# HP 9000 Series 300 Computer Systems

## **Pricing Information**



Effective date: October 1988\*

### Table of Contents

Introduction	1
System Processing Units (SPUs)	. 2
Series 300 Workstations	· -
Series 300 Instrument Controllers	20
Series 300 Network Servers	26
SPU Accessories	28
SPU Upgrades	29
Boot ROM/Processor Board Updates	30
DOS Coprocessor System	31
BASIC and Pascal Language Processor System	32
VMERUS Connection	
VMEBus Connection	32
Graphics Boards	33
Monitors	33
Graphics Accessories	34
Graphics Upgrades	35
HP-HIL Input Devices	36
Interface Products for Series 300 (DIO)	36
Local Area Network (LAN)	38
Shared Resource Management (SRM)	41
Series 300 Peripherals, Media, and Accessories	42
Series 300 Operating and Language Systems	47
HP 9000 Hardware Support Services	52
HP 9000 Software Support Services	72
General Consulting Services	75
Series 300 Training	75
Series 300 Training	
General HP 9000 Training	75
Purchase Plans	76

## Introduction

#### **About This Document**

This pricing guide is designed to help you find and use pricing information about HP 9000 Series 300 computers quickly and easily. It is organized into sections containing information about hardware, operating systems and support services (see Table of Contents). The support services generally follow the actual product listings, whether hardware or operating system software. Occasionally you will find hardware and operating system software listed together (e.g., the BASIC Language Processor System The support for these will be listed separately in the hardware and software support sections.

System Configurations

The Series 300 family of computing systems consists of a variety of workstations and instrument controllers, as well as modular components that allow you to select a system matched to your needs. The pre-configured workstations and network servers include the components most likely needed for typical applications.

If you prefer to build your own system, we have a selection of processors with different performance levels, display systems, memory boards, interface cards, operating systems, and

peripherals. Refer to *HP 9000 Series 300 Hardware Technical Data* (Pub. No. 5954-9830) for the technical specifications of the Series 300 family.

The workstations come bundled with either HP-UX software license, AI Development Environment, or a combination of these operating system elements. The instrument controllers come bundled with BASIC, a language specifically suited to instrument-based applications. The network servers are bundled with HP-UX pre-installed on the system disc. An assortment of interfaces are available for the various workstations, controllers and servers, depending on the intended application. The detailed system descriptions will help you determine which system contains the components right for your application.

Hewlett-Packard offers various hardware and software support services.

### Series 300 Modular Components

Custom ordering a Series 300 system is easy. The following guide is useful in successfully configuring a system that exactly meets your needs.

Depending on the model you choose, you'll need to consider:

- SPU (System Processing Unit) includes box with power supply, processor board, memory, HP-IB, RS-232C, and HP-HIL interfaces, a battery-backed real-time clock, an HP-IB cable, and HP-HIL cable for the keyboard. The SPU may also include DMA and LAN, a license to use HP-UX, or high speed HP-IB disc interface
- Keyboard
- Graphics board (to generate video signals for a matching monitor) – note that the 98561A SPU comes with 512 x 400 monochrome output standard (delete this feature using Opt. 003, adding in its place the desired graphics board if a different output is required)
- Monitor (to display signals generated by the graphics board)
- Data Storage pick the data storage best suited to your needs
- An operating system including a license to use
- HP-ĤIL ID Module (if you plan to use application software that requires it)

#### You May Want to Add:

- Additional RAM cards including Error-Checking and Correcting (ECC) RAM<sup>†</sup>
- Interface cards
- An expander box or boxes
- Plotter
- Modem
- Additional HP-HIL devices
- Additional graphics devices or terminals
- Printer
- Support services
- Networking
- Taboret cabinets, accessories or other furniture
  - \* All data and prices are subject to change without notice.

    All prices include factory base plus freight in 11 S.A.
  - All prices include factory base plus freight in U.S.A.
    † All RAM is parity-checking RAM unless otherwise specified.

## **System Processing Units (SPUs)**

## Model 310 System Processing Unit Standard Features

Product/Opt. Number	Description			
98561A	Model 310 SPU	\$ 5,055		
	<ul> <li>MC68010 Processor, 10 MHz</li> <li>1 Mbyte on-board parity-checking RAM</li> <li>16 Mbytes virtual memory address space</li> <li>16-bit memory bus</li> <li>512 x 400 on-board monochrome graphics interface</li> <li>IEEE-488 HP-IB interface</li> <li>RS-232C serial interface</li> <li>HP-HIL interface</li> <li>Audio interface</li> <li>1-meter HP-IB cable, HP-HIL keyboard cable</li> </ul>			
Opt. 002*	Delete ½ Mbyte RAM, leaving ½ Mbyte on board	-900		
Opt. 003*	Delete on-board graphics interface. Order appropriate graphics interface and monitor. CPU board will have 1 Mbyte RAM on-board but no graphics interface.	-500		
Opt. 004	Delete 4-slot I/O card cage. SPU box will be delivered with slots for CPU board and optional graphics interface only. The I/O card cage upgrade can be ordered later as Product Number 98242A.	-350		
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C		

<sup>\*</sup>Opt. 002 and Opt. 003 cannot be ordered concurrently.

### Model 320 System Processing Unit Standard Features

Product/Opt. Number	Description	Price
98561B	<ul> <li>Model 320 SPU</li> <li>MC68020 Processor, 16.67 MHz</li> <li>MC68881 Floating Point Coprocessor, 16.67 MHz</li> <li>1 Mbyte parity-checking RAM board</li> <li>4 Gbytes virtual memory address space</li> <li>16-bit memory bus</li> <li>Human interface board containing: <ul> <li>IEEE-488 HP-IB interface</li> <li>RS-232C serial interface</li> <li>HP-HIL interface</li> <li>Audio interface</li> </ul> </li> <li>1-meter HP-IB cable, HP-HIL keyboard cable</li> <li>DB9 to DB25 RS-232C adapter cable</li> </ul>	\$ 8,510.
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C
98561C	Model 320U SPU  ● 98561B SPU plus:  - 98568A expander  - Three 1 Mbyte RAM boards (4 Mbytes total)  - DMA Controller  - LAN interface <sup>†</sup> - High-speed HP-IB disc interface	13,800.
Opt. 002	Delete 2 Mbytes RAM, for a total of 2 Mbytes	-1,000.
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C

'Must also order MAU, AUI and LAN cable as well as LAN software for LAN hook-up.

## Model 330 System Processing Unit Standard Features

Product/Opt. Number	Description		
98562A	Model 330 SPU  MC68020 Processor, 16.67 MHz  MC68881 Floating Point Coprocessor, 16.67 MHz  Four Mbytes built-in parity-checking RAM, expandable up to 8 Mbytes (off-board)  Four Gbytes virtual memory address space  32-bit memory bus  32-bit DIO II bus  System interface board with  IEEE-488 HP-IB interface  Audio interface	\$10,645.	
	<ul> <li>Audio Interface</li> <li>HP-HIL interface</li> <li>RS-232C serial interface</li> <li>Two-channel DMA Controller</li> <li>HP-IB, HP-HIL, and RS-232C adapter cables</li> <li>Note: Two out of four DIO-II slots available for accessory cards.</li> </ul>		
	<b>Note:</b> Must order Option 015 or 017; options cannot be ordered concurrently.		
Opt. 006	Add 98242B 2-slot DIO Backplane	390.	
Opt. 010*	Add 98262A High-speed HP-IB Disc Interface	960.	
Opt. 011*	Add 98265A SCSI single-ended board with 1m cable and terminator	1,100.	
Opt. 015	IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C	
Opt. 017	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C	
Opt. W03	Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C	

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently.

## Model 350 System Processing Unit Standard Features

Product/Opt. Number	Description	Price
98562B	<ul> <li>Model 350 SPU</li> <li>MC68020 Processor, 25 MHz</li> <li>MC68881 Floating Point Coprocessor, 20 MHz</li> <li>Eight Mbytes parity-checking RAM, expandable to up to 32 Mbytes (48 Mbytes with ECC RAM)</li> <li>Four Gbytes virtual memory address space</li> <li>32-bit system bus</li> <li>32-bit DIO II bus</li> <li>System interface board with:  – IEEE-488 HP-IB interface  – RS-232C serial interface</li> <li>Audio interface</li> <li>IEEE-488 High-speed HP-IB Disc Interface</li> <li>Two-channel DMA Controller</li> <li>HP-HIL interface</li> <li>HP-IB, HP-HIL, and RS-232C adapter cables</li> <li>Note: One out of four DIO-II slots available for accessory cards.</li> <li>Note: Must order Option 015 or 017; options cannot be ordered concurrently.</li> </ul>	\$23,330.
Opt. 011	Delete high-speed HP-IB; add 98265A SCSI single-ended board with 1m cable and terminator	150.
Opt. 015	IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116	Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbyte RAM add-on with a 12 Mbyte RAM add-on	9,500.
Opt. 208	Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050.
Opt. 216	Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150.

## Model 360 System Processing Unit Standard Features

Product/Opt. Number	Description	Price
98579A	Model 360 SPU	\$14,365.
	MC68030 Processor, 25 MHz	
	MC68882 Floating Point Coprocessor, 25 MHz	
	Four Mbytes built-in parity-checking RAM, expandable to 16 Mbytes	
	Four Gbytes virtual memory address space	
	32-bit memory bus     32-bit DIO II bus	
	System interface board with	
	- IEEE-488 HP-IB interface	
	- Audio interface	
	– HP-HIL interface	
	- RS-232C serial interface	
	- Two-channel DMA Controller	
	HP-IB, HP-HIL, and RS-232C adapter cables	
	<b>Note:</b> Two out of four DIO-II slots available for accessory cards.	
	<b>Note:</b> Must order Option 015 or 017; options cannot be ordered concurrently.	
Opt. 006	Add 98242B 2-slot DIO Backplane	390.
Opt. 010*	Add 98262A High-speed HP-IB Disc Interface	960.
Opt. 011*	Add 98265A SCSI single-ended board with 1m cable and terminator	1,100.
Opt. 015	IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*	Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112*	Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500.
Opt. 116*	Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790.

## Model 370 System Processing Unit Standard Features

Product/Opt. Number	Description			
98579B	<ul> <li>Model 370 SPU</li> <li>MC68030 Processor, 33 MHz</li> <li>MC68882 Floating Point Coprocessor, 33 MHz</li> <li>Eight Mbytes parity-checking RAM, expanding to up to 32 Mbytes (48 Mbytes with ECC RAM)</li> <li>Four Gbytes virtual memory address space</li> <li>32-bit system Bus</li> <li>32-bit DIO II Bus</li> <li>System interface board with: <ul> <li>IEEE-488 HP-IB Interface</li> <li>RS-232C serial interface</li> <li>Audio interface</li> <li>IEEE 802.3/Ethernet LAN Interface</li> <li>IEEE-488 High-speed HP-IB disc interface</li> <li>IEEE-488 High-speed HP-IB disc interface</li> <li>HP-HIL interface</li> <li>HP-IB, HP-HIL, and RS-232C adapter cables</li> </ul> </li> <li>Note: One out of four DIO-II slots available.</li> <li>Note: Must order Option 015 or 017; options cannot be ordered concurrently.</li> </ul>	21,900.		
Opt. 11	Delete high-speed HP-IB; add 98265A SCSI single-ended board with 1m cable and terminator	150.		
Opt. 015	IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C		
Opt. 017	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C		
Opt. 116	Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbyte RAM add-on with a 12 Mbyte RAM add-on.	9,500.		
Opt. 208	Substitute 8 Mbyte ECC RAM for 8 Mbytes parity-checking RAM	4,050.		
Opt. 216	Substitute 16 Mbyte ECC RAM for 8 Mbytes parity-checking RAM	12,150.		

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently; Opts. 108, 112 and 116 cannot be ordered concurrently.

#### **Series 300 Workstations**

#### Localization for Series 300 Workstations

The Models 310, 318, 319, 320, 330, 350, 360, and 370 workstations and instrument controllers are available in the following localized versions. The localized versions include localized keyboard, monitor, SPU, power cord, and applicable manuals. This localization scheme also applies to the HP-HIL keyboards. The price does not change. To order the localized version, include the appropriate option number. For example, to order a German version of the Model 310 Low-cost Color Instrument Controller, order 98581B + Opt. ABD (workstation product number plus Opt. ABD for the German version). The localization option is a must order option.

OptionLanguageOptionLanguageABA...U.S. EnglishABP ... Swiss GermanABC...Canadian FrenchABQ ... Swiss FrenchABD...GermanABS ... SwedishABE...European SpanishABU ... U.K. EnglishABF...European FrenchABW ... Belgian DutchABH...DutchABX ... Finnish

ABJ . . . Katakana ABY . . . Danish ABK . . . ICON/European ASCII ABZ . . . Italian

ABM. . . Latin Spanish ACA . . . Kanji (HP-UX only)

ABN... Norwegian ABO ... Taiwan

(Traditional Chinese)

AB1 . . . Korean

#### Cables for HP-IB, keyboard, and video

All Series 300 workstations come with a 1-meter HP-IB cable\* and a coiled HP-HIL keyboard cable. The appropriate video cable is shipped with each video or graphics board.

#### Series 300 Entry-Level Workstations

The Models 318M and 319C+ are limited-expansion workstations and therefore have no accessory slots available for interface and accessory cards. On-board HP-IB and RS-232C interfaces are available to allow connection of printers, plotters and data storage devices to your system.

Product/Opt. Number	Component	Description	Price
98563B	98786A 98594L Keyboard	Model 318M Monochrome Workstation SPU consisting of:  MC 68020 Processor, 16.67 MHz  MC68881 Floating Point Coprocessor, 16.67 MHz  MG68881 Floating Point Coprocessor, 16.67 MHz  MG68881 Floating Point Coprocessor, 16.67 MHz  MG6881 Floating Point Copr	\$ 5,140
Opt. 060		Add 46060A HP-HIL 2-button Mouse	150
Opt. 084		Add 48084A HP-HIL ID Module	187
98564A	98785A 98594L Keyboard	<ul> <li>319C + Color Workstation</li> <li>SPU consisting of:</li> <li>MC68020 processor, 16.67 MHz</li> <li>MC68881 Floating Point Coprocessor, 16.67 MHz</li> <li>4 Mbytes parity-checking RAM, expandable to 16 Mbytes</li> <li>6-plane graphics board with RGB cable</li> <li>IEEE-488 HP-IB interface with two-channel DMA Controller (order HP-IB cable separately)</li> <li>RS-232C serial interface with DB25 connector</li> <li>IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector</li> <li>HP-HIL interface with cable</li> <li>Built-in speaker</li> <li>16-inch High-resolution Color Monitor (1024 x 768)</li> <li>HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11</li> <li>Note: Must specify one keyboard option</li> </ul>	\$ 9,785
Opt. 010 <sup>†</sup>		Add high-speed HP-IB disc interface capability	805
Opt. 011 <sup>+</sup>		SCSI single-ended board with 0.5m cable and terminator	795
Opt. 060		Add 46060A HP-HIL 2-button Mouse	153
Opt. 084	-	Add 46084A HP-HIL ID Module	190
Opt. 108‡		Add 4 Mbytes RAM for total of 8 Mbytes RAM	3,490
Opt. 112‡		Add 8 Mbytes RAM for total of 12 Mbytes RAM	6,980
Opt. 116		Add 12 Mbytes RAM for total of 16 Mbytes RAM	10,470
Opt. 719		Substitute 19-inch color monitor (98751A) for 16-inch monitor (98785A)	3,100

<sup>\$</sup> Application Execution Environment (AXE), Programming Environment (PE), Network Services (NS) and Network File System (NFS).

<sup>\*</sup> Cable not included in Model 319C+.

Opt. 010 and Opt. 011 are not offered as a field upgrade. Opt. 010 and Opt. 011 cannot be ordred concurrently

<sup>&</sup>lt;sup>‡</sup> The 4 and 8 Mbyte RAM expansion boards are also offered as field upgrades.

## Entry Level Workstations (cont'd.)

Product/Opt. Number	Component	Description	Price
98573A	98720A ● Opt. 721 ● Opt. 722 98789A 98594L Keyboard	319 SRX Solid Rendering Workstation SPU consisting of:  MC68020 processor, 16.67 MHz  MC68881 Floating Point Coprocessor, 16.67 MHz  4 Mbytes parity-checking RAM, expandable to 16 Mbytes  IEEE-488 HP-IB interface with two-channel DMA Controller (order HP-IB cable separately)  RS-232C serial interface with DB25 connector  IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector  HP-HIL interface with cable  Built-in speaker  High-speed HP-IB disc interface Interface to the 98720A 3D display controller with:  3D Solid Rendering Graphics Accelerator  8 planes frame buffer memory 16-inch high resolution color monitor (1280 X 1024) HP-UX 6.2, License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11  Note: Must specify one keyboard option	\$25,745.
Opt. 016*		Add 8 planes frame buffer memory for a total of 16 planes	4,000.
Opt 024*		Add 16 planes frame buffer memory for a total of 24 planes	8,000.
Opt. 032*		Add 24 planes frame buffer memory for a total of 24 planes with a full 16-bit Z-buffer	12,000.
Opt. 060		Add 46060A HP-HIL 2-button Mouse	153.
Opt. 084		Add 46084A HP-HIL ID Module	190.
Opt. 108†		Add 4 Mbytes RAM for total of 8 Mbytes RAM	3,490.
Opt. 112 <sup>+</sup>		Add 8 Mbytes RAM for total of 12 Mbytes RAM	6,980.
Opt. 116		Add 12 Mbytes RAM for total of 16 Mbytes RAM	10,470.
Opt. 719		Substitute 19-inch color monitor (98752A) for 16-inch monitor (98789A)	3,100.

<sup>\*</sup>Opt. 016, 024, and 032 cannot be ordered concurrently. SCSI interface not available.

#### Support Materials for 319 SRX

New Assembli	es for 319 SRX			
Exchange Part Number	New Part Number	Description		Price
98573-69580	98573-66580	PCA-98720A/high-speed HP-IB IF card		\$ 550.
Current Assem	blies for 319 SRX			
98564-69511	98564-66511	PCA-CPU with 8 Mbytes		\$ 875.
98564-69520	98564-66520	PCA-RAM 4 Mbytes		725.
98564-69521	98564-66521	PCA-RAM 8 Mbytes		1,100.
New Parts for 3	19 SRX			<b>.</b>
Part Number		Description HS		Price
98573-60200	Panel-Rear/98720		C215	TBD.
98573-61600	Cable-Ribbon HP-	IB	C215	TBD.
98573-84001	Label-ID		C215	TBD.
Documentation	n for 319 SRX			
98564-90000	Familiarization Guide			\$ 520.
98573-90641	Installation Picture	nstallation Picture Guide		
98564-90039	Update 319 Service	pdate 319 Service Handbook		

<sup>&#</sup>x27;The 4 and 8 Mbyte RAM expansion boards are also offered as field upgrades. Upgrades must be installed by HP qualified personnel; the CE installation charge included in list price.

#### **RAM Upgrades**

Product/Opt. Number	Component	Description	Price
		Note: Upgrades must be installed by HP qualified personnel. The installation charge is included in the list price	
98266A		Model 319 4 Mbyte RAM daughterboard upgrade	\$ 4,590.
98266B		Model 319 8 Mbyte RAM daughterboard upgrade	8,050.

**Series 300 Configurable Systems**Models 330, 350, 360, and 370, with several I/O slots available, offer exceptional configurability that allows these systems to be tailored to each application and enable expansion to meet future needs.

Model 330 Workstations (CH, CHX, C, MH, M)

Product/Opt. Number	Component	Description	Price
98588S	98562A 98550A 98789A 46060A 46081A 46084A 98594L Keyboard	Model 330CH 2D Color Workstation Model 330 SPU plus: High-resolution Color Graphics Board with RGB cables 16-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available. Note: Must specify one keyboard option	\$14,365.
Opt. 006		Note: Must order Option 015 or 017; options cannot be ordered concurrently.  Add 98242B 2-slot DIO Backplane	200
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	390. 960.
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	1,100. N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 556		Add 98556A 2D integer-based graphics accelerator	5,065.
Opt. 719		Substitute 19-inch monitor (98752A) for 16-inch monitor (98789A)	3,100.
98588S Opt. 556	98562A 98550A 98789A 46060A 46081A 46084A 98594L Keyboard	Model 330CHX 2D Color Workstation (Model 330CH with 2D Integer-based Graphics Accelerator) Model 330CH 2D Color Workstation Add 98556A 2D Integer-based Graphics Accelerator Model 330 SPU plus: High-resolution Color Graphics Board with RGB cable 16-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$14,365. 5,065.
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390.
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960.
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 719		Substitute 19-inch color monitor (98752A) for 16-inch monitor (98789A)	3,100.

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently.

Product/Opt. Number	Component	Description	Price
98583S	98562A 98547A 98785A 46060A 46081A 46084A 98594L Keyboard	Model 330 C Color Workstation Model 330 SPU plus: High-resolution Color Graphics Board with RGB cable 16-inch High-resolution Color Monitor (1024 x 768) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	14,365
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 719		Substitute 19-inch color monitor (98751A) for 16-inch monitor (98785A)	3,100
98589S	98562A 98548A 98788A 46060A 46081A 46084A 98594L Keyboard	Model 330MH 2D Monochrome Workstation Model 330 SPU plus: High-resolution Monochrome Graphics Board 19-inch High-resolution Monochrome Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	11,275
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
985825	98562A 98544B 98786A 46060A 46084A 98594L Keyboard	Model 330M Monochrome Workstation Model 330 SPU plus: High-resolution Monochrome Graphics Board 17-inch High-resolution Monochrome Monitor (1024 x 768) HP-HIL 2-button Mouse HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	11,275
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently.

## Model 350 Workstations (SRX, TurboSRX, CH, CHX, CX, C, MH, M, AIC, AIM)

Product/Opt. Number	Component	Description	Price
98587E	98562B 98720A • Opt. 721 • Opt. 722 98725A 98752A 98290A 46060A 46081A 46084A 98594L Keyboard	Model 350SRX Solid Rendering Workstation Model 350 SPU plus: 3D Display Controller 3D Solid Rendering Graphics Accelerator Frame Buffer Board 16-bit Display Controller Interface to 98720A 19-inch High resolution Color Monitor (1280 x 1024) RGB cable HP-HIL 2-button Mouse 2. 4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE, NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$49,43
Opt. 011		Delete High-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/O
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/0
Opt. 016		Add one 8-plane frame buffer board for a total of 16 planes (limit four 8-plane boards per 98720A)	4,130
Opt. 024		Add two 8-plane frame buffer boards for a total of 24 planes (limit four 8-plane boards per 98720A)	8,000
Opt. 032		Add three 8-plane frame buffer boards for a total of 24 planes with a full 16-bit Z-buffer (limit four 8-plane boards per 98720A)	12,000
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 716		Substitute 16-inch monitor (98789A) for 19-inch monitor (98752A)	-3,000
98587F	98562B 98730A 98726A 98752A 46060A 46081A 46084A 98594L Keyboard	Model 350 TurboSRX Solid Rendering Workstation Model 350 SPU plus: 3D Display Controller with eight planes of frame buffer memory and RGB cable 32-bit Display Controller Interface to 98730A 19-inch High resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 608, 616, or 624; options cannot be ordered concurrently. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$43,255
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/0
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,000
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 608		Add three accelerators for 3D solids and a full 16-bit Z-buffer	20,000
Opt. 616		Add one frame buffer card (for a total of 16 planes of frame buffer memory), 3 accelerators for 3D solids and a full 16-bit Z-buffer	24,000
Opt. 624		Add two frame buffer cards (for a total of 24 planes of frame buffer memory), 3 accelerators for 3D solids and a full 16-bit Z-buffer	28,000
Opt. 716		Substitute 16-inch monitor (98789A) for 19-inch monitor (98752A)	-3,000

### Model 350 Workstations (cont'd)

Product/Opt. Number	Component	Description	Price
98588E	98562B 98550A 98752A 46060A 46081A 46084A 98594L Keyboard	Model 350CH 2D Color Workstation Model 350 SPU plus: High-resolution Color Graphics Board with RGB cable 19-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$34,965
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on.	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 556		Add 98556A 2D Integer-based Graphics Accelerator	5,065
Opt. 716		Subsitute 16-inch Monitor (98789A) for 19-inch Monitor (98752A)	-3,000
98588E Opt. 556	98562B 98550A 98752A 46060A 46081A 46084A 98594L Keyboard	Model 350CHX 2D Color Workstation (Model 350CH with 2D Integer-based Graphics Accelerator)  Model 350CH 2D Color Workstation  Add 98556A 2D Integer-based Graphics Accelerator  Model 350 SPU plus:  High-resolution Color Graphics Board with RGB cable  19-inch High-resolution Color Monitor (1280 x 1024)  HP-HIL 2-button mouse  2.4m HP-HIL extension with audio  HP-HIL ID Module  HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11  Note: Zero out of four DIO II slots available for accessory cards.  Note: Must specify one keyboard option  Note: Must order Option 015 or 017; options cannot be ordered concurrently.	34,965 5,065
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM; replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 716		Substitute 16-inch color monitor (98789A) for 19-inch monitor (98752A)	-3,000

Product/Opt. Number	Component	Description	Price
98586E	98562B • Opt. 006 98700A 98710A 98701A 98287A 98751A 98290A 46060A 46081A 46084A 98594L	Model 350CX Color Workstation with Graphics Accelerator Model 350 SPU plus: Add 2-slot DIO Backplane High-resolution Display Controller Graphics Accelerator for the 98700A 4-plane Graphic Memory Upgrade for 98700A Series 300 Interface Card for 98700A 19-inch High-resolution Color Monitor (1024 x 768) RGB Cable HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	\$46,665
	Keyboard	Note: Zero out of four DIO II slots available; one DIO accessory (does not support I/O cards) slot available. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017	37. 30.	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
98583E	98562B 98547A 98751A 46060A 46081A 46084A 98594L	Model 350C Color Workstation Model 350 SPU plus: High-resolution Color Graphics Board with RGB cable 19-inch High resolution Color Monitor (1280 x 768) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE, NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$34,965
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes Parity-checking RAM	12,150
Opt. 716		Substitute 16-inch Monitor (98785A) for 19-inch monitor (98751A)	-3,000

Product/Opt. Number	Component	Description	Price
98589E	98562B 98548A 98788A 46060A 46081A 46084A 98594L	Model 350MH Monochrome Workstation Model 350 SPU plus: High-resolution Monochrome Graphics Board 19-inch High-resolution Monochrome Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	\$26,165
And Comments	Keyboard	Note: Zero out of four DIO II slots available for accessory cards.  Note: Must specify one keyboard option  Note: Must order Option 015 or 017; options cannot be ordered concurrently.	
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
98582E	98562B 98544B 98786A 46060A 46084A 98594L Keyboard	Model 350M Monochrome Workstation Model 350 SPU plus: High-resolution Monochrome Graphics Board 17-inch High-resolution Monochrome Monitor (1024 x 768) HP-HIL 2-button Mouse HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$26,165
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
98585E	98562B 98550A 98752A 46060A 46081A 46084A 98594L 98594A 98784A 98678L 98678B Opt. 022 79232U Opt. 022 Keyboard	Model 350 AIC Color AI Development System Model 350 SPU plus: High-resolution Graphics Board with RGB cable 19-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Media and documentation for 98594L; software on ¼-inch tape cartridge HP-UX Programmer's Documentation Set Development Environment for Common LISP License-to-Use Development Environment for Common LISP; software on ¼-inch tape cartridge Development Environment for HP PROLOG; software on ¼-inch tape cartridge Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$42,445
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/0
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 232		Delete Development Environment for HP PROLOG	-4,000

Product/Opt. Number	Component	Description	Price
98584E	98562B 98548A 98788A 46060A 46081A 46084A 98594L 98594A 9878B 98678L 98678B Opt. 022 79232U Opt. 022 Keyboard	Model 350 AIM Monochrome AI Development System Model 350 SPU plus: High-resolution Monochrome Graphics Board with cable 19-inch High-resolution Monochrome Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Media and documentation for 98549L; software on ¼-inch tape cartridge HP-UX Programmer's Documentation Kit Development Environment for Common LISP License-to-Use Development Environment for Common LISP; software on ¼-inch tape cartridge Development Environment for HP PROLOG; software on ¼-inch tape cartridge Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$33,640.
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500.
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050.
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150.
Opt. 232		Delete Development Environment for HP PROLOG	-4,000.

## Model 360 Workstations (SRX, TurboSRX, CH, CHX, C+, MH)

Product/Opt. Number	Component	Description	Price
98587W	98579A 98720A • Opt. 721 • Opt. 722 98725A 98789A 98290A 46060A 46081A 46084A 98594L Keyboard	Model 360 SRX Solid Rendering Workstation Model 360 SPU plus: 3D Display Controller 3D Solid Rendering Graphics Accelerator Framer Buffer Board 16-bit Display Controller Interface to 98720A 16-inch High-resolution Color Monitor (1280 x 1024) RGB cable HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option; ABO and AB1 not available. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	34,965
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots.	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 016		Add one 8-plane frame buffer board for a total of 16 planes (limit four 8-plane boards per 98720A)	4,130
Opt. 024		Add two 8-plane frame buffer boards for a total of 24 planes (limit four 8-plane bourds per 98720A)	8,260
Opt. 032		Add three 8-plane frame buffer boards for a total of 24 planes with a full 16-bit Z-buffer (limit four 8-plane boards per 98720A)	12,405
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790
Opt. 719		Substitute 19-inch monitor (98752A) for 16-inch monitor (98789A)	3,100

Opt. 010 and Opt. 011 cannot be ordered concurrently; Opts. 108, 112, and 116 cannot be ordered concurrently.

Product/Opt. Number	Component	Description	Price
98587T	98579A 98730A 98726A 98267A 98752A 98290A 46060A 46081A 46084A 98594L 98262A	Model 360 TurboSRX Solid Rendering Workstation Model 360 SPU plus: 3D Display Controller with eight planes of frame buffer memory 32-bit Display Controller Interface to 98730A 4 Mbytes RAM board for a total of 8 Mbytes RAM 19-inch High-resolution Color Monitor (1280 x 1024) RGB cable HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 IEEE 488 High-speed Disc Interface Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option; ABO and AB1 not available. Note: Must order Option 608, 616, or 624; options cannot be ordered concurrently. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	35,995
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 011		Delete High-speed HP-IB Disc Interface and add 98265A SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017	P	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 112		Add 4 Mbytes RAM for a total of 12 Mbytes RAM	4,590
Opt. 116		Add 8 Mbytes RAM for a total of 16 Mbytes RAM	8,890
Opt. 416		Add one 8-plane buffer board	4,000
Opt. 424		Add two 8-plane buffer boards	8,000
Opt. 608		Add three accelerators for 3D solids and a full 16-bit Z-buffer	20,000
Opt. 616		Add one frame buffer card (for a total of 16 planes of frame buffer memory), 3 accelerators for 3D solids and a full 16-bit Z-buffer	24,000
Opt. 624		Add two frame buffer cards (for a total of 24 planes of frame buffer memory), 3 accelerators for 3D solids and a full 16-bit Z-buffer	28,000
Opt. 716		Substitute 16-inch monitor (98789A) for 19-inch monitor (98752A)	-3,000
98588W	98579A 98550A 98789A 46060A 46081A 46084A 98594L Keyboard	Model 360 CH 2D Color Workstation Model 360 SPU plus: High-resolution Color graphics Board with RGB cable 16-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option; ABO and ABI not available. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$19,510
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/O
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790
Opt. 556		Add 98556A 2D integer-based graphics accelerator	5,065
Opt. 719		Substitute 19-inch monitor (98752A) for 16-inch monitor (98789A)	3,100

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently; Opts. 108, 112 and 116 cannot be ordered concurrently.

Product/Opt. Number	Component	Description	Price
98588W Opt. 556	98579 A 98549 A 98785 A 46060 A 46081 A 46084 A 98594 L Keyboard	Model 360 CHX 2D Color Workstation (Model 360 CH with 2D Integer-Based Graphics Accelerator)  Model 360 CH 2D Color Workstation  Add 98556A 2D Integer-based Graphics Accelerator  Model 360 SPU plus:  High-resolution Color graphics Board with RGB cable 16-inch High-resolution Color Monitor (1024 x 768)  HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio  HP-HIL ID Module  HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11  Note: One out of four DIO II slots available for accessory cards.  Note: Must specify one keyboard option; ABO and AB1 not available.  Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$19,510 5,065
Opt. 006	4	Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790
Opt. 719		Substitute 19-inch monitor (98751A) for 16-inch monitor (98785A)	3,100
98588W	98579A 98549A 98785A 46060A 46081A 46084A 98594L Keyboard	Model 360C + 2D Color Workstation Model 360 SPU plus: High-resolution Color graphics Board with RGB cables 16-inch High-resolution Color Monitor (1024 x 768) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option; ABO and AB1 not available. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$16,500
Opt. 006		Add 98242B 2-slot DIO Backplane	390
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*		Add 4 Mbyte RAM for a total of 8 Mbyte RAM	4,890
Opt. 112*		Add 8 Mbyte RAM for a total of 12 Mbyte RAM	9,500
Opt. 116*		Add 12 Mbyte RAM for a total of 16 Mbyte RAM	13,790
Opt. 719		Substitute 19-inch monitor (98751A) for 16-inch monitor (98785A)	3,100

<sup>\*</sup>Opt. 010 and Opt. 011 cannot be ordered concurrently; Opts. 108, 112 and 116 cannot be ordered concurrently.

### Model 360 Workstations (cont'd)

Product/Opt. Number	Component	Description	Price
98589W	98579A 98548A 98788A 46060A 46081A 46084A 98594L Keyboard	Model 360MH 2D Monochrome Workstation Model 360 SPU plus: High-resolution Monochrome Graphics Board 19-inch High-resolution Monochrome Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: One out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option; ABO and AB1 not available. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	16,010.
Opt. 006		Add 98242B 2-slot DIO Backplane to convert one DIO-II slot to two DIO slots	390.
Opt. 010*		Add 98262A High-speed HP-IB Disc Interface	960.
Opt. 011*		Add 98265A SCSI single-ended board with 1m cable and terminator	1,100.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500.
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790.

Opt. 010 and Opt. 011 cannot be ordered concurrently: Opts. 108, 112 and 116 cannot be ordered concurrently

## Model 370 Workstations (SRX, TurboSRX, CH, CHX, C+, MH, AIC, AIM)

Product/Opt. Number	Component	Description	Price
98587G	98579B 98720A ● Opt. 721 ● Opt. 722 98725A 98752A 98290A 46060A 46081A 46084A 98594L Keyboard	Model 370 SPU plus: 3D Display Controller 3D Solid Rendering Graphics Accelerator Frame Buffer Board 16-bit Display Controller Interface to 98720A 19-inch High resolution Color Monitor (1280 x 1024) RGB cable HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE, NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$50,250.
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 016		Add one 8-plane frame buffer board for a total of 16 planes (limit four 8-plane boards per 98720A)	4,000.
Opt. 024		Add two 8-plane frame buffer boards for a total of 24 planes (limit four 8-plane boards per 98720A)	8,000.
Opt. 032		Add three 8-plane frame buffer boards for a total of 24 planes with a full 16-bit Z-buffer (limit four 8-plane boards per 98720A)	12,000.
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500.
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050.
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150.
Opt. 716		Substitute 16-inch monitor (98789A) for 19-inch monitor (98752A)	-3,000.

Product/Opt. Number	Component	Description	Price
98587H	98579B 98730A 98726A 98752A 98290A 46060A 46081A 46084A 98594L Keyboard	Model 370 TurboSRX Solid Rendering Workstation Model 370 SPU plus: 3D Display Controller with eight planes of frame buffer memory and RGB cable 32-bit Display Controller Interface to 98730A 19-inch High resolution Color Monitor (1280 x 1024) RGB cable HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 608, 616, or 624; options cannot be ordered concurrently. Note: Must order Option 015 or 017; options cannot be ordered concurrently.	44,250.
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500.
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050.
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150.
Opt. 416		Add one 8-plane frame buffer	4,000
Opt. 424		Add two 8-plane frame buffers	8,000.
Opt. 608		Add three accelerators for 3D solids and a full 16-bit Z-buffer	20,000.
Opt. 616		Add one frame buffer card (for a total of 16 planes of frame buffer memory), 3 accelerators for 3D solids and a full 16-bit Z-buffer	24,000.
Opt. 624		Add two frame buffer cards (for a total of 24 planes of frame buffer memory, 3 accelerators for 3D solids and a full 16-bit Z-buffer	28,000.
Opt. 716		Substitute 16-inch monitor (98789A) for 19-inch monitor (98752A)	-3,000.
98588G	98562B 98550A 98752A 46060A 46081A 46084A 98594L Keyboard	Model 370CH 2D Color Workstation Model 370 SPU plus: High-resolution Color Graphics Board with RGB cable 19-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX 6.2 License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	\$31,900.
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500.
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050.
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150.
Opt. 556		Add 98556A 2D Integer-based Graphics Accelerator	5,065.
Opt. 716		Substitute 16-inch Monitor (98789A) for 19-inch monitor (98752A)	-3,000.

Product/Opt. Number	Component	Description	Price
98588G		Model 370CHX 2D Color Workstation (Model 370CH with 2D integer-based Graphics Accelerator)	31,900
		Model 370CH 2D Color Workstation	
Opt. 556		Add 98556A 2D Integer-based Graphics Accelerator	5,06
	98579B	Model 370 SPU plus:	
	98550B 98752A	High-resolution Color Graphics Board with RGB cable 19-inch High resolution Color Monitor (1280 x 1024)	A STATE OF THE STA
	46060A	HP-HIL 2-button Mouse	
	46081A	2.4m HP-HIL Extension with audio	
	46084A 98594L	HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	
	70374E	<b>Note:</b> Zero out of four DIO II slots available for accessory cards.	
	Keyboard	Note: Must specify one keyboard option	
O-1 011		Note: Must order Option 015 or 017; options cannot be ordered concurrently.	1.5
Opt. 011 Opt. 015		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or	15
•		StarLAN 10).	N/
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,50
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,05
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,15
Opt. 716		Substitute 16-inch color monitor (98789A) for 19-inch monitor (98752A)	-3,00
98583G	005700	Model 370C+ 2D Color Workstation	\$28,00
	98579B 98549A	Model 370 SPU plus: High-resolution Color Graphics Board with RGB cable	
	98751A	19-inch High resolution Color Monitor (1024 x 768)	
	46060A	HP-HIL 2-button Mouse	
	46081A 46084A	2.4m HP-HIL Extension with audio	
	98594L	HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	
		<b>Note:</b> Zero out of four DIO II slots available for accessory cards.	
	Keyboard	Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	15
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N.
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,50
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,05
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,15
Opt. 716		Substitute 16-inch monitor (98785A) for 19-inch monitor (98751A)	-3,00
98589G	005500	Model 370MH Monochrome Workstation	\$24,50
	98579B 98548A	Model 370 SPU plus: High-resolution Monochrome Graphics Board	
	98788A	19-inch High resolution Monochrome Monitor (1280 x 1024)	
	46060A	HP-HIL 2-button Mouse	
	46081A 46084A	2.4m HP-HIL Extension with audio HP-HIL ID Module	
	98594L	HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	
		<b>Note:</b> Zero out of four DIO II slots available for accessory cards.	
4	Keyboard	<b>Note:</b> Must specify one keyboard option <b>Note:</b> Must order Option 015 or 017: options cannot be ordered concurrently.	
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	15
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/
Opt. 017	-	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,05
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,15
		· · · · · · · · · · · · · · · · · · ·	,

Product/Opt. Number	Component	Description	Price
98588G Opt. 688	·	Model 370AIC Color AI Development System includes:	\$31,900
Орт. 000	98594A 98794A 98688L 98688A Opt. 022	Media and documentation for 98594L; software on ¼-inch tape cartridge HP-UX Programmer's Documentation Set Development Environment for Common LISP II License-to-Use Development Environment for Common LISP II; software on ¼-inch tape cartridge	4,000
	98579B 98550A 98752A 46060A 46081A 46084A 98594L Keyboard	Model 370 SPU plus: High-resolution Graphics Board with RGB cable 19-inch High-resolution Color Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	12,150
Opt. 716		Substitute 16-inch monitor (98785A) for 19-inch monitor (98751A)	-3,000
98589G		Model 370 AIM Monochrome AI Development System	\$24,500
Opt. 688	98594A 98794A 98688L 98688A Opt. 022 98579B 98548A 98788A 46060A 46081A 46084A 98594L Keyboard	includes: Media and documentation for 98549L; software on ¼-inch tape cartridge HP-UX Programmer's Documentation Kit Development Environment for Common LISP II License-to-Use Development Environment for Common LISP II; software on ¼-inch tape cartridge Model 370 SPU plus: High-resolution Monochrome Graphics Board with cable 19-inch High resolution Monochrome Monitor (1280 x 1024) HP-HIL 2-button Mouse 2.4m HP-HIL Extension with audio HP-HIL ID Module HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11 Note: Zero out of four DIO II slots available for accessory cards. Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently.	4,000
Opt. 011		Delete high-speed HP-IB; add SCSI single-ended board with 1m cable and terminator	150
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 116		Converts 8 Mbytes RAM to 16 Mbytes RAM. Replaces the 4 Mbytes RAM add-on with a 12 Mbytes RAM add-on	9,500
Opt. 208		Substitute 8 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	4,050
Opt. 216		Substitute 16 Mbytes ECC RAM for 8 Mbytes parity-checking RAM	

## **Series 300 Instrument Controllers**

Model PC-305 and PC-308 Instrument controllers

The PC-305 and PC-308 instrument controllers are based on the HP Vectra Personal Computer with the BASIC Language Processor plug-in card. Within Series 300, they are instrument and measurement control computers, but they also run all the PC-DOS software of the IBM-PC\* compatible HP Vectra. For information on interfaces and accessories, please consult the *Office Workstation Products Direct Price Guide*, Pub. No. 5951-7096D.

Product/Opt. Number	Component	Description	Price
82316D	D1180A 82300B 82304B 45951E	PC-305M BASIC Controller HP Vectra CS SPU, 8086-compatible, 7.16 MHz. Includes 640 Kbytes RAM, 3½-inch 1.44 Mbytes microfloppy disc drive, Vectra CS PC Kit with AT2/DIN keyboard, Vectra CS manuals, serial/parallel interface, Getting Started manual with 3½-inch installation disc. Video Graphics Adapter BASIC Language Processor Card (512 Kbytes RAM, HP-IB interface) and BASIC 5.1 (single 3½-inch, 1.44 Mbytes, overlays, Programmer's Reference Guide, BASIC Reference Manual) BASIC 5.0 ROM and Installation Guide Vectra Disc Operating System with MS-DOS 3.3, Personal Applications Manager, File Manager and Utilities, 3½-inch discs	\$ 4,300
		<b>Note:</b> Must order Option 001, 002 or 003; options cannot be ordered concurrently.	
Opt. 001	D1181W	14-inch Monochrome Video Graphics Display (white)	N/C
Opt. 002	D1181G	14-inch Monochrome Video Graphics Display (green)	N/C
Opt. 003	D1181A	14-inch Monochrome Video Graphics Display (amber)	N/C
Opt. W03		Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C
82316DB 82316DD 82316DE 82316DF 82316DK 82316DS 82316DU 82316DZ 82317D	D1180A 82300B 82304B 45951E	Localized options include power cords, monitors, PC kits and MS-DOS. Order using the appropriate product number below and the appropriate option number above. Euro English German European Spanish European French ICON Swedish/Finnish U.K. English Italian  PC-305ML BASIC Controller HP Vectra CS SPU, 8086-compatible, 7.16 MHz. Includes 640 Kbytes RAM, 3½-inch 1.44 Mbytes microfloppy disc drive, 20Mbytes hard disc drive, Vectra CS PC Kit with AT2/DIN keyboard, Vectra CS manuals, serial/parallel interface, Getting Started manual with 3½-inch installation disc. Video Graphics Adapter BASIC Language Processor Card (512 Kbytes RAM, HP-IB interface) and BASIC 5.1 (single 3½-inch, 1.44 Mbytes, overlays, Programmer's Reference Guide, BASIC Reference Manual) BASIC 5.0 ROM and Installation Guide Vectra Disc Operating System with MS-DOS 3.3, Personal Applications Manager, File Manager and Utilities, 3½-inch discs	4,300 4,300 4,300 4,300 4,300 4,300 4,855
Opt. 001	D1181W	Note: Must order Option 001, 002 or 003; options cannot be ordered concurrently.  14-inch Monochrome Video Graphics Display (white)	NI/C
Opt. 002	D1181G	14-inch Monochrome Video Graphics Display (green)	N/C
Opt. 003	D1181A	14-inch Monochrome Video Graphics Display (green)	N/C
Opt. W03		Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C
82317DB 82317DD 82317DE 82317DF 82317DK 82317DS 82317DU 82317DU		Localized options include power cords, monitors, PC kits and MS-DOS. Order using the appropriate product number below and the appropriate option number above. Euro English German European Spanish European French ICON Swedish/Finnish U.K. English Italian	4,855 4,855 4,855 4,855 4,855 4,855 4,855 4,855

<sup>\*</sup> IBM is a registered trademark of International Business Machines Corporation.

Product/Opt. Number	Component	Description	Price
82314D	D1180A 82300B 82304B 45951E	PC-308ML BASIC Controller HP Vectra ES/12 SPU, Intel 80286, 12 MHz. Includes 640 Kbytes RAM, 3½-inch 1.44 Mbytes microfloppy disc drive, 20 Mbytes hard disc drive, Vectra ES/12 PC Kit with AT2/DIN keyboard, Vectra ES/12 manuals, serial/parallel interface, Getting Started manual with 3½-inch installation disc. Video Graphics Adapter BASIC Language Processor Card (512 Kbytes RAM, HP-IB interface) and BASIC 5.1 (single 3½-inch, 1.44 Mbytes, overlays, Programmer's Reference Guide, BASIC Reference Manual) BASIC 5.0 ROM and Installation Guide Vectra Disc Operating System with MS-DOS 3.3, Personal Applications Manager, File Manager and Utilities, 3½-inch discs	\$ 6,155
		<b>Note:</b> Must order Option 001, 002 or 003; options cannot be ordered concurrently.	
Opt. 001	D1181W	14-inch Monochrome Video Graphics Display (white)	N/C
Opt. 002	D1181G	14-inch Monochrome Video Graphics Display (green)	N/C
Opt. 003	D1181A	14-inch Monochrome Video Graphics Display (amber)	N/C
Opt. W03		Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C
82314DB 82314DD 82314DE 82314DF 82314DK 82314DS 82314DU 82314DU		Localized options include power cords, monitors, PC kits and MS-DOS. Order using the appropriate product number below and the appropriate option number above. U.S. English German European Spanish European French ICON Swedish/Finnish U.K. English Italian	6,155 6,155 6,155 6,155 6,155 6,155 6,155
82315D	D1182A D1180A 82959S 82300B 82304B 45951E	PC-308CL BASIC Controller HP Vectra ES/12 SPU, Intel 80286, 12 MHz. Includes 640 Kbytes RAM, 3½-inch 1.44 Mbytes microfloppy disc drive, 20 Mbytes hard disc drive, Vectra ES/12 PC Kit with AT2/DIN keyboard, Vectra ES/12 manuals, serial/parallel interface, Getting Started manual with 3½-inch installation disc. Video Graphics Color Display Video Graphics Adapter Tilt/Swivel Base BASIC Language Processor Card (512 Kbytes RAM, HP-IB interface) and BASIC 5.1 (single 3½-inch, 1.44 Mbytes, overlays, Programmer's Reference Guide, BASIC Reference Manual) BASIC 5.0 ROM and Installation Guide Vectra Disc Operating System with MS-DOS 3.3, Personal Applications Manager, File Manager and Utilities, 3½-inch discs Note: Must order Option 001, 002 or 003; options cannot be ordered concurrently.	\$ 6,695
Opt. W03		Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C
82315DB 82315DD 82315DE 82315DF 82315DK 82315DS 82315DU 82315DU		Localized options include power cords, monitors, PC kits and MS-DOS. Order using the appropriate product number below. U.S. English German European Spanish European French ICON Swedish/Finnish U.K. English Italian	6,695. 6,695. 6,695. 6,695. 6,695. 6,695. 6,695.

Product/Opt. Number	Component	Description	Price
82319D	D1182A D1180A 82959S 82300B	PC-308CM BASIC Controller HP Vectra ES/12 SPU, Intel 80286, 12 MHz. Includes 640 Kbytes RAM, 3½-inch 1.44 Mbytes microfloppy disc drive, 40 Mbytes hard disc drive, Vectra ES/12 PC Kit with AT2/DIN keyboard, Vectra ES/12 manuals, serial/parallel interface, Getting Started manual with 3½-inch installation disc. Video Graphics Color Display Video Graphics Adapter Tilt/Swivel Base BASIC Language Processor Card (512 Kbytes RAM, HP-IB interface) and BASIC 5.1 (single 3½-inch, 1.44 Mbytes, overlays, Programmer's Reference Guide, BASIC	\$ 7,095.
	82304B 45951E	Reference Manual) BASIC 5.0 ROM and Installation Guide Vectra Disc Operating System with MS-DOS 3.3, Personal Applications Manager, File Manager and Utilities, 3½-inch discs	
Opt. W03		Convert 1-year return-to-HP warranty to 90-day on-site warranty	N/C
82319DB 82319DD 82319DE 82319DF 82319DK 82319DS 82319DU 82319DZ		Localized options include power cords, monitors, PC kits and MS-DOS. Order using the appropriate product number below. Euro English German European Spanish European French ICON Swedish/Finnish U.K. English Italian	7,095. 7,095. 7,095. 7,095. 7,095. 7,095. 7,095. 7,095.

#### **Model 310 Instrument Controllers**

Component	Description	Price
98561A 98543A 35741A 98616A Opt. 044 Keyboard	Model 310CMA Color Instrument Controller  Model 310 SPU plus: Medium-resolution Color Graphics Board with RGB cable 12-inch Medium-resolution Color Monitor (512 x 400) BASIC Language System software on 3½-inch microfloppy discs Note: Must specify one keyboard option Note: This system does not include the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID. Note: Two DIO I/O and two DIO Accessory slots are available.	8,610
	Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
	Delete manuals	-90.
	Delete BASIC Language System	-450.
	Add 98546A Display Compatibility Interface	875.
	Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C
	To delete the keyboard, specify a delete keyboard option: English version without keyboard; 220V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 120V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V Italian version without keyboard; 220V	-210. -210. -210. -210. -210. -210. -210. -210.
	98561A 98543A 35741A 98616A Opt. 044	98561A 98543A 35741A 98616A Opt. 044 Keyboard  Note: Must specify one keyboard option Note: Two DIO I/O and two DIO Accessory slots are available.  Substitute BASIC Language System Add 98546A Display Compatibility Interface  Convert 1 year return-to-HP warranty to 90-day on-site warranty  To delete the keyboard, specify a delete keyboard; 220V Canadian French version without keyboard; 220V European Spanish version without keyboard; 120V ICON/European English version without keyboard; 220V

Model 310 Instrument Controllers (cont'd)

Product/Opt. Number	Component	Description	Price
98580B	98561A 35731A 98616A Opt. 044 Keyboard	Model 310CMA Monochrome Instrument Controller Model 310 SPU plus: 12-inch Medium-resolution Monochrome Monitor (512 x 400) BASIC Language System software on 3½-inch microfloppy discs Note: Must specify one keyboard option. Note: This system does not include the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID. Note: Two DIO I/O and two DIO Accessory slots are available.	5,900.
Opt. 042		Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
Opt. 100		Delete manuals	-90.
Opt. 613		Delete BASIC Language System	-450.
Opt. 002		Substitute ½ Mbyte (512 Kbytes) on-board RAM for standard 1 Mbyte.	-900.
Opt. 008		Add 98546A Display Compatibility Interface	875.
Opt. W03		Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C
Opt. 05A Opt. 05C Opt. 05D Opt. 05E Opt. 05F Opt. 05K Opt. 05M Opt. 05Z		To delete the keyboard, specify a delete keyboard option: English version without keyboard; 120V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 220V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V Italian version without keyboard; 220V	-210. -210. -210. -210. -210. -210. -210. -210.

## **Model 330 Instrument Controllers**

Product/Opt. Number	Component	Description	Price
98581S	98562A • Opt. 006 • Opt. 010 98543A 35741A 98616A Opt. 045 Keyboard	Model 330 CMA Color Instrument Controller  Model 330 SPU plus:  98242B 2-slot DIO Backplane  98262A High-speed HP-IB Disc Interface  Medium-resolution Color Graphics Board with RGB cable  12-inch Medium-resolution Color Monitor (512 x 400)  BASIC Language System software on 3½-inch microfloppy discs  Note: Must specify one keyboard option  Note: This system does not include the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID.  Note: Must order Option 015 or 017; options cannot be ordered concurrently.  Note: One DIO I/O and DIO Accessory slot are available.	\$14,365.
Opt. 042		Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 613		Delete BASIC Language System	-450.
Opt. W03		Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C
Opt. 05A Opt. 05C Opt. 05D Opt. 05E Opt. 05F Opt. 05K Opt. 05M Opt. 05Z		To delete keyboard, specify a delete keyboard option: English version without keyboard; 120V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 220V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V Italian version without keyboard; 220V	-210. -210. -210. -210. -210. -210. -210. -210.

Model 330 Instrument Controllers (cont'd)

Product/Opt. Number	Component	Description	Price
98580S	98562A • Opt. 006 • Opt. 010 98542A 35731A 98616A Opt. 045 Keyboard	Model 330MMA Monochrome Instrument Controller  Model 330 SPU plus:  98242B 2-slot DIO Backplane  98262A High-speed HP-IB Disc Interface  Medium-resolution Monochrome Graphics Board  12-inch Medium-resolution Monochrome Monitor (512 x 400)  BASIC Language System software on 3½-inch microfloppy discs  Note: Must specify one keyboard option  Note: This system does not inloude the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID.  Note: Must order Option 015 or 017; options cannot be ordered concurrently.  Note: One DIO I/O and DIO Accessory Slot are available.	11,275.
Opt. 042		Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 613		Delete BASIC Language System	-450.
Opt. W03		Convert 1 year return-to-HP warranty to 90-day on-site warranty	N/C
Opt. 05A Opt. 05C Opt. 05D Opt. 05E Opt. 05F Opt. 05K Opt. 05M Opt. 05Z		To delete the keyboard, specify a delete keyboard option: English version without keyboard; 120V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 220V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V Italian version without keyboard; 220V	-210. -210. -210. -210. -210. -210. -210. -210.

### **Model 360 Instrument Controllers**

Product/Opt. Number	Component	Description	Price
98580WX	98579A • Opt. 006 • Opt. 010 98544B 98786A 46060A 46084A 98594L 98594A 98796L 98796A Keyboard	Model 360 MMAX Monochrome HP BASIC/UX Instrument Controller Model 360 SPU plus: 98242B 2-slot DIO Backplane 98262A High-speed HP-IB Disc Interface 1024 x 768 Mono Graphics Board 17" Monochromatic Monitor HP-HIL 2-button Mouse HP-HIL ID Module HP-UX License-to-Use, AXE; PE; NS-ARPA, NFS Services/300; and X.11 Media and documentation for 98594L; software on ¼-inch tape cartridge. HP BASIC/UX License-to-Use HP BASIC/UX media and documentation (¼-inch tape) Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently. Note: One DIO I/O and Accessory slot are available.	\$18,345.
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 100		Delete media/documentation for HP BASIC/UX and HP-UX	-500.
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500.
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790.
Opt. 003		Delete graphics subsystem (98544B graphics board and 98786A monitor)	-1,500.
Opt. 402		152 MB 7958B Disc Drive with all system software installed (recommended for development systems)	5,675.

<sup>\*</sup> Opt. 108, 112, and 116 cannot be ordered concurrently.

Product/Opt. Number	Component	Description	Price
98581W	98579A	Model 360CMA Color Instrument Controller Model 360 SPU plus: 98242B 2-slot DIO Backplane 98262A High-speed HP-IB Disc Interface Medium-resolution Color Graphics Board with RGB cable 12-inch Medium-resolution Color Monitor (512 x 400) BASIC Language System software on 3½-inch microfloppy discs Note: Must specify one keyboard option	\$18,070
		Note: This system does not include the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID.  Note: Must order Option 015 or 017; options cannot be ordered concurrently.  Note: One DIO I/O and DIO Accessory slot are available.	
Opt. 042		Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500.
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790.
Opt. 613	WE.	Delete BASIC Language System	-450.
Opt. 05A Opt. 05C Opt. 05D Opt. 05E Opt. 05F Opt. 05K Opt. 05M Opt. 05Z		To delete keyboard, specify a delete keyboard option: English version without keyboard; 120V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 220V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V Italian version without keyboard; 220V	-210. -210. -210. -210. -210. -210. -210. -210.
98580W		Model 360MMA Monochrome Instrument Controller	15,805.
	98579A	Model 360 SPU plus:  98242B 2-slot DIO Backplane  98262A High-speed HP-IB Disc Interface  Medium-resolution Monochrome Graphics Board  12-inch Medium-resolution Monochrome Monitor (512 x 400)  BASIC Language System software on 3½-inch microfloppy discs  Note: Must specify one keyboard option  Note: This system does not inloude the HP-HIL ID Module. The module must be purchased separately if you plan to use application software which requires ID.  Note: Must order Option 015 or 017; options cannot be ordered concurrently.  Note: One DIO I/O and DIO Accessory slot are available.	10,000
Opt. 042		Substitute BASIC software on 51/4-inch floppy for BASIC on 31/2-inch microfloppy	N/C
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,500.
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,790.
Opt. 613		Delete BASIC Language System	-450.
Opt. 05A Opt. 05C Opt. 05D Opt. 05E Opt. 05F Opt. 05K Opt. 05M		To delete the keyboard, specify a delete keyboard option: English version without keyboard; 120V Canadian French version without keyboard; 120V German version without keyboard; 220V European Spanish version without keyboard; 220V European French version without keyboard; 220V ICON/European English version without keyboard; 220V Latin Spanish version without keyboard; 120V	-210. -210. -210. -210. -210. -210. -210.

Product/Opt. Number	Component	Description	Price
98581WX	98579A • Opt. 006 • Opt. 010 98550A 98789A 46060A 46081A 46084A 98594L 98594L	Model 360 CMAX Color HP BASIC/UX Instrument Controller Model 360 SPU plus: 98242B 2-slot DIO Backplane 98262A High-speed HP-IB Disc Interface 1280 x 1024 Color Graphics Board 16" Color Monitor HP-HIL 2-button Mouse Buffer Box w/speaker HP-HIL ID Module HP-UX License-to-Use, AXE; PE; NS-ARPA, NFS Services 300; and X.11 Media and documentation for 98594L; software on ½-inch tape cartridge. HP BASIC/UX License-to-Use HP BASIC/UX media and documentation (½-inch tape)	\$22,705.
	Keyboard	Note: Must specify one keyboard option Note: Must order Option 015 or 017; options cannot be ordered concurrently. Note: One DIO I/O and Accessory slot are available.	
Opt. 015		IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017		IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 100		Delete media/documentation for HP BASIC/UX and HP-UX	-500.
Opt. 108*		Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,850.
Opt. 112*		Add 8 Mbytes RAM for a total of 12 Mbytes RAM	9,415.
Opt. 116*		Add 12 Mbytes RAM for a total of 16 Mbytes RAM	13,670.
Opt. 402		152 MB 7958B Disc Drive with all system software installed (recommended for development systems)	5,625.

<sup>\*</sup>Opt. 108, 112, and 116 cannot be ordered concurrently.

#### Series 300 Network Servers

#### Localization for Series 300 Network Servers

The Series 300 Model 15 and Model 25 are available in the following localized versions. The localized versions include localized keyboard, SPU, disc drive, tape drive, power cord, and applicable manuals. To order a server, you must include the appropriate localized option and the appropriate HP-UX pre-load option. For example, to order the German version of the model 25 Network Server with HP-UX pre-load with 150-Mbytes of swap space, order 98566E + Opt. ABD & Opt. 1AR. The localization and HP-UX pre-load options are must order options.

Option	Language	Option	n <sup>*</sup> Language
ABA	. U.S. English	АВР <sup>-</sup>	. Swiss German
ABC	. Canadian French	ABQ	. Swiss French
ABD	. German	ABS	. Swedish
ABE	. European Spanish	ABU	. U.K. English

ABW Belgian Dutch
ABX Finnish
ABY Danish
ABZ Italian
ABN Norwegian

#### **Entry-Level Network Server**

The Model 15 Network Server is a limited-expansion server and therefore has no accessory slots available for interface and accessory cards. Its 304-Mbytes disc, 60-Mbytes tape, fast processor and low price makes it ideal for workgroups of 4 to 10 clients.

#### **High-Performance Network Server**

The Model 25 Network Server is a high-performance server. Its 571-Mbytes disc, 536-Mbytes tape, 4-MIPS processor and DIO-II expander makes it ideal for workgroups of 8 to 35 clients.

### **Network Servers**

Product/Opt. Number	Description	Price
98564E	HP 9000 Model 15NS Design Automation Network Server Includes:	\$25,500
	Model 319 SPU/ with 8 Mbytes RAM and High-speed Disc Interface	
	304-Mbytes Fixed Disc Drive 60-Mbytes ¼-inch Tape Drive	
	HP-UX License-to-Use AXE; PE; NS-ARPA, NFS services/300; and X.11	
	HP-UX Media and Documentation for 98594L software on ¼-inch tape cartridge HP-UX Programmers Documentation Set	
	HP-HIL Keyboard	
	HP Design Plus Cabinet	
	Note: Must specify one localized version option Note: Must specify one HP-UX pre-load option	
Opt. 1AP	Pre-load HP-UX with 50-Mbytes swap space	N/C
Opt. 1AQ	Pre-load HP-UX with 100-Mbytes swap space	N/C
Opt. 1AR	Pre-load HP-UX with 150-Mbytes swap space	N/C
Opt. 112	Add 4 Mbytes RAM for a total of 12 Mbytes RAM	4,590
Opt. 116	Add 8 Mbytes RAM for a total of 16 Mbytes RAM	8,050
Opt. 401	Substitute 536-Mbytes ¼-inch Tape Cartridge Autochanger for 60-Mbytes ¼-inch	7 500
Opt. 549	Tape Drive Add C + graphics package. Includes a 98785A 16-inch high-resolution color monitor	7,500
Opt. 349	(1024 x 768); a 46060A, HP-HIL 2-button mouse; and a 46084A HP-HIL ID Module.	3,900
98566E	HP 9000 Model 25NS Design Automation Network Server	\$58,900
	Includes: Model 350 SPU/ with 8 Mbytes ECC RAM	
	Direct Connect DIO II Expander	
	571-Mbytes Fixed Disk Drive	
	1/4-inch Tape Cartridge Autochanger HP-UX License-to-Use AXE; PE; NS-ARPA, NFS Services/300; and X.11	
	HP-UX Media and Documentation for 98594L; software on 1/4-inch tape cartridge	
	HP-UX Programmers Documentation Set HP-HIL Keyboard	
	HP Design Plus Cabinet	
	Fixed Disc cabinet	
	Note: Must specify one localized version option Note: Must specify one HP-UX pre-load option	
Opt. 1AP	Pre-load HP-UX with 50-Mbytes swap space	N/C
Opt. 1AQ	Pre-load HP-UX iwth 100-Mbytes swap space	N/C
Opt. 1AR	Pre-load HP-UX with 150-Mbytes swap space	N/C
Opt. 1AS	Pre-load HP-UX with 200-Mbytes swap space	N/C
Opt. 015	IEEE 802.3/Ethernet AUI LAN interface (used for ThickLAN, ThinLAN or StarLAN 10).	N/C
Opt. 017	IEEE 802.3/Ethernet LAN interface with ThinMAU and BNC "T" connector	N/C
Opt. 316	Substitute 16-Mbytes ECC RAM for 8-Mbytes ECC RAM	12,000
Opt. 332	Substitute 32-Mbytes ECC RAM for 8-Mbytes ECC RAM	22,000
Opt. 548	Add MH graphics. Includes 98548A, high-resolution monochrome video board; a	4,900
	98788A, 19-inch high-resolution monochrome monitor (1280 x 1024), a 46060A, HP-HIL 2-button mouse; a 46081A, 2.4m HP-HIL Extension with audio; and a 46084A HP-HIL ID Module	
Opt. 550	Add CH graphics package. Includes 98550A, high-resolution color graphics board with RGB cable; a	12,700
- [	98752A, 19-inch high-resolution color monitor (1280 x 1024); a 46060A, HP-HIL 2-button mouse; a	12,700
	46081A, 2.4m HP-HIL Extension with audio; and a 46084A HP-HIL ID Module.	
98610A	Simplex Korean (Japan only)	180.
Opt. 022 98610L	Software on 1/4-inch tape cartridge  LTU Simplex Korean (Japan only)	N/C
98854A	Simplex Chinese (Japan only)	380 180
Opt. 022	Software on 1/4-inch tape cartridge	N/C
98854L	LTU Simplex Chinese (Japan only)	380.
98864A	Japanese Designer (Japan only)	180.
Opt. 022 98864L	Software on 1/4-inch tape cartridge	N/C
70004L	LTU Japan Designer (Japan only)	840.

## **SPU Accessories**

Product/Opt. Number	Description	Price
98242A	<b>4-slot DIO Backplane</b> . Converts two DIO II slots to two pairs of DIO slots (a total of four DIO slots) in 98570A Opt. 004 expander, 98561A Opt. 004 SPU, or 98562A SPU.	\$ 465.
98242B	<b>2-slot DIO Backplane.</b> Converts one DIO II slot to one pair of DIO slots (a total of two DIO slots) in 98562A/B SPU or 98570A Opt. 004 expander.	390.
98568A Opt. 132	Direct Connect 8-slot I/O Expander. Attaches directly to a Series 300 SPU.  Required option for first 98568A attached to Model 330 or 350. Connect 98568A directly to Model 330 or 350 motherboard, using no system slots. (Option not required for second 98568A).	1,965. 425.
98570A Opt. 004	Direct Connect DIO II Expander. Adds two DIO II slots and four DIO slots to a model 330, 350, 360, or 370 SPU. Delete 4-slot DIO backplane for a total of four DIO II system slots. For Models 330 and 350 only.	2,385. -400.
9888A	16-slot DIO Expander. Maximum of two allowed in system. Uses one DIO interface slot.	4,155.
98258A Opt. 004 Opt. 005	4 Mbyte Parity-Checking RAM Controller. Accepts either a 98258B or 98258C RAM add-on board (Model 350 and 370 only) or can be used stand-alone (Models 330, 350, 360, and 370). Occupies one system slot. Includes 3-slot system bus connector.  Delete 3-slot system bus connector (for use with Model 330).  Substitute 4-slot system bus connector (for use with Model 350 with two out of RAM controllers or FPA installed)	6,470. -250. N/C
98258B	4 Mbyte Parity-Checking RAM Add-on. For Model 350 only. Plugs into 98258A for a total of 8 Mbytes RAM.	5,870.
98258C	12 Mbyte Parity-Checking RAM Add-on. For Model 350 only. Plugs into 98258A for a total of 16 Mbytes RAM.	16,615.
98257A	1 Mbyte RAM Card (DIO). For Models 310 and 320 only.	1,720.
98264A Opt. 004 Opt. 005	8 Mbyte Error-Checking and Correcting (ECC) RAM. Occupies one system slot. For Model 350 only. Includes 3-slot system bus connector.  Delete 3-slot system bus connector.  Substitute 4-slot system bus connector (for use with Model 350 with two out of RAM controllers or FPA installed)	12,950. -250. N/C

Product/Opt. Number	Description	Price
98264B	16 Mbyte Error-Checking and Correcting RAM. Occupies one system slot. Includes 3-slot system bus connector.	20,250.
Opt. 004 Opt. 005	Delete 3-slot system bus connector. Substitute 4-slot system bus connector (for use with Model 350 with two out of RAM controllers or FPA installed)	-250. N/C
98248A Opt. 005	Floating Point Accelerator for Model 350. Includes 3-slot system bus connector. Substitute 4-slot system bus connector (for use with Model 350 with two RAM controllers installed)	5,870. N/C
98248B Opt. 004 Opt. 005	Floating Point Accelerator for Models 330, 360, and 370.  Delete 3-slot system bus connector  Substitute 4-slot system bus connector (for use with Model 370 with two RAM controllers installed)	3,500. -150. N/C
98262A	High-speed HP-IB Disc Interface for Model 330 system interface board. Maximum one per system. Uses no DIO II or DIO slots. Includes 2m HP-IB cable.	960.
98265A	SCSI Single-ended Board for Models 330 and 350. Maximum one per system. Uses no DIO II and DIO slots. Includes 1m cable and terminator.	1,100.
98267A	4 Mbyte Parity-Checking RAM Add-on. For Model 360 only.	5,880.
98267B	8 Mbyte Parity-Checking RAM Add-on. For Model 360 only.	10,645.
98267C	12 Mbyte Parity-Checking RAM Add-on. For Model 360 only.	16,590.

# SPU Upgrades

## Field Upgrades

Product/Opt. Number	Description	Price
98243B	<ul> <li>Model 310 CPU Field Upgrade to Model 320. Model 310 processor board must be returned to HP. Upgrade includes:</li> <li>Model 320 processor board</li> <li>HP-IB/HP-HIL/RS-232C, audio, battery-backed real-time clock interface card</li> <li>1 Mbyte RAM card</li> </ul>	\$ 5,930.
Opt. 002	Delete 1 Mbyte RAM board	-1,000.
98244A	<ul> <li>Model 330 CPU Field Upgrade to Model 350. Model 330 processor board must be returned to HP. Upgrade includes:</li> <li>Model 350 processor board</li> <li>98258A 4 Mbytes RAM Controller</li> <li>98258B 4 Mbytes RAM Add-on</li> <li>98262A High-Speed HP-IB Disc Interface</li> <li>2-high System Bus</li> </ul>	15,345.
Opt. 001	Delete 98258A and 98258B. Allows conversion to ECC RAM or re-use of previously owned 4 Mbytes RAM Controller. Requires either ECC RAM, HP 98258B 4 Mbytes RAM Add-on, or HP 98258C 12 Mbytes RAM Add-on. (Model 350 requires minimum 8 Mbytes RAM.)	-7,000.
Opt. 002	Delete 98262A High-Speed HP-IB Disc Interface. Allows re-use of previously owned 98262A. (Model 350 requires High-Speed HP-IB Disc Interface.)	-475.
Opt. 003	Substitute 3-high for 2-high system bus (allows re-use of previously owned 98248A Floating Point Accelerator)	N/C
Opt. 116 Opt. 570	Add 8 Mbytes Parity-Checking RAM (for a total of 16 Mbytes RAM) Add 98570A Direct Connect DIO II Expander	9,500. 2,355.
98247A	<ul> <li>Model 330 CPU Field Upgrade to Model 360. Model 330 processor board must be returned to HP. Upgrade includes:</li> <li>Model 360 processor board with 4 Mbytes RAM</li> <li>Note: Must order Opt. 108, 112, or 116; options cannot be ordered concurrently.</li> </ul>	6,125.
Opt. 108	Add 4 Mbytes RAM for a total of 8 Mbytes RAM	4,890.
Opt. 112 Opt. 116	Add 8 Mbytes RAM for a total of 12 Mbytes RAM Add 12 Mbytes RAM for a total of 16 Mbytes RAM	9,500. 13,790.
98258N	Return credit for one 98258A 4 Mbytes RAM Controller	-1,000.

## Trade-in Programs

Product/Opt. Number	Description	Price
	<b>Note</b> Replaced SPU, Expander, interfaces and accessories must be returned to HP for proper credit.	
98562A	Model 310 SPU trade-in allowance when purchasing Model 330 SPU	\$10,645
Opt. 0H0	Return credit for Model 310 SPU	-1,600
98257N	Return credit for 98257A (up to three 98257N allowed); if ordered concurrently with 98258A 4 Mbytes RAM Controller, up to seven 98257N products are allowed.	-300
98620N	Return credit for 98620A/B (one allowed)	-100
98625N	Return credit for 98625A/B (one allowed)	-130
98635N	Return credit for 98635A (one allowed)	-200
98643N	Return credit for 98643A (one allowed)  Note: Each return credit (N-suffix product numbers) must be ordered with the 98562A Opt. [H] trade-in.	-265
00E(3B		22.220
98562B Opt. 600	Model 320 SPU trade-in allowance for purchasing Model 350 SPU   Return credit for 98561B Model 320 SPU	23,330
Opt. 600	Return credit for 98568A Direct Connect 8-slot I/O Expander	-400
Opt. 601	Return credit for 3-board set (98620A/B, 98625A/B, 98643A)	-495
Opt. 603	Return credit for 98257A 1 Mbyte RAM card	-300
Opt. 604	Return credit combination for 98561B, 98568A, 98620A/B, 98625A/B, 98643A and three 98257A products	-5,295
Opt. 605	Add 98242B 2-slot DIO Backplane to allow re-use of 98287A display interface	N/C
Opt. 606	Exchange 98724A for new 98725A 16-bit Display Controller Interface to 98720A 3D Display Controller	N/O
98579A	Model 320 SPU trade-in allowance for purchasing Model 360 SPU	14,365
Opt. 600	Return credit for 98561B Model 320 SPU	-3,50
Opt. 601	Return credit for 98568A Direct Connect 8-slot I/O Expander	-400
Opt. 602	Return credit for 3-board set (98620A/B, 98625A/B, 98643A)	-495
Opt. 603	Return credit for 98257A 1 Mbyte RAM card (up to three Opt. 603 allowed); if ordered concurrently with Opts. 108, 112, or 116, up to seven Opt. 603 are allowed.	-300
Opt. 604	Return credit combination for 98562B, 98568A, 98620A/B, 98625A/B, 98643A and three 98257A products	-5,295
Opt. 605	Add 98242B 2-slot DIO Backplane to allow re-use of 98287A display interface	N/
Opt. 606	Exchange 98724A for new 98725A 16-bit Display Controller Interface to 98720A 3D Display Controller	N/
98247B	Model 350 CPU Field Upgrade to Model 370. Includes:  ● 98579-66515 processor board	5,000
98247C	Model 360 CPU Field Upgrade to Model 370. Model 350 processor board must be returned to HP. Upgrade includes:	18,600
	<ul> <li>98579-66515 Processor board</li> </ul>	
	98258A/B 8 Mbyte parity RAM board	
	98262A High-Speed HP-IB Disc Interface	
	• 2-high System bus	
Opt. 002	Delete 98262A High-Speed HP-IB Disc Interface. Allows re-use of previously owned 98262A. (Model 350 requires High-Speed HP-IB Disc Interface.)	-47
Opt. 003	Substitute 3-high for 2-high system bus	N/
Opt. 011	Substitute SCSI interface 98265A for HP-IB 98262A	150
Opt. 116	Add 8 Mbyte Parity-Checking RAM (for a total of 16 Mbytes RAM)	9,50
Opt. 570	Add 98570A Direct Connect DIO Expander	2,38
98267AN	Return credit for 4 Mbyte RAM 98267A	-1,00
98267BN	Return credit for 8 Mbyte RAM 98267B	-2,00
98267CN	Return credit for 12 Mbyte RAM 98267C	-3,000
	·	1 '

# **Boot ROM/Processor Board Updates**

Product/Opt. Number	Description	P	rice
98563-67001	Rev. B Boot ROM for Model 310/320/330/350 to support the discless node feature of HP-UX 6.2. The following models which were shipped prior to 1 January 1988 require the Boot ROM update in order to use the discless node feature. Note: HP-UX 6.2 does not require the Rev. B Boot ROM. Use of the discless node feature of HP-UX 6.2 requires the newer version of Boot ROM.	\$	85.
	<ul> <li>Model 310 systems with serial number prefixes prior to 2751Axxxxx, 2801Gxxxxx, or 2751Jxxxxx</li> <li>Model 320 systems with serial number prefixes prior to 2752Axxxxx, 2801Gxxxxx, or all xxxxJxxxxx</li> <li>Model 330 systems with serial number prefixes prior to 2740Axxxxx, 2752Gxxxxx, or 2740Jxxxxx</li> <li>Model 350 systems with serial number prefixes prior to 2747Axxxxx, 2801Gxxxxx, or 2747Jxxxxx</li> <li>98243A/B Model 310 to Model 320 Field Upgrade which included a 98561-66516 processor board</li> </ul>		
	Note: The Boot ROM must be installed by HP qualified personnel. Installation assistance may be purchased separately.  Note: Model 310 systems with serial numbers less than 2522A02500 and Model 320 systems with serial numbers less than 2543A02300 require another update procedure. Please contact your local HP service office for more details.		

Product/Opt. Number	Description	Price
98562-69013	Model 330 Processor Board Update. Model 330 systems with serial number prefixes prior to 2740Axxxxx, 2801Gxxxxx, or 2740Jxxxxx which were shipped prior to 1 January 1988 require this update to support the 2D Integer-Based Graphics Accelerator, TurboSRX display controller or SCSI. This update includes a new processor board with Rev. C1 Boot ROM, which is a superset of the Rev. B Boot ROM, and a new system interface board. Old processor board and system interface board must be returned to HP.	1,500.
98562-69517	Model 350 Processor Board Update. Model 350 systems with serial number prefixes prior to 2747Axxxxx, 2801Gxxxxx, or 2747Jxxxxx which were shipped prior to 1 January 1988 require this update to support the 2D Integer-Based Graphics Accelerator, TurboSRX display controller or SCSI. This update includes a new processor board with Rev. C1 Boot ROM which is a superset of the Rev. B Boot ROM. Old processor board must be returned to HP.	1,600.

# **DOS Coprocessor System**

## **Pre-Configured Products**

Product/Opt. Number	Description	Price
98286S	DOS Coprocessor System. Includes DOS Coprocessor interface card and 98531A DOS Coprocessor Software. Requires DIO I-based accessory slot and the latest revision of HP-UX, minimum Application Execution Environment. Available options include the 9127A 51/4-inch disc drive and the D1387A 80287 numeric coprocessor. (Must order one media option below.)	N/C
Opt. 022	Software on ¼-inch tape cartridge	\$ 1,335.
Opt. 045	Software on 3½-inch double-sided discs	1,335.
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair	N/C
98286T	DOS Coprocessor Memory Enhancement Kit for Models 310 and 320. Includes a 98286S DOS Coprocessor System and one 98257A 1 Mbyte RAM card. Requires two DIO I-based accessory slots and the latest revision of HP-UX, minimum Application Execution Environment. (Must order one media option below.)	N/C
Opt. 022	Software on ¼-inch tape cartridge	2,270.
Opt. 045	Software on 3½-inch double-sided discs	2,270.
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair	N/C
98286D	DOS Coprocessor Discless Node Kit. Includes 98286A DOS Coprocessor interface card, License-to-Use 98531A DOS Coprocessor Software, and complete documentation kit. Requires one DIO I-based accessory slot and the current revision of HP-UX, minimum Application Execution Environment.	1,245.
Opt. 100	Delete manuals	-100.
Opt. W03	Convert 1 year return-to-HP warranty to 90-day on-site repair	N/C

#### **Stand-alone Products**

Product/Opt. Number	Description	Price
98531A	DOS Coprocessor Software. Includes media, license-to-use, and complete documentation. For use with DOS Coprocessor interface card. Requires latest revision of HP-UX, minimum Application Execution Environment. (Must order one media option below.)	N/C
Opt. 022	Software on ¼-inch tape cartridge	\$ 510.
Opt. 045	Software on 3½-inch double-sided discs	510.
98531K	Series 300 DOS Coprocessor Documentation Kit for 98531A Software	150.
9127A	<b>360 Kbytes Single 5</b> 1/4 <b>-inch Flexible Disc Drive</b> (also supports HP 270 Kbytes format). For use with Series 300 DOS Coprocessor System.	1,090.
D1387A	80287 Numeric Coprocessor. For use on the Series 300 DOS Coprocessor Interface Card.	450.

# **BASIC and Pascal Language Processor Systems\***

Product/Opt. Number	Description	Price
82300B	BASIC Language Processor. Includes Vectra PC/IBM PC AT plug-in board, 512 Kbytes RAM, HP-IB interface, BASIC 5.1 on 51/4-inch and 31/2-inch media.	\$ 1,595.
82301B	BASIC Language Processor Software only	†275.
82310A	Pascal Language Processor. Includes Vectra PC/IBM PC AT plug-in board, 512 Kbytes RAM, HP-IB interface and Pascal 3.2 on 5¼-inch or 3½-inch media. (Must order one option below.)	1,995.
Opt. 042 Opt. 044	Software on 5½-inch floppy disc Software on 3½-inch single-sided disc	N/C N/C
82311A Opt. 042 Opt. 044	Pascal Language Processor Software only. (Must order one option below.) Software on 5 <sup>1</sup> / <sub>4</sub> -inch floppy disc Software on 3 <sup>1</sup> / <sub>2</sub> -inch single-sided disc	995. N/C N/C
82312A	HP Pascal Language Processor board with Right-to-Execute, HP BASIC 82301A/B or HP Pascal 82311A.	1,485.
82313A	Hierarchical File System Software for use with BASIC or Pascal Language Processors. Provides access to HP-UX file systems; software on both 51/4-inch and 31/2-inch media	395.
82303A	RAM Expansion Kit. 512Kbyte RAM expansion kit for 82300B, 82305A or 82310A. User-installable	510.
82304B	BASIC ROM for Language Processor. Contains BASIC 5.0 in ROM.	595.
82305A	RAM Expansion Board for 82300B or 82310A. Allows expansion of system to total of 4Mbytes. User-installable.	615.
82306A	GPIO Interface for Language Processor	510.
82307A	GPIO Cable (unterminated)	197.
50963A	SRM Interface for BASIC or Pascal Language Processor. Includes BNC "T" connector.	895.

<sup>\*</sup>Additional PC and software products are available as listed in the **Office Workstation Products Direct Price Guide**, Pub. No. 5956-4314D.

## **VMEbus Connection**

Product/Opt. Number	Description	Price
98577A*	VMEbus Expander (4 slots). Includes Series 300 HP-UX Driver Development Guide and VME Accessory Development Guide.	\$ 4,810.
Opt. 100	Delete manuals	-50.
98646A	<b>HP 9000 VMEbus Adapter.</b> Includes DIO interface card, VME card, interconnecting cable, and hardware manual. (98358X software driver required for BASIC 4.0/5.0.)	1,295.
98358A	VMEbus Software Drivers for 98646A	
Opt. 244	Pascal Driver on 3½-inch microfloppy with manual	109.
Opt. 242	Pascal Driver on 51/4-inch floppy disc with manual	109.
Opt. 322	HP-UX Driver on ¼-inch tape cartridge	219.
Opt. 344	HP-UX Driver on 3½-inch microfloppy with manual	219.
98358R	Right-to-Reproduce VMEbus Software Drivers for 98646A	
Opt. 200	Right-to-reproduce Pascal Driver and manual	55.
Opt. 300	Right-to-reproduce HP-UX Driver and manual	109.
Opt. 400	Right-to-reproduce BASIC 4.0/5.0 Driver and manual	55.

<sup>\*</sup>Model 330 systems shipped prior to 1 January 1988 require a processor upgrade for use with 98577A. See service note #98562A-1.

 $<sup>\</sup>begin{tabular}{l} $^t$ \textbf{Note:} Special introductory price for HP 82300A/B customers who wish to upgrade to current software. Price effective through July 31, 1988. \end{tabular}$ 

# **Graphics Boards**

Product/Opt. Number	Description	Price
98542A	Medium-resolution Monochrome Graphics Board, 512 x 400 (order 35731A/B monitor)	\$ 825.
98543A	Medium-resolution 4-plane Color Graphics Board, 512 x 400 (order 35741A/B monitor)	2,480.
98544B	High-resolution Monochrome Graphics Board, 1024 x 768 (order 98786A monitor)	1,450.
98546A	<b>Display Compatibility Interface</b> , 512 x 400. Medium-resolution monochrome alpha/graphics board set with cables for Series 200 display compatibility (order 35731A/B or 35741A/B monitor).	875.
98547A	High-resolution 6-plane Color Graphics Board, 1024 x 768 (order 98751A or 98785A monitor)	4,645.
98548A*	High-resolution, High-performance Monochrome Graphics Board, 1280 x 1024 (order 98788A monitor)	
98549A*	<b>High-resolution, High-performance Color Graphics Board,</b> 1024 x 768, 6-plane (order 98751A or 98785A monitor)	4,500.
98550A*	<b>High-resolution, High-performance Color Graphics Board,</b> 1280 x 1024, 8 planes plus 2 overlay planes (order 98789A or 98752A monitor).	5,570.

<sup>\*</sup>Not operational on Model 310.

## **Monitors**

Product/Opt. Number	1 Description	
35731A		
35741A	<b>12-inch Medium-resolution Color Monitor</b> (512 x 400), 60 Hz, 115 Vac (for use with 98543A graphics board).	1,195.
98751A	<b>19-inch High-resolution Color Monitor</b> (1024 x 768), 60 Hz, 115/230 Vac (for use with 98700A display controller, 98547A or 98549A graphics board). Tilt/swivel available (order 98787B below).	6,650.
98752A	<b>19-inch High-resolution Color Monitor</b> (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98550A graphics board or the 98720A/98730A display controller). Tilt/swivel available (order 98787B below).	
98785A	<b>16-inch High-resolution Color Monitor</b> (1024 x 768), 60 Hz, 115/230 Vac (for use with the 98700A display controller or 98547A graphics board). Tilt/swivel available (order 98787B below).	
98786A	<b>17-inch High-resolution Monochrome Monitor</b> (1024 x 768), 60 Hz, 115/230 Vac (for use with 98544B graphics board).	
98788A	<b>19-inch High-resolution Monochrome Monitor</b> (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98548A graphics board). Tilt/swivel available (order 98787B below).	
98789A	<b>16-inch High-resolution Color Monitor</b> (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98550A graphics board or the 98720A/98730A display controller). Tilt/swivel available (order 98787B below).	
98787B	<b>Tilt/swivel</b> for 98751A, 98752A, 98785A, 98788A, 98789A monitors.	305.

 $<sup>^{*\</sup>prime}B^{\prime}$  versions are preset to local country power setting and have local product regulatory approval.

## Monitors (cont'd)

Product/Opt. Number	Description	Price
98752A	<b>19-inch High-resolution Color Monitor</b> (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98550A graphics board or the 98720A/98730A display controller). Tilt/swivel available (order 98787B below).	\$ 6,650.
98785A	<b>16-inch High-resolution Color Monitor</b> (1024 x 768), 60 Hz, 115/230 Vac (for use with the 98700A display controller or 98547A graphics board). Tilt/swivel available (order 98787B below).	3,615.
98786A	<b>17-inch High-resolution Monochrome Monitor</b> (1024 x 768), 60 Hz, 115/230 Vac (for use with 98544B graphics board).	2,065.
98788A	19-inch High-resolution Monochrome Monitor (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98548A graphics board). Tilt/swivel available (order 98787B below).	
98789A	789A <b>16-inch High-resolution Color Monitor</b> (1280 x 1024), 60 Hz, 115/230 Vac (for use with 98550A graphics board or the 98720A/98730A display controller). Tilt/swivel available (order 98787B below).	
98787B	Tilt/swivel for 98751A, 98752A, 98785A, 98788A, 98789A monitors.	305.

# **Graphics Accessories**

Product/Opt. Number	ber Description	
98556A		
98700A	<b>High-resolution Display Controller</b> . For use with the 98785A or 98751A monitor and the 98287A interface.	8,670.
98701A	4-plane Graphic Memory Upgrade for 98700A	2,830.
98710A	Graphics Accelerator for the 98700A	7,540.
98287A	Series 300 Interface Card for the 98700A	680.
98720A	SRX 3D Display Controller. Includes four planes which are used as frame buffer if no other frame buffer boards are installed. When frame buffer boards are added, these planes become alpha overlay planes. Also included are a power cord and keyboard cable. RGB cable (98290A), Series 300 Display Controller interface (98724A for Model 320 or 98725A for Model 330/350), and monitor (98789A or 98752A) are not included.	11,350.
Opt. 721	Add graphics accelerator	10,350
Opt. 722	Add eight planes frame buffer memory. Must order option 723, additional power supply. (Maximum four Option 722 per 98720A).	4,645
Opt. 723	Additional power supply, required for use with a 16-, 24-, or 32-plane 98720A system.	
98721A	3D Solid Rendering Graphics Accelerator for use with 98720A	
98722A	Frame Buffer Board. Adds eight planes frame buffer memory. Order additional power supply as described below (maximum for 98722As per 98720A, three 98722As per 98730A).	
98723A	Additional Power Supply, required for use with a 16-, 24-, or 32-plane 98720A system, or when upgrading a 98730A system from 8 planes to any other configuration.	
98724A	16-bit Display Controller Interface to 98720A. Includes LGB cable (for Model 320 only).	1,035
98725A	16-bit Display Controller Interface to 98720A (for Models 330 and 350 only).	1,035.
98726A	32-bit Display Controller Interface to 98730A (for Model 350 only).	1,035.
98730A	TurboSRX 3D Display Controller. For use with the Model 350 SPU. Includes four overlay planes and eight planes of frame buffer memory. Also included are a power cord, RGB cable (98290A) and keyboard cable. 32-bit Display Controller Interface (98726A) and monitor (98789A or 98752A) are not included. Requires Boot ROM Rev. C1.	
Opt. 016	Add 1 frame buffer card for a total of 16 planes of graphics memory. Cannot be ordered concurrently with	
Opt. 024	option 123 or 024. Add 2 frame buffer cards for a total of 24 planes of graphics memory. Cannot be ordered concurrently with option 123 or 016.	
Opt. 060	Add 3D graphics accelerator and full 16-bit Z-buffer. Cannot be ordered concurrently with option 123.	
Opt. 123	Delete power supply for systems with 8 planes and no accelerator, ONLY. Cannot be ordered concurrently with option 016, 024, or 060.	
98732A		

# **Graphics Upgrades**

Product/Opt. Number	Description	
	<b>Note:</b> Replaced graphics component must be returned to HP for proper credit. One return credit allowed for each comparable new component ordered.	
98733A	Upgrade to TurboSRX from 8-plane Series 300 SRX. Includes high-resolution display controller, 98726A interface, one power supply, two frame buffer boards, 3D graphics accelerator, 16-bit Z-buffer and Boot ROM Rev. C1. This upgrade includes a new processor board with Rev. C1 Boot ROM, which is a superset of Rev. B Boot ROM, and a new system interface board. Must return 98720A, 98721A, 98724/5A. No trade discounts apply.	
Opt. 016	Upgrade for 16-plane SRX. Delete one frame buffer board and one power supply.	-4,645
Opt. 024	Upgrade for 24-plane SRX. Delete two frame buffer boards and one power supply.	-9,290
Opt. 032	Upgrade for 32-plane SRX. Delete two frame buffer boards and one power supply. Must return one 98722A frame buffer board.	-13,935
98542N	<b>Return credit for Monochrome Graphics Board (98542A)</b> . Must be ordered with 98544A, 98547A, 98548A, 98549A, 98550A, 98720A, or 98730A.	\$ -330
98543N	<b>Return credit for 4-plane Graphics Board (98543A).</b> Must be ordered with 98544A, 98547A, 98548A, 98549A, 98550A, 98720A, or 98730A.	-990
98544N	<b>Return credit for Monochrome Graphics Board (98544A/B).</b> Must be ordered with 98547A, 98548A, 98549A, 98550A, 98720A, or 98730A.	-575
98547N	<b>Return credit for 6-plane Color Graphics Board (98547A/98545A).</b> Must be ordered with 98548A, 98549A, 98550A, 98720A, or 98730A.	
98548N	Return credit for Monochrome Graphics Board (98548A). Must be ordered with 98549A, 98550A, 98720A, or 98730A.	
98549N	Return credit for Color Graphics Board (98549A). Must be ordered with 98720A, 98722A, and 98730A.	
98550N	Return credit for Color Graphics Board (98550A). Must be ordered with 98720A, 98722A, and 98730A.	
35731N	<b>Return credit for 12-inch Monochrome Monitor (35731A/B).</b> Must be ordered with 98751A, 98752A, 98786A, 98788A, or 98789A.	-130
35741N	Return credit for 12-inch Color Monitor (35741A/B). Must be ordered with 98751A, 98752A, 98785A, 98786A, 98788A, or 98789A.	
98751N	Return credit for 19-inch Color Monitor (98751A). Must be ordered with 98752A.	-2,400
98782N	Return credit for 19-inch Color Monitor (98782A). Must be ordered with 98752A.	-2,400
98785N	Return credit for 16-inch Color Monitor (98785A). Must be ordered with 98751A, 98752A, or 98789A.	-1,450
98786N	<b>Return credit for 17-inch Monochrome Monitor (98786A/98781A).</b> Must be ordered with 98751A, 98752A, 98785A, 98788A, or 98789A.	-825
98788N	Return credit for 19-inch Monochrome Monitor (98788A). Must be ordered with 98751A, 98752A, 98785A, or 98789A.	-850
98789N	Return credit for 16-inch Color Monitor (98789A). Must be ordered with 98752A.	-1,450
98287N	Return credit for 98700A Interface to Series 300 (98287A). Must be ordered with 98725A, 98724A, or A1017A.	
98288N	Return credit for Display Station Buffer (98288A). Must be ordered with 98725A, 98724A, or A1017A.	-180
98556N	Return credit for 2D Integer-based Graphics Accelerator (98556A). Must be ordered with 98721A or 98732A.	-1,51
98700N	Return credit for Display Controller (98700A). Must be ordered with 98549A, 98550A, 98720A, or 98730A.	
98701N	Return credit for 4-plane Graphic Memory Upgrade (98701A). Must be ordered with 98700N and 98722A, or 98700N and 98550A.	-1,120
98710N	Return credit for Graphics Accelerator (98710A). Must be ordered with 98556A, 98721A, or 98732A.	
98733A	<b>Upgrade from 8-plane SRX to 24-plane TurboSRX.</b> Includes three accelerators and full Z-buffer. Must return 98720A, 98721A, and either 98724A or 98725A. No trade discounts apply.	28,93
Opt. 016 Opt. 024	Upgrade for 16-plane SRX	-4,64
	Upgrade for 24-plane SRX	-9,29

## **HP-HIL Input Devices**

For detailed information on model numbers and operating system revisions that support these peripherals, please refer to the **Series 300 Configuration Reference Manual**, Part Number 98561-90020. All devices (except keyboard) include cable.

Product/Opt. Number	Description	Price
45911A	HP-HIL Digitizer, 11" x 11", 12 lines per inch resolution	\$ 510.
46021A	HP-HIL Keyboard (U.S. English version). Cable comes with SPU or can be ordered separately.	225.
98203C Opt. 001	HP-HIL Keyboard with rotary knob for BASIC and Pascal systems. US ASCII. Field Upgrade Kit for Series 300 models shipped before 1 September 1988	805. 45.
46060A	HP-HIL 2-button Mouse	148.
46060B	HP-HIL 3-button Mouse	180.
46080A	2.4 meter HP-HIL Extension	89.
46081A	2.4 meter HP-HIL Extension with audio	220.
46082A Opt. 015 Opt. 343	15 meter HP-HIL Remote Extension with audio and RGB video Delete RGB and Remote Delete RGB cables	770. -335. -120.
46082B	30 meter HP-HIL Remote Extension with audio and RGB video	1,085.
46083A	HP-HIL Knob	200.
46084A	HP-HIL ID Module	195.
46085A	HP-HIL Control Dial Module	1,410.
46086A	HP-HIL 32-button Box with 32 user-definable special-function keys and one user programmable LED	935.
46087B Opt. 001 Opt. W03	HP-HIL Digitizer, ANSI A/ISO A4-size Add the 46089A 4-button Cursor with crosshair Convert 1-year Return-to-HP warranty to 90-day on-site warranty	850. 280. N/C
46088B Opt. 001 Opt. W03	HP-HIL Digitizer, ANSI B/ISO A3-size Add the 46089A 4-button Cursor with crosshair Convert 1-year Return-to-HP warranty to 90-day on-site warranty	1,365. 280. N/C
46089B Opt. W03	<b>4-button Cursor</b> with crosshair for 46087/88 Convert 1-year Return-to-HP warranty to 90-day on-site warranty	280. N/C
46094A	Quadrature Port allows devices using Logitech quadrature signals to be connected to HP-HIL interface	165.
46095A	3-button Mouse interfaces to HP-HIL via 46094A Quadrature Port	145.
35723A	HP-HIL Touchscreen bezel for 12-inch monitors 35731A and 35741A	530.
92916A	HP-HIL Bar Code Reader for commercial and industrial bar code applications	625.

## **Interface Products for Series 300 (DIO)**

Product/Option Number		DIO Slot		
	Description	Accessory /Memory	Interface	Price
36593.A Opt. 003 Opt. 004	HP-UX Gateway/SNALink for Series 300 Gateway System RS-232C V.35		X	N/C \$ 6,120. 6,495.
50955A Opt. 042 Opt. 044	3278 Display Station Emulator (interface and software) Software on 5½-inch floppy disc Software on 3½-inch microfloppy disc		Х	N/C 1,605. N/C
50962A	SRM Coax Interface for Series 200 and 300 systems		X	895.
98253A	EPROM Programmer Interface (98255A)		X	1,550.
98255A	EPROM Card, 16 sockets for 2764 or 27128 EPROM ICs	X		310.
98256A	256 Kbytes RAM Card for Models 310 and 320	X		615.
98257A	1 Mbyte RAM Card with parity check for Models 310 and 320	X		1,720.
98265A	SCSI Single-ended Board			1,100.
98259A	128 Kbytes Magnetic Bubble Memory Card	X		1,965.

Product/Ontion		DIO Slot		
Product/Option Number	Description	Accessory /Memory	Interface	Price
98546A	<b>Display Compatibility Interface</b> , $512 \times 400$ . Medium-resolution monochrome alpha/graphics board set with cables for Series 200 display compatibility (order $35731$ A/B or $35741$ A/B monitor).		Х	\$ 875.
98620B	Two-channel DMA Controller Card for Models 310 and 320	X		515.
98622A	16-bit GPIO Interface Card		Х	370.
Opt. 001	Add 4.6m unterminated cable (P/N 5061-4209)			105.
Opt. 002 Opt. 003	Add 0.8m terminated cable for 9885M Flexible Disc Drive (P/N 5061-4211) Add 4.6m terminated cable for 6940A/B Multiprogrammer (P/N 5061-4210)			105. 137.
Opt. 003	Add 2.5m terminated cable for 9866A/B Thermal Printer (P/N 5061-4212)			184.
98623A	43-line BCD Interface Card		X	405.
Opt. 001	4.6m unterminated cable (P/N 5061-4217)			110.
98624A	HP-IB Interface standard speed		Х	345.
10833A	1m HP-IB cable	]		80.
10833B 10833C	2m HP-IB cable 4m HP-IB cable			90. 100.
10833D	0.5m HP-IB cable			80.
98625B	HP-IB Disc Interface, high speed (for models 310 and 320 only)		X	685.
98262A	HP-IB Disc Interface, high-speed			960.
98626A	RS-232C (Serial) Interface		X	395.
Opt. 001	DTE (male) RS-232C cable (P/N 5061-4215)			79.
Opt. 002	DCE (female) RS-232C cable (P/N 5061-4216)			79.
98627A	RGB Color Video Output Interface with cables		X	1,045
98628A	Datacomm Interface, RS-423 and RS-232C		Х	510.
Opt. 001	DTE (male) RS-232C cable (P/N 5061-4215)			90.
Opt. 002 Opt. 003	DCE (female) RS-232C cable (P/N 5061-4216) DCE (female) RS-449/423 cable (P/N 5061-4250)			90.
98630A	Breadboard Interface	- V		184.
98630A Opt. 001	Service Extender	X		330. 106.
98633A	<b>6944A Multiprogrammer Interface.</b> For use with HP 6944A Multiprogrammer. <b>Note:</b> Requires HP 14753A Computer-Aided Test Software Package.		Х	400.
98635A	Floating Point Math Card for Model 310	X		1,005.
98640A	7-channel Analog-to-Digital Interface		Х	1,040.
Opt. 001	Delete diagnostic software and test hood			-75.
Opt. 630	Diagnostic software on 3½-inch microfloppy			N/C
Opt. 655	Diagnostic software on 51/4-inch floppy			N/C
98641A	<b>RJE 2780/3780 Interface.</b> For use with HP-UX and 50967A RJE software.		X	1,315.
Opt. 001	V.35		X	750.
98642A Opt. 001	4-port RS-232C Multiplexer Delete all cables		X	630. -100.
98643A	LAN/300 Link with ThinMAU. For use with Models 310 and 320, or for		X	1,365.
200 107 1	additional LAN interfaces. Requires 509521./C.			1,505.
Opt. 241	Delete ThinMAU and BNC "T" connector			-350.
98644A	RS-232C Serial Interface		Х	200.
98646A	VMEbus Adapter. Includes DIO interface card, VME card, interconnecting cable, and hardware manaual. (Requires 98358A software driver.)		Х	1,295.
98647A	PC-IB Interface		Х	865
700 <del>1</del> 771	P. II.D.		v	685.
98691A	Programmable Datacomm Interface		X	
	DTE (male) RS-232C cable (P/N 5061-4215) DCE (female) RS-232C cable (P/N 5061-4216)		^	100. 100.

## Local Area Network (LAN)

## LAN Software

Product/Opt. Number	Description	Price
50952L 50952C	NS-ARPA Services/300 License-to-Use. Media and documentation must be ordered separately. Media and documentation for 50952L. Requires 98643A LAN/300 Link for Models 310 and 320. Includes NS, ARPA, and Berkeley 4.2 Networking Services. Select media option. Requires prior or concurrent purchase of 50952L.	\$ 900. 200.
Opt. 022	Software on ¼-inch tape cartridge	N/C
Opt. 045	Software on 3½-inch double-sided discs	N/C
50969L	NFS Services/300 License-to-Use. Includes remote file sharing, the Yellow Pages, Remote Procedure Call, and External Data Representation. Media and documentation must be ordered separately.	495.
50969A	Media and documentation for 50969L. Requires prior or concurrent purchase of 50969L and 50952L/C.  Order either media option 022 or 045 below.	100.
Opt. 022	Software on ½-inch tape cartridge	N/C
Opt. 045	Software on 3½-inch double-sided discs	N/C

#### LAN Hardware

Product/Opt. Number	Description	Price
98643A Opt. 241	LAN/300 Link (requires 50952L/C). Includes LAN interface, 28641A ThinMAU with integrated 1 meter AUI cable, and BNC "T" connector. (Required for Models 310 or 320 and for additional LAN interfaces.) Delete ThinMAU and "T" connector for connecting to ThickLAN cable or StarLAN 10. (Must order MAU and AUI cable separately.)	
	ThinLAN Cables and Accessories	
92227A 92227B 92227C 92227D 92227E 92227F 92227G 92227H	ThinLAN Coax Cable (with BNC connectors installed):  1m coax cable  2m coax cable  4m coax cable  8m coax cable  16m coax cable  32m coax cable  64m coax cable  128m coax cable	25. 27. 29. 33. 39. 51. 76. 126.
9 <b>2227</b> J 92227K	ThinLAN Coax Cable (without connectors): Cut-to-length, PVC (cost per meter) Cut-to-length, FEP (cost per meter)	.78 3.35
92227L 92227M 92227N 92227P 28641A	ThinLAN Accessories BNC Connector Pair for 92227J/K BNC Connector Tool Kit for 92227J/K BNC "T" Connector ThinLAN Terminator Pair ThinMAU. Includes 1 meter AUI cable and BNC "T" connector (included with 98643A)	22.50 450. 27.50 23.00 350.

Note: For complete information on LAN cables and accessories, see the HP Computer Users' Catalog.

Product/Opt. Number	Description	Price
	ThickLAN Cables and Accessories	
30241A 92256C	Backbone LAN MAU and Tap LAN MAU and Installation Kit (order once)	\$ 400. 39.
92254A 92254B	Backbone LAN AUI Cables (with connectors attached): 6m FEP AUI Cable 12m FEP AUI Cable	135.
92254C 92254D	24m FEP AUI Cable 48m FEP AUI Cable	200. 345.
92254E 92254F	6m PVC (11) AUI Cable 12m PVC AUI Cable	635. 85. 110.
92254G 92254H	24m PVC AUI Cable 48m PVC AUI Cable	160. 250.
92255A 92255B 92255C	Backbone LAN AUI Cables (without connectors attached) and Tools: FEP Cut-to-length AUI Cable (cost per meter) PVC Cut-to-length AUI Cable (cost per meter) LAN AUI Connector Kit (order for each 92255A/B connection)	13. 4.50 47.
92253A	Backbone LAN Coax Cables (including connectors and terminators): 23.4m FEP without connectors attached	400.
92253B 92253C	23.4m FEP with connectors attached 117m FEP without connectors attached	425. 1,500.
92253D 92253E 92253F	500m FEP without connectors attached 23.4m PVC without connectors attached 23.4m PVC with connectors attached	6,000. 200.
92253G 92253H	117m PVC without connectors attached 500m PVC without connectors attached	225. 500. 2,100.
92256A 92229B	Backbone LAN Coax Cable Tools for attaching connectors (order once): LAN Coax Installation Tool Kit LAN Coax Crimp Tool	185. 199.
92223A	Repeater Kit. Includes repeater, two 5m repeater AUI cables, and 2 repeater MAUs. For connecting to ThinLAN or Backbone LAN coax segments.	4,080.
92223C	20m Repeater FEP AUI. Includes a single 20m repeater AUI Cable. For extending the distance between the repeater and repeater MAU (up to 50 meters maximum).	335.
28645A	ThinLAN Hub. Includes ThinLAN Hub assembly, MAU assembly, MAU Coax Tap, four BNC "T" connectors, 5m AUI cable, wall mounting bracket, and installation manual.	3,010.
Opt. 241	Delete MAU, Tap, AUI cable, and mounting bracket.	-500.
28663A Opt. 001	StarLan 10 Hub. Includes ThickMAU and 5 meter AUI cable for backbone connection. Provides connectivity to IEEE 802.3 twisted-pair local area network.	2,995.
Opt. 241	Add modular adapter Delete ThickMAU and 5 meter AUI cable	40.
Opt. 242	Delete ThickMAU and 5m cable, add ThinMAU	-500. -100.
28664A	Twisted-pair MAU. Provides connections to AUI interfaces that meet IEEE 802.3 specifications. For use with 28663A StarLan 10 Hub.	295.
Opt. 001	Add loopback connection for self-test capability.	7.
98562-6653	System Interface Board Upgrade to AUI LAN Connector. Works in Model 330, 350, 360, and 370 systems to provide LAN AUI connector in place of integrated ThinLAN MAU and BNC "T" Connector. Allows connection to STARLAN 10 (via STARLAN 10 MAU, 28644A), ThickLAN (via AUI cable, 92254x, and ThickMAU and tap 30241A), or ThinLAN (via ThinLAN MAU 28641A).	1,200.

Note: For complete information on LAN cables and accessories, see the HP Computer Users' Catalog.

## Series 300-to-IBM Data Communications

Product/Opt. Number	Description	Price
36590A Opt. 0D0	HP-UX SNA3270 Datacomm Software for Series 300 Upgrade from stand-alone to Gateway	\$ 1,050. 315.
36592A Opt. 0A0 Opt. 0A1 Opt. 0D0 Opt. 0D1 Opt. 001 Opt. 002	HP-UX SNALink for Series 300 2 session, RS-232C (19.2 Kbps) 32 session, RS-232C (19.2 Kbps) Upgrade to 32 session Upgrade to Gateway 2 session, V.35 (56/64 Kbps) 32 session, V.35 (56/64 Kbps)	2,040. 5,610. 4,200. 1,575. 2,415. 5,985.
36591A	<b>HP-UX Gateway/SNA3270 Datacomm Software.</b> Required for each Series 300. Requires NS-ARPA Services/300 5052L/C.	1,050.
36593A Opt. 003 Opt. 004	HP-UX Gateway/SNALink for Series 300 Gateway System RS-232C interface, up to 19.2 Kbps V.35 interface, up to 56/64 Kbps	N/C 6,120. 6,495.
50955A Opt. 042 Opt. 044	3278 Display Station Emulator. Includes 98695A interface. Software on 51/4-inch floppy disc Software on 31/2-inch microfloppy disc	N/C 1,605. 1,605.
50967A	HP 9000 RJE Emulator. Requires the 98641 A Series 300 RJE interface.	1,606.
98188A Opt. 0D0	HP-UX SNA 3770 (requires 36592A HP-UX SNA Link) Upgrade from stand-alone to gateway.	\$ 1,020. 300.
98184A	HP-UX Gateway/SNA 3770 (requires NS-ARPA Services/300)	1,020.
98855A  Opt. 301 Opt. 304 Opt. 308 Opt. 312 Opt. 316 Opt. 400 Opt. 501 Opt. 502 Opt. 503 Opt. 504	5080 Emulator.* Standard hardware and software required to support the 5080 terminal emulator gateway. Includes VME coax interface. Requires NS-ARPA Services/300 and HP-UX 6.0. (Must specify number of users option below.)  1-user gateway license, media and documentation 4-user gateway license, media and documentation 8-user gateway license, media and documentation 12-user gateway license, media and documentation 16-user gateway license, media and documentation Channel Controller Coaxial Communications T1 Communications V.35 Communications Fiber Optic	9,630. 19,260. 24,460. 28,660. 32,860. 11,940. N/C 2,050. 2,050. 2,270.
98856A  Opt. 301  Opt. 304  Opt. 308  Opt. 312	5080 Emulator User Upgrade.* Adds users to the 98855A 5080 Emulator. Requires prior or concurrent purchase of 98855A. (Must specify number of users option below.) Add 1 user Add 4 users Add 8 users Add 12 users	6,400. 12,600. 18,600. 24,600.
Opt. 301 Opt. 304 Opt. 308 Opt. 312 Opt. 316 Opt. 501 Opt. 502 Opt. 503 Opt. 504	5080 Emulator Gateway License Upgrade.* Includes Communications Processor and VME Coax Interface. Requires prior or concurrent purchase of 98855A or existing Spectrographics DSCC equipment. (Must specify number of users option below.)  1-user gateway license, media and documentation  4-user gateway license, media and documentation  12-user gateway license, media and documentation  16-user gateway license, media and documentation  16-user gateway license, media and documentation  17-user gateway license, media and documentation  18-user gateway license, media and documentation  19-user gateway license, media and documentation  10-user gateway license, media and documentation  10-user gateway license, media and documentation  11-user gateway license, media and documentation  12-user gateway license, media and documentation  13-user gateway license, media and documentation  14-user gateway license, media and documentation  15-user gateway license, media and documentation  16-user gateway license, media and documentation  17-user gateway license, media and documentation	11,650. 23,300. 28,500. 32,700. 36,900. N/C 2,050. 2,050. 2,270.

<sup>\*</sup> HP 5080 Enulator products are available in the United States only and requires a special product support plan. Ask your HP sales representative for more details

Product/Opt. Number	Description	Price
98858A	Gateway License for 3278 Emulator and 5080 High-speed File Transfer.* Requires prior or concurrent purchase of 98855A. (Must specify number of users option below.)	2 100
Opt. 301	1-user gateway license, media and documentation	2,100.
Opt. 304	4-user gateway license, media and documentation	4,600.
Opt. 308	8-user gateway license, media and documentation	8,600.
Opt. 312	12-user gateway license, media and documentation	12,600.
Opt. 316	16-user gateway license, media and documentation	16,600.
98859A	3278 Emulator and 5080 High-speed File Transfer Gateway License Upgrade.* Requires prior or concurrent purchase of 98855A and 98858A. (Must specify number of users option below.)	i i
Opt. 301	1-user gateway license, media and documentation	2,100.
Opt. 304	4-user gateway license, media and documentation	4,600.
Opt. 308	8-user gateway license, media and documentation	8,600.
Opt. 312	12-user gateway license, media and documentation	12,600.

<sup>\*</sup> HP 5080 Emulator products are available in the United States only and requires a special product support plan. Ask your HP sales representative for more details.

## NS for the DEC VAX computer

Product/Opt. Number	Description	Price
50950A Opt. 044 Opt. 200 Opt. 250 Opt. 300 Opt. 350 Opt. 400	NS for the DEC VAX computer For HP 9000 to DEC MicroVAX communications; software on 5½-inch floppy (RX50) For HP 9000 to DEC MicroVAX communications; software on TK50 Upgrade from low to mid software; software on 9-track tape For HP 9000 to DEC 11/725-85X0 communications; software on 9-track tape Upgrade from mid to high software; software on 9-track tape For HP 9000 to DEC 8600-89X0 communications; software on 9-track tape	\$ 6,300. 6,300. 2,955. 8,930. 3,155. 11,550.
50950R Opt. 044 Opt. 200 Opt. 300 Opt. 400	Right-to-Reproduce NS for the DEC VAX computer For HP 9000 to DEC MicroVAX communications; software on 5¼-inch floppy (RX50) For HP 9000 to DEC MicroVAX communications; software on TK50 For HP 9000 to DEC 11/725-85X0 communications; software on 9-track tape For HP 9000 to DEC 8600-89X0 communications; software on 9-track tape	5,336. 5,336. 7,569. 9,784.

## Shared Resource Management (SRM)

## **SRM Servers**

Product/Opt. Number	Description	Price
50960A	SRM Server. Includes 98619A operating system, 50962A coax interface, interfaces and cables for video monitor and keyboard, CPU, 1/2 Mbyte RAM memory, DMA controller, HP-IB interface, RS-232C, and coax terminator kit in 325mm wide case.	\$ 5,400.
	<b>Note:</b> You must order 82913A monitor and 46021A keyboard separately. <b>Note:</b> Requires 9888A bus expander for more than one SRM interface.	
Opt. 022 Opt. 045 Opt. 100* Opt. 110*	Software on ¼-inch tape cartridge Software on 3½-inch microfloppy disc 256 Kbytes RAM; required for on-line backup and serial printer support 1 Mbyte RAM; recommended for maximum SRM performance and required for on-line backup and serial printer support	N/C N/C 620. 1,500.
50960U Opt. 100	SRM Upgrades Battery-powered clock upgrade. Keyboard/HP-IB interface with a battery powered time-of-day clock (for systems shipped prior to 1 January 1988)	615.
98619A	SRM Operating System. Includes software and manual. Requires 50960A or 9920A Opt. 500 configuration. Included with 50960A SRM Server.  Note: You must order Opt. 022 or Opt. 045.	2,170.
Opt. 001 Opt. 022 Opt. 045	Upgrade from previous revision of SRM Operating System Software on ¼-inch tape cartridge Software on 3½-inch microfloppy disc	-800. N/C N/C

<sup>\*</sup> Opt. 100 and Opt. 110 cannot be ordered concurrently.

#### SRM Workstation Hardware

Product/Opt. Number	Description	Price
	Hardware required in the Series 300 workstations to connect to the SRM Servers via the coax link:	
50962A 50963A	SRM Coax Interface SRM Interface for Vectra	\$ 895. 895.
50961U Opt. 200	SRM Coax Adapter Upgrade Upgrades 98629A SRM interface card installed in a Series 200/300 computer or SRM server. Includes SRM coax adapter and BNC "T" connector.	320.
92227A 92227B 92227C 92227D 92227E 92227F 92227G 92227H	Coax Cables (PVC insulation, with BNC connector installed):  1m coax cable  2m coax cable  4m coax cable  8m coax cable  16m coax cable  32m coax cable  64m coax cable  128m coax cable	25. 27. 29. 33. 39. 51. 76.
92227J 92227K	Coax Cable (without connector): Cut-to-length, PVC insulation (300 to 3000 meters; cost per meter) Cut-to-length, FEP insulation (300 to 3000 meters; cost per meter)	.78
92227L 92227M 92227N 45695A	Cable Accessories: BNC Connector Pair for 92227J/K BNC Connector Tool Kit BNC T-connector BNC 50 Ohm Terminator Pair	\$ 22.50 450. 27.50 40.

#### **SRM Workstation Software**

Product/Opt. Number	Description	Price
	Software required in the workstations to connect to the SRM servers:	
	To connect BASIC/Pascal systems in Series 300 and Vectra with Language Processor: The SRM access software is included in BASIC and Pascal language systems revision 2.1 or later.	N/C
	To connect Series 300 HP-UX systems:	
98693A Opt. 022 Opt. 045	SRM Access Utilities for HP-UX Software on ¼-inch tape cartridge Software on 3½-inch microfloppy disc	\$ 545. N/C N/C

## Series 300 Peripherals, Media and Accessories

For detailed information on model numbers and operating system revisions that support these peripherals, please refer to the *Series 300 Configuration Reference Manual*, Part Number 98561-90020. Peripheral, interface, and accessory information in this document is for ordering purposes only. This information

does not imply support on all SPUs and operating systems. Consult the *Series 300 Peripheral, Interface and Accessory Support Matrix* in the manual before specifying or ordering products.

## Microfloppy and Hard Disc Storage (270 Kbytes - 40Mbytes)

These storage devices do not include HP-IB cables.

Product/Opt. Number	Description	Price
9127A	360 Kbytes, Single 5 <sup>1</sup> / <sub>4</sub> -inch Floppy Disc Drive (also supports HP format 270 Kbytes). For use with the HP Series 300 DOS Coprocessor System.	\$ 1,090.
9122C Opt. 001	2 Mbytes, 3½-inch Dual Microfloppy Disc Drive (1.42 Mbytes formatted). Delete one microfloppy	1,465. -315.
9153C Opt. 010 Opt. 011 Opt. 020 Opt. 021 Opt. 040 Opt. 041	10/20/40 Mbytes Hard Disc with 2 Mbytes Microfloppy Drive. Must order one option below.  10 Mbytes hard disc with 2 Mbytes 3½-inch microfloppy disc drive  10 Mbytes 3½-inch hard disc drive  20 Mbytes hard disc with 2 Mbytes 3½-inch microfloppy disc drive  20 Mbytes 3½-inch hard disc drive  40 Mbytes hard disc with 2 Mbytes 3½-inch microfloppy disc drive  40 Mbytes 3½-inch hard disc drive	1,980. 1,725. 2,795. 2,435. 3,640. 3,305.

HP-IB Hard Disc Storage (41 Mbytes to 571 Mbytes)
These disc drives include a 1M HP-IB cable unless otherwise noted.

Product/Opt. Number	Description	Price
7907A	41 Mbyte Fixed/Removable Disc Drive, 20½ removable, 20½ fixed, CS/80, HP-IB	\$13,420.
7935H*	404 Mbyte Removable Media Disc Drive	24,000.
7935HR* Opt. 102 Opt. 103	Remarketed 404 Mbyte Removable Media Disc Drive Discount for ordering two 7935HRs Discount for ordering three 7935HRs	10,000. -1,000. -3,000.
7936H	307 Mbyte Fixed Disc Drive	14,250.
7937H	571 Mbyte Fixed Disc Drive	15,700.
7957A	81 Mbyte Fixed Disc Drive	4,250.
7957B	81 Mbyte Fixed Disc Drive	3,850.
7958A	130 Mbyte Fixed Disc Drive	6,450.
7958B	152 Mbyte Fixed Disc Drive	5,475.
7959B	304 Mbyte Fixed Disc Drive	9,350.
7962B	152 Mbyte Fixed Disc Drive, with upgrade capability	6,300.
7963B	304 Mbyte Fixed Disc Drive, with upgrade capability	10,750.
97962B	152 Mbyte Upgrade Kit for 7962B and 7963B with internal HP-IB cable	4,150.
97963B	304 Mbyte Upgrade Kit for 7962B and 7963B with internal HP-IB cable	7,050.

<sup>\*</sup> Note: FRD supplies.

SCSI Hard Disc Storage (107 Mbytes to 323 Mbytes)
SCSI cables are not included with these disc drives. Cables are included with the Series 300 SCSI Interface.

Product/Opt. Number	Description	Price
7957S	107 Mbyte Fixed Disc Drive	\$ 4.875.
7958S	161 Mbyte Fixed Disc Drive	5,475.
7959S	323 Mbyte Fixed Disc Drive	9,350.

**Back-up Tape Drives**These tape drives include a 1M HP-IB cable.

Product/Opt. Number	Description	Price
7980A	6250 cpi and 1600 cpi ½-inch Streaming Tape Drive	\$23,200.
Opt. 800	Adds 800 CPI capability	1,600.
7979A Opt. 800	1600 cpi ½-inch Tape Drive Adds 800 cpi capability	13,400. 1,600.
35401A	1/4-inch Cartridge Autochanger	8,000.
92192C	Cartridge Magazine (Unloaded. One included with 35401A.)	65.
9144A	1/4-inch Cartridge Tape Drive (67 Mbytes of data storage per 16-track cartridge tape)	2,550.
9145A	1/4-inch Cartridge Tape Drive (133 Mbytes of data storage per 32-track cartridge tape)	3,980.

## Series 300 Printers

## These printers do not include interfacing cables. RS-232 or HP-IB cables must be ordered separately.

#### Character Printers

Product/Opt. Number	Description	Price
2603A	48 cps* Daisy-wheel Printer; HP-IB interface	\$ 1,495.
2225A	150 cps Thinkjet printer; HP-IB interface	495.
2227A	160 cps QuietJet Plus printer; RS-232C interface	799.
2227B	160 cps QuietJet Plus printer; HP-IB interface	799.
2228A	160 cps QuietJet printer; RS-232C interface	599.
2235B	RuggedWriter 480 printer, RS-232C/HP-IB interface	1,895.
2235D	Rugged Writer 480 printer with RS-232C/HP-IB interface, and sheet feeder	2,145.
2932A Opt. 046	200 cps Dot Matrix Impact Printer Replace RS-232C interface with HP-IB	2,595. 150.
2934A Opt. 046	200 cps Dot Matrix Impact Printer Replace RS-232C interface with HP-IB	2,995. 150.
3630A Opt. 001 Opt. 002	HP Paint Jet Color Graphics Printer RS-232C Interface HP-IB Interface	1,395. N/C N/C

<sup>\*</sup> Key: cps = characters per second

#### Line Printers

Product/Opt. Number	Description	Price
2563B Opt. 114 Opt. 290 Opt. 510 Opt. 850	300 lpm* Impact Printer Deletes quietized cabinet, passive stacker, and sound enclosure. HP 9000 HP-IB interface and 4-m cable for Series 300/500/800 Bundled option package; includes Opt. 004, 005, 008, 068 Configures the printer for use with SRM	\$ 7,790. -1,600. 458. 580. 458.
2564B Opt. 114 Opt. 290 Opt. 510 Opt. 850	600 lpm Impact Printer Deletes quietized cabinet, passive stacker, and sound enclosure, and adds non-quietized cabinet. HP-IB CIPER interface for use with Series 300/500/800 Bundled option package; includes Opt. 004, 005, 008, 068 Configures the printer for use with SRM	12,950. -1,500. 567. 580. 567.
2566B Opt. 115 Opt. 290 Opt. 500 Opt. 850	900 lpm Impact Printer Passive paper stacker HP-IB CIPER interface for use with Series 300/500/800 Printer package, includes Options 004, 005, and 115 Configures the printer for use with SRM	22,641. 390. 567. 555. 567.
2567B Opt. 115 Opt. 500	1200 lpm Impact Printer Passive paper stacker Printer package; includes Options 004, 005, and 115	29,170. 390. 555.

<sup>\*</sup> Key: lpm = lines per minute

## Page Printers

Product/Opt. Number	Description	Price
33440A	LaserJet Series II 8 ppm* Printer	\$ 2,695.
2684A	LaserJet 2000 20 ppm Printer <sup>†</sup>	19,995.
2684P	LaserJet 2000 Printer with 2000-sheet paper deck <sup>†</sup>	21,995.
2684D	LaserJet 2000 Printer with 2000-sheet input paper deck and duplexer	25,695.

<sup>\*</sup> Key: ppm = pages per minute

<sup>1</sup> Interface not included.

## Series 300 Graphics Devices

Product/Opt. Number	Description	Price
3630A Opt. 001 Opt. 002	HP PaintJet Color Graphics Printer, 8½ x 11-inch size RS-232C Interface HP-IB Interface	\$ 1,395. N/C N/C
7440A Opt. 001 Opt. 002	ColorPro 8-Pen Graphics Plotter, for A4/A-size media RS-232C Interface HP-IB Interface	1,295. N/C N/C
7475A Opt. 001 Opt. 002	AB-size, 6-Pen Plotter RS-232C Interface HP-IB Interface	1,895. N/C N/C
7550A	AB-size, 8-Pen Sheet-Feed Plotter (comes with RS-232C and HP-IB interfaces standard)	3,900.
7570A 17570A	DraftPro C/D-size, 8-Pen Plotter (comes with RS-232C interface standard) Optional HP-IB cartridge	3,995. 295.
7595A	DraftMaster I A E-size, 8-Pen Plotter (comes with RS-232C and HP-IB interfaces standard)	9,900.
7596A	DraftMaster II A E-size, 8-Pen Roll-feed Plotter (comes with RS-232C and HP-IB interfaces standard)	11,900.
17520A	DraftMaster Upgrade Kit (for upgrading DraftMaster I to DraftMaster II)	2,500.
C1600A	HP 7600 Series Plotter Model 240D, D-size monochrome electrostatic plotter (comes with RS-232C, HP-IB and Centronics interfaces standard)	22,900.
C1601A	HP7600 Series Plotter Model 240E, E-size monochrome electrostatic plotter (comes with RS-232C, HP-IB and Centronics interfaces standard)	27,500.

Series 300 Terminals
Terminals do not include RS-232C cables. Cables must be ordered separately.

Product/Opt. Number	Description	Price
	HP 700/92 Block-Mode Display Terminal, 14-inch screen, 8-page memory, printer port, 80- and	
	132-column.	\$ 895
C1001A	HP 700/92 with amber screen	\$ 895 895
C1001G C1001W	HP 700/92 with green screen HP 700/92 with soft white screen	895
CIOOIVV	HP 700/22 ANSI DEC VT220 Compatible Terminal, 14-inch screen, 4-page memory, 80- and	
	132-column.	
C1004A	HP 700/22 with amber screen	499
C1004G	HP 700/22 with green screen	499
C1004W	HP 700/22 with soft white screen	499
	HP 700/41 Entry-level ASCII Terminal, 14-inch screen, 1-page memory, printer port, 80-column, nine ASCII terminal compatibility modes. Not supported as system console.	
C1003A	HP 700/41 with amber screen	375
C1003G	HP 700/41 with green screen	375
	HP 700/43 Fully-featured ASCII Terminal, 14-inch screen, 4-page memory, printer port, 132-column, twelve ASCII terminal compatibility modes. Not supported as system console.	
C1006A	HP 700/43 with amber screen	475
C1006G	HP 700/43 with green screen	475
C1006W	HP700/43 with soft-white screen	475
2393A	12-inch Graphics Display Terminal, 47-66 Hz, 115 Vac	2,295 204
Opt. 046	Port 2: HP-IB interface Port 2: 25-pin RS-232C interface, same as accessory 40210R	204
Opt. 092 Opt. 093	Port 2: 8-bit parallel Centronics-type interface, same as accessory 40201P	204
2397A	Color Graphics Terminal with selectable 512 x 390 or 640 x 400 resolution. Eight colors from 64-color	3,595
239/A	palette.	0,030
Opt. 046	Port 2: HP-IB interface	204
Opt. 092	Port 2: 25-pin RS-232C interface, same as accessory 40210R	204
Opt. 093	Port 2: 8-bit parallel Centronics-type interface, same as accessory 40201P	204
45851A	HP 150 II Touchscreen Computer	2,610
45711A	Portable Plus Computer	2,790
45850A	HP 150 II Personal Computer Terminal	2,500
9807A	Integral II Personal Computer	5,162
98791B	HP 2392A and VT100 Terminal Emulator (requires 46084A HP-HIL ID Module and RS-232C interface.)	515

## Series 300 Miscellaneous Peripherals

Product/Opt. Number	Description	Price
2334A	x.25 Multiplexer	\$ 2,415.
26075A	HP-IB Switch	755.
92205A	Hayes Smartmodem 1200™ (U.S.), 60 Hz, 120 Vac	399.
92205C	Hayes Smartmodem 1200™ (Canada), 60 Hz, 120 Vac	399.

Smartmodem  $1200^{\text{\tiny TM}}$  is a trademark of Hayes Microcomputer Products, Inc.

## Series 300 Accessories

Product/Opt. Number	Description	Price
10833A 10833B 10833C 10833D	Cables: 1 meter HP-IB Cable 2 meter HP-IB Cable 4 meter HP-IB Cable 0.5 meter HP-IB Cable	\$ 80. 90. 100.
10834A	Adapter, extends HP-IB connector 2.3 cm	31.
17255D	RS-232C cable	40.
40242G	RS-232C cable	69.
92211L	Taboret Cabinet Rack for Series 300 and 325 mm-wide peripherals	250.
92211M	Small Taboret Cabinet Rack for Series 300 and 325 mm-wide peripherals	190.
92211R	HP Design Plus Mobile Mini-rack for 325 mm-wide peripherals	585.
98290A	3-meter RGB Cable	190.
98787B	Tilt and Swivel Base for the 98751A, 98752A, 98785A, or 98789A monitor	305.
19511A	Stack Cabinets for 307/571 Mbytes disc drives	1,000.
19512A	EIA 19-inch Rack Slide Kit for 7936 and 7937 disc drives	265.
92213B	CAD Table with pull-out work surface and keyboard tray	799.
19500B	EIA 19-inch Rack Mounting Kit for 91XX, and 795x/A/B/S disc drives	125.
98567A	EIA 19-inch Rack Mounting Kit for the 35731A/B 12-inch monitor	233.
98567B	EIA 19-inch Rack Mounting Kit for the 35741A/B 12-inch monitor	233.
98569A	EIA 19-inch Rack Mounting Kit for Series 300 SPU or SPU and expander	243.

## Series 300 Media

Product/Opt. Number	Description	Price
92192A	Blank 3½-inch, Double-sided Microfloppy Discs (box of ten)	\$ 39.
92192N	Blank 3½-inch, Double-sided Microfloppy Discs (box of 100)	279.
92191A	Blank 3½-inch, Single-sided Microfloppy Discs (box of ten)	29.
92190A	Blank 51/4-inch Floppy Discs (box of ten)	25.
92195A	Blank 8-inch Floppy Discs (box of ten)	61.
97907A	20.5 Mbytes Cartridge Tape for 7907 A	225.
88140LC	Certified, ¼-inch Tape Cartridges, for the 9144A tape drive, 600-foot (box of five)	219.
88140SC	Certified, ¼-inch Tape Cartridges, for the 9144 tape drive, 150-foot (box of five)	169.
92245L	Certified, ¼-inch Tape Cartridges, for the 9145A tape drive, 600-foot (box of five)	239.
92245S	Certified, 1/4-inch Tape Cartridges, for the 9145A tape drive, 150-foot (box of five)	189.

## Series 300 Operating and Language Systems

## HP-UX Operating System

Product/Opt. Number	Description	Price
98594L	<b>HP-UX Software Bundle License-to-Use, 2 user.</b> Includes AXE, PE, NS-ARPA, NFS; and X.11. Media must be ordered separately.	\$ 1,100
98594A	Media and documentation for 98594L. Requires prior or concurrent purchase of 98594L. Must order Opt. 022 below. Does not include HP-UX Programmer's Documentation Set which can be ordered separately, see 98794A. Does not include media or documentation for X.11 which can be ordered separately, see B1152A.	
Opt. 022	Software on ¼-inch tape cartridge	450
98515L	HP-UX Application Execution Environment (AXE) License-to-Use, 2 user. Includes HP-UX kernel,	152
98515B	HP Windows/9000 and PAM. Media and documentation must be ordered separately.  Media and documentation for 98515L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98515L or 98594L.	
Opt. 022 Opt. 045	Software on ¼-inch tape cartridge Software on ¼-inch double-sided discs	202 305
98595L	HP-UX Application Execution Environment (AXE) License-to-Use, 16 user. Includes HP-UX kernel, HP-Windows/9000 and PAM. Media and documentation must be ordered separately.	505
Opt. 003 98595B	2-user to 16-user Upgrade. Requires prior purchase of 98515L or 98594L  Media and documentation for 98595L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98595L.	-150
Opt. 022	Software on ¼-inch tape cartridge Software on 3½-inch double-sided discs	200
Opt. 045 98596L	HP-UX Application Execution Environment (AXE) License-to-Use, 32 user. Includes HP-UX kernel,	300
	HP-Windows/9000 and PAM. Media and documentation must be ordered separately.	
Opt. 003 98596B	16-user to 32-user Upgrade. Requires prior purchase of 98595L.  Media and documentation for 98596L. Order media Opt. 022 below. Requires prior or concurrent purchase of 98596L.	-500
Opt. 022	Software on ¼-inch tape cartridge	200
98594-17000	HP-UX AXE License-to-Use 6.2 Upgrade. Upgrade from 5.x or 6.0 AXE to 6.2 AXE. Requires prior purchase of 98515A, 98595A or 98596A. Media and documentation must be ordered separately (98515B, 98595B, or 98596B).	100
98597L	HP-UX Programming Environment (PE) License-to-Use. Requires Application Execution Environment. Includes commands, C compiler, MC680x0 assembler, symbolic debugger, RS-232C data communications and device I/O library. Media and documentation must be ordered separately.	660
98597C	Media and documentation for 98597L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98597L or 98594L.	
Opt. 022	Software on ¼-inch tape cartridge	550.
Opt. 045 98598L	Software on 3½-inch double-sided discs <b>HP-UX FORTRAN 77 Compiler License-to-Use.</b> FORTRAN 77 is a full implementation of the ANSI	750.
76376L	FORTRAN 77 X.39-1978 standard, plus MIL-STD 1753 and other extensions. Media and documentation must be ordered separately.	605.
98598B	Media and documentation for 98598L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98598L.	
Opt. 022 Opt. 045	Software on 1/4-inch tape cartridge Software on 31/2-inch double-sided discs	200. 200.
98599L	HP-UX Pascal Compiler License-to-Use. The Pascal compiler is a superset of the proposed ANSI standard with data manipulation, I/O and other extensions. Media and documentation must be	605.
98599B	ordered separately.  Media and documentation for 98599L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98599L.	
Opt. 022 Opt. 045	Software on ½-inch tape cartridge Software on ½-inch double-sided discs	200. 200.
97066L	HP-UX Technical BASIC License-to-Use. The BASIC interpreter includes a complete BASIC	405.
97066B	development and run-time environment. Media and documentation must be ordered separately.  Media and documentation for 97066L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 97066L.	
Opt. 022 Opt. 045	Software on ½-inch tape cartridge Software on ½-inch double-sided discs	202. 202.
98794A	HP-UX Programmer's Documentation Set. Includes HP-UX reference, concepts and tutorials, C Programming documentation and Starbase Graphics Library documentation.	455.

Product/Opt. Number	Description	Price
98594-87901	HP-UX Software Bundle Manual Kit (order from DMK*). For HP-UX 6.0 or later versions. Includes binders and documentation as follows: HP-UX Reference, System Administrator Manual, A Beginner's Guide to HP-UX, A Beginner's Guide to Text Editing, A Beginner's Guide to Using Shells. Using Network Services, Using ARPA Services, Networking Overview: NS-ARPA and NFS Service, Installing and Maintaining NS-ARPA, Using and Administrating NFS Services, Programming and Protocol for NFS Services, NS Reference Pages, ARPA/Berkley Service Reference Pages and NFS Services Reference Pages.	\$ 350.
98794-87901	HP-UX Manual Kit (order from DMK*). For HP-UX 6.0 or later versions. Includes binders and documentation as follows: HP-UX Reference, Term Reference, Peripheral Installation Guide, HP-UX Portability Guide, HP Windows/9000 Documentation, HP Windows/9000 Reference, FORTRAN/9000 Reference, Text Editors and Processors HP-UX Concepts and Tutorials, Text Editors and Formatters HP-UX Concepts and Tutorials, Programming Environment HP-UX Concepts and Tutorials, Device I/O and User Interfacing HP-UX Concepts and Tutorials, Shells and Miscellaneous Tools HP-UX Concepts and Tutorials, Facilities for Series 200/300/500 HP-UX Concepts and Tutorials, Application Execution Environment User's Guide, HP-UX Installation Manual, Starbase Device Drivers Library Manual, Starbase C Pocket Reference, Starbase FORTRAN Pocket Reference, Starbase Pascal Pocket Reference, Starbase Reference, Starbase Graphics Techniques/HP-UX Concepts and Tutorials, A Beginner's Guide to HP-UX, A Beginner's Guide to Text Editing, A Beginner's Guide to Using Shells, Quick Reference for vi, Assembler Reference and ADB Tutorial, HP-UX System Administrator Manual, HP-UX Documentation Roadmap, A Book on C, Introducing UNIX System V and Pascal Language Reference.	650.
98672L 98672B	HP-GKS Graphics Library License-to-Use. HP-GKS is a full level 2b implementation of the ANSI/ISO Graphics Kernel System standard. Media and documentation must be ordered separately. Media and documentation for 98672L. Order either media Opt. 022 or 044 below. Requires prior or	810.
Opt. 022 Opt. 045	concurrent purchase of 98672L. Software on 16-inch tape cartridge Software on 3½-inch double-sided discs	200. <b>20</b> 0.
98600L	HP-UX DGL/AGP Graphics Library License-to-Use. Media and documentation must be ordered	1,415
98600B	separately. Media and documentation for 98600L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98600L.	
Opt. 022 Opt. 045	Software on $\frac{1}{4}$ -inch tape cartridge Software on $\frac{3}{2}$ -inch double-sided discs	205. 205.
98674L 98674B	Starbase Display List License-to-Use. Media and documentation must be ordered separately.  Media and documentation for 98674L. Order either media Opt. 022 or 045 below. Requires prior or concurrent purchase of 98674L.	305.
Opt. 022 Opt. 045	Software on ¼-inch tape cartridge Software on ½-inch double-sided discs	200. 200.
98860L 98860A	HP-UX Ada Development System License-to-Use. Requires HP-UX Programming Environment. Includes validated compiler, libraries, debugger/browser, cross reference and text reformatter. Media and documentation must be ordered separately. Media and documentation for 98860L. Requires concurrent purchase of 98860L. Order Opt. 022 below.	5,900. 250.
Opt. 022	Software on ¼-inch tape cartridge.	200.
82320A Opt. 022 Opt. 045	X Window System, Version 10.4 Software on ¼-inch tape cartridge Software on 3½-inch double-sided discs	715. 715.
82320R Opt. 100	Right-to-Reproduce the X Window System, Version 10.4. Includes manual set and right-to-reproduce certificate.  Delete manuals	605. -100.
B1151A B1152A	X Window System, Version 11 License-to-Use. Media and documentation must be ordered separately.  Media and documentation for B1151A. Required prior or concurrent purchase of B1151A. Order Opt. AA0	\$ 100.
Opt. AA0 Opt. AA8	or AA8 below. Software on ¼-inch tape cartridge Software on 3½-inch double-sided discs	715. 800.
98678L	Development Environment for Common LISP License-to-Use. Requires 46084A HP-HIL Module and HP-UX Programming Environment 6.0 or later. Includes compiler, interpreter, debugger and integrated environment for development of Common LISP applications. Order media and documentation separately.	3,060.
98678B Opt. 022	Media and documentation for 98678L. Requires prior or concurrent purchase of 98678L. Order Opt. 022 below.  Software on ¼-inch tape cartridge	1,020.

<sup>\*</sup>HP's Direct Marketing Division; order direct by dialing 1-800-538-8787 (in the U.S. only)

Product/Opt. Number	Description	Price
79232U	<b>Development Environment for HP PROLOG.</b> Requires 98678L Development Environment for Common LISP. Includes choich of syntax compiler, debugger, interpreter, and integrated environment for development of PROLOG applications. Order Opt. 022 below.	\$ 4,180
Opt. 022	Software on ¼-inch tape cartridge	N/0
98688L	HP Common LISP II Development Environment License-to-Use. Requires 46084A HP-HIL Module and HP-UX Application Execution Environment 6.0 or later (HP-UX Programming Environment is recommended). It is an implementation of Lucid Common LISP™ and includes interpreter, compiler, debugging tools, and an embedded editor. Lucid and Lucid Common LISP are trademarks of Lucid, Inc.	3,500
Opt. 001 98688A	Upgrade credit for previous purchase of 98678A/B (must specify serial number of HP-HIL ID Module in special instructions).  Media and documentation for 98688L. Requires prior or concurrent purchase of 98688L. Order Opt. 022	-1,000
	below.	500
Opt. 022	Software on 1/4-inch tape cartridge	500
98689L 98689A	HP Common LISP II Application Environment License-to-Use. Requires 46084A HP-HIL Module and HP-UX Application Execution Environment 6.0 or later. Allows applications developed in HP Common LISP II to run on an additional Series 300 system.  Media and documentation for 98689L. Requires prior or concurrent purchase of 98689L. Order Opt. 022 below.	700
Opt. 022	Software on ¼-inch tape cartridge.	150
79725L 79725B	HP SQL/300 Development Environment License-to-Use. A relational database management system based on the Structural Query Language (SQL). Includes language preprocessors for C, FORTRAN, or Pascal programs. Media and documentation must be ordered separately. Requires HP-UX 6.0 or later. (Refer to 79725A for use on HP-UX 5.15 through 5.5.)  Media and documentation for 79725L. Requires prior or concurrent purchase of 79725L. Order either	3,150
Opt. 022	media Opt. 022 or 045 below. Software on ¼-inch tape cartridge	250
Opt. 022 Opt. 045	Software on 3½-inch double-sided disc	250
Opt. 100	Delete manuals	-100
79727L	HP Visor/300 Database Access Tools License-to-Use. A forms-based interface to HP SQL/300 databases for performing ad hoc queries or for generating customized reports. Media and documentation must be ordered separately. Requires HP-UX 5.15 or later.	675
79727B	Media and documentation for 79727L. Requires prior or concurrent purchase of 79727L. Order either media Opt. 022 or 045 below.	100
Opt. 022 Opt. 045	Software on ¼-inch tape cartridge Software on ¼-inch double-sided disc	125 125
Opt. 043 Opt. 100	Delete manuals	-25
98112A Opt. 022	HPToday/HP-UX Developer Pack. Version includes complete Application Development Environment dictionary, screen and report painter, logic commands, application testing and run-time environment supporting C-ISAM or HP-SQL data file management systems. (For Models 350, 360, 370) Software on <sup>1</sup> / <sub>4</sub> -inch tape cartridge	10,000 N/0
98118A	HPToday/HP-UX Run-time Environment. Includes all requiared libraries, routines and logic to run	2,000
90110A	HPToday applications. (For Models 350, 360, 370)	
Opt. 022	Software on ¼-inch tape cartridge	N/O
92471A	HP Today/HP-UX Developer Pack. Version includes complete Application Development Environment dictionary, screen and report painter, logic commands, application testing and run-time environment supporting C-ISAM or HP-SQL data file management systems. (For Models 310, 318, 319, 320, 330)	4,900 N/0
Opt. 022 Opt. 045	Software on ¼-inch tape cartridge Software on ¾-inch double-sided disc	N/0
92470A	HP Today/HP-UX Run-time Environment. Includes all required libraries, routines and logic to run HP Today applications. (For Models 310, 318, 319, 320, 330)	1,000
Opt. 022 Opt. 045	Software on ¼-inch tape cartridge Software on ¼-inch double-sided disc	N/O
98683X Opt. 022	DGL Skeleton Device Handler Software on ¼-inch tape cartridge	505
98693A	SRM Access Utilities for HP-UX	545
Opt. 022	Software on ¼-inch tape cartridge	N/O
Opt. 045	Software on 3½-inch double-sided disc	N/0
97009-10220	Starbase Driver Development Guide (order from DMK*)	250
98053A Opt. 22	Versatec Hardcopy Support. Includes software, documentation, and cable. Must order HP 98622A GPIO interface separately. Supported plotters are available from Versatec.	1,035

<sup>\*</sup>HP's Direct Marketing Division; order direct by dialing 1-800-538-8787 (in the U.S. only). Lucid and Lucid Common LISP are trademarks of Lucid, Inc.

## HP-UX Operating System (cont'd)

Product/Opt. Number	Description	Price
98796L	HP BASIC/UX License-to-Use. (sometimes known as "Rocky Moutain BASIC on HP-UX"). Includes BASIC development environment, compiler and CSUB development utilities for Series 300 HP-UX Operating System. Media and documentation must be ordered separately.	995.
98796A	Media and documentaiton for 98796L. Order either media Opt. 022 or 045. Requires prior or concurrent purchase of 98796L.	
Opt. 022	Software on ¼-inch tape cartridge	305.
Opt. 045	Software on 3½-inch double-sided disc	305.
98796K	Documentation only for 98796L.	255.
98869L	HP BASIC/UX Software Bundle License-to-Use. Includes HP BASIC/UX (sometimes known as "Rocky Mountain BASIC" on HP-UX) 98796L and HP-UX Software Bundle License-to-Use 98594L	2,110.
Opt. 001	Upgrade from a previous BASIC Language System (98613B or 98616A).	-860.
98869A	Media and documentation for 98869L. Must order media Opt. 022. Requires prior or concurrent purchase of 98869L.	760.
E2000A	HP Interactive Test Generator. See E2000A under BASIC Language Systems	
E2001A	HP Instrument Drivers. See E2001A under BASIC Language Systems	

<sup>\*</sup>HP's Direct Marketing Division; order direct by dialing 1-800-538-8787 (in the U.S. only).

## **BASIC Language Systems**

Product/Opt. Number	Description	Price
98616A	RAM-based BASIC 5.1 Language System. Includes one system disc set, BASIC 5.0/5.1 Manual Kit and Utilities Pack. (Order one choice under "Media Options.")	\$ 875.
Opt. 001	Upgrade from a previous BASIC Language system	-340.
98616M Opt. 100	<b>Right-to-reproduce one copy of BASIC 5.</b> <i>x</i> for VEUs, SRM users, or end users. Delete manuals	750. -90.
98616R Opt. 100	Right-to-reproduce one copy of BASIC 5.x for resellers. Delete manuals	750. -90.
98613B*	RAM-based BASIC 4.0 Language System. Includes one system disc set, BASIC 4.0 Language Manual Kit and BASIC 4.0 Utilities Pack. (Order one choice under "Media Options.")	875.
Opt. 001	Upgrade from a previous BASIC Language system	-340.
98613R*	<b>Right-to-reproduce one copy of BASIC 4.0 Language System.</b> Includes BASIC 4.0 Language Manual Kit and right-to-reproduce license.	750.
Opt. 001 Opt. 100	Upgrade from a previous version of BASIC Right-to-reproduce Delete manuals	-170. -90.
98603A*	ROM-based BASIC 4.0. Includes one system ROM board, BASIC 5.0/5.1 Manual Kit, and BASIC 4.0 Utilities Pack. The ROM board contains all BASIC 4.0 binaries. (Order one choice under "Media Options.")	1.920.
98603B	ROM-based BASIC 5.1. Includes one system ROM board, BASIC 4.0 Manual Kit, and BASIC 5.1 Utilities Pack. The ROM board contains all BASIC 5.1 binaries. (Order one choice under "Media Options.")	1,920.
98618A	BASIC 5.x Compiler. Includes BASIC 5.0/5.1 Compiler disc and manual kit.	510.

<sup>\*</sup>BASIC 4.0 and Pascal 3.1 are supported on the Models 310 and 320 and Series 200 only.

<sup>\*</sup> Except SRM, Datacomm and KNB.\_2. These binaries are provided in software separately.

Product/Opt. Number	Description	Price
98618-17x00 <sup>+</sup>	BASIC 5.x Compiler Upgrade Kit. Incudes BASIC 5.0/5.1 Compiler disc and manual kit. (Customer must return previous version to DMK!)	\$ 350
98616-11x40 <sup>+</sup>	BASIC 5.x Compiled Subprogram Utilities (CSUB). For use with BASIC 5.0/5.1 and Pascal 3.2. These utilities allow you to develop compiled subprograms in Pascal or Assembly that are callable by BASIC.	300
98616-17x40 <sup>†</sup>	<b>BASIC 5.</b> x <b>CSUB Utility Upgrade</b> . This upgrades previous versions of the Compiled Subprogram Utilities to the current version.	58
98616-87901	BASIC 5.0/5.1 Documentation Kit (order from DMK <sup>t</sup> ).	350
E2000A	HP Interactive Test Generator. HP BASIC software development tool accelerates test development with a windowed, mouse driven interface designed specifically for controlling HP-IB Instruments. Must order HP E2001A Instrument Drivers separately. Requires HP BASIC Rev. 5.1 or greater, or HP BASIC/UX Rev. 5.5 or greater.	995
AA7	Software on 3½-inch single sided disc.	N/
AA8	Software on 3½-inch double sided disc.	N/
AA6	Software on 51/4-inch disc	N/-
AA0	Software on ¼-inch tape cartridge	N/
E2001A	<b>HP Instrument Drivers.</b> Complete set of all available instrument drivers for use with HP E2000A Interactive Test Generator.	498
AA7	Software on 3½-inch single sided disc.	N/
AA8	Software on 3½-inch double sided disc.	N/
AA6	Software on 51/4-inch disc	N/
AA0	Software on ¼-inch tape cartridge	N/

## **Pascal Language Systems**

Product/Opt. Number	Description	Price
98617A	<b>RAM-based Pascal 3.2 Language System.</b> Includes system disc set and Pascal 3.2 Manual Kit. (Order one choice under "Media Options" section below).	\$ 1,015
Opt. 001	Upgrade from previous version of Pascal Language System	-400.
98617M Opt. 100	<b>Right-to-reproduce one copy of Pascal 3.2</b> for VEUs, SRM users, or end users. Delete Manuals	870. -110.
98617R Opt. 100	Right-to-reproduce one copy of Pascal 3.2 for resellers. Delete manuals	870. -110
98617E Opt. 090	Right-to-execute Pascal 3.2 for resellers. Additional 99 copies of Pascal 3.2 right-to-execute	350 6,540
98617-87901	Pascal 3.2 Documentation Kit (order from DMK <sup>†</sup> )	350
98615C*	RAM-based Pascal 3.1 Language System. Includes system disc set and Pascal 3.1 Language Manual Kit. (Order one choice under "Media Options" section below.)	1,015
Opt. 001	Upgrade from previous version of Pascal Language System	-400
98615R*	Right-to-Reproduce Pascal 3.1 Language System. Includes Pascal 3.1 Language Manual Kit and right-to-reproduce license.	-200
Opt. 001 Opt. 100	Discount for second and subsequent upgrades from previous versions of Pascal Language System.  Delete manuals	-110
98615E*	<b>Right-to-Execute Pascal 3.1 Language System.</b> Certificate for stand-alone applications using portions of the Pascal Language System.	350
Opt. 090	99 additional Right-to-Execute certificates (100 total)	6,540
98615-87971	Pascal 3.1 Systems Internals Documentation (order from DMK <sup>+</sup> )	200

 $<sup>*</sup>BASIC\,4.0\,and\,Pascal\,3.1\,are\,supported\,on\,Models\,310\,and\,320\,only.$ 

## **Media Options**

Product/Opt. Number	Description	Price
Opt. 042 Opt. 044	Specify one media option for each BASIC or Pascal Language System ordered Software on 5¼-inch disc Software on 3½-inch disc, single-sided format on double-sided media Software on 3½-inch disc, double-sided format	N/C N/C N/C

 $<sup>{}^</sup>t\!HP's\,Direct\,Marketing\,Division; order\,direct\,by\,dialing\,1-800-538-8787\,(in\,the\,U.S.\,only).$ 

<sup>&#</sup>x27;The 'X' in the part number indicates media option: 2 is for 5½-inch external format; 4 is for 3½-inch double-sided discs recorded single-sided; 5 is for 3½-inch double-sided discs recorded double-sided.

<sup>&</sup>lt;sup>†</sup>HP's Direct Marketing Division; order direct by dialing 1-800-538-8787 (in the U.S. only).

## **HP 9000 Hardware Support Services**

#### Overview

At Hewlett-Packard, we want you to get the most from your workstation products. To meet the goals of maximum uptime and productivity at minimum cost, our products are backed by a wide range of hardware services designed to meet your price/performance needs.

In the following section, support services are listed alongside Series 300 products, *in the same order and categories* as in the hardware section (minus descriptions) – so you can easily look up support services for products in which you are interested. A few products, such as trade-in programs, manuals, media, and upgrades are not applicable.

#### **Summary of Hardware Support Services**

Service	Place of Service	Response Time
Standard (SMMC)	Customer Site (0-100 miles radius from HP Primary Service Responsible Office)	Four Hours
BASIC (BMMC)	Customer Site (0-100 miles radius from HP Primary Service Responsible Office)	Next Day
Priority (WMMC)	Customer Site (0-100 miles radius from HP Primary Service Responsible Office)	Four Hours
Next Day (PMMC)	Customer Site (0-100 miles radius from HP Primary Service Responsible Office)	Next Day
Scheduled (Sched.)	Customer Site (0-100 miles radius from HP Primary Service Responsible Office (SRO))	Scheduled Weekly

Our support services let you choose your hardware maintenance program depending upon whether your highest priority is a quick response or a low cost for your workstation products. These services are available for most HP computers, plotters, printers, terminals, and associated peripherals. You receive the services of an HP Customer Engineer specially trained in the type of equipment you have. And you get the support level that is right for you, for a known cost.

HP maintains a staff of trained Customer Engineers and stocks each Service Responsible Office and Customer Service Center with its own service inventory and tools, assuring you that quality maintenance service will be available when you need it.

If your HP 9000 Series 300 is used in a multi-computer or multisystem environment, HP can provide the services listed below. These services include an account-assigned engineer and work-tocompletion features.

#### Standard System Maintenance Service (SMMC)

Standard System Maintenance Service provides four-hour response from 8:00 a.m. to 9:00 p.m. every business day, excluding HP holidays. Extended coverage options are available to provide service up to 7 days per week, 24 hours per day.

#### **Basic System Maintenance Service (BMMC)**

Basic System Maintenance Service provides you with next-business-day response from 8:00 a.m. to 5:00 p.m. during the standard work week. These services include an account-assigned CE and work-to-completion features.

If your HP 9000 Series 300 is used as a stand-alone workstation, the following services may be appropriate:

#### Priority On-site Service (WMMC)

Priority On-site Service offers a four-hour response time for on-site service. Support coverage is from 8:00 a.m. to 5:00 p.m. every business day, excluding HP holidays.

#### Next Day On-site Service (PMMC)

Next Day On-site Service gives you next-business-day response between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding HP holidays.

#### Scheduled On-site Service (Sched.)

When backup equipment is available, you can meet your uptime requirements and receive economical on-site support with Scheduled On-site Service. With 25 units or more under contract, HP will perform repairs at a designated location on a scheduled weekly basis during normal business hours, excluding HP holidays.

**Note:** All prices are quoted in monthly amounts. N/C stands for No Charge, N/A stands for Not Available.

## **Entry Level Workstations**

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98563B	Model 318M Workstation	N/A	18.	29.	N/A	36.
Opt. 060		N/A	N/C	N/C	N/A	N/A
Opt. 084		N/A	N/C	N/C	N/A	N/A
98564A	Model 319C + Workstation	9.	14.	23.	N/A	28.
Opt. 010		2.	4.	6.	N/A	8.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 060		N/C	N/C	N/C	N/A	N/C
Opt. 084		N/C	N/C	N/C	N/A	N/C
Opt. 108		1.	2.	4.	N/A	4.
Opt. 112		2.	4.	7.	N/A	8.
Opt. 116		4.	7.	11.	N/A	14.
Opt. 719		6.	13.	21.	N/A	26.
98573A	319SRX Solid Rendering Workstation	36.	56.	91.	91.	112.
Opt. 016	_	7.	10.	16.	16.	20.
Opt. 024		10.	16.	26.	26.	32.
Opt. 032		14.	22.	36.	36.	44.
Opt. 060		N/C	N/C	N/C	N/C	N/C
Opt. 084		N/C	N/C	N/C	N/C	N/C
Opt. 108		2.	2.	4.	4.	5.
Opt. 112		3.	4.	7.	7.	8.
Opt. 116		5.	7.	11.	11.	14.
Opt. 719		8.	12.	19.	19.	24.

## RAM Upgrades

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98266A	RAM Upgrade	1.	2.	3.	N/A	4.
98266B	RAM Upgrade	3.	4.	7.	N/A	8.
98267A	Model 360 4 Mbytes RAM Board	1.	2.	3.	N/A	4.
98267B	Model 360 8 Mbytes RAM Board	2.	3.	5.	N/A	6.
98267C	Model 360 12 Mbytes RAM Board	3.	6.	9.	N/A	12.

## System Processing Units (SPUs)

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98561A Opt. 002 Opt. 003 Opt. 004 Opt. W03	Model 310 SPU  Model 320 SPU	5. N/C N/C N/C N/C N/C	9. N/C N/C N/C N/A	14. N/C N/C N/C N/A 21.	15. N/C N/C N/C N/A	19. N/C N/C N/C N/A
Opt. W03	Nidder 320 St C	N/A	N/A	N/A	N/A	N/A
98561C Opt. 022 Opt. W03	Model 320U SPU	20. N/C N/A	35. N/C N/A	57. N/C N/A	N/A N/C N/A	70. N/C N/A
98562A Opt. 006 Opt. 010 Opt. 011 Opt. 015 Opt. 017 Opt. W03	Model 330 SPU	6. N/C N/C N/C N/C N/A	9. N/C N/C N/C N/C N/A	14. N/C N/C N/C N/C N/A	N/A N/A N/A N/C N/C N/A	18. N/A N/A N/C N/C N/A
98562B Opt. 011 Opt. 015 Opt. 017 Opt. 016 Opt. 208 Opt. 216	Model 350 SPU	12. N/C N/C N/A 6. -1.	18. N/C N/C N/A 10. N/C 3.	29. N/C N/C N/A 16. 1.	N/A N/C N/C N/A N/A N/A	36. N/C N/C N/A 20. N/A N/A

System Processing Units (SPUs) (cont'd)

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98579A	Model 360 SPU	6.	9.	14.	N/A	18.
Opt. 006		N/C	N/C	N/C	N/A	N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/A	N/C
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 108		1.	3.	3.	N/A	4.
Opt. 112		2.	6.	5.	N/A	6.
Opt. 116		3.	6.	9.	N/A	12.
98579B	Model 370 SPU	12.	18.	29.	29.	36.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		1.	2.	3.	N/C	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 116		6.	10.	16.	N/A	20.
Opt. 208		-1.	N/C	1.	N/A	N/C
Opt. 216		1.	3.	5.	N/A	6.

## Series 300 Configurable Systems

## Model 330 Workstations

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98588S	Model 330CH 2D Color Workstation	9.	14.	22.	22.	28.
Opt. 006		NA	N A	N A	N/A	N/A
Opt. 010		N/A	N/A	N/A	N/A	N/A
Opt. 011		N/A	N/A	N/A	N/A	N/A
Opt. 015		N/A	N/A	N/A	N/A	N/A
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 556		N/A	N/A	N/A	N/A	N/A
Opt. 719		8.	12.	19.	19.	24.
98588S	Model 330CHX 2D Color Workstation	9.	14.	22.	22.	28.
Opt. 006		N/C	N/C	N/C	N/A	N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017						
Opt. 556						
Opt. 719		8.	12.	19.	19.	24.
98583S	Model 330C Color Workstation	9.	14.	22.	N/A	28.
Opt. 006		N/C	N/C	N/C	N/A	N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 719		9.	13.	21.	N/A	26.
98589S	Model 330MH 2D Monochrome Workstation	11.	18.	29.	N/A	36.
Opt. 006		N/C	N/C	N/C	N/A	N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/C	N/A	N/C	N/C	N/C
98582S	Model 330M Monochrome Workstation	11.	18.	29.	N/A	36.
Opt. 006		N/C	N/C	N/C	N/A	90. N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/C	N/A	N/C	N/C	N/C
r			1	1,	1	1.7.

Model 350 Workstations

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98587E	Model 350SRX Solid Rendering Workstation	47.	73.	118.	N/A	146.
Opt. 016	Ü	7.	10.	16.	N/A	20.
Opt. 024		11.	16.	26.	N/A	32.
Opt. 032		15.	22.	36.	N/A	44.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 013		N/A	N/A	N/A	N/A	N/A
Opt. 017 Opt. 116		6.	10.	16.	N/A	20.
Opt. 110 Opt. 208		-1.	N/C	1.	N/A	N/C
		N/C	3.	5.	N/A	6.
Opt. 216					N/A	156.
98587F	Model 350 TurboSRX Solid Rendering	N/A	78.	125.	IN/A	130.
	Workstation	N/C	N/C	N/C	N/C	N/C
Opt. 011			N/C N/C	N/C	N/C	N/C
Opt. 015		N/C	N/A	N/A	N/A	N/A
Opt. 017		N/A	1		N/A	N/C
Opt. 116		N/A	N/C	N/C		N/C
Opt. 208		N/A	N/C	N/C	N/A	N/C N/C
Opt. 216		N/A	N/C	N/C	N/A	
Opt. 608		N/A	49.	78.	N/A	98.
Opt. 616		N/A	55.	88.	N/A	110.
Opt. 624		N/A	61.	98.	N/A	122.
Opt. 716		N/C	N/C	N/C	N/C	N/C
98588E	Model 350CH 2D Color Workstation	23.	35.	56.	56.	70.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		6.	10.	16.	16.	20.
Opt. 208		-1.	N/C	1.	1.	2.
Opt. 216		N/C	3.	5.	5.	6.
Opt. 556		3.	4.	6.	6.	8.
Opt. 330		-9.	-12.	-19.	-19.	-24.
_	No. 1 1000CHYOD Color Workstown	N/A	N/A	N/A	N/A	N/A
98588E	Model 350CHX 2D Color Workstation	N/A N/A	N/A N/A	N/A	N/A	N/A
Opt. 011				N/A	N/A	N/A
Opt. 015		N/A	N/A	N/A N/A	N/A	N/A
Opt. 017		N/A	N/A		N/A	N/A
Opt. 116		N/A	N/A	N/A		N/A
Opt. 208		N/A	N/A	N/A	N/A	N/A N/A
Opt. 216		N/A	N/A	N/A	N/A	
Opt. 716		N/A	N/A	N/A	N/A	N/A
98586E	Model 350CX Color Workstation with Graphics Accelerator	43.	65.	105.	N/A	130.
Opt. 011	*	N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		6.	10.	16.	N/A	20.
Opt. 208		N/A	N/A	N/A	N/A	N/A
Opt. 206		N/A	3.	5.	N/A	N/A
98583E	Model 350C Color Workstation	24.	36.	58.	N/A	72.
	Model 550C Color Workstation	N/C	N/C	N/C	N/C	N/C
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/A	N/A	N/A	N/A	N/A
Opt. 017		6.	10.	16.	N/A	20.
Opt. 116		-1.	N/C	1.	N/A	N/C
Opt. 208			3.	5.	N/A	6.
Opt. 216		N/C		-21.	N/A	-26.
Opt. 716		-9.	-13.	-21.	1 1/17	-20.

Model 350 Workstations (cont'd)

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98589E	Model 350MH Monochrome Workstation	17.	27.	44.	N/A	54.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		6.	10.	16.	N/A	20.
Opt. 208		-1.	N/C	1.	N/A	N/C
Opt. 216		N/C	3.	5.	N/A	6.
98582E	Model 350M Monochrome Workstation	17.	27.	44.	N/A	54.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		6.	10.	16.	N/A	20.
Opt. 208		-1.	N/C	1.	N/A	N/C
Opt. 216		N/C	3.	5.	N/A	6.
98585E	Model 350AIC Color AI Development System	N/A	36.	58.	N/A	72.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		N/A	10.	16.	N/A	20.
Opt. 208		N/A	N/C	1.	N/A	N/C
Opt. 216		N/A	3.	5.	N/A	6.
Opt. 232		N/A	N/A	N/A	N/A	N/A
98584E	Model 350AIM Monochrome AI Development System	17.	27.	44.	N/A	54.
Opt. 011		N/C	N/C	N/C	N/C	N/C
Opt. 015		N/C	N/C	N/C	N/C	N/C
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 116		6.	10.	16.	N/A	20.
Opt. 208		-1.	N/C	1.	N/A	N/C
Opt. 216		N/C	3.	5.	N/A	6.
Opt. 232		N/A	N/A	N/A	N/A	N/A

## Model 360 Workstations

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98587W	Model 360SRX Solid Rendering Workstation	33.	52.	84.		
Opt. 011	8	N/C	N/C	N/C	N/A N/A	104.
Opt. 015		1.	2.	3.	N/A N/A	N/C
Opt. 017		1.	2.	3.	N/A N/A	4.
Opt. 016		7.	10.	16.	N/A N/A	4.
Opt. 024		11.	16.	26.	N/A N/A	20.
Opt. 032		15.	22.	36.	N/A N/A	32. 44.
Opt. 108		1.	2.	3.	N/A	44.
Opt. 112		2.	3.	5.	N/A	6.
Opt. 116		3.	6.	9.	N/A	12.
Opt. 719		18.	12.	19.	N/A	24.
98587T	Model 360 Turbo SRX Solid Rendering Workstation	47.	75.	119.	N/A	150.
Opt. 011		N/C	N/C	N/C	N/A	NIC
Opt. 015		1.	2.	3.	N/A N/A	N/C
Opt. 017		1.	2.	3.	N/A N/A	4.
Opt. 112		2.	3.	5.	N/A N/A	4.
Opt. 116		3.	6.	9.	N/A	6. 12.
Opt. 416		4.	6.	10.	N/A	12.
Opt. 424		8.	12.	20.	N/A	24.
Opt. 608		28.	45.	72.	N/A	90.
Opt. 616		32.	51.	82.	N/A	102.
Opt. 624		36.	57.	92.	N/A	114.
Opt. 716		-8.	-12.	-19.	N/A	-24.
98588W	Model 360CH 2D Color Workstation	9.	14.	22.	N/A	28.
Opt. 006		N/C	N/C	N/C	N/A	N/C
Opt. 010		N/C	N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C	N/C	N/A	N/C
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017 Opt. 108		1.	2.	3.	N/A	4.
Opt. 108 Opt. 112		1.	2.	3.	N/A	4.
Opt. 112 Opt. 116		2.	3.	5.	N/A	6.
Opt. 116 Opt. 556		3.	6.	9.	N/A	12.
Opt. 719		3.	4.	6.	N/A	8.
	M 112000 - 0.1	8.	12.	19.	N/A	24.
Opt. 011	Model 360C + Color Workstation	9.	14.	22.	N/A	28.
Opt. 015	+	N/C	N/C	N/C	N/A	N/C
Opt. 017		1.	2.	3.	N/A	4.
Opt. 116		1. 3.	2.	3.	N/A	4.
Opt. 208			6.	9.	N/A	12.
Opt. 216		-1. 1.	N/C	1.	N/A	N/C
Opt. 716		-8.	3. -12.	5. -19.	N/A N/A	6. -24.
98589W	Model 360MH 2D Monochrome Workstation	11.	18.			
Opt. 006	and the constitution	N/C	N/C	29.	N/A	36.
Opt. 010		N/C	N/C N/C	N/C	N/A	N/C
Opt. 011		N/C	N/C N/C	N/C N/C	N/A	N/C
Opt. 015		1.	2.	3.	N/A	N/C
Opt. 017		1.	2. 2.	3.	N/A	4.
Opt. 108		1.	2.	3. 3.	N/A	4.
Opt. 112		2.	3.	5.	N/A	4.
Opt. 116		3.	6.	9.	N/A N/A	6.

#### Model 370 Workstations

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98587G	Model 370SRX Solid Rendering Workstation	47.	73.	118.	N/A	146.
Opt. 016		7.	10.	16.	N/A	20.
Opt. 024		11.	16.	26.	N/A	32.
		15.	22.	36.	N/A	44.
Opt. 032		N/C	N/C	N/C	N/C	N/C
Opt. 011		1.	2.	3.	N/C	4.
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1	10.	16.	N/A	20.
Opt. 116		6.		10.	N/A	N/C
Opt. 208		-1.	N/C			
Opt. 216		N/C	3.	5.	N/A	6. 24
Opt. 716		-8.	-12.	-19.	N/A	-24.
98587H	Model 370 TurboSRX Solid Rendering Workstation	54.	82.	131.	N/A	156.
O-+ 011	VVOIRStation	N/C	N/C	N/C	N/C	N/C
Opt. 011		1.	2.	3.	N/C	4.
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		6.	10.	16.	N/A	20.
Opt. 116			N/C	1.	N/A	N/C
Opt. 208		-1.		5.		6.
Opt. 216		1.	3.		N/A	98.
Opt. 608		31.	49.	78.	N/A	
Opt. 616		35.	55.	88.	N/A	110.
Opt. 624		39.	61.	98.	N/A	122.
Opt. 716		-8.	-12.	-19.	N/A	-24.
Opt. 416		4.	6.	10.	N/A	12.
		8.	12.	20.	N/A	24.
Opt. 424		<u> </u>			N.T./ A	70
98588G	Model 370CH Color Workstation	23.	35.	56.	N/A	70.
Opt. 011		N/C	N/C	N/C	N/A	N/C
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 116		6.	10.	16.	N/A	20.
		-1.	N/C	1.	N/A	N/C
Opt. 208		1.	3.	5.	N/A	6.
Opt. 216		3.	4.	6.	N/A	8.
Opt. 556		-8.	-12.	-19.	N/A	-24.
Opt. 716			-14.			<del>                                     </del>
98583E	Model 370C + Color Workstation	22.	36.	58.	N/A	72.
Opt. 011	Moderator	N/C	N/C	N/C	N/A	N/C
Opt. 011		1.	2.	3.	N/A	4.
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		3.	6.	9.	N/A	12.
Opt. 116		-1.	N/C	1.	N/A	N/C
Opt. 208		1.	3.	5.	N/A	6.
Opt. 216			-12.	-19.	N/A	-24.
Opt. 716		-8.	-12.	-17.	IN/A	24.
98589G	Model 370MH Monochrome Workstation	17.	27.	44.	N/A	54.
Opt. 011	MATCHET DA OFFICE AND INCOME.	N/C	N/C	N/C	N/C	N/C
Opt. 011		1.	2.	3.	N/C	4.
Opt. 015		1.	2.	3.		4.
Opt. 017			10.	16.	N'A	20.
Opt. 116		6.			N/A	N/C
	1	-1.	N/C	1.	1 N/A	11/
Opt. 208 Opt. 216		1.	3.	5.	N/A	6.

## **Series 300 Instrument Controllers**

## Model PC-305 and PC-308 Instrument Controllers

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
82316Dx	PC-305M BASIC Controller	7.	10.	16	N/A	20.
Opt. 001		N/A	N/A	N/A	N/A	N/A
Opt. 002		N/A	N/A	N/A	N/A	N/A
Opt. 003		N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A
82317Dx	PC-305ML BASIC Controller	10.	14.	22.	N/A	28.
Opt. 001		N/A	N/A	N/A	N/A	N/A
Opt. 002		N/A	N/A	N/A	N/A	N/A
Opt. 003		N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A
82314Dx	PC-308ML BASIC Controller	15.	18.	28.	N/A	36.
Opt. 001		N/A	N/A	N/A	N/A	N/A
Opt. 002		N/A	N/A	N/A	N/A	N/A
Opt. 003		N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A
82315Dx	PC-308CL BASIC Controller	15.	19.	29.	N/A	38.
Opt. W03		N/A	N/A	N/A	N/A	N/A
82319Dx	PC-308CM BASIC Controller	N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A

## **Model 310 Instrument Controllers**

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98581B	Model 310C Low-cost Color Instrument	6.	11.	17.	18.	23.
	Controller					
Opt. 042		N/C	N/C	N/C	N/C	N/C
Opt. 100		N/A	N/A	N/A	N/A	N/A
Opt. 613		N/C	N/C	N/C	N/C	N/C
Opt. 008		N/C	N/C	N/C	N/C	N/C
Opt. W03		N/A	N/A	N/A	N/A	N/A
98580B	Model 310M Monochrome Instrument Controller System	6.	11.	17.	18.	23.
Opt. 042		N/A	N/A	N/A	N/A	N/A
Opt. 100		N/A	N/A	N/A	N/A	N/A
Opt. 002		N/C	N/C	N/C	N/C	N/C
Opt. 008		N/C	N/C	N/C	N/C	N/C
Opt. 613		N/C	N/C	N/C	N/C	N/C
Opt. W03		N/A	N/A	N/A	N/A	N/A

## **Model 330 Instrument Controllers**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98581S	Model 330CMA Color Instrument Controller	7.	11.	17.	N/A	22.
Opt. 015		N/A	N/A	N/A	N/A	N/A
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 042		N/A	N/A	N/A	N/A	N/A
Opt. 613		N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A
98580S	Model 330MMA Monochrome Instrument	7.	11.	17.	N/A	22.
Opt. 015	Controller	N/A	N/A	N/A	N/A	N/A
Opt. 017		N/A	N/A	N/A	N/A	N/A
Opt. 042		N/A	N/A	N/A	N/A	N/A
Opt. 613		N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A

## **Model 360 Instrument Controllers**

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98581 W	Model 360 CMA Color HP BASIC/WS Instrument Controller	7.	11.	17.	N/A	22.
Opt. 042		N/A	N/A	N/A	N/A	N/A
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 108		1.	2.	3.	N/A	4.
Opt. 112		1.	3.	5.	N/A	4.
Opt. 116		N/A	N/A	N/A	N/A	N/A
Opt. 613		3.	6.	9.	N/A	5.
98580W	Model 360 MMA Monochrome HP BASIC/WS Instrument Controller	7.	11.	17.	N/A	22.
Opt. 042		N/A	N/A	N/A	N/A	N/A
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 108		1.	2.	3.	N/A	4.
Opt. 112		1.	3.	5.	N/A	4.
Opt. 116		3.	6.	9.	N/A	12.
Opt. 613		N/A	N/A	N/A	N/A	N/A
98580WX	Model 360 MMAX Monochrome HP BASIC/UX Instrument Controller	11.	18.	29.	N/A	36.
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 100		N/A	N/A	N/A	N/A	N/A
Opt. 108		1.	2.	3.	N/A	4.
Opt. 112		1.	3.	5.	N/A	4.
Opt. 116		3.	6.	9.	N/A	12.
Opt. 003		-9.	-5.	-15.	N/A	18.
Opt. 402		15.	10.	24.	N/A	30.
98581WX	Model 360 CMAX Color HP BASIC/UX Instrument Controller	14.	9.	22.	N/A	28.
Opt. 015		1.	2.	3.	N/A	4.
Opt. 017		1.	2.	3.	N/A	4.
Opt. 100		N/A	N/A	N/A	N/A	N/A
Opt. 108		1.	2.	3.	N/A	4.
Opt. 112		1.	3.	5.	N/A	4.
Opt. 116		3.	6.	9	N/A	12.
Opt. 402		15.	10.	24.	N/A	30.

## Series 300 Network Servers

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98564E	Model 15NS Design Automation Network Server	N/A	N/A	N/A	N/A	N/A
Opt. 1AP		N/A	N/A	N/A	N/A	N/A
Opt. 1AQ		N/A	N/A	N/A	N/A	N/A
Opt. 1AR		N/A	NΑ	N/A	NA	N/A
Opt. 112		N/A	N/A	N/A	N/A	N/A
Opt. 116		N/A	N/A	N/A	N/A	N/A
Opt. 401		N/A	N/A	N/A	N/A	N/A
Opt. 549		N/A	N/A	N/A	N/A	N/A
98566E	Model 25NS Design Automation Network Server	N/A	N/A	N/A	N/A	N/A
Opt. 1AP		N/A	N/A	N/A	N/A	N/A
Opt. 1AQ		N/A	N/A	N/A	N/A	N/A
Opt. 1AR		N/A	N/A	N/A	N/A	N/A
Opt. 1AS		N/A	N/A	N/A	N/A	N/A
Opt. 316		N/A	N/A	N/A	N/A	N/A
Opt. 332		N/A	N/A	N/A	N/A	N/A
Opt. 548		N/A	N/A	N/A	N/A	N/A
Opt. 550		N/A	N/A	N/A	NA	N/A

## **SPU Accessories**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98242A	4-slot DIO Backplane	N/C	N/C	N/C	N/C	N/C
98242B	2-slot DIO Backplane	N/C	N/C	N/C	N/A	N/A
98568A Opt. 132	Direct Connect 8-slot I/O Expander	1. N/C	2. N/C	3. N/C	3. N/A	4. N/C
98570A Opt. 004	Direct Connect DIO II Expander	N/C N/A	2. N/A	3. N/A	N/A N/A	4. N/A
9888A	16-slot DIO Expander	4.	7.	11.	11.	14.
98258A Opt. 004 Opt. 005	4 Mbytes Parity-Checking RAM Controller	3. N/A N/A	4. N/C N/C	6. N/C N/C	N/A N/A N/A	8. N/C N/C
98258B	4 Mbytes Parity-Checking RAM Add-on	1.	1.	2.	N/A	2.
98258C	12 Mbytes Parity-Checking RAM Add-on	7.	11.	18.	N/A	22.
98257A	1 Mbyte RAM Card (DIO)	N/C	N/C	N/C	N/C	N/A
98264A	8 Mbytes Error-Checking and Correcting (ECC) RAM	N/A	N/A	N/A	N/A	N/A
Opt. 004 Opt. 005		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
98264B	16 Mbytes Error-Checking and Correcting (ECC) RAM	5.	8.	13.	N/A	16.
Opt. 004 Opt. 005		N/C N/C	N/C N/C	N/C N/C	N/A N/A	N/C N/C
98248A	Floating Point Accelerator for Models 330 and 350	3.	4.	7.	7.	8.
98248B	Floating Point Accelerator for Model 360	3.	4.	7.	N/A	8.
98262A	High-speed HP-IB Disc Interface for Model 330 System Interface Board	N/C	N/C	N/C	N/A	N/C
98265A	SCSI Single Ended Board for Models 330 and 350	N/A	N/A	N/A	N/A	N/A
98267A	Model 360 4 Mbytes RAM Board	1.	2.	3.	N/A	4.
98267B	Model 360 8 Mbytes RAM Board	2.	3.	5.	N/A	6.
98267C	Model 360 12 Mbytes RAM Board	3.	6.	9.	N/A	12.

## **SPU** Upgrades

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
98243B	Model 310 CPU Upgrade to Model 320	5.	8.	13.	N/A	16.
Opt. 002		-2.	-4.	-7.	N/A	-8.
98244A	Model 330 CPU Upgrade to Model 350	7.	11.	17.	17.	22.
Opt. 001		-4.	-5.	-8.	-8.	-10.
Opt. 002		N/C	N/C	N/C	N/C	N/C
Opt. 003		N/C	N/C	N/C	N/A	N/C
Opt. 116		6.	10.	16.	16.	20.
Opt. 570		1.	2.	3.	3.	4.
98247A	Model 360 SPU Upgrade Kit	N/C	N/C	N/C	N/A	N/C
Opt. 108		1.	2.	3.	N/A	4.
Opt. 112		2.	3.	5.	N/A	6.
Opt. 116		3.	6.	9.	N/A	12.
98247B	Model 350 CPU Upgrade to Model 370	2.	3.	4.	N/A	5.
98247C Opt. 002 Opt. 003 Opt. 011 Opt. 116 Opt. 570	Model 360 CPU Upgrade to Model 370	4. N/C N/C N/C 6. 1.	6. N/C N/C N/C 10. 2.	10. N/C N/C N/C 16.	N/A N/A N/A N/A N/A N/A	13. N/C N/C N/C 20.

**Boot ROM/Processor Board Updates** 

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98563-67001	Boot ROM for Models 310/320/330/350	N/A	N/A	N/A	N/A	N/A
98562-69013	Model 330 Processor Board Update	N/A	N/A	N/A	N/A	N/A
98562-69517	Model 350 Processor Board Update	N/A	N/A	N/A	N/A	N/A

**DOS Coprocessor System** 

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98286S	DOS Coprocessor System	N/C	N/C	N/C	N/A	N/C
Opt. W03		N/C	N/C	N/C	N/A	N/C
98286T	DOS Coprocessor Memory Enhancement Kit	N/C	N/C	N/C	N/A	N/C
Opt. W03		N/A	N/A	N/A	N/A	N/A
98286D	DOS Coprocessor Discless Node Kit	N/A	N/A	N/A	N/A	N/A
Opt. W03		N/A	N/A	N/A	N/A	N/A
9127A	360 Kbytes Single 51/4-inch Flexible Disc Drive	3.	6.	10.	N/A	N/A
D1387A	80287 Numeric Coprocessor	N/C	N/C	N/C	N/C	N/C

# **BASIC** and Pascal Language Processor Systems

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
82300B	BASIC Language Processor	N/C	N/C	N/C	N/A	N/C
82310A	Pascal Language Processor	N/C	N/C	N/C	N/A	N/C
82312A	Pascal Language Processor Board with Right-to-Execute	N/C	N/C	N/C	N/A	N/C
82303A	RAM Expansion Kit	N/C	N/C	N/C	N/A	N/A
82304B	BASIC ROM for Language Processor	N/C	N/C	N/C	N/A	N/A
82305A	RAM Expansion Board	N/C	N/C	N/C	N/A	N/A
82306A	GPIO Interface for Language Processor	N/C	N/C	N/C	N/A	N/A
82307A	GPIO Cable (unterminated)	N/A	N/A	N/A	N/A	N/A
50963A	SRM Interface for BASIC Language Processor	N/A	N/A	N/A	N/A	N/A

## **VMEbus Connection**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98577A	VMEbus Expander	6.	9.	15.	N/A	18.
98646A	HP 9000 VMEbus Adapter	N/A	N/A	N/A	N/A	N/A

## **Graphics Boards**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98542A	Medium-resolution Monochrome Graphics Board	N/C	N/C	N/C	N/C	N/C
98543A	Medium-resolution 4-plane Color Graphics Board	N/C	N/C	N/C	N/A	N/C
98544B	High-resolution Monochrome Graphics Board	N/C	N/C	N/C	N/A	N/C
98546A	Display Compatibility Interface	N/C	N/C	N/C	N/C	N/C
98547A	High-resolution 6-plane Color Graphics Board	N/C	N/C	N/C	N/A	N/C
98548A	High-resolution, High-performance Monochrome Graphics Board	N/C	N/C	N/C	N/A	N/C
98549A	High-resolution, High-performance Color Graphics Board	N/C	N/C	N/C	N/A	N/C
98550A	High-resolution, High-performance Color Graphics Board	N/C	N/C	N/C	N/A	N/C

## **Monitors**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
35731A	12-inch Medium-resolution Monochrome Monitor	1.	2.	3.	3.	4.
35731B	12-inch Medium-resolution Monochrome Monitor	1.	2.	3.	3.	4.
35741A	12-inch Medium-resolution Color Monitor	1.	2.	3.	3.	4.
35741B	12-inch Medium-resolution Color Monitor	1.	2.	3.	3.	4.
98751A	19-inch High-resolution Color Monitor	10.	18.	29.	N/A	36.
98752A	19-inch High-resolution Color Monitor	N/A	17.	27.	27.	34.
98785A	16-inch High-resolution Color Monitor	3.	5.	8.	8.	10.
98786A	17-inch High-resolution Monochrome Monitor	5.	9.	15.	N/A	18.
98788A	19-inch High-resolution Monochrome Monitor	5.	9.	15.	N/A	18.
98789A	16-inch High-resolution Color Monitor	3.	5.	8.	N/A	10.
98787B	Tilt/Swivel	N/C	N/C	N/C	N/A	N/C

## **Graphics Accessories**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98556A	2D Integer-based Graphics Accelerator	3.	4.	6.	6.	8.
98700A	High-resolution Display Controller	N/A	14.	23.	23.	28.
98701A	4-plane Graphic Memory Upgrade for 98700A	N/A	N/C	N/C	N/C	N/C
98710A	Graphics Accelerator for the 98700A	7.	11.	18.	18.	22.
98287A	Series 300 Interface Card for the 98700A	N/C	N/C	N/C	N/C	N/C
98720A Opt. 721 Opt. 722 Opt. 723	SRX 3D Display Controller	10. N/A N/A N/A	16. N/A N/A N/A	26. N/A N/A N/A	N/A N/A N/A N/A	32. N/A N/A N/A

## *Graphics Accessories (cont'd)*

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98721A	3D Solid Rendering Graphics Accelerator	10.	16.	26.	N/A	32.
98722A	Frame Buffer Board	4.	6.	10.	N/A	12.
98723A	Additional Power Supply	3.	4.	6.	N/A	8.
98724A	16-bit Display Controller Interface to 98720A	N/C	N/C	N/C	N/A	N/C
98725A	16-bit Display Controller Interface to 98720A	N/C	N/C	N/C	N/A	N/C
98726A	32-bit Display Controller Interface to 98730A	1.	1.	2.	2.	2.
98730A Opt. 016 Opt. 024 Opt. 060 Opt. 123	Turbo SRX 3D Display Controller	29. N/A N/A N/A N/A	47. N/A N/A N/A N/A	75. N/A N/A N/A N/A	75. N/A N/A N/A N/A	94. N/A N/A N/A N/A
98732A	Three 3D Solid Rendering Graphics Accelerators and full 16-bit Z-buffer	28.	45.	72.	72.	90.

## **HP-HIL Input Devices**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
45911A	HP-HIL Digitizer	2.	3.	4.	N/A	6.
46021A	HP-HIL Keyboard	N/C	N/C	N/C	N/C	N/C
98203C Opt. 001	HP-HIL Keyboard with Rotary Knob	N/C N/C	N/C N/C	N/A N/A	N/A N/A	N/A N/A
46060A	HP-HIL 2-button Mouse	N/C	N/C	N/C	N/C	N/C
46060B	HP-HIL 3-button Mouse	N/C	N/C	N/C	N/C	N/C
46080A	2.4m HP-HIL Extension	N/C	N/A	N/A	N/A	N/A
46081A	2.4m HP-HIL Extension with audio	N/C	N/C	N/C	N/C	N/C
46082A Opt. 015 Opt. 343	15m HP-HIL Remote Extension with audio and RGB video	N/C	N/C	N/C	N/C	N/C
46082B	30m Remote Extension with audio and RGB video	N/C	N/C	N/C	N/C	N/C
46083A	HP-HIL Knob	N/C	N/C	N/C	N/C	N/C
46084A	HP-HIL ID Module	N/C	N/C	N/C	N/C	N/C
46085A	HP-HIL Control Dial Module	N/C	N/C	N/C	N/C	N/C
46086A	HP-HIL 32-button Box	N/C	N/C	N/C	N/C	N/C
46087B Opt. 001 Opt. W03	HP-HIL Digitizer, ANSI A/ISO A4-size	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C
46088B Opt. 001 Opt. W03	HP-HIL Digitizer, ANSI B/ISO A3-size	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C	N/C N/C N/C
46089B Opt. W03	4-button Cursor	N/C N/C	N/C N/C	N/C N/C	N/C N/C	N/C N/C
46084A	Quadrature Port	N/C	N/C	N/C	N/C	N/C
46095A	3-button Mouse	N/C	N/C	N/C	N/C	N/C
35723A	HP-HIL Touchscreen bezel	N/C	N'C	N'C	N/C	N'C
92916A	HP-HIL Bar Code Reader	N/C	2.	3.	3.	4.

## **Interface Products for Series 300 (DIO)**

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
36593A	HP-UX Gateway/SNA Link for Series 300	t	t	t	t	†
O 1 002	Gateway System	NT/A	NT/A	NI/A	NI/A	NI/A
Opt. 003 Opt. 004		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
50955A	3278 Display Station Emulator	N/C	N/C	N/C	N/C	N/C
Opt. 042 Opt. 045		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
	ODA C. T. C.		-			
50962A	SRM Coax Interface	N/C	N/C	N/C	N/A	N/A
98253A	EPROM Programmer Interface	N/C	N/C	N/C	N/C	N/A
98255A	EPROM Card	N/C	N/C	N/C	N/C	N/A
98256A	256 Kbytes RAM Card	N/C	N/C	N/C	N/C	N/A
98257A	1 Mbyte RAM Card	N/C	N/C	N/C	N/C	N/A
98265A	SCSI Single-ended Board	N/C	N/C	N/C	N/C	N/C
98259A	128 Kbytes Magnetic Bubble Memory Card	N/C	N/C	N/C	N/C	N/A
98546A	Display Compatibility Interface	N/C	N/C	N/C	N/C	N/C
98620B	Two-channel DMA Controller Card	N/C	N/C	N/C	N/C	N/A
98622A	16-bit GPIO Interface Card	N/C	N/C	N/C	N/C	N/A
Opt. 001		N/C	N/C	N/C	N/C	N/A
Opt. 002		N/C	N/C	N/C	N/C	N/A
Opt. 003		N/C	N/C	N/C	N/C	N/A
Opt. 004		N/C	N/C	N/C	N/C	N/A
98623A	43-line BCD Interface Card	N/C	N/C	N/C	N/C	N/A
Opt. 001		N/C	N/C	N/C	N/C	N/A
98624A	HP-IB Interface, standard speed	N/C	N/C	N/C	N/C	N/A
98625B	HP-IB Disc Interface, high speed (for Model 310 and 320 only)	N/C	N/C	N/C	N/C	N/A
98262A	HP-IB Interface, high speed (for Models 330 and 350 only)	N/C	N/C	N/C	N/A	N/C
98626A	RS-232C (Serial) Interface	N/C	N/C	N/C	N/C	N/A
Opt. 001		N/C	N/C	N/C	N/C	N/A
Opt. 002		N/C	N/C	N/C	N/C	N/A
98627A	RGB Color Video Output Interface	N/C	N/C	N/C	N/C	N/A
98628A	Datacomm Interface, RS-423 and RS-232C	N/C	N/C	N/C	N/C	N/A
Opt. 001		N/C	N/C	N/C	N/C	N/A
Opt. 002		N/C	N/C	N/C	N/C	N/A
Opt. 003		N/C	N/C	N/C	N/C	N/A
98630A	Breadboard Interface	N/A	N/A	N/A	N/A	N/A
Opt. 001	COMMAND IN	N/A	N/A	N/A	N/A	N/A
98633A	6944A Multiprogrammer Interface	N/A	N/A	N/A	N/A	N/A
98635A	Floating Point Math Card for Model 310	N/C	N/C	N/C	N/C	N/A
98640A	7-channel Analog-to-Digital Interface	N/C	N/C	N/C	N/C	N/A
Opt. 001		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
Opt. 630 Opt. 655		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
98641A	RJE 2780/3780 Interface	N/C	N/C	N/C	N/A	N/C
98642A	4-port RS-232C Multiplexer	N/A	N/A	N/A	N/A	N/A
98642A Opt. 001	4-port K5-252C withitiplexer	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

## Interface Products for Series 300 (cont'd)

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98643A Opt. 241	LAN/300 Link with Thin MAU	N/C N/A	N/C N/A	N/C N/A	N/C N/A	N/C N/A
98644A	RS-232C Serial Interface	N/C	N/C	N/C	N/C	N/A
98646A	VMEbus Adapter	N/A	N/A	N/A	N/A	N/A
98691A Opt. 001 Opt. 002 Opt. 003	Programmable Datacomm Interface	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A

## Local Area Network (LAN)

## LAN Hardware

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
98643A Opt. 241	LAN/300 Link	N/C N/C	N/C N/C	N/C N/C	N/C N/C	N/C N/C
92227A through 92227K	ThinLAN Coax Cable	N/A	N/A	N/A	N/C	N/C
92227L	BNC Connector Pair for 92227J/K	N/A	N/A	N/A	N/A	N/A
92227M	BNC Connector Tool Kit for 92227J/K	N/A	N/A	N/A	N/A	N/A
92227N	BNC "T" Connector	N/A	N/A	N/A	N/A	N/A
92227P	ThinLAN Terminator Pair	N/A	N/A	N/A	N/A	N/A
28641A	Thin MAU	N/A	2.	3.	3.	4.
30241A	Backbone LAN MAU and Tap	N/A	N/A	N/A	9.	12.
92256C	LAN MAU and Installation Kit	N/A	N/A	N/A	N/A	N/A
92254A through 92254H	Backbone LAN AUI Cable	N/A	N/A	N/A	N/C	N/C
92255A/B	Backbone LAN AUI Cable	N/A	N/A	N/A	N/C	N/C
92255C	LAN AUI Connector Kit	N/A	N/A	N/A	N/A	N/A
92253A through 92253H	Backbone LAN Coax Cable	N/A	N/A	N/A	N/C	N/C
92256A	LAN Coax Installation Tool Kit	N/A	N/A	N/A	N/C	N/C
92229B	LAN Coax Crimp Tool	N/A	N/A	N/A	N/C	N/C
92223A	Repeater Kit	N/A	24.	38.	N/A	48.
92223C	20m Repeater FEP AUI	N/A	N/A	N/A	N/A	N/A
28645A Opt. 241	ThinLAN Hub	5. N/A	9. N/A	15. N/A	N/A N/A	19. N/A
28633A Opt. 001 Opt. 241 Opt. 242	StarLAN 10 Hub	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
28644A Opt. 001	Twisted Pair MAU	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A

# Shared Resource Management (SRM) SRM Servers

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
50960A	SRM Server	\$6.	\$10.	\$16.	\$16.	\$20.
Opt. 100		N/A	N/A	N/A	N/A	N/A
Opt. 110		N/A	N/A	N/A	N/A	N/A
50960U	SRM Upgrades	N/A	N/A	N/A	N/A	N/A
Opt. 100		N/A	N/A	N/A	N/A	N/A
98619A	SRM Operating System	N/A	N/A	N/A	N/A	N/A
Opt. 001		N/A	N/A	N/A	N/A	N/A

#### **SRM Workstation Hardware**

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
50962A	SRM Coax Interface	N/C	N/C	N/C	N/A	N/C
50963A	SRM Interface for Vectra	N/C	N/C	N/C	N/A	N/C
50961U Opt. 200	SRM Coax Adapter Upgrade	N/C N/C	N/C N/C	N/C N/C	N/C N/C	N/C N/C
92227A through 92227K	Coax Cables	N/A	N/A	N/A	N/A	N/A
92227L	BNC Connector Pair for 92227J/K	N/A	N/A	N/A	N/A	N/A
92227M	BNC Connector Tool Kit	N/A	N/A	N/A	N/A	N/A
92227N	BNC "T" Connector	N/A	N/A	N/A	N/A	N/A
45695A	BNC 50 Ohm Termination Pair	N/A	N/A	N/A	N/A	N/A

## Series 300 Peripherals, Media, and Accessories

# Microfloppy and Hard Disc Storage (270 Kbytes - 40 Mbytes)

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
9127A	360 Kbyte, Single 51/4-inch Floppy Disc Drive	3.	6.	10.	N/A	N/A
9122C	2 Mbyte (1.42 Mbytes formatted) Disc Drive	3.	9.	6.	9.	12.
Opt. 001		- 1.	- 3.	- 2.	- 3.	- 4.
9153C	10/20/40 Mbyte Hard Disc with 2 Mbytes Microfloppy Drive					
Opt. 010		N/A	5.	8.	N/A	10.
Opt. 011		N/A	4.	6.	N/A	8.
Opt. 020		N/A	6.	10.	N/A	12.
Opt. 021		N/A	5.	8.	N/A	10.
Opt. 040		N/A	7.	11.	N/A	14.
Opt. 041		N/A	6.	10.	N/A	12.

# HP-IB Hard Disc Storage (41 Mbytes to 571 Mbytes)

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
7907A	41 Mbyte Fixed/Removable Disc Drive	N/A	N/A	N/A	80.	96.
7935H	404 Mbyte Removable Media Disc Drive	N/A	N/A	N/A	103.	130.
7935HR	Remarketed 404 Mbytes Removable Media Disc Drive		The state of the s			
7936H	307 Mbyte Fixed Disc Drive	N/A	N/A	N/A	33.	42.
7937H	571 Mbyte Fixed Disc Drive	N/A	N/A	N/A	40.	50.
7957A	81 Mbyte Fixed Disc Drive	13.	20.	32.	32.	40.
7957B	81 Mbyte Fixed Disc Drive					
7958A	130 Mbyte Fixed Disc Drive	14.	19.	33.	33.	43.
7958B	152 Mbyte Fixed Disc Drive					
7959B	304 Mbyte Fixed Disc Drive	N/A	N/A	N/A	27.	34.
7962B	152 Mbyte Fixed Disc Drive					
7963B	304 Mbyte Fixed Disc Drive	N/A	17.	27.	27.	34.
97963B	304 Mbyte Upgrade Kit	16.	10.	26.	26.	33.

## SCSI Hard Disc Storage (107 Mbytes to 323 Mbytes)

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
7957S	107 Mbyte Fixed Disc Drive	9.	14.	22.	22.	28.
7958S	161 Mbyte Fixed Disc Drive	10.	15.	24.	24.	30.
7959S	323 Mbyte Fixed Disc Drive	11.	17.	27.	27.	34.

## **Back-up Tape Drives**

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
7978B	6250 cpi and 1600 cpi ½-inch Streaming Tape Drive				85.	106.
7974A Opt. 800	1600 cpi ½-inch Tape Drive	N/A N/A	N/A N/A	N/A N/A	88. 14.	110. 17.
35401A	1/4-inch Cartridge Autochanger	N/A	N/A	N/A	35.	42.
92192C	Cartridge Magazine	N/A	N/A	N/A	N/A	N/A
9144A	1/4-inch Cartridge Tape Drive (67 Mbytes per 16-track)	5.	7.	13.	13.	16
9145A	1/4-inch Cartridge Tape Drive (133 Mbytes per 32-track)					

#### Series 300 Printers

#### Character Printers

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
2603A	48 cps* Daisy-wheel Printer	14.	21.	34.	34.	42.
2225A	150 cps Thinkjet printer	2.	4.	6.	6.	8.
2227A	160 cps QuietJet Plus printer	2.	4.	6.	N/A	8.
2227B	160 cps QuietJet Plus printer	2.	4.	6.	N/A	N/A
2228A	160 cps QuietJet printer	2.	4.	6.	N/A	N/A

## Character Printers (cont'd)

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
2235B	RuggedWriter 480 printer	7.	11.	18.	N/A	22.
2932A	200 cps Dot Matrix Impact Printer	7.	13.	21.	21.	26.
Opt. 046		N/A	N/A	N/A	0.	0.
2934A	200 cps Dot Matrix Impact Printer	9.	15.	24.	24.	30.
Opt. 046		N/A	N/A	N/A	0.	0.
3630A	HP PaintJet Color Graphics Printer	3.	5.	8.	N/A	10.
Opt. 001		N/A	N/A	N/A	N/A	N/A
Opt. 002		N/A	N/A	N/A	N/A	N/A
Opt. 004		N/A	N/A	N/A	N/A	N/A

<sup>\*</sup>Key: cps = characters per second

## Line Printers

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
2563B	300 lpm* Impact Printer	N/A	N/A	N/A	47.	59.
Opt. 114		N/A	N/A	N/A	N/C	N/C
Opt. 290		N/A	N/A	N/A	N/C	N/C
Opt. 510		N/A	N/A	N/A	N/C	N/C
Opt. 850		N/A	N/A	N/A	N/C	N/C
2564B	600 lpm Impact Printer	N/A	N/A	N/A	75.	94.
Opt. 114		N/A	N/A	N/A	N/C	N/C
Opt. 290		N/A	N/A	N/A	N/C	N/C
Opt. 510		N/A	N/A	N/A	N/C	N/C
Opt. 850		N/A	N/A	N/A	N/C	N/C
2566B	900 lpm Impact Printer	N/A	N/A	N/A	175.	219.
Opt. 115		N/A	N/A	N/A	N/C	N/C
Opt. 290		N/A	N/A	N/A	N/C	N/C
Opt. 500		N/A	N/A	N/A	N/C	N/C
Opt. 850		N/A	N/A	N/A	N/C	N/C
2567B	1200 lpm Impact Printer	N/A	N/A	N/A	186.	233.
Opt. 115		N/A	N/A	N/A	N/C	N/C
Opt. 500		N/A	N/A	N/A	N/C	N/C

<sup>\*</sup>Key: lpm = lines per minute.

## Page Printers

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
33440A	LaserJet Series II 8 ppm* printer	15.	30.	43.	N/A	60.
2684A	LaserJet 2000 20 ppm printer	N/A	N/A	N/A	289.	362.
2684P	LaserJet 2000 with 2000-sheet paper deck	N/A	N/A	N/A	313.	390.
2684D	LaserJet 2000 with 2000-sheet paper deck and duplexer	N/A	N/A	N/A	347.	434.

<sup>\*</sup>Key: ppm = pages per minute.

## Series 300 Graphics Devices

Product No.	Description	Sched.	PMMC	WMMC	ВММС	SMMC
3630A Opt. 001 Opt. 002	HP PaintJet Color Graphics Printer	3. N/A N/A	5. N/A N/A	8. N/A N/A	N/A N/A N/A	10. N/A N/A
7440A Opt. 001 Opt. 002	ColorPro 8-pen Graphics Plotter	3. N/A N/A	4. N/A N/A	7. N/A N/A	N/A N/A N/A	N/A N/A N/A
7475A Opt. 001 Opt. 002	AB-size, 6-Pen Plotter	4. N/A N/C	7. N/A N/C	11. N/A N/C	11. N/A N/C	13. N/A N/C
7550A	AB-size, 8-Pen Sheet-Feed Plotter	12.	20.	32.	32.	40.
7570A 17570A	<i>DraftPro</i> C/D size, 8-Pen Plotter Optional HP-IB Cartridge	6. N/A	10. N/A	15. N/A	N/A N/A	N/A N/A
7595A	DraftMaster I A E size, 8-Pen Plotter	12.	20.	32.	N/A	N/A
7956A	DraftMaster II A E size, 8-Pen Roll-feed Plotter	12.	20.	32.	N/A	N/A
17520A	DraftMaster Upgrade Kit	N/A	N/A	N/A	N/A	N/A
C1600A	HP 7600 Series Plotter Model 240D, D-size Monochrome Electrostatic Plotter	N/A	100.	160.	N/A	N/A
C1601A	HP 7600 Series Plotter Model 240E, E-size Monochrome Electrostatic Plotter	N/A	124.	198.	N/A	N/A

## Series 300 Terminals

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
	HP 700/92 Block-Mode Display Terminal					
C1001A		2.	3.	5.	N/A	6.
C1001G		2.	3.	5.	N/A	6.
C1001W		2.	3.	5.	N/A	6.
	HP 700/22 ANSI DEC VT 220 Compatible Terminal					
C1004A		2.	3.	5.	N/A	6.
C1004G		2.	3.	5.	N/A	6.
C1004W		2.	3.	5.	N/A	6.
	HP 700/41 Entry-level ASCII Terminal					
C1003A	•	2.	3.	5.	N/A	6.
C1003G		2.	3.	5.	N/A	6.
	HP 700/43 Fully-featured ASCII Terminal					
C1006A		2.	3.	5.	N/A	6.
C1006G		2.	3.	5.	N/A	6.
C1006W		2.	3.	5.	N/A	6.
2393A	12-inch Graphics Display Terminal	3.	5.	8.	8.	10.
Opt. 046		N/C	N/C	N/C	N/C	N/C
Opt. 092		N/C	N/C	N/C	N/C	N/C
Opt. 093		N/C	N/C	N/C	N/C	N/C
2397A	Color Graphics Terminal	3.	6.	10.	N/A	12.
Opt. 046		N/C	N/C	N/C	N/C	N/C
Opt. 092		N/C	N/C	N/C	N/C	N/C
Opt. 093		N/C	N/C	N/C	N/C	N/C
45851A	HP 150 II Personal Computer	2.	10.	16.	16.	20.
45711A	Portable Plus Computer	4.	7.	11.	N/A	N/A
45850A	HP 150 II Personal Computer Terminal	7.	10.	16.	16.	20.
9807A	Integral II Personal Computer	17.	30.	48.	N/A	N/A
98791B	HP 2392A/VT100 Terminal Emulator	N/A	N/A	N/A	N/A	N/A

## Series 300 Miscellaneous Peripherals

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
2334A	x.25 Multiplexer	N/A	N/A	N/A	18.	22.
26075A	HP-IB Switch	N/A	N/A	N/A	5.	6.
92205A	Hayes Smartmodem 1200™ (U.S.)	N/A	N/A	N/A	N/A	N/A
92205C	Hayes Smartmodem 1200™ (Canada)	N/A	N/A	N/A	N/A	N/A

Smartmodem 1200™ is a trademark of Hayes Microcomputer Products, Inc.

## Series 300 Accessories

Product No.	Description	Sched.	PMMC	WMMC	BMMC	SMMC
10833A through 10833D	Cables	N/A	N/A	N/A	N/A	N/A
10834A	Adapter	N/A	N/A	N/A	N/A	N/A
92240B	Swivel Base Unit	N/A	N/A	N/A	N/A	N/A
92211L	Taboret Cabinet Rack	N/A	N/A	N/A	N/A	N/A
92211M	Small Taboret Cabinet Rack	N/A	N/A	N/A	N/A	N/A
92211R	HP Design Plus Mobile Mini-rack	N/A	N/A	N/A	N/C	N/C
98290A	3-meter RGB Cable	N/A	N/C	N/C	N/C	N/C
98787B	Tilt and Swivel Base	N/A	N/A	N/A	N/A	N/A
19511A	Stack Cabinets	N/A	N/A	N/A	N/A	N/A
92213B	CAD Table	N/A	N/A	N/A	N/A	N/A
19500A	EIA 19-inch Rack Mounting Kit	N/A	N/A	N/A	N/A	N/A
98567A	EIA 19-inch Rack Mounting Kit	N/A	N/A	N/A	N/A	N/A
98567B	EIA 19-inch Rack Mounting Kit	N/A	N/A	N/A	N/A	N/A
98569A	EIA 19-inch Rack Mounting Kit	N/A	N/A	N/A	N/A	N/A

## **HP 9000 Software Support Services**

Hewlett Packard's software services span a broad range—from personal on-site assistance to materials-only services. These levels give flexibility in choosing the level of HP support to meet changing requirements.

#### **Operating Systems Support**

The following services are available to support a central system.

**Account Management Support (AMS)** - Provides local assistance from an account-assigned SE, one Response Center caller (a system manager), one alternate for telephone assistance and a Software Materials Subscription.

**Response Center Support (RCS)** - Provides one Response Center caller, one alternate for telephone assistance and Software Materials Subscription.

**Software Materials Subscription (SMS)** - Provides software and manual updates, *Software Status Bulletin* and *HP communicator* magazine. Updates to ROM-based systems are not provided.

The following services are available to support additional systems:

**Additional System Coverage (ASC)** - Extends AMS or RCS coverage on the operating system to one additional system under the same System Manager. All support is delivered through the central system.

**Extended Materials Support (Ext. SMS)** - Extends SMS by providing the right to make one copy of all central system materials for use on one additional system.

The following optional services are also available for central or additional systems:

**Additional Response Center Caller (ARCC)** - Provides one additional caller access to the HP Response Center.

**Manual Update Service (MUS)** - Provides one copy of updates to software reference manuals.

**Software Notification Service (SNS)** - Provides issues of the *HP communicator* and *Software Status Bulletin*.

#### **Application Software Support**

**Software Materials Subscription (SMS)** - Provides software and manual updates, *Software Status Bulletin* and *HP communicator* magazine. SMS must be ordered for each piece of subsystem and application software.

**Extended Materials Support (Ext. SMS)** - Extends Software Materials Subscription by providing the right to make one copy of all central system materials for use on one additional system.

**Manual Update Service (MUS)** - Provides one copy of updates to software reference manuals.

In addition, if AMS or RCS levels of support are selected for the operating system, Family Support must be ordered for the application software in the system. Family Support: Central System - provides local SE assistance and/or access to the Response Center for all software products in the family. Customer can choose AMS or RCS level of support independent of the level of support on the operating system. Family Support entitles customer to an additional Response Center caller and an alternative for each family supported.

**Family Support: Additional System Coverage** - Extends Family Support on the central system to one additional system. All support is delivered through the central system.

#### Subsystem Software

Subsystem software is software that operates above the level of an operating system but is not application software—for example: compilers, languages, or interface drivers. Although listed with their appropriate products or operating systems in the product section, they are listed separately under "Subsystem Software" in this support section.

Support for subsystem software is determined by the level of support on the operating system. As of August 1, 1987, Category Support on the HP 9000 Series 200, 300, and 500 is no longer required for subsystem software. Customers with AMS support on their operating system will receive AMS support on their subsystem software.

Category MUS has also been obsoleted and MUS should be purchased for each individual subsystem software product.

For support outside the U.S., contact your regional or local sales office.

#### **Product Numbering for Support Services**

A plus (+) symbol followed by a three-character suffix is attached to each software product. The first level in the suffix identifies the software support service:

Letter	Software Support Service
Н	Response Center Support (RCS)
N	Software Notification Service (SNS)
P	Additional Response Center Caller (ARCC)
Q	Manual Update Service (MUS)
S	Software Materials Subscription (SMS)
T	Account Management Support (AMS)
V	Additional System Coverage (ASC)
W	Extended Software Materials Subscription (Ext. SMS)

The numbers in the suffix designate the media option, if one is required. A media option must always be specified for the operating system on a central system. If the software configuration on an additional system is not the same as or a subset of the central system, then a media option must be specified for the additional system.

## Software Support Services for Series 300 Operating and Language Systems

Software Product No.	AMS	RCS	SMS	ASC	Ext. SMS	MUS	ARCC	SNS*
HP-UX 98594L HP-UX Software Bundle License-to-Use, 2-user				+ V00 \$80/mo	+ W00 \$35/mo	+ Q00 \$10/mo	+ P00 \$100/mo	+ N00 \$10/mo
1/4-inch tape cartridge	+ T22 \$345/mo	+ H22 \$180/mo	+ S22 \$100/mo	+ V22 \$100/mo	+ W22 \$50/mo			
98515L Application Execution Environment (AXE) License-to-Use, 2-user			+ S00 <sup>+</sup> \$25/mo	+ V00 \$15/mo	+ W00 \$5/mo	+ QO \$10/mo	+ P00 \$100/mo	+ N00 \$10/mo
1/4-inch tape cartridge	+ T22 \$80/mo	+ H22 \$45/mo	+ S22 \$25/mo	+ V22 \$25/mo	+ W22 \$15/mo			
3½-inch microfloppy, double-sided format	+ T45 \$80/mo	+ H45 \$45/mo	+ S45 \$25/mo	+ V45 \$25/mo	+ W45 \$15/mo			
98595L Application Execution Environment License-to-Use, 16-user			+ S00 <sup>‡</sup> \$30/mo	+ V00 \$25/mo	+ W90 \$5/mo	+ Q00 \$10/mo	+ P00 \$100/mo	+ N00 \$10/mo
<sup>1</sup> ⁄ <sub>4</sub> -inch tape cartridge	+ T22 \$120/mo	+ H22 \$65/mo	+ S22 \$40/mo	+ V22 \$40/mo	+ W22 \$20/mo			
3½-inch microfloppy, double-sided format	+ T45 \$120/mo	+ H45 \$65/mo	+ S45 \$40/mo	+ V45 \$40/mo	+ W45 \$20/mo			
98596L Application Execution Environment License-to-Use, 32-user			+ S00 <sup>‡</sup> \$35/mo	+ V00 \$30/mo	+ W00 \$10/mo	+ Q00 \$10/mo	+ P00 \$100/mo	+ N00 \$10/mo
1/4-inch tape cartridge	+ T22 \$155/mo	+ H22 \$85/mo	+ S22 \$50/mo	+ V22 \$50/mo	+ W22 \$30/mo			
98597L HP-UX Programming Environment License-to-Use				+ V00 \$60/mo	+ W00 \$15/mo	+ Q00 \$10/mo	+ P00 \$100/mo	+ N00 \$10/mo
<sup>1</sup> / <sub>4</sub> -inch tape cartridge	+ T22 \$315/mo	+ H22 \$150/mo	+ S22 \$70/mo	+ V22 \$70/mo	+ W22 \$20/mo			,
3½-inch microfloppy	+ T45 \$315/mo	+ H45 \$150/mo	+ S45 \$70/mo	+ V45 \$70/mo	+ W45 \$20/mo			
98616A RAM-based BASIC				+ V00 \$25/mo	+ W00 \$10/mo	+ Q00 \$5/mo	+ P00 \$100/mo	+ N00 \$10/mo
51/4-inch internal flexible disc	+ T42 \$120/mo	+ H42 \$65/mo	+ S42 \$30/mo	+ V42 \$30/mo	+ W42 \$20/mo			
3½-inch microfloppy, single-sided format	+ T44 \$120/mo	+ H44 \$65/mo	+ S44 \$30/mo	+ V44 \$30/mo	+ W44 \$20/mo			
3½-inch microfloppy, double-sided format	+ T45 \$120/mo	+ H45 \$65/mo	+ S45 \$30/mo	+ V45 \$30/mo	+ W45 \$20/mo			
Pascal 98617A RAM-based Pascal				+ V00 \$25/mo	+ W00 \$5/mo	+ Q00 \$5/mo	+ P00 \$100/mo	+ N00 \$10/mo
51/4-inch internal flexible disc	+ T42 \$120/mo	+ H42 \$65/mo	+ S42 \$35/mo	+ V42 \$40/mo	+ W42 \$20/mo			
3½-inch microfloppy, single-sided format	+ T44 \$120/mo	+ H44 \$65/mo	+ S44 \$35/mo	+ V44 \$40/mo	+ W44 \$20/mo			
3½-inch microfloppy, double-sided format	+ T45 \$120/mo	+ H45 \$65/mo	+ S45 \$35/mo	+ V45 \$40/mo	+ W45 \$20/mo			
98619A SRM Operating System				+ V00 \$20/mo	+ W00 \$10/mo	+ Q00 \$5/mo	+ P00 \$100/mo	+ N00 \$10/mo
1/4-inch tape cartridge	+ T22 \$155/mo	+ H22 \$85/mo	+ S22 \$30/mo	+ V22 \$35/mo	+ W22 \$20/mo			
3½-inch microfloppy, double-sided format	+ T45 \$155/mo	+ H45 \$85/mo	+ S45 \$30/mo	+ V45 \$35/mo	+ W45 \$20/mo			-

<sup>\*</sup>This service includes only the HP communicator magazine and Software Status Bulletin.

<sup>&</sup>lt;sup>†</sup>Use with 98597L. <sup>‡</sup>Use with 98597L and 98594L.

#### Software Support Services for Subsystem Software

Series 300 subsystem software support services (SMS, Ext. SMS, and MUS) are uniformly priced as follows:

SMS . . . . . \$15/mo
 Ext. SMS . . . . \$10/mo
 MUS . . . . \$5/mo

#### Series 300 subsystems include the following:

- DOS Coprocessor System (98286S)
- DOS Coprocessor Software (98531A)
- BASIC Language Processor (82300B)
- VMEbus Software Drivers for 98646A (98358A)
- HP-UX Gateway/SNALink for Series 300 Gateway System (36593A)
- 3278 Display Station Emulator (50955A)
- EPROM Programmer Interface (98253A)
- HP-UX FORTRAN 77 Compiler License-to-Use (98598L)
- HP-UX Pascal Compiler License-to-Use (98599L)
- HP-UX Technical BASIC License-to-Use (97066L)
- HP-UX Programmer's Documentation Kit (98794A)
- Documentation Kit for 98594A HP-UX Software Bundle (98594-87901)
- HP-UX 6.0 Complete Core Documentation Kit (98794-87901)
- HP-GKS Graphics Library License-to-Use (98672L)
- HP-UX DGL/AGP Graphics Library License-to-Use (98600L)
- Starbase Display List License-to-Use (98674L)
- HP-UX Ada Development System License-to-Use (98860L)
- X Window System (82320A)
- Development Environment for Common LISP License-to-Use (98678L)
- Development Environment for HP PROLOG (79232U)
- Execution License for Common LISP/PROLOG (98679L)
- HP Common LISP II Development Environment License-to-Use (98688L)
- HP Common LISP II Application Environment License-to-Use (98689L)
- HP SQL/300 Development Environment License-to-Use (79725L)
- HP Visor/300 Database Access Tools License-to-Use (79727L)

- HP Today/HP-UX Developer Pack (98112A)
- HP Today/HP-UX Run-time Environment (98118A)
- DGL Skeleton Device Handler (98683x)
- SRM Access Utilities for HP-UX (98693A/94A)
- SRM Access Software/BASIC Utilities (97058A)
- Versatec Hardcopy Support (98053A)
- RAM-based BASIC 5.1 Language System (98616A)
- ROM-based BASIC 5.1 (98603B)
- BASIC 5.x Compiler (98618A)
- BASIC 5.x Compiler Upgrade Kit (98618-17x00)
- BASIC 5.x Compiled Subprogram Utilities (CSUB) (98616-11x40)
- BASIC 5.x CSUB Utility Upgrade (98616-17x40)
- BASIC 5.0/5.1 Documentation Kit (98616-87901)
- RAM-based Pascal 3.2 Language System (98617A)
- Pascal 3.2 Documentation Kit (98617-87901)
- NS-ARPA Services/300 License-to-Use (50952L)
- NFS Services/ 300 License-to-Use (50969L)
- HP-UX SNA 3270 Datacomm Software for Series 300 (36590A)
- HP-UX Gateway/SNA3270 Datacomm Software (36591A)
- HP-UX Gateway/SNALink for Series 300 Gateway System (36593A)
- HP-UX SNA 3770 (98188A)
- HP-UX Gateway/SNA 3770 (98194A)
- 5080 Emulator (98855A)
- Gateway License for 3278 Emulator and 5080 High-speed File Transfer (98858A)
- 3278 Emulator and 5080 High-speed File Transfer Gateway License Upgrade (98859A)
- NS for the DEC VAX computer (50950A)

## **General Consulting Services**

Field District (ID44)	Regular	After Hours	Weekends or
	Hours	Weekday	Holidays
Product Support	51413A	51419A	51422A
Representative	\$92/Hr.	\$130/Hr.	\$160/Hr.
Application Engineer	51414A	51420A	51423A
	\$115/Hr.	\$160/Hr.	\$200/Hr.
Specialist	51415A	51421A	51424A
	\$145/Hr.	\$200/Hr.	\$255/Hr.

Project Center (ID44)	Regular	After Hours	Weekends or
	Hours	Weekday	Holidays
Product Support	35135G	35135H	35135K
Representative	\$92/Hr.	\$130/Hr.	\$160/Hr.
Application Engineer	35135C	35135I	35135L
	\$115/Hr.	\$160/Hr.	\$200/Hr.
Specialist	35135D	35135J	35135M
	\$145/Hr.	\$200/Hr.	\$255/Hr.

Travel Charge options for HP 51413A – 51424A Consulting Services and HP 35135C – M Project Services.

101 Zone 1 Travel Charge	\$120
102 Zone 2 Travel Charge	210
103 Zone 3 Travel Charge	280
104 Zone 4 Travel Charge	440
105 Beyond Zone 4 Travel Charge	Quote

For Europe and Intercon only, the following daily rates apply:

51416A	Product Support Representative Daily Rate	\$780
51417A	Application Engineer Daily Rate	975
51418A	Specialist Daily Rate	1,230

#### **Packaged Consulting**

Product	Description	Price
35630A + 42A	VISTA + 3565S Install (1st mainframe) Each Additional Mainframe	\$700 120
64710S + 42A	TEAMWORK Installation	700
64801S + 42A	64000 UX Installation	700
74210A + 42A	EDS Installation	850
74400A + 42A	PCDS Installation	800
98366A + 42A	ME 5/10/30 Installation	500
98595A + 42A	AXE MU Installation	800
98597A + 42A	PE MU Installation	1,000

## General HP 9000 Training

Product	Description	HP Site	On-Site*		
22862A	NFS/Yellow Pages (2 days)	\$500 <sup>+</sup>	\$3,500†		
35130A	Programming in C Language (5 days)	1,100	8,750		
50959A	Using SRM from BASIC and Pascal (1 day)	350	1,750		
51432A	HP-UX Fundamentals for General Users (5 days)	1,100	8,750		
51433A	Shell Programming for General Users (5 days)	1,100	8,750		
51434A	HP-UX for Programmers (5 days)	1,100	8,750		
51435A	Advanced HP-UX Tools (5 days)	1,100	8,750		
51438A	SCCS and make utility (2 days)	500	3,500		
51440A	Document Preparation (3 days)	900	6,000		
51439A	Advanced Editing with vi (1 day)	300	1,750		
98501B	Intro to Workstation BASIC (5 days)	1,100	8,750		
98510D	S200/300 BASIC Operating and Advanced Programming (5 days)	1,100	8,750		
98502A	9845 Operating and Programming (5 days)	1,100	8,750		
98503A	BASIC I/O Programming (4 days)	900	7,000		
31112A	Intro to Pascal (5 days)	1,100	8,750		
98511B	S200/300 Advanced Pascal Workstation (5 days)	1,100	8,750		
98524A	HPL Operating and Programming (5 days)	1,100	8,750		
98525A	HPL I/O Programming (4 days)	1,100	8,750		

<sup>\*</sup> Courses can be given at suitably-equipped customer facilities. These courses, which carry an X suffix (such as 35128X), are listed in the HP Corporate Price List. Prices do not include instructor travel or set-up charges. For more information on all Training Courses, contact the local Hewlett-Packard Applications Engineering Organization or your local HP sales office.

## Series 300 Training

Product	Description	<b>HP Site</b>	On-Site*
22861A	ARPA/Berkeley for Series 300 (2 days)	\$600	\$4,000
51436A	HP-UX Series 300 System Administrator (5 days)	1,100	8,750
98510C	Series 200/300 BASIC Operating and Programming (5 days)	1,100	8,750

<sup>\*</sup> Courses can be given at suitably-equipped customer facilities. These courses, which carry an X suffix (such as 35128X), are listed in the HP Corporate Price List. For more information on all Training Courses, contact the local Hewlett-Packard Applications Engineering Organization or your local HP sales office.

<sup>†</sup> Price effective August 1, 1988.

## **Purchase Plans**

Both hardware and software support services are covered under our Customer Support Services Agreement. Contact your HP Sales Representative for more information.

Hewlett-Packard maintains fully-trained and well-equipped service operations at more than 170 offices worldwide. Contact your nearest sales office for specific prices and plans.

#### Warranties

The warranty covering a specific system is determined by the HP WARRANTY AND INSTALLATION TERMS in effect at the time of purchase. These terms are specified in HP Pub. No. 5954-1617(D) for the United States and in similar documents for other countries.





Copyright © 1988 Hewlett-Packard Co. Printed in U.S.A. 9/88 5954-9831D