

HP CHANNELS

Information For Hewlett-Packard's Value-Added Businesses

April 1988



Introducing the new HP MICRO 3000LX and HP 3000 Series 925

HP CHANNELS

Volume 7, No. 6

Editor

Tracy Wester

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.

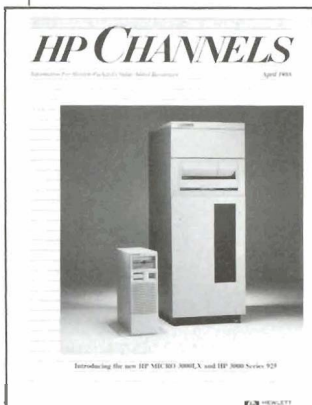
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On the cover



The HP MICRO 3000LX offers a new entry point into the HP 3000 family and the new Series 925 offers HP Precision Architecture in a midrange system. These highlighted systems are only two of six new HP 3000 products. See articles on all six new systems beginning on page 5.

HP CHANNELS
April 1988

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VAB migration to HP Precision Architecture — a success

When the new Hewlett-Packard Precision Architecture (HP-PA) systems were announced, HP, in anticipation of the importance of migrating VAB software, established several programs. Among these are Fast Start and Expanded Fast Start. Both programs were created to aid key VABs, as well as major and key account customers.

The Fast Start program required a participant to come to the Software Evaluation and Migration Center (SEMC) in Cupertino for all migration accesses. An engineer from the SEMC was assigned to that participant for the duration of the program.

The Expanded Fast Start program required that the participant have an AMS contract, and that an HP-PA-trained systems engineer (SE) be assigned to support them. The assigned SE accompanies the participant to the SEMC for the initial migration access, and is responsible for scheduling future accesses either at the SEMC, or at a Field Migration Center (FMC). These programs have been the vehicles for migration of many VABs, tool suppliers, and major end-users.

To facilitate these programs, Hewlett-Packard organized several migration centers throughout the United States and Europe. The SEMC has aided in the migration of over 35 VABs, and continues to facilitate the Expanded Fast Start program, and other programs created to migrate software to Precision Architecture. Their professional and well-trained staff have been critical in ensuring the success of these migration programs.

Here is a list of VARs and their software products that have been migrated to MPE-XL.

Vendor	Products
ADAGER	ADAGER
ARGI	Subscription Fulfillment Package ?
ASK	MANMAN
Bea Management	P.A.R.T.S.
BSA	PROPHIT — ?
Cognos	PowerHouse
Collier-Jackson	CJ/PAYROLL CJ/ADVANCED GL CJ/NEWSPRINT
CRI	RELATE13000 BUILDER13000
DISC	OMNIDEX FILEPRO DBMGR
DRC	SFD } ? INVISION } ?
DSI	QED — ?
Gerber Alley	THE ALTERNATIVE ?
InfoCentre	SPEEDWARE
INNOVUS (SSG)	SPSS SPSS-X BMDP MINITAB
JBI	MARKII
Martin Marietta	MAS/3000
MSA/AMI	AMAPS/3000
OCS	OCS/3000
PSG	FASTRAN
PSS	ROBOT13000
ROBELLE	QEDIT SUPERTOOL EXPRESS DBAUDIT
SATCOM	BOSS13000 PSI/3000 QMS/3000

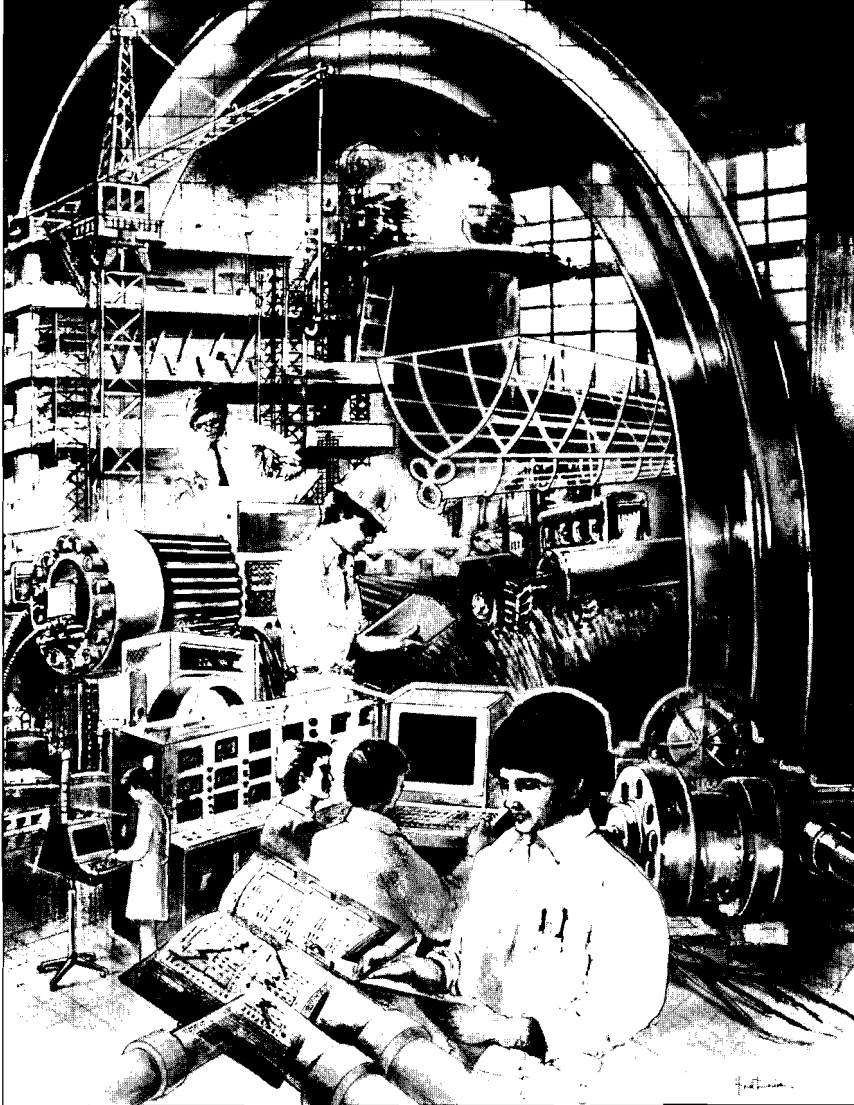
Vendor	Products
SDG	TRM/3000
Summit	SPECTRUM
Tymlabs	PREVIEW
VTLS	VTLS
CUSTOMER	PRODUCTS
BRADMARK	DBGENERAL
CAROLIAN	SILHOUETTE13000
FDP/Boston /Miami	MASS CLAS
HOLLAND HOUSE	UNISPOOL
InfoCentre	SPEEDWARE
Insurance Data Processing	VISION-MIS PROPERTY CASULTY SYSTEM
Pertaine	SCHOOL13000 STUDENT/3000 MENU13000
PSG	FASTRAN
SPLASH	SPLASH
Tymlabs	BACKPACK
Unison	MAESTRO RADAR TAPES INSIGHT
Vesoft	MPEX/3000 SECURITY13000
WDS	COMPASS CONTRACT

If you are interested in acquiring any of the above-listed software, please contact the VAB directly, or if there is software not listed that you require, contact that VAB, and urge them to gain admittance to the Expanded Fast Start Program.

VABs who have not migrated their software to MPE-XL, and are interested in doing so, should contact their HP sales rep, who will assist them with admittance into the Expanded Fast Start Program.*

*To join the Expanded Fast Start Program, an AMS contract must be established, and field approval acquired.

Baan Info Systems on HP commercial UNZX systems



The Dutch Systemhouse, Baan Info Systems (Baan) – an HP VAR since May 1987 – and Hewlett-Packard Netherlands have recently signed a joint-marketing agreement. The agreement includes cooperation in activities such as advertising, production of brochures, and organizing seminars. Recently, both partners organized a successful CIM seminar entitled, "Production Control in Larger Industrial Companies."

Baan is a successful Dutch systemhouse specializing in UNIX® operating system-based commercial applications. The very early commitment to the UNIX operating system as the de facto standard for future software has given Baan a substantial lead on national and international competition; they developed specific applications for manufacturing (mixed solution of MRP and Make To Order) and the building industry.

Baan previously worked with several hardware vendors. Due to increasing demand, they decided to look for a pro-

fessional partner in the middle and high-end UNIX operating system market. Baan's motivation for choosing HP as a partner is based on two things.

The high quality of HP's products and HP's strong commitment to the UNIX operating system

- The prospective of HP's international support.

HP chose Baan as a partner for several important reasons:

- The possibility of expanding new business
- Baan's leadership in the UNIX operating system market for MRP solutions
- The financial health of the company and their business attitude.

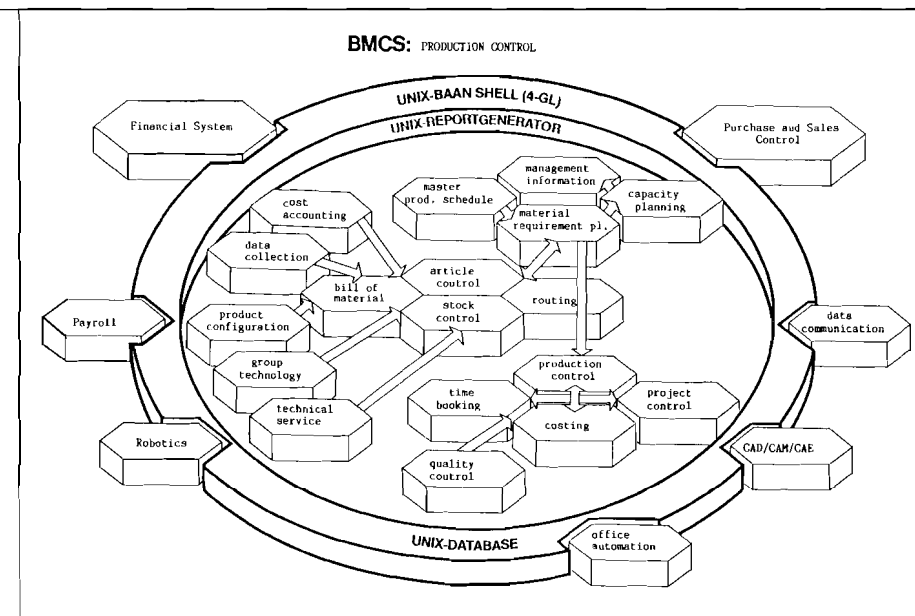
Thinking industrial

In the software industry, people should focus on data-directed tasks instead of function-directed tasks. Software, which is being developed for the data environment, is flexible. The Baan software enables the system and implementation management to assemble the desired version of the software according to individual wishes. According to Baan, a software product consists of subassemblies such as special functions, da'tabases, operating systems, computers, special procedures. etc. Those subassemblies should be replaceable at any time by other, newer and better, products. In Baan's philosophy, the databases must be replaceable, because a new DBMS will come. That is the reason Baan developed their own fourth-generation language (4-GL), which is database independent. In this language, the customization of screens, print-outs, and summaries is very easy.

Windowing is productivity

Every software module is equipped with advanced windowing techniques. A number of different processes may be started up, without leaving the original application. Apart from that, the windowing techniques make working with Baan's Manufacturing Systems (BMCS) very user friendly and efficient.

Baan Manufacturing Control System (BMCS)



BMCS is a flexible and fully integrated MRP system for middle-sized and large industrial companies (10 to 1,500 employees). More than 300 systems have already been installed in several countries: Australia, Germany, Great Britain, and the Netherlands. BMCS is developed completely according to the MRP (Material Requirements Planning) philosophy. However, in comparison to other MRP packages, BMCS is applicable in companies that work with client orders (Make To Order). The system integrates shop floor control with Data Time Registration in the factory. Furthermore, a CAD/CAM integration has been realized that links product drawings and Numeric Control Data directly with article numbers. Rapid project calculations and graphic simulations can very easily be made. English, German, and Dutch versions are available.

BMCS modules

The following modules are available within BMCS:

- Bill of Material
- Article Control
- Stock Control
- Routing
- Production Control and Planning
- Shop Floor Control
- Cost Accounting
- Hours Accounting
- Project Control
- Material Requirements Planning
- Capacity Requirements Planning
- Master Production Planning
- Purchase Order Control
- Sales Quotation Control
- Offer Control
- Statistics and Management Information

Available soon

- Group Technology
- Product Configuration

For more information on Baan Info Systems and BMCS, their manufacturing control system, contact:

Hewlett-Packard the Netherlands
 Rob Hageman (sales rep) or
 Onno Camman (district manager)
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Customer Support

Training

New RJE/3000 training course

On April 1, 1988, a new self-paced customer training course is available for RJE/3000 users. This training course is an updated and revised version of the kit previously used by HP systems engineers, and consists of a student workbook, lab tape of hands-on exercises, and an administrator's guide.

This is an introductory course to RJE/3000. It provides users with a general review of the IBM 2780 and 3780 operating environments, the technical aspects and features of RJE/3000, and hands-on exercises using RJE/3000 to interact with an IBM host. Users who have purchased RJE/3000 or who are planning to purchase this product in the future should place their orders now.

Ordering information

Product No.	Opt.	Description
32041A	1	Training course (includes one copy of all materials)
32401A	2	Additional copies of student workbook

Business Computers

General

HP announces office applications on UNIX strategy

At the recent UniForum Show, HP announced it will make its key office-system products – including the HP NewWave application environment – available on HP computers running the UNIX^B operating system. This announcement demonstrates HP's strategic direction and commitment to the UNIX operating system.

Development of the UNIX-operating-system office products will occur in three parallel phases, announced Robert J. Frankenberg, general manager of the Information Systems Group:

HP's host-based office and communication services will be ported to HP-UX and supported by personal computers running the HP NewWave application environment.

- HP will provide an X Window interface through which MS^B-DOS and OS/2 systems will be able to run UNIX-system applications. The X Window System has emerged as an industry-standard interface with the UNIX operating system.

The HP NewWave environment will be ported to HP-UX and made available on UNIX-system workstations.

In making the announcement, HP believes it is the first major systems vendor to commit to offering its complete family of office services software for both a proprietary and an open operating system.

HP's commitment to industry standards such as the UNIX operating system, the X Window System, and the PC platform was underscored in this announcement of strategic direction.

The combination of industry standards and unique HP contributions in user-interface technology presents an opportunity for a major competitive advantage in the coming years. You will continue to be kept informed of specific product strategies as they emerge in the future.

General

TransactXL: Native Mode performance for Transact applications

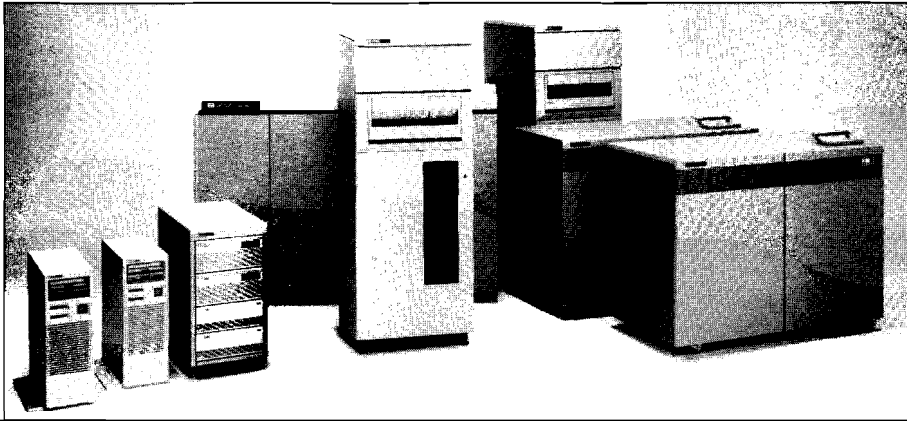
TransactXL features a Native Mode compiler in addition to the high-level programming language associated with Transact/V. Now, users can run their Transact applications in Native Mode on 900 Series HP 3000 systems. And unlike interpreted statements, compiled transact statements provide the user with a performance level comparable to that of traditional third-generation languages, such as COBOL and Pascal.

Ordering information

TransactXL will be supported later this year on the 1.1 release of MPE XL, but it is already listed on the HP Price List so that users can start ordering the product now. Transact/V users receive an upgrade towards the purchase of TransactXL. In order to optimize the performance of their Transact applications, Transact users with an HP Series 930 or 950 should make the move to Transact/XL.

HP 3000

HP introduces a new product line



The HP 3000 product line has been extended at both the low and high end, and strengthened in the midrange. Six new systems make the HP 3000 product line the most aggressive in the industry and offer users more systems to choose from than ever before.

At the low end of the product line, HP now offers two new systems: the HP MICRO 3000LX and the MICRO 3000GX. Harnessing the power of the current HP MICRO 3000, the new HP MICRO 3000LX and GX are the lowest priced HP 3000s ever. Specifically, the HP MICRO 3000LX costs about half of any previous entry-level HP 3000. The HP MICRO 3000GX offers greater configurability than the LX at a price about 25 percent lower than the HP MICRO 3000 it replaces. The HP MICRO 3000LX and GX are also the most compact HP 3000s ever. In fact, so compact that they can easily fit under a desk. For many users, however, the greatest feature offered by the new HP MICRO 3000s is an upgrade path to any other system in the HP 3000 family. And when combined with a turnkey software solution, the HP MICRO 3000LX and GX provide a very affordable complete systems solution for small businesses.

The new HP 3000 Series 925LX and 925 extend Precision Architecture to the midrange of the HP 3000 product line. The Series 925 offers 60 percent more performance than the Series 58 at close to the same price. The Series 925 provides supermini performance in a surprisingly small package. An entire system can be rack mounted in a single 5-foot 3-inch cabinet. The Series 925LX offers this same impressive level of performance with smaller configuration capabilities. The Series 925LX is an ideal HP 3000 development system and can be field upgraded to the Series 925.

The Series 935 extends our midrange offerings even further. In fact, the Series 935 is one of the most advanced examples of Precision Architecture yet. This dynamite system offers 70 percent more power than the Series 925 and comes in the same small package. The Series 935 is offered as a stand-alone system or as an upgrade from the Series 925. The Series 935 will be available in the second half of 1988.

The high end of the HP 3000 product line has also been extended with the Series 955. The Series 955 is an 11 MIPS machine that offers 50 percent greater throughput than the Series 950. The Series 955 will be sold as a field upgrade to the Series 950 as well as a stand-alone system and will be available in the first half of 1989.

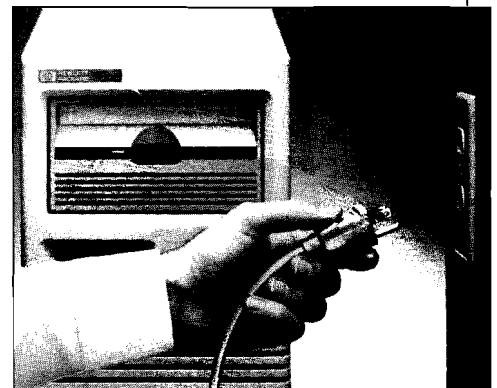
With these new systems, HP offers substantially higher levels of performance at lower prices than ever before. HP also provides an excellent growth path to additional performance with on-site field upgrades and trade-in credits for current HP 3000s. And with HP Precision Architecture, these systems are only the beginning. Users investing in the HP 3000 family today can continue to receive the benefits of this technology to provide cost-effective growth well into the future.

For more information on these new products, see the following articles in this issue, or contact your HP sales rep.

HP 3000

New minis at micro prices

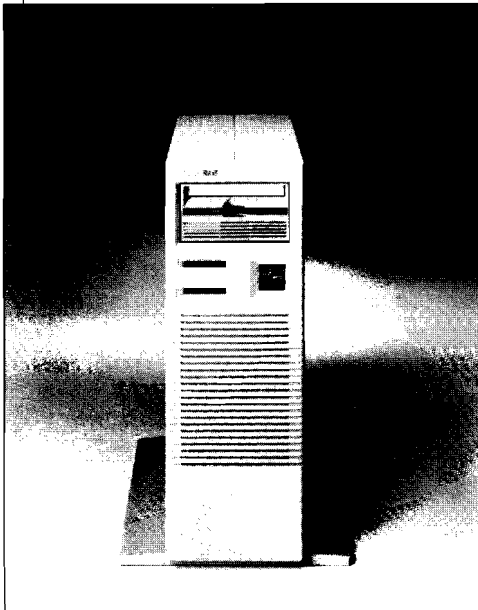
Hewlett-Packard is pleased to introduce the lowest priced HP 3000s ever: the HP MICRO 3000LX and MICRO 3000GX. These two systems offer HP MICRO 3000 power and ease of use at incredibly low prices. In fact, the HP MICRO 3000LX costs about half the price of the previous entry-level HP 3000. And price isn't the only thing small about these two systems; using an innovative packaging scheme, the HP MICRO 3000LX and GX are so compact they can easily fit under a desk.



HP MICRO 3000LX

continued on next page

The new HP MICRO 3000LX offers a breakthrough entry point into the HP 3000 family. This entry-level system comes equipped with five direct-connect ports, 2 Mbytes of memory, a 67-Mbyte cartridge tape and 81 Mbytes of disc storage. In addition, the HP MICRO 3000LX comes standard with an HP 700192 console, the MPE operating system, and HP Easytime and disc-caching software. The HP MICRO 3000LX also offers optional local and wide area networking capabilities that allow users to cost effectively reach branch offices or departments.



HP MICRO 3000GX

The HP MICRO 3000GX directly replaces the MICRO 3000 and costs about 25 percent less. The HP MICRO 3000GX offers greater configurability than the 3000LX. The basic 3000GX model comes equipped with eight direct-connect ports, 2 Mbytes of memory, a 67-Mbyte cartridge tape, and 152 Mbytes of disc storage. Like the 3000LX model, the HP MICRO 3000GX comes standard with an HP 700192 console, the MPE operating system, HP Easytime, and disc-caching.

The HP MICRO 3000GX also allows users to connect parallel disc and tape and print devices through an external HP-IB connector.

Users are by no means limited to an entry-level configuration, however. Both the HP MICRO 3000LX and GX have been designed to support larger configurations for users who need extra capabilities up front or who want future flexibility as departments or businesses grow. Specifically, the HP MICRO 3000LX can support up to eight direct connections, 4 Mbytes of memory and 304 Mbytes of disc storage. The 3000GX model can support up to 16 direct connections, 4 Mbytes of memory, and 2 Gbytes of disc storage.

To be sure, the HP MICRO 3000LX and GX offer users an affordable entry point into the HP 3000 family. Smaller businesses for whom the HP MICRO 3000 was too expensive now have an HP 3000 option. When combined with a turnkey software solution, the HP MICRO 3000LX and GX provide a very affordable complete system solution for small businesses. In fact, users

who are on HP timeshare systems may now consider purchasing their own HP 3000.

The HP MICRO 3000LX and GX offer long-term advantages as well. Users who purchase the HP MICRO 3000LX or GX enter a compatible family of systems that provides a seamless growth path that is unmatched in the industry. Users can upgrade to any other system in the HP 3000 family as their business needs grow. This means flexibility today and a guaranteed future tomorrow.

Both the HP MICRO 3000LX and GX are included in HP's LEVAR program. Low-end VARS who sell at least two HP MICRO 3000 systems a year qualify for a minimum discount of 25 percent off the list price of all HP MICRO systems they purchase during the year.

Both systems come standard with an HP 700192 console and an optimized manual set.

The table provides a product summary of the new HP MICRO 3000LX and GX. For additional information, please contact your HP sales rep.

Product highlights

Features	HP MICRO 3000LX	HP MICRO 3000GX
Total ports (RS-232)	5 or 8 ports	8 or 16 ports
Memory	2 or 4 Mbytes	2 or 4 Mbytes
Disc	81, 152, or 304 Mbytes	152 Mbytes to 2 Gbytes
Standard tape drive	1/4-inch cartridge tape	5/8-inch cartridge tape
Datacomrn (optional)	1 WAN and/or 1 LAN	1 WAN and/or 1 LAN
External HP-IB	Not available	Standard
Software		
HP Easytime	Standard	Standard
Disc-Caching	Standard	Standard
MPE Operating System	Standard	Standard

HP 3000

Low-cost HP MICRO 3000LX/GX Datacomm Program now available

The new low-cost HP MICRO 3000LX and GX systems are ideally suited for small branch office environment. Together with the 3000LX's and GX's competitive low system prices, it is important that the data communication element also be attractively priced.

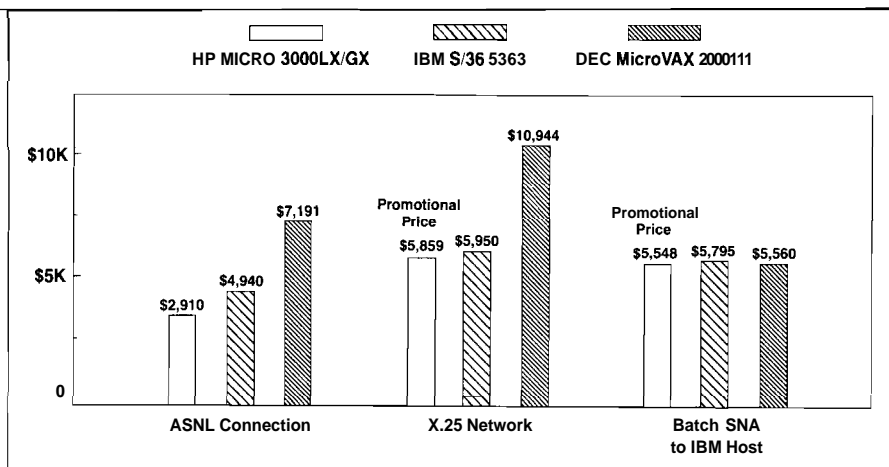
The HP MICRO 3000LX/GX Datacomm Promotion includes the NS 3000/V Network Services, NS X.5 3000/V Network Link, SNA LINK, SNA IMF, and SNA NRJE. This special networking promotion has been designed for situations where either HP 3000-to-HP 3000 communications or HP 3000-to-IBM mainframe networking is required.

In situations where the user requires HP-to-HP communications and expects relatively low volumes of data traffic,

the Asynchronous HP Serial Network Link (PIN 32003A) offers the most attractive solution. If the user requires HP-to-HP communications and uses an X.25 network, then HP can offer a solution that includes the NS 3000/V Network Services in addition to the new NS X.25 3000/V Network Link.

Users in a mixed HP and IBM environment where an SNA network is the preferred solution can now choose SNA Link and SNA NRJE at about the same price as the equivalent IBM services on the IBM 5363 system. An aggressive discount is also available for SNA IMF. The following graph illustrates just how aggressive we have become in the entry-level systems area where users are more price conscious.

Entry-level datacommunication prices



The HP MICRO 3000LX/GX Datacomm Promotion is available now. Detailed information is listed below for the products that are offered through this promotion. For further information, please call your HP sales rep.

Details

Product No.*	Description
30246A	SNA Link
Opt. 110	For MICRO – synchronous modem cable
Opt. 120	For MICRO – V.35 cable
Opt. 125	For MICRO – auto dial
Opt. 190	For MICRO – no hardware
24405A	NS X.25 3000/V Network Link
Opt. 110	For MICRO – synchronous modem cable
Opt. 120	For MICRO – V.35 cable
Opt. 135	For MICRO – direct connect
Opt. 190	For MICRO – no hardware
30247A	SNA IMF
Opt. 310	For MICRO
30247R	SNA IMF – right to copy
Opt. 310	For MICRO
30245A	SNA NRJE
Opt. 310	For MICRO
30245R	SNA NRJE – right to copy
Opt. 310	For MICRO
32344A	NS 3000/V Network Services
Opt. 310	For MICRO
32344R	NS 3000/V Network Services – right to copy
Opt. 310	For MICRO

* + M05 Promotional adjustment for each option.

Contact your HP sales rep for the terms and conditions.

HP 3000

HP Easytime makes life easier

HP Easytime is a menu-driven, task-oriented interface to the operator, user, and system manager functions that are necessary for the day-to-day management of an entry-level HP 3000 system.

continued on next page

HP Easytime shields users from the MPE commands necessary to run the system on a daily basis. Selecting an option and pressing a softkey are sufficient to perform most system functions. The user is always in control: at any time the user is given the option to cancel or escape from a function. Any destructive action requires confirmation and the user is warned of the consequences the action might have. Typical functions that can be performed by HP Easytime are listed here.

- Printout management
- File store and restore
 - File handling
 - Job and session control
- Peripheral configuration
- System backups.

Also integral to HP Easytime is a computer-based training program. The computer based training includes instructions and exercises. It introduces the novice user to the management of the system and gives "hands on" experience with examples on all of the different functions of the product.

HP Easytime is easy to operate and requires minimal time for system management. In fact, by configuring the physical console as an application terminal, the need for a full-time system operator can be eliminated. As a result, the responsibility for running the computer can be given to any employee who can then act as an operator on a part-time basis.

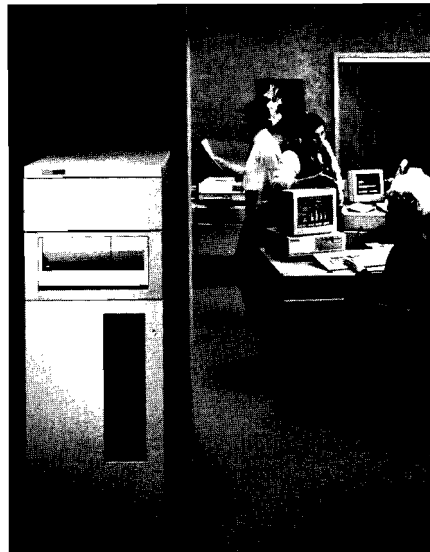
Two new features will be available with the MPE VIE, V-Delta-2 release of HP Easytime. With this release, a software switch has been added to enable or disable the console messages from appearing. Previously, the messages never appeared and were only available within HP Easytime. This enhancement lets the user decide whether to use the console as a dedicated console or as a dedicated application terminal. Additionally, the product has been expanded to

support the configuration of up to seven ATPs, now allowing HP Easytime to be used with the HP MICRO 3000XE. The MPE VIE, V-Delta-2 release of HP Easytime (A.00.02) expands the product base to the new HP MICRO 3000LX and MICRO 3000GX, as well as the HP MICRO 3000 and MICRO 3000XE.

Contact your HP sales rep for more information.

HP 3000

New midrange 900 Series HP 3000 systems



On April 4, 1988, HP announced three new HP Precision Architecture systems in the midrange of the HP 3000 family of commercial processors — the Series 925LX, the Series 925, and the Series 935. These systems set new standards for price performance and growth path in the industry.

Series 925

The Series 925 has the power of a superminicomputer in a surprisingly small package. This 3.2 MIPS system supports up to 152 users, 16 disc drives, and up to 48 Mbytes of memory. All this adds up to high perfor-

mance for a very low price. In fact, the Series 925 offers more than 50 percent more performance than the HP 3000 Series 58, at close to the same cost. It can be rack mounted with a distributed terminal controller, a magnetic tape drive, and two disc drives into a single 1.6-meter cabinet, creating an entry level system that requires very little space.

Series 925LX

The Series 925LX offers Series 925 performance at a reduced cost for users with smaller configuration requirements. For example, it supports up to 32 users, 8 disc drives, and (like the Series 925) up to 48 Mbytes of main memory. The Series 925LX is an excellent HP Precision Architecture demo/development system, as well as an end-user application development engine. And when larger configurations are necessary, the Series 925LX can be easily upgraded to the Series 925. It too can be rack mounted into an attractive 1.6-meter cabinet.

Series 935

For those users needing even more performance than the Series 925, HP has announced the Series 935. Offering from 70 to 100 percent more performance than the Series 925, the Series 935 is one of the most advanced examples of HP Precision Architecture yet. Clocking in at 6 MIPS, the Series 935 offers unparalleled price performance in a remarkably small size. It will be available later this year, both as a new system and as a convenient upgrade (replacing two boards) from Series 925 processors.

No computer room needed

Users who need high performance processing without an expensive computer room will find the new Series 925LX, 925, and 935 to be ideal for their computing needs. Even racked with peripherals in the cabinet, each system can operate in a departmental area, on carpet, in normal office-environment temperature ranges. This is just another example of the advantage of the HP Precision Architecture scaled into mid-range computing.

Ordering information

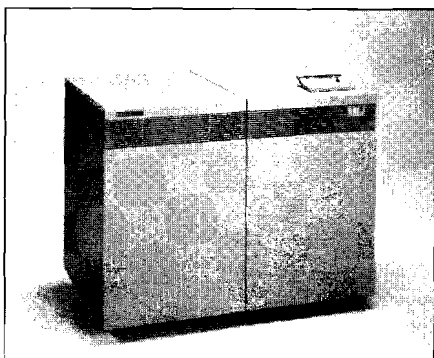
Product No.	Description
A1032A	Series 925LX Preconfigured System for up to 32 users. Includes 24 Mbytes of memory, MPE XL FOS, ALLBASEIXL, and System Dictionary/XL.
A1007A	Series 925 Preconfigured System with 32 Mbytes memory, MPE XL FOS, ALLBASEIXL, and System Dictionary/XL.
A1016A	Series 925 Field Upgrade with 8 Mbytes of memory.
A1001A 92211R	1.6-meter, 19-inch EIA cabinet .53-meter cabinet

Contact your HP sales rep for more information.

HP 3000

New high-end HP 3000 Series 955 provides a 50 percent performance boost over the Series 950

The HP 3000 Series 955 is a field upgrade from the Series 950, providing 50 percent greater processing power. Available also as a new system, the Series 955 joins the Series 950 to extend the HP 3000 product line even further at the high end.



Users who either own or would like to purchase a Series 950 can be assured that there is room to grow with the HP 3000 as their data processing needs grow. With a new ultrahigh-performance floating point coprocessor, the Series 955 opens the door for even more computationally intensive commercial applications as well.

Using an advanced implementation of HP's proprietary NMOS III VLSI integrated circuit technology, the Series 955 delivers an 11 MIPS CPU on a single chip, and has a single board processor. The transaction processing performance of the Series 955 is roughly 2½ times the VAX 8700, which requires eight processor boards. With significantly fewer parts, the Series 955 has better hardware reliability and lower support costs than its competitors.

The Series 955 will be offered as a field upgrade from the Series 950. The Series 955 will be orderable in the second half of 1988 and availability for the Series 955 is targeted for the first half of 1989 (calendar).

With performance comparable or better than systems from the competition priced considerably higher, the Series 955 continues the HP tradition of leadership price/performance.

The Series 955 is only the first of several field upgrades to be implemented using the current Series 950 system package. This process of supplying significant performance improvement with convenient, cost effective field upgrades allows greater flexibility for the user.

For more information on the new HP 3000 Series 955, contact your HP sales rep.

HP 3000

New HP 3000 systems literature

New HP 3000 literature is now available. Developed especially for our value-added businesses are two brochures, The HP MICRO 3000 Family Brochure and The HP 3000 Series 925 and 935 Systems Brochure. Both brochures cover the new additions to the HP 3000 family, while emphasizing a strong working relationship between HP and our VABs.

Also in stock are the new HP 3000 Family General Information Manual, featuring all current HP 3000 MPE V and MPE/XL systems, and the new HP 3000 Configuration and 900 Series Systems Performance Guides.

The listing below contains the part number and title for all new literature available at introduction, and has already been distributed to VABs. If additional literature is needed or the literature was not received, users can order through their HP sales rep or office.

New HP 3000 systems literature

Lit No.	Description
5952-3758D	Business Computing Literature Folder
5951-6772D	HP 3000 Family Strategy Brochure
5951-6773D	MICRO 3000 Family VAB Brochure
5951-6774D	Series 925 and 935 VAB Systems Brochure
5951-0676D	HP 3000 Family General Information Manual
5951-0680D	MICRO 3000LX System Data Sheet
5951-0686D	MICRO 3000GX System Data Sheet

continued on next page

Lit No.	Description
5951-0679D	Series 925 System Data Sheet
5951-0691D	Series 925LX System Data Sheet
5951-0681D	Series 955 System Data Sheet
5951-0677	900 Series Systems Performance Guide
5951-0685	HP 3000 Family Overhead Slide Set Diskette and Script
5951-0678	HP 3000 Configuration Guide

HP 3000

Introducing NS X.25 3000/V Network Link

The NS3000/V networking product family is now complete with the introduction of the NS X.25 3000/V Network Link. This link provides the capability to connect to either a private or public X.25 packet switched network (PSN). NS X.25 3000/V Network Link can be used in conjunction with NS3000/V Network Services for access to higher level user services such as Network File Transfer. In addition, programmatic access to lower level protocols is available for use in developing customized applications for communications with remote HP and non-HP systems.

The NS X.25 3000/V Network Link follows an OSI-layered architecture and includes defacto and industry standard protocols such as TCP/IP and CCITT X.25. The NS X.25 link is currently certified to run on popular U.S. and European PSNs including the U.S. Defense Data Network (DDN standard mode), Telenet and Tymnet in the U.S., Datex-P in Germany, and PSS in Great Britain.

X.25 3000/V Network Link provides several new capabilities not previously available with DS X.25. As with all of the NS3000/V links, users have transparent access over multiple NS3000/V links (X.25, Point-to-Point, ASNL, or LAN) and between networks. Users no longer need to know the network topology nor log onto intermediate nodes.

Additional 1980 CCITT X.25 facilities are supported with the NS X.25 3000/V Network Link. Added flexibility and increased performance is provided through the support of permanent virtual circuits and flow control and packet size negotiation. Increased system access security is provided through the support of Closed User Groups along with the provision of system-defined Local User Groups.

Another key enhancement is the provision of programmatic access to the TCP transport level 4 and to the X.25 packet level 3. The programmatic interface, Network InterProcess Communications (NetIPC) provides intrinsics which are accessible from a variety of programming languages. These intrinsics can be used to develop customized applications between HP and non-HP computers such as transferring data from remote non-HP systems to a central database running on an HP 3000.

In most cases, user applications written under DS3000 Network Services will run with no modification under NS3000/V Network Services. Due to the fact that DS X.25 and NS X.25 have different architectural structures, these two links cannot communicate directly with one another. However, they can co-exist on the same node and share an INP for connection to the X.25 network. As a result, full connectivity of the network is maintained while migrating to NS X.25. A migration guide can be ordered with the link for use in planning for a smooth and

orderly migration from DS X.25 to NS X.25. Support of remote asynchronous PAD terminals and printers will be available three to six months after the release of NS X.25 3000/V. This PAD support feature in NS will provide similar functionality to that currently available with DS X.25.

To encourage the DS installed base to migrate to NS, HP will provide, at no cost, an upgrade to both NS3000/V Network Services and the NS X.25/V Network Link to those users who currently have those products under HP support contracts. To facilitate distribution and to ensure that all users receive the free upgrade, the NS software will be distributed via MIT tapes as part of the DS update process. See your HP sales rep for more information on this upgrade program

Ordering information

Product No.	Description
24405A	NS X.25 3000/V Network Link
<i>Processor options</i>	
(Includes software and hardware interface)	
1—	Series 37, MICRO 3000, XE, LX, and GX
3—	Series 39-58
4—	Series 6X-70
<i>Cable options</i>	
-10	RS-232-C modem connections
-20	V.35 modem connections
	Direct hardwired connections
<i>Software-only options</i>	
	Series 37, MICRO 3000, XE, LX, and GX
	Series 39-58
490	Series 6X-70

Remarketed HP 3000 systems availability

The following lists the similarities and differences between the six remarketed HP 3000 system processing units (SPUs) HP currently has available.

- MICRO 3000 – The remarketed MICRO 3000 is the lowest-priced HP 3000 system.
- MICRO 3000XE – For the user who needs more connectivity than the MICRO 3000 and who insists on (and is willing to pay more for) the newest technology. This is the lowest-priced alternative for users not planning to keep their systems, without upgrades, for at least four years.
- Series 42 – This is the least-expensive alternative for most users who want midrange power and moderate connectivity. For growing users, this system provides a much-less-expensive growth path than choosing a MICRO 3000XE.
- Series 48 – For about the same price (and with the same power) as a remarketed MICRO 3000XE, the Series 48 has nearly twice the connectivity (terminals and INPs) and costs much less to upgrade. The tradeoff? Higher support costs.
- Series 52 – With only moderate connectivity, the Series 52 provides a significant increase in power compared with MICROS and Series 4X SPUs. Plus, you can buy three Series 52s for the same price as one of the next more-powerful SPU, the Series 68R.
- Series 58 – This system has the most power and connectivity of any of the midrange systems, and it's still less than half the price of a remarketed Series 68.

Remarketed HP 3000 midrange systems

Product No.	Description
32535AR	HP MICRO 3000
32545AR	HP MICRO 3000XE
32542RR	Series 42
32548BR	Series 48
32552AR	Series 52
32558AR	Series 58

Note HP's emphasis on connectivity between systems. HP business systems have traditionally been differentiated on this basis, and users appreciate these differences. About 25 percent of our total installed base own Series 44s, 48s, and 58s, all of which offer significantly greater connectivity than their equivalent low-connectivity counterparts, the Series 40, 42, and 52. The average number of terminals connected to the Series 44/48/58 class of computer is 50. This means that more than half of the users who purchased these computers could not have met their needs with ATP connections on a Series 40/42/52 and would have had little growth potential with a MICRO 3000XE.

Additional facts

- The MICRO 3000XE was designed as a replacement for the Series 42 and the 48, but it does **not** have the same feature set. For instance, about twice as many terminals and wide-area-network (WAN) links can be connected to the Series 48 as to the MICRO 3000XE.
- Series 42s and 48s protect the user's investment better because:
 - The next step in increasing SPU power is a simple and relatively inexpensive field upgrade
 - GICs, ATPs, INPs, and SIBs purchased with the Series 4X machine can be used on future Series 5X, 6X, and 7X computers. Memory can be used on Series 5X machines only.

- A box swap upgrade is necessary for either the HP MICRO 3000 or MICRO 3000XE, and INPs, ATPs, PICs, etc., must also be replaced.

If you have questions about any of these systems, please contact your local HP sales rep.

More office products available on 900 Series HP 3000 systems

The February issue of *HP Channels* announced the availability of TDP and HP Spell on 900 Series HP 3000 systems. The following additional products for the same series of systems are now available.

- 36570 – HP DeskManager (B.02.01), including HP Word/PC and Advance-Write converters, MContext, and HP Slate
- 27520 – HP File/Library (A.00.03)
- 27522 – HP Schedule (A.00.04)
- 32132 – HP ListKeeper (A.02.02)
- 32119 – HP Word Programmatic Intrinsic (A.01.04)
- 27515 – HP OfficeConnect to DISOSS (Internal Node) (A.00.05)
- 27509 – HP Convert/DCA (A.00.04)

All of the above products run in Compatibility Mode in the MPE XL environment and offer virtually all of the functionality offered by the same product running in the MPE V environment. In all cases, the same versions of code are running in the MPE XL and MPE V environments. Any differences in functionality are detailed later in this article.

continued on next page



Ordering information

All of these products have been on the HP Price List for several months. Option 340 should be selected for users wishing to run on 900 Series HP 3000 systems. Users who are upgrading should choose the relevant upgrade option (OCD, OCE, or OCF) in order for the correct credit to be generated.

Performance data

The Series 950 will support 45 simultaneous active HP DeskManager sessions. This represents an upgrade of about 30 percent over an HP 3000 Series 70, and therefore, presents an excellent price/performance ratio for HP Desk users on the Series 950. The following table summarizes the maximum number of simultaneous active HP DeskManager sessions supported on the different machines.

HP 3000 system	Number of active HP Desk sessions*
MICRO 3000XE	12
Series 58	16
Series 70	35
Series 950	45

*Simultaneous active users means those actually active in the CPU. There could be as many as four times that many HP Desk users signed on.

Native Mode

There are currently no plans to port HP Desk to Native Mode on HP-PA. It is worth noting that porting HP Desk to Native Mode would not necessarily improve performance. Approximately 80 percent of session time is actually in Operating System code, which is in Native Mode. Many of the performance benefits of Precision Architecture, therefore, have already been realized.

Reference section

HP 3000 Series 950 machines deliver superior performance at a reasonable cost. There are currently, however,

some product differences for MPE XL environments. These differences are due to either the required feature in MPE XL not being currently available, or the required product has not been ported by HP.

Please use the following data as reference and look for updates as new releases of MPE XL are made available.

Terminals – The following terminal types and PCs are supported for OPD products in the MPE XL environment and over RS-232 Serial links only. Connections via an X.25 PAD, Virtual Terminal, an HP 2334A MUX, or a Data Switch are not supported.

- HP 2392A
- HP 2393A
- HP 2394A
- HP 2397A
- HP 2627A
- HP 2624B
- HP 2622A
- HP 150A/B/C (with AdvanceLink)
- HP Vectra PC (with AdvanceLink)
- HP Portable Plus (with AdvanceLink)
- IBM PC AT (with AdvanceLink)

The reference to the HP Vectra PC does not include the HP Portable Vectra PC. The reference to HP 2392A does not include those terminals that emulate the HP 2392A, for example, the HP 700 series.

Processing documents with HP Desk – HP Word documents cannot be created, edited, or checked with HP Spell in the MPE XL environment. Existing HP Word documents or those received from other HP Word systems can be read or printed as simple text, i.e. without HP Word enhancements. HP Word documents can be exchanged with other HP Word13000 and HP Word/PC users who have access to all of that product's editing and printing capabilities.

VisiCalc[™] spreadsheets can be transmitted by HP Desk in the MPE XL environment but cannot be read, printed, or edited. Transmitting the spread sheets to a PC with AdvanceMail and then converting to Lotus[™] 1-2-3[®] will allow them to be processed.

HP 3000 Business Graphics items cannot be created or edited in the MPE XL environment. HP 3000 figure files can be read on a suitable terminal or printed. PC Gallery files can be transmitted to a PC for processing, and by using the Curator product, can be converted in the MPE XL environment to HP 3000 figure files for subsequent reading or printing.

HP Slate – This is not sold or supported in the MPE XL environment other than as part of HP Desk.

Gateways – Gateways to the Telex network, and IBM's PROFS and DISOSS systems are not currently supported in the MPE XL environment. However, providing there is a gateway in the user's network running in the MPE V environment, HP Desk users can communicate with PROFS and DISOSS users, initiate DISOSS Library access, and communicate with Telex users worldwide.

Wide-area networks – Currently unsupported in the MPE XL environment. However, providing there is a gateway in the user's network running in the MPE V environment, HP Desk users can communicate with others over the wide-area network.

X.25 – This is unsupported in the MPE XL environment for terminal, PC, and host-to-host connections.

HP ListKeeper and HP Word integration – This is not supported in the MPE XL environment.

HP ListKeeper and graphics integration – Data from HP ListKeeper lists cannot be extracted and used by DSG/3000 and HP EasyChart to produce charts.

HP Word Programmatic Intrinsic, and the need to purchase HP Word – There is no requirement to purchase HP Word for the MPE XL environment in order for the Intrinsic to process HP Word documents. Those functions of HP Word required to run the Intrinsic are supplied with the Intrinsic for MPE XL environments.

HP Convert/DCS, and conversions to HP Word – It should be noted that, although conversion to HP Word is fully supported in the MPE XL environment, those resulting HP Word documents cannot be processed by the HP Word13000 product. This is because HP Word13000 is not supported in the MPE XL environment. Distributing HP Word documents with HP DeskManager and AdvanceMail is permitted, as is processing with the HP Word Programmatic Intrinsic, and HP Word/PC.

For more information, please contact your HP sales rep.

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

HP 3000

Selective operation of the HP 35401A with the HP 3000

Good news for users who are fast discovering the many advantages and substantial savings available with unattended backup. HP announces another great feature – selective access of the HP 35401A ¼-inch cartridge tape autochanger on the HP 3000.

With this feature, a remote HP 3000 system operator can "interrogate" an HP 35401A at any given time and access any cartridge in the magazine. This can be done by loading the software utility "CS80UTIL," which is now available for the HP 3000. This will allow the operator to ascertain which cartridge is loaded. The auto-changer can then be instructed to load tapes in a *selected* order for backup and restore purposes.

This can be done in addition to the original sequential mode of tape access. This utility will also enable the operator to remotely recover from certain error conditions.

New users of the HP 35401A will automatically receive an application note entitled, "Programmatic Selective Operation Using CS80UTIL and the HP 3000" (PIN 35401-90921). This application note is shipped with the order, and explains this utility in full.

Users who already have an HP 35401A installed and would benefit from this document, please contact your HP sales rep for a copy.

HP 3000

Return credits will drop on selected WAN link products

The April HP Price List will list reduced return credits for some wide-area network (WAN) link products. As usual, HP gives a 30-day "grace" period. However, the new return credits must be used on quotes made after March 31 and on orders placed after April 30.

Product No.	Description
302246AN	
Opt. 100	HP 3000 Series 37, MICRO 3000, and MICRO 3000XE
Opt. 200	HP 3000 Series 39 through 70
30251AN	
Opt. 100	HP 3000 Series 37, MICRO 3000, and MICRO 3000XE
Opt. 200	HP 3000 Series 39 through 70
30270AN	
Opt. 100	HP 3000 Series 37, MICRO 3000, and MICRO 3000XE
Opt. 200	HP 3000 Series 39 through 70
30271AN	
Opt. 100	HP 3000 Series 37, MICRO 3000, and MICRO 3000XE
Opt. 200	HP 3000 Series 39 through 70
32026AN	HP 3000 Series 39 through 70
32027AN	HP 3000 Series 39 through 70
32028AN	HP 3000 Series 39 through 70
32187AN	
Opt. 100	HP 3000 Series 37, MICRO 3000, and MICRO 3000XE
Opt. 200	HP 3000 Series 39 through 70
32188AN	HP 3000 Series 39 through 70

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Technical Computers

HP Precision Architecture HP-UX

HP-UX 2.0: what's new for the HP 9000 Series 800

HP-UX 2.0 demonstrates HP's continued commitment to standards by providing Network File System (NFS) from Sun Microsystems, more UNIX® operating system enhancements from UC Berkeley, and additional DEC VMS enhancements to the FORTRAN compiler. HP-UX 2.0 contributes to HP's leadership position in internationalization of the UNIX operating system by providing additional support for an increased number of languages in both the HP-UX command set and subsystems. Improvements are also made in the strategic areas of graphics, networking, and databases.

Many of the enhancements in HP-UX 2.0 were developed to eliminate specific sales objections. In addition, over 400 service requests (SR) were closed.

HP-UX 2.0 enhancements

- Operating System support for NFS 3.0 (see Subsystems section for details)
- Long file names – increase the maximum length from 14 to 255 characters and provide easier porting from Berkeley UNIX operating systems
- Symbolic links – ability to span file systems, and additional compatibility with Berkeley UNIX operating systems
- Internationalization features – additional support for Chinese (both Simplified and Traditional), Korean, Arabic, Hebrew, Icelandic, Greek, and Turkish (Japanese already supported)

- System Activity Report (SAR) – new AT&T System V utilities for easier system administration (includes collecting, processing, and saving Operating System information)
- Korn Shell – provides a powerful command interpreter and programming language
- Remote Spooling (AT&T System V compatible) – ability to send printer output to a printer attached to a remote system via a LAN (also, canceling a remote print job and getting status is included)

In addition to these enhancements:

- New peripherals have been supported
- System backup has been made faster and more reliable
- Berkeley UNIX Revision Control System (RCS) has been added to core system
- AT&T System V UUCP (HoneyDanBer) is now included (made more reliable and simpler)

Subsystems

NFS – provides a distributed file system capability within a heterogeneous multivendor network of machines. (Reference the article entitled, "Announcing Network File System/9000," in the January issue of *HP Channels*.)

2D graphics accelerator (98556A) – provides additional capability to the 2D HRC Graphics Subsystem (A1020H), and enables better penetration of the EE physical-design market and other technical workstation markets.

FORTRAN 77 – HP 1000, 3000, and DEC VMS extensions have been added, and the process of migrating existing applications from the VAX

VMS family is easier (reference the March *HP Channels* article, "FORTRAN 77 on the HP 9000 Series 800 – Update," for more detailed information on this product.

- ALLBASE – Sustained system throughput is improved as additional users are added. Native Language Support (NLS) is provided for both 8- and 16-bit languages with support for USASCII and local language columns/tables (HP SQL only). COBOL preprocessor support is provided. Data expansion when migrating IMAGE/1000 data to HP IMAGE has been limited. (Reference the March *HP Channels* article, "ALLBASE/HP-UX enhancements," for more detailed information on this product.)

NS/9000 – Using probe proxy request/server, the Series 800 is now supported through a Series 800 LAN-to-LAN gateway. NLS allows the use of non-English languages and character sets in the error and logging messages.

- ARPA/9000 – Support for Telnet Virtual Terminal (VT) to and from an HP 1000 system running RTE 5.05 OS is provided with the NS/1000 (91790A) product.
- PORT HP-UX – Offers substantial decrease of the executable residing on disc, support of multiple environments, and documentation has been increased to aid in the migration process.

In addition to these enhancements

- The C compiler has been enhanced for further compatibility with the HP 3000
- The Pascal compiler has been enhanced for further compatibility with the Series 300
- The Starbase graphics library has been enhanced

Contact your HP sales rep for more information on any of the enhancements to HP-UX 2.0 for the HP 9000 Series 800. Also, watch future issues of *HP Channels*.

HP-UX A.B2.00 Series 800 networking enhancements

The HP-UX A.B2.00 release for the HP 9000 Series 800 requires that users update their LAN/9000, Network Services/9000, and ARPA/9000 software to the A.B2.00 versions. We strongly recommend that users sign up for the software materials subscription service, so they get the correct versions of software. These networking software products require that the version number of the software be consistent with the version number of HP-UX. Networking software A.B1.X0 will not operate with HP-UX A.B2.00 nor will the HP-UX A.B1.X0 operate with the A.B2.00 networking software.

The following capabilities were added to the Series 800 networking products shipping this month.

LAN/9000

- ARPA Internet Protocol (IP) internetting
- Network Services Internet Protocol (IP) internetting
- Configurable network memory
Internet Protocol subnetting support
- Support for three LAN interfaces

ARPA/9000

- Support for Telnet virtual terminal to HP 1000
- Support for Telnet virtual terminal from HP Vectra PC

Network Services/9000

Support for Network File Transfer from HP Vectra PC

NFS Services19000

- Support for NFS on Series 800 systems

The ARPA and Network Services IP level internetting capabilities allow the HP 9000 Series 800 to be used as a gateway into other subnets. That means the Series 800 can be used as a routing node to forward information across a wide area network (WAN) or directly to another LAN. Support for three LAN interface cards provides separate connections to three LANs. A hub with three interfaces benefits users by filtering messages and enhancing security by forwarding only information destined for a node on the appropriate LAN.

Users can save network memory by configuring the maximum amount of memory they allocate and how much per session. Previously, memory was allocated on fixed blocks for all networking activity. This efficient method will give users memory to use for other purposes.

The subnetting capability extends the functionality of the IP addressing mechanism. Now users may divide their network into independent groups of nodes.

Telnet support means Series 800 users can log in to/from remote HP 1000 systems running the RTE 5.05 OS with the NS/1000 product, P/N 91790A.

The B.OOOO NS-User Services/Vectra PC, P/N 50923F, with the HP Terminal Program A.00.02, PIN 24975, can log in to remote HP 9000 Series 800 and transfer files across a LAN.

HP's Network File System (NFS) product will be available at the release of HP-UX A.B2.00.

Please speak to your local HP sales rep for information on these capabilities.

HP SQL/300 for HP-UX 6.0

HP SQL/300 for HP-UX 6.0 is now available. The following is a compatibility matrix for SQL/300, Visor/300, and HP-UX. Note that Visor1300 is not affected by the HP-UX changes.

Product No.	Description	HP-UX	
		5.15-5.5	6.0
79725A	SQL/300 1.0	Yes	No
79725B/L	SQL/300 1.01	No	Yes
79727A/B/L	Visor/300 1.0	Yes	Yes

Ordering information

Product No.	Description
79725L	HP SQL/300 Relational DBMS Development Environment license-to-use
79725B	Media and documentation for 79725L
Opt. 022	1/4-inch cartridge tape
Opt. 045	3%-inch double-sided floppy disc
Opt. 100	Delete manuals
79727L	HP Visor1300 Database Access Tools license-to-use
79727B	Media and documentation for 79727L
Opt. 022	1/4-inch cartridge tape
Opt. 045	3%-inch double-sided floppy disc
Opt. 100	Delete manuals

Literature

A new data sheet is available that combines HP SQL/300, HP Visor/300, and an abbreviated description of HP TODAY.

Lit No.	Description
5951-6798	HP 9000 Series 300 Information Management

The 79725A and 79727A products will be removed from the June 1 HP Price List.

HP 9000

New SCSI interface

On April 1, Hewlett-Packard introduced two small computer systems interface (SCSI) cards for the HP 9000 Series 300. SCSI represents another industry standard that HP supports. One of the interfaces is designed for the Model 319 and the other for the Models 330 and 350. Functionally, the Model 319 card and the Model 330/350 card are nearly identical. Both cards take the same physical space in the computer as a high-speed HP-IB card. They are daughter boards on the Model 319's graphics board and the Model 330/350's system interface board. The differences are that the Model 319 card performs 16-bit DMA while the Model 330/350 card permits 32-bit, and the 319 card has a 1/2-meter cable versus the 1-meter cable in the 330/350 version.

SCSI will only be available on HP-UX 6.0 (or later) systems. At this time, no plans are in place to offer SCSI on BASIC or Pascal systems.

The cards are implementations of ANSI standard X3T9.2. Our drivers support the ANSI "Common Command Set for Direct Access Devices." The software is designed for asynchronous operation, so the cards will operate at burst data transfer rates up to 1.5 Mbytes/sec.

HP is also introducing three new SCSI discs at the same time. These high-performance discs range in capacity from 107 to 323 Mbytes. The SCSI interfaces and discs have been developed together to give users an industry-standard solution to their needs for HP-UX mass storage. (See article in Peripherals section entitled, "New SCSI discs join the midrange product family.")

Normally, SCSI will be available as Option 011 on all HP-UX bundles. The Model 330/350 card is also available as a user installable product, PIN 98265A. However, older SPUs will require a Rev. C boot ROM, which means the CPU board must be upgraded.

Please contact your HP sales rep for additional information about these new SCSI products.

HP 9000

HP 9000 Series 300 CPU board updates

Users of the HP 9000 Model 330 or Model 350 with the following serial numbers who would like to use the HP 98556A 2D integer-based graphics accelerator will need to update the processor board.

HP 9000	Serial number prefixes
Model 330	Prior to 2740Axxxxx, 2801Gxxxxx, or 2740Jxxxxx
Model 350	Prior to 2747Axxxxx, 2801Gxxxxx, or 2747Jxxxxx

These computers were shipped before January/February, 1988.

The HP 98562-69013 Model 330 processor-board update kit includes a new processor board with a Revision C Boot ROM and a new system interface board.

The HP 98562-69517 Model 350 processor-board update kit includes a new processor board with a Revision C Boot ROM. The Revision C Boot ROM is a superset of the Revision B Boot ROM, allowing use of the discless node feature.

The current processor board and a system interface board must be returned to Hewlett-Packard.

Contact your HP sales rep for more information.

HP 9000

Correction: HP 9153C support on HP 9000 BASZC 5.0

On page 8 in the March issue of HP *Channels*, in the article entitled, "HP 9153C support on HP 9000 BASIC 5.0," the first sentence contained a typographical error. It stated that the HP 9153C disc drive is "not" supported under the HP 9000 Series 300 BASIC 5.0. This should have been "now." We are sorry for any inconvenience this may have caused.

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General

Announcing AdvancePrint: low-cost advanced shared printing

AdvancePrint is a new PC software product that provides low-cost, advanced shared printing for PCs connected to an HP 3000 via basic serial connections. AdvancePrint replaces Print Central as HP's low-cost shared printing solution. AdvancePrint is easy to use, fast, and has new advanced features, all at a new low price.

AdvancePrint is easy

AdvancePrint incorporates a new streamlined design with an intuitive interface and a manual that's less than 100 pages. The HP 3000 installation process is entirely PC based, providing fast, menu-based configuration. PC configuration is just as simple, with printer selection from menus and an automatic connection feature that supports up to three concurrent printer connections. Users can implement advanced shared printing without an advanced degree in computer science.

AdvancePrint is fast

AdvancePrint was designed for fast performance, using data compression and efficient coding techniques. PC lockup is 30 to 60 percent less than Print Central, and document turnaround time is 20 to 40 percent faster. AdvancePrint users spend less time printing and more time working.

AdvancePrint is smart

AdvancePrint has advanced features you won't find anywhere else:

- **Document status checking** – Users can check whether their documents are printing or waiting to print.

- **Connection files** – Complex PC-to-HP 3000 connection processes (such as modem or X.25 connections) are simplified by defining them once in a command file.
- **Printer security** – Printer access is controlled by the system manager, who specifies the appropriate printers for PC users.
- **Setup string library** – Users can pre-define printer setup strings, so that changing of fonts or page orientation is vastly simplified.

Users get innovative, advanced features that let them get the most out of their printer investment.

Available now on MPE V and MPE XL

AdvancePrint is available today for MPE V T-Delta-6 and forward and for MPE XL A.O1.00 and forward.

Ordering information

HP Vectra PC	HP 150	Description
32583F Opt. 003	32584A	AdvancePrint single-user license, 3½-inch HP Vectra PC discs

HP 3000 environment solutions

Environment	Solution
Serial connections PCs with AdvanceLink	AdvancePrint
Serial connections new PCs or PCs without AdvanceLink	AdvanceLink with AdvancePrint option
Local Area Network (LAN)	Business System Plus

Contact your HP sales rep for more information.

General

AdvancePrint replaces Print Central

AdvancePrint replaces Print Central as HP's low-cost shared printing solution for PCs. Print Central is now classified as a functionally stable product. No additional enhancements will be made to Print Central and only serious and critical defects will be addressed.

AdvancePrint advantages

AdvancePrint offers a number of significant improvements over Print Central. AdvancePrint is easy to install, easy to use, and offers advanced features you'd expect to find only in a LAN-based solution. For example, AdvancePrint offers:

- Streamlined user interface
- Easy printer and setup string selection
- Document status checking
- LPT1-3 support – users can connect up to three printers simultaneously.
- Significantly improved performance
 - Connection files for automation of complex connection processes
- Substantially reduced HP 3000 installation time (15 to 30 minutes)
- MPE V support for T-Delta-6 and forward
- MPE XL support for AO1.00 and forward

Differences between Print Central and AdvancePrint

AdvancePrint operates in a similar fashion to the DIRECT mode of Print Central. As a result, the functionality of certain printers with AdvancePrint is different than that offered by Print Central. Specifically:

- HP 2680A and HP 2688A printers are supported in print and space mode.

continued on next page

Bold, underlining and graphics are not supported for these printers. Unlike Print Central, however, AdvancePrint provides limited environment file support. With AdvancePrint, one environment file and the default font of that environment file can be used in printing a document.

- HP 256X printers can print graphics and highlighted text for some PC applications (see the AdvancePrint sales guide in this issue). At a minimum, these printers are supported in print and space mode.
- HP 260X printers are now fully supported for the HP Vectra PC. HP 260X printers are not supported for the HP 150 PC. (As with Print Central, please note that these printers are not recommended as shared devices.)
- All printers must be MPE-spooled devices. This means that hardwired (attended) devices are not supported

Upgrading from Print Central to AdvancePrint

Print Central users who want the new features offered by AdvancePrint or who are migrating to an MPE XL system can upgrade to AdvancePrint through a disc-exchange program at a reduced price. To upgrade to AdvancePrint, Print Central users must return their PC discs to HP's Software Distribution Center and order one of the following products:

Product No.		Description
HP Vectra PC	HP 150	
325832	325842	10-user right-to-copy license upgrade
32583M	32584M	50-user right-to-copy license upgrade
32583N Opt. 003	32584N	50-user upgrade (includes 50 disc sets). 3%-inch HP Vectra PC discs

Software Materials Subscription Services products for AdvancePrint for the HP Vectra PC may be ordered for these products by ordering the corresponding SMS or EMS products for 32583L, 32583Q, and 32583S. Contact your HP sales rep for details.

General

Buy AdvancePrint with AdvanceLink and save

Now AdvanceLink and AdvancePrint team up to provide shared resources for basic serial connections at an unbeatable price. Two new AdvanceLink options give the user about a 25 percent price break on AdvancePrint.

To get the products on 5%-inch discs, order PIN 68333F Opt. 100. To get AdvanceLink and AdvancePrint on 3%-inch discs, order 68333F Opt.003 and Opt. 103.

Product No.	Description
68333F Opt. 100	AdvanceLink AdvancePrint 5%-inch
Opt. 003 Opt. 103	3%-inch discs AdvancePrint 3%-inch

The AdvanceLink/AdvancePrint combination provides advanced shared printing, terminal emulation, file transfer, PC backup, and connection management that's competitive with any comparable product. The result is a single-vendor solution that provides the best PC integration available for the user's point-to-point connections.

Note that AdvanceLink context switching cannot be used with AdvancePrint until the next AdvanceLink release (scheduled for the summer of 1988). Purchasing AdvanceLink SMS now ensures the user can take advantage of that feature when available.

Switching to PCs offers users new levels of functionality and lots of processing power. But it could mean losing access to the host-based files, printers, and backup services terminal they now take for granted. For a LAN environment, these capabilities are included with Business System Plus. And for a serial environment, AdvanceLink and AdvancePrint provide this connectivity in the form of file transfer, print sharing, backup, and connection management.

General

AdvanceMail update

Now that the HP DeskManager performance release (B.02.00) is available, more users will be moving from HP Desk A.03.01 to HP Desk B to take advantage of higher functionality and performance. We encourage both new and existing users to consider the benefits of using our PC-based electronic mail application, AdvanceMail.

Key AdvanceMail benefits

- Frees up HP 3000 resources
- More electronic mail users can be supported on every HP 3000
- Cuts datacommunication costs
- Files created with PC applications can be incorporated into messages and mailed around the network. Among other benefits, this means that users can use the PC-based word processor of their choice to create messages.
- Users can receive messages in the file format of their choice.
- Users can choose to work entirely independently of the HP 3000 when creating and reading messages because they only need to make the connection to actually send and receive messages.
- Messages can be sent and received at preset times – without user intervention.

Ordering information

Product No.	Description
27534A	AdvanceMail for the HP 150
27535F	AdvanceMail for HP Vectra and IBM PCs
Opt. L	10 copies plus 1 manual
Opt. Q	1 master (right to copy 50), 5 manuals
Opt. S	50 copies and 5 manuals
Opt. T	5 manuals

AdvanceMail is available on subscription services P/Ns 5958-7340 and 5955-9895. The AdvanceMail Administrator's disc is distributed with the HP DeskManager administration manuals.

For more information about AdvanceMail, please contact your HP sales rep.

General

HP Pascal Language Processor and new right-to-execute product

Now HP Pascal software developers can offer high-performance HP Pascal 3.2-based applications that run on HP Vectra PCs and other personal computers. The HP Pascal Language Processor provides HP Series 2001300 Pascal applications to the owners of PCs.

The HP Pascal Language Processor consists of an HP Vectra PC plug-in card, HP Pascal 3.2 language software, and documentation. This is the same Pascal 3.2 that runs on HP 9000 Series 2001300 computers.

When installed in an HP Vectra PC, the new subsystem delivers the best of both worlds: HP's powerful Pascal workstation environment *and* access to a wealth of PC-DOS application software. It offers software developers the opportunity to market their HP Pascal

applications on personal computers without rewriting Series 2001300 Pascal programs. The Pascal Language Processor is object code compatible with Series 2001300 Pascal workstations. Since code written for the language processor will also run on high-performance HP workstations, a natural migration path is established.

New product information

The Pascal Language Processor products for HP Vectra PC systems are now available and shipping. Recent changes have been made to the products. As of April 1, 1988, no-charge options for different disc media sizes were added to the 82310A and 82311A Language Processor products.

In addition, on April 1, a new product was added to the Language Processor family, the 82312A HP Pascal Language Processor with Right-to-Execute. The intent of this product is to provide a lower cost option for the end-user who wishes only to execute run-time HP Pascal software application products, etc., and does not wish to purchase the Pascal development system. No software is included with this product. It consists solely of the Language Processor hardware and a software-execution license.

Product background

Unlike the HP 82300B BASIC Language Processor, installation of HP Pascal requires the user to partition the PC hard disc into two sections: a LIF partition and the DOS partition. Pascal files reside on the LIF partition, whereas the system emulation software resides on the DOS partition. Utility programs and the use of floppy discs allows access or transport of data files from one partition to another.

Due to the system's complexity, we recommend the 82310A and 82311A products only to experienced Pascal developers, ISVs, and VARs. It is not a product for the casual or inexperienced user.

Although the standard 512 Kbyte RAM is sufficient for many development and run-time applications, we recommend a 1 Mbyte RAM configuration (addition of one 82303A RAM Expansion Kit).

Support for non-HP personal computers

The HP Pascal Language Processor is supported on the HP Vectra PCs (CS, ES, and RS) and on IBM PC/AT and Compaq Deskpro 286 personal computers equipped with EGA or VGA displays.

Literature

A technical data sheet, Lit. No. 5951-6787, is available from Hewlett-Packard.

Ordering information

Product No.	Description
82310A	HP Pascal Language processor - Plug-in 68000 card with 512 Kbytes RAM, HP-IB, Pascal 3.2 software on floppy discs, manuals
<i>Must order media-size options:</i>	
Opt. 042	Software on 5-inch floppy discs
Opt. 044	Software on 3-inch microfloppy discs
82311A	HP Pascal software-only option - Pascal Language Processor Software for 82300B owners, manuals
<i>Must order media-size options:</i>	
Opt. 042	Software on 5-inch floppy discs
Opt. 044	Software on 3-inch microfloppy discs
82312A	HP Pascal Language Processor with Right-to-Execute - HP Language Processor card (hardware only, no software included), Right-to-Execute HP Pascal Language Processor Software applications

continued on next page

Other related products

Product No.	Description
82301B	HP BASIC Language Processor Software-only option - BASIC Language Software only, for 82310A owners who wish to run HP BASIC as well as Pascal
82303B	512-Kbyte RAM expansion kit - Set of four 1-megabit chips, used on main board or RAM expansion board
82304B	HP BASIC 5.0 ROM for Language Processor. User installable.
82305B	RAM expansion board - Includes 512 Kbytes, expandable to 3 Mbytes (4 Mbytes total), expand in 512 Kbyte increments with 82303A kit, attaches to processor card; doesn't require slot
50963A	Shared Resource Manager Interface - Uses full performance DIO connection, takes one HP Vectra PC expansion slot
82306A	GPIO Interface - Uses full performance DIO connection, takes one HP Vectra PC expansion slot
82307A	GPIO Interface Cable

Desktop

ME Series 10 on the HP Vectra RS 20 PC

The introduction of ME Series 10 (MS[®]-DOS version) highlights a significant shift in the low-end workstation-based CAD/CAM market: professional-class CAD packages running on high-performance PCs. Combined with the release of the HP Vectra RS PC and the new high-resolution intelligent graphics controller, ME Series 10 now runs on a full range of HP computers – from PCs to workstations.

ME Series 10 can be credited with launching HP as a key vendor in the ME CAD/CAM market – from being unranked to the number eight position in a two-year period. HP's growth path to solids modeling (ME Series 30) was announced in Fall, 1986. In its first

year of sales, ME Series 30 rocketed to the number two position for sales of such systems.*



Why is support of the HP Vectra RS PC and MS-DOS so important? Until now, the main platform for the ME Series products has been HP-UX on the HP 9000. Performance needs for such professional systems demand this kind of computing power. Now, the HP Vectra RS PC makes this kind of power available to a large base of PC-CAD users who have outgrown both the PC and the software. Their needs are growing and as they reach the limits of their PC-CAD systems, ME Series 10 (MS-DOS version) offers a significant growth path opportunity while keeping all the benefits of MS-DOS.

The ME Series products are constantly competing and winning against main-frame systems such as CADAM[®], CATIA[®], and Medusa[®]. On an HP Vectra RS PC, a user benefits from lower price, excellent performance, and the usability of MS-DOS.

By choosing ME Series 10, a user gets a professional-quality CAD system that features:

Capabilities tuned for mechanical engineers – In a recent survey, 65 percent of users reported greater than 50 percent productivity gains within six months.

Consultation before and after purchase – a worldwide team of experienced field engineers has specialized training in ME-CAD/CAM solutions.

A full range of post-sales support services to ensure a successful installation – with the MS-DOS platform this is a significant contribution in an environment where the on-going investment in terms of training and data is considerably more than the initial purchase price.

A necessary sense of security – HP provides the solutions needed today and will be there with the solutions of tomorrow.

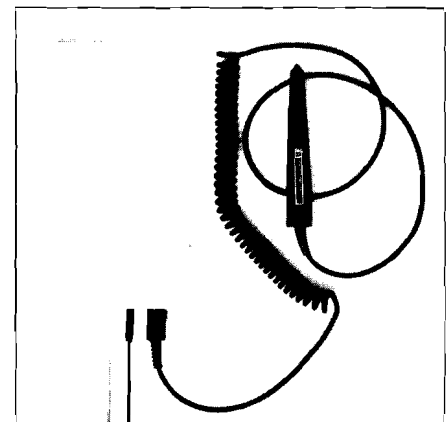
Contact your HP sales rep for more information about the ME Series 10.

*Source: CIM data

MS[®]-DOS is a trademark of Microsoft Corporation. CADAM[®] is a registered trademark of CADAM, Inc. CATIA[®] is a registered trademark of Dassault Systems. Medusa[®] is a registered trademark of Cambridge Interactive Systems Limited.

Desktop

HP-HIL barcode reader now supported on HP Vectra ES and RS PCs



A dedicated software driver has been developed to have HP Vectra ES and RS PCs support the HP 92916A HP-HIL barcode reader. This new driver is

compatible with former HP Vectra PCs as well. These drivers are delivered on a 5¼-inch floppy.

The HP 92916A supports:

Old HP Vectra PCs

- All 724XX SPUs
- All 459XX CPUs

New HP Vectra PCs

- HP Vectra ES PC
- HP Vectra RS PC

HP Portable Vectra CS PCs do not offer HP-HIL and consequently cannot support HP 92916A.

HP Vectra CS PCs do not currently offer standard HP-HIL capability. There is currently *no* confirmation that the separate HP-HIL interface card, planned for the HP Vectra CS PC, will run with HP 92916A. Tests will be made as soon as possible.

The HP 92916A does not support:

- HP Vectra CS PC
- HP Portable Vectra CS PC

The HP 92916A, HP-HIL barcode wedge reader, supports most popular barcode symbologies: Code Interleaved 2 out of 5, 3 of 9, Extended 3 of 9, Codabar, and UPC/EAN/JAN.

For more information, refer to the HP 92916A data sheet, PIN 5953-5968. For any questions, or to get a copy of the data sheet, contact your HP sales rep.

Desktop

Windows1386 releases the power of the HP Vectra RS PC

Microsoft Windows1386 delivers significant new advances in functionality to personal computing. It provides the real benefits of the 80386 hardware technology that can be used today on the HP Vectra RS PC.

Greater functionality for MS®-DOS applications

- **Multiple Virtual PCs** – Windows1386 takes advantage of the unique capabilities of the Intel 80386 processor to overcome several recognized barriers in personal computing. It overcomes the 640-Kbyte memory limitation of the 8086 and 80286-based PCs by using the virtual memory capabilities of the 80386.
- Under Windows/386, each MS-DOS application executes within a private “virtual PC” and can be allocated a full 640 Kbytes of memory. The number of MS-DOS applications that can run at the same time is dependent only on the total amount of physical memory present on the system.
- **Multitasking of MS-DOS applications** – Windows1386 allows the user to multitask existing MS-DOS applications. For example, a document can be edited in Executive MemoMaker while Lotus@1-2-3@is calculating a large spreadsheet in the background.

Applications can be executed in a variety of modes. Applications can be run in FOREGROUND mode, which means the application executes only when the user is working with it. BACKGROUND mode allows the application to continue execution while the user is working on another application. EXCLUSIVE mode turns off multitasking and gives maximum CPU resources to the application running in this mode. Windows1386 lets the user choose the most effective way to run the applications.

- **Windowing of MS-DOS applications** – Windows1386 allows existing MS-DOS applications to be viewed in a

window or full screen. WINDOWING lets the user run MS-DOS applications in a window alongside Windows-based applications. This is especially useful for monitoring the status of applications executing in the background.

Or, the user can select to run an MS-DOS application FULL SCREEN, allowing the user to work with the application exactly as if it were running only under MS-DOS. Full screen mode is best suited for working with a single application, whereas windowing is effective when the user is working with several applications.

Full Windows functionality

Microsoft Windows1386 and Microsoft Windows 2.0 – Windows1386 and Windows 2.0 share the same user interface and provide a consistent application environment for Windows applications. Microsoft Windows 2.0-based applications can be used interchangeably with either Windows product.

- **Expanded memory support** – A new memory manager in Windows1386 provides emulation of the LIM 4.0 (Lotus/INTEL/Microsoft) expanded memory specification, using conventional memory. Windows applications as well as MS-DOS applications written to use LIM 4.0, have access to expanded memory under Windows/386.

Windows/386: For today and for the future

Windows1386 offers the best of both worlds: the ability to run existing MS-DOS application software in a more efficient and productive manner, as well as full compatibility with existing Windows applications.

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Windows1386 provides an excellent transition to the future. Windows1386 shares a visually consistent graphical interface with the MS OS/2 Presentation Manager from Microsoft and IBM, making Windows users immediately productive when they migrate to OS/2 environment.

MS-DOS is a U.S. registered trademark of Microsoft Corp. Lotus® and 1-2-3® are U.S. registered trademarks of Lotus Development Corp.

Desktop

How to order Windows/386 from HP

Effective February 1, 1988, users can order the standard Microsoft version of Windows1386 directly from Hewlett-Packard. Each package includes both 5¼- and 3½-inch discs.

Product No.	Description
D1 Opt. ABA	Microsoft Windows/386 Presentation Manager for personal computers using the Intel 80386 processor

Use the HP-distributed version

As with any major new software product, the first release may include software errors. Windows/386 is no exception. Since the first shipments of Windows/386 by Microsoft and PC manufacturers such as Compaq in September of 1987, Microsoft has been continually making changes to improve the reliability and functionality of the Windows1386 product. (Some fairly significant changes have been rolled into the product as late as January 1988.)

To ensure that you are working with the latest release of Windows1386 and a version that HP can support on the HP Vectra RS systems, make sure that you are using a copy of Microsoft Windows1386 distributed from HP.

HP tested and supported configurations

The following HP PC configuration has been tested and is supported by Hewlett-Packard with Windows/386:

- HP Vectra RS PC
 - HP Vectra DOS 3.2 or later
 - HP Enhanced Graphics Display System (EGA)
- HP Mouse or HP Graphics Tablet (HP-HIL)

Windows1386 also supports a number of HP printers and plotters.

Printers: HP LaserJet, LaserJet Plus, LaserJet 500 Plus, LaserJet Series II, LaserJet 2000, and HP ThinkJet C/D

- *Plotters:* HP 7470A, 7475A, 7550A, 7580A, 7585A, 7586B, HP ColorPro, HP DraftPro, HP DraftMaster I and II

Note: The HP ScanJet Image Scanner is not supported with Windows/386.

User support for this software product on HP Vectra RS PCs is provided by Hewlett-Packard as well as directly through Microsoft Corporation.

Desktop

New tested products list shows compatibility of HP Vectra CS PC

The new HP Vectra CS PC has been enthusiastically received by our customers as a compatible, low-cost personal computer. Now there's even more evidence of the excellent compatibility that HP has engineered into its PCs. The latest edition of "Tested Products for the HP Vectra CS Personal Computer" (Lit. No. 5956-4310D) lists over 150 software and hardware products that have been found to be compatible. Contact your HP sales rep to get a copy of this information sheet.

Desktop

Terminal emulation in ROM available on HP Vectra PC

Now all HP Vectra desktop PCs can be enhanced with a new accessory that makes the terminal-emulation program ROM-resident.

The HP 24531A Terminal ROM Card is a memory card containing the HP terminal program in ROM (also available on disc media, PIN 24597A). Started from PAM or DOS, this program loads two to three times faster than when loaded from a hard disc, and gives the user an extra feeling of security and efficiency.

In addition, if the PC is not equipped with a hard disc, the user may "boot and go" into terminal mode at power on directly from the Terminal ROM Card.

This accessory is recommended for terminal-intensive users and is another step forward in individual productivity and reduced disc media manipulation.

The Terminal ROM Card operates on all HP Vectra desktop PCs as well as on the installed base of HP Vectra. It does not operate on non-HP PCs.

Product No.	Description
24531A	Terminal ROM Card
5954-7232	Data sheet

Call your local HP sales rep for more information.

Desktop

ROM-based applications on the HP Vectra PC with ROM disc accessory card

Now, with the ROM disc accessory, ISVs, VARs, OEMs, ICOEMs, and system integrators are able to build dedicated, PC-based workstations and also discless workstations with the application software in ROM.

The HP 24530A ROM disc accessory is a memory card containing sockets for ROMs or EPROMs and a few Kbytes of CMOS battery-protected RAM. It allows the installation of applications in ROM/EPROM in order to have them permanently resident in the PC.

The application does not need to be modified and a software utility kit is also available to ease installation/burning of the application in EPROM.

The ROM Disc Accessory is ideal for all applications requiring ruggedness as it allows the design of intelligent workstations with no moving parts. For example:

- Process controllers: metallurgy, chemicals, cement, etc.
- Mobile data acquisition: petroleum, etc.

It also fits applications where discless operation is of importance and where the end-product is a "black box," such as:

- Measuring instruments
- Dedicated POS terminals: rental, ticketing, videotext, etc.
- LAN-based workstations
- Non-U.S. or European terminals
- Protocol controller or front-end processor

The ROM Disc Accessory operates on all HP Vectra desktop PCs and does not operate on non-HP PCs.

Ordering information

Product No.	Description
HP 24530A	ROM Disc Accessory
Opt. 001	ROM Disc program. Kit (Includes documentation and software for product development)
5954-7233	Data sheet

Desktop

HP Touchscreen to HP Vectra PC software upgrade program

HP is now offering a worldwide program that allows trade end-user users to upgrade their software from the HP Touchscreen to the HP Vectra PC family. This program is available only to users who have traded in their HP Touchscreen PC. This software program runs from February 1 to October 31, 1988.

The following points highlight the software program:

- The program is worldwide.
- Any end-user trade/reseller customers who have traded in their HP Touchscreen to an HP Vectra PC are eligible.
- Products should be returned to country location.
- Program runs from February 1 to October 31, 1988.
- The upgrade program is through:
 - HP Direct Marketing Division (DMK)
 - HP Direct Marketing Operation (DMO)
 - HP Software Distribution Center (SDC) for large site-license orders

The following upgrade products are now on the DMK Parts Price List (PPL). Same pricing is used for the site-license upgrade products.

Product No.	Description
68333-65001	AdvanceLink
68350-60002	Charting Gallery
68351-60002	Drawing Gallery
68352-60001	Gallery Collection
68330-60005	Executive MemoMaker
April I PPL	Executive Card Manager
27535-65009	HP Message to AdvanceMail

The HP site-license upgrade program ("Z" quantity 10, "M" and "N" quantity 50) is on the HP Price List. Users can apply their purchase-agreement discounts.

Users cannot apply their purchase-agreement discounts through DMK or DMO.

How to order with the HP software program

DMK/DMO, SDC, and reseller channel ordering procedures are as follows:

- All orders must reference the sales order number (except reseller channel customers) of their HP Touchscreen to HP Vectra PC trade-in order.
- U.S. customers should send a mail order along with the original HP disc(s) to: HP Direct, P.O. Box 60008, Sunnyvale, CA, 94088, Attention Software Administrator.
- U.S. customers call 800-538-8787 for ordering information at DMK.
- European customers should return their original HP disc(s) to the local HP Direct with a mail order. HP Direct will transmit an order to the supplying division (DMK if DMO does not supply the upgrade).
- All other customers should return their original HP disc(s) to their HP sales office. The customer is billed after shipment.

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Reseller channel end-user ordering procedures are as follows:

- Send in an HP Vectra PC proof-of-purchase (a photocopy of the invoice) and a trade-in-return form (photocopy) from your HP Vectra reseller.
- Send mail order with the original HP disc(s) and payment direct to DMK or DMO.

HP's Software Distribution Center (SDC) now manufactures the site-license software. SDC ordering procedures are as follows:

- Work with the local HP sales rep to decide which software products and the quantity needed.

Customer orders the "Z" quantity 10, "M" and "N" quantity 50 upgrade products.

- Customer needs to return disc(s) as proof of purchase.

Contact your HP sales rep for more details on how to order the upgrade program.

Desktop

Discontinuance of HP Vectra StarLAN PCs

All versions of the HP Vectra StarLAN PCs will be discontinued. The following product numbers were removed from the April 1, 1988, HP Price List

HP Vectra CS StarLAN PC	HP Vectra ES/12 StarLAN PC
D1201A Opt. 001 Opt. 002 Opt. 051 Opt. 052 Opt. 053 Opt. 054 Opt. ABA Opt. ABB Opt. ABK	D1202A Opt. 015 Opt. 016 Opt. 051 Opt. 052 Opt. 053 Opt. 054 Opt. ABA Opt. ABB Opt. ABK

The HP Vectra StarLAN PCs will not roll to the recently announced third release of HP OfficeShare, Version B.00.00. However, a free software

upgrade program is available for users who purchased any HP Vectra StarLAN PC between October 1, 1987, and March 15, 1988. Refer to the March edition of *HP Channels*, page 22, for complete details on ordering the upgrade.

Users should now order HP Vectra PCs, HP OfficeShare, and HP StarLAN at the component level (see following matrix). Since the HP Vectra StarLAN PCs are priced at sum-of-components, there will be no price penalty when buying components. Additionally, users will be ordering the new enhanced version of HP OfficeShare software. Please be aware that users will now be required to install the HP StarLAN interface card into the HP Vectra PC.

If you ordered HP Vectra CS StarLAN PC	SPU with 20 Mbytes and video interface	Matching monitor	Now order these components		
			HP Vectra PC DOS 3.2	OfficeShare V.B.00.00	StarLAN PC Link
D1201A Opt.001.051. ABA	D1121A Opt. ABA	35731A	45951B	50923F	50926F
D1201A Opt. 002. 052. ABA	D1122A Opt. ABA	35743A	45951B	50923F	50926F
D1201A Opt. 001, 053, ABB or ABK	D1121A Opt. ABB or ABK	35731AB	45951B	50923F	50926F
D1201A Opt. 002. 054, ABB or ABK	D1122A Opt. ABB or ABK	35743BB	45951B	50923F	50926F
If you ordered HP Vectra ES/12 StarLAN PC					
D1202A Opt. 015.051. ABA	D1321A Opt. ABA	35731A	45951B	50923F	50926F
D1202A Opt. 016, 052. ABA	D1322A Opt. ABA	35743A	45951B	50923F	50926F
D1202A Opt. 015, 053, ABB or ABK	D1321A Opt. ABB or ABK	35731AB	45951B	50923F	50926F
D1202A Opt. 016. 054, ABB or ABK	D1322A Opt. ABB or ABK	35743BB	45951B	50923F	50926F

Desktop

New release of Executive MemoMaker/150 now available

A new release of Executive MemoMaker/150, Version C.03.00, is now available. The new release is fully compatible with Graphics Gallery B.02.00 and supports HP RuggedWriter, PaintJet, and DeskJet printers.

All of the new Gallery features, including rotated figures and skewed text, will be displayed in graphics merged with Executive MemoMaker (EMM) text. On high-resolution black and white printers (150 dpi resolution or greater), two types of grayscale output are now supported, as well as color pictures on color printers.

Several upgrades are available for current EMM customers. Individual upgrades are supplied by HP Direct. Users must return the application master when ordering the upgrade. Site-license upgrades are ideal for users with 50 or more copies of EMM to upgrade. Two options are offered: one includes 50 copies of the software and the other includes a set of master discs that may be copied by the user. To purchase a site-license upgrade, users must return the required number of master discs or show proof of purchase of a site license for Executive Memomaker.

Ordering information

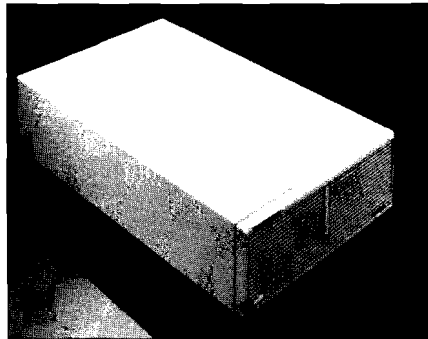
Product No.	Description
45418-63006	Single-unit upgrade, version C.02.00 to C.03.00
45418M	Site-license upgrade, 50 copies, user duplicates software

Contact your HP sales rep for more information.

Peripherals

Mass Storage

New disc subsystem features high capacity in compact package



The latest addition to HP's disc drive product line is the innovative HP 7963B. This new disc drive subsystem features an initial 304-Mbyte capacity and a special multimechanism package. Up to three HP 5%-inch Winchester – each with its own controller – can be placed in the package to share the same HP-IB channel and power supply.

Users will benefit from the flexibility the HP 7963B offers:

304 Mbytes – The user gets high capacity in a midrange package (132mm x 325mm x 554mm). This package still fits neatly in the HP 92211R Design Plus cabinet. It can also be mounted in a 19-inch cabinet with the help of a new 19560B rack adapter kit.

Ability to expand – Additional 304-Mbyte disc mechanisms can be placed in the original HP 7963B package. Up to three mechanisms can be housed in the package for a total of 912 Mbytes (maximum configuration is three 304-Mbyte mechanisms).

- **Low-cost add-on capacity** – The HP 97963B standalone mechanism is priced 25 percent lower than the separately packaged HP 7959B subsystem of equal capacity (304 Mbytes). The HP 7963B with one 97963B kit will cost approximately 5 percent less than two HP 7959Bs.
- **HP's own 5¼-inch Winchester** – The exceptional design of the HP 7963B is due to the integration of HP's own 5%-inch mechanism. Designed and manufactured solely by HP, this mechanism has performance and reliability features typically found in larger system discs.
- **Use in a wide range of applications** – The HP 7963B is well suited for office and workstation environments requiring less than one Gbyte total mass storage.

Other product features

- **A specially designed track positioning system** using embedded servo code. The servo code essentially eliminates seek errors and provides greater read/write accuracy over the entire operating temperature range.
Channel optimization – This feature is similar to rotation position sensing (RPS) and allows multiple discs to better use a single HP-IB channel.
- **Automatic sparing** – This enhancement reduces disc errors and required maintenance.
- **Self-test capabilities and error logging**
- **Quick and easy access to replaceable assemblies**

Contact your HP sales rep for more information.

Mass Storage

New SCSI discs join the midrange product family



Introducing the HP 7957S, 7958S, and 7959S disc drives. These products extend the current HP product line with three more capacities – 107, 161, and 323 Mbytes – plus offer a new interface. For the first time, HP will offer systems users mass storage with the Small Computer System Interface (SCSI).

Like the new HP 7959B and 7963B, the SCSI disc drives feature high performance and reliability. The HP 7957S, 7958S, and 7959S are targeted toward users who want an industry-standard interface.

The HP 7957S, 7958S, and 7959S products integrate the new HP-designed and built 5%-inch Winchester disc mechanism. These products are designed to perform with the HP 9000 Series 300 computers. (See article in Technical section entitled, "New SCSI interface.")

The HP 9000 Series 300 supports these new disc drives using HP-UX 6.0. The Series 300 models are: 319 Option 011, 330 Option 011, and 350 Option 011.

Contact your HP sales rep for more information.

Mass Storage

New HP 7959B extends current midrange product offering

In addition to the exciting new HP 7963B, HP is also introducing the 304-Mbyte HP 7959B – an extension of the current HP 7957A and 7958A product line.

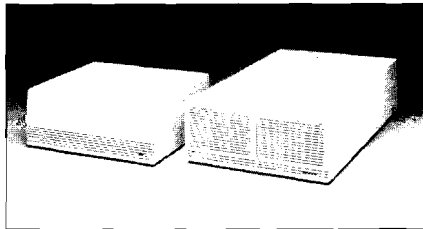
Like the HP 7963B, the HP 7959B is also available in 304 Mbytes and features the same performance and reliability with HP's own 5%-inch Winchester disc mechanism. The only

difference is that the HP 7959B is a single-mechanism subsystem. Additional capacity can be acquired only by purchasing an entire disc drive. The HP 7959B is the perfect choice for users who want to purchase only one disc drive at the lowest price or who require the smaller HP 7957A/7958A footprint.

Contact your HP sales rep for more information.

Mass Storage

HP 7959B and 7963B system support



With the introduction of HP's new disc drives – the HP 7959B and 7963B – users will benefit with traditional HP quality and low cost of ownership. System support for these just-released products is summarized below.

System	HP 7959B	HP 7963B	Comments
Technical			
HP 9000			
Series 20013000 BASIC 5.0	Yes	Yes	
Pascal 3.2	Yes	Yes	
Series 300 HP-UX 6.0	Yes	Yes	
Series 500 BASIC/HP-UX	TBD	TBD	Contact HP
SRM	Planned	Planned	Summer 1988
Series 800 HP-UX 1.2	Yes	No	
2.0	Yes	Yes	
HP 1000			
A-Series 5.0	Yes	Yes	
E/F-Series	No	No	Contact HP
HP 3065 X/L 3.0	Yes	No	
HP 64100 AF 2.1	Yes	Yes	
Commercial			
HP 3000			
MPE-V (V-Delta-1)	Yes	Yes	
MPE-XL	Planned	Planned	1st half 1989
HP 260	No	No	

Contact your HP sales rep for more information.

When to choose the HP 7936 and 7937 instead of the HP 7959B or 7963B

The introduction of the new HP 7959B and HP 7963B products may raise a question of which products to choose. Four areas of positioning exist for the user: total system capacity, performance/flexibility, environment, and price advantages.

Total system capacity

The HP 7963B offers possible capacities of 304, 608, and 912 Mbytes as compared to the HP 7936H of 307, and the HP 7937H of 571 and 1142 Mbytes. The HP 7937 disc drives are designed for systems that require 1 Gbyte or more of storage. On these systems, the fewer number of spindles will provide better overall reliability and the ability to configure more mass storage on the system. Therefore, users who already have an HP 7936 or HP 7937 disc drive should continue to buy the HP 7937 for additional disc storage.

Performance/flexibility

Whereas the HP 7959B and HP 7963B now offer performance similar to the HP 7936H and HP 7937H in many applications, because of a faster data transfer rate, the HP 7936H/7937H still offers faster performance in applications with transfer sizes of over 4 Kbytes. In addition, the HP 7936XP/7937XP still provide the performance advantages of disc controller cache which is not available on the HP 7959B/7963B. Also,

the HP 7936H/7937H offer the flexibility of future upgrades to controller cache, and to a fiber link interface. The future fiber link interface will provide additional flexibility on HP Precision Architecture systems by providing longer cabling lengths and more total mass storage capacity.

Environment

The HP 7936/7937 products are all designed for a data center or departmental computing environment and have a sound power level of approximately 65 dB(A). The HP 7959B/7963B, however, have a sound power level of <54 dB (A) and are suitable for an office or workstation environment. If you are buying a disc drive into a factory floor environment, the HP 7936/7937 drives still offer the widest environmental tolerances and most reliable solution in this environment.

Price advantages

The HP 7937H still offers the lowest cost per megabyte for users with mass storage needs of 1 gigabyte or more, and offers the lowest cost of ownership through lower service costs in this capacity.

For quick reference, use the following guidelines when determining which disc to buy.

Disc drive selection guide

Selection Criteria	HP 7959B	HP 7963B	HP 7936/7937
Low entry cost	X		
Future growth		X	
Office/workstation environment	X	X	
Data center environment			X
Factory floor environment			X
Less than 1 gigabyte	X	X	
More than 1 gigabyte			X
Performance/flexibility			
Cache			X
Fiber link			X
Large transfers			X
Configuration flexibility			X

HP 9153C and 9122C support on HP 9000 BASIC 3.0 and 4.0

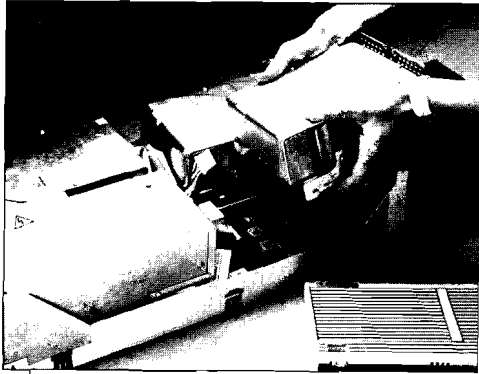
Hewlett-Packard announces official support of the new HP 9153C and 9122C disc drives under HP 9000 Series 20013000 BASIC 3.0 and 4.0. This means that users can now take advantage of the newest disc drive offerings from HP without upgrading their operating systems.

Earlier support was announced for BASIC 5.1 and 5.0 (one problem existed with 5.0 when used with HFS and the HP 9153C disc was configured as a single 40-Mbyte volume). BASIC 5.1 corrects this discrepancy.

The new HP 9153C offers the exceptional reliability of the HP 3%-inch mechanism coupled with a new 2-Mbyte unformatted microfloppy disc drive. The new HP 9122C microfloppy offers 2 Mbytes of unformatted capacity (1.42 Mbytes formatted) in a dual- or single-drive configuration, with greater reliability and quieter operation than the HP 9122D/S.

Moss Storage

New upgrade feature comparison between HP 9153M and HP 979638



Inexpensive upgrades are features of both the new HP 7963B and HP 9153C disc drives, previously introduced in December, 1987. Users benefit from upgrades in both of these products through reduced upgrade cost and

investment protection of their equipment. Even though the concept is similar for both products, implementation is somewhat different.

Although the 97963B 304-Mbyte upgrade kit may be installed by the user, this is only recommended if the user has a computer maintenance department or would be installing multiple 97963B kits. Each HP 97963B upgrade kit provides the material and instructions to perform the upgrade installation; however, the first upgrade may require a demonstration. The learning that occurs on the first installation is easily levered to further installations. Installation by an HP customer engineer (CE) is recommended for HP 3000 systems due to the software configuration requirements.

Comparing upgrade features of the HP 9153C and 7963B

Feature	HP 9153C	HP 7963B
Base capacities	10120140 Mbytes	304 Mbytes
Upgrade kits	HP 9153M, 20 Mbytes	HP 97963B, 304 Mbytes
Maximum number of mechanisms in one package	2 (for capacity of up to 40 Mbytes)	3 (for capacity of up to 912 Mbytes)
Controller architecture	One controller for all mechanisms; single HP-IB address	Each mechanism has its own controller; individual mechanism HP-IB address
Who performs the upgrade	Must be performed by an HP customer engineer	May be performed by the user, Option D02

Networks

ARPA TCP/IP now available for HP Vectra PCs

PC users now have the ability to share files and gain terminal communication to a multivendor computing environment through a new AdvanceNet product. By using the de facto industry-standard Advanced Research Projects Agency-defined Transmission Control Protocol/Internet Protocol (ARPA TCP/IP), the associated ARPA services and popular Berkeley Software Distribution (BSD) 4.2 networking services, PC users can integrate PCs into an existing network. The ARPA product is supported on the HP Vectra PC and IBM PCs (AT, XT, and PS/2-Model 30) and will be available April 1, 1988.

The user must order the PC/ARPA software and the HP ThinLAN PC Interface (27210B) as two products, a services product and a link product. The ARPA Services/Vectra PC (HP D1800A) and the ARPA ThinLAN Link/Vectra PC (HP D1801A) provide the multivendor communication software and hardware to integrate a PC into an existing networking environment. Both are available on 3%- or 5%-inch floppy disc. The two products must be used together.

The D1800A ARPA Services/Vectra PC provides the ARPA services, File Transfer Protocol (FTP), TELEtype NETWORK protocol (telnet), and popular Berkeley networking commands, remote copy (RcP) and remote command execution (rsh). These services allow the PC user to share files with ARPA-supported computers on the network and to emulate a vt100 terminal allowing virtual terminal access to the other ARPA servers, e.g. HP 9000 Series 300 HP-UX workstation. The ARPA Services1 Vectra PC is available in 10- and 50-user licenses.

The D1801A ARPA ThinLAN Link/Vectra PC provides the ARPA transport protocols, TCP/IP, and an HP PC ThinLAN Interface card. The HP PC ThinLAN Interface card (HP 27210A) allows connections to Thin or Thick Ethernet cabling. Support of StarLAN 10 will be offered when the product is available. The ARPA protocols closely adhere to the following Military Standards (MILSTD):

- Internet Protocol (IP) MIL-STD 1777
Transmission Control Protocol (TCP) MILSTD 1778
- Address Resolution Protocol (ARP) RFC-826

This product pair also includes additional capabilities for the user's ease of use. This includes an easy-to-use menu-driven installation program. This menu-driven installation process allows the ARPA expert and non-ARPA expert alike to quickly and easily install the ARPA product on their PC.

A rich set of diagnostics for the HP ThinLAN PC interface card allows the user to quickly and easily locate problems with the PC Interface card, the PC connection to the LAN, and connections to remote ARPA systems.

Currently, we have certified operation of ARPA services by testing communication with products from HP and other vendors. The following configurations are certified.

Certified configurations

Computer	Operating system	Network software package
DEC VAX 7XX	VMS 4.4 or later	Wollongongs WIM/VX 2.2 or later
SUN	SUN release 3.2/3.3	Sun Networking
DEC VAX 7XX	BSD UNIX 4.2/4.3	BSD 4.214.3 Networking
HP 9000 Series 300	HP-UX 5.5 or later	NS-ARPA Series Rev. 5.3 or later
HP 9000 Series 800	HP-UX A.B1.20 or later	ARPA Services1800 Rev. 1.2 or later

For continued user satisfaction, HP has an ongoing program to certify the PC/ARPA product with additional products.

If you would like to use the PC/ARPA product to communicate with products that are not listed here, please contact your HP sales rep. Testing may have occurred or may be planned in the near future.

Product structure

Product No.	Description
D1800A	ARPA Services1 HP Vectra PC
Opt. AA6	Software on 5%-inch floppy
Opt. AA8	Software on 3%-inch floppy
Opt. OA9	10-user license
Opt. OAA	50-user license
D1801A	ARPA ThinLAN Link/ HP Vectra PC
Opt. AA6	Software on 5-114-inch floppy
Opt. AA8	Software on 3-112-inch floppy
Opt. OCK	Delete interface card (Transport software only)

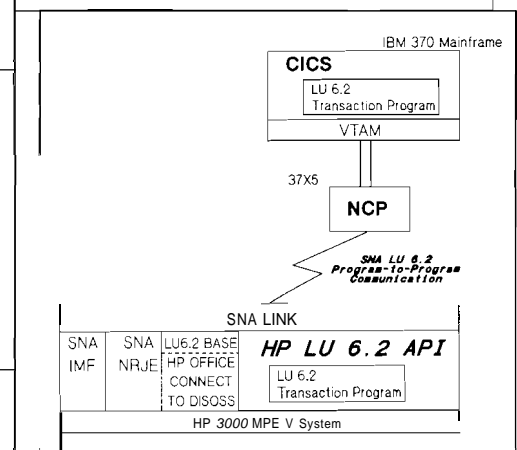
Networks

Introducing LU 6.2 APZ: new HP-to-ZBM networking product

HP introduces new software for the HP 3000 application programmer - LU 6.2 Application Programming Interface (LU 6.2 API).

LU 6.2 is an IBM communications protocol used for program-to-program communications between networked systems. The new LU 6.2 API product makes it possible for application programs written on the HP 3000 to talk to application programs running on an IBM host mainframe in an SNA network.

LU 6.2 API provides a set of high-level intrinsics that may be called from within the HP 3000 application program. The intrinsics can start a "conversation" with a remote application program in order for the application program "pair" to work together in accomplishing some task, or "transaction." For this reason, applications that support the LU 6.2 protocol are commonly referred to as "transaction programs." Transaction programs may be designed to transfer files from one system to another or access/update a remote database. The following illustrates the relationship between these transaction programs.



What makes LU 6.2 API unique from HP's other SNA products, such as SNA NRJE (8100/DPPX workstation emulation to an IBM host), or SNA IMF (327413276 Control Unit emulation to an IBM host) is that it does not emulate a "dumb" terminal to the host. With LU 6.2 communications, either side can initiate the program-to-program conversations and have equal capability in sending and receiving data.

LU 6.2 API features

HP LU 6.2 API provides the following features and benefits:

- Remote program invocation* – Allows the HP 3000 LU 6.2 API transaction program to remotely invoke an LU 6.2 application resident on the IBM host mainframe.
- *Remote attach* – Allows an IBM host mainframe LU 6.2 transaction program to remotely invoke an HP 3000 resident LU 6.2 API transaction program.
- Mapped conversation LU 6.2* – Easy-to-use programmatic interface handles intermediate input/output procedures.
- *Application compatibility* – LU 6.2 API may be run concurrently with other HP SNA services, such as SNA IMF and SNA NRJE, over the same SNA Link to the IBM host.

Ordering information

HP LU 6.2 is available on the V-Delta-3 MIT and appears on the

April 1 HP Price List. Ordering options are as follows:

Product No.	Description
30253A	HP LU 6.2 API
Opt. 310	For HP 3000 Series 37, 37XE, or MICRO 3000s
Opt. 320	For HP 3000 Series 39-58
Opt. 330	For HP 3000 Series 64-70
30253R	<i>Right to copy</i> HP LU 6.2 API
Opt. 310	For HP 3000 Series 37, 37XE, or MICRO 3000s
Opt. 320	For HP 3000 Series 39-58
Opt. 330	For HP 3000 Series 64-70

Terminals

HP 2392A and 2394A terminal obsolescence plans

Hewlett-Packard is planning to remove the HP 2392A and the 2394A from the HP Price List on August 1, 1988. These products have been replaced by the new HP 700192 and 700194, respectively. The current Special Options on the HP 2392A and the 2394A will be available on the HP 700192 and 700194 by this time. Two exceptions are L14 Hebrew, and L04 Katakana. The Hebrew localization will not be offered on our new products while the Katakana localization will be provided as a separate new product available during the July-August timeframe.

Contact your HP sales rep for more information.

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Supplies

Supplies

New 3%-inch disc for HP 9122C stores 1.42 Mbytes of data

Users can store up to 1.42 Mbytes of data on each high-density 3%-inch microfloppy disc when used with their HP 9122C drive. High-density discs simplify backup, offer improved performance, and are covered by a five-year warranty.

HP discs do make a difference. HP discs are precisely engineered to match the unique features of HP drives. To ensure 2 perfect match, HP engineers set exacting specifications to define the optimum (not merely compatible) discs for use in HP disc drives. The discs are then tested, round after round, during manufacturing and at final certification. The result is a premium product guaranteed to be 100 percent error free.

The HP 9122C disc drive can use either of the following 3½-inch microfloppy discs:

- 92192X high-density disc stores up to 1.42 Mbytes of data per disc
- 92192A double-sided disc stores up to 710 Kbytes of data per disc

Use high-density discs only with high-density drives such as the HP 9122C. Loss of data will occur if high-density discs are used in lower capacity drives.

Ordering information

Product No.	Description
92192X	Box of 10, 3%-inch high-density, double-sided, unformatted, 1.42/1.44 Mbytes (formatted capacity) microfloppy discs. For use with HP 9122C, 9153C, HP Portable Vectra CS and Vectra PCs with the 45813A internal disc drive. Note: Use with 1.42 and 1.44 Mbyte drives only.
92192A	Box of 10, 3%-inch, double-sided, unformatted, 710/720 Kbytes (formatted capacity) microfloppy discs. For use with HP 9122C, 9153C, Portable Vectra CS, Vectra PCs with the 45813A internal disc drive and other HP double-sided 3%-inch disc drives.

To order these products in the U.S. call 800-538-8787 between 6 a.m. and 5 p.m. PST. Users outside the U.S. can call one of the HP Direct numbers

listed at right.

Supplies

HP DIRECT order phone numbers

HP DIRECT Fast Phones – the easy, direct way for users to order supplies, accessories, media, furniture, and software from HP DIRECT.

Location	Telephone Number
Australia	(03) 895-2645 (03) 895-2615 (03) 895-2815 (03) 895-2861 (0222) 2500-614/615/616
Austria	(02) 761 31 11
Belgium/Luxembourg	
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	04 30 16 40
Finland	(90) 887 2361
France	(1) 69 28 83 90 (1) 69 28 32 64
Greece	(01) 672 6090
Italy	(02) 9236 9702
Japan	
Sagamihara	0427 59 1311
Osaka	06 304 6021
Middle East	
Athens	(01) 682 8811
Norway	(02) 24 60 90
South Africa	
Johannesburg	(011) 802 5111
Cape Town	(021) 437 954
Spain	(91) 637 4013 (91) 637 0011
Sweden	(08) 750 2400
Switzerland	(057) 31 24 90
The Netherlands	(020) 547 6606
United Kingdom	(0734) 69 72 01
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: Database/Analysis/Graphical Reporting for Technical Users

Abstract: Test Quality Company (TQC) develops, markets, sells, and supports software for traditional HP instrumentation customers using the HP 9000 Series 200/300 computers in BASIC, Pascal, and HP-UX. Specialization includes HP-IB systems using HP's RF and microwave instruments, data acquisition systems, and database management and analysis for ATE and engineering applications.

TekBase Data Management and Analysis System – A relational database and analysis product designed with technical/ATE users in mind. TekBase offers HP 9000 Series 200/300 users a tool that can be incorporated into application programs, supporting the BASIC, Pascal, FORTRAN, or HP-UX environments. Features include two- and three-dimensional graphics, capability to handle arrays of data and complex numbers, a powerful import/export capability, and an elaborate technical query language (TQL) interface.

- **Converse Screen/Forms Generator for Rocky Mountain BASIC** – A productivity tool for software developers who use BASIC on the HP 9000 Series 200/300. Provides error checking, hardware independence, elaborate graphics, and data management. Screen-driven creation utility for development of user screens and application library subprograms which may be included in user developed software.

Company Name: Test Quality Company

Address: 2316 Walsh Avenue
Santa Clara, California 95051
U.S.A.

Phone: 408-986-8880
FAX: 408-986-1479

Contact Person: Jim Jenkins

Type of Distributor Wanted: Software OEMs, Distributors, Technical Systems Retailers

Geographic Coverage: U.S. and Canada

Industry: Cross industry – project management scheduling and graphics

Abstract: SofTrak Systems has project management scheduling and graphics software for a full range of Hewlett-Packard computers (HP 150, HP Vectra PC, and HP 9000 Series 200, 300, 500, and 800).

Specifically, MicroTrak is a critical path method scheduling system that allows users to plan projects, coordinate resources, track accompanying costs, evaluate "what if" scenarios, quickly generate reports, and easily print time-scaled schedules. Prices for MicroTrak start at \$595 (U.S. list). PlotTrak is a companion to the MicroTrak system that enables users to produce a plotted visual representation of their schedule that effectively communicates project time frames and priorities to others involved in the project. What is actually produced with PlotTrak is a time-scaled precedence network diagram or Gantt bar chart. Prices for PlotTrak start at \$295 (U.S. list).

In addition to MicroTrak and PlotTrak, SofTrak Systems offers CustomGantt, a stand-alone Gantt chart generation software system. Without the need of a separate project scheduling system, Custom Gantt helps users quickly and easily create presentation quality Gantt charts for proposals and presentations. Prices for CustomGantt start at \$95 (U.S. list). Both PlotTrak and CustomGantt support the full line of Hewlett-Packard pen plotters.

For nearly three years, Hewlett-Packard sold MicroTrak and PlotTrak for the HP-UX operating system on the HP 9000 Series 200, 300, and 500 computers. HP recently returned the marketing responsibilities to SofTrak Systems. Inasmuch as MicroTrak and PlotTrak have been upgraded twice since most users purchased the software from HP, current users may upgrade to the latest releases for a nominal upgrade fee.

Company Name: SofTrak systems, Inc

Address: P.O. Box 16750
1574 West 1700 South, Suite 2C
Salt Lake City, Utah 84116
U.S.A.

Phone: 801-973-9610

Contact Person: Nancy Allen

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide (non-exclusive)

Industry: Chemical Fertilizer Industry

Abstract: "Fertilizer SOP" is an electronic management manual that contains standard operating procedures (SOP) designed specifically to organize the internal efficiency of running any kind of Chemical Fertilizer business, large or small, multinational or domestic. These SOPs implement and simplify numerous management principles. Domestic or international contracts can easily be assembled from "Standard Contract Clauses" provided by the manual. Many office procedures are standardized for practical application. Using this sophisticated productivity tool greatly raises managerial standards and reduces executive and all employees' costly time demands. It is similar to the "Our Own SOP" manual published by the same company for any type of organization.

Any of the typical SOPs are 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 percent owned subsidiaries are available. An informative free descriptive leaflet is furnished on requests written on company letterhead.

Included are a hardcopy of all procedures and everything else contained in the discs, an extra set of 24 color-coded separator tabs for a customized SOP, and an audio-cassette with customizing instructions (for those who tend not to read instructions).

Requirements necessary – HP 150 with double-sided disc drive, HP Portable, HP Portable PLUS, or HP Vectra PC, IBM or IBM compatibles, no special memory required; a text processor program able to read or convert Wordstar by Micropro International. A good printer.

Useful, but not essential –To derive maximum use of "Our Own SOP," in addition to WordStar it would be very helpful to have both HP Executive CardManager (ECM) and Lotus 1-2-3 by Lotus Development Corporation, Rel. IA.

Company Name: Central Resources Corporation
Computrex Division

Address: P.O. Box 96
Point Lookout, NY 11569-0096
U.S.A.

Phone: 516-431-2718

Contact Person: Leonard Linton

Type of Distributor Wanted: Open

Geographic Coverage: Worldwide

Industry: Computer Language Conversionware

Abstract: FORTRIX-C is a source language converter taking as its input a standard FORTRAN SOURCE program or program module, and outputting Kernighan & Ritchie C source language. When compiled with a standard C compiler, the output object program will be functionally similar to that of the original compiled FORTRAN program.

Because of the rich and diverse history of FORTRAN, FORTRIX-C has been designed to accommodate and automatically translate standard versions of FORTRAN plus closely related derivatives. In addition, many enhancements to standard FORTRAN developed by key manufacturers are also supported. FORTRIX-C has been ported to all HP 9000 series computers running the HP-UX operating system.

Abstract: COBLIX-C is a source language translator that takes as input a standard COBOL program and generates as output a C language program that, when compiled and implemented in an appropriate operational environment, will produce functionally equivalent results.

The COBLIX-C Basic Kernel System handles ANSI Level One and Level Two features plus extensions of vendors. The COBLIX-C Enhanced Support Package translates machine-dependent, vendor-specific, and ANSI COBOL 85 extensions found in many modern COBOL programs.

If you are using extended COBOL features, Rapitech Systems' engineers can custom tailor COBLIX-C to your requirements. COBLIX-C has been ported to run on HP 9000 series computers running the HP-UX operating system.

Company Name: Rapitech Systems, Inc.

Address: Montebello Corporate Park
Suffern, NY 10901
U.S.A.

Phone: 914-368-3000

Contact Person: Dr. Lawrence T. Woodruff

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 Channels Development
Attn: Marilyn Rauchle
19091 Pruneridge Ave.
Building 46UV
Cupertino, CA 95014
U.S.A.

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.

How to get your name added to the distribution for HP Channels

If you work for a company that is a value-added business for Hewlett-Packard and want to receive your own copy of *HP Channels*, call Hewlett-Packard and have your sales rep send your name and the information requested below to Tracy Wester.

HP sales reps only: To add new U.S. or Canadian accounts to the distribution for *HP Channels*, please send Tracy Wester the following information (on HP Desk 0000153 or to the address listed below): company name address, phone number, contacts' name/title, and HP sales rep name, COMSYS number, and engineer code. For accounts outside of the U.S. or Canada, contact Tracy Wester to get the name of the person who handles the distribution of *HP Channels* in your country.

Please address editorial correspondence to Tracy Wester at address listed below.

HP CHANNELS

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Corporate Marketing Communications
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Palo Alto, CA 94304-1298 USA*