fall 1986 HP Vectra PC Technical Software Guide is now available.



This newest Vectra catalog lists more than 245 software vendors' marketing, technical, or TOA software for the HP Vectra PC. There are more than 600 tested and vendor verified compatible software products listed along with

complete vendor recommended configuration information.

Applications range from analog circuit design to technical word processing. There are also listings for accessories such as light pens, image processors, and voice cards. The software and hardware businesses represented range from small, independent value-added firms, to corporate giants. Many are in the catalog for the first time.

Contact your HP sales rep for a copy of the guide (refer to P/N 5954-8267).

Desktop

OLDER HP VECTRA PC MODELS TO BE REMOVED FROM HP PRICE LIST JANUARY 1

On January 1, 1987, Hewlett-Packard will remove Vectra Model 35 (P/N 72435A) and Vectra Office Models 1 and 2 (P/N 72475A and 72485A) from the HP Price List:

Product	Description
<i>Model 35</i>	
P/N 45935A	SPU with 256 Kbytes of RAM and 1.2-Mbyte disc drive
P/N 72435A	Same as above with PC Kit
<i>Vectra Office, Model 1</i>	
P/N 72475A	Includes CPU with 640 Kbytes of RAM, Multi-mode Video Adapter, Color Adapter, Dual Serial Card, Security Keylock, DOS, and two 360-Kbyte flexible disc drives.
<i>Vectra Office, Model 2</i>	
P/N 72485A	Includes CPU with 640 Kbytes of RAM, Multi-mode Video Adapter, Color Adapter, Dual Serial Card, Security Keylock, DOS, one 360-Kbyte flexible disc drive, and one 20-Mbyte hard disc subsystem.

Users will still have excellent alternatives from which to select a comparable Vectra model – for example, the more popular Vectra Models 25 and 45, as well as the new Vectra Office, which consists of a Vectra 3000 and the Vectra Office Professional or Assistant Software Packs.

Because of the superior Vectra PC alternatives available and low demand, these models will be taken off the HP Price List. For example, those Model 35 users who want a basic SPU with a 1.2-Mbyte floppy disc drive can order a Model 45 for only about \$20 more and receive 384 Kbytes more RAM.

Similarly, old Vectra Office users can order a Vectra 3000, Monochrome or EGA model, and a Vectra Office Software Pack for substantially greater savings than those offered on Models 1 and 2.

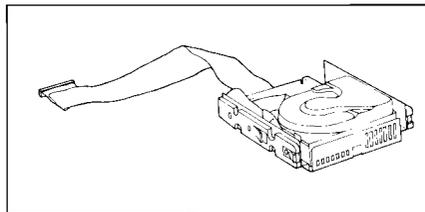
No special support plan is required because the Vectra itself is still fully supported. Also, users can still order the components separately to build a comparable Vectra Office, Model 1 and 2.

Peripherals

Mass Storage

HP 45816A HARD DISC RELIABILITY UPDATE

The reliability of the Hewlett-Packard 45816A, 20-Mbyte internal hard disc for the HP Vectra PC, has recently outperformed our initial expectations. At introduction, this rugged 3½-inch drive was conservatively specified at a 40,000-hour MTBF. However, after nine months in production, our annualized failure rate derived from our warranty data indicates an MTBF of more than 80,000 power-on hours. This is four times better than typical industry-standard drives.



The ruggedness of this HP “exclusively designed-and-built” drive has set new environmental standards for the disc drive industry and has, in fact, led to its use as an OEM component for factory floor controls in the heavy industrial marketplace.

The drive’s resilience to heat, high humidity, shock, and vibration have made it a leader in the industry. *Personal Engineering & Instrumentation News* reported the following in their August 1986 issue: “the disk that leads the list in performance and the unit mentioned more often than any other by vendors is Hewlett-Packard’s 3½-inch hard disk.”

HP’s commitment for the past five years to solve hard disc performance problems produced the most rugged drive for the HP Industrial Vectra environment and the most reliable drive for the HP Vectra office environment.

To order this reliable 3½-inch disc drive for your office environment, continue to specify the HP Vectra PC Model 25 or 45 and the HP 45816A 20-Mbyte disc subsystem.

If you require additional information, please contact your HP sales rep.

Mass Storage

HP 9123D DISC DRIVE PRICE INCREASE

Effective October 1, 1986, the price of the HP 9123D disc drive was increased.

The HP 9123D is the double-sided 3½-inch dual drive designed exclusively for the HP Touchscreen II PC. Relying on the Touchscreen II PC for its power supply, the drive provides up to 788 Kbytes of formatted capacity per drive.

For questions regarding the HP 9123D, please contact your HP sales rep.

Mass Storage

HP 9133/34AL SUPPORTED ON HP SERIES 80 COMPUTERS

The HP 9133L has been tested and found to work on HP Series 80 computers when the configuration switch on the disc drive is set to 9. At this setting, the drive is divided into two individual units. The maximum capacity recognized by the Series 80 is 16.76 Mbytes, therefore, you can have two individual units of 16.76 Mbytes each.

HP-UX SNA3270 PROVIDES IBM COMMUNICATIONS FOR HP 9000

A new family of HP-UX datacommunications products was introduced in November for the HP 9000 Series 300 workstations and Series 800 minicomputers. HP 9000 users may now access IBM Systems Network Architecture (SNA) corporate mainframe databases, share expensive host peripherals, run local HP-UX applications while taking advantage of mainframe computing power, access corporate mail systems, and transfer files over the corporate network.

The HP-UX SNA3270 family of link and service products allow single systems or a LAN-based "Gateway" to emulate an IBM 3278 terminal. Additional features such as 3270 PC file transfer, 3287 printer emulation, and support for HP-UX Windows are included at link speeds up to 19,200 bits per second.

For more information on HP-UX SNA3270 or its associated products, see the complete introduction article, "Announcing New HP 9000-to-IBM Datacom Products," on page 10.

HP 2334A Plus – X.25 MULTIPLEXER

The HP 2334A has now been selling successfully for two years. It fits very well into most Hewlett-Packard user configurations. The HP 2334A is mainly used as a statistical multiplexer, although it can also be configured as an X.25 PAD.

The new HP 2334A Plus will provide important benefits in three key areas: performance, improved reliability, and faster configurations.

Performance.

The HP 2334A Plus offers at least a 25 percent improvement in performance over the HP 2334A. The HP 2334A Plus can now handle up to 34 packets per second (128-Kbyte packets), as compared to 27 packets per second for the HP 2334A. A complete performance analysis will be presented in an upcoming issue of *HP Channels* in early 1987.

For printers connected to the HP 2334A Plus, the performance improvement will reach 100 percent or more. To achieve this, a new ATP Term Type 26 has been created (Term Type 26 will not be available on ADCCs).

Improved reliability.

Quality implies reliability, and quality is one of the main advantages of HP products over the competition. The reliability of the HP 2334A Plus has been significantly improved in several areas:

- New CPU board (state of the art components).
- Saving of the configuration during powerfail.
- Improved firmware.
- Improvement of modem signal management.
- Diagnostic commands.

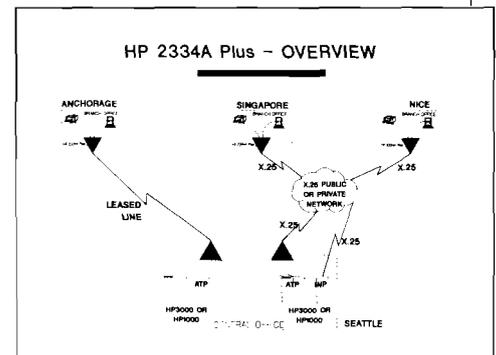
Faster configuration

The HP 2334A's configuration was sophisticated but complex, in particular for those using it as a statistical multiplexer over a leased line. It is no longer necessary to configure the X.25 parameters, since the HP 2334A Plus now provides a built-in default configuration for statistical multiplexer over a leased line. It can be installed and operational in a few minutes.

To speed up the configuration the following functions have been designed in the product:

- Default configuration.
- Bypass of infrequently used parameters.
- HELP and LIST, display commands.
- Standard Option 123.

In summary, *performance*, *reliability*, and *fast configuration* are the three major benefits of the HP 2334A Plus. These enhancements will be offered at no extra cost to the user.



Terminals

**HP 13264A DATA
LINK ADAPTER
DISCONTINUANCE**

The HP 13264A allowed an HP 262X multipoint terminal to be connected to the Factory Data Link (also named Multipoint Data Link). The last HP 262X multipoint terminal (HP 2624B) was obsoleted on October 1, and we plan to discontinue the HP 13264A on April 30, 1987.

As no more terminals support the multipoint protocol, there will be no replacement product.

Alternative solutions

- 1) Switch to a traditional point-to-point connection using the HP 2392A or 2394A and multiplexers.
- 2) Use the HP 2392A/2394A and a third-party multipoint to point-to-point protocol converter such as the BKS200 from BKS Electronics (Telephone: 33-76-98-30-99).

For any problem, please contact your HP sales rep.

Plotters

**HP 7090 SOFTWARE NOW AVAILABLE FOR HP
9000 SERIES 300 COMPUTERS**

All the great capabilities of original HP 17090A/B software are now available with HP 17090C software for properly configured HP 9000 Series 300 computers. The computer system must have 10 softkeys, a knob, and separate displays for alpha characters and graphics.

With HP 17090C Measurement Graphics Software, the HP 7090 system can start taking measurements almost immediately. The friendly menus allow quick and easy access to the software's capabilities.

Software capabilities include six main functional areas:

- Measurement setup
- Measurement
- Display
- Annotation
- Storage and retrieval
- Data manipulation

System requirements

The table below lists the operating system, memory, and equipment that are needed to use the software with the HP 7090.

HP 17090 version	Operating system	Available memory ¹		Applicable HP 9000 models
		Minimum	Optimum	
A	BASIC 2.0	235K	470K	HP 216 HP 226 HP 236 HP 220 ²
B	BASIC 3.0	216K	433K	HP 216 HP 226 HP 236 HP 220 ²
C	BASIC 4.0/4.03	245K	470K	HP 216 HP 217 ³ HP 226 HP 236 HP 220 ³ HP 237 ³ Series 300 ^{4,5,6}

¹Memory required after loading BASIC and all necessary binary files. With minimum RAM, short delays will be encountered when software subsystems are swapped in memory.

²Applicable when equipped with an HP 98203A/B keyboard.

³Applicable when equipped with BASIC 4.03 and an HP 98203C keyboard. The HP 220 may also be used with BASIC 4.0 and an HP 98203A/B keyboard.

⁴BASIC 4.03 is required when the computer is equipped with an HP 98203C keyboard.

⁵The HP 46083A knob is required when the computer is equipped with either an HP 46020A or HP 46021A keyboard.

⁶The HP 98546A display compatibility interface is required when the computer is equipped with a single-plane monochrome bit-mapped display.

Ordering information

Measurement Graphics Software is supplied on two 3½-inch microfloppy or 5¼-inch minifloppy discs and includes a user's manual. To order, specify the model number and option listed below.

Product No.	Description
HP 17090C	Measurement Graphics Software
Opt. 630	3½-inch microfloppy discs
Opt. 655	5¼-inch minifloppy discs

Note: HP 17090 A/B Measurement Graphics Software will remain available.

Printers

ANNOUNCING

IMPROVED

HP THINKJET

FAMILY OF PRINTERS

Effective in December, you will see an updated version of the HP ThinkJet (HP 2225C) family of printers. As you know, the HP 2225C family is Hewlett-Packard's AC-powered ThinkJet printer with a Centronics/parallel interface, which allows compatibility with many popular industry PCs. The improved version, which will replace the current printer, has the following enhancements:

Feature	Benefit
Offline power adaptor	– Portability is enhanced. – Overall product weight is reduced by 1½ pounds. – In-case ambient heat is reduced.
Extra power adaptors available	– Allows the user to buy one printer for use in all countries.
Single board design	– Single board design has reduced repair time from 70 to 30 minutes.

To make the transition as easy as possible, all product numbers and ordering procedures for the improved version are identical to the current HP 2225C printer family.

Users can expect to receive the improved printer in the U.S. during early December and the non-U.S. version during late December.

Printers

BATTERY-POWERED

CENTRONICS

THINKJET PRINTER

CABLING

REQUIREMENTS

To connect the new battery-powered Centronics ThinkJet printer (HP 2225P) to many of the popular portable computers (IBM Convertible, IBM compatibles, and Zenith, etc.), users will need to order a special Centronics/parallel printer cable. Currently, Hewlett-Packard has the only industry-standard cables available for the HP 2225P, making the following order information very important:

Product No.	Description
92219Z	Centronics printer cable 3.3 ft (1 meter length) 25-pin male and 15-pin male connector Shielded

The 92219Z cable is available through HP's Direct Marketing Division. Users can phone 800-538-8787 to place their orders.

Printers

HEBREW AND ARABIC HP THINKJET PRINTERS OBSOLETE

As of December 1, 1986, the HP 2225AT, 2225CT, 2225AV, and 2225CV ThinkJet printers will be discontinued. For users requiring a narrow-carriage inkjet printer in Hebrew or Arabic, HP QuietJet printer versions are currently under development.

All other HP ThinkJet printer models are available internationally.

Printers

SPECIAL CHARACTERS

AVAILABLE IN HP

QUIETJET PRINTER

FAMILY

Recently, many users have asked that certain symbols such as "trademark," "degree," and "copyright" be included in the HP QuietJet printer family. The ECMA-94 is one of the symbol sets resident in the QuietJet printer and it provides these symbols and many more.

Now users can access the information they need:

- To select ECMA-94 in the printer, the DIP switches A6, A7, A8, and B1 are set Down, Down, Down, Up, if the firmware date code at the top of the self-test printout is less than 8626; and set Down, Up, Up, Up, if the date code is 8626 or greater. To see which characters are available, set the switches and print a self test. ECMA-94 can also be selected in software by the Esc(ON) escape sequence.
- ECMA-94 allows the user all regular characters using the regular keys, as

well as the special symbols by using the EXTEND CHAR key on the 100 Series or the ALT key on the HP Vectra/IBM PC models. The user should refer to the owner's manual for use of these keys.

- For the HP 150/Touchscreen PC, refer to "Character Sets" in the *Using Your HP Touchscreen as a Terminal* owner's manual, P/N 45626-9005.
- To learn which Roman8 extended character on your keyboard matches the desired ECMA-94 extended character, refer to the appendix in the new *QuietJet Owner's Manual*, P/N 02227-90019.

Now HP has the tools to assist users with some of their special printing requirements.

For more information on how to access the special characters available, contact your HP sales rep.

Printers

HP 2688A PRINTER **DISCONTINUED**

The HP 2688A laser printer will be removed from the HP Price List on December 31, 1986.

For users who still wish to purchase the product after December 31, we will continue to accept orders until February 28, 1987. However, we have a very limited supply of these new units remaining. In addition, we have refurbished units available with a 40 percent discount. These units will be available for sale while the supply lasts or until February 28, 1987. Please call your HP sales rep.

Printers

HP 9876A THERMAL **OBSOLESCENCE** **UPDATE**

The HP 9876A Thermal Graphics Printer was removed from the HP Price List October 1, 1986, due to the limited availability of printheads. However, HP's Greeley Division (GLD) has made a lifetime purchase and will continue building the HP 9876 until our printhead supply is exhausted.

Hewlett-Packard's primary commitment is to provide a ten-year life support for our installed base and secondarily to supply existing government contracts. Any remaining units will be available to prospective customers.

Please contact your HP sales rep for more information.

Supplies

Supplies

HP DIRECT **CATALOGS MAKE IT** **EASY TO ORDER BY** **PHONE**

Are you aware of the many benefits received when ordering HP computer supplies and accessories by phone through HP DIRECT?

- Easy-to-use, full-color catalogs.
- Fast, efficient, ordering assistance from friendly telemarketing and customer service professionals.
- Convenient payment methods by credit card or open customer account.

Winter 1986/87 catalogs published

Hot off the press are the U.S. and Canadian editions of the latest *Computer Users Catalog* and the U.S. edition of the latest *Personal Computer Users Catalog*. (International versions of the new *Computer Users Catalog* will be available in February 1987. The *Personal Computer Users Catalog* is available in the U.S. only.)

Catalog highlights

More than 100 new products are introduced in these two catalogs, bringing HP DIRECT's product offerings to almost 2,000. The "New Products" section featured in the front of each catalog includes the following:

- HP-18C Business Consultant calculator.
- InkJet color cartridges.
- HP QuietJet Plus printer accessory kit.
- HP LaserJet printer soft fonts.
- Additions to the MicroManager™ furniture line.

Completely revised cable charts now cross-reference cables according to the

type of equipment a user owns. HP Touchscreen PC owners, for example, can now see at a glance the type of cable and connector they need to link their PC to an HP 3000, modem, printer, plotter, or disc drive.

Flexible 3½-inch and 5¼-inch double-sided discs are offered for the first time in packages of 100. And in all quantities, HP premium discs are now greatly reduced in price and come with a new five-year warranty.

New peel-off labels speed orders on their way when affixed to purchase requisitions and serve as reminders to purchasing departments to order through HP DIRECT.

More *Helpful Ideas* than ever before. Interspersed throughout both catalogs are bright yellow memos containing suggestions such as: how to choose the right HP LaserJet printer fonts to design a printed page or how to order cut-to-length cables.

Ease of ordering

HP DIRECT phone order service is fast, easy, and friendly. In the U.S., users can now call in their order on a single toll-free line (800-538-8787). Standing by to accept direct order calls any weekday between 9 a.m. and 5 p.m. are telemarketing consultants who will confirm product availability and price on the spot. After phone orders are received and promptly processed, HP DIRECT provides *free* surface delivery and ships within 24 hours. All HP DIRECT orders can be placed against HP DIRECT open accounts or charged to the user's VISA, MasterCard, or American Express credit cards.

Special fast-order direct phone lines for computer supplies also are available in many countries outside the U.S. Refer to the following list to order U.S. and international versions of the *Computer Users Catalog* and the U.S. edition of the *Personal Computer Users Catalog*.

Ordering information

Product No.	Catalog
5953-2450	International edition (English language)
5953-2450(C)	Canadian edition
5953-2450(FR)	French language edition
5953-2450(GR)	German language edition
5953-2450(IT)	Italian language edition
5953-2450(UK)	UK edition.*
5953-2450(D)	U.S. edition.*
5953-2461(D)	Personal Computer Users Catalog U.S. edition

Order catalogs through DMK except where noted.

*Order by calling your HP sales rep. *MicroManager™* is a trademark of *MicroComputer Accessories, Inc.*

Supplies

NEW FULLY SHIELDED RS-232-C GENDER CONVERTERS

Users who have a shielded RS-232-C cable system and need gender converters should purchase HP's gender converters with 100 percent shielding. With these fully shielded gender converters, users can better protect their data and their cable system from the effects of EMI and RFI.

HP's Direct Marketing Division (DMK) has replaced the 92222F/M gender converters with the fully shielded 92224F/M gender converters.

The 92224F female gender converter will link two male cables together and the 92224M male gender converter will connect two female cables. All 25 pins in each gender converter are wired straight through, ensuring all signals are passed through unaltered.

For fast service, users can call DMK's direct order phone numbers. Users from anywhere in the U.S. can dial 800-538-8787.

Product No.	Description
92224F	RS-232-C female shielded gender converter
92224M	RS-232-C male shielded gender converter

Supplies

DMK direct order phone numbers

DMK Fast Phones — the easy, direct way for you to order supplies, accessories, media, furniture, and software from Direct Marketing Division.

Location	Telephone Number
Australia	(03) 895-2645 (03) 895-2615 (03) 895-2815 (03) 895-2861
Austria	(0222) 2500-615 (0222) 2500-616
Belgium/Luxembourg	(02) 762 32 00
Canada	
Toronto Local	416-671-8383
Ontario	1-800-387-3417
Quebec	1-800-387-3417
British Columbia	112-800-387-3154
Other Provinces	1-800-387-3154
Denmark	(02) 816640, ext. 258
Finland	(90) 887 2361
France	(1) 69 288 390
Greece	(01) 6726090
Italy	(02) 9236 9437 (02) 9236 9478 (02) 9236 9585
Japan	
Sagamihara	0427 59 1311
Osaka	06 304 6021
Middle East	
Athens	(01) 6828811
Norway	(02) 171180
South Africa	
Johannesburg	(011) 8025111
Cape Town	(021) 537954
Spain	(91) 6374013 (91) 6370011
Sweden	(08) 7502400
Switzerland	(057) 31 22 53 (057) 31 22 54 (057) 31 22 59
The Netherlands	(020) 547 6606
United Kingdom	(0734) 697201
United States	800-538-8787
West Germany	(0130) 3322

SOFTWARE PACKAGES AVAILABLE AND WANTED

If you have a software package available for cross-licensing, or are looking for a package to cross-license, this section will help you. Your entry will appear for two months; the most recent additions are shaded. To list your company in the Cross-Licensing Classifieds (at no charge), see the address at the end of this section.

Software Packages Available

Industry: Manufacturing/Distribution

Abstract: Abacus Data Systems has announced its Comprehensive Reseller Assistance Program to market its Manufacturing/Wholesale Distribution management system to HP 3000 computer users.

The Abacus DM/3000 is designed for manufacturing and wholesale distributors. It includes modules for sales order and quotation processing, inventory control, purchasing, sales analysis, bill of material processor, physical inventory system, and general accounting applications. The system supports multiple companies and multiple warehouses. Running on all models of HP 3000 computers, the software is designed with an IMAGE database system to provide data integrity protection and easy report writing capability.

Company Name: Abacus Data Systems, Inc.

Address: 3166 Des Plaines Avenue, Suite 32
Des Plaines, Illinois 60018

Phone: 312-298-8780

Contact Person: Eddie Li

Type of Distributor Wanted: HP 3000 Series

Geographic Coverage: Worldwide

Industry: Cross industry — any market or sales department

Abstract: SMS/3000 is a comprehensive versatile, and easy-to-use sales management system designed for HP 3000 users. SMS/3000 is a prospecting system which manages leads from the point of identification through sales closure. Flexible reporting allows continual monitoring of sales efforts. Equally adaptable to direct sales or telemarketing environments, SMS/3000 allows each company to adapt their unique characteristics in the market place to provide technological identification of market trends, opportunities, or problem areas within the sales department.

Industry: Cross industry

Abstract: Lasersoft/3000 is a menu driven application which allows designing of forms and merging of data from existing applications onto forms, using an HP 3000. Multiple documents can be stored with up to 28 different typefaces and sizes, allowing line drawing, boxes, and shadings plus the insertion of logo, signature, and graphics files. Related support services such as logos, signatures, fonts, and forms design are offered by Business Systems International.

Company Name: Business Systems International, Inc.

Address: 20942 Osborne Street
Canoga Park, CA 91304
USA

Phone: 818-998-7227

Telex: 5101004239

Contact Person: William Akel or Nita White

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Any type of Organization

Abstract: "Our Own SOP" is an electronic management manual which contains Standard Operating Procedures (SOP) from several different businesses. Organizes the internal efficiency of running large or small multinational or domestic business or other type of organization. These SOPs implement and simplify numerous management principles. Many office procedures are standardized for practical application. Using this sophisticated productivity tool greatly raises managerial standards and reduces all executive and employee costly time demands.

Easily adapted with any "WordStar" reading word processing program to suit the organization's requirements and produce a unique, customized SOP Management Manual without designing and writing one from scratch. Not copy protected, the Licensing Agreement allows copies within one organization's legal entity, additional copy discounts for the purchaser's more than 50% owned subsidiaries are available.

Necessary requirements: Hewlett-Packard 150 with double-sided disc drive, HP Portable 100, portable PLUS or VECTRA, IBM or IBM compatibles. No special memory required. Text processor program able to read or convert WordStar by MICROPRO INTERNATIONAL. A good printer.

Optional: Hewlett-Packard's EXECUTIVE CARD MANAGER (ECM) & 1-2-3 from Lotus Development Corporation, Rel. 1A.

Company Name: CENTRAL RESOURCES CORPORATION,
COMPUTREX Division

Address: P.O. Box 96
Point Lookout, NY 11569-0096
USA

Phone: 516-431-2718

Contact Person: Leonard Linton

Type of Distributor Wanted: Open

Geographic Coverage: United States

Industry: Cross industry — videotex software and emulators for HP 1000/3000 and PCs

Abstract: Multiway videotex products containing terminal emulators for HP 150 and some other PCs, X.25-based, decentralized access network and Videotex host software for HP 1000 and HP 3000 computers.

The software is state of the art. Multi-lingual user interface (English, Swedish, Finnish etc.) enables instant change of the communication language. New languages are incorporated into the software by editing a proper message file. The context-sensitive, online help messages are also updated by just editing them. The software (except emulators) support multiple presentation standards (CEPT, PRESENTEL, ANTIOPE, NAPLPS) as well as online conversions between them (with some natural limitations that are in the standards).

The Videotex host software contains keyword search facility, electronic mail, and order entry facility. It has also several types of gateways and calendar-based reservation facility in addition to those features normally found in videotex host software. The videotex host software is currently used in travel industry information and reservation systems, nationwide public videotex systems, banking systems, in-house order entry systems, etc.

Hardware required:

- Emulator products: HP 150 (or some other PCs)
- Videotex host software product: HP 1000/3000 with 2-Mbyte memory minimum and dedicated terminal concentrator
- Access network: dedicated access points and HP 1000 (used as network management center)

Company Name: VTT Technology Inc.

Address: Lehtisaarentie 2 A
SF-00340 HELSINKI
Finland

Phone: 358 - 0 - 484483

Contact Person: Mr. Matti Hallivuori

Type of Distributor Wanted: OEM/System integrator

Geographic Coverage: Open

Industry: *Jobshop Manufacturing*

Abstract: JOBSHOP/3000 is a cost-efficient software solution for small to mid-sized jobshops. It provides comprehensive cost analysis and standard financial functions including payroll. JOBSHOP/3000 is a fully integrated system using an HP 3000 IMAGE database. Most user interaction is through an inquiry mode. It effectively monitors and documents job performance by costs to date, estimate variance, schedule variance, and percent complete. Distributed data collection includes labor distribution from the shop floor, updating job cost in real-time. JOBSHOP/3000 solves the problem of providing an acceptable solution of job cost analysis for the true jobshop. MCBA interface is available.

Company Name: Votaw Data Systems

Address: 13000 Lakeland Road
Santa Fe Springs, CA 90670
USA

Phone: 213-944-0676

Contact Person: Norm Querido

Type of Distributor Wanted: OEMs, dealers, distributors

Geographic Coverage: USA

Industry: *Cross industry - Software development tools*

Abstract: QCOMM/1000 is an easy-to-use, program-to-program message communication subsystem for use on HP 1000 computers. In addition, with DS/1000 it facilitates transparent program-to-program communication over DS/1000 networks.

Features include:

- Guaranteed message delivery on FIFO basis per message queue.
- Message queuing with full flow control.
- Handling of as many message queues as there are class numbers on the system.
- Blocking of messages for optimal throughput.
- Trace facility and dynamic viewport into queue usage.
- Multiple message queues per program.
- Variable message lengths.

Company Name: Bothma, Searle & Wilk CC

Address: P. O. Box 365
Halfway House
1685
Republic of South Africa

Phone: (27) (11) 805-1843

Telex: (SA) 4-26824

Contact Person: Neville Searle or Roland Wilk

Type of Distributor Wanted: HP 1000 OEM

Geographic Coverage: Worldwide

Industry: *Cross-industry*

Abstract: Dataport/HAN is looking for a sales-service organization in France, Spain, and Italy to expand their activities throughout Europe. Dataport/HAN sells solutions on HP 9000 Series 300 workstations for mechanical, electrotechnical, and architectural applications. The CAD 200 program-family sells very successfully in Germany, Austria, and Switzerland. Since 1984, Dataport/HAN has installed more than 300 systems in these countries. More than 2,000 systems have been installed worldwide.

Company Name: Dataport GmbH

Address: Kaiserstrasse 19
Eingang Neuhausgasse 16
D-6360 Friedberg
West Germany

Phone: (06031) 6 10 21-5

Telex: 4 184971 nd d

Contact Person: J. Brinkerhoff

Geographic Coverage: France, Spain, Italy

Industry: *Manufacturing*

Abstract: MDSS (Manufacturing Decision Support System) is an online, full-function manufacturing software product package in four separate modules: Material Management, Shop Floor Control, Order Processing, and Financial Reports.

MDSS is well suited to discrete manufacturing with support for make-to-order, make-to-stock, and selective repetitive manufacturing facilities ranging from \$5 million and up. MDSS is written in structured, ANSI COBOL to run on the HP 3000 series, and is professionally documented using standard HP software products. It has built-in, online "Help" screens for ease-of-use.

Company Name: Manufacturing Decision Support Systems, Inc.

Address: 300 East Ohio Building
1717 East 9th Street
Cleveland, OH 44114
USA

Phone: 216-861-8100

Contact Person: John A. Leibert, V.P.

Type of Distributor Wanted: Open

Geographic Coverage: United States, including Puerto Rico

Industry: *Cross industry - Office Automation*

Abstract: AUTHOR 3000 is powerful, character-oriented AUTHOR word processing software to be run on the HP 3000. This full-featured word processing package combines full-screen editing and user friendliness with system efficiency and high performance. AUTHOR 3000 is the first product in a full line of office automation products.

Features in AUTHOR 300 include:

- Electronic filing of all documents, using Drawer, Folder, Document hierarchy.
- Incorporation of function key orientation and full screen editor.
- Introduction of COMAR'S 65,000+ word spelling dictionary, and a personalized user-specified dictionary.
- Comprehensive step-by-step on-line help screens.
- Full mail list function supporting mass mailings.
- System's management function for system access control.
- Complete update of the User Reference Manual.
- Low-cost type-ahead hardware solution for terminal buffering.

Company Name: COMAR, Inc.

Address: 9320 S.W. Barbur Blvd., Suite 140
Portland, OR 97219-5419
USA

Phone: 503-293-2885

Contact Person: Glenn Manley

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

You can list your company in the **Cross-Licensing Classifieds** (either Software Packages Available or Software Packages Wanted) by sending the information in the format used here to:

Hewlett-Packard Company
Value Added Solutions Marketing
Attn: Marilyn Rauchle
10520 Ridgeview Court
Building 49C
Cupertino, CA 95014
USA

Entries will run for two months. The most recent additions are shaded. Be sure to send the information in at least one month before you wish it to appear.

H E W L E T T - P A C K A R D

HP CHANNELS

*Hewlett-Packard Company
Tracy Wester, Editor
Corporate Marketing Communications
3200 Hillview Avenue, Building 16L
Palo Alto, CA 94304-1298 USA*

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