Table of Contents
Environmental Protection Agency DTP/LAN Catalog

Introduction	page 1
Ordering Information	2
Product Descriptions	5
Desktop Publishing Hardware	6
Local Area Network Hardware	16
Desktop Publishing Software	32
Local Area Network Software	38
Pricing by CLIN	43
Desktop Publishing Hardware	43
Local Area Network Hardware	47
Font Cartridges	52
Documentation	53
Desktop Publishing System Maintenance	54
Local Area Network System Maintenance	62
Desktop Publishing Software	68
Local Area Network Software	70
Training	72
Local Area Network Support	73
Alphabetical Index	74
About SMA	83
Trademark Information	84

Micro Systems Division
Systems Management American Corporation
2525 Meridian Parkway, Suite 150
Durham, North Carolina 27713
(919) 544-6311, Toll-free (800) 356-7813
E-Mail Address: DTP/LAN

HEADQUARTERS LIBRARY
ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Introduction to Environmental Protection Agency DTP/LAN Contract

In September, 1987 the Environmental Protection Agency awarded the Agency-wide Desktop Publishing/Local Area Network Contract to Systems Management American Corporation, Micro Systems Division. Under the terms of Contract #68-01-7463, SMA is furnishing the necessary hardware, software, and services to support the EPA's implementation of desktop publishing systems and local area networks. Through the DTP/LAN contract, EPA users have access to microcomputer and communications technologies to interconnect personal computer systems throughout the Agency. The contract is valued at approximately $38 million and is for a base period and three option years.

SMA makes the EPA DTP/LAN Catalog available to familiarize EPA users with the range of products and services provided and to facilitate the ordering process. Major components are detailed in the Product Description section of this Catalog. Price information and contract line item numbers(CLINs) and descriptions can be applied directly to the preparation of Procurement Requests. All Procurement Requests, except those for training, must be signed by the Funds Certifying Official, PC Site Coordinator, SIRMO, and the Property Accountable Official.

Problems which cannot otherwise be resolved should be directed to Ernie Watson, the EPA Project Officer for the DTP/LAN contract. He can be reached at (919) 541-2143. E-Mail address: E.Watson.

SMA's Micro Systems Division in the Research Triangle Park area of North Carolina serves as the central support facility. This support center provides the following services for the entire Agency's acquisition of desktop publishing systems and local area networks:

- Support Services Management
- Order Tracking and Status
- Software Support
- Pre-installation Services
- Warranty and Maintenance Requests, Reporting and Tracking

EPA users eligible to receive the value-added and subscription services and support under the terms of this contract are identified by the EPA Project Officer. Included in the eligible group are the users of desktop publishing systems and local area networks currently installed in the Agency.

The EPA DTP/LAN Catalog contains technical, descriptive, and pricing information for each product available to eligible EPA users. This catalog does not provide and should not be construed to provide instructions for use or recommended applications for any item of equipment listed.

The information contained in this catalog is subject to change. All changes are subject to EPA approval and will be reflected in updates to the EPA DTP/LAN Catalog. Instructions for filing updates will accompany each update package.

Micro Systems Division
Systems Management American Corporation
2525 Meridian Parkway, Suite 150
Durham, North Carolina 27713
(919) 544-6311, Toll-free (800) 356-7813
E-Mail Address: DTP/LAN

Ordering Information
Environmental Protection Agency DTP/LAN Catalog

To order products and services from the DTP/LAN Catalog, users must complete EPA Form 1900-8 Procurement Request/Order. Copies of the official "instructions" and Form 1900-8 are included in this section to provide easy reference.

"Instructions for Completing EPA Form 1900-8 Procurement Request/Order" should be followed when ordering products and services. The items listed below should be completed as follows:

ITEM 13: Suggested Source

Systems Management American Corporation
Contract #68-01-7463

ITEM 16: Approvals

c. Funds Certifying Official
d. Property Accountable Official Signature
e. PC Site Coordinator Signature
f. SIRMO Signature

ITEM 26: Schedule

a. Contract Line Item Number (CLIN) taken from DTP/LAN Catalog

b. Short Description (2-3 words)

c. Quantity Ordered
NOTE: On the DTP/LAN contract, there is no restriction on the number of systems ordered on each Procurement Request.

e. Refer to CLIN Price List in DTP/LAN Catalog

GENERAL

A four-digit delivery code must appear somewhere on the Procurement Request. The delivery code ensures that ordered items are delivered to the correct locations.

Micro Systems Division
Systems Management American Corporation
2525 Meridian Parkway, Suite 150
Durham, North Carolina 27713
(919) 544-6311, Toll-free (800) 356-7813
E-Mail Address: DTP/LAN

☆ U.S. Government Printing Office: 1986-163-961

Instructions for Completing EPA Form 1900-8 Procurement Request/Order

General:

This form is a 9-part interleaved set and is designed to be completed with an elite typewriter (12 pitch). The originating office should complete all areas that apply. Shaded areas are reserved for Procurement use only. After completing the form, in accordance with the instructions below, retain the copy marked for "Originator" and send the others through required channels.

Item:

1 thru 6	Enter the originator's name, mail code, telephone number, date of requisition, signature of originator, and the latest date that the items can be delivered.
7	Self explanatory. Attach a justification for other than full and open competition or for sole source small purchases.
8 thru 11	Enter the name, address, mail code, and telephone number. If the person is the same as the originator, leave blank.
12	Self explanatory. Failure to include the appropriation number, the number of the Servicing Finance Office designated by the Financial Management Division for the accounting office which will record the commitment and obligation, document type, document control number, account number, object class, or dollar amount may result in the return of the request to the originator for completion of these items. Special care should be taken to insure that all data placed in these blocks are accurate and appear legibly on all copies as these data will serve to record the commitment of funds as well as to eventually obligate the funds on the contract document. **Note:** Item 12(d) should be used to denote document type (DT) code, i.e., C = EPA prime contract, P = EPA purchase or delivery order.
13	If more than 1 source is suggested, attach a list of the contractor's/vendor's name, address, and point of contact (if known) for each source.
14	Self explanatory.
15	**For Small Purchases Only:** Check one box. If "Yes" is checked, the funds certifying official must commit sufficient funds in the Document Control Register to cover the total potential amount of the obligation.
16	Self explanatory.
17 thru 25	For procurement office use only.
26(a)	Self explanatory.
26(b)	The degree of detail required will vary with the complexity of the proposed procurement. Each request shall contain sufficient information on its face to process the request. If the proposed procurement is for nonpersonal work or services, provide a title which specifically describes the work or services to be procured and limit the title to sixty (60) positions, including the spaces between each word of the title for computer input, and attach the documentation required in Chapter 2 of the Contracts Management Manual. In other instances, describe the article(s) requested in detail using manufacturer's model numbers and descriptions, if possible, and provide specification, quantity increment, delivery requirement, and special packaging or transportation requirements. (Use EPA Form 1900-8A, Continuation Sheet, if additional space is required.)
26(c) and 26(d)	Self explanatory.
26(e)	Enter the estimated price of the item
26(f) and 26(g)	For Procurement use only — **Leave Blank.**
26(h)	Used for inspection and acceptance only.
27 and 28	To be completed by the contracting officer.
Note:	The contracting officer will complete the blocks marked "Invoice Address" and "Ship To" on copy 2 when *this form is used as a purchase order.*

Remove this page before completing the Procurement Request.

(Shaded areas are for use of procurement office only) Page of

US Environmental Protection Agency
Washington, DC 20460

EPA Procurement Request/Order

1. Name of Originator		2. Date of Requisition
3. Mail Code	4. Telephone Number	5. Date Item Required

6. Signature of Originator

7. Recommended Procurement Method
☐ Competitive ☐ Other than full and open competition ☐ Sole source small purchase

8. Deliver To *(Project Manager)*	9. Address	10. Mail Code	11. Telephone Number

12. Financial Data — a. Appropriation — b. Servicing Finance Office Number

NOTE: Item 12(d) Document Type — Contract = "C," Purchase Order = "P"

FMO Use (c) *(13 digits)*	DT (d)	Document Control Number (e) *(6 digits)*	Account Number (f) *(10 digits)*	Object Class (g) *(4 digits)*	Amount (h) Dollars	Cents

13. Suggested Source *(Name, Address, ZIP Code, Phone/Contact)*

14. Amount of money committed is:
☐ Original
☐ Increase
☐ Decrease

15. For Small Purchases Only: Contracting Office is authorized to exceed the amount shown in Block 12(h) by 10% or $100, whichever is less.
☐ Yes ☐ No

16. Approvals

a. Branch/Office	Date	d. Property Management Officer/Designee	Date
b. Division/Office	Date	e. Other *(Specify)*	Date
c. Funds listed in Block 12 and Block 15 *(if any)* are available and reserved. *(Signature of Certifying Official)*	Date	f. Other *(Specify)*	Date

17. Date of Order	18. Order Number	19. Contract Number *(if any)*	20. Discount Terms

21. FOB Point	22. Delivery to FOB Point by *On or before (Date)*	23. Person Taking Order/Quote and Phone No.

24. Contractor *(Name, address, ZIP Code)*

25. Type of Order
☐ a. Purchase

Reference your quote *(See block 23)*

Please furnish the above on the terms specified on both sides of this order and on the attached sheets, if any, including delivery as indicated.

☐ b. Delivery provisions on the reverse are deleted. The delivery order is subject to the terms and conditions of the contract. *(See Block 19)*

c. ☐ Oral ☐ Written ☐ Confirming

26. Schedule

Item Number (a)	Supplies or Services (b)	Quantity Ordered (c)	Unit (d)	Estimated Unit Price (e)	Unit Price (f)	Amount (g)	Quantity Accepted (h)
					Total		

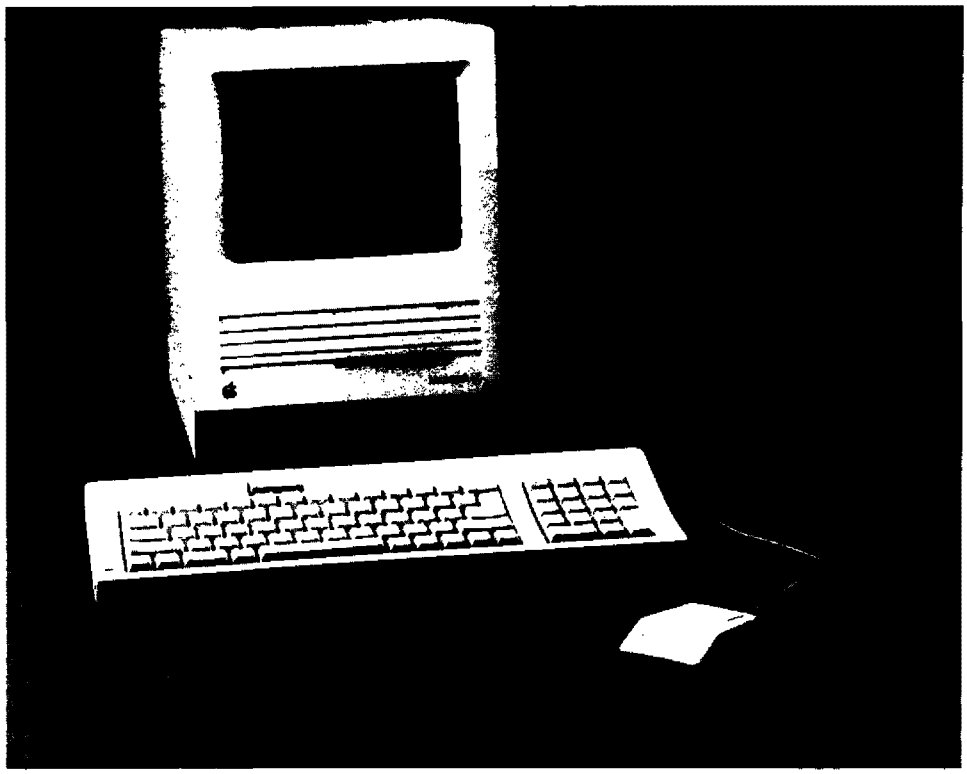
28. Typed Name and Title of Contracting Officer

Introduction to Product Description Section

The following Product Descriptions are provided for informational purposes only. They describe products by Contract Line Item Number (CLIN) currently available on the DTP/LAN contract. While not all products are represented at this time, updates to the DTP/LAN Catalog will incorporate Product Descriptions for all CLINs.

Photographs included are representative of the particular CLIN and do not necessarily contain all products included in a CLIN. Products are fully identified in the narrative portion.

CLIN 10010
Apple™ Macintosh SE with 20MB Hard Disk - Standard DTP System
see page 43



The Macintosh™ SE personal computer from Apple provides optimal flexibility to meet the most diverse needs of users. The Macintosh's "standardized" graphical interface allows immediate access to the power of the system with minimal end-user training and support. A standard expansion slot accommodates customized needs. The system comes with an internal 800K drive and a 20-megabyte internal hard disk. The powerful 68000 microprocessor provides full compatibility with the range of Apple Macintosh solutions--including all the most popular desktop publishing programs.

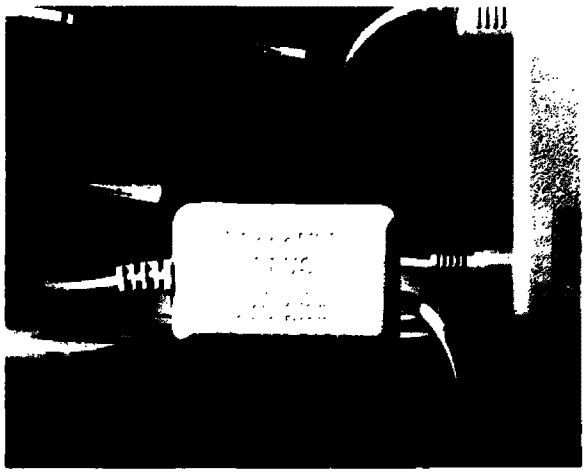
System software provided includes the operating system, diagnostics, tutorials and Hypercard™. Documentation includes a system reference manual detailing system information and a Utilities User's Guide documenting the use of the operating system's programs.

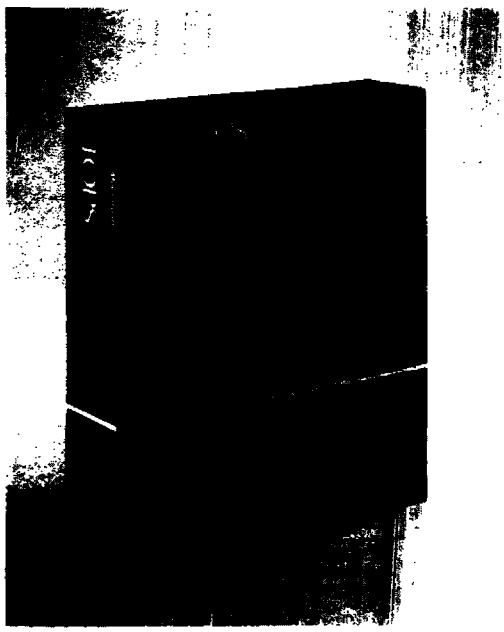
Contract line item number (CLIN) 10010 comes complete with the Apple extended keyboard, Apple system peripheral cable, PhoneNET PLUS® Connectors, and TOPS® for the Macintosh. The Apple extended keyboard includes: 15 function keys; a numeric keypad; standard cursor arrow keys in a T-style layout; and 6 cursor control keys. The mouse pad shown above is not included.

Refer to the reverse of this page for further feature information for PhoneNET PLUS Connectors and TOPS for the Macintosh. For ordering information, see page 43.

CLIN 10010
Apple Macintosh SE with 20MB Hard Disk - Standard DTP System
see page 43

The PhoneNET System™ runs the AppleTalk® protocol over ordinary telephone cabling, providing you with a reliable, inexpensive, and versatile network installation. PhoneNET PLUS Connectors are the building blocks of the PhoneNET System. They connect each device on an AppleTalk network in a variety of topologies, using RJ11 modular telephone jacks and other standard, easily obtainable telephone accessories.





TOPS network software for Macintosh systems is designed to connect your Macintosh to PCs, UNIX® systems, and other Macintoshes over TOPS' distributed Local Area Network. Residing as a desk accessory, TOPS is always available for use. It allows you to copy, edit, and print files located on other Macs and PCs without leaving your workstation. TOPS makes every computer both a server and a network station, increasing speed and efficiency over the entire network. Operating over PhoneNET System AppleTalk twisted pair cabling, TOPS is easy to use, compatible across multiple operating systems, and makes efficient use of your resources.

CLIN 10020
Apple Macintosh II with 40MB Hard Disk - Professional DTP System
see page 43

The Apple Macintosh II is the highest performance member of the Macintosh family with open architecture. The system comes standard with a full 32-bit 68020 microprocessor and floating point coprocessor and is designed for the most advanced applications in office productivity, desktop publishing, science and engineering. The Macintosh II's graphical interface is designed to provide "quick access" to these applications. There are six expansion slots that allow you to configure virtually any type of system. Using software from Apple and other third parties, the Macintosh II can support other operating environments such as MS-DOS™ and AT&T UNIX. The system comes equipped with an 800K internal drive and a 40MB internal hard disk.

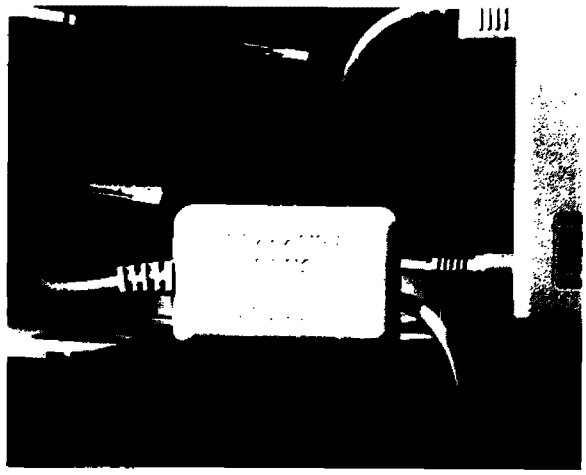
System software provided includes the operating system, diagnostics, tutorials and Hypercard™. Documentation includes a system reference manual detailing system information and a Utilities User's Guide documenting the use of the operating system's programs.

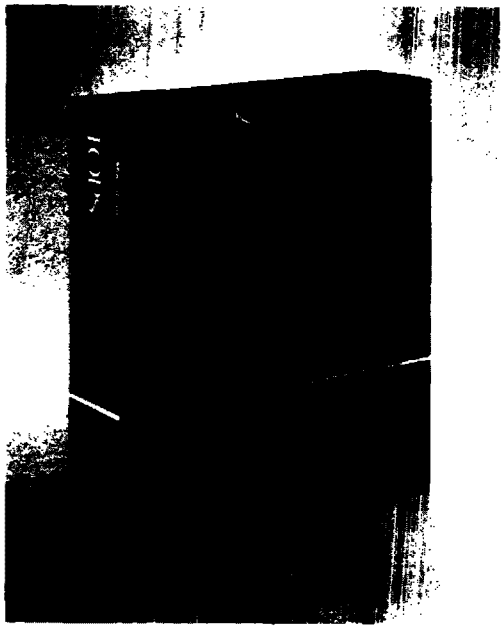
CLIN 10020 comes complete with the Apple extended keyboard, Apple system peripheral cable, PhoneNET PLUS Connectors, and TOPS for the Macintosh. The Apple extended keyboard includes: 15 function keys; a numeric keypad; standard cursor arrow keys in a T-style layout; and 6 cursor control keys. The color monitor shown above is CLIN 10120, which may be purchased separately. The mouse pad shown is also not included.

Refer to the reverse of this page for further feature information for PhoneNET PLUS Connectors and TOPS for the Macintosh. For ordering information, see page 43.

CLIN 10020
Apple Macintosh II - Professional DTP System
see page 43

The PhoneNET System runs the AppleTalk protocol over ordinary telephone cabling, providing you with a reliable, inexpensive, and versatile network installation. PhoneNET PLUS Connectors are the building blocks of the PhoneNET System. They connect each device on an AppleTalk network in a variety of topologies, using RJ11 modular telephone jacks and other standard, easily obtainable telephone accessories.

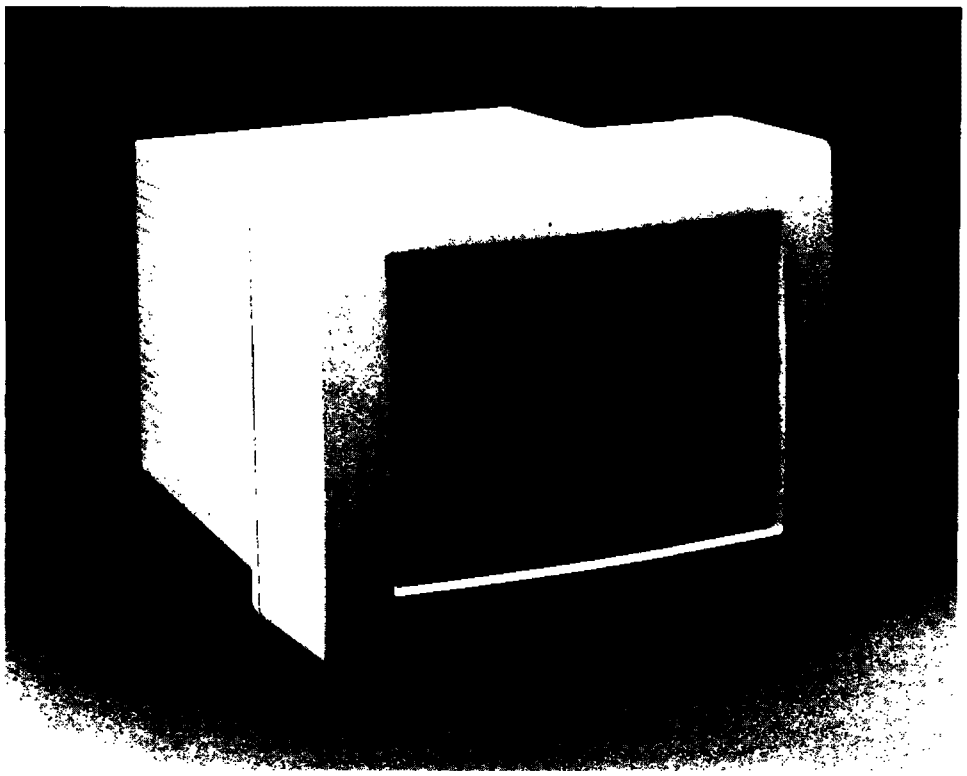




TOPS network software for Macintosh systems is designed to connect your Macintosh to PCs, UNIX systems, and other Macintoshes over TOPS' distributed Local Area Network. Residing as a desk accessory, TOPS is always available for use. It allows you to copy, edit, and print files located on other Macs and PCs without leaving your workstation. TOPS makes every computer both a server and a network station, increasing speed and efficiency over the entire network. Operating over PhoneNET System AppleTalk twisted pair cabling, TOPS is easy to use, compatible across multiple operating systems, and makes efficient use of your resources.

SMA
Systems Management American Corporation

CLIN 10110
Apple High-Resolution Monochrome Monitor
see page 43

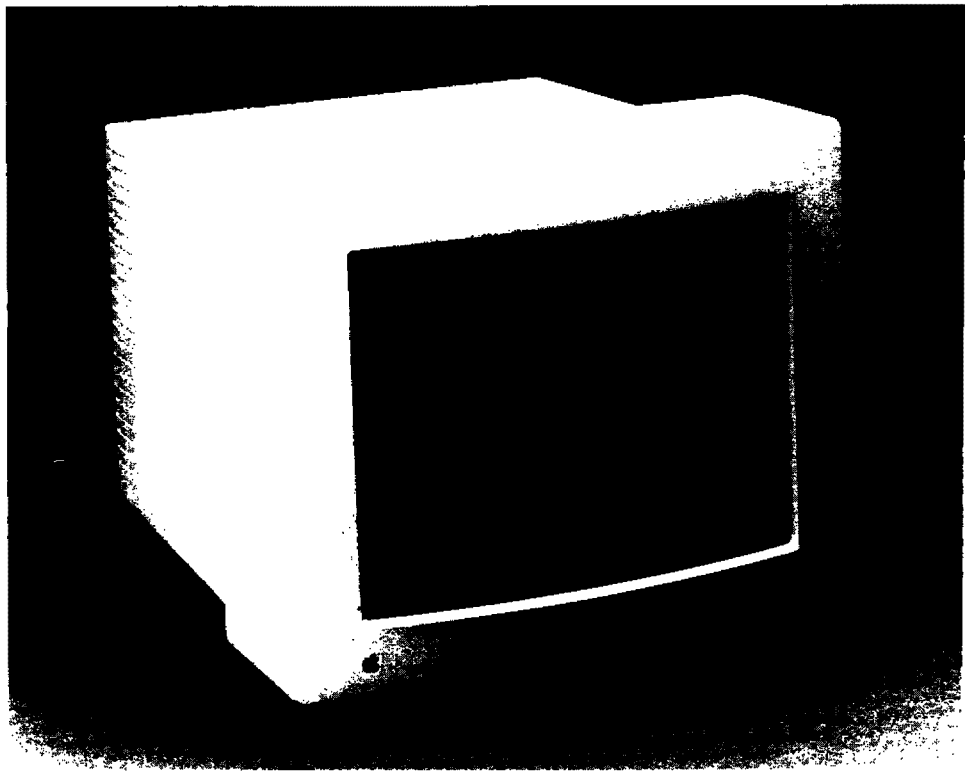


The Apple high-resolution monochrome monitor affords Macintosh users larger resolution than available with the standard Macintosh monitor. It comes with a 12-inch flat screen that displays the full width and almost half the length of a letter-size page. This monitor is excellent for word processing, spreadsheet and data base applications. The analog input format permits a much wider range of gray scales than is possible with digital displays. The 640 by 480 pixel display provides sharper text and graphics at Apple's standard 72 dots-per-inch resolution, an important feature when developing standard desktop publishing documents.

CLIN 10110 comes complete with Apple Macintosh II 1/4 bit Video Card and Apple Macintosh II 8-bit Video Expansion Kit installed, as well as an Apple Universal Monitor Stand. User manual(s) included.

For ordering information, see page 43.

CLIN 10120
AppleColor™ High-Resolution RGB Monitor
see page 43



The AppleColor High-Resolution RGB Monitor comes standard with a 13-inch screen that displays text and graphics in brilliant color or sharp gray scales, taking full advantage of the advanced capabilities of the Macintosh II personal computer. Used in conjunction with Macintosh Video Card and Video Expansion Kit, the AppleColor monitor is capable of displaying 256 colors simultaneously from a palette of more than 16 million colors. The 640 x 480 pixels display provides sharp text and graphics in both color and gray scales at Apple's standard 72 dots-per-inch resolution.

CLIN 10120 comes complete with Apple Macintosh II 1/4 bit Video Card and Apple Macintosh II 8-bit Video Expansion Kit installed, as well as an Apple Universal Monitor Stand. User manual(s) included.

For ordering information, see page 43.

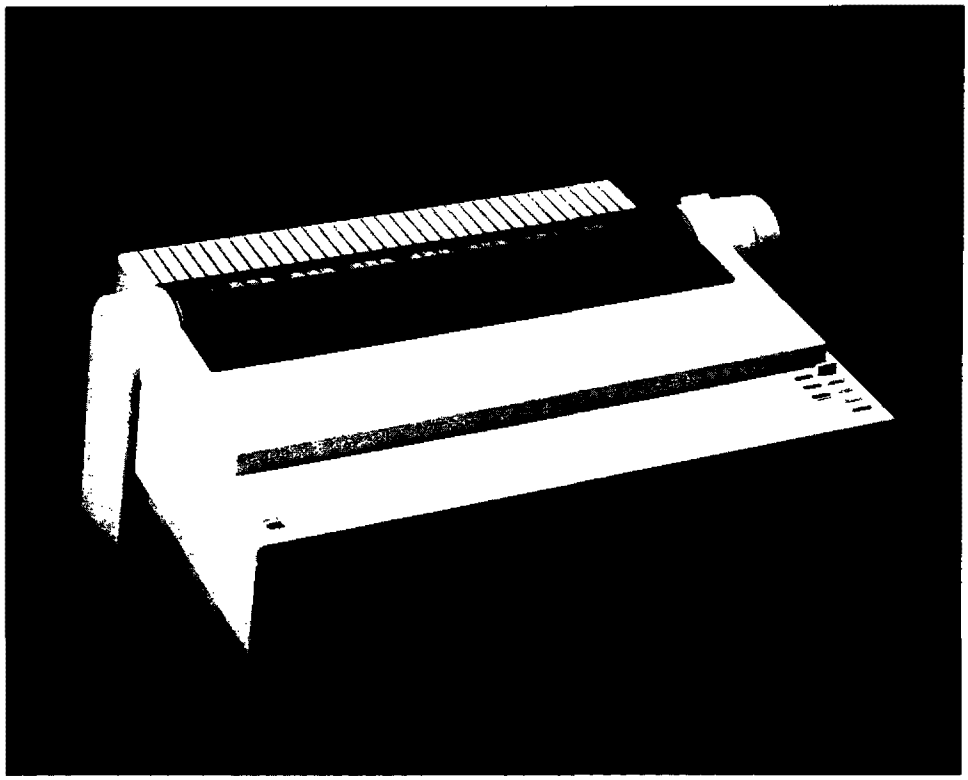
CLIN 10140
Large Screen Color Monitor for Professional DTP System
see page 44

The Spectrum™ video card from SuperMac Technology is perfect for CAD/CAM, color desktop publishing, graphic design, and desktop productivity applications. User selects from 1-, 2-, 4-, or 8-bit modes, providing compatibility with all color or black and white Macintosh II applications. In the 8-bit mode, Spectrum lets you use 256 colors or shades of gray at once. It is equipped with 768 kilobytes of high-speed video RAM, providing display capability of up to 1024 x 768 pixels at Apple's standard 72 dots-per-inch resolution. Flicker-free color palette updates allow for smooth, noise-free animation.

The SuperMac Standard 19" Color Monitor brings you up to 1024 x 768 display for a screen area up to 4.5 times the area of the original Macintosh display. It comes equipped with 768 kilobytes of high-speed video RAM. User manual(s) included.

For ordering information, see page 44.

CLIN 10200
Apple ImageWriter® II
see page 44



The Apple ImageWriter II is a versatile, nine-pin dot-matrix printer designed to accommodate the needs of high-volume users. It works with all Macintosh and Apple II computers to create high-quality text and graphics in black and white. The ImageWriter II supports text enhancements such as boldface, superscript, subscript, underlining, and proportional text. In addition, the ImageWriter II functions on the AppleTalk Network in three versatile print modes:

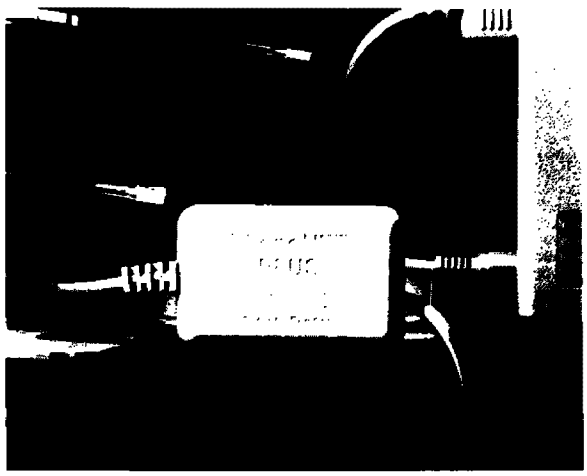
- Draft for proofing
- Standard for regular correspondence
- Near-letter-quality

CLIN 10200 is equipped with the AppleTalk option card installed and PhoneNET PLUS Connectors. Refer to the reverse of this page for further feature information for PhoneNET PLUS Connectors. User manual(s) included.

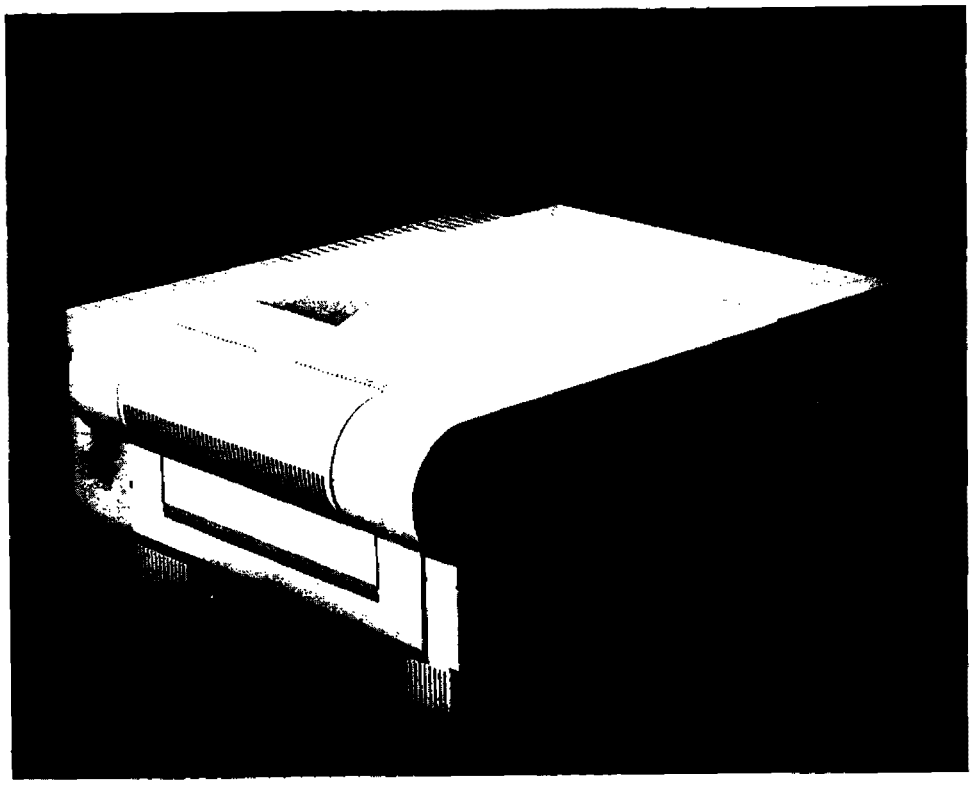
For ordering information, see page 44.

CLIN 10200
Apple ImageWriter II
see page 44

The PhoneNET System runs the AppleTalk protocol over ordinary telephone cabling, providing you with a reliable, inexpensive, and versatile network installation. PhoneNET PLUS Connectors are the building blocks of the PhoneNET System. They connect each device on an AppleTalk network in a variety of topologies, using RJ11 modular telephone jacks and other standard, easily obtainable telephone accessories.



CLIN 10211
Apple LaserWriter® II NT
see page 44



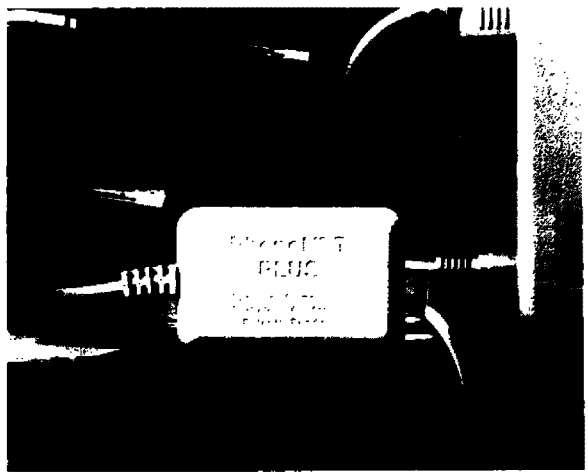
The Apple LaserWriter II NT is a high quality PostScript™ printer (300 dots per inch), that when connected to the AppleTalk Personal Network, can support up to 31 Macintosh and MS-DOS users. Users can take advantage of the high quality graphics made possible by using any of the Macintosh personal computers, to develop near-typeset quality documents such as brochures, newsletters, memos, reports and presentation transparencies. The LaserWriter II NT can print high-resolution output using a wide range of materials, including: standard photocopy paper, letterhead, labels, envelopes and transparency film. The LaserWriter II NT comes standard with 1MB read-only memory (ROM), 2MB RAM, and 11 of the most popular typefaces and is capable of supporting an even wider array of nonstandard PostScript fonts.

CLIN 10211 comes complete with toner cartridge and letter case, an additional toner cartridge, and PhoneNET PLUS Connectors. Refer to the reverse of this page for further feature information for PhoneNET PLUS Connectors. User manual(s) included.

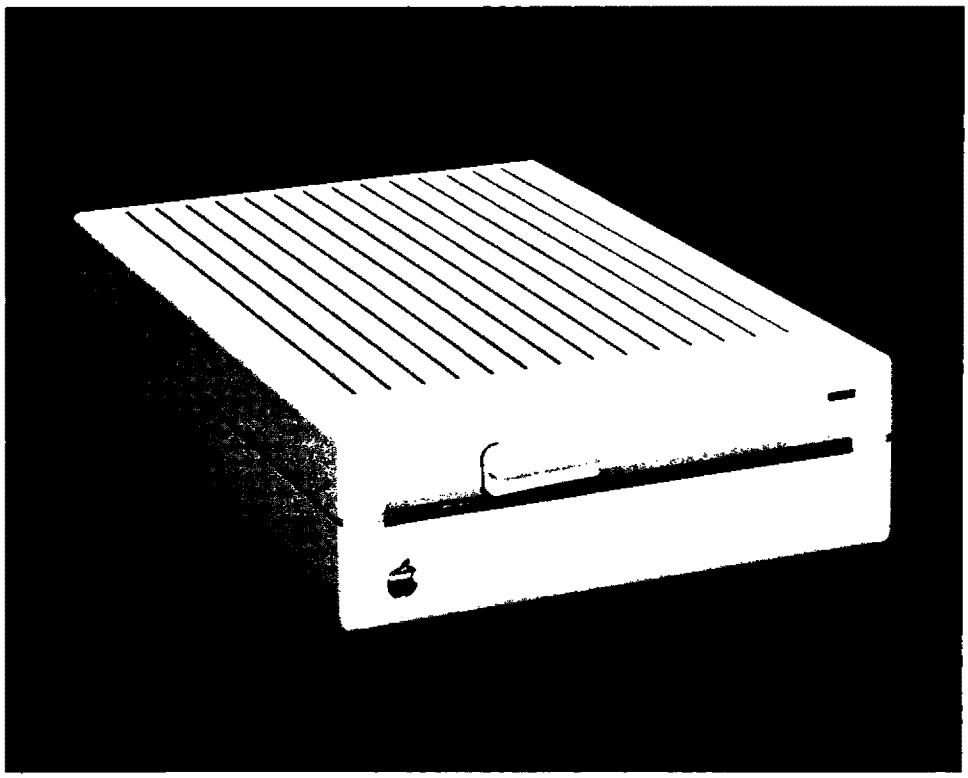
For ordering information, see page 44.

CLIN 10211
Apple LaserWriter II NT
see page 44

The PhoneNET System runs the AppleTalk protocol over ordinary telephone cabling, providing you with a reliable, inexpensive, and versatile network installation. PhoneNET PLUS Connectors are the building blocks of the PhoneNET System. They connect each device on an AppleTalk network in a variety of topologies, using RJ11 modular telephone jacks and other standard, easily obtainable telephone accessories.



CLINs 10500 & 10510
Apple PC 5.25" Drive Diskette File Transfer System
see pages 44 & 45



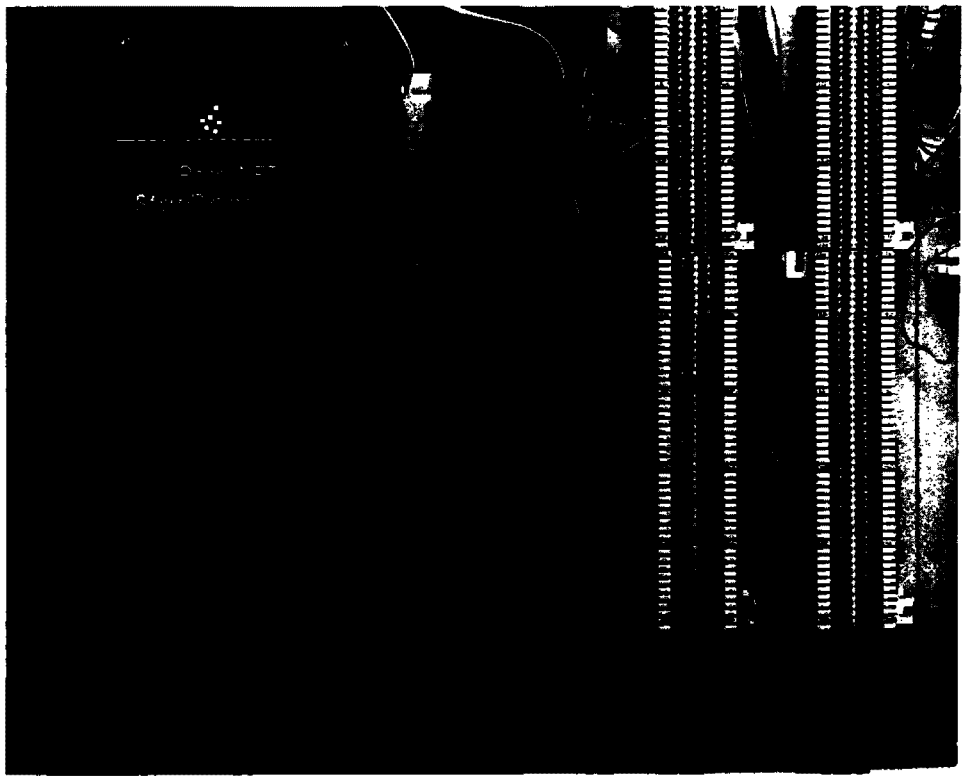
The Apple PC 5.25" Drive has been designed for Macintosh users who want to access data in standard MS-DOS files or run existing MS-DOS programs in conjunction with standard Macintosh software applications. The drive is fully compatible with existing 5.25", 360K MS-DOS media. The Apple PC 5.25" Drive supports a mixed PC environment by allowing Macintosh II and Macintosh SE users to read/write files to/from MS-DOS formatted disks.

This affordable and highly reliable data device is easily connected to a Macintosh disk drive with either the Macintosh SE PC Drive Card or the Macintosh II PC Drive Card.

CLIN 10500 comes complete with File Exchange Software and Macintosh SE PC Drive Card. CLIN 10510 comes complete with File Exchange Software and Macintosh II PC Drive Card. User manual(s) included.

For ordering information, see pages 44 and 45.

CLIN 10700
Farallon PhoneNET StarController™ Card with Software
see page 45



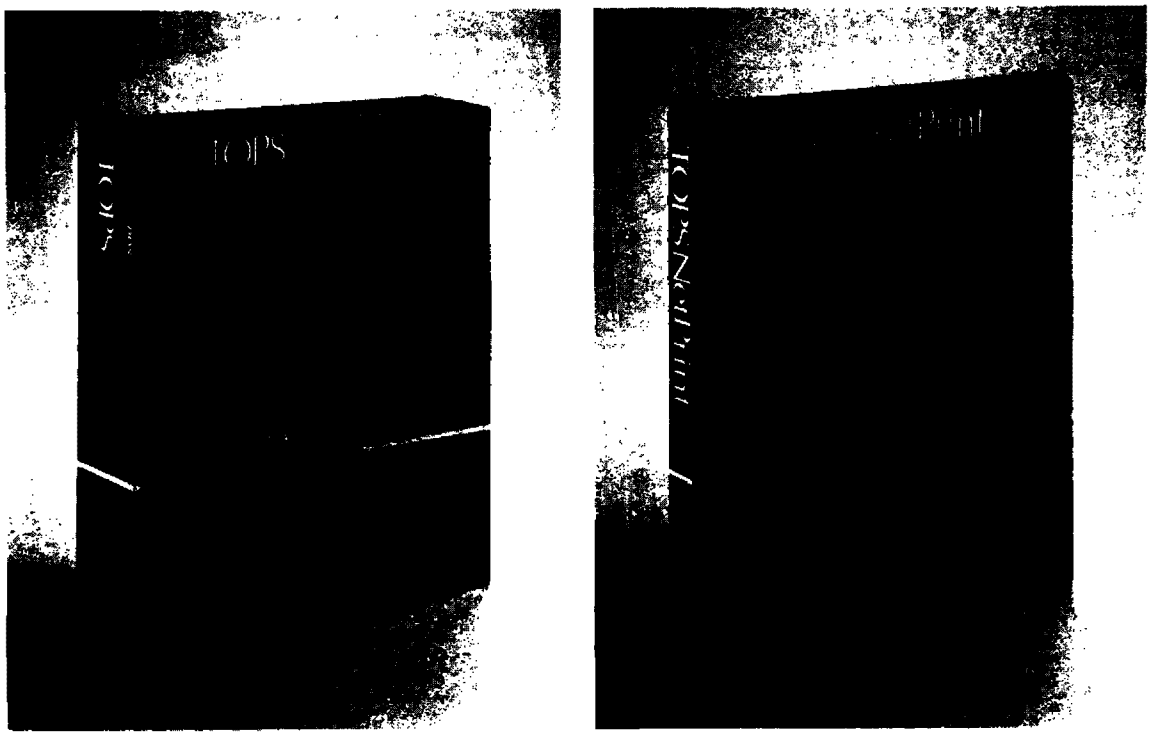
Create large AppleTalk networks in active star topologies with the PhoneNET StarController. You need the StarController when your network exceeds the limits of a passive star (six branches) or if you are planning very large networks. A PhoneNET active star radiates from the StarController. This intelligent device has 12 ports and can support up to 12 physical networks, each up to 3,000 feet of cable (36,000/StarController). Link multiple StarControllers to create building-wide networks.

The StarController isolates branches, reduces error rates and continually monitors the network for faults - whether the software is on or off. StarCommand™ and PhoneNET Manager™ - the software included with the StarController - provide you with the management, testing, and fault isolation tools you need to run your active star network with maximum efficiency and minimum effort. Neither program requires a dedicated Macintosh. Use both in conjunction with other PhoneNET software.

StarController can use your existing telephone cabling or dedicated wiring. It connects right into your building's wiring closets. User manual included.

For ordering information, see page 45.

CLIN 10720
TOPS Network Interface Card - PC Compatible Network Interface
see page 46



CLIN 10720, the TOPS Network Interface Card PC-Compatible Network Interface, consists of (1) TOPS FlashCard™ (not shown), (1) TOPS for the PC, (1) TOPS NetPrint™, and (1) PhoneNET PLUS Connectors.

TOPS NetPrint allows an IBM personal computer to print directly to any AppleTalk printer connected to the TOPS Network. All this is done in the background so you can continue working while your document is being printed (print spooling). TOPS allows formerly incompatible computers - IBM PCs, Macintoshes and UNIX systems - to share files, hard disks, and printers. TOPS NetPrint supports all popular applications. Even if your application is not PostScript compatible, TOPS NetPrint will translate to PostScript from within the application, emulating either an IBM Proprinter™ or an Epsom FX/80 dot-matrix printer (data translation).

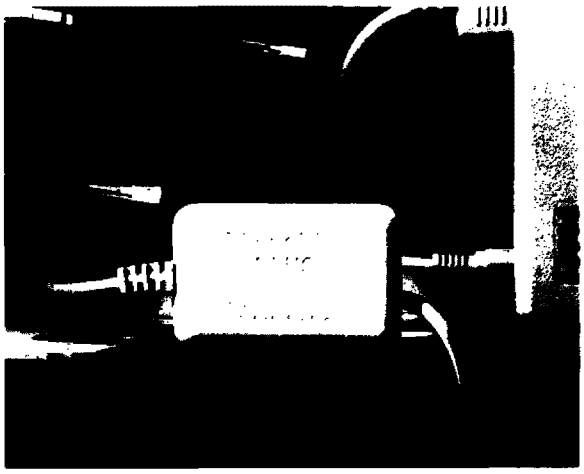
TOPS network software for DOS systems connects your IBM PC, XT, AT, PS/2 Model 30 or compatible to other PCs, Macintoshes and UNIX systems over TOPS. Unlike most other LANs, TOPS offers distributed file service. That means every computer is both a server and a network station. Instead of using a centralized file server to act as a "middleman" to other computers, TOPS allows a computer to directly share its files with any other.

CLIN 10720 also comes with PhoneNET PLUS Connectors, refer to the reverse of this page for more information. User manual(s) included.

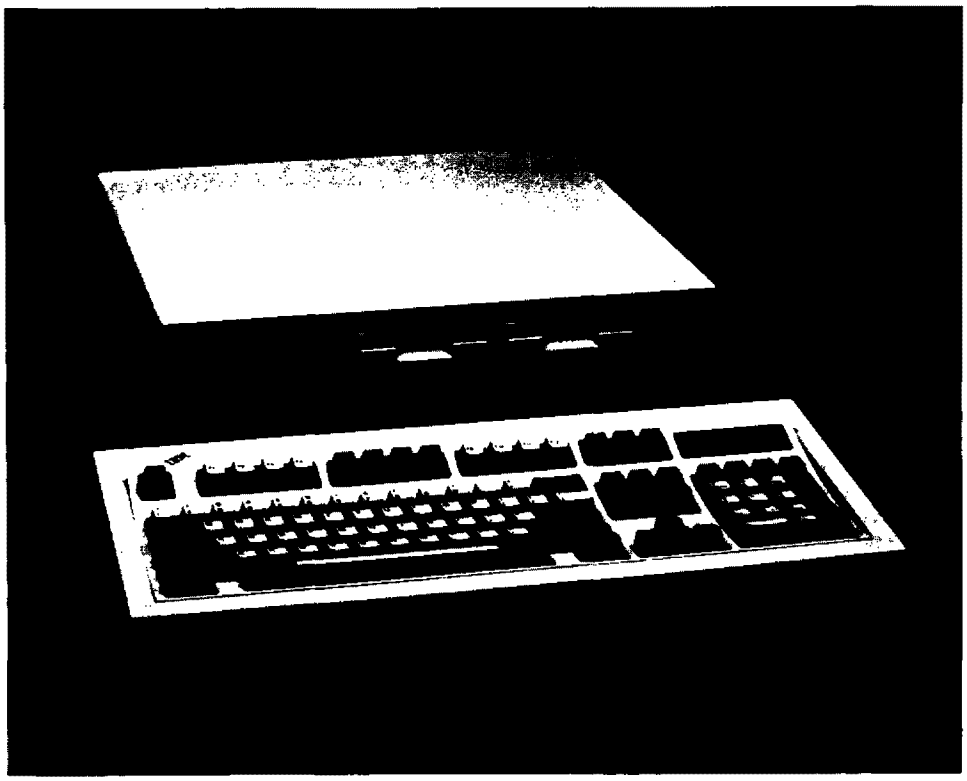
For ordering information, see page 46.

CLIN 10720
TOPS Network Interface Card - PC Compatible Network Interface
see page 46

The PhoneNET System runs the AppleTalk protocol over ordinary telephone cabling, providing you with a reliable, inexpensive, and versatile network installation. PhoneNET PLUS Connectors are the building blocks of the PhoneNET System. They connect each device on an AppleTalk network in a variety of topologies, using RJ11 modular telephone jacks and other standard, easily obtainable telephone accessories.



CLIN 11000
IBM® Personal System/2™ Model 30
see page 47



The IBM Personal System/2 Model 30 is the primary component of the network workstation. The PS/2 Model 30 provides full IBM PC compatibility with enhanced features including an 8086 processor running at 8MHz, MCGA color graphics display adapter, 640MB RAM and built-in parallel (printer) and serial ports. Three internal expansion slots allow for addition of option cards such as the IBM Token-Ring Adapter II card for connection to the LAN.

CLIN 11000 comes with IBM PC-DOS version 3.3 operating system. Manuals included: Guide to Operations.

A monitor is required to operate the PS/2 Model 30. Compatible monitors available from the DTP/LAN Catalog include a monochrome monitor (CLIN 11100) and color monitor (CLIN 11110). The color monitor is recommended for greater functionality and ease of use with the software offered in this catalog and by other vendors.

For connection to the LAN, a Token-Ring Adapter II card (CLIN 11400) should be ordered with the unit.

For ordering information, see page 47.

CLINs 11010 and 11020
IBM Personal System/2 Model 60
see page 47

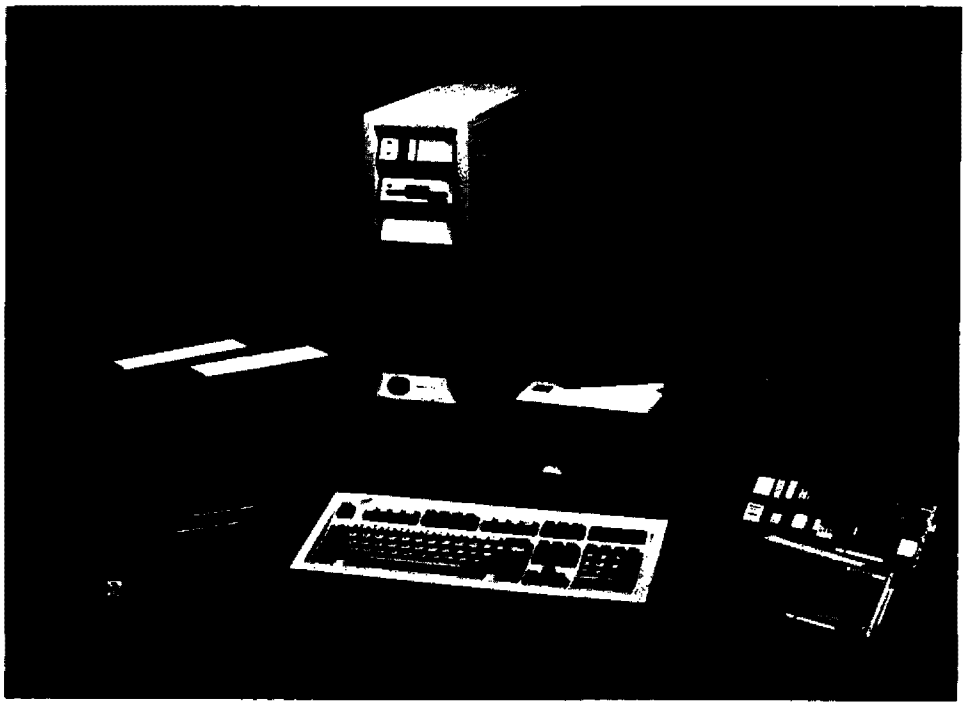
The IBM Personal System/2 Model 60 Network Bridge Processor is a 80286-based system running at 10MHz and utilizing the IBM Micro Channel™ Architecture for higher speed data transfers in the computer and between networks. The Network Bridge Processor may be used standalone or may find additional use as a LAN workstation. When used as a workstation the Network Bridge Processor features a VGA adapter for almost picture-like graphics and text display. The Network Bridge Processor comes standard with either a 40MB (CLIN 11010) or 70MB(11020) hard disk and a 1.44MB high-density 3.5-inch floppy drive.

The Network Bridge Processor uses the bridging software supplied with CLIN 11301 (Novell® PS/2 Advanced NetWare® 2.11) and also comes standard with IBM PC-DOS version 3.3. A Quick Reference manual and Reference Diskette are included.

For use on the LAN, a Token-Ring Network Adapter/A card is required. The Token-Ring Network Adapter/A card is available as CLIN 11700 from the DTP/LAN Catalog. A monitor is required to operate the Network Bridge Processor. Compatible monitors available from the DTP/LAN Catalog include a monochrome monitor (CLIN 11100) and color monitor (CLIN 11110)

For ordering information, see page 47.

CLIN 11030
IBM Personal System/2 Model 80
see page 47



The File and Print Server System offered to the EPA is the IBM Personal System/2 Model 80. It offers a new level of performance computing for network or standalone environments. Highlights include: Micro Channel architecture with a 20MHz 80386 32-bit microprocessor running at 16MHz; high density memory technology; and a wide range of integrated features. Increased speed, high reliability, and a wide selection of connectivity options enable it to support large server, gateway, or multiuser applications. The Model 80 is designed to maintain compatibility with most existing software products for IBM PCs. The system comes complete with a keyboard; a 1.44MB 3.5" diskette drive; a 70MB hard disk; and one serial and parallel port.

CLIN 11030 comes standard with a Token-Ring Adapter/A, Adapter connection cable, IBM 60MB cartridge tape backup system, 2 tape cartridges, SY-TOS tape backup software and 10 each 3.5", high density diskettes. These components are described on the reverse of this page. SMA provides NetWare set up and configuration before shipping. A Quick Reference manual and Reference Diskette are included. SMA also includes a "Server Pack" of notes and diskettes with each server system.

Novell Advanced NetWare 2.11 is required for the system. It is available as CLIN 10301 from the DTP/LAN Catalog. A monitor is also required to operate the system. Monitors available through this catalog include color (CLIN 11110) and monochrome (CLIN 11100) monitors.

the following options are recommended: CLIN 11310 - Memory Expansion Adapter Card; and CLIN 11320 - 2MB Memory Expansion. Order one CLIN 11320 for each additional 2MB desired, it plugs into CLIN 11310. Check with SMA for available sizes of higher capacity disk drives.

For ordering information, see page 47.

CLIN 11030
IBM Personal System/2 Model 80
see page 47

IBM Token-Ring Network Adapter/A

The IBM Token-Ring Network Adapter/A is a feature card for the IBM PS/2 family of computer systems. The adapter contains a microprocessor operating under control of adapter resident microcode. A diskette is included with the adapter which contains an adapter description file, adapter diagnostic, and a single ring network diagnostic.

LAN Adapter Cable

The LAN Adapter Cable connects the Token-Ring Adapter card to the Token-Ring Network at the wall socket or Multistation Access Unit (MAU).

LAN Support Program Package

The IBM Local Area Network Support Program provides support for IBM PS/2 computer systems attached to the IBM Token-Ring Network and simplifies the installation of IBM LAN software support. The program is included on the Server Set-up Disk shipped with each system.

IBM 6157 Tape Backup System

The IBM 6157 is a streaming tape drive which, when attached to the PS/2 family of processors, allows fast convenient save/restore and interchange capabilities. The tape drive utilizes 1/4-inch magnetic tape cartridges and is used in conjunction with the SY-TOS/IBM Tape Utilities. The Tape Back-up System must be attached to a workstation on the network. Specify make and model of the workstation when ordering this CLIN.

IBM DOS 3.30 Program Package

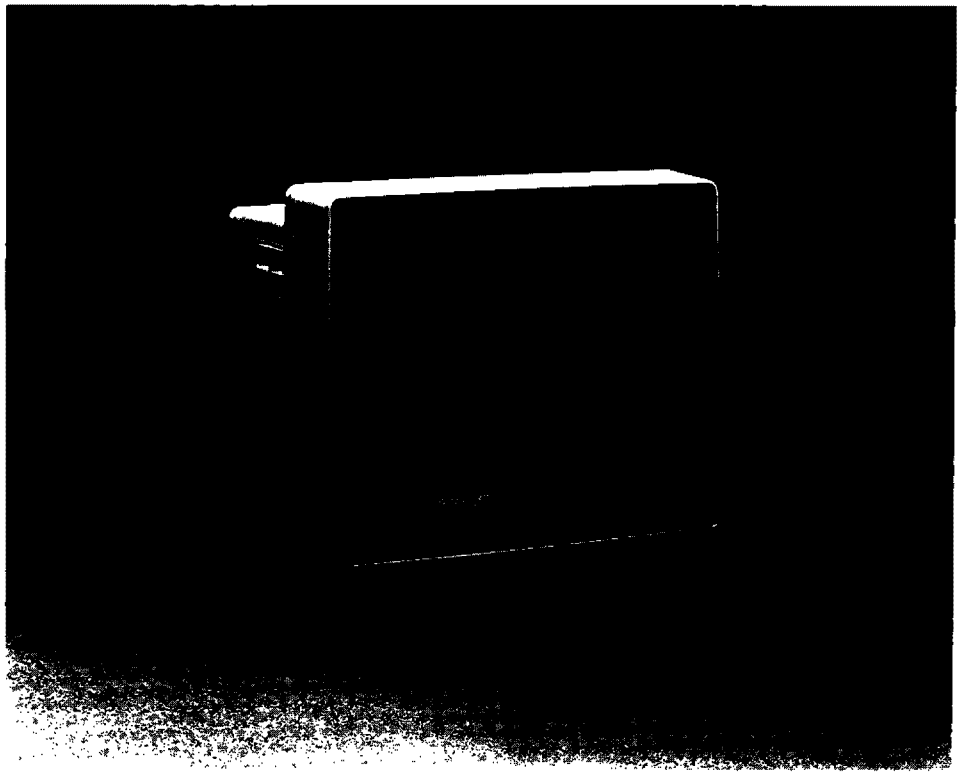
DOS is a program for controlling the operation of the IBM PC. It initiates the execution of an application program and enables it to read and write to files and other devices. It provides facilities for managing disk and diskette files and for developing and testing applications written in a wide range of supported programming languages.

SY-TOS/IBM Tape Utilities

SY-TOS/IBM Tape Utilities provide the software to save/restore and interchange data from tape to system unit hard disk. The utilities require the 6157 Streaming Tape Drive and the 6157 Tape Drive Adapter.

For ordering information, see page 47.

CLIN 11100
IBM Personal System/2 Monochrome Monitor/Adapter
see page 47

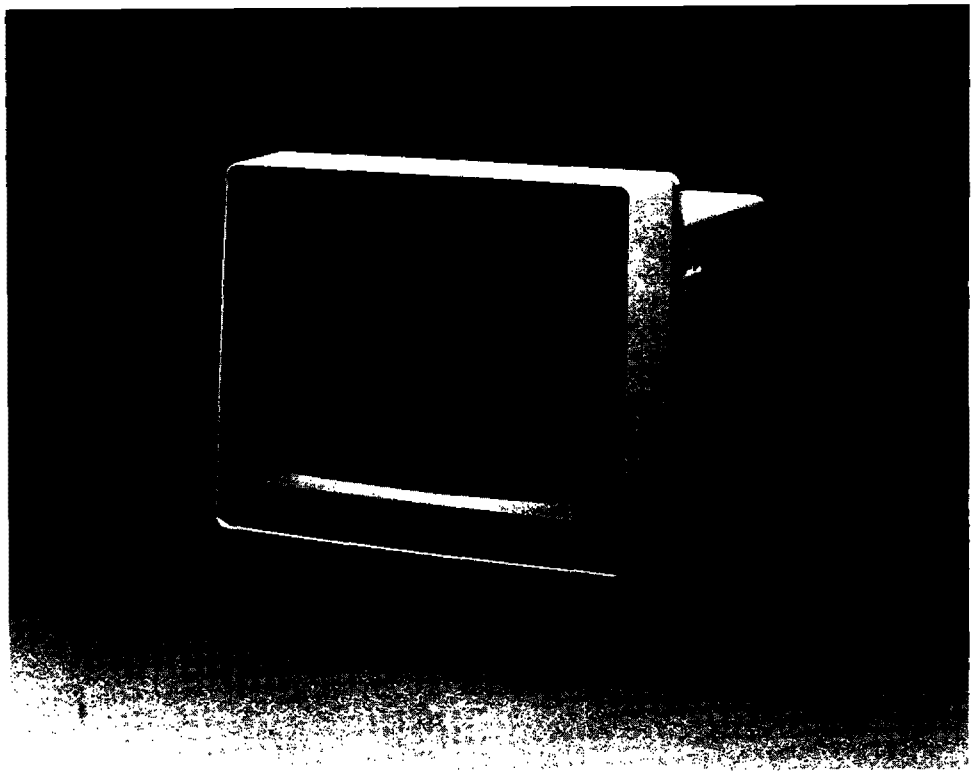


The IBM Personal System/2 Monochrome Monitor is a multimode, paper white-phosphor, monochrome display featuring advanced text, graphics, and imaging capabilities. An integrated tilt and swivel base is standard. Up to 64 shades of gray can be shown. It can provide 640 X 480 and 720 X 400 dots-per-inch graphics as well as text display.

User manual and instructions for installation and testing are included.

For ordering information, see page 47.

CLIN 11110
IBM Personal System/2 12" Color Display Monitor/Adapter
see page 48



The IBM Personal System/2 12" Color Display Monitor is a multimode analog color display featuring advanced text, graphics, and imaging capabilities. An integrated tilt and swivel base is standard. Up to 256 colors can be selected at one time from 262,144 possible colors when attached to the Integrated Display Adapter. It can provide 640 x 480 and 720 x 400 dots-per-inch graphics as well as text display.

User manual and instructions for installation and testing are included.

For ordering information, see page 48.

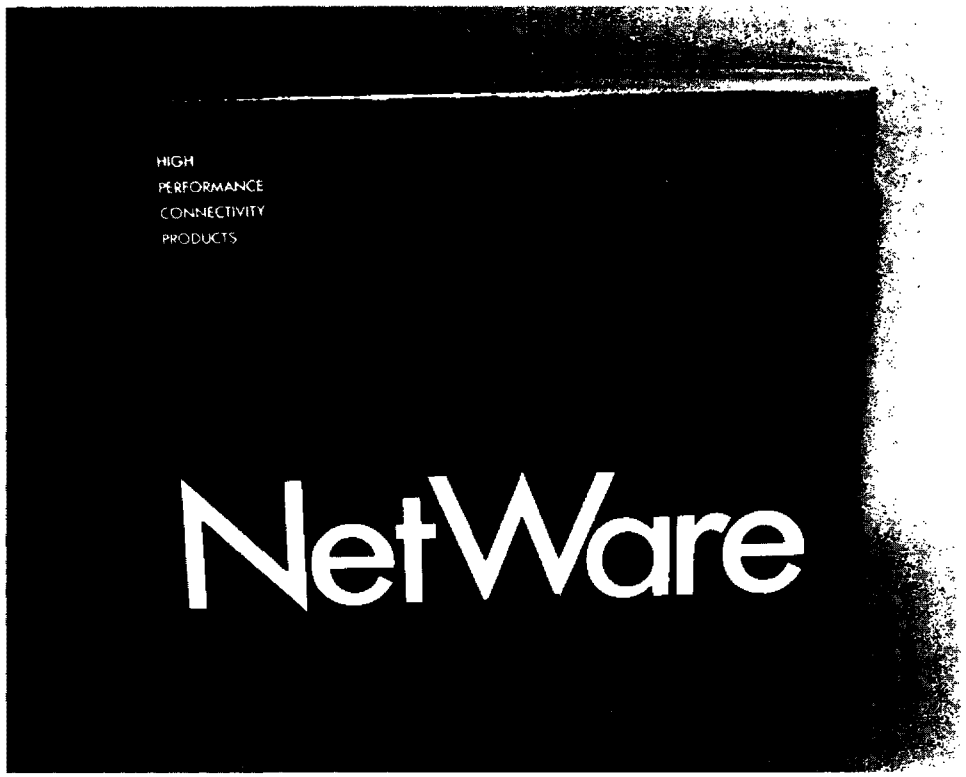
CLIN 11200
Hewlett-Packard Laserjet Series II
see page 48

The Hewlett-Packard Laserjet Series II is considered the standard of comparison among laser printers. It prints 300 dots-per-inch text and graphics at 8 pages per minute. The Laserjet II comes standard with 19 font size and style variations for both letter format and landscape(rotated) printing. Fonts can be added with font cartridges which plug into the printer, or "soft fonts" which are loaded into the printer from software programs on the computer. The printer comes standard with 2MB memory, permitting more versatile control of the printer operation. It may be connected to the computer through the use of a parallel or serial port. An 8-foot parallel-type cable and two Hewlett-Packard toner cartridges are included, making the printer ready to work right out of the box.

Manuals supplied include "Getting Started with your Laserjet Series II" and a "User's Manual."

For ordering information, see page 48.

CLIN 11301
Novell® PS/2 Advanced NetWare® 2.11
see page 48



Novell PS/2 Advanced NetWare 2.11 is a LAN and File Server operating system designed for up to 100 concurrent network users. Advanced NetWare is the fastest LAN operating system on the market today and is used in an estimated 50% plus of all installed local area networks.

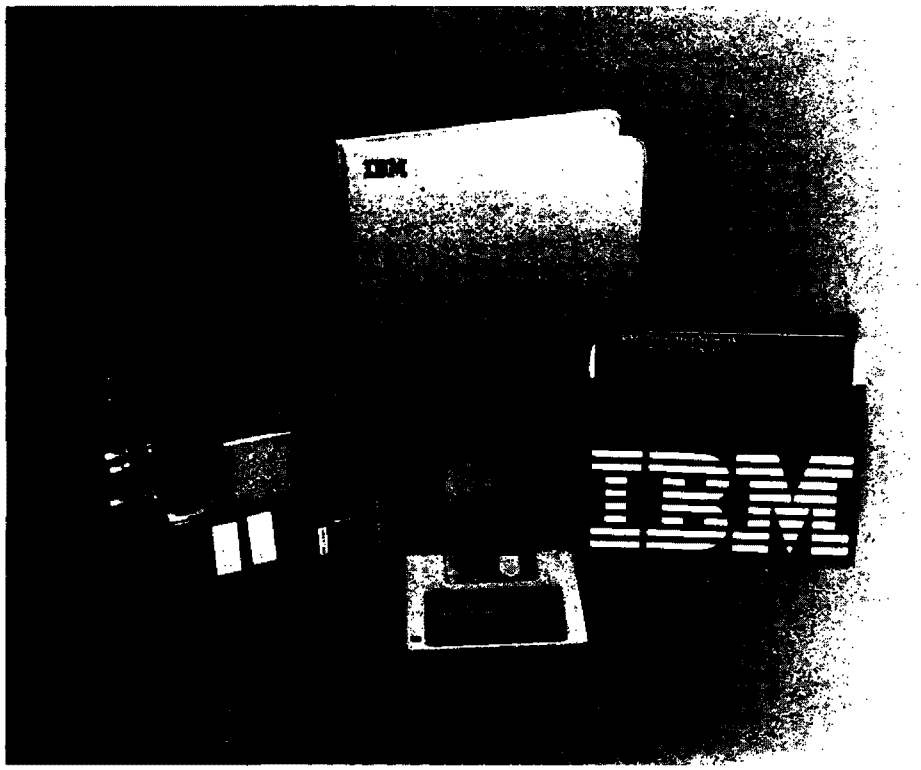
Special features of Advanced NetWare include various security locks to tightly control user access to sensitive files yet allow easy access where required. Advanced NetWare includes accounting features for time and usage billing by several categories, plus easy network management through menu style utility programs.

Advanced NetWare offers a host of features including connection options to mainframe computers using 3270-type terminal and controller emulations, TCP/IP connection, asynchronous and synchronous modem communications, and interconnection to LAN media other than Token-Ring, such as ARCNet, Ethernet, AppleTalk and TOPS. Advanced NetWare permits several separate LAN's to be connected together through a "bridge" station using either of a network file server or a network workstation.

Advanced NetWare 2.11 is normally shipped already installed on CLIN 11031 (File and Print Server System). User manual included.

For ordering information, see page 48.

CLIN 11400
Network Interconnect Card
see page 49



The Network Interconnect Card CLIN consists of a Token-Ring Network PC Adapter II and the LAN Support Program Package.

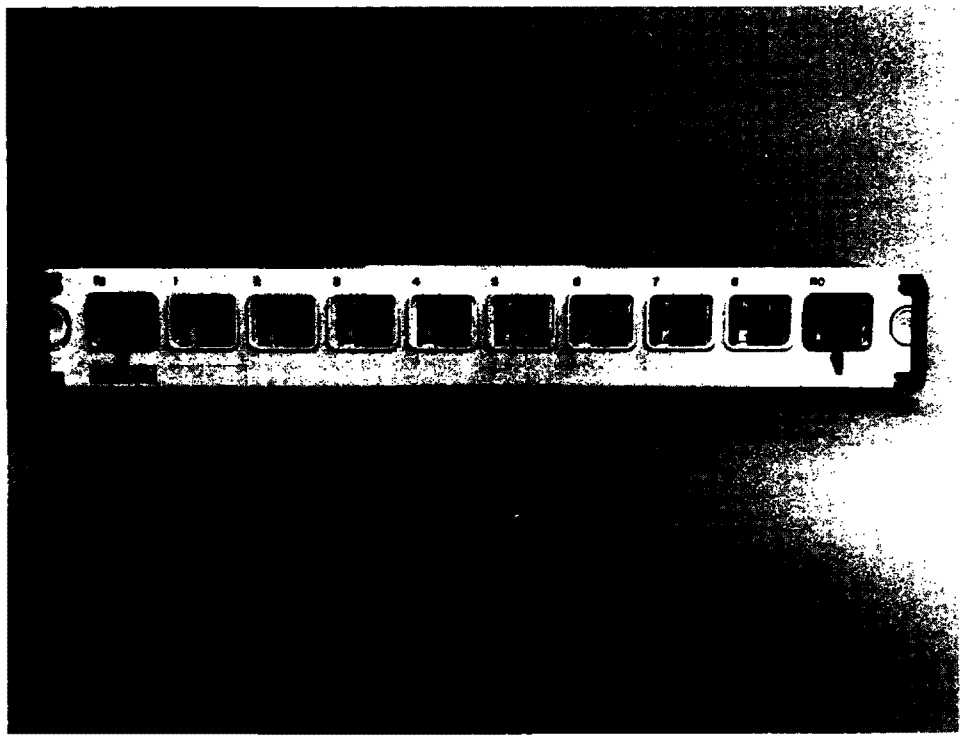
The Token-Ring Network PC Adapter II attaches the PS/2 Model 30, PC/XT or PC/AT bus compatibles to the Token-Ring Network. This option includes the adapter card, 5.25" diskette, and supporting documentation. The diskette includes adapter and ring diagnostics.

The IBM Local Area Network Support Program provides a NETBIOS interface for the IBM Token-Ring Network. It provides support for IBM PS/2 computer systems attached to the IBM Token-Ring Network and simplifies the installation of IBM LAN software support.

A "Guide to Operations" and Diagnostic Diskettes are included.

For ordering information, see page 49.

CLIN 11500
IBM 8228 Multistation Access Unit (MAU)
see page 49



The IBM Multistation Access Unit attaches up to eight devices into the IBM Token-Ring Network stations. Cables from the attaching devices are simply plugged into the unit. An access unit can be interconnected to other access units to form larger networks.

The access unit is designed for installation in a standard 19" rack or in a component housing. A cable bracket included with the unit may be used to organize and identify the cables attached to a rack mounted access unit. Also included is a tool to initialize the MAU after shipment.

An accessory plastic housing to enable wall or standalone mounting of the MAU is available under CLIN 11530, LAN Multistation Access Unit Component Housing.

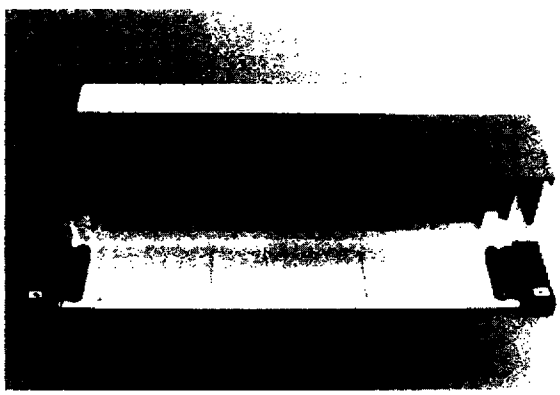
For ordering information, see page 49.

CLIN 11510 and 11520
LAN Standard 72" X 19" Distribution Rack and LAN Standard Distribution Panel and Grounding Kit
see page 49

CLIN 11510, the LAN Standard 72" X 19" Distribution Rack, is used to mount CLIN 11500 (MAU) and associated cables in a wiring closet configuration. It requires CLIN 11520, LAN Standard Distribution Panel and Grounding Kit, for installation.

For ordering information, see page 49.

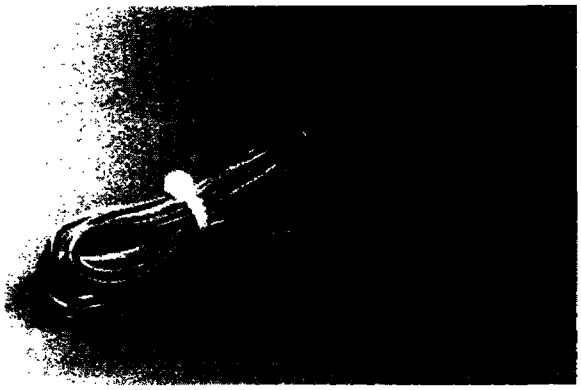
CLIN 11530
LAN Multistation Access Unit Component Housing
see page 49



CLIN 11530, LAN Multistation Access Unit Component Housing is a plastic enclosure which holds and protects the MAU (CLIN 11500) in a standalone or wall mounted configuration. A bracket on either side of the Component Housing provides organization for the cables attached to the MAU and a hinged cover protects the MAU from dust and debris.

For ordering information, see page 49.

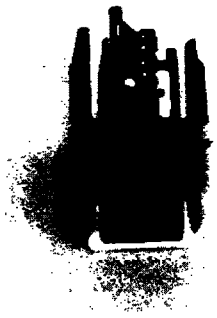
CLIN 11640
4-Meter Type 3 Media Jumper Cable
see page 50



CLIN 11640 consists of a 4-meter Type 3 Media Jumper Cable. It is used to connect the MAU to a telephone punch block, used in type 3 wiring systems.

For ordering information, see page 50.

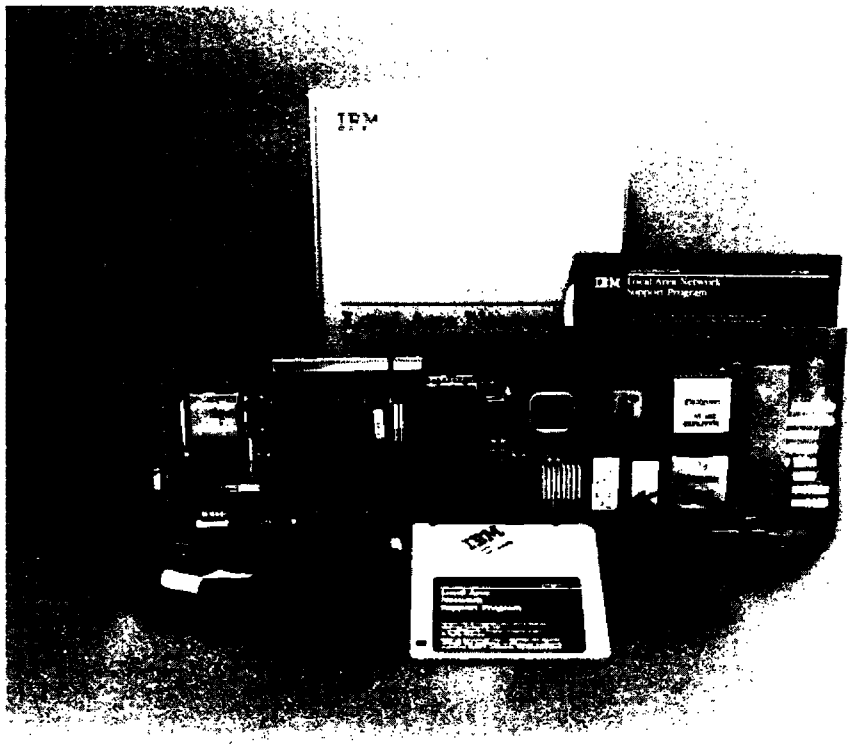
CLIN 11650
Standard Wall Data Connector
see page 50



CLIN 11650 consists of a Standard Wall Data Connector and a Faceplate for the Data Connector. It fits a standard wall electrical box. The faceplate is not shown.

For ordering information, see page 50.

CLIN 11700
Network Bridge Interconnect Card
see page 50



CLIN 11700, a Network Bridge Interconnect Card pictured above, consists of an IBM Token-Ring Network Adapter/A, IBM Token-Ring Cable, and the LAN Support Program Package.

The IBM Token-Ring Network Adapter/A is a feature card for the IBM PS/2 system model 50, 60, and 80 (Micro Channel). A diskette is included with the adapter which contains an adapter description file, adapter diagnostic, and a single ring network diagnostic. User manual(s) and installation and testing instructions are also included.

The LAN Support Program Package from IBM provides a NETBIOS interface for the IBM Token-Ring Network.

For ordering information, see page 50.

CLIN 11900
CXI PCOX™ SNA Communications Server
see page 51

CLIN 11900 consists of the CXI PCOX SNA Communications Server and eight copies of PCOX/One LAN Version, (8) PCOX-3270-FT Utility, (1) PCOX-GW-3270 SDLC, and (1) PCOX/Remote plug-in board. User manual(s) included.

PCOX/One (LAN version) is a LAN workstation package which operates with coaxial, remote, and high-speed Token-Ring gateways in a NETBIOS or SPX environment. It provides the user access to mainframe applications and files through 3278/79 terminal emulation, providing one host and one DOS session. PCOX/One features an efficient, versatile, and friendly user interface.

PCOX/3270 FT Utility allows users to upload and download data between their PCs and a mainframe. It runs with all PCOX 3270 series software products and TSO or CMS host subsystems. PCOX/3270 FT provides Advanced and Basic file transfer options, a Batch File Generator program, and installation procedures. Transfers can be initiated by means of DOS command or via interactive screen panels.

At the EPA, a 4800 band synchronous modem is generally required for use with this item.

Novell's PCOX-GW-3270 SDLC connection gives LAN workstations remote access to up to 16 concurrent host sessions. The gateway server software makes use of the PCOX/REMOTE hardware to emulate an SNA 3174/3274 remote cluster controller. The connection links via synchronous modem, at speeds up to 19.2 kbits per second, to an IBM 3705/3725 or equivalent communications server.

PCOX/REMOTE plug-in board is a short (5") synchronous serial interface board with RS-232C interface. It connects a PC or a LAN via synchronous modems to an IBM 3205 or 3725 communications controller or an S/3X minicomputer. In this capacity the interface emulates an SNA/SDLC or BSC IBM 3274 or 3274 cluster controller or an IBM 5251 M12 or 5294 controller. PCOX/REMOTE is converted to a 16-session 3270 LAN Gateway by using PCOX/GW-3270 software.

For ordering information, see page 51.

CLIN 11910
Remote 3278/79 Workstation Software
see page 51

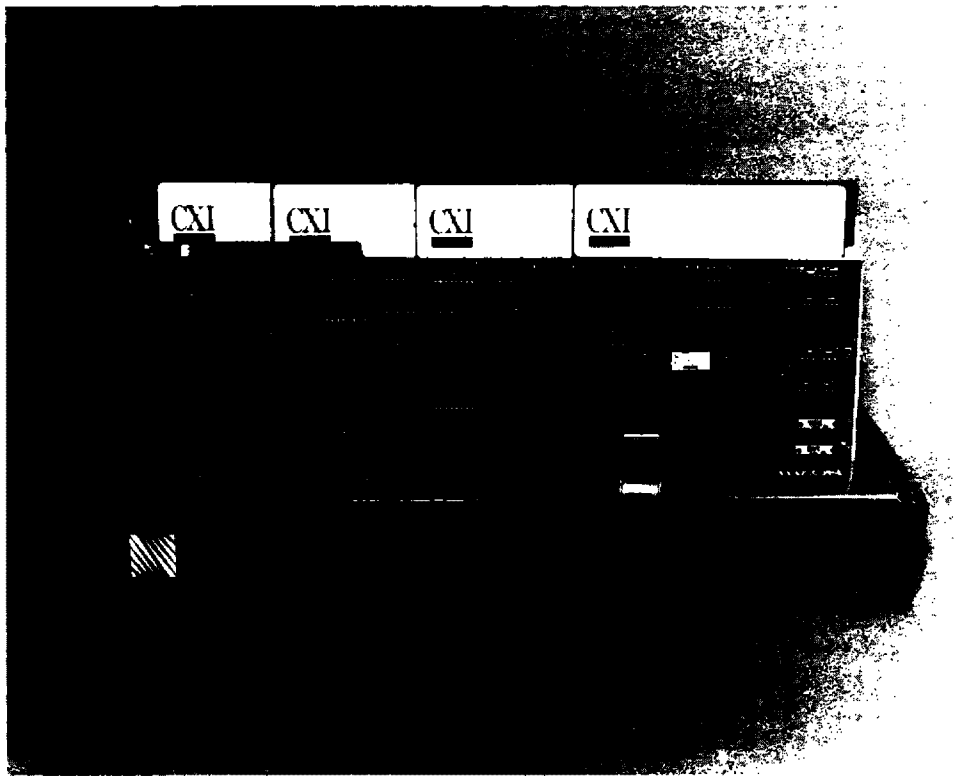
CLIN 11910 consists of one copy of Remote 3278/79 Workstation Software, PCOX/One (LAN Version), and PCOX-3270-FT Utility. User manual(s) included.

PCOX/One (LAN version) is a LAN workstation package which operates with coaxial, remote, and high-speed Token-Ring gateways in a NETBIOS or SPX environment. It provides the user access to mainframe applications and files through 3278/79 terminal emulation, providing one host and one DOS session. PCOX/One features an efficient, versatile, and friendly user interface.

PCOX/3270 FT Utility allows users to upload and download data between their PCs and a mainframe. It runs with all PCOX 3270 series software products and TSO or CMS host subsystems. PCOX/3270 FT provides Advanced and Basic file transfer options, a Batch File Generator program, and installation procedures. Transfers can be initiated by means of DOS command or via interactive screen panels.

For ordering information, see page 51.

CLIN 11920
Novell Asynchronous Communications Server (ACS)
see page 51



Novell's PCOX/SVR-ACS Asynchronous Communications Software (ACS) allows any workstation on an Advanced NetWare LAN to communicate with any asynchronous device. With ACS, up to four workstations can simultaneously call into or out of the LAN and function as network workstations. Since more than one ACS can be installed on a single LAN, connectivity is virtually unlimited.

NetWare ACS software consists of an ACS Control Program ASCOM IV (the dial-out software package) and NetWare AnyWare (the dial-in software package). Through the use of additional Wide Area Network Interface Modules (WNIMs), each ACS can support up to 16 asynchronous connections.

ASCOM IV enables network workstations to call up asynchronous host computers or public services. NetWare AnyWare gives remote workstations direct access to the LAN and provides complete access to the network from any location. Additional features include file transfer, automatic logging of transmitted/received files, terminal emulation, data capture routines, built-in operating commands, editor, on-line HELP utility, and a simultaneous print capability. User manual(s) included.

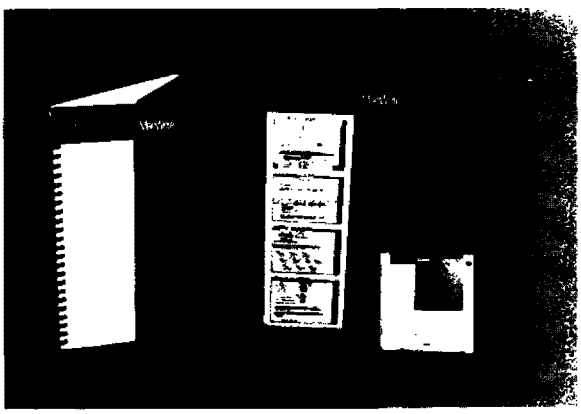
For ordering information, see page 51.

CLIN 30010
Desktop Publishing Software
see page 68

Aldus Pagemaker® 3.0 for the Macintosh is the software heart of the desktop publishing concept. Pagemaker allows you to produce a wide range of documents and publications electronically - everything from simple business proposals to sophisticated reports and full-length books. Create page designs, integrate text and graphics from other software programs, edit copy, adjust graphics, add design flourishes, and prepare your documents for final reproduction. Functioning in a what-you-see-is-what-you-get (WYSIWYG) environment, Pagemaker helps make whatever you create look its best. User manual included.

For ordering information, see page 68.

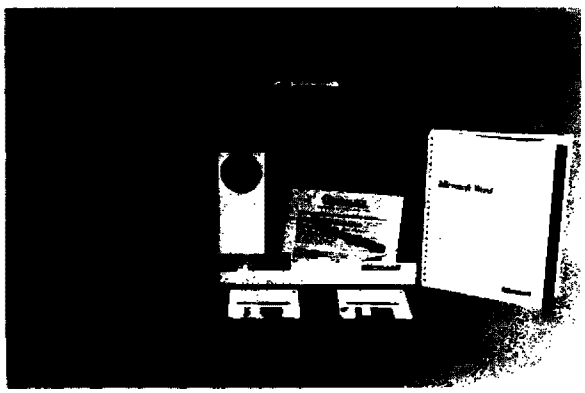
CLIN 30020
Basic Word Processing Package
see page 68



Claris™ MacWrite® is the original word processing program developed by Apple and remains one of the most popular. MacWrite is a basic no-frills word processing program that is easy to learn and use. It does not offer some advanced features found in high-end programs, such as mail merge capability or the ability to have more than one document open at a time. However, for simple correspondence or E-Mail it is quite suitable. User manual included.

For ordering information, see page 68.

CLIN 30030
Full-Featured Word Processing Package
see page 68



Microsoft® Word is the most popular high-end word processing program for the Macintosh. Create a page layout with snaking or independent, side-by-side columns of text or graphics. Highlight information with advanced formats like double underline, strike-through, boxes around paragraphs, mathematical typesetting, and more. Word includes integrated outlining, style sheets and 80,000-word spelling checker. It offers import/export ability with MacWrite, Microsoft Word for the PC, Rich Text Format (RTF), and Document Content Architecture (DCA) PC programs. User manual included.

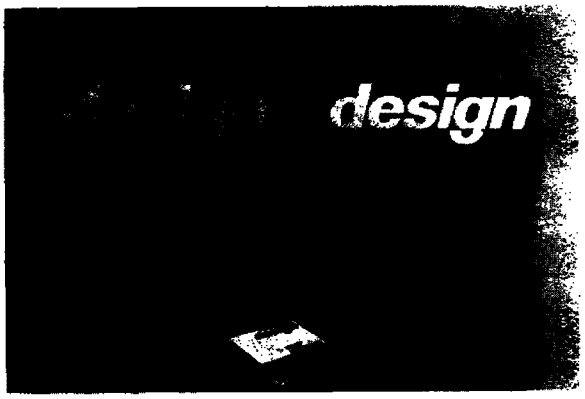
For ordering information, see page 68.

CLIN 30040
Outline Processing Package
see page 68

Living Videotext's More™ is an outline processing program for the Macintosh featuring presentation specialties. More takes you from the outline to the printed document. A document editor lets you put a practically unlimited amount of text under headlines. With the Tree Chart feature, you can transform an outline instantly into a tree diagram and print it. With the Bullet Chart feature, you can turn lists and pictures into professional quality slides. More includes many additional features such as dial-out capability, time stamps and math calculations. User manual included.

For ordering information, see page 68.

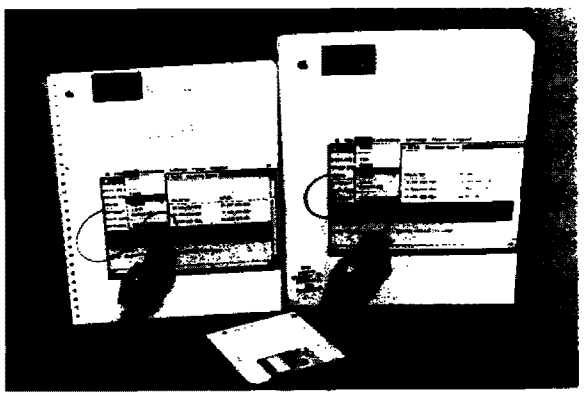
CLIN 30050
Graphics-Oriented Outline Processing Package
see page 68



Meta Software's Design is a graphics and text-handling program used to help visualize complex systems. It speeds the creation of flow charts, information networks, computer programs, organizational charts, decision trees, and presentation graphics - anything for which graphic representation best illustrates the concepts and relationships between elements. Once you connect one object to another in a diagram, it stays connected, no matter where you move it. You can build Design diagrams up to 9,999 pages, arrange them in hierarchical structure and create hypertext links to organize text across multiple pages. User manual included.

For ordering information, see page 68.

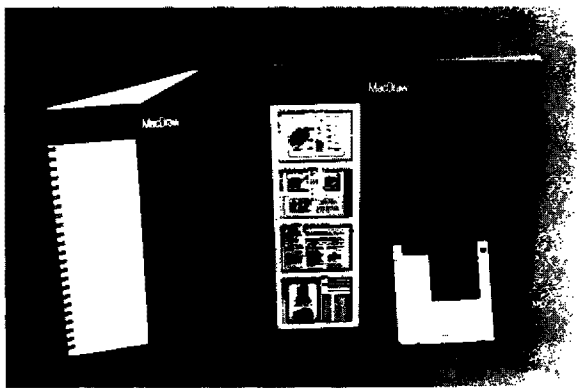
CLIN 30060
Terminal Emulation Program
see page 68



Apple MacTerminal™ is a communications program originally developed for the Macintosh by Apple. A basic, no frills communication program suitable for E-Mail, MacTerminal emulates DEC VT100 and VT52, IBM 3278 (requires a cluster controller to communicate) and TTY. It is compatible with Hayes modems or compatibles. Protocols supported: Text, XModems and MacBinary. MacTerminal does not support Kermit. User manual included.

For ordering information, see page 68.

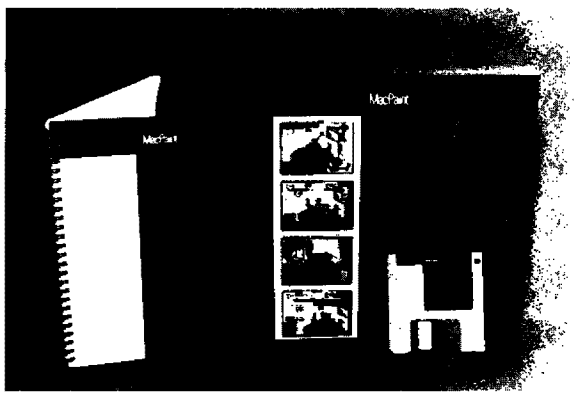
CLIN 30070
Object-Oriented Line Art Graphics Package
see page 68



Claris MacDraw® is the object-oriented drawing program developed by Apple for the Macintosh. It is a popular basic drawing program for creating structural designs. MacDraw is at its best when the image you wish to create can be drawn through a combination of geometric shapes. It can generate graphics on its own or can be used to edit graphics created in other object-oriented programs. Output on Apple's LaserWriter is a full 300 dots per inch. Although maximum image size can be up to 4 x 8 feet, one drawback of large drawings is that the screen window does not automatically enlarge as you draw. User manual included.

For ordering information, see page 68.

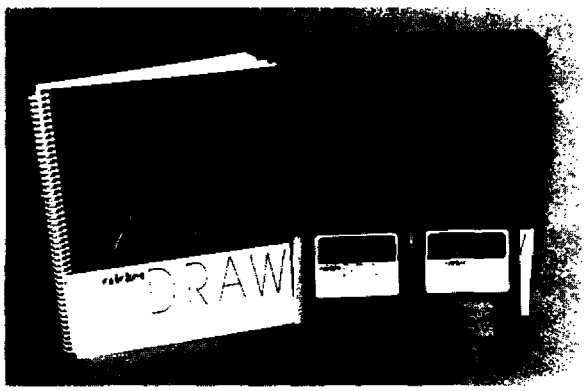
CLIN 30080
Bit-Map Oriented Graphics Art Package
see page 68



Claris MacPaint® is the original paint program developed by Apple for the Macintosh. Its creator, Bill Atkinson, also developed Hypercard. MacPaint is a bit-mapped graphics program which gives you a complete set of drawing tools, from pencil to paint brush, for freehand work. You can also choose from a variety of shapes and fill them with patterns that come with the program, or ones you create yourself. Output is at the same resolution (72 dots per inch) that you see on a Macintosh screen, as opposed to the 300 dots-per-inch output of object-oriented programs. User manual included.

For ordering information, see page 68.

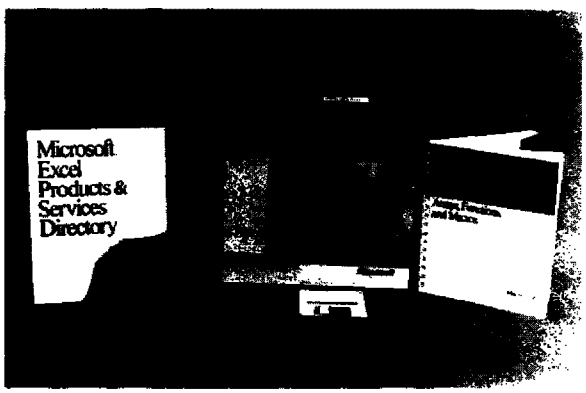
CLIN 30090
Object-Oriented PostScript Compatible Graphics Package
see page 69



Cricket Draw is an advanced, full-featured object-oriented graphics program from Cricket Software. Its ability to generate output in PostScript code allows it to do some things that other drawing programs cannot, such as much finer grey scales in fills and fitting text on any curved line. Additionally, Cricket Draw supports color on the screen and files created in Cricket Draw can be sent to slide service bureaus for full color slides or overheads. User manual included.

For ordering information, see page 69.

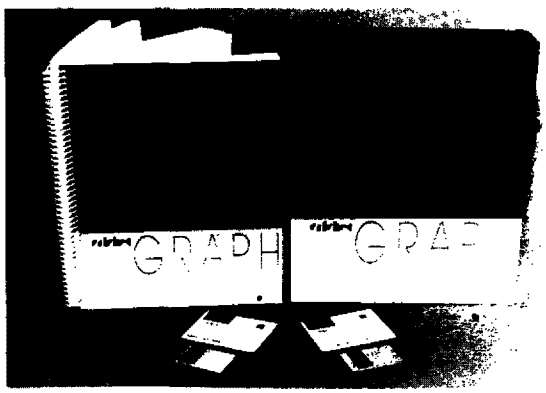
CLIN 30100
Integrated Spreadsheet Software
see page 69



Microsoft Excel is the premiere spreadsheet for the Macintosh and is widely considered the best anywhere. Sophisticated financial and scientific numerical analyses and reporting, high-end charting and graphs, as well as data base management make it a productive business partner. Excel can import and export data to Lotus 1-2-3. It provides up to 256 columns and 16,384 rows; 131 functions and 151 macros. Excel has enough power and features for the dedicated spreadsheet user, yet is easy to learn and use by others. User manual included.

For ordering information, see page 69.

CLIN 30110
Business Graphics Software
see page 69



Cricket Graph from Cricket Software is an advanced, full-featured graphing program for the Macintosh. It supports on-screen color and can print to Hewlett-Packard plotters for color output or overheads. Users can input or import data from word processing programs, spreadsheets or data bases - 40 data columns per window, 2700 rows per column. Cricket Graph includes 12 graph types, including dual axis, quality control and polar with multiple customization options. Output is at 300 dots-per-inch resolution on Apple's LaserWriter and can be imported by Pagemaker or Word. User manual included.

For ordering information, see page 69.

CLIN 31010 and 31011
Standard Software
see page 70

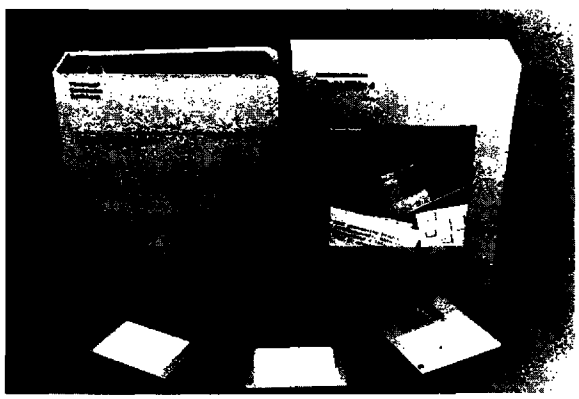
Wordstar™ Professional is a solid basic word processing program which has become the standard in many offices worldwide.

CLIN 31010, base version, is required to be installed on the file server.

CLIN 31011, per node version, is required for each logged-in user of the Wordstar Professional base version. It includes complete documentation and templates for each user.

For ordering information, see page 70.

CLIN 31020 and 31021
Displaywriter Interface
see page 70



The DisplayWrite 4 word processor interface package emulates the operation of an IBM Displaywriter on an IBM PC or compatible. User manual included.

CLIN 31020, base version, is required to be installed on the file server.

CLIN 31021, per node version, is required for each logged-in user of the DisplayWrite 4 package on the file server .

For ordering information, see page 70.

CLIN 31030 and 31031
Wang-Like Interface
see page 70

The Wang-like interface package available to EPA LAN users is MultiMate Advantage™ from Ashton-Tate®, in base or per node versions.

CLIN 31030, base version, is required to be installed on the file server.

CLIN 31031, per node version, is needed for each logged-in user of the MultiMate Advantage server package. It includes documentation and templates.

For ordering information, see page 70.

CLIN 31040 and 31041
Supplementary Software
see page 70

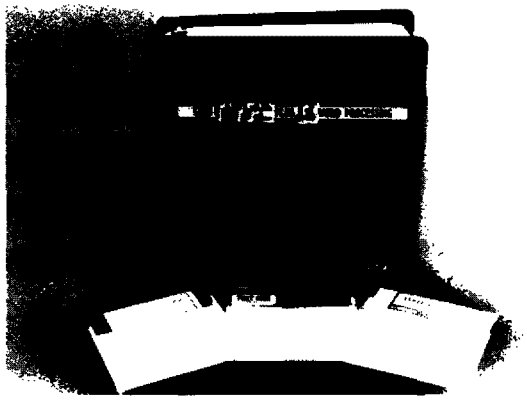
The supplementary LAN applications word processing software available to EPA users is WordPerfect® from WordPerfect Corporation, in base or per node versions. The current Version 4.2 includes new features approaching desktop publishing standards such as graphics inclusion and margins in inches, points, or characters.

CLIN 31040, the base or "First Station" version, must be installed on the file server.

CLIN 31041, the per node or "Additional Station" version, is needed for each logged-in user of the WordPerfect server package. It includes documentation and templates.

For ordering information, see page 70.

CLIN 31050 and 31051
Lexitron-like Interface
see pages 70 & 71



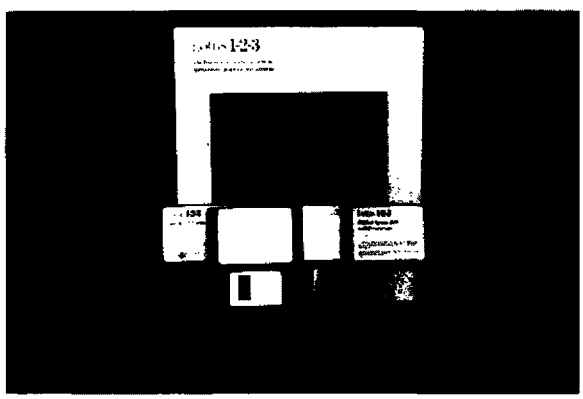
The Lexitron-like interface package available to EPA LAN users is Lexitype Plus II, a LAN applications word processing software program, in base or per node versions.

CLIN 31050, base version, is required to be installed on the file server.

CLIN 31051, per node version, is needed for each logged-in user of the Lexitype server package. It includes documentation and templates.

For ordering information, see pages 70 and 71.

CLIN 31060
Spreadsheet and Graphics
see page 71

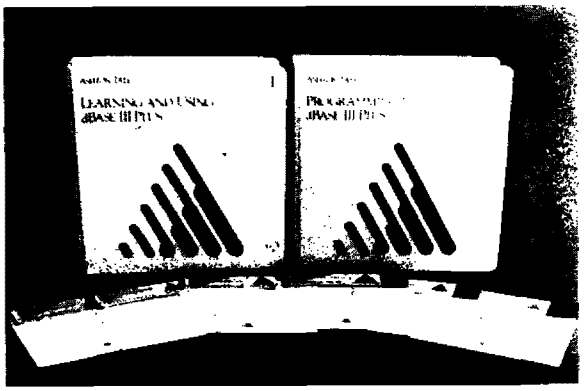


The spreadsheet and graphics package available to EPA LAN users is Lotus 1-2-3™ 2.01 from Lotus Development Corporation. User manual included.

CLIN 31060 is identical to single-user Lotus 1.2.3. It does not include file locking support.

For ordering information, see page 71.

CLIN 31070 and 31071
Data Base Management System
see page 71



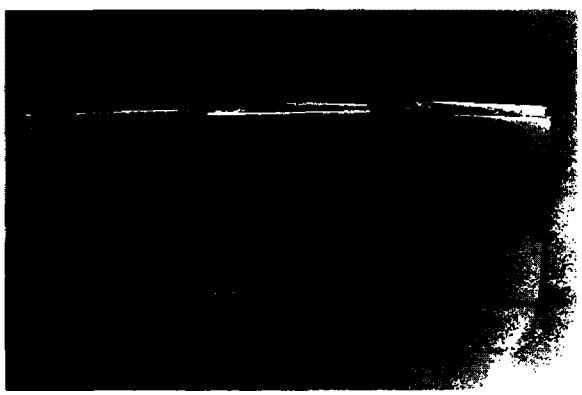
The data base management system available to the EPA is dBase III Plus™ from Ashton-Tate, in the base or per node versions. DBase III Plus is the most widely-used data base package in the IBM PC community. In fact, many other applications and data files are often formatted in the dBase III file format. User manual included.

CLIN 31070, the single user version, may also be used on the file server. It does not support file or record locking.

CLIN 31071 combines with a single-user package to yield six-user capability with file and record locking.

For ordering information, see page 71.

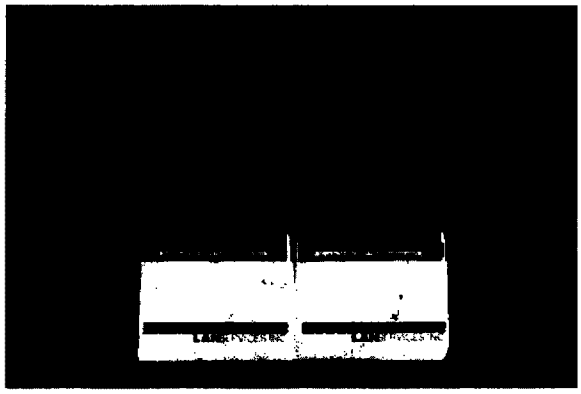
CLIN 31080
Mainframe 4th Generation Data Base
see page 71



The mainframe 4th generation data base package available to EPA LAN users is PC/Focus™ from Information Builders, Inc. This PC/Focus version supports all of the features of the mainframe package. The software comes complete with diskettes and user, applications, and technical manuals.

For ordering information, see page 71.

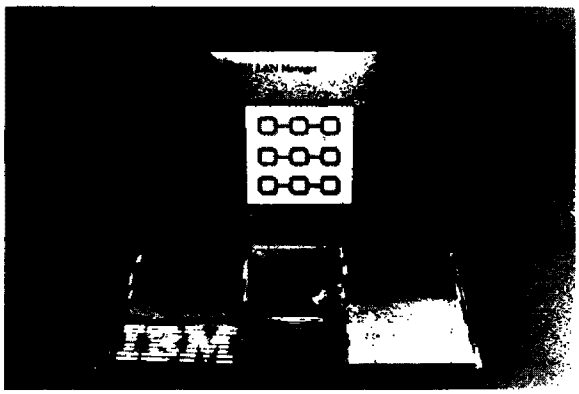
CLIN 31090
Network Management Audit
see page 71



LANtrail™ from LANServices provides the System Administrator with easy and timely access to information being tracked, including: reports on station access; system changes; system errors; executed programs; file access; directory usage; and system security. The program provides a NetWare-like user interface and tracks information on the LAN and across bridges. The System Administrator may use LANtrail from any workstation he/she is logged into. User manual included.

For ordering information, see page 71.

CLIN 31100
Network Monitoring and Diagnosis
see page 71



LAN Manager Version 1.0 allows you to maintain network records, monitor network status, and determine the source of problems on an IBM Token-Ring Network. On a Token-Ring Network, the LAN Manager monitors activity on the ring to which its adapter is attached. A LAN Manager is needed for each IBM Token-Ring Network that you wish to monitor. User manual included.

For ordering information, see page 71.

DTP System - Hardware

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
10010	Standard Desktop Publishing (DTP) System	Apple Macintosh SE with 20MB Hard Disk Built-in Monitor for the Macintosh SE Apple Extended Keyboard 8' Apple System Peripheral Cable PhoneNET PLUS TOPS for Macintosh	$ 3,065.29
10020	Professional DTP System	Apple Macintosh II with 40MB Hard Disk Apple Extended Keyboard 8' Apple System Peripheral Cable PhoneNET PLUS TOPS for Macintosh	$ 4,487.73
10100	Large Screen Monochrome Monitor and Adapters for Standard DTP System	SuperMac SuperView SE Monitor with Cable SuperMac SuperView SE Video Card	Under Modification
10110	Apple High-Resolution Monochrome Monitor and Adapter for Professional DTP System	Apple Mac II 1/4 Bit Video Card Apple Mac II 8-Bit Video Expansion Kit Apple High-Resolution Monochrome Monitor Apple Universal Monitor Stand	$ 888.64
10120	Apple High-Resolution RGB Color Monitor and Adapter for Professional DTP System	Apple Mac II 1/4 Bit Video Card Apple Mac II 8-Bit Video Expansion Kit AppleColor High-Resolution RGB Monitor Apple Universal Monitor Stand	$ 1,331.11
10130	Large Screen Monochrome Monitor for Professional DTP System	SuperMac SuperView II Monitor with Cable SuperMac SuperView II Video Card	Under Modification

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
10140	Large Screen Color Monitor for Professional DTP System	SuperMac Spectrum Monitor with Cable SuperMac Spectrum Video Card	$ 3,057.91
10200	DTP Dot Matrix Printer	Apple ImageWriter II AppleTalk Option PhoneNET PLUS	$ 623.00
10211	DTP Laser Printer	Apple LaserWriter II NT with Toner Cartridge and Letter Case Additional Toner Cartridge (1) PhoneNET PLUS	$ 3,658.36
10300	AST MAC86 Co-Processor Board for Macintosh SE	AST MAC86 Co-Processor Board for Macintosh SE MS-DOS 3.2 - Intel 8086 Chip Apple PC 5.25" Drive with Apple Apple File Exchange Software	$ 799.00
10310	AST MAC286 Co-Processor Board for Macintosh II	AST MAC286 Co-Processor Board for Macintosh II MS-DOS 3.2 - Intel 80286 Chip Apple PC 5.25" Drive with Apple Apple File Exchange Software	$ 1,559.38
10400	Apple Macintosh II Internal 800KB 3.5" Disk Drive	Apple Macintosh II Internal 800KB 3.5" Disk Drive 3.5" Disk Drive MacTerminal 800K Drive	$ 239.64
10500	Apple 5.25" Diskette File Transfer System for Standard DTP System	Apple 5.25" Diskette File Transfer System Apple PC 5.25" Drive with Apple Apple File Exchange Software Macintosh SE PC Drive Card	$ 391.33

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
10510	Apple 5.25" Diskette File Transfer System for Professional DTP System	Apple 5.25" Diskette File Transfer System Apple PC 5.25" Drive with Apple Apple File Exchange Software Macintosh II PC Drive Card	$ 391.33
10600	Avatar Mainframe SE Internal 3270 Emulation Board for Standard DTP System	Avatar Mainframe SE Internal 3270 Emulation Board 3270 Emulation-Individual Coax Attachment for Macintosh SE DTP-Compatible MacMainFrame™ SE (internal) MacMainFrame HFT (per building)	$ 1,289.53
10610	MacMainFrame DX External 3270 Emulation Board for Professional DTP System	MacMainFrame DX External 3270 Emulation Board 3270 Emulation-Individual Coax Attachment for Macintosh II DTP-Compatible MacMainFrame DX (external) MacMainFrame HFT (per building)	$ 1,553.92
10620	Tridata Netway 1000A 3270 Emulator-Network Gateway Attachment	3270 Emulator-Network Gateway Attachment Netway 1000A (includes box/software) PhoneNET PLUS	$ 2,944.56
10700	Farallon PhoneNET StarController Card with Software	Farallon PhoneNET StarController Card with Software DTP LAN StarController PhoneNET StarController with Software	$ 1,218.14
10710	Kinetics Fast Path Model 3 Network Bridge	Kinetics Fast Path Model 3 Network Bridge Network Bridge Fast Path-3 with Thin Ethernet Cables	$ 2,567.38

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
10720	TOPS Network Interface Card PC-Compatible Network Interface	TOPS Network Interface Card PC Compatible Network Interface PC Compatible Network Interface PhoneNET PLUS TOPS NetPrint for the PC TOPS for the PC TOPS FlashCard	$ 702.75
10800	Network Support for FY '88	Network Support Basic	$ 2,711.59
10900	Hewlett-Packard 7550A Plotter	Hewlett-Packard 7550A Plotter With RS232C Serial Interface 6' Serial Interface Cable Transparency Pens (2 packs of 5 colors)	$ 2,848.69

Local Area Network - Hardware

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
11000	IBM Personal System/2 Model 30	IBM Personal System/2 Model 30 IBM DOS 3.30 Program Package (Network Console Workstation)	$ 1,257.47
11010	IBM Personal System/2 Model 60 with 40MB Hard Disk	IBM Personal System/2 Model 60 with 40MB Hard Disk IBM DOS 3.30 Program Package (Network Bridge Processor)	$ 3,660.97
11020	IBM Personal System/2 Model 60 with 70MB Hard Disk	IBM Personal System/2 Model 60 with 70MB Hard Disk IBM DOS 3.30 Program Package (Network Bridge Processor)	$ 4,327.39
11030	IBM Personal System/2 Model 80 with 70MB Hard Disk	IBM Personal System/2 Model 80 with 70MB Hard Disk Token-Ring Network Adapter/A Token-Ring Network Cable LAN Support Program Package IBM 6157 Tape Backup System IBM Tape Backup Adapter IBM DOS 3.30 Program Package 3.5" DS/HC Diskettes (10 Per Box) Streaming Tape Cartridges (2 Each) SY-TOS Tape Utilities Program (File and Print Server System)	$ 7,910.14
11100	IBM PS/2 8503 Monochrome Monitor/Adapter	IBM PS/2 8503 Monochrome Monitor/Adapter Monochrome Monitor	$ 174.80

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
11110	IBM PS/2 8513 12" Color Display Monitor/Adapter	IBM PS/2 8513 12" Color Display Monitor/Adapter Color Monitor	$ 470.87
11200	Hewlett-Packard Laserjet Series II - Standard Laser Printer	Hewlett-Packard Laserjet Series II With Centronics Parallel Interface HP 2MB Memory Expansion Card 8' Shielded Parallel Cable HP Toner Cartridge (2 each)	$ 2,619.49
11210	Hewlett-Packard Laserjet 500 Plus - High Performance Laser Printer	Hewlett-Packard Laserjet 500 Plus With Centronics Parallel Interface HP 2MB Memory Expansion Card 8' Shielded Parallel Cable HP Toner Cartridge (2 each)	$ 4,343.83
11301	Novell PS/2 Advanced NetWare 2.11 File and Print Server System Software	Novell PS/2 Advanced NetWare 2.11 Network Operating System Software	$ 2,006.00
11310	IBM PS/2 80386 Memory Expansion Option - File and Print Server System Memory Expansion Adapter	IBM PS/2 80386 Memory Expansion Option IBM 2MB 32-Bit RAM Memory Expansion Adapter	$ 1,127.46
11320	IBM PS/2 80386 Memory Expansion Kit - File and Print Server System Memory Expansion Kit	IBM PS/2 80386 Memory Expansion Kit IBM 2MB 32-Bit RAM Expansion Memory Kit	$ 903.50
11330	IBM PS/2 Additional 115 Hard Disk Drive - File and Print Server System Additional Disk Drive	IBM PS/2 Additional 115 Hard Disk Drive	$ 2,919.16

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
11400	Network Interconnect Card	Network Interconnect Card IBM Token-Ring Network Adapter II LAN Support Program Package	$ 641.30
11410	8' PC-To-Data Connector Attachment Cable	8' PC-to-Data Connector Attachment Cable LAN 8' Adapter Cable IBM Token-Ring Cable - Type 6	$ 25.67
11420	8' PC-To-Modular Connector Attachment Cable	8' PC-To-Modular Connector Attachment Cable Type 3 Media Filter LAN Type 3 Media Filter IBM Token-Ring Cable - Type 3	$ 46.98
11500	IBM 8228 Multistation Access Unit (MAU)	IBM 8228 Multistation Access Unit (MAU) LAN Multistation Access Unit	$ 559.36
11510	LAN Standard 72" X 19" Distribution Rack	LAN Standard 72" X 19" Distribution Rack 72" X 19" Distribution Rack	$ 721.65
11520	LAN Standard Distribution Panel and Grounding Kit	LAN Standard Distribution Panel and Grounding Kit LAN Standard Distribution Panel IBM Rack Grounding Kit	$ 194.47
11530	LAN Multistation Access Unit Component Housing	LAN Multistation Access Unit Component Housing IBM Access Unit Housing	$ 80.85

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
11600	System Patch Cable 8'	System Patch Cable 8'	$ 25.13
11610	System Patch Cable 30'	System Patch Cable 30'	$ 60.09
11620	System Patch Cable 75'	System Patch Cable 75'	$ 83.03
11630	System Patch Cable 150'	System Patch Cable 150'	$ 220.69
11640	4-Meter Type 3 Media Jumper Cable	4-Meter Type 3 Media Jumper Cable	$ 19.12
11650	Standard Wall Data Connector	Standard Wall Data Connector Faceplate for Data Connector	$ 16.06
11660	Type 3 Media Wall Data Connector	Type 3 Media Wall Data Connector Faceplate for Type 3 Data Connector	$ 13.87
11670	LAN Wiring Test Plug	LAN Wiring Test Plug Data Wrap Plug	$ 25.13
11700	Network Bridge Interconnect Card	Network Bridge Interconnect Card IBM Token-Ring Network Adapter/A IBM Token-Ring Cable LAN Support Program Package	$ 663.15

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
11710	Network Bridge Program	Network Bridge Program	nsp
11800	Network Console Interconnect Card	Network Console Interconnect Card IBM Token-Ring Network PC Adapter II IBM Token-Ring Network PC Adapter Cable LAN Support Program Package	$ 675.17
11900	CXI PCOX SNA Communications Server	CXI PCOX SNA Communications Server PCOX-One LAN Version (8) PCOX-3270-FT Utility (8) PCOX-GW-3270 SDLC PCOX-Remote-HW	$ 2,051.72
11910	Remote 3278/79 Workstation Software	Remote 3278/79 Workstation Software PCOX-3270-FT Utility PCOX-One	$ 182.99
11920	Novell Asynchronous Communications Server (ACS)	Novell Asynchronous Communications Server Novell ACS Package	$1,065.19

Font Cartridges

All fonts on the SMA contract print in both portrait and landscape modes.

The following are font cartridges and soft (downloadable) fonts available on the DTP/LAN contract. The Hewlett Packard reference number is listed in the Component/Characteristics column.

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
12000	Courier Font	Courier Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 92286L	$ 177.53
12010	Prestige Elite Font	Prestige Elite Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 92286M	$ 177.53
12020	Letter Gothic Font	Letter Gothic Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 92286N	$ 177.53
12030	Times Roman Proportional Font	Times Roman Proportional Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 92286P	$ 177.53
12040	Line Drawing Character Font	Line Drawing Character Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 92286R	$ 177.53
12050	Times Roman/Helvetica Downloadable Font	Times Roman/Helvetica Downloadable Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 33412 AD	$ 143.12
12060	Presentation Downloadable Font	Presentation Downloadable Font HP Optional Laserjet Font Cartridges HP Softfonts Software Reference: HP 33412 DA	$ 143.12

Documentation

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
13000	LAN Planning Packages	LAN Planning Packages TRN Telephone Twisted-Pair Media Guide	$ 12.45
13010	LAN Planning Packages	LAN Planning Packages TRN Introduction and Planning Guide	$ 22.94
13020	LAN Planning Packages	LAN Planning Packages TRN Installation Guide	$ 20.21
13030	LAN Planning Packages	LAN Planning Packages TRN Administrator's Guide	$ 9.07
13040	LAN Planning Packages	LAN Planning Packages TRN Problem Determination Kit	$ 73.20
13050	LAN Planning Packages	LAN Planning Packages LAN Cabling Systems Planning and Installation Guide	$ 16.93

DTP System - Maintenance

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20010	Macintosh SE System Unit	On-Site/In-Warranty Maintenance	$ 28.60
20011	Macintosh SE System Unit	On-Site/Out-of-Warranty Maintenance	$ 34.30
20012	Macintosh SE System Unit	Carry-in and Ship-In/Out-of-Warranty Maintenance	$ 23.25
20020	Macintosh II System Unit	On-Site/In-Warranty Maintenance	$ 39.80
20021	Macintosh II System Unit	On-Site/Out-of-Warranty Maintenance	$ 47.75
20022	Macintosh II System Unit	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 32.40
20100	Large Screen Monochrome Monitor and Adapters - Standard DTP System	On-Site/In-Warranty Maintenance	$ 14.00
20101	Large Screen Monochrome Monitor and Adapters - Standard DTP System	On-Site/Out-of-Warranty Maintenance	$ 16.75
20102	Large Screen Monochrome Monitor and Adapters - Standard DTP System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 11.40

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20110	Apple High-Resolution Monochrome Monitor and Adapter - Professional DTP System	On-site/In-Warranty Maintenance	$ 7.30
20111	Apple High-Resolution Monochrome Monitor and Adapter - Professional DTP System	On-Site/Out-of-Warranty Maintenance	$ 8.80
20112	Apple High-Resolution Monochrome Monitor and Adapter - Professional DTP System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 6.00
20120	Apple High-Resolution RGB Color Monitor and Adapter - Professional DTP System	On-Site/In-Warranty Maintenance	$ 11.55
20121	Apple High-Resolution RGB Color Monitor and Adapter - Professional DTP System	On-Site/Out-of-Warranty Maintenance	$ 13.85
20122	Apple High-Resolution RGB Color Monitor and Adapter - Professional DTP System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 9.40
20130	Large Screen Monochrome Monitor - Professional DTP System	On-site/In-Warranty Maintenance	$ 14.00

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20131	Large Screen Monochrome Monitor - Professional DTP System	On-Site/Out-of-Warranty Maintenance	$ 16.75
20132	Large Screen Monochrome Monitor - Professional DTP System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 11.35
20140	Large Screen Color Monitor - Professional DTP System	On-Site/In-Warranty Maintenance	$ 31.45
20141	Large Screen Color Monitor - Professional DTP System	On-Site/Out-of-Warranty Maintenance	$ 37.80
20142	Large Screen Color Monitor - Professional DTP System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 25.60
20200	Apple ImageWriter II	On-Site/In-Warranty Maintenance	$ 4.95
20201	Apple ImageWriter II	On-Site/Out-of-Warranty Maintenance	$ 5.90
20202	Apple ImageWriter II	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.90
20210	Apple LaserWriter II NT	On-Site/In-Warranty Maintenance	$ 35.60

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20211	Apple LaserWriter II NT	On-Site/Out-of-Warranty Maintenance	$ 42.70
20212	Apple LaserWriter II NT	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 29.00
20300	AST MAC86 Co-Processor Board for Macintosh SE	On-Site/In-Warranty Maintenance	$ 8.40
20301	AST MAC86 Co-Processor Board for Macintosh SE	On-Site/Out-of-Warranty Maintenance	$ 10.10
20302	AST MAC86 Co-Processor Board for Macintosh SE	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 6.80
20310	AST MAC86 Co-Processor Board for Macintosh II	On-Site/In-Warranty Maintenance	$ 8.40
20311	AST MAC86 Co-Processor Board for Macintosh II	On-Site/Out-of-Warranty Maintenance	$ 10.10
20312	AST MAC286 Co-Processor Board for Macintosh II	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 6.80
20400	Apple Macintosh II Internal 800KB 3.5" Disk Drive - MacTerminal 800K Drive	On-Site/In-Warranty Maintenance	$ 2.10

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20401	Apple Macintosh II Internal 800KB 3.5" Disk Drive - MacTerminal 800K Drive	On-Site/Out-of-Warranty Maintenance	$ 2.50
20402	Apple Macintosh II Internal 800KB 3.5" Disk Drive - MacTerminal 800K Drive	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 1.70
20500	Apple 5.25" Diskette File Transfer System for Macintosh SE	On-Site/In-Warranty Maintenance	$ 3.70
20501	Apple 5.25" Diskette File Transfer System for Macintosh SE	On-Site/Out-of-Warranty Maintenance	$ 4.45
20502	Apple 5.25" Diskette File Transfer System for Macintosh SE	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.00
20510	Apple 5.25" Diskette File Transfer System for Macintosh II	On-Site/In-Warranty Maintenance	$ 3.70
20511	Apple 5.25" Diskette File Transfer System for Macintosh II	On-Site/Out-of-Warranty Maintenance	$ 4.45
20512	Apple 5.25" Diskette File Transfer System for Macintosh II	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.00

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20600	Avatar's Mainframe SE Internal 3270 Emulation Board for Macintosh SE DTP-Compatible	On-Site/In-Warranty Maintenance	$ 6.00
20601	Avatar's Mainframe SE Internal 3270 Emulation Board for Macintosh SE DTP-Compatible	On-Site/Out-of-Warranty Maintenance	$ 7.20
20602	Avatar's Mainframe SE Internal 3270 Emulation Board for Macintosh SE DTP-Compatible	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 4.50
20610	MacMainframe DX External 3270 Emulation Board for Macintosh II DTP-Compatible	On-Site/In-Warranty Maintenance	$ 8.40
20611	MacMainframe DX External 3270 Emulation Board for Macintosh II DTP-Compatible	On-Site/Out-of-Warranty Maintenance	$ 10.00
20612	MacMainframe DX External 3270 Emulation Board for Macintosh II DTP-Compatible	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 6.80
20620	Tridata Netway 1000A 3270 Emulator-Network Gateway Attachment	On-Site/In-Warranty Maintenance	$ 23.00

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20621	Tridata Netway 1000A 3270 Emulator-Network Gateway Attachment	On-Site/Out-of-Warranty Maintenance	$ 27.55
20622	Tridata Netway 1000A 3270 Emulator-Network Gateway Attachment	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 18.70
20700	Farallon PhoneNET StarController Card with Software	On-Site/In-Warranty Maintenance	$ 4.25
20701	Farallon PhoneNET StarController Card with Software	On-Site/Out-of-Warranty Maintenance	$ 5.10
20702	Farallon PhoneNET StarController Card with Software	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.45
20710	Kinetics Fast Path Model 3 Network Bridge	On-Site/In-Warranty Maintenance	$ 17.50
20711	Kinetics Fast Path Model 3 Network Bridge	On-Site/Out-of-Warranty Maintenance	$ 21.00
20712	Kinetics Fast Path Model 3 Network Bridge	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 14.30

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
20720	TOPS Network Interface Card - PC Compatible Network Interface	On-Site/In-Warranty Maintenance	$ 0.55
20721	TOPS Network Interface Card - PC Compatible Network Interface	On-Site/Out-of-Warranty Maintenance	$ 0.65
20722	TOPS Network Interface Card - PC Compatible Network Interface	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 0.45
20900	Hewlett-Packard 7550A Plotter	On-Site/In-Warranty Maintenance	$ 27.35
20901	Hewlett-Packard 7550A Plotter	On-Site/Out-of-Warranty Maintenance	$ 32.80
20902	Hewlett-Packard 7550A Plotter	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 22.25

LAN System - Maintenance

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21000	IBM Personal System/2 Model 30 (Network Console)	On-Site/In-Warranty Maintenance	$ 11.90
21001	IBM Personal System/2 Model 30 (Network Console)	On-Site/Out-of-Warranty Maintenance	$ 14.25
21002	IBM Personal System/2 Model 30 (Network Console)	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 9.65
21010	IBM Personal System/2 Model 60 with 40MB Hard Disk (Network Bridge)	On-Site/In-Warranty Maintenance	$ 25.20
21011	IBM Personal System/2 Model 60 with 40MB Hard Disk (Network Bridge)	On-Site/Out-of-Warranty Maintenance	$ 30.25
21012	IBM Personal System/2 Model 60 with 40MB Hard Disk (Network Bridge)	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 20.50
21020	IBM Personal System/2 Model 60 with 70MB Hard Disk (Network Bridge)	On-Site/In-Warranty Maintenance	$ 37.10

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21021	IBM Personal System/2 Model 60 with 70MB Hard Disk (Network Bridge)	On-Site/Out-of-Warranty Maintenance	$ 44.55
21022	IBM Personal System/2 Model 60 with 70MB Hard Disk (Network Bridge)	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 30.25
21030	IBM Personal System/2 Model 80 with 70MB Hard Disk (File and Print Server System)	On-Site/In-Warranty Maintenance	$ 80.70
21031	IBM Personal System/2 Model 80 with 70MB Hard Disk (File and Print Server System)	On-Site/Out-of-Warranty Maintenance	$ 96.85
21032	IBM Personal System/2 Model 80 with 70MB Hard Disk (File and Print Server System)	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 65.75
21100	IBM PS/2 8503 Monochrome Monitor/Adapter	On-Site/In-Warranty Maintenance	$ 1.75
21101	IBM PS/2 8503 Monochrome Monitor/Adapter	On-Site/Out-of-Warranty Maintenance	$ 2.10
21102	IBM PS/2 8503 Monochrome Monitor/Adapter	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 1.40

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21110	IBM PS/2 8513 12" Color Display Monitor/Adapter	On-Site/In-Warranty Maintenance	$ 4.80
21111	IBM PS/2 8513 12" Color Display Monitor/Adapter	On-Site/Out-of-Warranty Maintenance	$ 5.75
21112	IBM PS/2 8513 12" Color Display Monitor/Adapter	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.90
21200	Hewlett-Packard Laserjet Series II Printer	On-Site/In-Warranty Maintenance	$ 23.00
21201	Hewlett-Packard Laserjet Series II Printer	On-Site/Out-of-Warranty Maintenance	$ 27.60
21202	Hewlett-Packard Laserjet Series II Printer	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 18.75
21210	Hewlett-Packard Laserjet 500 Plus	On-Site/In-Warranty Maintenance	$ 38.45
21211	Hewlett-Packard Laserjet 500 Plus	On-Site/Out-of-Warranty Maintenance	$ 46.20
21212	Hewlett-Packard Laserjet 500 Plus	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 31.35

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21310	IBM PS/2 80386 Memory Expansion Option - Adapter for File and Print Server System	On-Site/In-Warranty Maintenance	$ 11.20
21311	IBM PS/2 80386 Memory Expansion Option - Adapter for File and Print Server System	On-Site/Out-of-Warranty Maintenance	$ 13.40
21312	IBM PS/2 80386 Memory Expansion Option - Adapter for File and Print Server System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 9.10
21320	IBM PS/2 80386 Memory Expansion Kit for File and Print Server System	On-Site/In-Warranty Maintenance	$ 9.10
21321	IBM PS/2 80386 Memory Expansion Kit for File and Print Server System	On-Site/Out-of-Warranty Maintenance	$ 10.90
21322	IBM PS/2 80386 Memory Expansion Kit for File and Print Server System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 7.40
21330	IBM PS/2 Additional 115 Hard Disk Drive for File and Print Server System	On-Site/In-Warranty Maintenance	$ 24.50

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21331	IBM PS/2 Additional 115 Hard Disk Drive for File and Print Server System	On-Site/Out-of-Warranty Maintenance	$ 29.40
21332	IBM PS/2 Additional 115 Hard Disk Drive for File and Print Server System	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 19.95
21400	Network Interconnect Card and Cables - IBM Token-Ring Network Adapter II	On-Site/In-Warranty Maintenance	$ 2.05
21401	Network Interconnect Card and Cables - IBM Token-Ring Network Adapter II	On-Site/Out-of-Warranty Maintenance	$ 2.50
21402	Network Interconnect Card and Cables - IBM Token-Ring Network Adapter II	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 1.70
21500	IBM 8228 Multistation Access Unit (MAU) - Cabling and Concentrator Hardware	On-Site/In-Warranty Maintenance	$ 4.60
21501	IBM 8228 Multistation Access Unit (MAU) - Cabling and Concentrator Hardware	On-Site/Out-of-Warranty Maintenance	$ 5.55

Contract Line Item Number	Item Description	Component/Characteristics	Monthly Fee
21502	IBM 8228 Multistation Access Unit (MAU) - Cabling and Concentrator Hardware	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 3.75
21700	Network Bridge Interconnect Cards - IBM Token-Ring Network Adapter/A	On-Site/In-Warranty Maintenance	$ 5.60
21701	Network Bridge Interconnect Cards - IBM Token-Ring Network Adapter/A	On-Site/Out-of-Warranty Maintenance	$ 6.70
21702	Network Bridge Interconnect Cards - IBM Token-Ring Network Adapter/A	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 4.55
21800	Network Console Interconnect Cards - IBM Token-Ring Network PC Adapter II	On-Site/In-Warranty Maintenance	$ 2.05
21801	Network Console Interconnect Cards - IBM Token-Ring Network PC Adapter II	On-Site/Out-of-Warranty Maintenance	$ 2.50
21802	Network Console Interconnect Cards - IBM Token-Ring Network PC Adapter II	Carry-in and Ship-in/Out-of-Warranty Maintenance	$ 1.70

DTP System - Software

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
30010	Desktop Publishing Software	Aldus Pagemaker 3.0	$ 429.00
30020	Basic Word Processing Package	Claris MacWrite	$ 92.86
30030	Full-Featured Word Processing Package	Microsoft Word	$ 260.02
30040	Outline Processing Package	Living Videotext's More	$ 185.73
30050	Graphics-Oriented Outline Processing Package	Meta Software's Design	$ 191.19
30060	Terminal Emulation Program	Apple MacTerminal	$ 92.86
30070	Object-Oriented Line Art Graphics Package	Claris MacDraw	$ 144.21
30080	Bit-Map Oriented Graphics Art Package	Claris MacPaint	$ 92.86

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
30090	Object-Oriented PostScript Compatible Graphic	Cricket Software's Cricket Draw	$ 244.72
30100	Integrated Spreadsheet Software	Microsoft Excel	$ 260.02
30110	Business Graphics Software	Cricket Software's Cricket Graph	$ 169.34

LAN System - Software

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
31010	Standard	Base Wordstar Professional	$ 288.35
31011	Standard	Per Node Wordstar Professional	$ 80.85
31020	Displaywriter Interface	Base DisplayWrite 4	$ 406.41
31021	Displaywriter Interface	Per Node DisplayWrite 4	$ 406.41
31030	Wang-like Interface	Base MultiMate Advantage	$ 756.01
31031	Wang-like Interface	Per Node MultiMate Advantage	$ 178.08
31040	Supplementary	Base WordPerfect 4.2	$ 250.18
31041	Supplementary	Per Node WordPerfect 4.2	$ 75.38
31050	Lexitron-like Interface	Base Lexitype Plus II	$ 633.65

Contract Line Item Number	Item Description	Component/Characteristics	Purchase Price
31051	Lexitron-like Interface	Per Node Lexitype Plus II	$ 163.88
31060	Spreadsheet and Graphics	Base Lotus 1-2-3 2.01	$ 344.14
31061	Spreadsheet and Graphics	Per Node Lotus 1-2-3 2.01	$ 344.14
31070	Data Base Management System	Base dBase III Plus	$ 585.58
31071	Data Base Management System	Per Node dBase III Plus (Includes 5 Nodes)	$ 737.44
31080	Mainframe 4th Generation Database	PC/Focus	$ 696.47
31090	Network Management Audit	LANServices LANtrail	$ 324.47
31100	Network Monitoring and Diagnosis	IBM LAN Manager Version 1.0	$ 1,579.76

DTP/LAN - Training

Contract Line Item Number	Item Description	x = 0 SMA-NC	x = 1 EPA On-Site	x = 2 EPA Off-Site	x = 3 Travel & Subsistence
4001x	DTP LAN Administrator Course	$2,017.02	$815.27	$2,978.42	$ 819.38
4002x	NDPD and Local Support Personnel Course	$2,593.86	$1,392.11	$4,035.96	$1,092.50
4003x	DTP Systems for the Common User Course	$ 815.27	$ 407.63	$ 647.98	$ 546.25
4004x	LAN Administrator Course	$2,593.86	$1,392.11	$4,035.96	$1,092.50
4005x	NDPD Local and Support Personnel Course	$2,305.44	$1,103.69	$3,266.84	$ 819.38
4006x	Basic LAN User Course	$ 815.27	$ 407.63	$ 647.98	$ 546.25
4007x	Advanced LAN User Course	$ 815.27	$ 815.27	$1,295.97	$ 546.25
4008x	LAN Executive Management Overview Course	$ 778.21	$ 778.21	$1,351.77	$ 546.25
4009x	LAN Application Developers Course	$ 815.27	$ 815.27	$1,416.14	$ 546.25
4010x	National Program Managers Course	$ 815.27	$ 815.27	$1,416.14	$ 546.25

LAN Network Support

Contract Line Item Number	Item Description	Component/Characteristics	Price/Hour
50010	Senior LAN Analyst	Senior LAN Analyst	$ 146.40
50020	LAN Analyst	LAN Analyst	$ 72.98
50030	Senior LAN Field Engineer	Senior LAN Field Engineer	$ 61.73
50040	LAN Field Engineer	LAN Field Engineer	$ 37.04
50050	Travel and Subsistence	Prices for Travel and Subsistence are fixed based on the Joint Travel Regulations (JTR) plus a 14% handling charge.	

NOTE: Each delivery order will have Statement of Work attached describing the LAN support required.

Alphabetical Index

DESCRIPTION	CLIN	PAGE
3.5" Disk Drive, Apple Macintosh II Internal 800KB	10400	44
5.25" Diskette File Transfer System for Professional DTP System, Apple	10510	13, 45
5.25" Diskette File Transfer System for Standard DTP System, Apple	10500	13, 44
5.25" Drive, Apple PC	10300 10310 10500 10510	13, 44, 45
3270 Emulation Board for Professional DTP System, MacMainFrame DX External	10610	45
3270 Emulation Board for Standard DTP System, Avatar Technologies, Inc., Mainframe SE Internal 3270	10600	45
3270 Emulator, Tridata Netway 1000A	10620	45
3278/79 Workstation Software, Remote	11910	30, 51
6157 Tape Backup System, IBM	11030	18, 47
A		
Aldus Pagemaker 3.0, DTP Software	30010	32, 68
Apple 5.25" Diskette File Transfer System for Professional DTP System	10510	13, 45
Apple 5.25" Diskette File Transfer System for Standard DTP System	10500	13, 44
Apple File Exchange Software, Macintosh II	10510	13, 45
Apple File Exchange Software, Macintosh SE	10500	13, 44
Apple High-Resolution Monochrome Monitor for Professional DTP System	10110	8, 43
Apple High-Resolution RGB Color Monitor for Professional DTP System	10120	9, 43
Apple ImageWriter II, DTP Dot Matrix Printer	10200	11, 44
Apple LaserWriter II NT, DTP Laser Printer	10211	12, 44
Apple Macintosh II Internal 800KB 3.5" Disk Drive	10400	44
Apple Macintosh II with 40MB Hard Disk, Professional DTP System	10020	7, 43
Apple Macintosh SE with 20MB Hard Disk, Standard DTP System	10010	6, 43
Apple MacTerminal, Terminal Emulation Program, DTP Software	30060	34, 68
Apple PC 5.25" Drive	10300 10310 10500 10510	13, 44, 45
AppleTalk	10200	11, 44
Ashton-Tate, dBase III Plus, Data Base Management System, Base, LAN System Software	31070	41, 71
Ashton-Tate, dBase III Plus, Data Base Management System, Per Node, LAN System Software	31071	41, 71
Ashton-Tate, MultiMate Advantage, Wang-like Interface, Base, LAN System Software	31030	39, 70
Ashton-Tate, MultiMate Advantage, Wang-like Interface, Per Node, LAN System Software	31031	39, 70
AST MAC86 Co-Processor Board for Macintosh II	10310	44
AST MAC86 Co-Processor Board for Macintosh SE	10300	44
Asynchronous Communications Server (ACS), Novell	11920	31, 51

DESCRIPTION	CLIN	PAGE
Avatar Technologies, Inc., Mainframe 3270 SE Internal Emulation Board for Standard DTP System	10600	45
C		
Cable, 8' PC-to-Data Connector Attachment	11410	49
Cable, 8' PC-to-Modular Connector Attachment	11420	49
Cable, 8' System Patch	11600	50
Cable, 30' System Patch	11610	50
Cable, 75' System Patch	11620	50
Cable, 150' System Patch	11630	50
Cable, 4-meter Type 3 Media Jumper	11640	50
Claris MacDraw, Object-Oriented Line Art Graphics Package, DTP Software	30070	35, 68
Claris MacPaint, Bit-Map Oriented Graphics Art Package, DTP Software	30080	35, 68
Claris MacWrite, Basic Word Processing Package, DTP Software	30020	32, 68
Color Display Monitor, IBM PS/2 8513 12"	11110	20, 48
Color Monitor for Professional DTP System, Apple, High-Resolution RGB	10120	9, 43
Color Monitor for Professional DTP System, SuperMac Spectrum Monitor, Large Screen	10140	10, 44
Communications Server, CXI PCOX SNA	11900	29, 51
Component Housing, LAN Multi-Station Access Unit	11530	25, 49
Co-Processor for Macintosh II, AST MAC86	10310	44
Co-Processor for Macintosh SE, AST MAC86	10300	44
Cricket Draw, Object-Oriented PostScript Compatible Graphics, DTP Software, Cricket Software	30090	36, 69
Cricket Graph, Business Graphics Software, DTP Software, Cricket Software	30110	37, 69
Cricket Software's Cricket Draw, Object-Oriented PostScript Compatible Graphics, DTP Software	30090	36, 69
Cricket Software's Cricket Graph, Business Graphics Software, DTP Software	30110	37, 69
CXI PCOX SNA Communications Server	11900	29, 51
D		
Data Connector, Standard Wall	11650	26, 50
Data Connector, Type 3 Media Wall	11660	27, 50
Design, Graphics-Oriented Outline Processing Package, DTP Software, Meta Software	30050	34, 68
dBase III Plus, Data Base Management System, Base, LAN System Software, Ashton-Tate	31070	41, 71
dBase III Plus, Data Base Management System, Per Node, LAN System Software, Ashton-Tate	31071	41, 71
DisplayWrite 4, Displaywriter Interface, Base, LAN System Software	31020	38, 70
DisplayWrite 4, Displaywriter Interface, Per Node, LAN System Software	31021	38, 70
Disk Drive, Apple Macintosh II Internal 800KB, 3.5"	10400	44

DESCRIPTION	CLIN	PAGE
Disk Drive, File and Print Server System, IBM PS/2 Additional 115	11330	48
Distribution Panel, LAN Standard	11520	25, 49
Distribution Rack, LAN Standard 72" X 19"	11510	25, 49
DOS 3.30 Program Package, IBM	11000 11010 11020 11030	16, 17, 18, 47
Dot Matrix Printer, Apple ImageWriter II, DTP	10200	11, 44
Drive, Apple PC 5.25"	10300 10310 10500 10510	13, 44, 45
Drive Card, Macintosh II PC	10510	13, 45
Drive Card, Macintosh SE PC	10500	13, 44
DTP Dot Matrix Printer, Apple ImageWriter II	10200	11, 44
DTP Laser Printer, Apple LaserWriter II NT	10211	12, 44
DTP Software, Aldus Pagemaker 3.0	30010	32, 68
DTP Software, Apple MacTerminal, Terminal Emulation Program	30060	34, 68
DTP Software, Claris MacDraw, Object-Oriented Line Art Graphics Package	30070	35, 68
DTP Software, Claris MacPaint, Bit-Map Oriented Graphics Art Package	30080	35, 68
DTP Software, Claris MacWrite, Basic Word Processing Package	30020	32, 68
DTP Software, Cricket Software's Cricket Draw, Object-Oriented Post-Script Compatible Graphic Package	30090	36, 69
DTP Software, Cricket Software's Cricket Graph, Business Graphics Software	30110	37, 69
DTP Software, Living Videotext's More, Outline Processing Package	30040	33, 68
DTP Software, Meta Software's Design, Graphics-Oriented Outline Processing Package	30050	34, 68
DTP Software, Microsoft Excel, Integrated Spreadsheet Software	30100	36, 69
DTP Software, Microsoft Word, Full-Featured Word Processing Package	30030	33, 68
E		
Excel, Integrated Spreadsheet Software, DTP Software, Microsoft	30100	36, 69
F		
Farallon , PhoneNET PLUS	10010 10020 10200 10211 10620 10720	6, 7, 11, 12, 15, 43, 44, 45, 46
Farallon, PhoneNET StarController	10700	14, 45
File and Print Server System, IBM PS/2 Model 80 w/70MB Hard Disk	11030	18, 47
File and Print Server System Software, Novell PS/2 Advanced NetWare 2.11	11301	22, 48
File Exchange Software, Macintosh SE, Apple	10500	13, 44
File Exchange Software, Macintosh II, Apple	10510	13, 45
File Transfer System for Professional DTP System, Apple 5.25" Diskette	10510	13, 45
File Transfer System for Standard DTP System, Apple 5.25" Diskette	10500	13, 44

DESCRIPTION	CLIN	PAGE
Font, Courier	12000	52
Font, Letter Gothic	12020	52
Font, Line Drawing Character	12040	52
Font, Presentation Downloadable	12060	52
Font, Prestige Elite	12010	52
Font, Times Roman/Helvetica Downloadable	12050	52
Font, Times Roman Proportional	12030	52
G		
Grounding Kit, IBM Rack	11520	25, 49
Guide, LAN Cabling Systems Planning and Installation, LAN Planning Package	13050	53
Guide, TRN Administrator's, LAN Planning Package	13030	53
Guide, TRN Installation, LAN Planning Package	13020	53
Guide, TRN Introduction and Planning, LAN Planning Package	13010	53
Guide, TRN Problem Determination Kit, LAN Planning Package	13040	53
Guide, TRN Telephone Twisted-Pair Media, LAN Planning Package	13000	53
H		
Hewlett-Packard 7550A Plotter	10900	46
Hewlett-Packard Laserjet 500 Plus, High Performance Laser Printer	11210	48
Hewlett-Packard Laserjet Series II, Laser Printer, Standard	11200	21, 48
High-Resolution Monochrome Monitor for Professional DTP System, Apple	10110	8, 43
High-Resolution RGB Color Monitor for Professional DTP System, Apple	10120	9, 43
I		
IBM 8228 Multistation Access Unit (MAU)	11500	24, 49
IBM 6157 Tape Backup System	11030	18, 47
IBM Access Unit Housing	11530	25, 49
IBM DOS 3.30 Program Package	11000 11010 11020 11030	16, 17, 18, 47
IBM, LAN Manager Version 1.0, Network Monitoring and Diagnosis, LAN System Software	31100	42, 71
IBM PS/2 8503 Monochrome Monitor	11100	19, 47
IBM PS/2 8513 12" Color Display Monitor	11110	20, 48
IBM PS/2 80386 Memory Expansion Kit, File and Print Server System	11320	48
IBM PS/2 80386 Memory Expansion Option, File and Print Server System	11310	48
IBM PS/2 Additional 115 Hard Disk Drive, File and Print Server System	11330	48
IBM PS/2 Model 30 Network Console Workstation	11000	16, 47
IBM PS/2 Model 60 w/ 40MB Hard Disk, Network Bridge Processor	11010	17, 47
IBM PS/2 Model 60 w/ 70MB Hard Disk, Network Bridge Processor	11020	17, 47
IBM PS/2 Model 80 w/ 70MB Hard Disk, File and Print Server System	11030	18, 47
IBM Rack Grounding Kit	11520	25, 49
IBM Token-Ring Network Adapter II, Network Interconnect Card	11400	23, 49

DESCRIPTION	CLIN	PAGE
IBM Token-Ring Network Adapter/A, Network Bridge Interconnect Card	11700	28, 50
IBM Token-Ring Network PC Adapter II, Network Console Interconnect Card	11800	51
ImageWriter II, DTP Dot Matrix Printer, Apple	10200	11, 44
Information Builders, Inc., PC/Focus, Mainframe 4th Generation Data Base, LAN System Software	31080	41, 71
J		
Jumper Cable, 4-meter Type 3 Media	11640	26, 50
K		
Kinetics Fast Path Model 3 Network Bridge	10710	45
L		
LAN Cabling Systems Planning and Installation Guide, LAN Planning Package	13050	53
LAN Manager Version 1.0, Network Monitoring and Diagnosis, LAN System Software, IBM	31100	42, 71
LAN Multistation Access Unit Component Housing	11530	25, 49
LAN Network Support	500xx	73
LAN Planning Package, LAN Cabling Systems Planning and Installation Guide	13050	53
LAN Planning Package, TRN Administrator's Guide	13030	53
LAN Planning Package, TRN Installation Guide	13020	53
LAN Planning Package, TRN Introduction and Planning Guide	13010	53
LAN Planning Package, TRN Problem Determination Kit	12040	53
LAN Planning Package, TRN Telephone Twisted-Pair Media Guide	13000	53
LANServices, LANtrail, Network Management Audit, LAN System Software	31090	42, 71
LAN Standard 72' X 19" Distribution Rack	11510	25, 49
LAN Standard Distribution Panel	11520	25, 49
LAN Support Program Package	11030 11400 11700	18, 23, 28, 47, 49, 50
LAN System Software, dBase III Plus, Ashton-Tate, Data Base Management System, Base	31070	41, 71
LAN System Software, dBase III Plus, Ashton-Tate, Data Base Management System, Per Node	31071	41, 71
LAN System Software, DisplayWrite 4, Displaywriter Interface, Base	31020	38, 70
LAN System Software, DisplayWrite 4, Displaywriter Interface, Per Node	31021	38, 70
LAN System Software, PC/Focus, Information Builders, Inc., Mainframe 4th Generation Data Base	31080	41, 71
LAN System Software, LAN Manager Version 1.0, IBM, Network Monitoring and Diagnosis	31100	42, 71
LAN System Software, LANtrail, LANServices, Network Management Audit	31090	42, 71
LAN System Software, Lexitype, Lexitron-like Interface, Base	31050	40, 70
LAN System Software, Lexitype, Lexitron-like Interface, Per Node	31051	40, 71

DESCRIPTION	CLIN	PAGE
LAN System Software, Lotus 1-2-3 2.01, Lotus Development Corporation, Spreadsheet and Graphics, Base	31060	40, 71
LAN System Software, Lotus 1-2-3 2.01, Lotus Development Corporation, Spreadsheet and Graphics, Per Node	31061	71
LAN System Software, MultiMate Advantage, Ashton-Tate, Wang-like Interface, Base	31030	39, 70
LAN System Software, MultiMate Advantage, Ashton-Tate, Wang-like Interface, Per Node	31031	39, 70
LAN System Software, WordPerfect 4.2, WordPerfect Corp., Supplementary, Base	31040	39, 70
LAN System Software, WordPerfect 4.2, WordPerfect Corp., Supplementary, Per Node	31041	39, 70
LAN System Software, Wordstar Professional, Standard, Base	31010	38, 70
LAN System Software, Wordstar Professional, Standard, Per Node	31011	38, 70
LAN Wiring Test Plug	11670	50
LANtrail, Network Management Audit, LAN System Software, LANServices	31090	42, 71
Large Screen Color Monitor for Professional DTP System, SuperMac Spectrum Monitor	10140	10, 44
Large Screen Monochrome Monitor for Standard DTP System, SuperMac SuperView	10100	43
Large Screen Monochrome Monitor for Professional DTP System, SuperMac Graphix Monitor	10130	43
Laser Printer, High Performance, Hewlett-Packard Laserjet 500 Plus	11210	48
Laser Printer, Standard, Hewlett-Packard Laserjet Series II	11200	21, 48
LaserWriter II NT, DTP Laser Printer, Apple	10211	12, 44
Living Videotext's More, Outline Processing Package, DTP Software	30040	33, 68
Lexitype, Lexitron-like Interface, Base, LAN System Software	31050	40, 70
Lexitype, Lexitron-like Interface, Per Node, LAN System Software	31051	40, 71
Lotus 1-2-3 2.01, Spreadsheet and Graphics, Base, LAN System Software, Lotus Development Corp.	31060	40, 71
Lotus 1-2-3 2.01, Spreadsheet and Graphics, Per Node, LAN System Software, Lotus Development Corp.	31061	71
Lotus Development Corp., Lotus 1-2-3 2.01, Spreadsheet and Graphics, Base, LAN System Software	31060	40, 71
Lotus Development Corp., Lotus 1-2-3 2.01, Spreadsheet and Graphics, Per Node, LAN System Software	31061	71
M		
MAC86 Co-Processor for Macintosh II, AST	10310	13, 44
MAC86 Co-Processor for Macintosh SE, AST	10300	13, 44
Macintosh II PC Drive Card	10510	13, 45
Macintosh II with 40MB Hard Disk, Professional DTP System, Apple	10020	7, 43
Macintosh SE PC Drive Card	10500	13, 44
Macintosh SE with 20MB Hard Disk, Standard DTP System, Apple	10010	6, 43
MacDraw, Object-Oriented Line Art Graphics Package, Claris	30070	35, 68

DESCRIPTION	CLIN	PAGE
MacMainFrame DX External 3270 Emulation Board for Professional DTP System	10610	45
MacMainFrame DX (external)	10610	45
MacMainFrame SE (internal), Avatar Technologies, Inc.	10600	45
MacPaint, Bit-Map Oriented Graphics Art Package, DTP Software, Claris	30080	35, 68
MacTerminal, Terminal Emulation Program, DTP Software, Apple	30060	34, 68
MacWrite, Basic Word Processing Package, DTP Software, Claris	30020	32, 68
Mainframe SE Internal 3270 Emulation Board for Standard DTP System, Avatar	10600	45
Maintenance, DTP Hardware	20xxx	54-61
Maintenance, LAN Hardware	21xxx	62-67
Memory Expansion Kit, File and Print Server System, IBM PS/2 80386	11320	48
Memory Expansion Option, File and Print Server System, IBM PS/2 80386	11310	48
Meta Software's Design, Graphics-Oriented Outline Processing Package, DTP Software	30050	34, 68
Microsoft Excel, Integrated Spreadsheet Software, DTP Software	30100	36, 69
Microsoft Word, Full-Featured Word Processing Package, DTP Software	30030	33, 68
Monochrome Monitor, IBM PS/2 8503	11100	19, 47
Monochrome Monitor for Professional DTP System, Apple, High-Resolution	10110	8, 43
Monochrome Monitor for Professional DTP System, SuperMac Graphix Monitor, Large Screen	10130	43
Monochrome Monitor for Standard DTP System, SuperMac Superview, Large Screen	10100	43
More, Outline Processing Package, DTP Software, Living Videotext	30040	33, 68
MultiMate Advantage, Wang-like Interface, Base, LAN System Software, Ashton-Tate	31030	39, 70
MultiMate Advantage, Wang-like Interface, Per Node, LAN System Software, Ashton-Tate	31031	39, 70
Multistation Access Unit, IBM 8228	11500	24, 49
Multistation Access Unit Component Housing, LAN	11530	25, 49

N

Netway 1000A 3270 Emulator, Tridata	10620	45
Network Adapter/A, Token-Ring, IBM	11030	18, 47
Network Bridge, Kinetics Fast Path Model 3	10710	45
Network Bridge Interconnect Card, IBM Token-Ring Network Adapter/A	11700	28, 50
Network Bridge Processor, IBM PS/2 Model 60 w/40MB Hard Disk	11010	17, 47
Network Bridge Processor, IBM PS/2 Model 60 w/70MB Hard Disk	11020	17, 47
Network Bridge Program	11710	51
Network Console Interconnect Card, IBM Token-Ring Network PC Adapter II	11800	51
Network Console Workstation, IBM PS/2 Model 30	11000	16, 47
Network Interconnect Card, IBM Token-Ring Network Adapter II	11400	23, 49

DESCRIPTION	CLIN	PAGE
Network Interface Card, PC Compatible Network Interface, TOPS	10720	15, 46
Network Operating System Software, Novell PS/2 Advanced NetWare 2.11	11301	22, 48
Network Support	10800	46
Novell Asynchronous Communications Server (ACS)	11920	31, 51
Novell PS/2 Advanced NetWare 2.11, Network Operating System Software, File and Print Server System Software	11301	22, 48
P		
Pagemaker 3.0, DTP Software, Aldus	30010	32, 68
PC Compatible Network Interface, TOPS Network Interface Card	10720	15, 46
PC Drive Card, Macintosh II	10510	13, 45
PC Drive Card, Macintosh SE	10500	13, 44
PC/Focus, Mainframe 4th Generation Data Base, LAN System Software, Information Builders, Inc.	31080	41, 71
PCOX-3270-FT Utility	11900 11910	29, 30, 51
PCOX-GW-3270 SDLC	11900	29, 51
PCOX-One	11910	30, 51
PCOX-One LAN Version	11900	29, 51
PCOX SNA Communications Server, CXI	11900	29, 51
PhoneNET PLUS, Farallon Computing	10010 10020 10200 10211 10620 10720	6, 7, 11, 12, 15, 43, 44, 45, 46
PhoneNET StarController, Farallon	10700	14, 45
Plotter, Hewlett-Packard 7550A	10900	46
Plug, LAN Wiring Test	11670	50
Printer, Apple ImageWriter II, DTP Dot Matrix	10200	11, 44
Printer, Apple LaserWriter II NT, DTP Laser	10211	12, 44
Printer, Hewlett-Packard Laserjet 500 Plus, High Performance, Laser	11210	48
Printer, Hewlett-Packard Laserjet Series II, Laser	11200	21, 48
Professional DTP System, Apple, Macintosh II with 40MB Hard Disk	10020	7, 43
R		
Remote 3278/79 Workstation Software	11910	30, 51
S		
SNA Communications Server, CXI PCOX	11900	29, 51
Standard DTP System, Apple, Macintosh SE with 20MB Hard Disk	10010	6, 43
Standard Wall Data Connector	11650	26, 50
StarController, Farallon PhoneNET	10700	14, 45
SuperMac Graphix Monitor, Large Screen Monochrome Monitor for Professional DTP System	10130	43
SuperMac Spectrum Monitor, Large Screen Color Monitor for Professional DTP System	10140	10, 44
SuperMac SuperView, Large Screen Monochrome Monitor for Standard DTP System	10100	43
SY-TOS Tape Utilities Program	11030	18, 47

DESCRIPTION	CLIN	PAGE
T		
Tape Backup System, IBM 6157	11030	18, 47
Tape Utilities Program, SY-TOS	11030	18, 47
Technical Support, LAN Network Support	500xx	73
Test Plug, LAN Wiring	11670	50
Token-Ring Network Adapter II, Network Interconnect Card, IBM	11400	23, 49
Token-Ring Network Adapter/A, IBM	11030 11700	18, 28, 47, 50
Token-Ring Network PC Adapter II, Network Console Interconnect Card, IBM	11800	51
TOPS for Macintosh	10010 10020	6, 7, 43
TOPS for the PC	10720	15, 46
TOPS NetPrint for the PC	10720	15, 46
TOPS Network Interface Card, PC Compatible Network Interface	10720	15, 46
Training	40xxx	72
Tridata Netway 1000A 3270 Emulator	10620	45
TRN Administrator's Guide, LAN Planning Package	13030	53
TRN Installation Guide, LAN Planning Package	13020	53
TRN Introduction and Planning Guide, LAN Planning Package	13010	53
TRN Problem Determination Kit, LAN Planning Package	13040	53
TRN Telephone Twisted-Pair Media Guide, LAN Planning Package	13000	53
Type 3 Media Wall Data Connector	11660	27, 50

DESCRIPTION	CLIN	PAGE
W		
Word, Full-Featured Word Processing Package, DTP Software, Microsoft	30030	33, 68
WordPerfect 4.2, Supplementary, Base, LAN System Software, WordPerfect Corp.	31040	39, 70
WordPerfect 4.2, Supplementary, Per Node LAN System Software, WordPerfect Corp.	31041	39, 70
WordPerfect Corp., WordPerfect 4.2, Supplementary, Base, LAN System Software	31040	39, 70
WordPerfect Corp., WordPerfect 4.2, Supplementary, Per Node, LAN System Software	31041	39, 70
Wordstar Professional, Standard, Base, LAN System Software	31010	38, 70
Wordstar Professional, Standard, Per Node, LAN System Software	31011	38, 70

About
Systems Management American Corporation

Systems Management American (SMA) Corporation was founded in 1970. Then known as Systems Management Associates, this fledgling company provided financial and management consulting services to minority and small businesses. Within two years, SMA had expanded into data processing services and had been certified under the Small Business Administration's 8(a) program to participate in federal minority set-aside contracting opportunities.

In 1972 SMA was the first minority firm to obtain a contract for software services from the National Aeronautics and Space Administration (NASA). SMA expanded again in 1973, opening its Micrographics Department, and hit $1 million in annual sales for the first time. It was in 1975 that SMA landed a major contract with the Department of Health, Education and Welfare for the processing of national student loan data. Sales doubled in 1976 with the increased demand for data processing services. An in-house Computer Operations Center was established.

In 1978, SMA negotiated the first hardware procurement contract ever let by the Federal Government to a minority-owned firm at Fort Eustis. These and similar efforts led to the Navy's selection of SMA as the prime contractor for the Shipboard Non-Tactical ADP Program II (SNAP II) contract. SNAP II is a program initiated by the Chief of Naval Operations to outfit 600 naval ships and submarines with computer systems for the handling of shipboard administrative information needs.

As a result of SNAP II, SMA formed the Systems Integration Division, hired more than 100 new employees, constructed a 35,000 square foot manufacturing plant, and moved to downtown Norfolk. The company was renamed Systems Management American Corporation.

SMA has broadened its geographic base from the Mid-Atlantic region of the U.S. to span both coasts, Alaska and Hawaii. We have also gained a worldwide scope, with installation teams traveling to such exotic sites as Manema, Baharain, Sasebo and Yokosuka, Japan, Subic Bay, Republic of the Philippines, and Holyloch, Scotland.

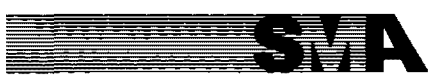
Today, SMA's Norfolk headquarters is home to two major command, control, and communications programs for the Federal Aviation Administration: the Maintenance Control Center Processor/ Maintenance Monitor Console Program; and, the National Radio Communications System, High Frequency Program. Also based in Norfolk are a new effort for the U.S. Air Force for field-deployable microcomputers and our continuing work for the EEOC.

Since 1985, SMA's Space Division, Inc. in Houston, Texas has teamed with Rockwell International Corporation to manage space shuttle operations at NASA's Johnson Space Center in Houston.

SMA's Micro Systems Division in the Research Triangle Park area of North Carolina opened in 1987. This division is prime contractor to the Environmental Protection Agency (EPA) and the Department of Health and Human Services (HHS) on two major contract efforts. For the EPA, SMA is installing microcomputer-based local area networks and desktop publishing systems. The HHS contract requires SMA to integrate, install and support approximately 1,000 computer workstations at agency offices nationwide. Optical imaging contracts for the Department of Education, the Naval Facilities Engineering Command, and others are also based here.

In Arlington, Virginia SMA's office supports critical government liaison and marketing efforts, as well as providing direct program support for Department of Education, HHS, FAA, and other current contracts. Our long-standing San Diego, California office serves as a base for all West Coast marketing activity and houses a variety of data entry operations.

Since its inception in 1970, SMA has grown from a one-room consulting operation to a national firm with nearly 600 employees and $60 million in annual sales. As the eighth largest black-owned company in the nation, SMA continues to be considered one of the most successful.



Systems Management American Corporation

Trademark Information

(in order of appearance)

Apple is a trademark of Apple Computer, Inc.
Macintosh is a trademark of Apple Computer, Inc.
PhoneNET Plus is a registered trademark of Farallon Computing, Inc.
TOPS is a registered trademark of Sun Microsystems, Inc.
PhoneNET System is a trademark of Farallon Computing, Inc.
AppleTalk is a registered trademark of Apple Computer, Inc.
UNIX is a registered trademark of AT&T
MS-DOS is a trademark of Microsoft Corporation
AppleColor is a trademark of Apple Computer, Inc.
Spectrum is a trademark of SuperMac Technology
ImageWriter is a registered trademark of Apple Computer, Inc.
PostScript is a trademark of Adobe Systems, Inc.
StarController is a trademark of Farallon Computing, Inc.
StarCommand is a trademark of Farallon Computing, Inc.
PhoneNET Manager is a trademark of Farallon Computing, Inc.
TOPS FlashCard is a trademark of Sun Microsystems, Inc.
TOPS NetPrint is a trademark of Sun Microsystems, Inc.
IBM is a registered trademark of International Business Machines Corporation
Proprinter is a trademark of International Business Machines Corporation
Personal System/2 is a trademark of International Business Machines Corporation
Micro Channel is a trademark of International Business Machines Corporation
Novell is a registered trademark of Novell, Inc.
NetWare is a registered trademark of Novell, Inc.
Laserjet is a trademark of Hewlett-Packard Co.
Ethernet is a trademark of Xerox Corporation
PCOX is a trademark of Novell, Inc.
PageMaker is a trademark of Aldus Corporation
Claris is a trademark of Claris
MacWrite is a registered trademark of Claris
Microsoft is a registered trademark of the Microsoft Corporation
Microsoft Word is a trademark of the Microsoft Corporation
More is a trademark of Living VideoText
Design is a trademark of Meta Software
MacTerminal is a trademark of Apple Computer, Inc.
MacDraw is a registered trademark of Claris
MacPaint is a registered trademark of Claris
Excel is a trademark of the Microsoft Corporation
Ashton-Tate is a registered trademark of Ashton-Tate
Advantage is a trademark of Ashton-Tate
WordPerfect is a registered trademark of WordPerfect Corporation
Lotus 1-2-3 is a trademark of the Lotus Development Corporation
dBase II Plus is a trademark of Ashton-Tate
PC/Focus is a trademark of International Business Machines Corporation
LANtrail is a trademark of LAN Services

Other computer and software names identified by ® or ™ are registered trademarks and/or trademarks of their respective manufacturers.