

HP Computer Update

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November 1992

New HP 9000 Model 1210 provides low entry point to fault-tolerant family



The new **HP** industrial workstations and **real-time** computer systems combine the performance, support, and service that **form the foundation** of **HP's** reputation.

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New **HP-Convex Cluster Computing Program** is designed to help more users apply the power of multiple workstations to large, numerically **intensive** applications.

see page 14

The five new **HP JetDirect cards** for Ethernet and **AppleTalk** networks support and **enable** users to connect **peripheral** devices anywhere on LANs.

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The new **HP DeskJet 550C** and **DeskWriter 550C** printers offer **300-dpi laser-quality** black and color printing using both the **black and color** cartridges together.

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PACKARD**

HP Computer Update

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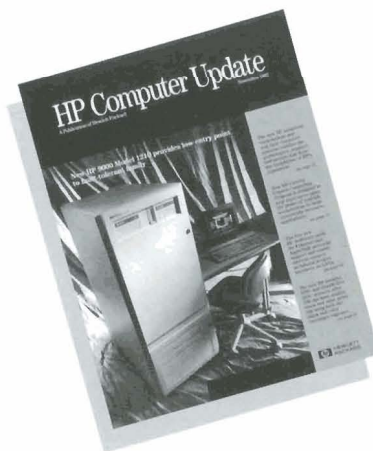
To order HP software or hardware products, call your HP representative. A telephone listing for sales offices in the U.S. and Canada appears on the back cover.

To receive literature or technical information on HP computer systems and workstations, and to order workstations and select computer products, call HP DIRECT at 800-637-7740 (U.S. only).

To receive technical information about any HP product, call the Customer Information Center: 800-752-0900 in the U.S., or 800-387-3867 in Canada

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HP Computer Museum
www.hpmuseum.net

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New one-year warranty for HP computer systems

Beginning November 1, HP computer systems **will** come with a new one-year, **onsite** warranty. This **will** replace the current 90-day warranty for most systems. Computer systems **will** have options that provide for faster repair response and software support.

The changes meet the needs of customers and HP Channel Partners who have increasingly expressed the desire for a one-year warranty and a choice of warranty terms to address different application requirements, systems classes, and distribution channels.

The warranty for most computer system products **will** provide for one-year, **onsite** repair with a guaranteed response time of within 72 hours. Users who need faster assured response, such as those running **mission-critical** applications, should order a system support option. System support options upgrade the assured response time to either next day or four hours and include phone support for software and software updates.

Listed below are the SPUs with the new one-year, **onsite** warranty. Systems not listed **will** offer the current 90-day onsite warranty.

- HP 9000 Series 300 measurement systems
- HP Apollo 9000 Series 400 and 700 workstations and Xstations

- HP 9000 Model 8X7S and HP 3000 Series 9X7, 9X7LX, and 980 business systems and servers
- HP 9000 Model 890S, HP 3000 Series 990, 990DX, 992, and 992DX Corporate Business Systems
- HP 9000 Series 1200 fault-tolerant systems
- Upgrades to **listed** SPUs
- **All** remarketed computer systems

The new HP 9000 Model 742rt board-level CPU for the VME bus **will** come standard with a one-year, return-to-HP warranty. A board swap repair strategy is more consistent with the needs of users for that product.

The new warranty **will** apply to systems shipped on or after November 1. The factory **will** notify users in the United States and Canada who have systems in backlog on November 1 about the change in warranty terms.

Peripherals and accessories warranty

Most peripherals and accessories that support the SPUs with the new warranty **will** have a one-year or longer warranty. The warranty repair site could be either **onsite** or return to HP. Products with a return-to-HP warranty are typically low cost as well as easy to replace and transport. System support options to upgrade to **onsite** repair **will** be available.

Peripherals and accessories with an **onsite**, one-year or greater warranty include:

- Memory, add-on CPUs, and floating-point coprocessors that support SPUs with the new **warranty**
- I/O and network interface cards that support SPUs with the new **warranty**
- Graphics heads for workstations
- Mass storage products such as magnetic **disk drives**, optical disk drives, DAT, and ½-inch tape drives
- Remarketed peripherals that have equivalent new peripherals with the new warranty
- High-end racks and integrated cabinets
- Networked HP LaserJet III and IIISi printers (come standard with **next-day** response)
- HP 7600 Series plotters (come standard with **next-day** response); and HP DraftPro and DraftMaster plotters (come standard with a three-year warranty and **next-day** response)

Peripherals and accessories with return-to-HP, one-year or greater warranty include:

- Terminals
- Input devices such as keyboards, mice, and digitizers
- Most racks, **rackmounts**, and cabinets
- Most cables

- PC networks and network MAUs
- PC monitors
- HP LaserJet IIP, IIIP, and III, PaintJet, and DeskJet printers (HP DeskJet comes standard with a one- or three-year warranty depending on model)
- HP ColorPro, 7475, and 7550 plotters

Installation and site preparation

Several SPUs and accessories currently come with installation or site preparation as part of the base warranty. In general, they **will** continue to include those services with the new warranty.

Most accessories and peripherals do not come standard with installation. If they are covered by the new warranty, they **will** also be eligible for installation if they are purchased with an SPU on a coordinated delivery and are part of the system configuration, and the SPU includes installation as part of the warranty. Users **will** be able to receive installation for products that do not come with installation by ordering a system support option.

HP DesignPlus workstation furniture price increase

Prices on the following products **will** increase on the January 1993 HP Price List. The new prices are effective February 1.

Product No.	Description
92211E	Drawer, 4-inch height
92211F	Drawer, 6-inch height
92211G	Drawer, 12-inch height
92211N	Mobile drawer cabinet
92211U	Joining bracket kit
922138	CAD table, 48-inch width
92213D	Document holder
92213F	CAD table, 59-inch width
92214A	System table, 43-inch width
922148	System table, 48-inch width
92214C	System table, 59-inch width
92214J	90-degree corner
92214K	CAD workstation corner



The promotions listed in *HP Computer Update* contain brief information about HP promotions currently in effect — including new promotions, promotions with changes (underlined), and promotions that are ending.

For more details on any of the following promotions, contact your HP representative.

Special considerations may apply to some of these promotions, and discount percentages can vary by country. Note: promotional programs listed with a "Worldwide" scope may not be available in all countries. Check with your HP representative for local availability.

Hewlett-Packard assumes no responsibility for any errors that might appear in these listings.

Workstations

HP GlancePlus UX Trial Software Kit Discount

If you purchase an HP GlancePlus UX license within 90 days of purchasing an HP GlancePlus UX trial software kit, you can receive a promotional discount off the price of the software license.

- **Scope:** For North America only
- **Eligible products:** P/Ns B1790A, B2660A, B1791A, B2661A, B1807A, B2804A
- **Start date:** April 1, 1992
- **End date:** December 31, 1992
- **Promotion number:** 2.626

Software Transfer Program *end*

If you are moving from an HP 9000 Series 3001400 HP-UX platform to an HP Apollo 9000 Series 700 PA-RISC platform, you are eligible to transfer software licenses and receive the discounts on the Series 700 products.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** Check with your HP representative
- **Start date:** June 1, 1992
- **End date:** November 30, 1992
- **Promotion number:** 2.648

3D Aggressor — Model 720CRX *change*

You can purchase the HP Apollo 9000 Model 720CRX-24Z (P/N A2264A0) for the promotional price of approximately \$25,390 (U.S. list)/\$25,135 (reference price). Also, you can purchase the Model 720CRX-24 (P/N A223A) at the promotional price of approximately \$23,390 (U.S. list)/\$23,650 (reference price).

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns A2263A/64A
- **Start date:** September 1, 1992
- **End date:** December 31, 1992
- **Promotion number:** 2.670

Domain "Welcome Back to Support"

If you are currently unsupported and sign up for a minimum of one year of ApolloLine Support or one year of Domain/OS Software Only Support, you can receive a 50% promotional discount on any Basic Software Update required to bring your system up to date.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** Check with your HP representative
- **Start date:** September 1, 1992
- **End date:** February 28, 1993
- **Promotion number:** 2.672

HP-UX CD-ROM Drive Offer *new*

If you purchase a CD-ROM starter kit (P/N B2950A) and HP-UX CD-ROM material update service (P/N H2069A or H2077A +S00 or comprehensive maintenance), you can receive an SCSI CD-ROM drive at no additional charge.

- **Scope:** Worldwide (except Europe) (*check with your HP representative for local availability*)
- **Eligible products:** P/N B2950A and HP-UX CD-ROM material update service (either P/N H2069A +S00 or H2077A +S00 or comprehensive maintenance) and P/N A1999A
- **Start date:** October 1, 1992
- **End date:** March 31, 1993
- **Promotion number:** 2.686

Networks

Enhanced Competitiveness — DTC16 Solution

If you purchase an HP 9000 Series 800 or 900 Series HP 3000 system with one or several HP DTC16s (data communications and terminal controller), you are eligible for a promotional discount on the DTCs. The DTCs must be fully loaded (two asynchronous options providing 12, 14, or 16 ports per DTC16, depending on the option combination).

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** Check with your HP representative
- **Start date:** July 1, 1992
- **End date:** December 31, 1992
- **Promotion number:** 2.655

HP EtherTwist Buy Three, Manage Free

With this promotion, you will receive a free copy of HP OpenView Interconnect manager/DOS network management software (P/N 27256D) when you buy any three manageable HP EtherTwist hubs, bridges, and/or routers — a savings of \$4,000. You can participate in the promotion by mailing a special claim card (received from direct mail, HP FIRST, or your authorized HP dealer), the bar code labels from the product packages, and a copy of your invoice to HP. HP will fulfill claims for the free software by mail.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** Manageable HP EtherTwist hubs, bridges, and routers: 26873A/74B/82A/85A/88A/88B/92A/99A
- **Start date:** September 1, 1992
- **End date:** January 31, 1993
- **Promotion number:** 2.669

National User Group Discount Coupon

Each person attending the National User Group Meeting will receive a \$500 promotional discount coupon that can be used against the purchase of PL 1L products (excluding consulting and all training classes less than \$2,000). More than one coupon can be used on any single order as long as the total discount percentage does not exceed 49%.

- **Scope:** North America
- **Eligible products:** PL 1L products excluding consulting and all training classes less than \$2,000. Check with your HP representative
- **Start date:** October 1, 1992
- **End date:** March 31, 1992
- **Promotion number:** 2.685

Peripherals

Optical Library Trade-in

If you are a current Optical Library user, you can trade in your used unit and purchase a new high-performance drive library (Models 20C, 60C, or 100C), of equivalent or greater capacity, and receive trade-in credit. Exception: Model 10 can only be traded in for a Model 20C or higher.

- **Scope:** Worldwide (*check with your HP representative for local availability*)
- **Eligible products:** P/Ns C1700C/04C/10C/14C/15C
- **Start date:** September 1, 1992
- **End date:** June 30, 1993
- **Promotion number:** 2.671



New HP Transact releases

HP Transact/iX Version A.04.00 and HP Transact, Version A.09.00 (P/Ns 30138A and 32247A) are the new versions of HP Transact for HP MPE/iX 4.5 and MPE V Release 30.

HP Transact is a low-cost, high-performance, flexible programming language for HP MPE V and MPE/iX systems. **Anything** that can be done in a 3GL such as COBOL can be done in HP Transact with fewer lines of code. Some users are achieving up to a 15:1 reduction in lines of code using HP Transact versus COBOL — resulting in **significantly** lower development and maintenance costs. Migrating from HP Transact V to iX is easy and users experience a gain of five to eight times the performance. For users who are still using COBOL or another 3GL, HP Transact can be the solution for increased application and maintenance productivity.

Hewlett-Packard is enhancing HP Transact to make the product more **powerful** and is delivering this release and another one later this year that will contain key enhancements and defect fixes. The features and fixes are part of the plan to meet the continually growing needs of the programming community.

Enhancements and benefits

This HP Transact release contains enhancements and defect fixes promised to RAPID Special Interest Group (SIGRAPID) and the customers at Interex in August 1991. It includes high-priority enhancements, including 6 of the top 10 enhancement requests identified by SIGRAPID.

- *HP TurboIMAGE Dynamic Rollback (X) support* — eliminates the high overhead of data recovery
- *Automatic enumeration of fragmented lists* — more effectively deals with a fragmented list register
- *Error message includes program name where error is occurring* — makes it easier to trace errors
- *Variable initialization to binary, octal, or hex* — makes intrinsic calls easier
- *Ability to set breakpoints on a data value in TRANDEBUG (HP Transact symbolic debugger)* — provides greater control when debugging applications
- *Ability to call HP Transact/iX programs from COBOL or Pascal* — provides a link from the new code to the existing application
- **HP TurboIMAGE critical item update support**

This release includes 20 defect fixes, 28 software service requests, and 30 documented service requests resolved; and over 150 documentation service requests closed. Reference manuals have been cleaned up and a separate quick reference guide has been implemented.

This delivery of HP Transact enhancements offers proof that HP is committed to meeting the demands of HP Transact users. Users with current support contracts will receive these enhancements. If users need these enhancements immediately, the release is also available through the field via general release patches.

SCSI DDS DAT on HP 3000 CIO systems

Testing has been completed on the HP 2.0-GB SCSI DDS DAT product (P/N C1520B) and it is now fully supported for all functionality on MPE/iX CIO 4.0 systems. The SCSI DDS DAT product **has** been available on NIO systems since HP MPE/iX 3.1. The DAT drive can be ordered in cabinets (P/Ns C2464R and C2464F).

The DAT drive requires firmware Revision 8.61 if it is to be used as an **autoinstalled** device, but users should roll the DAT **firmware** to Revision 8.61 regardless of its use. Users who received DDS DAT drives prior to or near September 1 probably have older **firmware** versions and will need to upgrade. Those with DDS DAT drives on NIO systems running HP MPE/iX 3.1 received a patch with the MPE/iX 4.0 release that included the firmware upgrade.

Contact your HP representative for more information.

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New HP 9000 Model 1210 low-end fault-tolerant system

The HP 9000 Model 1210 (P/N A1730A) is the new low-end UNIX® fault-tolerant integrated system computer that comes bundled with two MC68040/25-MHz processors, 16 MB of shadowed main memory, 880 MB of mirrored disk storage, 4–8 GB DAT, Ethernet card with TCP/IP software, and HP-FX operating system.

The VME-based system supports HP peripherals as well as C and C++ compilers and debuggers. It supports industry-standard databases, including Oracle Parallel Server (Version 6.2) and Informix Online (Version 4.1), and industry-standard networking including Ethernet 802.3 and X.25.

Features and benefits

The Model 1210 is expandable online to support high-performance online transaction processing (OLTP) applications. It supports four-way symmetric multiprocessing, up to 192 MB of shadowed main memory, 52 GB of mirrored disk storage, 900 users, and 32 VME-based I/O controllers. The single-cabinet system comes bundled with processors, memory, disks, and operating system. Providing a low entry point to HP's fault-tolerant family, the system is object-code compatible with Models 1245 and 1240. The Model 1210 is a fault-tolerant system ensuring less-than-a-second transparent recovery from hardware faults. Applications can benefit from its fault-tolerant design with no code changes, and system managers can modify configuration online with no scheduled downtime.

Model 1210 versus 1245 comparison

Description	Model 1210	Model 1245
Microprocessors	MC68040/25 MHz	MC68040/33 MHz
Number of processors	2–4	2–32
Memory (shadowed)	16–192 MB	32 MB–2 GB
Disks (mirrored)	880 MB–52 GB	650 MB–250 GB
Users	Up to 900	Over 5,000

Ordering information

Product No.	Description
A1730A	HP 9000 Model 1210 fault-tolerant system with VME I/O subsystem; complete 2:2 (16 MB):2 system bundle ¹
Opt. 503	Convert memory to four 16-MB memory elements (32 MB mirrored)
Opt. 506	Convert memory to two 64-MB memory elements (64 MB mirrored)
Opt. 510	Convert memory to four 64-MB memory elements (128 MB mirrored)
Opt. 602	16-user ports, including a dual terminal network interface and two 9-port cluster controllers with Centronics interface
Opt. 1F8	Delete Ethernet interface and TCP/IP
Opt. 1AW	Delete operating system software ²
Power option?:	
Opt. OEF	208V/120V North American power
Opt. OED	200V Japanese power
Opt. OEB	220–240V international power

¹ Bundle includes one main bay, two Model 1210 processor elements, two 16-ME memory elements, one battery backup unit, two VME I/O elements, two 8-slot VME card cages, one disk/DDS tray assembly with 10 slots for disk drives and two slots for DDS tape drives, two 880-MB disk drives, two VME SCSI interfaces, one 4–8-GB DDS tape drive with data compression, one Ethernet interface, TCP/IP with ARPA/Berkeley services and manuals, one HP-FX 32-user license and software installed on disk, one set of system manuals, and one set of operating system manuals.

² You must order the operating system separately and order Opt. 1F8 if Opt. 1AW is ordered.

³ One power option must be specified.

UNIX is a registered trademark of UNIX System Laboratories Inc. in the U.S.A. and other countries.



Verity TOPIC included in HP Cooperative Computing Solutions

Verity TOPIC (P/Ns B3124A and B3171A) is a client/server tool for knowledge and clerical workers that provides for easy storage and retrieval of textual documents based on document content. Retrieval is based on the user specification of keywords that either directly appear in the document or are similar in concept to other words and phrases in the document.

Verity TOPIC is part of the HP Knowledge Worker Solution of the newly announced HP Cooperative Computing Solutions.

Features and benefits

- *Concept retrieval* — captures user knowledge and expertise in a knowledge base of related ideas; allows users to search for documents using industry- or company-specific terminology and to preserve organizational knowledge even when key employees leave.
- *Relevance ranking* — lists retrieved documents in order starting with the document most likely to satisfy the user queries; helps users find information fast.
- *HyperLinks* — allows HyperLink connections to be made from documents to images, annotations, and electronic cross references; provides an accurate and fast way (by means of concept search) to find images and access cross-referenced documents.

- *Data feed handling* — filters and selectively disseminates in real time live-data feeds like news wires, press releases, and government filings.

Clients of choice — supports HP Apollo 9000 Series 700 workstations, Microsoft® Windows PCs, HP NewWave PCs, and Apple Macintoshes as clients to an HP 9000 Series 800 server (client software for other UNIX system workstations and OS/2 PCs may also be obtained from Verity).

Ordering information

Verity TOPIC is not an HP product. It is representative of a new category of products referred to as **pass-through** products. The product will be sold jointly by HP and Verity sales forces and parts of the solution will come from both companies.

HP adds value to the Verity product by testing and integrating the software with **networking** and other Knowledge Worker Solution applications as well as **providing** installation scripts and single vendor support for the full solution.

Consulting and training (P/N H2435A) for HP Document Manager are not required, but they are recommended.

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

Verity, TOPIC, and HyperLink are registered trademarks of Verity, Inc.

HP PE/WorkManager now shipping

HP Precision Engineering (PE)/WorkManager (P/Ns B2980A-B2982A) is now shipping. Features include the following:

Electronic vault — allows users to manage multiple types of electronic data files. Relational database technology makes search and retrieval fast and easy. **Simple** yet powerful access control lists (ACLs) are available to ensure that only authorized users can create, change, or delete **data**.

Classification — allows **similar** parts, such as brackets or fasteners, to be organized and categorized within the vault so users can browse through different groups to find specific parts more easily.

Product development management — In HP PE/WorkManager, users add references to data to an electronic "packet" that is routed to project members for action. Packets can be split and merged, **permitting** concurrent effort by different team members. An audit module allows product development teams to capture changes over time and answer questions such as "Who made what decision when?"

Configuration management — manages bills of materials (BOMs) including multiple views and options and the ability to record changes over time.

- *Product release management* — Release approval forms can be routed for electronic signoff. "States" managed by HP/PE WorkManager control "who" can approve "what" at each stage in the project. Rules can be applied to simulate a given company's release procedures.
- *Product change management* — HP/PE WorkManager provides extensive capabilities to manage and track product changes. Revision and version control are fully supported.
- *Application integration* — allows data management from different applications. Application integration products are available for HF CAD products such as HP ME10/30 and HP PE/SolidDesigner. Example integrations are available to AutoDesk's AutoCAD™, Parametric Technology's Pro-Engineer, Mentor Graphics' Falcon, Frame Technology's FrameMaker, and Point Control's SmartCAM. Additional integrations can be developed using HP's Interlink Integration Product which establishes interprocess communication between HP/PE WorkManager and other applications.

Configuration information

HF PE/WorkManager is offered on the HP Apollo 9000 family of UNIX-system workstations. It is also accessible from X terminals, ASCII terminals, and IBM-compatible PCs. HF PE/WorkManager supports HP ALLBASE relational database management system (RDBMS) and Oracle RDBMS.

AutoCAD is a U.S. trademark of Autodesk, Inc.

HP DataPair/800 to MirrorDisk UX upgrade

The HP 9000 Series 800 high-availability product is enhanced with the addition of an upgrade from HP DataPair/800 to MirrorDisk/UX (P/N B2491A, Opt. 006). HP DataPair/800 users must upgrade to MirrorDisk/UX to take advantage of the Logical Volume Manager (LVM) component of HP-UX 9.0 or upgrade to an HP Corporate Business Server 890. HP DataPair/800 does not support LVM and is not supported on Model 890 systems.

Users who need one of the following three features that are not supported with HP MirrorDisk/UX may not wish to upgrade.

- *Atomic Synchronization* — allows all disks in a mirrored string taken offline for backup to be stamped with the exact same time
- *Read-Only Access* — allows mirrored disk(s) taken offline for backup to be backed up by a second system, allowing the first system to continue processing at the same performance level
- *Disk arrays* — the disk arrays (P/Ns C2252HA/B and C2254HA/B) are not supported with HP-FL I/O cards (P/N A1749A or 27111A)

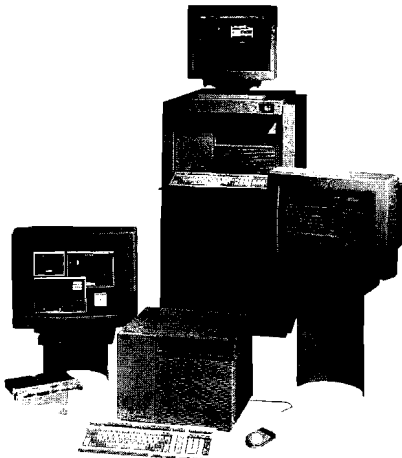
Atomic synchronization and read-only access will be supported with HP MirrorDisk/UX at a future HP-UX release.

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Introducing HP industrial workstations and real-time computer systems



HP has added a complete line of high-performance industrial workstations and real-time computer systems based on the proven PA-RISC architecture. The new systems include HP 9000 Model 742rt, a VMEbus board-level computer; Model 7451, a four-EISA expansion slot industrial workstation; and Model 7471, a 6VME, two-EISA expansion slot industrial workstation. The systems combine the performance, support, and service that form the foundation of HP's reputation.

The right systems solutions

Throughout every network and client/server scenario, for challenges as diverse as test and measurement, process control, and product development, HP's PA-RISC systems provide the right solutions in a complete open systems environment. The end result is a complete line of high-performance industrial systems that can be integrated into your real world solutions.

New HP 9000 Series 700i industrial workstations at entry-level prices

The new HP 9000 Model 745i/747i industrial workstations are high-performance, long-life, industrial rackmount workstations with built-in system modularity for easy serviceability.

Features and benefits

- *PA-RISC performance* — The Series 700i systems are based on the 50-MHz PA-RISC 7100 architecture and perform at 69 SPECmark '89, 36 SPECint92, and 72 SPECfp92. They are configurable with 16–128 MB of ECC RAM for high reliability.
- *I/O flexibility and expandability* — The systems include four EISA expansion slots (Model 7451) and six VME and two EISA expansion slots (Model 7471); integrated instrument HP-IB; and standard Ethernet, HP-HIL, audio, SCSI II, and Parallel (Centronics) printer ports and dual RS-232-C serial ports. Complete industry-standard built-in networking is provided with support for NFS, TCP/IP, and ARPA/Berkeley Networking Services.
- *Multiple-monitor support* — Model 7471i includes an SGC interface slot for CRX or Dual CRX cards in addition to onboard graphics support. Model 747i can support up to three monitors. Supported monitors include 14-inch (1,024×768), 17-inch (1,024×768), and 19-inch (1,280×1,024) monitors. The CRX cards support the 19-inch monitor only.
- *Rackmount design* — Series 700i industrial workstations are designed with front, back, or center rackmounting capabilities. Model 747i is seven rack units (12 inches) and Model 745i is four rack units (7 inches) high. Each system component is completely modular for easy access and service.
- *Flexible mass storage* — The mass storage module allows maximum flexibility with front or back removable media access and three separate storage bays for maximum internal disk capacity of 3.15 GB. Other supported internal peripherals: CD-ROM, 3%-inch floppy, 2-GB or 4–8 GB DDS tape drives.
- *Long product life* — HP is committed to a 5-year product life and 10-year product support for Models 7451 and 7471. HP will continue to develop, upgrade, and add to this product line while still providing compatibility between the various components when possible.

Ordering information

Product No.	Description
A2638A	HP 9000 Model 745i industrial workstation; bundle includes color monitor, HP-UX license to use, 16-Mi3 ECC RAM
A2639A	HP 9000 Model 747i industrial workstation; bundle includes 14-inch color monitor, HP-UX license to use, 16-Mi3 ECC RAM
A2637A	HP 9000 Model 745i instrument controller bundle includes 17-inch color monitor, HP-UX license to use, 16-MB ECC SIMM RAM

New HP 9000 Series 700rt real-time computer system

The HP 9000 Model 742rt VME board computer (P/N A2260A) is a VME board computer product, based on the 50-MHz PA-RISC 7100, that runs HP-RT, the new standards-based real-time operating system.

It is ideal for HP Channel Partners who supply high-performance real-time solutions to aerospace, telecommunication, industrial automation, and measurement automation markets.

Features and benefits

By using the PA-RISC 7100, HP brings the latest RISC technology to the board computer market. At 50 MHz, the Model 742rt provides over 61 MIPS of CPU performance, making it one of the fastest uniprocessor VME board computers. The high performance allows users to write applications that may be expanded later.

The Model 742rt comes standard with 8 MB of ECC RAM and can be upgraded with up to 64 MB. ECC RAM comes in a pair SIMMs and provides single-bit error correction and multiple-bit error detection. This provides higher memory reliability than parity error detection, which is found in most other board computer implementations.

The I/O required for computer operation is provided through the front bulkhead LAN AUI, SCSI-II, parallel (Centronics), and two RS-232-C ports. Purchasing a separate I/O module is not necessary. The HP-RT developer's kit supplies drivers that support the I/O ports.

Three onboard hardware timers, two 16-bit and one 32-bit with a resolution of 1 microsecond, are provided for incorporation into real-time applications that require high-timing accuracies. A battery-backed-up time-of-day clock keeps the system clock running when the system is powered down.

The Model 742rt fits into a standard 6U VME chassis and requires two slots. An HP-RT run-time license is included with each purchase of the model. HP-RT is a standards-based real-time operating system, bringing with it all the benefits of an open system with the response and determinism of a real-time system.



HP-RT: new real-time operating system for Series 700rt

The HP-RT developer's kit provides files and tools to develop an HP-RT operating system and its real-time applications. It includes backplane networking products that allow the HP-RT system to communicate over a common VMEbus backplane with other HP-RT, HP-UX, and VxWorks (Release 5.0) systems using standard networking facilities, ARPA/Berkeley, and NFS.

It was developed for HP Channel Partners who supply high-performance real-time solutions to aerospace, telecommunication, industrial automation, and measurement automation markets.

HP-RT features and benefits

HP-RT is a fully deterministic real-time operating system and provides guaranteed interrupt response time of less than 100 microseconds. It is for real-time applications where high performance and reliability are required.

HP-RT provides an API-based on POSIX.1 for system calls, POSM.4 for real-time extensions to POSM.1, and POSIX.4a for threads. Users can take advantage of open system benefits on a real-time operating system: vendor independence, technological obsolescence protection, software investment preservation, off-the-shelf application availability, and trained programmer availability.

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The subsystems of HP-RT include ARPA/Berkeley networking services, NFS, X clients, and X and OSF/Motif™ libraries. Programming languages supported are C/ANSI C and C++. These standard subsystems also take advantage of open system benefits.

Kit features and benefits

The developer's kit is hosted on HP Apollo 9000 Series 700 or HP 9000 Series 800 systems, Release 9.0 or greater. Programmers can take full advantage of software investment on the HP-UX system: compilers, linkers, CASE, and other tools. The use of already familiar tools can reduce the learning curve for the kit.

Symbolic cross debuggers on the HP-UX system also simplify kernel and process debugging on the target HP-RT system. The user interface and commands are based on xdb, the HP-UX debugger. Not only is the user able to debug programs symbolically, but the user interface and commands are the same as xdb, reducing the learning time.

Backplane networking features and benefits

The backplane networking allows HP-RT to communicate with other HP-RT, HP-UX, and VxWorks systems running on VME board computers in a common VMEbus backplane. This helps to reduce the footprint and LAN wiring of the total system by placing all the processors in one chassis communicating over the backplane as if it were a LAN connection.

Ordering information

Product No.	Description
B3138A	HP-RT developer's kit license to use
B3127A	HP-RT developer's kit media and documentation for HP Apollo Series 700
B3128A	HP-RT developer's kit media and documentation for HP 9000 Series 800
B3131A	HP-RT backplane networking hosted on Series 700
B3132A	HP-RT backplane networking hosted on Series 800
B3174A	HP-RT backplane networking

Additional options are available.

OSF/Motif is a trademark of the Open Software Foundation in the U.S. and other countries.

HP-RT Developer's Kit LTU product structure change

The HP-RT Developer's Kit license-to-use (LTU) product (P/N B3138A) structure has been changed to be based on maximum number of concurrent users, 1 or 10 users. This change has been implemented to put the LTU product more in line with HP-UX ISV products, making it more understandable and reducing potential ordering problems.

The single-user license allows the use of the HP-RT Developer's Kit software from one HP-UX server (HP 9000 Series 800/HP Apollo 9000 Series 700). The 10-user license allows up to 10 developers to use the HP-RT Developer's Kit software from one HP-UX server. A separate license is required for each server.

Product No.	Description
B3138A	HP-RT developer's kit LTU
Opt. UAO	Single-user license
Opt. 0A9	10-user license

New HP Apollo Series 700 Cluster Computing Program

A joint marketing program between HP and Convex Computers was recently announced — the HP Apollo 9000 Series 700 Cluster Computing Program. The program is designed to help more users apply the power of multiple workstations to large, numerically intensive applications like computational chemistry, fluid dynamics, and financial analysis. Target industries include oil and gas, education, and financial services.

The program allows users to purchase clusters of Series 700 workstations using HP Channel Partner solutions. Packages include Linda, NQS, PVM, Express, ISIS, and Load Balancer, optimized for a Series 700 cluster. A specially designed rack is available to mount Series 700 workstations as a central cluster.

HP has expanded its strategic relationship with Convex Computer to include the Series 700 cluster program. Convex has become an HP Channel Partner and will be selling HP workstation clusters to operate with the 3 Series Supercomputers. Convex has ported and will support the NQS network queueing system and the PVM parallel programming environment to Series 700 workstations. Convex has also ported its VECLIB suite of math and scientific libraries to the Series 700 and will sell this software as a standalone product. This software will help scientific and technical users who use a Convex computing environment.

Contact your HP representative for more information.

HP Visual Editor on HP-UX 9.0

HP Visual Editor 2.1 is a new version of the existing HP Visual Editor 2.0 products that provides HP-UX 9.0 users with the easy-to-use and easy-to-learn editor. It is the primary HP editor for novice UNIX users and application users under the X window environment. HP Visual Editor 2.1 is supported on HP-UX 8.0X and was designed for HP-UX 9.0 users who want to perform general text and program editing tasks.

Enhancements

- Support of the ISO88591 character set fonts
- Support of the AT keyboard on HP X-terminals

Ordering information

Product No.	Description
B1503A	HP Visual Editor 2.1 for HP 9000 Series 300/HP Apollo 9000 Series 400 systems and HP 700/X on HP-UX 8.0 and 9.0
B1505A	HP Visual Editor 2.1 for HP 9000 Series 600/1800 systems and HP 700/X on HP-UX 8.0 and 9.0
Opt. AA1	Software on 1/2-inch magnetic tape
Opt. AAH	Software on DAT tape

P/N B1503A/B1505A options:

Opt. UAO	One-seat license to use
Opt. UA3	Package of 8 seats license to use
Opt. UA5	Package of 16 seats license to use
Opt. UA7	Package of 32 seats license to use
Opt. AAO	Software on 5/8-inch cartridge tape
Opt. AAU	CD-ROM code word certificate
Opt. 0B1	Hard-copy manuals
B1504A	HP Visual Editor 2.1 1-seat license to use for HP Apollo 9000 Series 700 systems and HP 700/X on HP-UX 8.0 and 9.0
Opt. AAH	Software on DAT tape
Opt. AAU	CD-ROM code word certificate
Opt. OBJ	Hard-copy manuals

Users who need HP Visual Editor 2.1, for use on HP-UX 9.0 or for the enhancements listed above, need to place their orders during the month of November. Specify the following:

- Version 2.1 is required
- The required date should be *after* December 15, 1992.

Orders without these special instructions will ship with HP Visual Editor 2.0, which runs only on HP-UX 8.0 and doesn't have the enhancements listed above.

HP DCE Developers' Environment for HP-UX 9.0

HP DCE Developers' Environment for HP Apollo 9000 Series 700/HP 9000 Series 800 platforms is HP's first distributed computed environment (DCE) product that provides a fully functional, standards-based framework to develop, administer, and use distributed and client/server applications. It provides an implementation of Open Software Foundation™ (OSF) developers' services and contains additional tools to facilitate the development of DCE-based applications.

Features and benefits

HP DCE Developers' Environment consists of two software products: DCE Core Services and DCE Application Development Tools. HP DCE Core Services contain the following DCE technologies:

- *Remote Procedure Call (RPC)* — Both TCP and UDP versions are available to provide efficient operation over both LAN and WAN.
- *CMA threads* — This is a user-space implementation of the POSIX 1003.4a pthreads interface. It includes a thread-safe C library.
- *Naming* — Cell Directory Services (CDS) with Global Directory Agent (GDA) to Domain Naming Service (DNS) provide multicell operation and include CDS replication.

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- **Security** — U.S. version provides data encryption with the Data Encryption Standard (DES).
- **Time** — Distributed Time Service (DTS) guarantees time synchronization across the environment.

HP is committed to making DCE as easy as possible to develop with, administer, and use. HP has made it easier to install, configure, and validate the DCE Core Services by integrating the DCE install/configure process into HP-UX's OSF/Motif-based, menu-driven system administration manager (SAM). Additional DCE administration tools developed by HP are included to help HP's online support organization and customers perform DCE administrative tasks. HP DCE Core Services are fully interoperable with OSF DCE reference platforms.

HP provides DCE Application Development Tools to increase the productivity of DCE application developers. HP DCE Application Development Tools offer a DCE RPC tracing and logging facility with an error-reporting facility to aid in DCE application debugging. The Instrumented Interface Definition Language (IDL) compiler can be used to trace RPC activity in distributed applications. The software product includes several online DCE application examples to help novice and expert DCE programmers get started.

DCE introduces the concept of a cell. The cell is an administrative unit typically defined as a group of users that share the same resources. Each DCE cell must contain at least

one CDS server and one security server. The systems in the DCE cell, including the servers, are also DCE clients. The DCE client consists of RPC, threads, naming client, security client, and both time client and server. In addition, the CDS server can be replicated so that there are two CDS servers at one time running in a DCE cell. This ensures availability of the CDS server; if the primary server fails, the replicated CDS server provides backup. Security server replication is not yet supported by the HP DCE Developers' Environment.

Product line positioning

Opportunities where the HP DCE Developers' Environment can be applied include downsizing from a mainframe to a computational cluster where the program running on the mainframe is rewritten to be distributed across clients and servers within the cluster; converting existing NCS or ONC RPC-based applications into DCE-based applications; large, heterogeneous environments where users need to write distributed applications on industry-standard frameworks that will run on all of the different systems.

HP Channel Partners currently have different versions of their software to accommodate each of their supported systems. With HP DCE Developers' Environment, they can layer software on top of DCE; and because DCE will be supported on most if not all computer systems, Channel Partners will need only one version of their software.

Ordering information

Product No.	Description
<i>HP DCE Core services</i>	
B2920A	HP DCE Core Software for Series 700, U.S. version; includes media and documentation
B2921A	HP DCE Core Software for Series 700, non-U.S. version; includes media and documentation
B3190A	HP DCE Core Software for Series 800, U.S. version; includes media and documentation
B3191A	HP DCE Core Software for Series 800, non-U.S. version; includes media and documentation

DCE core software provides DCE run-time software for DCE clients and CDS security servers. You need to purchase only one copy of the DCE Core Software to build a DCE cell. If you are ordering for a mixed Series 700/800 DCE cell, you do not need to buy both software products; order either P/N B2920A or B3190A (for U.S. users) or P/N B2921A or B3191A (for non-U.S. users). You must then purchase the following licenses to run the DCE cell.

Product No.	Description
<i>HP DCE Client Licenses¹</i>	
B2923A	For Series 700
B3189A	For Series 800
<i>HP DCE CDS Server Licenses²</i>	
B2924A	For Series 700
B3187A	For Series 800
<i>HP DCE Security Server Licenses³</i>	
B2925A	For Series 700
B3188A	For Series 800

¹ Purchase one DCE client license for each system in the DCE cell, including the CDS and security servers.

² There must be at least one CDS server in the DCE cell. Purchase one DCE CDS server license for each CDS server and the CDS replica, if there is one.

³ There must be one security server in the DCE cell. Purchase one DCE security server license for the security server.

Referencing Program Update

For U.S. and Canada only

HP's Americas Value-Added Channels Marketing Center (VMC) announces several changes to the program levels and services offered as part of its HP Channel Partners Program. The following changes are effective immediately for Computer Systems Organization Channel Partners:

- All current "user-referenced services" — including eligibility for lease/bundled financing — are available to Channel Partners at the "listed program level.
- User referencing has been discontinued as a formal program.
- The User Referenced Solution insignia and Exhibit I-2 are obsolete.

During the past year, HP has been searching for ways to simplify the structure of CSO's channel marketing programs. Earlier this year, most of the services offered at the user-referenced level were moved to the listed level. The only services still remaining at the user-referenced level were:

- Use of the User Referenced Solution insignia
- Eligibility for HP's lease/bundled financing program.

The introduction of the new HP Channel Partner insignia has now made it possible for us to completely consolidate our channel program levels and eliminate the referencing program and insignia

Channel Partners in the U.S. and Canada were notified of the changes in a letter sent during the week of October 5 to presidents, executives, and marketing contacts listed in the VALID database. For more information, ask your company's executives or marketing representatives for a copy of the letter or contact your HP representative.

Refurbished Model 400t/425t workstations price reductions

For the U.S. and Canada only

Prices have been decreased on fully refurbished HP Apollo 9000 Models 400t and 425t workstations from HP's Finance and Remarketing Division (FRD).

All configurations and options of P/N A1630A/E (except Opt. ADJ, 19-inch high-resolution screen) can be shipped within two weeks after receipt of an order. Price reductions range from 50–80% off new U.S. list. For example, a diskless Model 400t system with a monochrome monitor and 8 MB of memory is now priced at \$2,067 — a savings of 70% off new list.



These refurbished products are targeted toward HP Apollo Domain users who want the optimum system performance with Apollo Token Ring cards and extremely price-sensitive users who want workstation performance at PC prices. These new prices make these products the lowest-cost HP workstation buy on the market today.

None of the systems include keyboards, which must be purchased new. Order a localization kit (P/N A1098A/99A) as a separate line item. HP Channel Partners also are eligible for special pricing on these workstations.

For more information in the U.S., call 800-FRDHELP (800-373-4357) or call Tom Taylor at 408-720-2459. In Canada, call Mark Glazer, 416-678-3192.



HP internal sales and training tools for HP Channel Partners

For U.S. only

Authorized U.S. HP Channel Partners can use a toll-free 800 telephone number to directly purchase selected HP internal sales tools and training materials.

To *qualify*, your company must have a current channel contract or catalog agreement with HP and be listed in the U.S. Value-Added Channels Marketing Center database (VALID).

To place orders, call 800-227-8164, specify the part number of the items you are ordering, and provide your U.S. customer number.

Revised HP Apollo 9000 Series 760 Sales Kit

- **Audience:** HP Channel Partners
- **Format:** 3%-inch vinyl binder
- **P/N:** 5960-7854
- **Price:** \$55.00
- **Description:** Updated edition includes products introduced on November 10. Contents include a self-study guide, applications guides, customer presentations, pricing and availability information, performance briefs, sales guides, white papers, sales literature, and resource listings.

Available literature

The following new literature is available through your local HP sales office. The literature is separated by product line and in order of publication number. Contact your HP representative for more information.

HP 3000 Systems

Positioning reprints

- **Audience:** Account teams
- **Format:** Each one page, 8½ x 11, black and white
- **Description:** These reprints are available to help aggressively position the HP 3000 product line and Corporate Business System.
- **Title:** **HP 3000: Storage Management on HP's Mainframe** reprint
- **P/N:** 5091-0311E
- **Description:** Reprint from Gartner Group's Large Computer Strategies group discusses MVS issues that disappeared in HP's architecture and says that HP is ahead of IBM in many ways.
- **Title:** **Large System Performance Summary** reprint
- **P/N:** 5091-4972E
- **Description:** Reprint is a Gartner Group bar chart that lists 15 competitive uniprocessors. In it, HP 3000 Series 992/100 compares very favorably with 3090 and current generation mainframes.

The Bigger, The Better brochure

- **Audience:** High-end HP 3000 users
- **Format:** 4 pages, foldout, full color
- **P/N:** 5091-5483E
- **Description:** Brochure leverages "The Bigger, The Better" print message in a glossy, high-quality deliverable for HP 3000 Corporate Business System prospects. It includes a collection of user and industry observer quotes that underscore HP's positioning and the business advantages of HP Corporate Business Systems.

HP Education Catalog

For the U.S. and Canada only

- **Audience:** HP 1000, 3000, and 9000 programmers, administrators, end users, MIS directors, technical managers
- **Format:** 80 pages, 8"x 11 inches, four-color cover, two-color inside
- **P/N:** 5091-5645EUS, 5091-5646EUS three-hole drill
- **Description:** November catalog provides lecture/labs, seminars, and self-paced course descriptions and schedules for UNIX system, HP-UX, MPE, RTE, networking, and open systems professionals. It emphasizes the added productivity gains to users who attend HP training instead of learning new technologies by trial and error. Piece includes some flow diagrams, registration information, onsite training benefits, and training discounts.

HP 9000 Systems**HP PA-RISC Compiler Optimization Technology White Paper**

- **Audience:** HP Apollo 9000 Series 700/HP 9000 Series 800 users and technical evaluators
- **Format:** 20 pages, 8% x 11 inches, black and white
- **P/N:** 5091-5594E
- **Description:** Paper explains the importance of optimizations, shows examples of benchmark performance improvements of optimized versus unoptimized code, gives an overview of the PA-RISC compiler structure and optimizations, and provides an in-depth description of recent optimizations in an appendix.

Gartner Group report subset reprint

- **Audience:** Users who need an unbiased perspective on the HP 9000 versus Sun
- **P/N:** 5091-57723
- **Description:** In an annual Gartner Group evaluation, HP rated higher than Sun Microsystems in 12 out of 14 categories ranging from client/server infrastructure to interoperability and ease of use. The HP 9000 came out with a total cost of ownership below the survey average and a showing in the functional categories evaluated, especially when compared directly against Sun.

Workstations**HP 9000 Series 700i and 700rt industrial workstations and real-time computer systems literature**

- **Title:** *Meeting the Challenge, Changing the World* brochure
- **Audience:** OEMs and systems integrators in manufacturing, aerospace, and telecommunications industries
- **Format:** 12 pages, 8% x 11, 6 color with pocket insert for additional product literature
- **P/N:** 5091-52433
- **Title:** *HP-RT Red-Tim Operating System for the HP 9000 Series 700rt* data sheet
- **Audience:** OEMs and systems integrators in manufacturing, aerospace, and telecommunications industries
- **Format:** 6 pages, 8% x 11, 4 color
- **P/N:** 5091-5246E

Title: HP 9000 Series 700i Model 7422: Red-Tim Computer Systems data sheet

- **Audience:** OEMs and systems integrators in manufacturing, aerospace, and telecommunications industries
- **Format:** 6 pages, 8½ x 11, 4 color
- **P/N:** 5091-5247E
- **Title:** *HP 9000 Series 700i Model 745i Industrial Workstations* data sheet
- **Audience:** OEMs and systems integrators in manufacturing, aerospace, and telecommunications industries
- **Format:** 8 pages, 8% x 11, 4 color
- **P/N:** 5091-5248E

- **Title:** *HP 9-000 Series 700i Model 7472: Industrial Workstations* data sheet
- **Audience:** OEMs and systems integrators in manufacturing, aerospace, and telecommunications industries
- **Format:** 8 pages, 8½ x 11, 4 color
- **P/N:** 5091-5249E

The RTOS Differencereprint

- **Audience:** Users evaluating computers for real-time applications
- **P/N:** 5091-5437E
- **Description:** Reprint on real-time application environments provides in-depth information on computer requirements for optimizing real-time applications. It explains how these operating systems affect real-time performance, which is critical to understanding the applications.

HP Visual Editor 2.1 data sheet

- **Audience:** HF-UX 9.0 users who want to perform general text and program editing tasks
- **P/N:** 5091-5516E
- **Description:** Describes new version of HP Visual Editor 2.0 products that provides the easy-to-use and easy-to-learn editor; also supported on HP-UX 8.0X.

PCs versus workstations: myth and reality white paper

- **Audience:** PC users who are considering moving to workstations
- **Format:** 12 pages, two color
- **P/N:** 5091-5678E
- **Description:** Revised white paper provides an overview of the PC versus workstation issue, focusing on five myths that prevail among PC users and MIS managers in the commercial marketplace. Piece dispels the myths, which are that productivity applications don't run on workstations; workstations cost more than PCs; workstation software costs more than PC software; PCs are easier to use than workstations; and PCs and workstations don't mix.

Peripherals

HP 2300/840L line printer data sheet

- **Audience:** Medium-/high-volume printing departmental environments, network environments
- **P/N:** 5091-51663
- **Description:** Data sheet describes a new 54-dBA 840-lpm line impact printer. The printer (P/N C2354A) replaces P/N 2564C. It features a new parchment white color that coordinates with HP LaserJet printer products and provides a clear window for checking printer output.

HP LIDM printers family brochure

- **Audience:** Line impact dot matrix printer users
- **P/N:** 5091-51903
- **Description:** Brochure describes HP's family of line impact dot matrix (LIDM) printers.

New HP high-performance optical drive literature

- **Title:** *Optical Storage Solutions Guide*
- **P/N:** 5091-2156E
- **Title:** *HP Optical Product Family* data sheet packet
- **P/N:** 5091-5426E
- **Title:** *Optical Disk* data sheet packet
- **P/N:** 5091-597EUS
- **Audience:** HP 9000 Series 700 and 800 users with removable hard disk applications, especially in rugged environments.
- **Description:** Data sheets and guide describe new HP high-performance optical drive, which features better access times and faster transfer rates; improves performance and reliability of the entire family of optical disk storage products; uses standard magneto-optical disks; is forward and backward compatible with current drives.

HP number one overall in 1992 VARBUSINESS survey

HP received top honors for overall average score and overall impression from VARs with over \$2M revenue in the 1992 *VARBUSINESS* Annual Report Card Review. In addition, these VARs ranked HP number one in 10 of 18 categories, including all 6 support categories. Here is the complete list of HP's first-place wins:

1. Breadth of product line
2. Product quality
3. Price/performance
4. Product/pricing data
5. End-user support
6. Technical support
7. Marketing support
8. Quality of sales leads
9. Sales rep assistance
10. Overall impression

This is the first year that *VARBUSINESS* has separated survey results by VAR revenue. HP also did well with VARs in the under \$2M group. They too ranked HP first in product breadth, product quality, and end-user support.

HP outranked its major competitors again in this year's survey. The under \$2M revenue VARs placed HP ahead of DEC, IBM, and Sun in 10 out of 18 categories; and the over \$2M group placed HP ahead in 15 categories. HP had 13 first-place wins overall and IBM had 2. DEC and Sun did not finish first in any category with either group.

A reprint of the *VARBUSINESS* article will soon be available. Check with your HP representative for availability.

Product No.	Description
HP DCE Application Development Tools	
B2922A	HP DCE Application Development Tools for Series 700; includes media and documentation
B3193A	HP DCE Application Development Tools for Series 800; includes media and documentation

You need to purchase only one copy of the HP DCE Application Development Tools media and documentation. If you are ordering for a mixed Series 700/800 DCE cell, you do not need to buy both software products; order either P/N B2922A or B3193A. You must then order one user license for each HP DCE Application Development Tools software user, as follows.

Product No.	Description
B2926A	HP DCE Application Development license to use for Series 700
B3192A	HP DCE Application Development license to use for Series 800

All products will be listed on the December HP Price List and available February 1993.

Open Software Foundation is a trademark of the Open Software Foundation in the U.S. and other countries.

HP 9000 Models 380 and 382 roll to HP-UX 9.0

Effective December 1, HP 9000 Model 382 HP-UX bundles internal hard disk drives will be preloaded with HP-UX 9.0. This affects configurations with the 420-MB disk option (Opt. AMK) and the 210-MB disk option (Opt. AM0). The operating system license certificate that is included with Models 380 and 382 will also be updated to HP-UX 9.0.

The operating system roll dates of these specific HP-UX system bundles is December 1 for all products listed below except for P/N A2242A.

Product No.	Description
A1458A	Model 380 SPU
A1480A	Model 380 C+ 2D color system
A1481A	Model 380 CH 2D color system
A1474A	Model 382 SPU
A2250A	Model 382 HP-UX system
A2243A*	Model 382 VEE-Test system
A2242A	Model 382 RMB-UX controller
A2244A	Model 31013201332 upgrade to MC68040
98244E	Model 375 upgrade to Model 380
98244D	Model 370 upgrade to Model 380

* Effective December 1, P/N A2243A will include the new VEE 2.0 release.

Users who require HP-UX 8.0 to run on Models 380 or 382 shipped after December 1 may **install** the HP-UX OS from 8.0 media or purchase HP-UX 8.0 media and manuals as P/N B1861A Opt. APB, and Opt. AA0 for 1/4-inch media, or P/N B2378A Opt. AAF for CD-ROM media

Users who require HP-UX 9.0 with the latest applications must specify an earliest acceptable date greater than December 1 (January 1 for P/N A2242A) on the order.

HP BASIC/UX for P/N A2242A will be released and shipping by January 1.

Series 400 and DN Series price increases

Effective November 1, there was a corporatwide computer price increase and the overall increase for the HP Apollo 9000 Series 400 was about 7.5% (U.S. list). There **will** be no price increase for hard disks or RAM memory. Other system add-on products will increase 5%.

The price of DN Series systems that are being discontinued on December 1 will not increase. The price of DN products that are being discontinued in June 1993 **will** increase 5%.

Contact your HP representative for more information.

New keyboards for Series 300/400/700 workstations and controllers

Effective November 1, new **HP-HIL** keyboards, which are included in must-order localization options for HP Apollo 9000 Series 4001700 and HP 9000 Series 300 workstations and controllers, **will** replace current keyboards in all systems shipped with *HP-UX 9.0*. Other systems will transition to the new keyboards after November 1 as inventory permits.

The new keyboards are designed to deliver best-in-class performance in areas of quality and ergonomics while maintaining complete compatibility with the previous keyboards in areas of key placement and key coding. Design improvements for the new keyboards include improved key feel and locator cues for speed and touch typing (demonstrated in high-speed typing tests, blind preference tests, and installed base acceptance tests), a **smaller** form factor to free up desk space, and an enhanced three-level **kickstand** that provides greater choice in selecting comfortable hand positions.

The following localization **kits** are affected by the keyboard change: P/Ns A1099A, A1099B, A1099C (HP-UX style layout); A2205A, A2205B (PC-style layout).

New workstation keyboard/localization kits

Effective November 1, the new localization kit P/N A1099C replaced P/Ns A1099A/B for HP 9000 Models 362, 380, and 382. Two versions of the new **kit** now include the new keyboard that was introduced in September. New keyboard **features** include a smaller footprint, better tactile feel, and full compatibility with previous keyboards. A PC-style keyboard is also available for *HP-UX* users as new localization kit P/N A2205B.

Ordering information

Product No.	Description
A1099C	HP 9000 Series 300/HP Apollo 9000 Series 4001700 localization kit; includes HP-HIL keyboard, three-button mouse, power cords
A2205B	HP-UX Workstation localization kit; includes PC-style keyboard
P/N A1099C/A2205B options	
Opt. 0B0	No documentation, new keyboard ¹
Opt. APP	HP-UX Release 8X documentation, old keyboard ^{2,3}
Opt. APH	HP-UX Release 9.0 documentation, new keyboard ^{4,5}

¹ This product as a P/N A1099C option directly replaces P/N A1099A, which was used with HP BASIC and Pascal systems.

² This product as a P/N A1099C option directly replaced P/N A1099B, which was used with Model 380/382 HP-UX 8.0 systems.

³ Option APP will ship with the older HP-UX keyboard as inventory permits. The standalone keyboard, P/N 46021A, will be available through January 1994.

⁴ This product is for use with Model 380/382 HP-UX 9.0 systems.

⁵ Effective December 1, Series 300 will ship with HP-UX 9.0 license.

A localized country option ABA-ABZ must be selected.

HP ISDN Link/Series 700 ordering change

To better meet CD-ROM manufacturing system requirements, the HP ISDN Link/Series 700 product structure has been **modified** effective with the October HP Price List. P/N J2104A Opt. 099 has been discontinued and replaced with P/N J2105A, new software that allows any HP Apollo 9000 Series 700 equipped with an ISDN link (P/N J2104A) to act as a TCP/IP router/gateway for other workstations or computers attached to the same Ethernet LAN.

Ordering instructions

Product No.	Description
J2104A	HP ISDN Link/Series 700 for standalone workstations; includes ISA/EISA hardware interface, RJ45 cable, manuals
J2105A	TCP/IP Router software for Series 700 workstations equipped with PIN J2104A ¹
P/N J2104A/J2105A options	
Opt. AAH	Software on DAT/DDS tape
Opt. AAU	CD-ROM certificate ²

¹ P/N J2104A is a prerequisite product for ordering P/N J2105A.

² Option AAU ships with DART#7 CD-ROM application disks.

Series 300 miscellaneous product discontinuance

Effective May 1, 1993, the following HP 9000 Series 300 products will be discontinued.

Product No.	Description
98013A	Model 340 D10 slot upgrade
98235A	Model 340 AUI LAN interface upgrade
98237A	Model 340 ThinLAN interface upgrade
98256A	256-KB RAM board for Series 2001300
98258A	Models 33013501370 4 MB parity add-on RAM
98258C	Models 33013501370 12 MB parity add-on RAM
98267A	Model 360 4 MB parity add-on RAM
98267B	Model 360 8 MB parity add-on RAM
98267C	Model 360 12 MB parity add-on RAM
98284A	Model 332 floating-point coprocessor
98286A	Series 300 DOS coprocessor
98286S	Series 300 DOS coprocessor system
98433D	Model 345 200-MB internal SCSI upgrade
98531A	Series 300 DOS coprocessor software
98556A	2D graphics accelerator
98571D	Model 340 200-MB internal SCSI upgrade
98630A	Series 2001300 breadboard I/O card
98674B	Media and manuals for PIN 98674L
986741	Media and manuals for PIN 98674L
98674D	Media and manuals for PIN 98674D
98674L	License to use Series 300 Starbase

SoftPC (P/N B2398A) is the replacement product for P/Ns 98286A, 98286S, 98531A), and HP-UX (P/N B1861A) is the replacement product for P/N 98674L. There are no replacement products for the remaining discontinued products.

Final U.S. orders will be accepted through May 31, 1993; final non-U.S. orders will be accepted through June 30, 1993. Final shipments will be made through October 31, 1993.

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HP 1000 Systems

HP 1000 Welcome Back Program ends

The HP 1000 Welcome Back Program has ended effective November 1 (Opt. 891 for P/Ns 92077A/92833A/92836A/92857A/91790A/92069A/92081A/92861A/92862A).

As stated in the program, HP 1000 software upgrade options (Opts. 401, 601, 701, 891, 991) were removed from the November HP Price List.

This program affects HP 1000 users who are not on support contract. Many users had taken advantage of this program to update their software to the most current releases. Users can still get the most current HP 1000 software releases by buying support contracts or ordering products from the HP Price List without upgrade options.

New HP entry-level color PC display

The new HP color VGA 14-inch display (P/N D1197A) is a competitively priced entry-level monitor with integrated tilt/swivel base. It is targeted toward professional PC users who mainly use text and other small-scale office applications.

With this introduction, HP adds an entry-level PC monitor offering to complete the PC display product line.

HP strengthens its display offering at the entry point of the PC monitor product line. This HP color VGA display offers standard image quality versus the superior image quality of other 14-inch HP displays that include a sharper dot pitch of 0.28 mm. The HP Super VGA display (P/N D1194A) is the recommended monitor for the use of Windows and other graphical user interface applications. But the monitor is *not* recommended to Microsoft Windows and other GUI application users.

Features and benefits

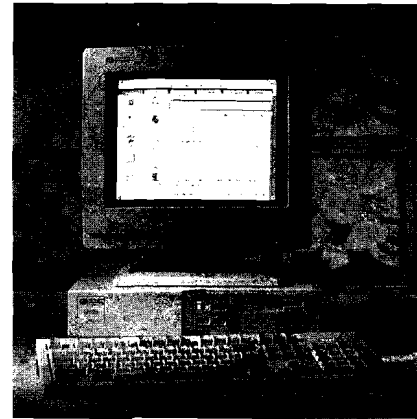
- *Attractive monitor* — The entry-level monitor offers a full-color, 14-inch screen with HP design bezel.

- *Easy-&-read* — The antiglare screen is easy to read, and the monitor refreshes the screen up to 60 Hz in standard VGA (640 by 480) resolution. The display offers standard image quality (0.39-mm dot pitch).
- *User flexibility* — The integrated tilt/swivel base and front panel brightness and contrast controls make the monitor easy to adjust, and the monitor covers industry-standard modes to guarantee compatibility.

Ordering information

Product No.	Description
D1197A	HP color VGA 14-inch display; supports standard VGA mode at 60 Hz; includes integrated tilt/swivel base, attached video cable, auto ranging power supply
You must order one of the following power cord options:	
Opt. ABA	U.S.
Opt. ABB	Europe
Opt. ABG	Australia
Opt. ABJ	Japan
Opt. ABQ	Switzerland
Opt. ABR	South Africa
Dpt. ABU	U.K.
Opt. ABY	Denmark
Opt. AR6	Indonesia
Opt. AB4	Singapore
Opt. AB2	China

New low-end HP Vectra 386/25N 2-MB PCs



The recently announced HP Vectra 386/25N PC Models 1 and 40C are the 2-MB RAM versions of the HP Vectra 386/25N PC. They are targeted toward entry-level PC users connected to LANs; primarily MS-DOS® users running basic business applications like simple word processing, spreadsheets, databases, and graphics in non-Windows environments.

The HP Vectra 386/25N PC 2-MB design retains the features competitors abandoned when introducing their entry-level 386SX-25MHz PCs at the same price level: networking capabilities, high-level security and individual privacy, high performance due to the HP cache, upgradability to HP Vectra 486/N PC Series, and serviceability.

Features and benefits

The new PCs retain HP Vectra 3861 25N PC line features. The Model 40C offers, for the first time, a complete user solution that includes a 42-MB hard disk drive, MS-DOS 5.0 preinstalled on the disk, and the HP VGA 14-inch color display (P/N D1197A).

- *Networking capabilities* — includes the necessary features, such as multilevel security or multivendor network compatibility, to allow easy LAN connection
- *16-KB cache* — allows for high-level performance
- *Upgradable* — allows for upgrade to HP Vectra 486/N PC Series
- *High level of ergonomics* — offers front-accessible control panel, low-noise fan, and slimline design
- *Best-in-class serviceability through snap-on cover* — provides an accessible design and user-friendly diagnostics

Ordering Information

Product No.	Description
D2495A	HP Vectra 386/25N PC Model 1
D2498A	HP Vectra 386/25N PC Model 40C; includes standard PC box and HP 14-inch VGA color display

MS-DOS is a U.S. registered trademark of Microsoft Corporation.

HP Vectra 486s/20 PC discontinuance

HP Vectra 486s/20 desktop PCs **will** be removed from the January 1993 HP Price List. Orders **will** be accepted through January 31, 1993. The HP Vectra 486U PC family

offers all the features of the HP Vectra 486s/20 PC with higher performance video and an easy growth path using the universal processor upgrade socket.

Product No.	Description	Replacement
D2260A	HP Vectra 486s/20 PC Model 1	P/N D2266A, HP Vectra 486/25U PC Model 1
D2261A	HP Vectra 486s/20 PC Model 1	P/N D2266A, HP Vectra 486/25U PC Model 1
D2262A	HP Vectra 486s/20 PC Model 120	P/N D2268A, HP Vectra 486/25U PC Model 120
D2263A	HP Vectra 486s/20 PC Model 240	P/N D2269A, HP Vectra 486/25U PC Model 240
D2264A	HP Vectra 486s/20 PC Model 430	P/N D2269A, HP Vectra 486/25U PC Model 240
D2265A	HP Vectra 486s/20 PC Model 120T	P/N D2274A, HP Vectra 486/33U PC Model 120

LAN MicroChannel PC Transport software obsolescence

HP LAN MicroChannel PC Transport software (P/N D1805A) **will** be removed from the December HP Price List. There is no replacement for this product.



New HP NetWare/9000 features

Novell NetWare Version 3.11 for HP 9000 Series 800 Version 3.11 adds functionality to NetWare and makes HP 9000 functionally similar to Intel-based NetWare 3.11 servers. NetWare/9000 lacks support for NLMs and Apple connectivity.

Features and benefits

- Packet Burst support provides greater NetWare throughput over WANs and faster overall response time.
- IP tunneling provides HP NetWare servers the ability to use existing TCP/IP networks to communicate between servers.
- The new version offers support for up to 16 locally attached printers and over 200 LAN attached printers.

Novell NetWare for Series 700/800 will be updated in February 1993 to support Token Ring and HP-UX 9.0. Novell NetWare will be updated to Version 3.11 in February 1993 for the Series 700 and in May 1993 for the 900 Series HP 3000.

Series 800 demo

A new Try and Buy Demo (Opt. 001 for P/N J2240A) is available for Series 800. The demo, when ordered with a media option, provides a complete Novell NetWare/9000 Series product. Users can evaluate Novell NetWare for Series 800 for 30 days in their own business environment. Users who purchase a permanent license can take advantage of the new delete manuals Opt. CBO for a credit. Novell NetWare 3.01B users without support service can use the Try and Buy Demo to move from NetWare/9000 Series 800 Version 3.01B to new Version 3.11. Installed permanent code words for Version 3.01B also activate Version 3.11. The Try and Buy Demo option for Series 700 will be available on the February

HP Price List.

New product numbers for Europe

Effective November 1, the product number for Novell NetWare on Series 800 was changed from P/N INVS-100003 to P/N J2240A. On the Series 700, P/N INVS-100002 was changed to P/N J2239A.

Ordering information

Novell NetWare/9000 pricing remains unchanged, but NetWare/9000 is now distributed worldwide under consolidated product numbers.

Product No.	Description
J2240A	Novell NetWare Version 3.11 for Series 800
Opt. 001	Try and Buy Demo 30-day trial package
Opt. CBO	Delete documentation
Opt. UAB	128 clients supported
Opt. UAD	250 clients supported
Opt. UB9	Credit for 64-user license
Opt. UBA	Credit for 128-user license
J2239A	Novell NetWare Version 3.01B for the Series 700
<i>P/N J2240A/J2239A options:</i>	
Opt. AA4	QIC cartridge tape
Opt. AAO	Software on 5/8-inch cartridge tape
Opt. AA1	Software on 1/2-inch 1600-bpi tape
Opt. AAH	Software on DAT
Opt. AAU	CD-ROM certificate
Opt. UA2	4 clients supported
Opt. UA3	8 clients supported
Opt. UA5	16 clients supported
Opt. UA7	32 clients supported
Opt. UA9	64 clients supported
Opt. UB2	Credit for 4-user license
Opt. UB3	Credit for 8-user license
Opt. UB5	Credit for 16-user license
Opt. UB7	Credit for 32-user license

HP NetWare/iX performance release for HP 3000

The enhanced performance release of HP NetWare/iX for HP 3000 is currently available. This version was demonstrated at **Interex**. Users can receive the enhancement by requesting the performance patches for HP NetWare/iX (P/N 32020A) from the Response Center.

This patched version of the product is for HP MPE/iX Release 4.0 only. Previous versions of HP MPE/iX do not support the performance patch. The HP NetWare/iX performance release will be shipped with HP MPE/iX 4.5.

Ordering information

Users order and install HP NetWare/iX on MPE/iX Release 4.0. The version of HP NetWare/iX shipped with Release 4.0 is A.01.06. HP NetWare/iX performance patches are retrieved from the Response Center and applied to the already installed product. After the performance patch is applied, the version of HP NetWare/iX will be k01.09. The performance patch is automatically enabled the first time the user brings up HP NetWare/iX after applying the patch.

The performance patch of HP NetWare/iX brings the overall performance of the product in line with that of an Intel486 server. Some benchmarks showed performance superior to an Intel server under loaded conditions. The actual performance observed will depend on the type of work the user is performing, the load on the system, and the system type. The best results will be seen on an NIO system and on HP Corporate Business System class processors.

Intel486 is a U.S. trademark of Intel Corporation.

HP EtherTwist transceiver — new price and features

On September 1, HP reduced the U.S. local currency price of the HP EtherTwist mini 10Base-T Transceiver (P/N 28685B).

Along with the new U.S. local currency price, HP's mini transceiver offers features not currently offered by other vendors:

- 6 LEDs — includes PWR, Tx, RX, collision, linkbeat, polarity
- Loopback test — helps isolate problems to transceiver
- Long cable — twisted-pair extends cable distance up to 220 meters

New user-based pricing for HP NetWare/iX

Effective November 1, NetWare for the HP 3000 will implement user-based pricing to provide a more competitive pricing scheme. With this announcement and the recent performance enhancements to NetWare/iX, HP 3000 offers an industry-leading price/performance NetWare server solution.

Product No.	Description
32020A	NetWare for HP 3000
Opt. UA3	8-user license
Opt. OAF	20-user license
Opt. UA7	32-user license
Opt. UA9	64-user license
Opt. UBD	100-user license
Opt. UD6	250-user license
Opt. UB3	Credit for 8-user license
Opt. UD8	Credit for 20-user license
Opt. UB7	Credit for 32-user license
Opt. UB9	Credit for 64-user license
Opt. UD9	Credit for 100-user license

HP ARPA and Network Services 2.1 products combined into one product

HP ARPA and Network Services 2.1 products have been combined into one new product (P/N J2246A). It combines the HP ARPA and Network Services 2.1 functionality of running in Novell NetWare and Microsoft LAN Manager environments. The separate HP ARPA Network Services 2.1 products have been removed from the November HP Price List: HP Network Services 2.1/MS-DOS (P/N D1811B), HP ARPA Services 2.1/MS-DOS (P/N D1812B), HP Network Services 2.1/MS-DOS for Novell NetWare (P/N D1819A), and HP ARPA Services 2.1/MS-DOS for Novell NetWare (P/N D1823A).

This version of HP ARPA/NS runs on Microsoft Lan Manager 2.1/2.1a, Novell NetWare NDIS and ODI, standalone clients, and Windows 3.X environments. PROBE is still provided for HP 3000 Resource Sharing connectivity for Microsoft Lan Manager 2.1 TCPAP clients.

Features and benefits

The new combined product has the same features and benefits as the separate HP ARPA/NS 2.1 products. With the combined product, users get more functionality, easier installation, and simplified ordering.

Enhancements were made to the four separate products to allow support of Microsoft Lan Manager 2.1a and Novell NetWare ODI clients.

Use of HP PC ARPA and Network Services requires:

- Supported PC with 512 KB of memory (and memory needed for terminal emulator or application)
- MS-DOS Version 3.3, 4.01, or 5.0
- Microsoft Lan Manager 2.1 and 2.1a support (PC clients can operate on both Ethernet and Token Ring networks.)
- Novell NetWare 2.15c and above support (HP ARPA/Network Services run on Novell NetWare clients using NDIS or ODI MAC drivers. All ODI drivers must be ODINSUP compatible. PC clients can operate on both Ethernet and Token Ring networks.)
- Optional Windows 3.0a and 3.1 and HP NewWave 3.0 and 4.0 support
- HP PC ARPA and Network Services are not supported on HP LAN Manager 1.1 and 1.2 clients or in OS/2 and Windows 2.11 environments

Ordering information

Product No.	Description
J2246A	HP PC ARPA/NS for MS-DOS, Microsoft Lan Manager, and Novell NetWare
You must order at least one of the following options*	
Opt. 001	1-user license with manuals and software
Opt. 002	RTC for 8 additional users
Opt. 003	RTC for 32 additional users
Opt. 004	RTC for 128 additional users
Opt. 005	RTC for 512 additional users
Opt. 006	Upgrade from HP NS 2.1 (P/N D1811B/D1819A), ARPA 2.1 (P/N D1812B/D1823A), or NS LAN GW (P/N D1807A), includes 1-user license with software and manuals
Opt. 007	Upgrade from NS 2.1, ARPA 2.1, or NS LAN GW; includes RTC for additional 1 user
Opt. 008	Upgrade from NS 2.1, ARPA 2.1, or NS LAN GW; includes RTC for additional 8 users
Opt. 009	Upgrade from NS 2.1, ARPA 2.1, or NS LAN GW; includes RTC for additional 32 users
Opt. 010	Upgrade from NS 2.1, ARPA 2.1, or NS LAN GW; includes RTC for additional 128 users
Opt. 011	Upgrade from NS 2.1, ARPA 2.1, or NS LAN GW; includes RTC for additional 512 users
Opt. 012	Additional user manual

* You must order Opt. 001 or 006 for one set of manuals and software.

Ethernet/Thinnet/fiber-optic cable obsolescence

Effective November 1, the following Ethernet/Thinnet/fiber-optic products were obsoleted.

ProductNo.	Description
K1036	6-fiber-optic cable
K1037	8-fiber-optic cable
K1056	Ethernet barrel connection, F
K1057	Ethernet barrel connection, M
K1058	Ethernet connection wrench
K1059	Ethernet connection wrench
K1060	Ethernet terminator, F
K1061	Ethernet terminator, M
K1062	Ethernet backbone cable
K1063	Ethernet backbone cable
K1065	Ethernet backbone cable
K1066	Ethernet backbone cable
K1067	Ethernet backbone cable
K1068	Ethernet backbone cable
K1072	Thinnet BNC adapter
K1073	Ethernet BNC connection crimp
K1074	Ethernet BNC PVC crimp
K1075	Thinnet BNC tee connection
K1076	Thinnet BNC terminator
K1077	Thinnet to Thicknet adapter
K1078	Ethernet crimping tool
KK081	Thinnet XCVR cable, 10 m
K1083	Thinnet XCVR cable, 20 m
K1085	Thinnet XCVR cable, 5 m
K1087	Thinnet XCVR cable, 50 m
K1094	Ethernet link care
K1095	Ethernet fiber-optic repeater
K1096	Ethernet multiport repeater
K1097	Ethernet segment repeater
K1098	Ethernet 8-port repeater
K1100	Thinnet cable, 1,000 feet, TEF
K1102	Thinnet cable, 1,000 feet, PVC
K1104	Ethernet XCVR install tools
K1111	Ethernet dia transceiver
K1112	Ethernet multiport transceiver
K1113	Ethernet XCVR n-type TAP
K1114	Ethernet BNC transceiver TAP
K1115	Ethernet Thinnet transceiver
K1116	Ethernet transceiver
K1117	Ethernet Thinnet BNC transceiver
K1118	Ethernet transceiver
K1120	Fiber-optic cable, 100 feet
K1121	Fiber-optic cable, 100 feet
K1122	Fiber-optic cable, 150 feet
K1123	Fiber-optic cable, 150 feet
K1124	Fiber-optic cable, 250 feet
K1125	Fiber-optic cable, 250 feet
K1126	Fiber-optic cable, 30 feet
K1127	Fiber-optic cable, 30 feet
K1128	Fiber-optic cable, 30 feet
K1129	Fiber-optic cable, 50 feet
K1130	Fiber-optic cable, 50 feet
K2131	Fiber-optic cable, 75 feet
K2122	Fiber-optic trans, 75 feet
K2123	Fiber media interface
K2124	Multimedia access
K2125	Power supply module
K2126	Intelligent repeater module
K2189	Etherlink board for IBM PC

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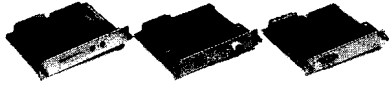
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General

New HP JetDirect cards

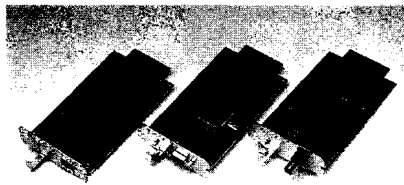


Support the HP LaserJet IIIsi, 4, PaintJet XL300 printers, and DesignJet plotter.

The HP JetDirect cards are five new HP JetDirect cards for Ethernet and AppleTalk networks that support and enable users to connect peripheral devices anywhere on LANs. They are for Novell NetWare/Ethernet, HP LANManager/Ethernet, AppleTalk (EtherTalk and LocalTalk), and UNIX systems/Ethernet. These cards are new members of HP's growing family of HP JetDirect network interfaces for HP peripherals.

The cards are targeted for Ethernet network environments that require either Thin Ethernet (10Base2) or 10Base-T connectivity to connect HP LaserJet IIIsi and the new 4/4M printers, HP PaintJet XL300 color printers, and HP DesignJet 600 plotters directly to a network.

HP JetDirect cards provide a fully integrated solution for connecting HP hard-copy devices into network environments.



Support the HP LaserJet II, IID, 11i, and IID printers.

Features and benefits

The new HP JetDirect cards support HP LaserJet 4/4M printers through the modular I/O slots (MIO). Users can install a card by sliding it into the MIO slot and connecting it to LAN cabling. A 10Base-T port has been integrated into the new cards due to user demand, eliminating the need for an external transceiver and the need for HP Ethernet 10Base-T adapter kit (P/N C1647A) when using the HP PaintJet XL300 color printer. This provides users with a more cost-effective solution for Ethernet networks. HP JetDirect cards also include the Thin Ethernet/10Base2 port (BNC) to maintain flexibility for choosing cabling solutions. For Novell NetWare users, the cards have improved support for encrypted passwords. Current HP JetDirect users will get this enhancement through an upgrade product.

Ordering information

Product No.	Description
J2337A	HP JetDirect card for Novell NetWare/Ethernet
J2338A	HP JetDirect card for LAN Manager/Ethernet
J2339A	HP JetDirect card for AppleTalk (EtherTalk)
J2340A	HP JetDirect card for UNIX/Ethernet
J2341A	HP JetDirect card for AppleTalk (LocalTalk)

HP JetDirect cards support peripherals

HP JetDirect cards are for users who require printing and plotting to be performed away from the file server, need faster graphics printing and plotting, and want better peripherals network management. Location flexibility, increased peripheral performance, and improved network administration are key benefits users can receive by incorporating HP JetDirect cards into hard-copy solutions. HP JetDirect cards support peripheral devices, network operating systems, network topologies, and cabling solutions.

Ordering information

Product No.	Description
J2337A	HP JetDirect card for Novell NetWare, Ethernet/802.3, BNC/10Base-T port, HP LaserJet 41 4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter
C2071A	HP JetDirect card for Novell NetWare, Ethernet/802.3, BNC port, HP LaserJet II/IIID/IIID printers
C2071B	HP JetDirect card for Novell NetWare, Ethernet/802.3, 10Base-T port, HP LaserJet II/IIID/IIID printers
C2059C	HP JetDirect card for Novell NetWare, Token Ring/802.5, DB9 port, HP LaserJet 4/4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter
C2071E	HP JetDirect card for Novell NetWare, Token Ring/802.5, DB9 port, HP LaserJet II/IIID/IIID printers

J2338A	HP JetDirect card for 3Com 3+ Open/ Microsoft Lan Manager, 802.3, BNC/10Base-T port, HP LaserJet 4/4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter
C2071C	HP JetDirect card for 3Com 3+ Open/ Microsoft Lan Manager, 802.3, BNC port, HP LaserJet II/IIID/IIID printers
C2071D	HP JetDirect card for 3Com 3+ Open/ Microsoft Lan Manager, 802.3, 10Base-T port, HP LaserJet II/IIID/IIID printers
C2059D	HP JetDirect card for 3Com 3+ Open/ Microsoft Lan Manager/ IBM LAN Server, Token Ring/802.5, DB9 port, HP LaserJet II/IIID/IIID printers
C2071F	HP JetDirect card for 3Com 3+ Open/ Microsoft Lan Manager/ IBM LAN Server, Token Ring/802.5, DB9 port, HP LaserJet II/IIID/IIID printers
J2340A	HP JetDirect card for HP-UW SCO UNIX/SunOS, Ethernet, BNC/10Base-T port, HP LaserJet 4/4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter
C2071S	HP JetDirect card for HP-UW SCO UNIX/SunOS, Ethernet, 10Base-T port, HP LaserJet II/IIID/IIID printers
C2071T	HP JetDirect card for HP-UW SCO UNIX/SunOS, Ethernet, BNC port, HP LaserJet II/IIID/IIID printers
	<i>UNIX cards require purchase of one of the following media options:</i>
	Opt. AAO 1/4-inch tape for HP-UX
	Opt. AAH DAT (DDS) tape for HP-UX
	Opt. AAV 114-inch tape for SunOS
	Opt. 1AK No software included
J2339A	HP JetDirect card for AppleTalk, EtherTalk BNC/10Base-T port, HP LaserJet 4/4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter

J3241A	HP JetDirect card for AppleTalk, LocalTalk, DIN 8 port, HP LaserJet 4/4M/IIIsi and PaintJet XL300 printers/DesignJet 600 plotter
33416A	HP JetDirect card for AppleTalk, LocalTalk, DIN 8 port, HP LaserJet II/IIID/IIID printers

AppleTalk is not supported on the HP DesignJet 600 plotter. LocalTalk is not supported on the HP LaserJet II printer; it is integrated with HP PaintJet XL300 printers and bundled with HP LaserJet 4M printers.

This information supersedes the current HP Dealer Price List.

Language options must be specified for all products.

HP JetDirect cards discontinuance

Effective November 1, the current HP JetDirect cards for Ethernet and AppleTalk networks were discontinued. Users who wish to connect new HP LaserJet 4/4M printers or HP PaintJet XL 300 color printers to local networks must order the new cards; the discontinued cards will not support these printers.

Discontinued products may not be ordered after November 1, only replacement products. See preceding article regarding direct replacements.

Product No.	Description	Replacement
C2059A	HP JetDirect card for Novell NetWare/Ethernet	J2337A
C2059B	HP JetDirect card for HP LAN Manager/Ethernet	J2338A
C2059E	HP JetDirect card for AppleTalk (EtherTalk)	J2339A
C2059F	HP JetDirect card for AppleTalk (LocalTalk)	J2341A
C2059T	HP JetDirect card for UNIX systems/EtherNet	J2340A
C1647A	Ethernet 10Base-T adapter kit	none

Workstation, printer, and terminal accessories obsolescence

The following products will be obsolete effective January 1, 1993.

Product No.	Description
92172F	HP-IB data lock
92172G	Lock system plate
92172H	Lock system screw
92175E	Vacuum filters
92175F	Hose, PM VAC
92175G	Cord, PM VAC
92175H	Crevice tool PM VAC
92175K	Gooseneck
92175T	Mat, static table
92175V	HP PM vacuum
92175W	Vacuum canister
92176S	Spray, anti-static
92176W	Wipes, anti-static
92193V	Clean kit, video
92207A	Filter, glare HP 26W
92207C	Filter, glare HP-86

Cable obsolescence

For Europe only

The following products are now obsolete in Europe only.

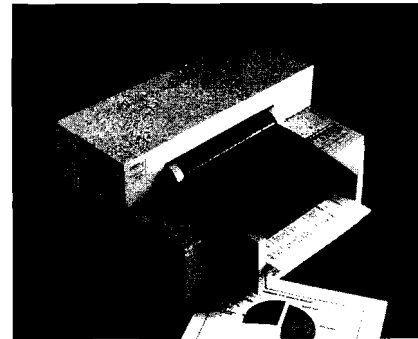
Product No.	Description
K2285	SCSI cable high-low
K2286	SCSI cable high-low
K2287	SCSI cable, 5-foot connection
K2288	SCSI cable, 3-foot screw connection

The following products will be obsolete in Europe only as of January 1, 1993.

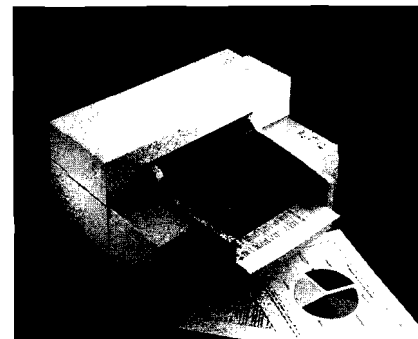
Product No.	Description
92179C	Cable, three-wire, shielded
92179D	Cable, five-wire, shielded

Printers

New HP DeskJet 550C and DeskWriter 550C printers



HP DeskJet 550C printer



HP DeskWriter 550C printer

The HP DeskJet 550C printer for MSDOS and Windows (P/N C2121A) and the HP DeskWriter 550C printer for the Apple Macintosh (P/N C2124A) are the new HP printers that offer 300-dpi laser-quality black and color printing using both the black and color cartridges together. These new printers are designed for dot matrix users who want to upgrade to better print quality, higher speed, and quiet operation, as well as low-end laser printer prospects who need black printing but also want convenient color printing.

Features and benefits

Users can get laserquality black and color printing on the same page without **changing** ink cartridges. The two integrated ink cartridges minimize the amount of composite black, so black text looks blacker and colors look brighter. Apple Macintosh and Windows users can produce highquality black graphics with 256 levels of grayscale.

Less ink use means lower ownership cost and faster printing. The faster, lower-cost black ink cartridge prints the black text in the document, **minimizing** use of the color ink cartridge to create black. **Professional-looking** text and graphics print faster and cost less.

The printers provide improved MSDOS software compatibility. The HP DeskJet 550C printer supports color ASCII text printing, so MSDOS word processing packages can print using color. The HP DeskJet 550C printer ships with a disk containing software drivers for six **top-tier** MSDOS applications.

The products offer increased document flexibility with more built-in fonts for MSDOS and Macintosh users. The HP DeskJet 550C printer has six built-in typefaces, 84 selectable fonts, and 13 scalable fonts for Windows. It is **TrueType** compatible with Windows 3.1. and like all HP DeskJet printers, it is compatible with Adobe Type Manager. New for Macintosh users are 35 scalable fonts that come with the HP DeskWriter 550C printer. These are the **same** as the fonts on Apple **LaserWriter** NT printers. The additional fonts were **originally** marketed separately as the HP DeskWriter Font Collection (P/N 22709A).

The products offer improved paper handling and media capability. With the new paper trays, users can print documents on a wider variety of paper sizes and types including executive-size paper. The new trays allow users to easily print up to 20 envelopes. On glossy paper, users can produce graphics and images with a photographic glossy appearance. Like the HP DeskJet 500C and the HP DeskWriter C printers, these new printers handle transparency film.

Users get HP reliability with a **three-year** limited warranty on parts and labor when they purchase an HP DeskJet 550C or DeskWriter 550C printer.

- Higher print quality than dot **matrix** printers
- Faster than most dot **matrix** printers
- **High-quality black** printing plus the added feature of color when needed
- Both printers come with an industry-leading three-year limited warranty.

Ordering information

Product No.	Description
C2121A	HP DeskJet 550C printer
C2124A	HP DeskWriter 550C printer



New HP DeskJet portable printer

Not available in Europe until February 1993



The new HP DeskJet portable, laser-quality printer (P/N C2614A) includes the inkjet technology, speed, and reliability found in other HP DeskJet printers. It includes optional battery operation and fonts, comes standard with custom portable VO cable, print cartridge, manuals, and external power module. This printer is designed for portable PC users who use notebook PCs in medium- to large-sized companies.

Features and benefits

With the portable HP DeskJet printer, on-the-road users can print high-quality documents. The printer provides 300-dpi laser-quality printing, offers 84 typeface, size, and style combinations for MS-DOS users, and is fully compatible in Windows 3.1.

The printer offers full desktop performance. It prints up to three pages per minute (240 cps in draft, 167 cps in letter-quality mode) on plain paper, transparencies, and labels in letter, legal, A4, and executive paper sizes. The printer is backward-compatible with HP DeskJet 500 printer drivers. For full-feature support, an HP DeskJet portable printer driver is required.

The printer offers maximum portability. The base unit weighs 4.4 pounds. The printer comes with a flexible parallel VO cable that is easy to roll up and carry, and the printer will also work with a standard Centronics cable. The printer offers sophisticated battery management features, including sleep and deep discharge modes, and can print up to 100 pages per charge with an optional camcorder-type rechargeable battery.

Other optional accessories are also available for maximum versatility. The worldwide rapid recharger/adapter for heavy battery users recharges two batteries in one hour per battery. International travelers can use the recharger/adapter on voltages worldwide. An optional carrying case holds the printer, accessories, and a notebook PC.

The portable HP DeskJet printer comes with a one-year limited warranty worldwide on the printer, sheet feeder, and optional worldwide rapid recharger/adapter. The battery and optional carrying case come with a 90-day warranty.

The portable HP DeskJet printer features HP's reliable inkjet technology, and no competitive portable printers in this price range can currently match the speed of the HP portable. Most competitors offer only one font size per typeface or offer unfamiliar typefaces. The HP DeskJet portable printer provides Courier and Letter Gothic and CG Times and Univers in 5, 6, 8, 10, 12, and 14 point. Landscape orientation is built in for Courier and Letter Gothic. In Windows 3.1, users have access to TrueType scalable fonts in portrait and landscape orientations.

Ordering information

Product No.	Description
C2614A	HP DeskJet portable printer
Optional accessories	
C3005A	50-page automatic cut-sheet feeder
C3003A	Rechargeable battery
C3004A	Worldwide rapid recharger/adapter
C3050A	Carrying case
C3061A	Replacement portable I/O cable (printer comes standard with this cable)

The printer will be available in Europe in February 1993

POSTNET bar code for HP 256XC/2300 printers

POSTNET is the U.S. postal bar code optional character set. It contains ZIP code information that is later decoded by automatic readers increasing the accuracy, speed, and reliability of the overall delivery process.

Features and benefits

POSTNET is made up of binary elements that are printed in the lower right corner of a mail piece representing zip codes. POSTNET offers significant savings to users, especially high-volume mailers. The savings for a single piece with a five-digit plus four-digit ZIP (ZIP + 4) bar code is about six cents. HP 256XC/2300 POSTNET is certified by the U. S. Postal Service. All HP 256XC/2300 line impact printers are on a list published by the National Address Information Center, Memphis, Tennessee 38188. POSTNET can be selected from either the printer's front panel or by the use of an escape sequence. POSTNET pitch is four characters per inch.

For more information, please contact your HP representative.

Terminals

HP X Station memory module price reduction

Effective October 1, prices for HP 700/RX station memory modules (DRAM) listed below were reduced by up to 33% (U.S. list). This translates to memory module prices of \$100 per megabyte (U.S. list).

Product No.	Description
C2321A	2-MB memory module
C2322A	4-MB memory module
C2323A	8-MB memory module
Opt. AN7	Delete 2-MB memory module for all bundles

Overlay removal from terminals kit

As of November 1, the ANSI overlay for the numeric keypad on HP 700/98 terminals was deleted from the keyboard kit. The overlay will still be available as P/N 5081-2239. The key assignment information that is on the overlay is included in the user manuals.

The supplemental overlay for the HP 700/32 (P/N C1017A/G/W) was also removed from the keyboard kit; it is available as P/N 5181-5172. This overlay is blank; it contains no text.



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For more information about the products described in this issue, call your local HP representative.

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