- A powerful desktop computer, expandable to a five-station multi-user cluster.
- Brings data processing and information management capabilities to small businesses, professional offices, and corporate departments.
- Full complement of business, office automation, and vertical application software.
- High performance Motorola MC68000 microprocessor with 32-bit architecture.
- Enhanced UNIX™ operating system, the de-facto standard for business applications, with easy-to-use menus and function keys.
- Multi-user, multi-tasking, concurrent operation.
- 10 or 20 MB hard disk, plus 800 kB flexible disk.
- Easily upgraded to the XP Expanded Performance Series.

INTEGRATED COMPUTER SYSTEM.

The Fortune 32:16™ is a completely integrated computer system designed to bring the benefits of data processing and information management to growing businesses, professional offices, and departments of large corporations. It fills a void between the powerful minicomputer, which is too expensive and complex for the small user, and the low-end personal computer, which is not powerful enough for the larger business, professional, or corporate user.

Moreover, the personal computer is typically limited to a single user. In contrast, the Fortune 32:16 with its CPU and terminals functions as a true cluster of interactive workstations. Each station is equivalent to a personal computer, yet has full access to a large data base, shared high speed printers and other peripherals, and mainframe files.

PS SERIES.

In the Fortune 32:16 Family, the Professional Series is an entry-level system providing a cost effective solution for smaller businesses and professional offices. The basic system consists of a central processing unit with separate ergonomically-designed keyboard and display.

Then, as your needs grow, up to four intelligent terminals can be added, to create a five-workstation cluster. If additional mass memory is needed, the hard disk can be upgraded from a 10MB to a 20MB. Further expansion is possible by upgrading the system to the Fortune XP Series, with its 13 terminal capability and up to 45 MB of mass storage. Still another level of expansion is offered with the Fortune Tape and Disk Expansion Cabinet. This is a separate self-contained unit with its own power supply. It adds up to 90MB of disk storage to any configuration, and a 20MB tape streamer for backup.

MC68000 PROCESSOR.

Built around the Motorola MC68000, one of the most powerful microprocessors available, the Fortune 32:16's 32 bit architecture provides significantly higher performance than other microprocessors in its price class. This means that while the Fortune 32:16 is comparable in size and price to a personal computer, its higher performance, multi-user/multi-tasking capabilities, plus true concurrent operation, rank it with many minicomputers.

ENHANCED UNIX.

With the 32:16 family, we supply an enhanced, easy-to-use version of the standard UNIX operation system called the Fortune Professional Operating System or FOR:PRO.™ Its enhancements are optimized for the business world, making it useful both for end-user applications and software development. Designed specifically with the operator in mind, Fortune FOR:PRO features a large number of dedicated function keys and easy-to-read menus with highlighted prompt commands.

FULL RANGE OF SOFTWARE.

Both general business and office automation software plus hundreds of vertical application packages are available to match the Fortune 32:16 to your specific needs.

GENERAL PURPOSE SOFTWARE:

- Fortune: Word™—Word Processing
- Multiplan™—Spreadsheet
- Business Accounting System:
  - General Ledger
  - Accounts Payable
  - Accounts Receivable
  - Fixed Assets
  - Payroll
  - Purchase Orders
  - Order Processing/Inventory Control
- Data Base Management Systems

VERTICAL SOFTWARE PACKAGES:

- Business Applications: Accounting, banking and financial, engineering and scientific, manufacturing,

medical and health care, sales and distribution.

- Professional Tools: Computer management, data base managers, graphics, management science.
- Office Automation: Calendars and scheduling, telephone management, word processing.
- Communications: Terminal emulation.
- Training and Education: Financial and student records.
- System Tools: Language processors, utility programs.

And remember, with its true multi-user capability, the Fortune 32:16 permits several operators to use the same or a different software package simultaneously. Each program is fully protected from unauthorized access or interference by other users.

The Fortune 32:16 also speaks a number of high-level computer languages. These are C, BASIC, Pascal, COBOL, SIBOL,* and FORTRAN. With this range of languages, and the portability inherent in the UNIX operating system, literally hundreds of proven application packages are available for the Fortune 32:16, and more are being written every day.

BACKUP AND SUPPORT. Behind every Fortune system is the kind of comprehensive maintenance and service organization usually associated only with large minicomputer and mainframe installations. It includes an on-site maintenance program, plus training classes and seminars. In addition, Fortune Systems provides extensive documentation and ready reference guides covering everything from initial system set-up to application conversion.

FORTUNE 32:16 SPECIFICATIONS
PS PROFESSIONAL SYSTEM SERIES

Microprocessor — Motorola MC68000
32 bit data and address registers.
24 bit memory address bus.
16 bit data bus.

Memory
512 kB, IMB RAM.
16 kB ROM.

Winchester Disk Storage
Model PS-10: 10 MB 5¼ inch hard disk with 95 millisecond average access.
Model PS-20: 20 MB 5¼ inch hard disk with 95 millisecond average access.

Flexible Disk Storage
800 kB 5¼ inch flexible diskette drive, double density, double sided, 96 tracks per inch.

Input/Output
Three I/O slots: one each for video and hard disk.
One extra option slot.

I/O Controllers
Two-port serial asynchronous controller, RS-232C, up to 19,200 bps (Comm A). Used for connecting terminals.
Two-port intelligent communications controller, RS-232C, synchronous or asynchronous, up to 19,200 bps (Comm B) for 3870 terminal emulation.
Parallel controller for tape streamer.

Video Display
Tilt and swivel 12 inch monochrome display.
High speed (500 Kbaud).
80 characters by 24 lines.
High resolution.

FOR:PRO UNIX-based Professional Operating System
Single-user version standard.
Multi-user version optional.

Languages
C, Pascal, COBOL, FORTRAN 77, SIBOL, BASIC

Keyboard
Low-profile, detachable.
99 keys, standard typewriter layout.
15 numeric key pad.
16 programmable function keys.

Software
Fortune:Word
Multiplan
Business Accounting System
Data Base Management Systems
Vertical Application Packages

Power Requirements
110/240 volts ac, 60/50 Hz, maximum 220 watts

Physical Characteristics

	Height (in/cm)	Depth (in/cm)	Width (in/cm)	Weight (lbs/kg)
Video Display	13.9/35.3	13.7/34.8	12.3/31.2	12/5.4
CPU	5.8/14.7	13.9/35.3	23.2/58.9	30/13.6
Terminal	12.9/32.8	13.7/34.8	12.3/31.2	12/5.4
keyboard	2.2/5.6	6.3/16.0	23.2/58.9	6/2.7

Due to our continuing product development programs, Fortune systems reserves the right to change specifications without notice or obligation.

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UNIX is a trademark of AT&T Bell Laboratories.
SIBOL is a registered trademark of Software Ireland, Ltd.
Multiplan is a trademark of Microsoft, Inc.

FORTUNE SYSTEMS CORPORATION
101 Twin Dolphin Drive
Redwood City, CA 94065
415 592-5140   Telex 172-632

- Multi-user desk top system, expandable to a 13 workstation cluster.
- For businesses, professional offices, and corporate departments.
- MC68000 UNIX™ based system offers the power and convenience of a minicomputer.
- Full range of software for general business, office automation, and vertical applications.
- FOR:PRO™ enhanced UNIX operating system, provides high performance, multi-user capability plus software portability.
- Fast access 30 or 45 MB hard disk, plus 800 kByte flexible disk.

AN INTEGRATED COMPUTER SYSTEM.

The Fortune 32:16™ is a completely integrated computer system designed to bring the benefits of data processing and information management to growing businesses, professional offices, and departments of large corporations. It fills a void between the powerful minicomputer, which is too expensive and complex for the small user, and the low-end personal computer, which is not powerful enough for the larger business, professional, or corporate user.

Moreover, the personal computer is typically limited to a single user. In contrast, the Fortune 32:16 with its CPU and terminals functions as a true cluster of interactive workstations. Each station is equivalent to a personal computer, yet has full access to a large data base, shared high speed printers and other peripherals, and mainframe files.

XP SERIES.

The XP Series is a high performance, fully expandable system optimized for multi-user performance with up to 13 workstations. It is designed to support commercial quality business and office automation software, as well as the development of new applications. Intended for larger installations in fast growing businesses and corporate departments, it combines the multi-user, multi-tasking, and concurrent operation of a minicomputer with the size and convenience of a desk top microcomputer.

Besides adding additional terminals, the XP can be expanded with more main memory, from 512 kB to 2 MB. Another level of expansion is offered by the Fortune Tape and Disk Expansion Cabinet. This is a separate self-contained unit with its own power supply. It adds up to 90 MB of disk storage to any configuration, and a 20 MB tape streamer for backup.

MC68000 PROCESSOR.

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ENHANCED UNIX.

With the Fortune 32:16 family, we supply an enhanced, easy-to-use version of the standard UNIX operating system called the Fortune Professional Operating System or FOR:PRO. Its enhancements are optimized for the business world, making it equally useful for end-user applications and software development.

Designed specifically with the operator in mind, Fortune FOR:PRO features a large number of dedicated function keys and makes extensive use of easy-to-read menus with high-lighted prompt commands.

FULL RANGE OF SOFTWARE.

Both general business and office automation software plus hundreds of vertical application packages are available to match the Fortune 32:16 to your specific needs.

GENERAL PURPOSE SOFTWARE:

- Fortune:Word™—Word Processing
- Multiplan™—Spreadsheet
- Business Accounting System:
  - General Ledger
  - Accounts Payable
  - Accounts Receivable
  - Fixed Assets
  - Payroll
  - Purchase Orders
  - Order Processing/Inventory Control
- Data Base Management Systems

VERTICAL SOFTWARE PACKAGES:

- Business Applications: Accounting, banking and financial, engineering and scientific, manufacturing, medical and health care, sales and distribution.
- Professional Tools: Computer management, data base managers, graphics, management science.
- Office Automation: Calendars and scheduling, telephone management, word processing.
- Communications: Terminal emulation.
- Training and Education: Financial and student records.
- System Tools: Language processors, utility programs.

And remember, with its true multi-user capability, the Fortune 32:16 permits several operators to use the same or a different software package simultaneously. Each program is fully protected from unauthorized access or interference by other users.

The Fortune 32:16 also speaks a number of high-level computer languages. These are C, BASIC, Pascal, COBOL, SIBOL, and FORTRAN. With this range of languages, and the portability inherent in the UNIX operating system, literally hundreds of proven application packages are available for the Fortune 32:16, and more are being written every day.

BACKUP AND SUPPORT. Behind every Fortune system is the kind of comprehensive maintenance and service organization usually associated only with large minicomputer and mainframe installations. It includes an on-site maintenance program, plus training classes and seminars. In addition, Fortune provides extensive documentation and ready reference guides covering everything from initial system set-up to application conversion.

FORTUNE 32:16 SPECIFICATIONS
XP EXPANDED PERFORMANCE SERIES

Microprocessor—Motorola MC68000
32 bit data and address registers.
24 bit memory address bus.
16 bit data bus.

Memory
512 kB RAM, expandable to 2 MB.
16 kB ROM.

Winchester Disk Storage
Model XP-30: 30 MB 5¼ inch hard disk with 45 millisecond average access.
Model XP-45: 45 MB 5¼ inch hard disk with 30 millisecond average access.

Flexible Disk Storage
800 kB 5¼ inch flexible diskette drive, double density, double sided, 96 tracks per inch.

Input/Output
Five I/O slots: one each for video and hard disk.
Three extra option slots.

I/O Controllers
Two or four-port serial asynchronous controllers (RS-232C), up to 19,200 bps (Comm A). Used for connecting terminals.
Two-port intelligent communications controller (RS-232C), synchronous or asynchronous, up to 19,200 bps (Comm B) for 3780 terminal emulation.
Parallel controller for tape streamer.

Video Display
Tilt and swivel 12 inch monochrome display.
High speed (500 Kbaud).
80 characters by 24 lines.
High resolution.

FOR:PRO UNIX-based Professional Operating System
Multi-user version standard.

Languages
C, Pascal, COBOL, FORTRAN 77, SIBOL, BASIC.

Keyboard
Low-profile, detachable.
99 keys, standard typewriter layout.
15 numeric key pad.
16 programmable function keys.

Software
Fortune:Word
Multiplan
Business Accounting System
Data Base Management Systems
Vertical Application Packages

Power Requirements
110/240 volts ac, 60/50 Hz, maximum 250 watts

Physical Characteristics

	Height (in/cm)	Depth (in/cm)	Width (in/cm)	Weight (lbs/kg)
Video Display	13.9/35.3	13.7/34.8	12.3/31.2	12/5.4
CPU	5.8/14.7	13.9/35.3	23.2/58.9	30/13.6
Terminal	12.9/32.8	13.7/34.8	12.3/31.2	12/5.4
Keyboard	2.2/5.6	6.3/16.0	23.2/58.9	6/2.7

XP EXPANDED PERFORMANCE SERIES

- Multi-user desk top system, expandable to a 13 workstation cluster.
- For businesses, professional offices, and corporate departments.
- MC68000 UNIX™ based system offers the power and convenience of a minicomputer.
- Full range of software for general business, office automation, and vertical applications.
- FOR:PRO™ enhanced UNIX operating system, provides high performance, multi-user capability plus software portability.
- Fast access 20 or 30 MB hard disk, plus 800 kByte flexible disk.

AN INTEGRATED COMPUTER

SYSTEM. The Fortune 32:16™ is a completely integrated computer system designed to bring the benefits of data processing and information management to growing businesses, professional offices, and departments of large corporations. It fills a void between the powerful minicomputer, which is too expensive and complex for the small user, and the low-end personal computer, which is not powerful enough for the larger business, professional, or corporate user.

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XP SERIES. The XP Series is a high

performance, fully expandable system optimized for multi-user performance with up to 13 workstations. It is designed to support commercial quality business and office automation software, as well as the development of new applications. Intended for larger installations in fast growing businesses and corporate departments, it combines the multi-user, multi-tasking, and concurrent operation of a minicomputer with the size and convenience of a desk top microcomputer.

Besides adding additional terminals, the XP can be expanded with more mass memory, from 20 to 30MB, and more main memory, from 512 kB to 768 kB or 1 MB. Another level of expansion is offered by the Fortune 30MB Expansion Cabinet. This is a separate self-contained unit with its own power supply. It adds 30MB of disk storage to any configuration, and a tape streamer for backup.

MC68000 PROCESSOR. Built around the Motorola MC68000, one of the most powerful microprocessors available, the Fortune 32:16's 32 bit architecture provides significantly higher performance than other microprocessors in its price class. This means that while the Fortune 32:16 is comparable in size and price to a personal computer, its higher performance, multi-user/multi-tasking capabilities, plus true concurrent operation, rank it with many minicomputers.

ENHANCED UNIX. With the Fortune 32:16 family, we supply an enhanced, easy-to-use version of the standard UNIX operating system called the Fortune Professional Operating System or FOR:PRO. Its enhancements are optimized for the business world, making it equally useful for end-user applications and software development.

Designed specifically with the operator in mind, Fortune FOR:PRO features a large number of dedicated function keys and makes extensive use of easy-to-read menus with highlighted prompt commands.

FULL RANGE OF SOFTWARE. Both general business and office automation software plus hundreds of vertical application packages are available to match the Fortune 32:16 to your specific needs.

GENERAL PURPOSE SOFTWARE:
- Fortune:Word™—Word Processing.
- Multiplan™—Spreadsheet.
- Business Accounting System:
  - General Ledger
  - Accounts Payable
  - Accounts Receivable
  - Fixed Assets
  - Payroll
  - Purchase Orders
  - Order Processing/Inventory Control
- IDOL® Data Base Management System

VERTICAL SOFTWARE PACKAGES:
- Business Applications: Accounting, banking and financial, engineering and scientific, manufacturing, medical and health care, sales and distribution.
- Professional Tools: Computer management, data base managers,

graphics, management science.
- Office Automation: Calendars and scheduling, telephone management, word processing.
- Communications: Terminal emulation.
- Training and Education: Financial and student records.
- System Tools: Language processors, utility programs.

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The Fortune 32:16 also speaks a number of high-level computer languages. These are C, BASIC, Pascal, COBOL, SIBOL,® and FORTRAN. With this range of languages, and the portability inherent in the UNIX operating system, literally hundreds of proven application packages are available for the Fortune 32:16, and more are being written every day.

BACKUP AND SUPPORT. Behind every Fortune system is the kind of comprehensive maintenance and service organization usually associated only with large minicomputer and mainframe installations. It includes an on-site maintenance program, plus training classes and seminars. In addition, Fortune provides extensive documentation and ready reference guides covering everything from initial system set-up to application conversion.

FORTUNE 32:16 SPECIFICATIONS
XP EXPANDED PERFORMANCE SERIES

Microprocessor — Motorola MC68000
32 bit data and address registers.
24 bit memory address bus.
16 bit data bus.

Memory
512 kB RAM, expandable to 768 kB or 1 MB.
16 kB ROM.

Winchester Disk Storage
Model XP-20: 20 MB 5¼ inch hard disk with 45 millisecond average access.
Model XP-30: 30 MB 5¼ inch hard disk with 45 millisecond average access.

Flexible Disk Storage
800 kB 5¼ inch flexible diskette drive, double density, double sided, 96 tracks per inch.

Input/Output
Five I/O slots: one each for video and hard disk.
Three extra option slots.

I/O Controllers
Two or four-port serial asynchronous controllers (RS-232C), up to 19,200 bps (Comm A). Used for connecting terminals.
Two-port intelligent communications controller (RS-232C), synchronous or asynchronous, up to 19,200 bps (Comm B) for 3780 terminal emulation.
Parallel controller for tape streamer.

Video Display
Tilt and swivel 12 inch monochrome display.
High speed (500 Kbaud).
80 characters by 24 lines.
High resolution.

FOR:PRO UNIX-based Professional Operating System
Multi-user version standard.

Languages
C, Pascal, COBOL, FORTRAN 77, SIBOL, BASIC.

Keyboard
Low-profile, detachable.
99 keys, standard typewriter layout.
15 numeric key pad.
16 programmable function keys.

Software
Fortune:Word
Multiplan
Business Accounting System
IDOL Data Base Management System
Vertical Application Packages

Power Requirements
110/240 volts ac, 60/50 Hz, maximum 250 watts

Physical Characteristics

	Height (in/cm)	Depth (in/cm)	Width (in/cm)	Weight (lbs/kg)
Video Display	13.9/35.3	13.7/34.8	12.3/31.2	12/5.4
CPU	5.8/14.7	13.9/35.3	23.2/58.9	30/13.6
Terminal	12.9/32.8	13.7/34.8	12.3/31.2	12/5.4
Keyboard	2.2/5.6	6.3/16.0	23.2/58.9	6/2.7

The Fortune 32:16 is one of the most versatile multi-user supermicro-computers on the market today for dynamic processing of large volumes of vital information. To answer the need for fast, efficient storage and retrieval of this information, Fortune Systems provides the Tape Streamer and Expansion Disk System.

Fortune's storage expansion system was designed to meet a wide variety of storage requirements, and is so versatile that two different types of storage requirements can be accom-modated in a single cabinet, com-pactly and economically.

The Fortune Tape Streamer and Disk Expansion System is an inde-pendently powered, highly flexible unit available with a 20MB Tape Streamer and 5¼" Fast Access Hard Disk options of 30 to 90MB. The unit comes complete with feature rich, easy-to-use software which includes menu interfaces and several powerful utility functions.

MODULAR DESIGN. Designed for maximum flexibility, the "stackable" Expansion Cabinet can be tailored to meet a wide range of storage require-ments. One elegant component accommodates the precise combina-tion of features that is right for the user, including:

- Single Tape Streamer
- Single Hard Disk
- Tape Streamer plus Hard Disk
- Two Hard Disks
- Two Hard Disks plus a tape streamer in an additional expansion cabinet

Both tape and disk options are available in kit form for easy upgrade-ability as the user's requirements grow.

A COMPLETE STORAGE SOLUTION

Tape Streamer

The Tape Streamer is an easy-to-use, cost effective file backup and storage system designed for the user who wishes to back up large quantities of data or to free valuable on-line disk space. This highly reliable device is capable of reading and writing up to 20MB of data on a standard tape cartridge. Tasks that used to require handling multiple flexible disks, can now be easily performed using a single tape cartridge, providing:

- Security Backup, to protect against loss of important data from a single file, a complete directory, or all user data files on a system
- Archiving, for consolidated storage in a fraction of the time
- Data Interchange, for efficient and reliable transfer of data from one system to another

Fast Access Hard Disk

Disk Expansion is designed for the user who requires additional on-line storage.

The Disk Expansion Cabinet's 5¼" disk drives are the same fast access units contained in the popular Fortune 32:16 XP 30 and XP 45. Users who routinely handle large amounts of data find that adding a second or third fast access hard disk drive to a system is extremely useful in optimizing performance.

SERVICE AND SUPPORT.
Behind every Fortune System is a comprehensive on-site maintenance and service program. Fortune provides extensive documentation and ready reference guides covering everything from initial system set-up to application conversion.

Fortune and Fortune 32:16 are trademarks of Fortune Systems Corporation.

Parallel I/O Controller
Motorola MC68000
128K Memory

Tape Streamer
20MB/ANSI 450' Cartridge
90 IPS Transfer Rate

Winchester Disk Storage
30MB 5¼" hard disk
with 45 millisecond average access time
45MB 5¼" hard disk
with 30 millisecond average access time

Power Requirements
110/240 volts ac, 60/50 Hz maximum
250 watts

Environmental and Safety Standard
FCC Class A, UL and CSA approved

Physical Characteristics
Height (in/cm):   5.8/14.
Depth (in/cm):   13.9/35.3
Width (in/cm):   23.2/58.9

Due to our continuing product development programs, Fortune Systems reserves the right to change specifications without notice or obligation.

FORTUNE 32:16
FOR: PRO

FOR:PRO, the Fortune Professional Operating System, is an enhanced version of AT&T's acclaimed UNIX™ System, widely regarded as the industry standard for multi-user, multi-tasking microcomputers. Based on Bell Lab's Version 7 and System III UNIX, FOR:PRO includes popular U.C. Berkeley enhancements. Future versions will include the capabilities of AT&T's new System V UNIX.

In addition to standard UNIX features, FOR:PRO incorporates Fortune enhancements for improved performance in the highly interactive environment of the desktop microcomputer. Versatile, reliable, and easy to use, FOR:PRO is well suited to the needs of both end-users and developers, with features including:

- Availability of over 170 UNIX commands
- Menu-driven, user-friendly interface
- Easy customization of the working environment
- High speed console
- Full-featured terminal driver
- Non-Fortune terminal support (termcap)
- Multiple printer support (printcap)
- Multiple communication controller support
- Development Tools
- Automatic reconfiguration as components are added

ELEGANT FILE STRUCTURING.

FOR:PRO's hierarchical file structure allows convenient organization of files by subject and owner. Its "tree" structure provides a root directory under which all other directories and files are located, enabling the Fortune 32:16 to serve as a compact electronic file cabinet in which any piece of stored information can be located instantly by simply identifying its path name. FOR:PRO's standard UNIX password protection system makes it easy to:

- assign read, write, and execute permissions to selected files
- protect confidential information from unauthorized access

- protect important files and programs against alteration or removal

MULTI-USER, MULTI-TASKING EFFICIENCY.

FOR:PRO was designed with the economy and efficiency of data base sharing in mind. Several users can operate a Fortune system simultaneously, and a single user can run multiple programs at the same time. Fortune's resource sharing capability dramatically increases productivity and cost effectiveness as it:

- allows users to share data on a central hard disk
- provides record-level locking
- facilitates networking with other computers
- allows background program execution, including print spooling
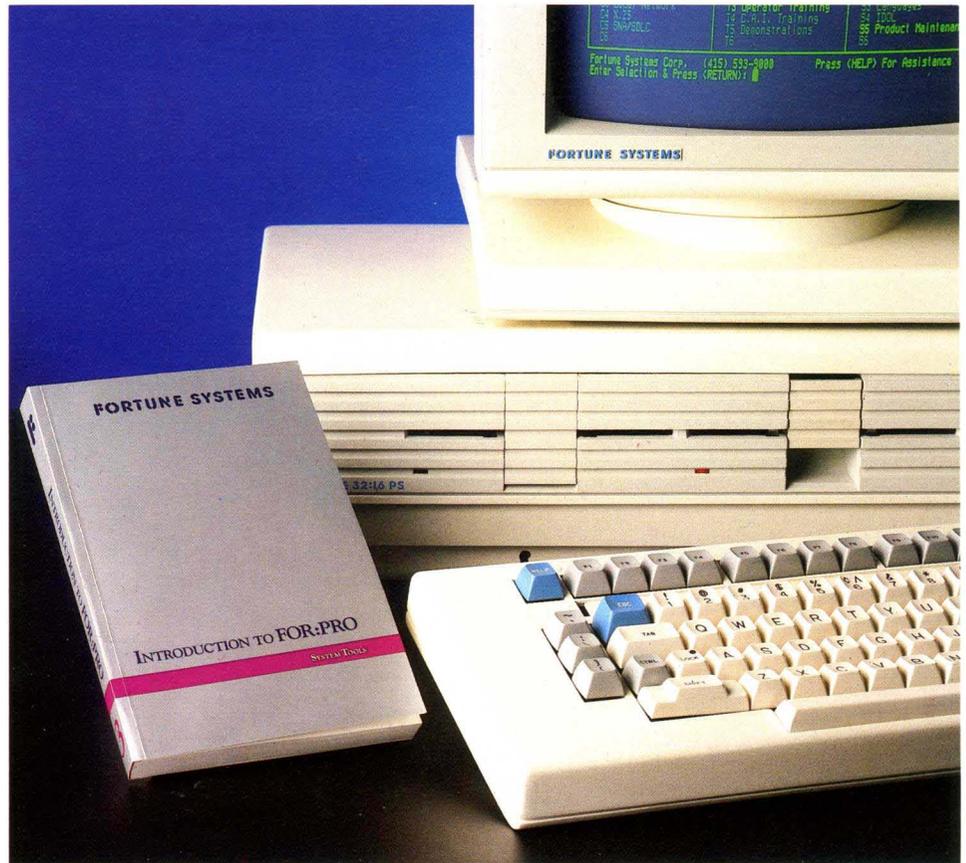- provides efficient electronic mail capability

FLEXIBLE USER INTERFACE.

FOR:PRO provides three different human interfaces, allowing users with varying levels of expertise to interact with the system with optimum efficiency.

For the computer novice, FOR:PRO offers an easy-to-use menu interface developed by Schmidt Associates. This user-friendly menu system, together with a "help" key, enables the user with no previous experience to make the system work within minutes.

For the more experienced user FOR:PRO offers both the standard Bourne shell and the optional Berkeley C shell. These interfaces provide more direct control and increased flexibility to developers and experienced users.

The Bourne and C shells serve not only as command interpreters but also as sophisticated programming languages, with a rich repertoire of utility tools and control facilities which allow the user to efficiently string together a sequence of commands to perform complex tasks. Bourne and C Shell capabilities include:

- loops and conditional execution
- encryption for additional document security
- wild-card expansion
- redirection of input and output
- direct "piping" of data from one program to another

AN IDEAL DEVELOPMENT SYSTEM.

The capabilities of FOR:PRO, the price and performance of Fortune's hardware products, and the benefits of Fortune's innovative third party software support program combine to make the Fortune 32:16 an ideal development system. FOR:PRO provides a wide variety of mature, field tested development tools for improved programming efficiency including:

- Source and object level debuggers
- Source Code Control System (SCCS)
- Lex, yacc, lint, prof
- Printcap and Termcap for terminal independent programming
- Curses, for easy screen and window manipulation
- Archive maintenance with ar and ranlib
- Extensive function libraries

WIDE RANGE OF AVAILABLE SOFTWARE.

Because UNIX is an increasingly accepted standard, a large and rapidly growing body of software is available to run on FOR:PRO.

FOR:PRO offers the benefits of:

- Wang-compatible word processing
- Multiplan™, Microsoft's powerful spreadsheet program
- A wide selection of sophisticated data base management systems
- Both asynchronous and bisynchronous communications capabilities
- A full set of standard programming languages
- A rich repertoire of third party applications

A WEALTH OF DOCUMENTATION.

In addition to the many available books which have been written on the UNIX operating system, Fortune offers its own full complement of documentation, including *Meet Your Fortune*, the *Fortune Programmer's Manual* and *Introduction to FOR:PRO*.

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Multiplan is a trademark of Microsoft Corporation.

UNIX is a trademark of Bell Laboratories.

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COMMUNICATIONS

The Fortune 32:16 microcomputer is a powerful data processor in its own right. With the added capability of data communications, the Fortune System becomes an extension of a mainframe or a member of a network of systems, making it one of the simplest to use, yet most versatile office automation mechanisms available today.

Fortune Systems has taken the often intimidating task of data communications and made it simple through use of a streamlined, plain English menu interface. Or, for the more experienced user, all software is easily accessible through the UNIX™ shell.

Whether for remote job entry of preprocessed data, or for interactive communication, the Fortune 32:16, coupled with its data communications technology, provides a solid solution to the communication needs of today and the growing demands of the future.

BINARY SYNCHRONOUS COMMUNICATIONS. For the user wishing to communicate with an IBM or IBM-like host system, Fortune Systems offers two binary synchronous communication packages, 3270 Interactive Terminal Emulation and RJE 3780.

Remote Job Entry (RJE) 3780 Emulation

Designed for versatility, the Fortune Systems implementation of 3780 emulation offers compatibility with any other 3780 terminal, real or emulated, over dial-up, leased, or private lines. With RJE 3780 a Fortune user may:

- transfer files or batch data
- transfer files in automatic or manual mode
- queue up to 20 files for transmission during one session
- receive files to the screen, disk, or printer or to the screen and printer simultaneously
- specify ASCII/EBCDIC code set

- modify data and protocol characteristics
- save data transfer parameter selections in a file for later use
- utilize diagnostic capabilities to assist in isolating any start up problems

3276 Interactive Terminal Emulation

For the user who wishes to maintain 3270 host communications without sacrificing local computing power, Fortune offers 3276 Interactive Terminal Emulation. In addition to performing all the functions of a powerful, standalone microcomputer, the Fortune 32:16 can function as an IBM 3276 Information Display System over dial-up or leased tele-communication lines, and is enabled to:

- emulate the IBM 3278 Model 2 Display Terminal from either the Fortune 32:16 console or attached Fortune ASCII terminals
- support printer emulation of the IBM 3287 Model 1 or Model 2
- support concurrent use of the 3276 software by up to three users
- support concurrent use of other Fortune applications by other users
- allow the user to exit the 3276 software, initiate another process, then resume 3276 interaction with the host
- support terminal initiated local copy function
- provide uninterrupted host response as the Intelligent Communications Controller may be left active
- supply error messages, communication line status, and other information on the 25th line of the screen
- provide line monitor diagnostic capabilities to assist in isolating any start up problems

ASYNCHRONOUS COMMUNICATIONS.

Fortune offers two asynchronous communication packages —FFCP and ITE. Together they provide an effective solution to the user's basic and sophisticated asynchronous communication needs.

Fortune to Fortune Copy

Fortune to Fortune Copy (FFCP) is a composite of several programs which permit communication between the Fortune 32:16 and another 32:16 or other Unix-based system. Through use of FFCP the user may:

- utilize dial-up, leased, or private lines
- transfer ASCII or Binary files to or from a remote system that supports Fortune to Fortune Copy or Unix to Unix Copy (UUCP)
- perform maintenance on the spool directory

While the FFCP software automatically:

- maintains data integrity through use of check sums performed as data is transmitted and received
- maintains a log of all user activity
- manages a spool directory from which files are sent

Interactive Terminal Emulation

Interactive Terminal Emulation (ITE) enables the Fortune 32:16 to interact with a Fortune or other UNIX-based system, and some non-UNIX systems as well, as if it were a Fortune ASCII terminal. With ITE the user has the ability to:

- communicate asynchronously in full duplex
- log onto any UNIX system to which it is connected and utilize the software, data base, or hardware available on the host system
- dial into the public networks provided by TELENET, TYMNET and others to access services such as Dow Jones, Source, etc.
- enter Tilde command sequences from either the keyboard or the function keys
- transfer ASCII files to and from host
- support host execution of a transmitted command file
- divert data displayed on the terminal screen to a file

Asynchronous Communications

Communication may be established at 300 or 1200 bps via phone lines and from 300 to 9600 bps if cable connected. Used Comm A Board or standard CPU SIO Port 1

Bisynchronous Communications

Binary synchronous communications processing is off-loaded from Fortune's 68000 processor to an Intelligent Communications Controller (ICC) which has its own Z-80 (6MHz) microprocessor, 16K of ROM, and 64K of RAM. All line synchronization and data transfer between the 32:16 and the host is handled by the Z-80 application.

3780 Emulation
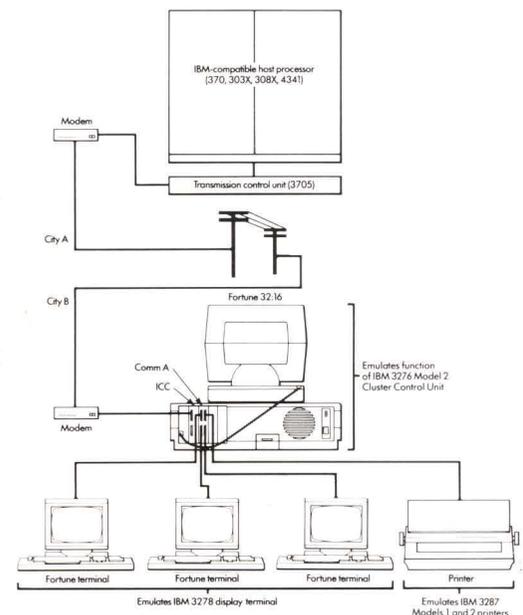
Requires ICC
Communications rates 2000-96000 BPS

3270 Emulation

Requires ICC
Communication rates of 2000-9600 BPS over switched or leased lines

MULTIPLAN SPREADSHEET PROGRAM

■ Transforms the Fortune 32:16™ into a powerful financial modeling and forecasting tool

■ Self-instructional tutorial with English language commands and next action prompts speeds learning and use

■ Flexible formatting such as automatic placement of commas, dollar signs, decimal points and rounding off

■ Performs arithmetic, trigonometric, conditional, financial and statistical functions.

■ Relative referencing inserts or deletes rows or columns without adjusting formulas

■ Easy insertion of data from existing documents by single keystrokes

■ Accepts VisiCalc® files—enabling a user to convert from a single-user system using VisiCalc to a multi-user Fortune System using Multiplan,™ a more powerful spreadsheet package.

HIGH PERFORMANCE ELECTRONIC SPREADSHEET.

Multiplan is a high-performance electronic spreadsheet that transforms the Fortune 32:16 microcomputer into a multi-purpose financial modeling and forecasting tool. This versatile system combines the ease of use and familiarity of a calculator with the vast memory and computing power of a sophisticated microcomputer. With Multiplan, any kind of complex manipulation of numbers, such as budget plans, financial and statistical analysis, and sales projections, becomes simple, quick, and vastly more efficient.

With Multiplan the Fortune 32:16 video display becomes a window that looks on a large electronic spreadsheet—up to 63 columns wide, 255 rows deep and several pages thick. Mathematical calculations are made automatically and with absolute accuracy. All information entered into the system can be electronically stored for future use including updates and recalled instantly on the screen, or printed out in the form of comprehensive reports.

Multiplan has many advanced and sophisticated features which go far beyond other commonly available financial modeling and forecasting software packages. Multiplan will

give you a document which reflects the parameters of your business—not the limitations of your computer. Extended capabilities include:

■ Versatile formats
—63 variable width columns
—255 rows
—multiple pages
■ Individually formattable cells
■ Up to eight built-in windows
■ Linking of multiple sheets
■ Sorting columns by rows in ascending/descending order
■ Print/display results and formulas
■ Protect portions of model
■ Friendly formula definition
■ Relative or absolute reference
■ References by name/coordinate

EASY TO LEARN. Multiplan is straightforward and logically structured so that its operation becomes intuitive after only a few hours of

practice. No time consuming training sessions or memorization of complicated commands are required. Using Multiplan is further simplified through a full menu of English commands (not just letter codes) and Next Action messages displayed at the bottom of the screen. A comprehensive manual and training disk introduce all features and functions of the program. A simple touch of the HELP key will ask Multiplan to identify the problem, and a series of prompts will put you back on the right path.

■ Self-instructional
■ Full word command line
■ Online Help when you need it
■ Next action prompts
■ Built in sample models
■ Default values

FLEXIBLE FORMATTING. The moment you power up Multiplan much of your formatting task has already been done for you. Rows and columns mark a grid of cells for data entry. And with Multiplan's default values, each cell is automatically set up in its most versatile format option, ready for data to be entered. Of course, when you need to tailor the format to fit a specific need, Multiplan lets you create your own format. Just a few of your options include:

- Centering of contents
- Left, right or fixed decimal alignment
- Automatic placement of dollar signs
- Automatic placement of commas— not available on most spreadsheet packages
- Automatic placement of percent signs
- Rounding off
- Locking of cells to control modification

These formatting controls can be done a cell at a time, a row or column at a time, or an entire range at a time, with all boundaries set by simply naming the coordinates.

Individual columns can vary from 3 to 32 characters in width, and a simple format command permits text to be written across all column barriers.

WHAT MULTIPLAN CAN DO. Multiplan can perform arithmetic, trigonometric, conditional, financial, and statistical functions quickly and easily. You build formulas by simply typing in the equation and highlighting the cells containing the data involved. And with Multiplan's relative referencing you can insert or delete rows or columns without having to adjust formulas. To make cell referencing more friendly, the NAME commands allow you to assign a word name such as SALES or PROFITS to a cell describing the data it contains.

To further expedite work, the Linking feature allows you to incorporate data from existing spreadsheet into a new spreadsheet being created. Rather than reentering the desired data, just ask for it by its name. Linked by a simple touch of a key, all data referenced by this name is automatically edited into the new document.

"WHAT IF" MODELING. A major benefit of Multiplan is the efficiency with which "What If" models can be created. To modify values or formulas simply enter a new value and the system will recalculate the entire spreadsheet in seconds, regardless of its complexity.

You can create an unlimited number of hypothetical situations. This is extremely helpful in preparing critical management documents, business plans, sales forecasts and production cost estimates in order to explore the impact of any variables you choose. Manual calculations of such complex data would take countless hours. With Multiplan this task is quickly executed by simply changing a few numbers on the electronic spreadsheet to examine alternatives for:
- Financial analysis
- Capital Management
- Market analysis
- Budgets
- Forecasts

MULTIPLE WINDOWS. Unlike other electronic spreadsheets, Multiplan has the ability to display up to eight windows at the same time. This feature allows the user to enter data in one area of a worksheet and simultaneously view its effect on areas of the worksheet which would otherwise be off the screen.

FLEXIBLE REPORT GENERATION. All information stored in Multiplan electronic spreadsheets can be compiled into comprehensive reports and printed out in a variety of ways. A sort command feature can analyze all data contained in a spreadsheet and then reorganize it ranking the values of columns by numeric or alphabetical order. Multiplan allows you to vary your margins, print formulas, and will even paginate your report for you. And with Fortune's enhanced version of Multiplan now you have the ability to change pitch, lines per inch, and printer number through use of a simple menu interface. In addition all Multiplan data can be easily integrated into Fortune's word processing documents.

FORTUNE SYSTEMS CORPORATION
101 Twin Dolphin Drive
Redwood City, CA 94065
415 592-5140   Telex 172-632

FORTUNE:WORD Word Processing System

- Versatile multi-user processing system.
- All WP features: insert/delete, copy/move, global search/replace, print formatting, many others.
- Command structure based on most widely used WP system for ease of operator training.
- Glossary for fast access to commonly repeated words and phrases.
- Spreadsheet data easily transferred to text documents.
- Simultaneous printing and editing.
- Electronic filing and retrieval of documents.
- Extended Fortune:Word:™ spelling checker, records processing, multiple columns, windows, plus other advanced features.

MULTI-USER WORD PROCESSOR.

Fortune:Word is a versatile, easy-to-use word processing program that turns the Fortune 32:16™ computer into a powerful multiple-station word processor. Unlike personal computers, which are typically limited to a single user, a Fortune 32:16 system and its terminals function as a cluster of workstations that can easily exchange documents. Each station can share common resources such as standardized text, forms, or tables, and can access a shared high speed printer.

EASY TO LEARN AND EASY TO USE.

To increase productivity in your office, you want an office automation system that won't steal valuable time. With Fortune:Word, productivity begins immediately. Fortune:Word practically talks to you—and in plain English. Simple screen menus and prompts guide every step. An on-line HELP is just a keystroke away. Function keys provide single-keystroke control over most functions.

FAST EDITING AND FORMATING.

Fortune:Word shows you margins, tabs, indents, and page breaks exactly as they will appear on the printed page. The cursor pinpoints locations for text entry or revision. Fifteen different commands move the cursor to the precise location.

Editing that used to take hours is accomplished in minutes with such features as these:

- Search and locate any character or phrase in the document.
- Replace multiple letters, words, or phrases throughout a document automatically or selectively with a few keystrokes.
- Copy or move blocks of text within a document, or from one document to another.
- Interchange letters, words, paragraphs, or whole pages in seconds and file each revision on the system for reference.
- Store frequently repeated names and phrases in a glossary for insertion into documents by simple keystrokes.

PROFESSIONAL PRINTOUT. Your

printed material should reflect your professional image. With Fortune:Word, a wealth of special handling features give an attractive and professional look to the documents that represent your company. Special emphasis can be added with such features as:

- Automatic line centering.
- Text indentation.
- Boldface print.
- Single or double underlining.
- Overstrike.
- Superscript and subscript.

When editing is complete, text is easily formatted with the help of a simple menu to produce the crisp, typeset look that makes a professional statement. These menu options include:

- 10, 12, or 15 pitch, 6 or 8 lines per inch.
- Ragged or justified margins.
- Draft (double spaced) or final line spacing.
- Proportional spacing.

If a document requires header or footer lines, Fortune:Word will automatically place them on each page of text and will number the pages for you while printing them in sequence, or any one page at a time.

The system can send documents to multiple printers, or queue multiple documents to the same printer. And while a document is being printed the workstation is free to begin work on a new project.

FAST ELECTRONIC FILING. Once a document is typed on the screen, it can be electronically saved on the storage disk for future reference. Documents are filed in Fortune:Word Libraries which you create to fit your need by grouping documents together in any configuration you choose—by title, author or subject matter.

The compact Fortune 32:16 microcomputer can now serve as an electronic file cabinet, which can instantly recall any document recorded on its hard disk. And with Fortune's ingenious security system, libraries and individual documents can be protected from unauthorized access through use of password protection.

Fortune:Word automatically creates alphabetized indexes of every document entered in the library—by author, title or a multitude of other choices—and then makes them available instantly through the touch of a key.

COST CONTROL. To maintain close control of costs, vital information, such as dates and as time of entering and editing, total worktime, number of pages or characters, and other useful control information is automatically tracked and displayed by Fortune:Word.

EXTENDED FORTUNE:WORD

As you grow, Fortune:Word will grow with you. Several sophisticated components comprise this optional tool to further increase office productivity.

THE SPELLING CHECKER. This proofreading feature checks every word in your document against a 90,000 word dictionary and flags any errors. You can then correct them, or if they're special terms, a touch of a key puts them in an exception dictionary.

RECORDS PROCESSING. This option is similar to a low-end Data Base Management System. A list of selected records can be merged into any document, sorted any way you like, to produce customized form letters, labels, or lists quickly and inexpensively.

ADVANCED FEATURES:

▪ Multiple Columns enables you to format text into several columns on the same page and see on the screen exactly how they will look.

▪ Windowing allows more than one document to be displayed and edited on the screen, eliminating the aggravation of constant referencing.

▪ Table of Contents Generator creates a table of contents and generates chapter and page numbers in a professional format.

▪ Index Generator takes a list of words, alphabetizes it, and looks up page numbers for each word.

▪ Advanced Glossary is a powerful user programming feature that can automate any consistently performed task and also perform four function math.

Fortune, FOR:PRO and Fortune 32:16 are trademarks of Fortune Systems Corporation.

LANGUAGES AND DEVELOPMENT TOOLS

High level languages available on Fortune™ computers include BASIC, COBOL, FORTRAN (including RATFOR, EFL), C, Pascal and SIBOL® The Fortune languages adhere to industry standards to facilitate porting of pre-existing software to the Fortune, but enhancements have been made to supply useful features lacking in some of the standards. C, FORTRAN, and Pascal modules can be separately compiled and then linked together, so that existing software in one or more languages can be combined with new software in the language of choice to produce a complete integrated system.

BUSINESS BASIC. BASIC, the most widely used language in microcomputer environments, enjoys ever growing popularity. Fortune's Business Basic, a very powerful implementation of BASIC with advanced file access methods, is compatible with BASIC:FOUR®'s BB III language. Many horizontal and vertical software packages have been written in this language, and successfully ported to the Fortune system. It is an interpreted language that enables the user to closely monitor the execution of a program, check the contents of variables, and even make some changes to the logic during execution. The latest release of BASIC (1.4) supports user task sizes as large as 320K.

COBOL. In the English-speaking world, COBOL is the most widely used language for business applications development. Fortune currently offers Micro Focus LEVEL II COBOL, which is unique among microcomputer COBOLS in conforming strictly to the Federal High Level ANSI '74 COBOL standard. Thus COBOL programs compatible with ANSI '74 (X3.23) specifications, including those running on large mainframes, are compatible with the Fortune COBOL. Interactive run-time debugging facilities are provided. The COBOL system is fully documented in the *Level II COBOL Reference Manual* and the *Level II COBOL Operating Guide,* both of which are provided with the software.

FORTRAN. FORTRAN (short for FORmula TRANslator) enjoys widespread use in scientific and statistical programming applications. Fortune's FORTRAN conforms to the FORTRAN 77 standard. The current 1.3 release includes preprocessing facilities which allow conversion between FORTRAN 77 and RATFOR (RATional FORtran) and from EFL (Extended FORTRAN Language) to FORTRAN 77. Additional features include optimizing capabilities, profiling support, array bounds checking, and a fast floating point facility which can make floating point operations execute ten times as quickly as in the previous release.

A comprehensive Fortune manual on FORTRAN 77 is included with the software. *A Structured Approach to FORTRAN 77 Programming,* by T. M. R. Ellis, is also provided as an instructional aid.

C. C is powerful, efficient, portable, and easy-to-use. Developed at Bell Labs along with UNIX,™ it is the language preferred by major microcomputer software developers such as VisiCorp, Lotus Development Corp., MicroPro, and Microsoft. The power of C to efficiently perform tasks that would otherwise require assembly language is illustrated by the fact that 90 percent of the UNIX operating system is written in C. The convenience of modern programming techniques is provided in C with facilities including while and for loops, subroutines, the ability to call functions recursively, case selection, structures, pointers, address arithmetic, command line argument capability, and standard function libraries. C is excellently documented in *The C Programming Language* by Kernighan and Ritchie. A copy of that book, together with Fortune's comprehensive C manual, is included with the C compiler.

PASCAL. PASCAL is a general purpose programming language designed to encourage the writing of well-structured, readable programs. It supports advanced program design approaches such as top-down program

and data structure design, program modularity, stepwise refinement, and team programming efforts. PASCAL is widely used to teach programming because it is easy to learn and promotes good programming techniques.

Fortune's Pascal compiler conforms to the specifications of Jensen and Wirth "Standard Pascal" and International Standards Organization (ISO) Pascal. Users of Fortune Pascal can also make use of the University of California at Berkeley's extensions to standard Pascal. Unlike the Pascal versions available on many micros, which allow only relatively small program segments, Fortune's Pascal can be used to write sophisticated programs up to several hundred kilobytes in size.

SIBOL. SIBOL is a new commercial programming language that permits programs written in DIBOL, DEC's most widely used business language, to run under Fortune's FOR:PRO™ UNIX-based operating system. SIBOL gives the Fortune 32:16 access to thousands of DIBOL programs written for the PDP-11 and VAX line of computers. The SIBOL package consists of a compiler, a run-time interpreter, a symbolic debugger, and a library of external utility subroutines. Complete and easy-to-use documentation is provided.

LANGUAGE DEVELOPMENT TOOLS. The Fortune Language Development Tools are a set of programs and libraries for use in creating, compiling, and debugging C, Fortran, and Pascal programs. The tools include a profiling facility, assembly language routines for fast floating point, a wide variety of system calls, terminal independent screen update functions, and a "make" utility used for code control in large programming projects.

Detailed information about the Language Development Tools is provided in a guide which accompanies the software.
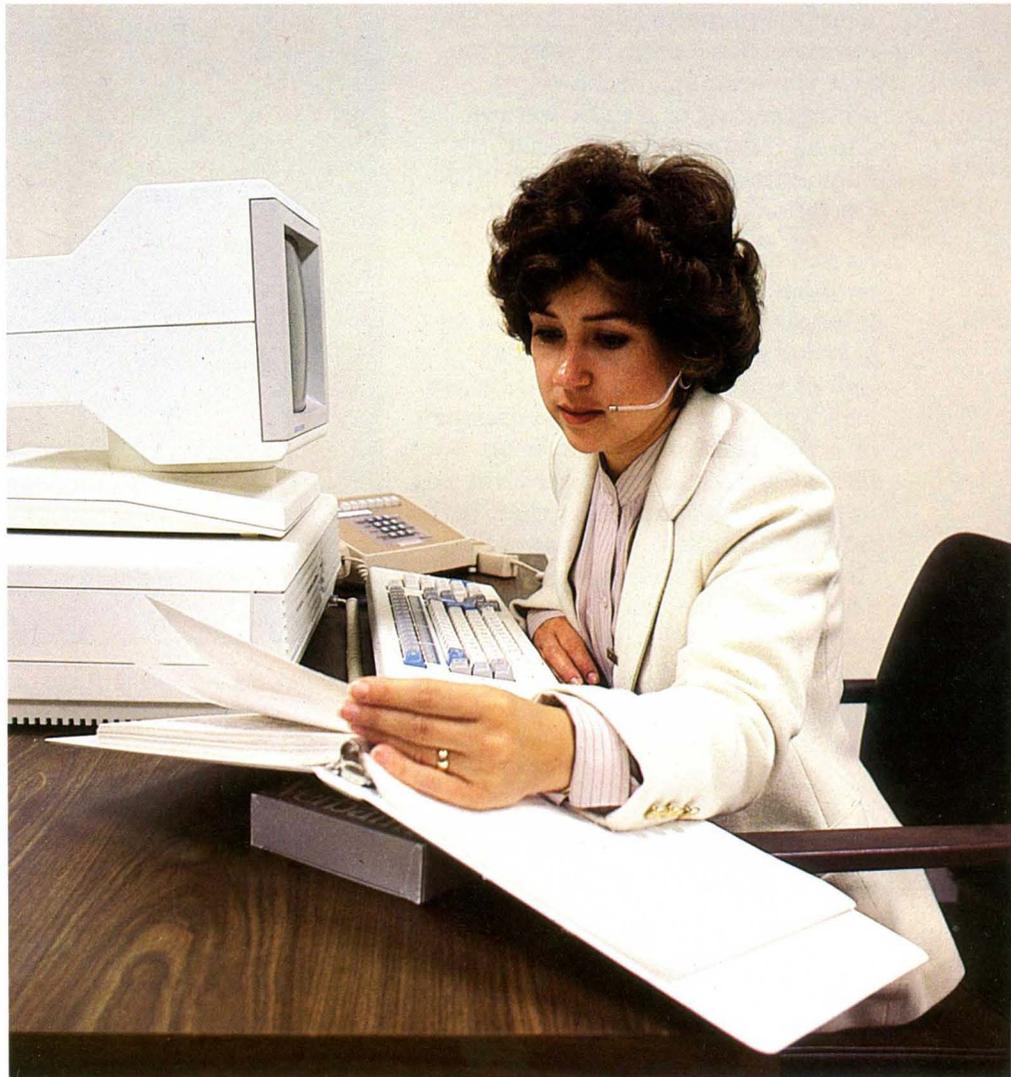
Customer Satisfaction is the primary objective of Fortune's service organization. As a Full Service manufacturer in the UNIX marketplace, we are committed to providing our customers with prompt, quality service and support. Once you have purchased a Fortune System, you can look forward to this wide range of valuable services:

- Quality Manufacturing reinforced by a System Warranty
- Site Planning and Installation Service
- Superior User-Oriented Documentation
- Easy-to-Use Tutorial Diskettes
- Multimedia Educational Services
- Strong Dealer Network and Fortune Resource Center
- Prompt On-Site Hardware Service
- Subscription Update Service for Software and Documentation
- Comprehensive Software Catalog

At Fortune, we are committed to producing only quality products and we back that commitment with a comprehensive system warranty. Quality is monitored at every step of the manufacturing process to ensure that the product delivered to you is ready to go. Fortune provides you with limited warranty coverage for all Fortune hardware and software products, for 90 days from the date of purchase.

Fortune expects your initial set up to be trouble free. And, to ensure this, each Fortune 32:16 arrives with an easy-to-understand User's Manual
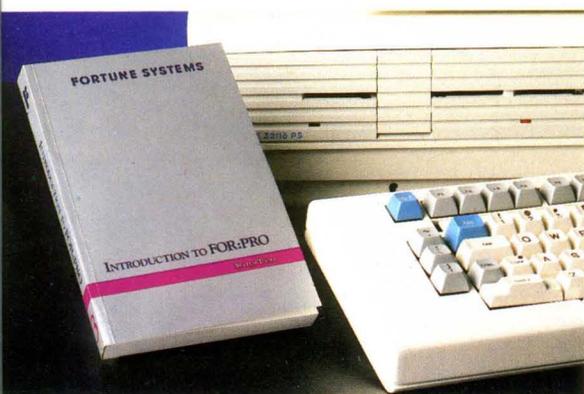
entitled *Meet Your Fortune System.* Using this manual, you should have no trouble setting up your Fortune 32:16. Or, for the customer who feels more comfortable with the assistance of a Fortune representative, Fortune provides installation services for a minimal fee.

Our superior documentation is only the first level of the ongoing, user-oriented support that Fortune provides. Fortune Systems offers excellent documentation for all of its software and hardware products and we package a comprehensive User's Manual with every software product. The User's Manual provides easy-to-read documentation for the novice user and

reference material for the professional user. For those needing a detailed understanding of Fortune's hardware and software, Fortune offers numerous User Manuals which address specific topics such as FOR:PRO,™ Fortune's UNIX™ based operating system.
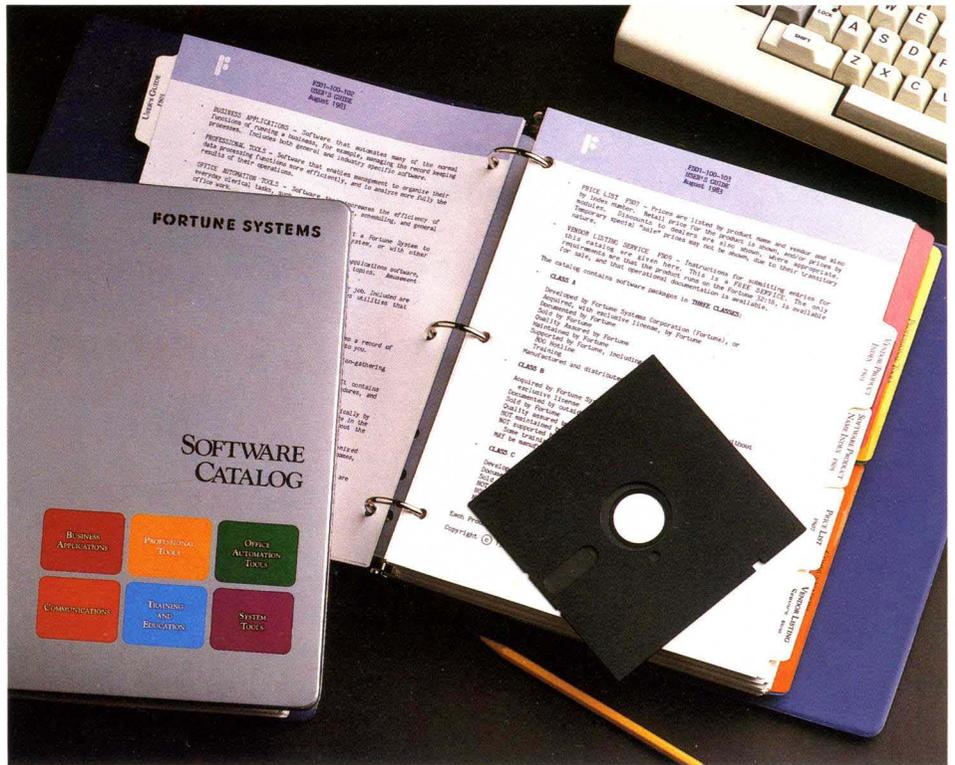
Your learning is enhanced further by the tutorial diskette included with each software application you purchase. Along with the User's Manual, each Fortune software application comes packaged with a tutorial diskette, so that the novice user has the benefit of interacting with the system while tracking clear, concise written instructions in the User's Manual.

CUSTOMER SUPPORT SERVICES

For our customers interested in quickly gaining expertise with Fortune products, Fortune offers hardware and software training courses in select major metropolitan areas. Our comprehensive training classes provide you with a quick, in-depth understanding of specific software and hardware products, from C Programming to System and Office Operations to Hardware Maintenance.

As part of our commitment to quality products and support, we select responsive dealers to service and support our products. Dealers are a key link in Fortune's support network, so we select our dealers carefully and then offer them Fortune's full support. We have a fully staffed Resource Center to provide dealers with immediate help regarding software questions or difficulties and have product specialists available twelve hours a day for consulting and problem assistance.

Our On-site Hardware Service means that help is quickly available.
A Fortune Maintenance Agreement ensures that help is only a toll-free telephone call away and that assistance will normally be on-site within four hours during weekdays. We make a variety of hardware services available to customers worldwide through our network of authorized Fortune Service Agents.

Our Subscription Update Service allows you to take advantage of Fortune software advances as soon as they become available. We want our customers to have the most recent updates of our software and documentation. Fortune offers a software subscription update service to ensure that you can take full advantage of the enhancements made to software applications you are licensed to use.

To assist you in your selection of productivity tools, Fortune publishes a comprehensive Software Catalog which lists and classifies the many software applications developed for the Fortune 32:16. Listed software is available through many of our Fortune authorized dealers.

Fortune Systems is committed to providing quality products, service and support. We hope you will take full advantage of the wide range of services we offer. For further information regarding any of Fortune's services and support, please contact the Fortune Marketing Information Center, (415) 592-5140.

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