Much has changed in the computer industry with the advent of the microcomputer and the growing popularity of the superminicomputer. Due to these two trends, many predict that the micro will squeeze out the low end of the mini product line as the supermini overtakes the high end, making the demise of the minicomputer imminent. What these prophets of doom fail to consider, however, is that the minicomputer still holds distinct advantages over a microcomputer, and that those advantages ensure the continued growth of the minicomputer market. Rather than supplant the minicomputer, the microcomputer will instead find its own niche in the marketplace and the two types of computers, with their own specialized tasks, will coexist in the industry.

Trying to find your way through the multitudes of computers on the market today can be extremely confusing. What is the difference between a micro-, mini-, and superminicomputer anyway? Attempting to get clear definitions of these three types of systems can be worse than trying to actually choose a computer to purchase. At first, it may seem as if the choice is between only the micro and supermini, and that the mini is really being replaced by these two systems. Undoubtedly, the predictions of the mini's demise are an outgrowth of just such a cursory glance at the industry. But a closer look at the capabilities and costs of the three different system types can show that each has its place in the industry.

The minicomputer is still alive and well despite predictions that the microcomputer would encroach on its domain. The fact that most of the major minicomputer manufacturers released new systems or new models within the last year is evidence of the minicomputer's health. Through detailed comparison charts, this report presents the salient characteristics of over 120 minicomputers from 45 vendors. The text of the report discusses the current state of the minicomputer market, provides a guide to the chart entries, and guidelines for selecting minicomputer systems.

MINICOMPUTER ADVANTAGES

Despite the increasing attention given to the microcomputer, it will take time for the microcomputer to match the total power of a minicomputer. True, many business applications can execute at the same speed on a mini as on a micro, but that is not the only measure of a system's power. For instance, microcomputers cannot yet support the large number of terminals or workstations that minis currently support (for example, the HP 3000 Series 68 can support up to 400 workstations). In fact, micros can not yet match the minicomputer on a variety of issues. In addition to the ability to support more workstations, the minicomputer has the following advantages over the microcomputer:



The MAI/Basic Four System 710 basic configuration consists of a central processor with 96KB of memory, one display terminal, two 35MB disk drives, and one 300 line-per-minute printer.



Features of the Plexus P/60 include multiprocessor architecture. During operation, the job processor performs data processing and operating functions while an intelligent mass storage processor handles disk and tape I/O, and intelligent communications processors handle terminal and printer I/O and data communications.

faster processing speeds

- greater expandability
- greater disk storage capacities
- cost effective communications with mainframes
- greater control and security
- abundance and greater variety of proven software

The ability to expand the capabilities of a minicomputer is probably its greatest advantage. Minis can handle a large number of terminals, large capacity disk drives and multiple printers. When a user needs more disk space for example, they can usually just connect an additional drive. Often this is not possible with a micro. Micros simply cannot support the number or variety of devices that are available for minicomputers. Also, most minicomputer vendors are committed to providing product lines that allow users to easily upgrade to a more powerful system as their business needs increase. Should a user outgrow their present system, many vendors have a larger system the user can purchase. In many cases, the original peripherals and software are portable to the larger system, protecting much of the user's investment. Micro vendors are not yet supplying a product line that offers the user this type of an upgrade path. Therefore, it is important to consider this issue of upgradability if a business is expected to grow substantially in the years ahead.

The advantage of greater disk capacities is related to the issue of growth. Micros typically support Winchester or fixed disk in the range of five to thirty megabytes (if they support hard disk at all). And the number of disks that can be attached to micros is often very limited. On the other hand, minicomputers support hard disks as large as 400 megabytes and often can support multiple large-capacity disk drives. Again, this support for greater disk storage serves to protect the user's investment in their hardware since a user can usually attach another drive to their present configuration when more disk storage is needed.

Minicomputers are also ahead of microcomputers in the area of communications. Local area networks (LAN), which provide the capability to interconnect multiple devices within a company, expand the capabilities of a minicomputer beyond that of a single system. Many are calling the LAN concept the backbone to the office of the future, where individual offices in every company are interconnected for high-speed communication. Through the use of a LAN, users can share valuable company resources, such as data bases, large-capacity storage devices, and highspeed printers, that would be too expensive to justify for each system alone. The many other advantages to local area networks provide numerous benefits to the user. Due to the increasing popularity of LANs, an entry has been added to the comparison charts indicating the LAN supported by the various systems in this report. Many systems are adopting the use of Xerox's Ethernet (at least 11 vendors listed in this report are using Ethernet), and it is viewed as the defacto standard by many. Networking software is beginning to emerge for microcomputers, but it will take time for the micros to reach the level that minicomputers have already achieved in the area of communications. In addition to the use of LANs, mini vendors are also giving their systems the ability to communicate with other systems and mainframes. Just glancing at the entry for protocols supported in the comparison charts shows that most minis can talk with IBM mainframes or support IBM's System Network Architecture (SNA). Microcomputer communication capabilities are growing and changing rapidly, but still have a long way to go before they match the capabilities of the minicomputer.

The problem of security has been receiving a great deal of attention lately. With a minicomputer information is centralized, preventing duplication of data. If a change or correction needs to be made, only one copy of the data needs to be maintained. The correction can be made quickly and easily, ensuring the integrity of the data. With micros, the data is often duplicated on multiple floppy disks because different individuals need the same information. Correcting data may be difficult because of these multiple copies. Someone needs to ensure that a correction is made on all the copies in order to maintain the integrity of the whole system.

The software issue is a particularly important one. Probably the greatest strength of the minicomputer is the soft-

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ware available, both operating system and application software. Again, most of the major mini vendors are protecting their current user's investments by building in compatibility to their software. Data General, for instance, employs the instruction set of the earlier Nova computers in the Eclipse computer's operating system allowing programs written on the Nova to be run on the larger Eclipse systems. For micros to penetrate the established markets of the minicomputer, the vendors will have to be able to save the user's present application software.

The incredible wealth of application software written for minicomputers is astounding. Every possible application is available for most of the major computer systems. Minicomputer vendors that don't supply software are heavily involved in programs that encourage third-party software vendors to write application software for the mini vendor's systems. Through specific software programs, mini vendors have carved out market segments for their systems that will be hard to compete against. Microcomputer vendors are still trying to do all things for all users. Until these vendors determine their particular market segments and strengths, the minicomputer will continue to dominate in vertical markets.

The existing software base of the minicomputer is also helping the mini to hold its ground against the superminicomputer. Users have an substantial interest in trying to protect their software investment because it is very expensive to convert existing applications to the longer word length. To determine whether a 32-bit system would benefit an application, the raw performance of the application must be considered. If the application is performance driven rather than memory driven, then a 16-bit system may give the application more performance for the same price. This is true because more of the circuitry of a 16-bit system can be dedicated to processing speed and parallelism rather than to managing the longer word length and

larger instruction set. If the cost of two systems is close, and if the 32-bit instruction set does not benefit the application, then the 16-bit system will generally give more performance for a specific application.

So how does a prospective user of computers determine which system will fit the needs of their company? In general, a minicomputer would be better than a microcomputer if your applications require:

- large amounts of data
- a large number of users on the same application simultaneously
- several different applications accessing several sets of data
- · several applications accessing the same core of data

The minicomputer with many workstations will meet the needs of such a business more effectively than a multitude of micros. Micros simply cannot handle the storage and communications requirements demanded to meet such needs—vet.

Despite these advantages, the threat posed by microcomputers is real. The market will continue to change in the months ahead and minicomputer vendors will have to revise their strategies to fight the tide of micros trying to infiltrate their ranks. The micro vendors are well aware of their shortcomings and it is guaranteed that they will address those areas in the near future. Micro manufacturers already rely heavily on standard microprocessors and operating systems so that attaching peripherals will become easier. The use of generic software by these systems makes it easier to transport programs from one system to another, also.



The Microdata Reality 4700 starts with a single base unit that can be configured by the user to meet a wide range of requirements. The base configuration includes 64KB of memory, 32MB of disk storage, and one single-density 1600 bpi streaming tape drive.

Some of the advantages offered by microcomputers are already finding their way into the systems offered by traditional mini vendors. Systems are becoming smaller, more compact, yet maintaining software compatibility. Production costs are being lowered, resulting in declining hardware prices, in order to directly attack the micro's approach into the small business market.

THE MINICOMPUTER MARKET

A minicomputer, for the purposes of this report, can generally be characterized as a computer that is distinguished by:

- a word length of 8 or 16 bits
- · a main memory capacity of less than six million bytes
- a purchase price for the basic configuration, including peripherals and controls, of \$35,000 and up

The minicomputer market saw a great deal of activity in the last year despite the dire predictions of the minicomputer's demise. All the major minicomputer manufacturers released new systems or new models in the last 12 months.

IBM's big announcement was the System/36, finally filling the gap between the System/34 and System/38. The System/36 provides source code and data file compatibility with the System/34, providing an easy migration path for existing System/34 users. Announced in May 1983, IBM has already enhanced the product line with four new models that double the disk storage capacity and increase main memory capacity to one megabyte for all models.

Other vendors repackaged existing processors into smaller, more compact configurations, in a direct response to the growing interest in microcomputers. Hewlett-Packard expanded its HP 1000 product line with the introduction of the HP 1000 Micro systems: Micro 26, 27, and 29. Each is based on the existing HP 1000 processors, the A600, A700, and A900, respectively. The new Micro 1000 systems offer the same processing capabilities as the other HP 1000 systems, but can be packaged in a floor accessory stand small enough to fit under a desk. DEC released the Micro PDP-11, a repackaged version of the PDP-11/23 processor. The Micro PDP-11 is packaged to fit easily under a desk, on a worktable, or as a rack mountable box enclosure.

Some vendors completely replaced a product line with all new systems. The Texas Instruments Business Systems series now consists of the 600A, 800A, and 800B computers. TI claims that reliability in these new systems has been increased by reducing the number of chips in the CPU. The 600A is up to 1.5 times faster than the TI's previous midrange computer and the 800A and 800B are twice as fast as the 600A. Hewlett-Packard also completely replaced the HP 3000 line with the announcements of the Series 39, 42, 48, and 68. These four systems replaced the earlier Series 40SX, 40, 44, and 64, respectively. The new HP 3000 systems support a new version of the MPE operating system, more terminals, and offer a disk caching feature to speed I/O transfers.

Honeywell brought out three new models in the DPS 6 family, the DPS/40, 45, and 75. A new version of the operating system increases portability of applications across the entire DPS 6 line and provides expanded capabilities for data base management and transaction processing. While Honeywell is continuing to market all 18 members of the DPS 6 family, emphasis is being placed on these three systems, as well as three other new models introduced last year.

Single model introductions were made from Burroughs, Data General, and Sperry. Burroughs announced the B 95, an entry-level system for the B 90 series. Burroughs is also following the trend toward small packaging, offering the B 95 in three modules, each measuring only 6.88-by-14-by-14.25 inches. In some configurations, Burroughs claims that the user can install the system on-site without assistance from service engineers. Data General released the Eclipse S/280, their most powerful 16-bit member of the Eclipse product line. The S/280 offers a choice of three operating systems, compatibility with the other Eclipse computers, and a wide range of options. Again, compact configurations are offered, with the CPU and system cache incorporated on a single 15-by-15 inch board. Sperry actually announced the System 80 Model 8 in 1982, but did not begin delivering the system until 1983. The Model 8 is the top-of-the-line System 80 and Sperry claims it gives twice the performance of the Model 6.

The large computer manufacturers were not the only vendors hard at work this past year. During 1983, six other vendors delivered products for the first time including vendors represented in this report for the first time: Rexon Business Machines Corp., Perq Systems Corp. (formally Three Rivers Computers), and Computone Computer Systems. Systems first delivered in the first quarter of 1984 included models from PolyMorphic Systems, Point 4 Computer Corp., and Modcomp. Two other vendors, Dimis, Inc. and Plexus Computer, Inc. indicated they will be shipping new systems in 1984, also.

THE COMPARISON CHARTS

The key functional characteristics of 125 commercially available minicomputers from 45 vendors are presented in the accompanying comparison charts. Most of the information in the charts was supplied or verified by the vendors during January 1984. Every attempt was made to include all the major suppliers of minicomputers in this report. The absence of any company's product from these comparison charts means either that the company was unknown to us or that it failed to respond to our repeated requests for information. The staff at Datapro Research Corporation greatly appreciates the cooperation of the vendors that did respond, in the preparation of these charts.

All of the comparison chart entries are explained in the following paragraphs, together with discussions of their significance to prospective buyers and some guidelines for selecting the most appropriate minicomputer for specific applications.

> WORD LENGTH

Probably the single most important distinguishing characteristic of a computer is its word length; that is, the number of bits (binary digits) that can be stored in or retrieved from main storage during a single cycle. In general, the longer the word, the greater the efficiency and accuracy of a computer's internal operations—and the higher its price tag.

Most of the minicomputers currently on the market have a 16-bit word length; this size neatly accommodates two 8-bit bytes (characters) and has been shown to yield an attractive balance between economy and performance for many applications. Other systems use an 8-bit word length. These 8bit systems are suitable for many functions where low cost is more important than high precision or sophisticated instruction repertoires.

Many minicomputers are now featuring 16/32-bit word lengths. These systems generally are based on the Motorola MC68000 microprocessor. The MC68000 has a 16-bit bus with 32-bit internal architecture.

Systems providing word length architectures of more than 16 bits (generally 32 bits) are featured in the Report Supermini Systems (70C-010-40). This report includes an introduction to "superminicomputers," as well as comparison columns describing the specifications of the superminis currently available.

MAIN MEMORY

The minimum and maximum amount of main storage available for each computer, expressed in thousands of bytes (KB) or millions of bytes (MB).

DISK STORAGE CAPACITY

This indicates the minimum and maximum on-line storage capacities offered by the system. The indicated storage capacities are shown in millions of bytes (MB) and indicate the range of disk storage capacities available for the systems or simply the maximum disk storage capacity of the system.

NO. WORKSTATIONS SUPPORTED

A very important consideration for many potential computer users is the number of workstations the system can support. Workstations, in this case, can mean most types of devices that can input and/or receive data from the computer. When the computer is used in a business environment, for example, the workstation would normally be a display terminal or teletypewriter, but in a manufacturing or distribution environment, the workstation could be a sensor or transmission unit that simply transmits signals back to the computer for processing.

PRICE RANGE

Ideally, these figures represent the upper and lower prices for system hardware, from the minimum processor complex to a fully configured system. The figures actually presented in the columns can vary according to vendor response. In cases in which only one figure is quoted (e.g., "From \$100,000"), the price is usually that of the minimum processor complex only.

TARGET MARKET

This indicates the industries toward which the system is geared. In many cases, the market is indicated in general terms capable of further refinement. For example, "Engineering/scientific" can indicate a variety of submarkets, including computer-aided engineering and design (CAE and CAD, respectively), seismic processing, and computation-intensive applications.

CENTRAL PROCESSOR

CPU manufacturer and model identifies the manufacturer and model of the minicomputer or microprocessor used as the system's central processing unit (CPU). An entry of "proprietary" indicates that the vendor supplies their own CPU and the model is generally identical to the model designated at the top of the chart.

Hardware floating-point facilities are included in the standard instruction repertoires of many currently available minicomputers. A hardware floating-point removes the burden of performing floating-point arithmetic from the CPU, and, thus, enhances system processing speed. In the absence of hardware floating-point, floating-point arithmetic would have to be performed through time- and spaceconsuming subroutines in the operating system.

The entries under this heading usually indicate that the system's hardware floating-point is single-precision, or double-precision, or a combination of the both. The precision of the floating-point is an indication of the number of bits on which it can operate simultaneously, generally expressed in arithmetic increments of 32; for example, a single-precision floating point can operate on 32 bits simultaneously, a double-precision on 64, and so forth.

Battery backup permits an orderly shutdown of the system in the event of an electrical failure or another sudden interruption. If battery backup is not or cannot be implemented, all data in main storage at the time of the interruption can be lost. This entry indicates whether battery backup is standard, optional, or inapplicable to a system.

A real-time clock or timer is another essential element in most "time-conscious" systems. A real-time clock enables the program to determine the time of day, while an interval timer usually indicates the amount of time that has elapsed since the occurrence of some significant event. In many cases, the timer can trigger an interrupt signal when a predetermined interval of time has elapsed. The entry indicates whether the clock or timer is standard, optional, or inapplicable to the system.

CPU cycle time, nanoseconds indicates the time that elapses between the CPU's call for data and the delivery of



that data from a storage device by the I/O section of the processor.

MAIN STORAGE

Bytes fetched per cycle is the number of bytes accessed by main storage in a single read.

Memory access indicates the number of bits transferred per second from auxiliary storage to main memory.

Cycle/access time, nanoseconds indicates two benchmarks of the system's main storage. The cycle time is a minimum time interval that must elapse between the starts of two successive accesses to any one storage location. Though cycle time ranks with word length as one of the most significant individual indicators of a computer's performance potential, one cannot assume that the computer with the fastest cycle time will be the best overall performer in a particular application. Other parameters that have an important effect on a computer's performance include the flexibility and power of its instruction repertoire, the number of storage cycles it requires to execute each instruction, and its input/output capabilities. Access time is the actual elapsed time between the CPU's request for data and the time when that data is received (read) in memory.

Storage protection is a feature that prevents unauthorized writing in or reading from certain areas of main storage. The protection can be accomplished through hardware, software, or a combination of both. Though unnecessary in simple dedicated systems, an effective storage protection scheme is an essential element in multiprogramming and time-sharing environments. The entry indicates whether storage protection is standard, optional, or inapplicable to the system.

Increment size, bytes denotes the size of the add-on units used to increase the system's main memory.

Cache memory is a high-speed storage unit that can significantly increase the performance of a computer by serving as a fast-access buffer between main storage and the central processor or the input/output subsystem. The entry indicates the capacity of the cache memory unit, in bytes, if applicable to the system.

INPUT/OUTPUT CONTROL

The number of I/O channels indicates the maximum combination of high-speed and low-speed channels that can be used to connect peripheral controllers to the CPU. Low-speed lines are used to connect such devices as terminals, printers, and card equipment, while high-speed lines connect mass storage devices like disk and magnetic tape subsystems.

The data transfer rate, sometimes referred to as the "I/O bandwidth," is a measure of the computer's ability to transfer data to and from peripheral devices or other external sources through all available I/O channels, buses, and ports. The transfer rate is indicated in thousands or

millions of bits per second (M or K bps) or thousands or millions of bytes per second (KB/second or MB/second).

COMMUNICATIONS

Maximum number of lines indicates how many data communications lines can be handled by a particular system. The types of lines are specified in the next two entries.

Synchronous lines are those featuring synchronous data transmission. In this mode of transmission, bits or characters (composed of 5-8 bits) of data pass through the line in blocks at a relatively constant rate regulated by synchronizing characters at the beginning of each block.

The entries indicate whether synchronous lines are standard, optional, or not applicable to the system; where possible, the maximum speed of each line in bits per second (bps) is noted.

Asynchronous lines feature asynchronous data transmission, in which characters are transmitted individually at irregular rates. A start bit precedes each character, and a stop bit follows it. The entry tells whether asynchronous lines are standard, optional, or inapplicable, and also notes the line speed in bps.

Protocols supported indicates which intersystem communications conventions, if any, are supported through the availability of appropriate hardware and software facilities.

Type of LAN supported indicates local area networks that can be used to link the system to other computer systems within a limited area, such as an office building. An example would be Xerox's Ethernet LAN.

RJE terminals emulated indicates which of the popular remote job entry terminals, if any, the system can be equipped to emulate. Programs that emulate the functions of the IBM 2780, 3780, and HASP terminals, for example, are available for many of the current minicomputers.

IBM 3270 emulation indicates whether the system can be equipped to emulate the functions of the widely used IBM 3270 display terminals.

PERIPHERAL EQUIPMENT

These entries provide details on the standard peripheral devices available for use with each computer system.

Disks supported indicates the types of disk media available for use on the system. Most responses indicate a mixture of fixed and removable disk drives. Fixed disk drives include those employing Winchester technology and those using older fixed-media technologies. Removable drives are those that employ disk packs and cartridges. This entry also supplies the storage capacities of the disk devices that are compatible with the system.

Serial printers generally range in speeds from about 30 to 600 or more characters per second (cps), employ various

matrix and daisy wheel technologies to print a character at a time, and are frequently able to print bidirectionally (that is, while the print head is moving in either direction across the page). These printers are usually used in smaller configurations, and provide excellent-quality hard-copy reports for far less money than the line-at-a-time printers usually used with larger systems. This entry indicates the speeds of the serial printers available for the system.

Letter-quality printers are low-speed serial printers (generally 30-55 cps) used in office automation applications to produce correspondence-quality documents. This entry provides the speeds of the letter-quality printers available for the system.

Line printers operate at speeds of 100 to 2000 or more lines per minute (lpm) and are used most frequently in large configurations. This entry gives the speeds of the line printers available for use on the system.

Reel-to-reel tape drives indicates the applicability and the speed in inches per second (ips) of tape drives that accommodate industry-standard ½-inch wide magnetic tape.

Streaming tape drives permit data to be transferred to a tape without the tape stopping between data blocks; this high-speed transfer makes streaming tape drives valuable as backup media for fixed disks. This entry indicates the speed of the tape in inches per second (ips) and, where applicable, the presence of a start/stop mode that permits the streaming tape drive to emulate conventional tape subsystems.

Cassette/cartridge tape drives indicates the availability and recording densities in bits per inch (bpi) of I/O devices that accommodate low-cost magnetic tape cassettes or cartridges. In some cases, the capacity of the cassette/cartridge in millions of bytes (MB) is given.

Other peripherals supported lists the additional peripheral devices that are available for each system. Typical entries include card readers and punches, plotters, laser printers, and graphics workstations.

SOFTWARE

Software—the programming packages and languages used to direct the computer's operations—is a crucial component of any computer system. When you select a system, it is imperative that you carefully investigate the available software. Areas of investigation should include: operating systems; programming languages; preprogrammed utility packages, such as sorts and file maintenance; and application packages, such as payroll, graphics, CAD/CAM, and others. Prospective buyers should carefully note whether the software they will require is included in the cost of the system or offered at extra cost.

Vendors' claims and promises concerning the availability and capabilities of software should be carefully checked. This is particularly true of software that has been announced but not yet released. Sometimes the delivered product does not live up to its touted capabilities.

An assembler is a special-purpose program that uses the computer's power to facilitate the preparation of other programs. It enables the programmer to write his or her own programs in a simplified format that uses mnemonic operation codes and symbolic operand addresses. The assembler program then converts these symbolic instructions into their machine-language equivalents, producing computer programs ready for loading and execution. Entries here indicate the availability of an assembler, a macro assembler, or both. A macro assembler is another software tool to make the programmer's job easier. Macro routines can be called by the programmer and copied right into the program. This saves the programmer from having to recode the routine each time it is used, and also eliminates the possibility of keying errors when that part of the program is entered. As usual, there is a price to pay; macros usually consume large quantities of memory space.

Compilers are software tools that shift part of the program preparation task from the user to the computer itself by converting programs written in a simplified, procedureoriented language into machine-language object programs. Compilers are now used in virtually all large- and mediumscale computer installations because of their demonstrated ability to slash programming costs—and they are becoming increasingly available for minicomputers. This widespread availability has resulted from the development of more powerful central processors; compilation is an intricate process that requires the storage space and processing power provided by supermini systems.

Entries in this section of the charts may include widely used high-level programming languages like Cobol (Common Business Oriented Language), RPG (Report Program Generator), Fortran (Formula Translator), Basic (Beginners All-purpose Symbolic Instruction Code), Algol (Algorithmic Language), APL, PL/1, and Pascal, or proprietary languages that are available from a vendor for use on a particular system.

A word of warning here: if you use a language that is unique to a vendor, you may be faced with a problem if you eventually decide to change vendors. Your investment in software may be lost, for the programs generally will not operate on any other system.

The operating system facilitates the operation of a computer by handling such functions as: scheduling, loading, and supervising the execution of programs; allocating storage and I/O devices; initiating and controlling I/O operations; analyzing interrupt signals and dealing with errors; handling communications between the system and its human operator; and controlling multiprogramming or time-sharing operations.

This entry indicates the types of operating systems available for the computer. Typical entries describing the available operating systems include: "batch," which means that the system processes one or more jobs sequentially and requires all data to be supplied before initiation; "interactive," which means that the system allows data and parameters to be entered as the job is executing; "real-time,"

which means that the system responds to external demands on a priority basis; or "time-sharing," which means that the system allows multiple users to access the system and share all its resources at the same time. The operating systems for many of the current minicomputers are capable of supporting two, three, or all four of the above modes of operation simultaneously.

Operating system implemented in firmware tells whether the language processor and the operating system are contained in microcode. The entries stipulate "fully", "partially", or "no" to indicate the extent of firmware implementation. Implementation of an operating system or language in firmware is advantageous to the user, for it frees more memory space for the user's programs and data. Also, because the microcode is generally contained in read-only memory, it is usually inaccessible to the user; thus, any possibility of the user's tampering with the language processor or operating system is eliminated and chances for error are reduced. Another advantage of firmware implementation is the ability to create more sophisticated and complex system functions at the hardware level. Microcode routines can be substituted for the usual subroutines, thereby increasing system performance.

A database management system (DBMS) is a software facility designed to manage and maintain data in a nonredundant structure so that the data will be conveniently available for processing by multiple applications. The DBMS organizes data elements in some predefined structure and keeps track of the relationships among the data elements, thereby facilitating information retrieval and report generation. The availability of an effective DBMS can greatly simplify applications programming tasks and increase the overall value of a data processing system. This entry provides the names of the principal database management systems available for the computer.

Principal industry application indicates the main types of software packages available for the computer's target market. Principal applications for the Engineering/scientific market would include CAD/CAE and power generation; principal applications for the commercial market would include transaction processing, distributed processing, office automation, and general business packages. In some cases, the vendors have supplied the names of specific application packages for their target industries.

Other packages are those software products that are not principal market applications for the system; they are secondary packages that are available for use in the target market and collateral markets. For example, a vendor in the commercial market could list an office automation package as the principal industry application and business graphics—useful but not primary for the target market—as the other package.

PRICING & AVAILABILITY

Basic system configuration and price, intended to provide an accurate guide to the cost of the system, ideally shows a processor/peripheral configuration that would typically be used in the vendor's stated target business environment.

Although we requested full configurations and applicable prices, many vendors did not comply. Some provided only processor configurations and prices; others neglected altogether to provide hardware and pricing data. Where components and pricing for processor complexes only were supplied, we have left the information as is; potential buyers should thus be aware that the actual cost of a full system configuration could be many times that of the base processor price provided in the comparison chart. When vendors supplied no information, we developed our own sample configurations. Although we believe each configuration to be realistic and accurate, the reader must realize that, depending upon the configuration and pricing rules imposed by the vendor, the actual price of a workable system could vary from that supplied in the chart.

If you wish to buy two or more computers, it is worth noting that most of the manufacturers offer sizable discounts from their list prices on orders for multiple computers. Discounts of up to 40 percent are not unusual on large orders.

Monthly maintenance of basic configuration provides the amount to be paid per month on a maintenance contract with the vendor for service and repair for the basic configuration given above.

Date of first delivery indicates when the first production model of each computer was delivered (or is scheduled to be delivered) to a customer.

Number installed to date shows how many systems of each type had been delivered to customers as of December 1983/January 1984.

COMMENTS

This final entry on the comparison charts is used to explain or amplify the preceding entries and to provide other pertinent information about each system's hardware, software, pricing, applications, or characteristics.

MANUFACTURERS

Listed below, for your convenience in obtaining additional information, are the names, addresses, and telephone numbers of the 45 vendors whose products are listed in the comparison charts that follow.

Alpha Microsystems, 17332 Von Karman, P.O. Box 18347, Irvine, CA 92714. Telephone (714) 957-8500.

Applied Systems Corporation, 26401 Harper Avenue, St. Clair Shores, MI 48081. Telephone (313) 779–8700.

August Systems, 18277 S.W. Boones Ferry Rd., Tigard, OR 97223. Telephone (503) 684-3550.

Barrister Information Systems Corp., One Technology Center, 45 Oak St., Buffalo, NY 14203. Telephone (716) 845–5010.

BTI Computer Systems, Inc., 870 West Maude Avenue, Sunnyvale, CA 94076. Telephone (408) 733–1122.

➤ Burroughs Corporation, Burroughs Place, Detroit, MI 48232. Telephone (313) 972–7000.

CADO Systems Corporation, 2055 W. 190th St., Torrance, CA 90503. Telephone (213) 323-8170.

Centurion Computer Corporation, 1780 Jay Ell Dr., Richardson, TX 75081. Telephone (214) 699-8400.

Chislin Industries, Inc. Comp. Prod. Div., 31352 Via Colinas #102, Westlake Village, CA 91361. Telephone (213) 991–2254.

Chromatics, Inc., 2558 Mountain Industrial Blvd., Tucker, GA 30084. Telephone (404) 493-7000.

Computer Automation Inc., 1800 Jay Ell Drive, Richardson, Tx. 75081. Telephone (214) 783-0993.

Computer Designed Systems, Inc., 10911 Olson Memorial Hwy., Minneapolis, MN 55441. Telephone (612) 545-2855.

Computer Extension Systems, Inc., 17511 El Camino Real, Houston, TX 77058. Telephone (713) 488-8830.

Computone Systems Inc., One Perimeter Road, Manchester, NH 03101. Telephone (603) 624-2700.

Cyberchron Corp., Route 9, P.O. Box 164, Garrison, NY 10524. Telephone (914) 424–3755.

Data General Corporation, 4400 Computer Dr., Westboro, MA 01581. Telephone (617) 366-8911.

Datapoint Corporation, 9725 Datapoint Drive, San Antonio, TX 78284. Telephone (512) 690-7000.

Digital Equipment Corporation, 146 Main St., Maynard, MA 01754. Telephone (617) 897-5111.

Dimis, Incorporated, 1806 Highway 35, P.O. Box 2293, Ocean, NJ 07712. Telephone (201) 531–2300.

Four-Phase Systems, Inc., 10700 N. DeAnza Blvd., Cupertino, CA 95014. Telephone (408) 255-0900.

General Automation, 1045 S. East St., P.O. Box 4883, Anaheim, CA 92803. Telephone (714) 778-4800, (800) 854-3148.

General Robotics Corporation, 55-57 North Main Street, Hartford, WI 53027. Telephone (414) 673-6800.

Hewlett-Packard Co., 3000 Hanover St., Palo Alto, CA 94304. Telephone (415) 857-1501.

Honeywell Information Systems, Inc., 200 Smith St., Waltham, MA 02154. Telephone (617) 895-6000.

International Business Machines Corporation (IBM), Old Orchard Rd., Armonk, NY 10504. Contact your local IBM representative.

MAI/Basic Four Corporation, 14101 Myford Road, Tustin, CA 92680. Telephone (714) 731-5100.

MDS/Qantel Business Computers, 4142 Point Eden Way, Hayward, CA 94545. Telephone (415) 887-7777.

Microdata Corporation, P.O. Box 19501, Irvine, CA 92713. Telephone (213) 829-6781.

Mitsubishi Electronics America, Inc., 991 Knox St., Torrence, CA 90502. Telephone (213) 515–3993.

Modular Computer Systems, Inc. (MODCOMP), 1650 West McNab Road, Ft. Lauderdale, FL 33310. Telephone (305) 974–1380.

NCR Corporation, 1700 S. Patterson Blvd., Dayton, OH 45479. Telephone (513) 445-5000.

Northern Telecom Systems Corp., P.O. Box 1222, Minneapolis, MN 55440. Telephone (612) 932–8000.

Perq Systems Corporation, 2600 Liberty Ave., Pittsburgh, PA 15230. Telephone (412) 621–6250.

Plexus Computer, Inc., 2230 Martin Ave., Santa Clara, CA 95050. Telephone (408) 988–1755.

Point 4 Computer Corporation, 2569 McCabe Way, Irvine, CA 92714. Telephone (714) 863–1111.

Polycomputers, 3822 E. LaPalma, Anaheim, CA 92807. Telephone (714) 632–0144.

PolyMorphic Systems, 5730 Thornwood Drive, Santa Barbara, CA 93117. Telephone (805) 967-0468.

Rexon Business Machines Corp., 5800 Uplander Way, Culver City, CA 90203. Telephone (213) 641–7110.

Sentinel Computer Corporation, 9902 Carver Road, Cincinnati, OH 45242. Telephone (513) 984-6622.

Sperry Corporation, P.O. Box 500, Blue Bell, PA 19424. Telephone (215) 542–4011.

STC Systems, Inc., 4 North St., Waldwick, NJ 07643. Telephone (201) 445-5050.

Tandem Computers, Inc., 19333 Vallco Parkway, Cupertino, CA 95014. Telephone (408) 725–6000.

Texas Instruments, Inc., P.O. Box 202146, Dallas, TX 75220. Telephone (512) 250-7363.

The Ultimate Corp., 77 Brant Ave., Clark, NJ 07066. Telephone (201) 388-8800.

Wang Laboratories, Inc., 1 Industrial Avenue, Lowell, MA 01851. Telephone (617) 459-5000. □

MANUFACTURER AND MODEL	Alpha Micro 1042E	Alpha Micro AM-1072	Alpha Micro AM-1082	Alpha Micro 1092
	40,000 1 %	40,000	46 (00 Lin	10/00 1::
WORD LENGTH	16/32 bits	16/32 bits	16/32 bits	16/32 bits
MAIN MEMORY	512KB-3MB	512KB-4MB	512KB-4MB	512KB-4MB
DISK STORAGE CAPACITY	60MB	70MB	140MB	400MB
NO. WORKSTATIONS SUPPORTED	26	Over 40	Over 40	Over 40
PRICE RANGE	\$21,700-\$25,400	\$30,500-\$34,166	\$48,000-\$60,600	\$56,000-\$68,600
TARGET MARKET	Small business	Small business	Small business	Small business
CENTRAL PROCESSOR				
CPU manufacturer and model	Motorola 68000	Motorola 68000	Motorola 68000	Motorola 68000
Hardware floating point	No	No	No	No .
Battery backup	Std.	Std.	Std.	Std.
Real-time clock or timer	Std.	Std.	Std.	Std.
	500	500	500	500
CPU cycle time, nanoseconds MAIN STORAGE				
Bytes fetched per cycle	2	2	2	2
Memory access	150ns	150ns	150ns	150ns
Cycle/access time, nanoseconds	500	500	500	500
Storage protection	Std.	Std.	Std.	Std.
			128K; 512K	128K; 512K
Increment size, bytes	128K; 512K	128K; 512K	-	
Cache memory, bytes	None	None	None	None
INPUT/OUTPUT CONTROL			l.	
No. of I/O channels	8	8	8	8
Data transfer rate	.333KB/second	.333KB/second	.333KB/second	.333KB/second
COMMUNICATIONS	,	•	•	1
Max. number of lines	26	over 40	over 40	over 40
	9.6K bps	9.6K bps	9.6K bps	9.6K bps
Synchronous				
Asynchronous	19.2K bps	19.2K bps	19.2K bps	19.2K bps
Protocols supported	2780/3780	2780/3780	2780/3780	2780/3780
Type of LAN supported	None	None	None	None
RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780
	No	No	No	No
IBM 3270 emulation	140	110		1
PERIPHERAL EQUIPMENT			140 1 . 20 1:5	Jun 1 . 30
Disks supported	Winchester: 60MB	Winchester: 70-400MB	Winchester: 70, 140,	Winchester: 70, 140
		* * * * *	400MB	400MB
Serial printers	Any RS-232	Any RS-232	Any RS-232	Any RS-232
Letter quality printers	40 cps	40cps	40cps	40cps
Line printers	to 900 lpm	to 700 lpm	to 900 lpm	to 900 lpm
	1600 bpi	1600 bpi	1600 bpi	1600 bpi
Reel-to-reel tape drives				
Streaming tape drives	30 ips	30 ips	30 ips	30 ips
Cassette/cartridge tape drives	None	None	None	None
Other perpherals supported	VCR: 100MB	VCR: 100MB	VCR: 100MB	VCR: 100MB
SOFTWARE				
Assembler	Assembler	Assembler	Assembler	Assembler
Compilers	Alpha Basic, Alpha	Alpha Basic, Alpha	Alpha Basic, Alpha	Alpha Basic, Alpha
•	Pascal, Fortran	Pascal, Fortran	Pascal, Fortran	Pascal, Fortran
Operating system	AMOS/L	AMOS/L	AMOS/L	AMOS/L
Operating sys. implemented in firmware	No ·	No	No	No
Database management system	Third Party	through dealers	through dealers	through dealers
Principal industry application	Accounting, word	Accounting, word	Accounting, word	Accounting, word
oipai maasti y application		processing	processing	processing
Other peakages	processing		Wide variety of	Wide variety of
Other packages		Wide variety of		
		industry applications	industry applications	industry applications
		sold through dealers	sold through dealers	sold through dealers
PRICING & AVAILABILITY		· ·		1
Basic system configuration and price	CPU, 512KB memory, 60MB	CPU, 512KB memory, 70MB		CPU, 512KB memory,
	Winchester, VCR	high-speed Winchester,	140MB high-speed Win-	400MB high-speed Win-
	interface, 2 ports, 9-	VCR interface, 2 ports,	chester VCR interface,	chester, VCR interface,
	slot chassis—\$21,700	19-slot chassis—\$30,500	2 ports, 19-slot	2 ports, 19-slot
			chassis—\$48,000	chassis—\$56,000
			55500 Q-0,000	20,000
Mo. maintenance of basic configuration	Contact vendor	Contact vendor	Contact vendor	Contact vendor
Date of first delivery	1983	1983	1983	1983
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
COMMENTS	Prices quoted are	Prices quoted are	Prices quoted are	Prices quoted are
	suggested retail	suggested retail	suggested retail	suggested retail

MANUFACTURER AND MODEL	Applied Systems Corp. ASC/68	August Systems Inc. Series 300 Tri-Gard System	August Systems Inc. Series 300 TRI-DAC System	Barrister Information Systems Corporation Barrister System 121
WORD LENGTH	16/32 bits	16-bits	16-bits	16-bits
MAIN MEMORY	256K to 2MB	256KB to 1MB	256KB to 1MB	1MB-2MB
DISK STORAGE CAPACITY	30 to 500MB	Not Required (*)	Not Required (*)	13MB-104MB
NO. WORKSTATIONS SUPPORTED	16/32	Not Applicable	4 or more Colorgraphic	16
PRICE RANGE	\$30,000-\$75,000	\$50,000 to \$200,000	\$125,000 to \$600,000	\$35,000-\$80,000
TARGET MARKET	Business/Communications/ Technical/CAD	Industrial control & Safety shutdown	Industrial control & Critical Data Acquisition	Legal Industry
CENTRAL PROCESSOR	Toolinidaly one	Colory Sharacann	Critical Data Acquisition	
CPU manufacturer and model	M68000	Intel SBC 86/30	Intel SBC 86/30	Proprietary
Hardware floating point	Double; Opt.	Double	Double	No
Battery backup	Opt.	Opt.	Opt.	Opt.
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	100	500	500	400
MAIN STORAGE			1_	1_
Bytes fetched per cycle	2/4	2	2	2
Memory access	9MB	32 bits/microsec.	32 bits/microsec.	16
Cycle/access time, nanoseconds	100	200	200	150
Storage protection	Opt.	None	None	Std.
Increment size, bytes	128K	128K	128K	1024K
Cache memory, bytes	2/4K	None	None	None
INPUT/OUTPUT CONTROL	1_			1
No. of I/O channels	8	up to 7000 Digital I/O	4K Digital, 12K Analog	10
Data transfer rate	1MB/sec	50KB/sec	50KB/sec	2500KB/sec.
COMMUNICATIONS		1		
Max. number of lines	16/32	40	40	8
Synchronous	Opt.; 56K bps	Opt.	Opt.	Std.
Asynchronous	Std.;19.2K bps	Opt., 38.4K bps	Opt. 38.4K bps/channel	Std., 38.4K bps
Protocols supported	TTY, 2780, SNA	SDLC, HDLC	SDLC, HDLC	None
Type of LAN supported	Ethernet	None	None	Ethernet
RJE terminals emulated	3780	None	None	None
IBM 3270 emulation	Yes	No	No	None
PERIPHERAL EQUIPMENT		ł	1	Į.
Disks supported	Fixed: 10MB-90MB Remov.: 50MB-500MB	Fixed: 10MB	Fixed: 10MB	Cartridge: 13MB, 40MB
Serial printers	30 to 200 cps	150 cps	150 cps	40-200 cps
Letter quality printers	30 to 150 cps	None	None	40 cps
Line printers	300 to 900 lpm	300 lpm	300 lpm	430-1000lpm
Reel-to-reel tape drives	800/1600 bpi	None	None	None
Streaming tape drives	Opt.	None	None	None
Cassette/cartridge tape drives	10MB	None	None	None
Other perpherals supported	Floppy Disk:1MB	Diskette: 640KB, 1.2MB	Diskette: 640KB, 1.2MB	Xerox 2700 Laser Printer Optical Character Reader
SOFTWARE	-			Optical Character Reader
Assembler	Macro	ASM86	ASM86	No
Compilers	C, Cobol, Basic, Pascal, Fortran, APL	Fortran 77, PLM 86	Fortran 77, PLM 86	None
O				
Operating system	Multitasking, UNIX	Real Time, Process Ctrl.	Real Time, Process Ctrl.	Multi-programming
Operating sys. implemented in firmware		Partially or fully	Partially or fully	Partially
Database management system	UNIF/INGRS	None	None	BIMS
Principal industry application	Network Computing,	Process, critical HVAC	Process safety shutdown,	Legal word processing,
Other mediages	Business, CAD/CAM	control, safety shutdown	crit. HVAC w/colorgraph.	billing, litigation sup.
Other packages	Office Automation,	Modbus protocol, Data	Modbus protocol, ladder,	Docketing, Attorney
	Accounting, Prof. Mgmt.,	Base builder, Ladder	database, & graphics	work, Product Retrieval,
PRICING & AVAILABILITY	Engineering/Graphics	logic builder	builder	Financial Modeling
Basic system configuration and price	CPU, 1MB Memory, 80M	Series 300 triple CPU	Corios 200 arials CRU	CDI 1004KB 14 10
basic system comiguration and price	disk drive, 1MB floppy	and I/O, Video Program;	Series 300 triple CPU and I/O basic—\$40,000;	CPU, 1024KB Memory, 13
	drive, printer/terminals	—\$45,000; with 100		disk, visual display
	, ,		with 100 digital I/O—	terminal, 200 cps matrix
	—\$35,000	digital I/O\$50,000; with 100 Analog I/O	\$46,000; with 100 Analog 1/0—\$56,000; with 1000	printer, word processing & Financial management
		\$61,000	1 *	
		1,000	Analog I/O— \$154,000;	software\$35,550
			each colorgraphic work- station—\$25,000	1
Mo. maintenance of basic configuration	Contact vendor	Opt.	Opt.	\$345
Date of first delivery	1983	November 1981	June 1983	August 1983
Number installed to date	Not supplied	Q 1301	2	August 1983 45
COMMENTS	Multi-processing, UNIX-	On-Line workstation not	Multiple units in star	"
OCH TIELT I O	based computer system	•	1 -	
		typically implemented.	network configuration	
	with Color/Graphics and	(*) Disk not required	with multiple color	1
	networking options.	for on-line control	graphic workstations	1
		operation (all-RAM,	also available at system	1
		portions EPROM)	price of \$1.5-\$2.0M	
		!	(*) Disk not required	1
			for on-line control.	1
			İ	1
	1	1	i	i

VORD LENGTH IAIN MEMORY ISK STORAGE CAPACITY O. WORKSTATIONS SUPPORTED RICE RANGE ARGET MARKET ENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds IAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	16 bits 64KB up to 400 MB 32 From \$9,000 Business Proprietary No Std. Std. Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780 None	8 bits 128KB-1.5MB 18MB-231MB 4-12 From \$14,000 Business/Commercial Proprietary No No Opt. Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA, X.25	8 bits 608KB-3.3MB 37MB-1.7GB 36 From \$23,000 Business/Commercial Proprietary No No Std. Not supplied Not supplied Not supplied 210 Std. 128K None Not supplied 4-18 Opt.; 9.6K bps Opt.; 98.4K bps 2780/3780, SNA, BDLC,	16 bits 13 1KB-2MB 65MB-8GB Not supplied From \$62,000 Business/Commercial Proprietary No No Opt. 167/250 Not supplied Not supplied 300-500 Std. 13 1K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
IAIN MEMORY ISK STORAGE CAPACITY O. WORKSTATIONS SUPPORTED RICE RANGE ARGET MARKET ENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds IN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	64KB up to 400 MB 32 From \$9,000 Business Proprietary No Std. Std. Not supplied Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	128KB-1.5MB 18MB-231MB 4-12 From \$14,000 Business/Commercial Proprietary No No Opt. Not supplied Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.; 38.4K bps 2780/3780, BDLC, SNA,	608KB-3.3MB 37MB-1.7GB 36 From \$23,000 Business/Commercial Proprietary No No Std. Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	13 1KB-2MB 65MB-8GB Not supplied From \$62,000 Business/Commercial Proprietary No No Opt. 167/250 Not supplied Not supplied 300-500 Std. 13 1K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
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ENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds IAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Proprietary No Std. Std. Not supplied Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Proprietary No No No Opt. Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Proprietary No No Std. Not supplied Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	Proprietary No No Opt. 167/250 Not supplied Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
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Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds AIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	No Std. Std. Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	No No Opt. Not supplied Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	No No Std. Not supplied Not supplied Not supplied 2 10 Std. 128K None Not supplied Not supplied Opt.; 9.6K bps Opt.; 38.4K bps	No No Opt. 167/250 Not supplied Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Battery backup Real-time clock or timer CPU cycle time, nanoseconds AIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes PPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Std. Std. Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	No Opt. Not supplied Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	No Std. Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	No Opt. 167/250 Not supplied Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Real-time clock or timer CPU cycle time, nanoseconds AIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate OMMUNICATIONS Max. number of lines Synchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Std. Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Opt. Not supplied Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Std. Not supplied Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	Opt. 167/250 Not supplied Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
CPU cycle time, nanoseconds AIN STORAGE Bytes fetched per cycle Wemory access Cycle/access time, nanoseconds Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate OMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Not supplied Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Not supplied Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Not supplied Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	167/250 Not supplied Not supplied 300-500 Std. 13 1K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
AIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL INO. of I/O channels Data transfer rate DMMUNICATIONS MANUNICATIONS Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Not supplied Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Not supplied Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Not supplied Not supplied 210 Std. 128K None Not supplied Not supplied Opt.; 9.6K bps Opt.; 38.4K bps	Not supplied Not supplied 300-500 Std. 13 1K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL INO. of I/O channels Data transfer rate DIMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate DMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Not supplied Not supplied None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Not supplied Not supplied Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Not supplied 210 Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	Not supplied 300-500 Std. 131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
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Storage protection ncrement size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate OMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	None Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	Std. 128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Std. 128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	Std. 13 1K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Increment size, bytes Cache memory, bytes IPUT/OUTPUT CONTROL INO. of I/O channels Data transfer rate OMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	Not applicable None 5 Not supplied 32 No 9.6K bps 2780/3780	128K, 512K None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	128K None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	131K, 262K, 524K, 1M 8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
Cache memory, bytes IPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate OMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	None 5 Not supplied 32 No 9.6K bps 2780/3780	None 6-11 Not supplied 2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	None Not supplied Not supplied 4-18 Opt.; 9.6K bps Opt.; 38.4K bps	8K-16K 15 Not supplied 8-32 Opt.; 19.2K bps Opt.; 50K bps
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OMMUNICATIONS Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	32 No 9.6K bps 2780/3780	2-4 Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	4-18 Opt.; 9.6K bps Opt.; 38.4K bps	8-32 Opt.; 19.2K bps Opt.; 50K bps
Max. number of lines Synchronous Asynchronous Protocols supported Type of LAN supported 3JE terminals emulated BM 3270 emulation	No 9.6K bps 2780/3780	Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Opt.; 9.6K bps Opt.; 38.4K bps	Opt.; 19.2K bps Opt.; 50K bps
Synchronous Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	No 9.6K bps 2780/3780	Opt.; 9.2K bps Opt.;38.4K bps 2780/3780, BDLC, SNA,	Opt.; 9.6K bps Opt.; 38.4K bps	Opt.; 19.2K bps Opt.; 50K bps
Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	9.6K bps 2780/3780	Opt.;38.4K bps 2780/3780, BDLC, SNA,	Opt.; 38.4K bps	Opt.; 50K bps
Asynchronous Protocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	9.6K bps 2780/3780	Opt.;38.4K bps 2780/3780, BDLC, SNA,	Opt.; 38.4K bps	Opt.; 50K bps
Profocols supported Type of LAN supported RJE terminals emulated BM 3270 emulation	2780/3780	2780/3780, BDLC, SNA,		
Type of LAN supported RJE terminals emulated BM 3270 emulation			IZ/OV/3/OV, SINA, BUILL	2780/3780, X.25, BDLC,
RJE terminals emulated BM 3270 emulation	None	1	SNA, X.25	BNA
RJE terminals emulated BM 3270 emulation	Intonic	None	None	None
BM 3270 emulation	2780/3780	2780/3780	2780/3780	2780/3780
	No	Yes	Yes	Yes
ERIPHERAL EQUIPMENT	140	1163	1.63	1 63
	Fixed: 2MB-54MB	Costridae: 4 CMP O 2NAD	Fixed: 18MB-77MB	Books GENAD 120NAD
Disks supported		Cartridge: 4.6MB, 9.2MB Fixed: 18MB-37MB		Pack: 65MB, 130MB Fixed: 402MB-1608MB
5	Pack: 80-252MB		Pack: 65MB, 130MB	
Serial printers	20-120cps	180-230 cps	180-230 cps	None
_etter quality printers	None	None	None	None
ine printers	300 lpm	85-600 lpm	160-1250 lpm	270-2000 lpm
Reel-to-reel tape drives	45 ips	None	None	50 ips; 1600 bpi
Streaming tape drives	None	25/100 ips	25/100 ips	25/100 ips
Cassette/cartridge tape drives	10MB	10 ips cassette	10 ips cassette	10 ips cassette
Other perpherals supported		Super mini disk: 6MB	Cartridge: 4.6-9.2MB,	Card equipment
		Winchester: 9.6, 14.4MB	Mini disk, card readers	1
OFTWARE				
Assembler	No	Not supplied	Not supplied	Not supplied
Compilers	Basic	Cobol, RPG, MPL II, NDL	Cobol, RPG, NDL, MPL II	Cobol, Fortran, Basic,
				RPG, NDL, Gemcos, SDL
Operating system	Multitasking	Real-time, Multitasking	Real-time, multitasking	Real-time, multitasking
Operating system Operating sys. implemented in firmwa		Fully	Fully	Fully
	e i artiarry	None	None	DMS II
Database management system	Accounting	J.	1	Business
Principal industry application	Accounting	General Business	General Business	Dusiless
Other packages		Mfg., Hospital, Educ.,	Mfg., Hospital, Educ.,	Mfg., Banking, Educ.,
Pas		Word Management,	Word Mgmt, Reporter,	Distribution
		Reporter, Domain	Domain	1
RICING & AVAILABILITY		Dente, Dente	- 5	
Basic system configuration and price	CPU, tape cartridge,	B 96 with 512KB memory,	B930 with 2 processors,	B1990-SP with 512KB
basic system configuration and price	27MB disk—\$38,950	80MB fixed disk, tape	256KB memory module,	memory, 4 comm. inter-
	27 WID GISK—\$50,950	streamer, and controls—	Data comm. I/O extender—	- faces, Maintenace Access
			· ·	
		\$40,615	\$23,228	Processor and ET1100
	•			workstation—\$59,300
				2
Mo. maintenance of basic configuration	n \$270 plus peripherals	Not supplied	Not supplied	Not supplied
Date of first delivery	1978	December, 1979	August, 1980	1980
Number installed to date	3500	Not supplied	Not supplied	Not supplied
OMMENTS	BTI 6000, supporting	B 90 Series consists of	1	5 models: B 1905, B 1915
	from 128KB to 1MB main	5 models: B 91, B 92,		B 1985, B 1990-SP, and
	memory, will replace the	B 93, B 95 and B 96.	1	B 1990-DP
	BTI 5000, 3rd quarter			
	1984.	1		1
	1.554	1	1	1
		1		
				1
		1		
		1		1

MANUFACTURER AND MODEL	Cado System Corp. TIGER ATS 32	Cado System Corp. TIGER ATS 64	Centurion Computer Corp. 6400/6500	Chrislin Industries Ind CI-Micro-11
WORD LENGTH	16 bits	16 bits	8, 16 bits	16 bits
	1		I	
MAIN MEMORY	256KB-512KB	256KB-1.1MB	128KB-512KB	256KB-4MB
DISK STORAGE CAPACITY	15MB-60MB	30MB-1,144MB	64MB-288MB	up to 140MB
NO. WORKSTATIONS SUPPORTED	32	64	20/8	10
PRICE RANGE TARGET MARKET	\$24,000-\$150,000 Business, professions	\$31,400-\$300,000 Business, professions	\$28,308-\$32,475	\$35,000-\$40,000 Technical, business
CENTRAL PROCESSOR				•
	Intel 8086, 8089	Intel 8086, 8089	Centurion CPU6	DEC LSI 11/23
CPU manufacturer and model			No	
Hardware floating point	None	None		Double
Battery backup	None	None	None	Opt.
Real-time clock or timer	Std.	Std.	Std.	Opt.
CPU cycle time, nanoseconds	500	500	200	Not supplied
MAIN STORAGE				
Bytes fetched per cycle	2	2	1	4
Memory access	Not supplied	Not supplied	8	1.2MB
Cycle/access time, nanoseconds	625	625	800	400/240
Storage protection	None	None	Std.	Std.
Increment size, bytes	128K	128K	128K	256K
Cache memory, bytes	None	None	None	8K
NPUT/OUTPUT CONTROL	1.000	[140116	1.0116	
•	32	64	22	
No. of I/O channels	1		32	E10KD /- 1
Data transfer rate	5M bits/second	7.7M bits/second	19.2KB/sec.	512KB/second
COMMUNICATIONS	1.	1_	1.	I
Max. number of lines	4	8	1	32
Synchronous	Std.; 19.2K bps	Std.; 19.2K bps	No	Opt.
Asynchronous	Std.; 19.2K bps	Std.; 19.2K bps	Std.; 9600 bps	Std.
Protocols supported	IBM 3741, 2770, 2780, 3780, BSC, TTY	IBM 3741, 2770, 2780, 3780, BSC, TTY	3780	Any DEC supported
Type of LAN supported	None	None	none	DECnet
RJE terminals emulated	IBM 3741,2770,2780,3780	IBM 3741,2770,2780,3780	3780	VT100
IBM 3270 emulation	No	No	No	No
PERIPHERAL EQUIPMENT				
Disks supported	Micro-Winchester: 15MB	Winchester: 30MB, 60MB or 143MB	64-96MB	Fixed: 10-140MB
Serial printers	100-400 cps	100-400 cps	120 cps-150 cps	50-100 cps
Letter quality printers	20,35,55 cps	20,35,55 cps	45 cps	Not supplied
Line printers	300lpm, 600lpm	300lpm, 600lpm	None	Not supplied
Reel-to-reel tape drives	None	None	1600 bpi	Not supplied
Streaming tape drives	90ips; 20MB	90ips; 20MB	55 ips	Not supplied
Cassette/cartridge tape drives	None	None	40mb	
Other perpherals supported	Diskette: 1.2MB; OCR	Diskette: 1.2MB, OCR	401116	Not supplied
	reader	reader		
SOFTWARE	ļ			
Assembler	None	None	Assembler	Macro
Compilers	CADOL III (Basic) Level II Cobol	CADOL III (Basic) Level II Cobol	BASIC, CPL	Fortran, Basic, Pascal, Cobol
Operating system	Real-time; multitasking	Real-time; multitasking	Real-time, Batch	Multitasking
Operating sys. implemented in firmware		Resides in ROM	Partially	Fully
Database management system	Just Ask III	Just Ask III	None	Various
Principal industry application	Business	Business	Financial	Manufacturing
Other packages	Word/data processing; message proc. accounting	Word/data processing; message proc. accounting	Service Industry, Accounting	Accounting
DDICING 8. AVAII ADII ITV	forecasting/modeling	forecasting/modeling	ĺ	
PRICING & AVAILABILITY	SECKE MARTINE	SECKE MATTER 1	6400; CDLL 00545	CDIL 484D
Basic system configuration and price	256KB memory, 1 trans.	256KB memory, 1 trans.	6400: CPU, 96MB disk,	CPU, 4MB memory,
	processor, 1 intranet	processor, 1 Intranet	video, 150 cps	terminal, 140MB
	processor, 1 control	processor, 1 control	printer—\$32,475	Winchester, 2MB floppy
	Bi-processor, 15MB disk,	Bi-processor, 30MB disk	6500: CPU, 64MB disk,	and RSC11-M software—
	7 Keyboard/CRTs, 1 dual	7 Keyboard/CRTs, 1 dual-	video, 150 cps	\$36,995
	mode printer—\$37,360	mode printer—\$44,760	printer—\$28,475	
Ma maintanana at territorio della di	1 20% of mumbers are	1.20%	\$440 (\$400	
Mo. maintenance of basic configuration		1.2% of purchase price	\$440/\$400	Contact vendor
Date of first delivery	10/83	3/83	October 1979	Jan. 83
Number installed to date	Not supplied	500	130/40	54
COMMENTS	Utilizes multiple,	Utilizes multiple,	6400—cabinet model	
	interactive processors	interactive processors	6500—desk model	
	in a tri-level	in a tri-level		
	architecture. Capacity	architecture.		
	can be added in 8-port	Capacity can be added	1	
	increments by modular	in 8-port increments by		
	addition of	modular addition of		
	microprocessor and memory cards in	microprocessor and memory cards in		

MANUFACTURER AND MODEL	Chromatics, Inc. CGC 7900	Computer Automation Inc. SyFA 200	Computer Automation Inc. SyFA 300	Computer Automation Inc. SyFA 1000
WORD I ENOTH	16 hita	16 hite	16 hita	16 hite
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	128KB-9MB	64K-128KB	64K-512KB	128KB-384KB
DISK STORAGE CAPACITY	10MB-81MB	32-96MB	32-96MB	32MB-2.4GB
NO. WORKSTATIONS SUPPORTED	1	8	24	32
PRICE RANGE	\$20,000-\$40,000	Not supplied	Not supplied	Not supplied
TARGET MARKET	Color Graphics	Business	Business	Business
CENTRAL PROCESSOR				
CPU manufacturer and model	Motorola 68000	Proprietary	Proprietary	Proprietary
Hardware floating point	No	No.	No	No
Battery backup	Opt.	None	None	None
Real-time clock or timer	Opt.	Std.	Std.	Std.
CPU cycle time, nanoseconds	Not supplied	150/100	150/100	100
MAIN STORAGE	· · · · · · · · · · · · · · · · · · ·		1	1
Bytes fetched per cycle	Not supplied	1 or 2	1 or 2	1 or 2
Memory access	Not supplied	Not supplied	Not supplied	Not supplied
Cycle/access time, nanoseconds	Not supplied	750/550	750/550	750/550
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	128K/512K	128K	128K	128K
Cache memory, bytes	None	None	None	None
	India	THO IS	THORE	ITOILE
INPUT/OUTPUT CONTROL	lun to 16	112	12	44
No. of I/O channels	Up to 16	12	13	
Data transfer rate	500K words/sec.	Not supplied	Not supplied	Not supplied
COMMUNICATIONS	l. .			1
Max. number of lines	18	19	19	34
Synchronous	No	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt.; 9.6K bps
Asynchronous	Std., 19.2K bps	9.6K bps	9.6K bps	Opt.; 9.6K bps
Protocols supported	RS-232 & RS-449			2780/3780, HASP, SNA,
		4		X.25, BSC
Type of LAN supported	No	SyFAnet	SyFAnet	SyFAnet
RJE terminals emulated	No	2780/3780/HASP	2780/3780/HASP	2780/3780, HASP
IBM 3270 emulation	No	Yes	Yes	Yes
PERIPHERAL EQUIPMENT		l .	1	
Disks supported	Fixed—10, 40, or 80MB	Fixed: 32-300 MB	Fixed: 32-300 MB	Fixed: 32-300MB
Serial printers	Interface supported	120-200 cps	120-200 cps	120-200 cps
		1 .		•
Letter quality printers	Interface supported	30 cps	30 cps	30 cps
Line printers	Interface supported	300-1000 lpm	300-1000 lpm	300-1000 lpm
Reel-to-reel tape drives	800 & 1600 bpi	None	800-1600 bpi	800/1600 bpi
Streaming tape drives	No	None	None	None
Cassette/cartridge tape drives	No	None	None	None
Other perpherals supported	500KB diskette	1		
		İ		
SOFTWARE		1		
Assembler	MC68000	None	None	No
Compilers	C, Pascal, Fortran 77	SyBol	SyBol	SyBOL
•				
Operating system	Idris OS, UNIX-comp.	Realtime/batch/multitask	Realtime/batch/multitask	Realtime/batch/multitask
Operating system Operating system Operating system		RAM memory resident	RAM memory resident	Partially
Database management system	No	SyMple	SyMple	SyMple
Principal industry application	CAD/CAM, Business	Business	Business	Manaufacturin, Insurance
	Graphics			Distribution
Other packages				
PRICING & AVAILABILITY				la
Basic system configuration and price	CPU, 19" CRT, 8-color	Contact vendor	Contact vendor	Contact Vendor
	overlay, 128K RAM, 64K			
	ROM, 2 serial I/O ports,		1 .	
	4 refresh memory planes,	+		
	24-slot card cage—			
	\$18,995		1	1
		1	Į.	I
		1		
Mo. maintenance of basic configuration	Contact vendor	Contact vendor	Contact vendor	Contact Vendor
Date of first delivery	December, 1980	7/80	5/80	July, 1975
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
	1401 Supplied			
COMMENTS		Virtual memory system,	Virtual memory system,	Virtual memory system,
		high level host	high level host	high-level host
		interface	interface, Telenet,	interface, Telenet-,
	1		Tymnet certified.	Tymnet-certified
		1	1	
		1	1	
				1
	<u> </u>	4	1	<u>L</u>

MANUFACTURER AND MODEL	Computer Automation, Inc. SvFA 1700	Computer Automation, Inc. SyFA 2000	Computer Designed Systems Adviser 100	Computer Designed Systems Adviser 600
			7.00.00.	Advisor 600
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	256KB	128KB-384KB	64KB-512KB	64KB-512KB
DISK STORAGE CAPACITY	32MB-96MB	32MB-2.4GB	23MB-288MB	1.2
NO. WORKSTATIONS SUPPORTED	24	32	8	16
PRICE RANGE	Not supplied	Not supplied	\$30,000-100,00	\$80,000-250,000
TARGET MARKET	Business/Office	Business	manufacturing,	Manufacturing,
CENTRAL PROCESSOR	1		distribution	distribution
CPU manufacturer and model	Proprietary	Proprietary	Not supplied	Nas summitted
Hardware floating point	No	No		Not supplied Double
Battery backup	None	None	single Opt.	Opt.
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	100	100	200	150
MAIN STORAGE		.00	200	1.00
Bytes fetched per cycle	1 or 2	1 or 2	4	6
Memory access	Not supplied	Not supplied	64 bits/second	64
Cycle/access time, nanoseconds	750/550	500	100	100
Storage protection	Std.	Std.	Opt.	Opt.
Increment size, bytes	Not applicable	128K	32K	64K
Cache memory, bytes	1K	1K	None	2K
INPUT/OUTPUT CONTROL	1			
No. of I/O channels	25	44	8	16
Data transfer rate	800KB/second	800KB/second	256KB/sec.	512KB/sec.
COMMUNICATIONS				
Max. number of lines	25	34	12	24
Synchronous	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt.	Opt.
Asynchronous	Opt.; 9.6K bps	Opt.; 9.6K bps	Std.	Std.
Protocols supported	2780/3780, HASP, SNA,	2780/3780, HASP, SNA,	All IBM	All IBM
	X.25, BSC	X.25, BSC		
Type of LAN supported	SyFAnet	SyFAnet	None	
RJE terminals emulated	2780/3780, HASP	2780/3780, HASP	No	2780/3780
IBM 3270 emulation	Yes	Yes	No	Yes
PERIPHERAL EQUIPMENT	NACCO DE CONTROL DE CO	First SOME SOOME	D. I. 00 0014D	
Disks supported	Winchester: 32MB, Diskette	Fixed: 32MB-300MB	Pack: 32-96MB	Pack: 32-96MB
Serial printers	120-200 cps	120-200 cps	20-350cps	Fixed: 80-300MB
Letter quality printers	30 cps	30 cps	20-250cps	20-350cps 20-250cps
Line printers	300-1000 lpm	300-1000 lpm	300-600-1200 lpm	
Reel-to-reel tape drives	None	None	800-1600 bpi	300-600-1200 lpm 800-1600 bpi
Streaming tape drives	90 ips; 6400 bpi	None	Opt.	None
Cassette/cartridge tape drives	10MB	None	Opt.	None
Other perpherals supported	10000	110110	John.	Thomas and the same and the sam
		, i		
SOFTWARE	1			
Assembler	No	No	No	Yes
Compilers	SyBOL	SyBOL	Abol	Abol, Cobol, Basic,
	'			Fortran, Pascal, RPG
	ļ .			
Operating system	Realtime/batch/multitask	Realtime/batch/multitask	Realtime, multitask, batch	Realtime, multitask, batch
Operating sys. implemented in firmware			Partially	Partially
Database management system	SyMple	SyMple	Advisor +	Advisor +
Principal industry application	Manufacturing, Insurance	Manufacturing, Insurance	Manufacturing,	Manufacturing,
	Distribution	Distribution	distribution	distribution
Other packages			Medical, construction,	Medical, construction,
	ļ .		fixed assets	fixed assets
DDIGING O ANAMARIETY	1			
PRICING & AVAILABILITY	la			lan
Basic system configuration and price	Contact Vendor	Contact Vendor	64K memory, 1 CRT, 23MB	CPU, 128K memory, 2 CR
			disk, 1600 lpm printer—	80MB disk, 300 lpm
			\$30,000	printer—\$80,000
	1			
	1			
	1			
	· ·	i	\$300.00	\$750.00
Mo. maintenance of basic configuration	Contact Vendor	Contact Vendor		1
Mo. maintenance of basic configuration Date of first delivery	Contact Vendor 1984	Contact Vendor April, 1981	1975	119//
		April, 1981		Not supplied
Date of first delivery	1984 Not supplied	April, 1981 Not supplied	1975 Not supplied	Not supplied
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system,	April, 1981 Not supplied Virtual memory system,		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host	April, 1981 Not supplied Virtual memory system, high-level host		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host interface, Telenet-,	April, 1981 Not supplied Virtual memory system, high-level host interface, Telenet-,		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host	April, 1981 Not supplied Virtual memory system, high-level host		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host interface, Telenet-,	April, 1981 Not supplied Virtual memory system, high-level host interface, Telenet-,		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host interface, Telenet-,	April, 1981 Not supplied Virtual memory system, high-level host interface, Telenet-,		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host interface, Telenet-,	April, 1981 Not supplied Virtual memory system, high-level host interface, Telenet-,		
Date of first delivery Number installed to date	1984 Not supplied Virtual memory system, high-level host interface, Telenet-,	April, 1981 Not supplied Virtual memory system, high-level host interface, Telenet-,		

	Computer Designed	Computer Extension	Computone Systems	Computone Systems, Inc.
MANUFACTURER AND MODEL	Systems Adviser 900	Systems, Inc. OMNIPAC	Inc. Control Center 3 (CC3)	Control Center 3-MF
WORD LENGTH	16 bits	12 bits	16 bits	16 bits
MAIN MEMORY	512KB-6MB	8KB-1MB	128KB-512KB	128KB-512KB
DISK STORAGE CAPACITY		10MB-240MB	15MB	43MB
NO. WORKSTATIONS SUPPORTED	32	16	4	104
PRICE RANGE	\$150,000-\$500,000	\$15,000-\$28,000	\$15,00-30,000	From \$30,000
TARGET MARKET	Manufacturing,	Business	Insurance, Accounting	Insurance, Accounting,
CENTRAL PROCESSOR	distribution	Dusiness	insurance, Accounting	Fuel Oil, Gen. Business
CPU manufacturer and model	Not supplied	Proprietary	Intel 8086	Intel 8086
			Double	
Hardware floating point	Double	No	1	Double
Battery backup	Opt.	None	None	None
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	100	980	125	125
MAIN STORAGE				
Bytes fetched per cycle	[6	2	2	2
Memory access	64	15	80 million	80M/second
Cycle/access time, nanoseconds	100	980	750	750
Storage protection	Opt.	None	None	None
Increment size, bytes	64K	8K	128K	128K
Cache memory, bytes	4K	None	None	None
INPUT/OUTPUT CONTROL) ···	1	1.3.10	1.5510
No. of I/O channels	32	32	5	120
		1	T-2	130
Data transfer rate	512KB/second	1M Word/Sec.	Not supplied	Not supplied
COMMUNICATIONS	l <u>.</u> .	ام	1.	l
Max. number of lines	64	32	4	104
Synchronous	Opt.	Opt.	Std., 19.2K bps	Std.; 19.2K bps
Asynchronous	Std.	Opt.	Std. 19.2K bps	Std.; 19.2K bps
Protocols supported	All IBM	Not supplied	None	None
Type of LAN supported		DECnet	None	None
RJE terminals emulated	3780	Not supplied	None	None
IBM 3270 emulation	Yes	No.	No	No
	res	INO	INO	INO
PERIPHERAL EQUIPMENT Disks supported	Fixed: 80-300MB	Winchester: 120MB	5¼" floppy: 740KB	Winchester: 43MB
			Winchester: 5-15MB	l
Serial printers	20-350cps	120 cps	None	None
Letter quality printers	20-250cps	40 cps	None	None
Line printers	300-600-1200 lpm	300 lpm	None	None
Reel-to-reel tape drives	800-1600 bpi	None	None	None
Streaming tape drives	None	None	90 ips 23MB	90 ips; 23MB
	None	None	None	None
Other perpherals supported	140110	Floppy disk	None	The state of the s
Other perprierals supported		l loppy disk	THORE	
COETIA/A DE				
SOFTWARE		la		۵.
Assembler	Yes	PAL	Opt.	Opt.
Compilers	Abol, Cobol, Basic, Fortran, Pascal, RPG	Dibol, Pascal, Basic, WPS8, Fortran IV	Basic, Fortran, Cobol, Pascal, C & HIBOL	Basic, Fortran, Cobol, Pascal, C & HIBOL
Operating system	Realtime,multitask,batch	Multi processing	Real-time, multitasking	Real-time, multitasking
Operating sys. implemented in firmware	Partially	No	Partially	Partially
Database management system	Advisor +	None	D.B.M.S.	D.B.M.S.
Principal industry application	Manufacturing,	Office automation	Business	Business
maddi y application	distribution			
Other peckages	Medical, construction,		Order Entry, Payroll,	Order Entry, Payroll,
Other packages	fixed assets		TAB, Amort. & Dep.	TAB, Amort. & Dep.
			Accts. Rec., Accts. Pay	Accts. Rec., Accts. Pay
PRICING & AVAILABILITY			1	ĺ
Basic system configuration and price	CPU, 128KB memory, 2CRTs	CPU, 40MB disk, 128K	CPU, 128K memory, 15MB	CPU, 256K memory, SMD
, ,	80MB disk, 300 lpm printer—\$150,000	word memory—\$15,000	disk, 730K floppy, 340 cps printer and intelligent terminal*	interface for 43MB disk, 23MB streaming tape, 340 cps printer & intelligent terminal*
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS	\$1,025.00 1977 Not supplied	Contact vendor 1980 200 Supports all DEC compatible peripherals.	June 1983 Not available "Systems are marketed and sold through an independent dealer network. Contact	August, 1983 Not available *Systems are marketed and sold through an independent dealer network. Contact
			vendor for dealer names.	vendor for dealer names.

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MANUFACTURER AND MODEL	Cyberchron Corp. C11/23	Cyberchron Corp. C11/73	Data General Corp. Eclipse S/120	Data General Corp. Eclipse S/140
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	128KB-4MB	128KB-4MB	128KB-512KB	128KB-2MB
DISK STORAGE CAPACITY	20MB-600MB	20MB-600MB	5MB-32GB	5MB-32GB
NO. WORKSTATIONS SUPPORTED	16	32	48	64
PRICE RANGE	\$10,000-\$60,000	\$15,000-\$100,000	\$12,000-\$150,000	\$22,000-\$180,000
TARGET MARKET	Tech./Business	Technical/Business	Technical/Business	Technical/Business
CENTRAL PROCESSOR				
CPU manufacturer and model	DEC PDP-11	DEC PDP-11	Proprietary	Proprietary
Hardware floating point	Double	Double	Double	Double
Battery backup	Opt.	Opt.	Opt.	Std.
Real-time clock or timer	Opt.	Opt.	Std.	Std.
CPU cycle time, nanoseconds	750	300	500	200
MAIN STORAGE				
Bytes fetched per cycle	2	2	2	2
Memory access	Not supplied	Not supplied	32 bits/sec	160 bits/sec
Cycle/access time, nanoseconds	150	210	500	100/400
Storage protection	None	None	Std.	Std.
Increment size, bytes	128K	128K	128K	128K
Cache memory, bytes	None	8K	None	None
INPUT/OUTPUT CONTROL	1,	14	24	24
No. of I/O channels Data transfer rate	4 512KB/second	750KB/202273	24 2MB/sec.	24 2MP (200
COMMUNICATIONS	5 IZNB/Second	750KB/second	∠iviD/sec.	2MB/sec.
Max. number of lines	32	32	160	160
	Opt.; 56K bps	l		
Synchronous Asynchronous	Opt.; 38.4K bps	Opt., 56K bps Opt., 38.4K bps	Opt.; 56K bps Opt.; 19.2K bps	Opt.; 56K bps Opt.; 19.2K bps
Protocols supported	2780/3780, X.25, Bisync.	2780/3780, X.25, Bisync.	2780/3780 SDLC, X.25,	2780/3780 SDLC, X.25,
r rotocois supported	SDLC, SNA	SDLC, SNA	SNA	SNA
Type of LAN supported	Ehternet, DECnet	Ethernet, DECnet	Xodiac	Xodiac
RJE terminals emulated	2780/3780	2780/3780	2780/3780, HASP	2780/3780, HASP
IBM 3270 emulation	Yes	Yes	Yes	Yes
PERIPHERAL EQUIPMENT	1,00	. 55	1.99	1.00
Disks supported	Fixed: 10MB-500MB	Fixed: 10MB-500MB	Fixed: 5-147MB	Fixed: 5-354MB
	Cartridge: 10MB-80MB	Cartridge: 10MB-80MB	Cartridge: 10MB-192MB	Cartridge: 10MB-277MB
Serial printers	20-300 cps	20-300 cps	20-180 cps	20-180 cps
Letter quality printers	20-45 cps	20-45 cps	55 cps	55 cps
Line printers	300-1000 lpm	300-1000 lpm	to 1200 lpm	to 1200 lpm
Reel-to-reel tape drives	15-125 lps	15-125 lps	75ips; 800/1600/6250bpi	75ips, 800/1600/6250bpi
Streaming tape drives	45 ips	45 ips	30ips; 1600bpi	30ips; 1600bpi
Cassette/cartridge tape drives	25 ips	25 ips	15MB; 6400 bpi	15MB; 6400 bpi
Other perpherals supported	Floppy: 5-1MB	Floppy:.5-1MB	·	
SOFTWARE	i			
Assembler	Macro	Macro	Macro	Macro
Compilers	Basic, Fortran, Cobol,	Basic, Fortran, Cobol,	Basic, Fortran, Pascal,	Basic, Fortran, Pascal,
	Pascal, C	Pascal, C	Cobol, Algol, PL/1,	Cobol, Algol, PL/1,
	L		DG/L	DG/L
Operating system	Batch/Realtime/multitask	Batch/Realtime/multitask	Real-time, batch	Real-time, batch
Operating sys. implemented in firmware		Partially	No	No
Database management system	Datatrieve	Datatrieve	INFOS	INFOS
Principal industry application	OEM/scientific	OEM/scientific	CAD/CAM, Commercial	CAD/CAM, Commercial
Oshan maskanas	Danaisisis 8	Data a sandala e	•	
Other packages	Data acquisition &	Data acquisition &		1
	data encryption	data encryption	ì	1
PRICING & AVAILABILITY				I .
Basic system configuration and price	CPU, 256KB memory, 20MB	CPLL 1MR memory 80MR	CPU, 512KB memory,	CPU, 512KB memory,
basic system configuration and price	disk, 240 cps printer	disk, 90MB streaming	50MB disk, streaming	50MB disk, streaming
	terminal—\$12,500	tape, 240 cps printer	tape—\$32,300	tape—\$42,050
	12,000	terminal—\$22,500	14pe 402,500	Tape 42,030
	I		· •	1
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Mo. maintenance of basic configuration		\$350	\$299	\$308
Date of first delivery	January 1979	December 1983	March, 1982	December 1979
Number installed to date	Over 500	Not supplied	Not supplied	Not supplied
COMMENTS				
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MANUFACTURER AND MODEL	Data General Corp. Eclipse S/280	Data General Corp. Eclipse C/30	Datapoint Corp. 8800	Digital Equipment Corp. PDP-11/23
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
	1	512KB-2MB	256KB-1024KB	
MAIN MEMORY	512KB-2MB			128KB-256KB
DISK STORAGE CAPACITY	5MB-32GB	150MB	202-1012MB	Not supplied
NO. WORKSTATIONS SUPPORTED	64	16	24	127
PRICE RANGE TARGET MARKET	\$30,000-\$250,000 Technical/Business	From \$10,300 Commercial/Business	\$67,000-\$81,000 Business/Office Auto-	Not supplied Commercial/technical
CENTRAL PROCESSOR			mation	·
CPU manufacturer and model	Buon minton.	Brandinton.	Danis danis	D
	Proprietary	Proprietary	Proprietary	Proprietary
Hardware floating point	Double	Double	None	Opt.
Battery backup	Opt.	Opt.	None	No
Real-time clock or timer	Std.	Std.	Std.	Opt.
CPU cycle time, nanoseconds	150	500	Not supplied	Not supplied
MAIN STORAGE				
Bytes fetched per cycle	4	2	4	Not supplied
Memory access	100 bits/sec	32M bits/second	Not supplied	Not supplied
Cycle/access time, nanoseconds	150/400	500	Not supplied	Not supplied
Storage protection	Std.	Std.	Not supplied	None
Increment size, bytes	512K	256K, 512K	128K	128K
Cache memory, bytes	4K	None	None	None
INPUT/OUTPUT CONTROL	177	1	1	1
No. of I/O channels	24	2	8	Not supplied
Data transfer rate		to 4MB/second	1.2MB/sec.	
Data transfer rate COMMUNICATIONS	11MB/sec	TO HIVID/SUCURIO	1.ZIVID/Sec.	Not supplied
	100	140	ام	N " 1
Max. number of lines	160	18	3	Not supplied
Synchronous	Opt.; 56K bps	Opt.; 56K bps	Opt. 40.8K bps	Opt.; 1M bps
Asynchronous	Opt.; 19.2K bps	Std.; 19.2K bps		Opt.; 9.6K bps
Protocols supported	2780/3780 SDLC, X.25, SNA	2780/3780 SDLC, X.25, SNA	2780/3780 HASP Datapoll, 3278	DDCMP, DNA
Type of LAN supported	Xodiac	Xodiac	ARC*	DECnet
RJE terminals emulated	2780/3780, HASP	2780/3780, HASP	2780/3780	None
IBM 3270 emulation	Yes	Yes	Yes	No
PERIPHERAL EQUIPMENT		1		
Disks supported	Fixed: 5-354MB Cartridge: 10MB-277MB	Fixed: 15-50MB, cartridge 150 cps	Fixed: 135-270MB Removable: 67MB	Cartridge: 5.2MB-41.6MB Floppy: 256KB-512KB
Control and the se				
Serial printers	20-180 cps	35, 55 cps	35-160 cps	180 cps
Letter quality printers	55 cps	200-300 lpm	35 cps	Not supplied
Line printers	to 1200 lpm	None	300-600 lpm	300-600 lpm
Reel-to-reel tape drives	75ips; 800/1600/6250bpi	30 ips; 1600bpi	25 ips	None
Streaming tape drives	30ips; 1600bpi	15MB; 6400 bpi	None	None
Cassette/cartridge tape drives	15MB; 6400 bpi		20MB	562 cps cassette
Other perpherals supported			Laser printer, color	
		:	bus. graphics	
SOFTWARE	i			ł
Assembler	Macro	Macro	SNAP3 Macro	Assembler and Macro
Compilers	Basic, Fortran, Pascal,	Basic, Fortran, Pascal,	Basic PLS, Fortran,	Basic, Fortran, Cobol,
,	Cobol, Algol, PL/1,	Cobol, Algol, PL/1,	Databus, Datashare,	Corol
	DG/L	DG/L, RPG II	Cobol, RPG Plus, Chain	
Operating system	Real-time, batch	Real-time, batch	Multitasking	Batch, real-time
An analysis and the language of the firm of the	las-	No	Not supplied	lai-
Database management system	INFOS	DG/DBMS	None	None
• .			1	None
Principal industry application	CAD/CAM, Commercial	Commercial	Office automation	
Other mades as	*	Office sustames!		Graphica Detataine
Other packages		Office automation	1	Graphics, Datatrieve,
			1	word processing
DDIONIO O ANZAU ADULTE:				
PRICING & AVAILABILITY	l		1	la
Basic system configuration and price	CPU, 512KB memory,	CPU, 512KB memory, power		Contact vendor
	50MB disk, streaming	supply, hardware	202MB disk, console,	
	tape—\$47,300	floating point unit,	8 port serial interface,	1
		chassis\$10,300	2 peripheral processors	
	1		\$67,000	
		1		1
Mo. maintenance of basic configuration	\$403	\$112	\$530	Contact vendor
Date of first delivery	March 1983	February 1983	1981	July, 1979
Number installed to date	Not supplied	Not supplied	500	Not supplied
COMMENTS	1	1	*36,780 workstations	
			supported with local	
			area network	
	1			
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	Digital Equipment Corp.	Digital Equipment	Digital Equipment	Digital Equipment
MANUFACTURER AND MODEL	Micro PDP-11 and PDP-11/23-Plus	Corp. PDP-11/24	Corp. PDP-11/34A	Corp. PDP-11/44
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	256KB-4MB	1MB-4MB	16KB-124KB	1MB-4MB
DISK STORAGE CAPACITY	Not supplied	Not supplied	Not supplied	Not supplied
NO. WORKSTATIONS SUPPORTED	127	127	127	127
PRICE RANGE	From \$10,000	From \$26,000	Not supplied	From \$44,000
TARGET MARKET	Business/technical	Business/technical	Business/technical	Business/technical
CENTRAL PROCESSOR				
CPU manufacturer and model	Proprietary	Proprietary	Proprietary	Proprietary
Hardware floating point	Opt.	Std.	Std.	Opt.
Battery backup Real-time clock or timer	No Std.	Opt. Std.	Opt.	Opt.
CPU cycle time, nanoseconds	Not supplied	Not supplied	Std. Not supplied	Std. Not supplied
MAIN STORAGE	Not supplied	Not supplied	Not supplied	Not supplied
Bytes fetched per cycle	Not supplied	Not supplied	Not supplied	Not supplied
Memory access	Not supplied	Not supplied	Not supplied	Not supplied
Cycle/access time, nanoseconds	59/26	Not supplied	725	96/48
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	256KB, 512KB	1M	Not supplied	1M
Cache memory, bytes	None	None	None	8K
INPUT/OUTPUT CONTROL	_			1.
No. of I/O channels	14	9	Not supplied	14
Data transfer rate	Not supplied	Not supplied	Not supplied	1M/second
COMMUNICATIONS				,
Max. number of lines	2	Not supplied	Not supplied	Not supplied
Synchronous	Opt.; 1M bps	Opt.; 1M bps	Opt.; 1M bps	Opt.; 1M bps
Asynchronous	Opt., 9.6K bps	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt., 9.6K bps
Protocols supported	DDCMP, DNA, X.25	DDCMP, DNA	DDCMP, DNA	DDCMP, DNA
Type of LAN supported	DECnet, Ethernet	DECnet, Ethernet	DECnet, Ethernet	DECnet, Ethernet
RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780
IBM 3270 emulation	Yes	Yes	Yes	Yes
PERIPHERAL EQUIPMENT				
Disks supported	Winchester: 10MB, Floppy	Winchester: 121KB-456KB	Cart/pack: 2.5-1400MB	Winchester: 121MB-456M
	Cartridge: 21MB-41MB	Pack: 205MB, floppy	Fixed: 512KB-8MB	Pack: 205MB
Serial printers	180 cps	30-180 cps	30-180 cps	30-180 cps
Letter quality printers	Not supplied	Not supplied	Not supplied	Not supplied
Line printers	300-600 lpm	300-1200 lpm	230-1200 lpm	300-1200 lpm
Reel-to-reel tape drives	None	45 ips; 800/1600 bpi	45/125 ips; 800/1600 bpi	45/125 ips; 800/1600 bp
Streaming tape drives	None	25/100 ips; 40MB	25/100 ips; 40MB	25/100 ips; 40MB
Cassette/cartridge tape drives	562 cps cassette	30 ips; 800 bpi	30 ips; 800 bpi	30 ips; 800 bpi
Other perpherals supported		Card readers	1	1
SOFTWARE				1
Assembler	Assembler and macro	Assembler and macro	Assembler and macro	Assembler and macro
Compilers	Cobol, Fortran, Basic,	Cobol, Fortran, Basic,	Cobol, Fortran, Basic,	Cobol, Basic, Fortran,
Compilers	Corol, Pascal	Corol, Dibol	Corol, Dibol	Corol, Dibol, Pascal
·	COIOI, Fascai	Corol, Dibol	Corol, Dibol	Corol, Dibol, Fascal
Operating system	Batch, real-time	Real-time, multitasking	Batch, real-time	Batch, real-time
Operating sys. implemented in firmware	No	No	No	No
Database management system	None	None	None	None
Principal industry application				
Other packages	Graphics, Datatrieve,	Graphics, Datatrieve,	Graphics, Datatrieve,	Graphics, Datatrieve
Other packages	word processing	Word processing	word processing	word processing
	Training	Trong processing	litera processing	Werd processing
PRICING & AVAILABILITY				1
Basic system configuration and price	PDP-11/23-Plus with	CPU with 1MB memory,	Contact vendor	CPU with 1MB memory,
	512KB memory, two 10MB	four system units for		3 system units for
	cartridge disks and	expansion, I/O connector	1	expansion, I/O
	controller, operating	panel, cabinet and power		connection panel,
	system license—\$20,750	controller—\$14,000		cabinet and power
				controller—\$29,950
; 				
Mo. maintenance of basic configuration	\$287	\$105	Contact vendor	\$154
Date of first delivery	1981	1981	March, 1976	June, 1980
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
COMMENTS	Utilizes DEC's RSX-11M,	Utilizes DEC's RT-11,	Uses similar technology	Optional CIS processor
	RSX-11M-Plus, RSX-11S,	RSX-11M, RSTS/E, CTS-300		& 1MB memory increment
	RSTS-E, CTS-500, RT11,	DSM-11, and Unix-based	memory mgmt. for greater	available; enhanced
	and DSM11 operating	operating systems	addressing capability.	main-table features &
	systems.			intelligent console
		Į	Į.	subsystem.
				1
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MANUFACTURER AND MODEL	Dimis, Inc. D153	Dimis, Inc. D253	Dimis, Inc. D453	Dimis, Inc. D754
WORD LENGTH	16 bit	16 bit	16 bit	16 bit
MAIN MEMORY	512KB	512KB	512KB	1,024KB
	1	1	300MB	
DISK STORAGE CAPACITY	80MB	300MB		300MB
NO. WORKSTATIONS SUPPORTED	10	28	50	50
PRICE RANGE	\$75,000-\$110,000	\$120,000	\$130,000	\$160,000
TARGET MARKET	Wholesale Distributor	Wholesale Distributor	Wholesale Distributor	Wholesale Distributor
CENTRAL PROCESSOR				
CPU manufacturer and model	MODCOMP Classic II	MODCOMP Classic II	MODCOMP Classic II	MODCOMP Classic II
Hardware floating point	Double	Double	Double	Double
Battery backup	Opt.	Opt.	Opt.	Opt.
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	250	250	250	250
MAIN STORAGE				
Bytes fetched per cycle	480	Not supplied	Not supplied	Not supplied
Memory access	480	250	125	125
			125	1 -
Cycle/access time, nanoseconds	Std.	250		125
Storage protection	None	Std.	Std.	Std.
Increment size, bytes	Not applicable	512K	512K	512K
Cache memory, bytes	None	None	None	None
NPUT/OUTPUT CONTROL	ł	1	1	1
	16	16	16-48	16-48
No. of I/O channels	1 -	1		
Data transfer rate	650KB/second	650KB/second	650KB/second	650KB/second
COMMUNICATIONS		1	1	
Max. number of lines	32	32	32	32
Synchronous	Opt.	Opt.	Opt.	Opt.
•		1 •		
Asynchronous	Std.; 9.6K bps	Std.; 9.6K bps	Std.; 9.6K bps	Std.; 9.6K bps
Protocols supported	J	i .		
		1	1	!
Type of LAN supported	None	None	None	None
RJE terminals emulated	No	No	None	None
IBM 3270 emulation	No	No	No	No
	1140	INO	INO	INO
PERIPHERAL EQUIPMENT Disks supported	Fixed: 80MB	Fixed: 80, 200 & 300MB	Fixed: 80, 200 & 300MB	Fixed: 80, 200 & 300MB
Disks supported			1 Mad. 00, 200 d. 000MB	
Serial printers	None	None	None	None
Letter quality printers	None	None	None	None
Line printers	300 lpm	300 lpm	600 lpm	600 lpm
	300 ipili			
Reel-to-reel tape drives		None	None	None
Streaming tape drives	800-1600 bpi	800-1600 bpi	800-1600 bpi	800-1600 bpi
Cassette/cartridge tape drives	None	None	None	None
Other perpherals supported		·		· ·
COETIMARE				
SOFTWARE	[·	[Í	
Assembler	Assembler	Assembler	Assembler	Assembler
Compilers	Fortran	Fortran	Fortran	Fortran
		1		
	Real-time, batch	Real-time, batch	Real-time, batch	Real-time, batch
Operating system		1	•	No
Operating system	I NO	No.	INO	
Operating sys. implemented in firmware	•	No	No	
Operating sys. implemented in firmware Database management system	None	None	None	None
Operating sys. implemented in firmware	•			
Operating sys. implemented in firmware Database management system	None	None	None	None
Operating sys. implemented in firmware Database management system	None	None	None	None
Operating sys. implemented in firmware Database management system Principal industry application	None	None	None	None
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution	None Distribution	None Distribution	None Distribution
Operating sys. implemented in firmware Database management system Principal industry application Other packages	None	None	None	None
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory,	None Distribution CPU, 512KB memory,	None Distribution CPU, 512KB-1,024KB	None Distribution
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm	None Distribution CPU, 512KB-1,024KB memory, 300MB disk—	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk—
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming	None Distribution CPU, 512KB-1,024KB	None Distribution CPU, 1,024KB-2,048KB
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm	None Distribution CPU, 512KB-1,024KB memory, 300MB disk—	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk—
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming	None Distribution CPU, 512KB-1,024KB memory, 300MB disk—	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk—
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming	None Distribution CPU, 512KB-1,024KB memory, 300MB disk—	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk—
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000	None Distribution CPU, 512KB-1,024KB memory, 300MB disk—	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training,	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training,	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training,	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training,
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training, support and all	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training,	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training,
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training,	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training,	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training, support, and all appli-	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training, support and all appli-
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training, support and all	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training, support, and all appli-	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training, support and all appli-
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training, support and all	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training, support, and all appli-	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training, support and all appli-
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training, support and all	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training, support, and all appli-	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training, support and all appli-
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date	None Distribution CPU, 512KB memory, 80MB disk, 300 lpm printer, streaming tape—\$110,000 \$440 New Product New Product Includes training, support and all	None Distribution CPU, 512KB memory, 300MB disk, 600 lpm printer, streaming magnetic tape—\$120,000 \$440 September 1980 Not supplied Includes training, support and all	None Distribution CPU, 512KB-1,024KB memory, 300MB disk— \$130,000 \$440 June 1974 Not supplied Includes training, support, and all appli-	None Distribution CPU, 1,024KB-2,048KB memory, 300MB disk— \$160,000 \$440 December 1978 Not supplied Includes training, support and all appli-

MANUFACTURER AND MODEL	Dimis, Inc. D755	Four-Phase Systems, Inc. Model 260	General Automation, Inc. ZEBRA 3000	General Automation, Inc. ZEBRA 3500
WORD LENGTH	16 bit	16 bits	16 bits	16 bits
MAIN MEMORY	2,048KB	1.75MB	1MB-1.5MB	256KB-1MB
	300MB	15MB-105MB	1	
DISK STORAGE CAPACITY	1		64MB-256MB	64MB-256MB
NO. WORKSTATIONS SUPPORTED	100	8	16	24
PRICE RANGE	\$195,000	\$14,000-\$36,000	\$28,900-\$75,000	\$32,450-\$60,000
TARGET MARKET	Wholesale Distributor	OEM/End user	Small Business	Small Business
CENTRAL PROCESSOR			ļ	
CPU manufacturer and model	MODCOMP Classic II	Motorola 68000	Motorola 68000	Motorola 68000
Hardware floating point	Double	None	No	No
Battery backup	Opt.	None	Std.	Std.
Real-time clock or timer	Std.	Std.	None	None
CPU cycle time, nanoseconds	250	125	Not supplied	Not supplied
MAIN STORAGE		1		тот барриос
Bytes fetched per cycle	Not supplied	2	2	2
Memory access	125	21.3MB	Not supplied	Not supplied
	125	625		Not supplied
Cycle/access time, nanoseconds	1		Not supplied	
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	1M	512K	512K	768K
Cache memory, bytes	None	None	None	None
INPUT/OUTPUT CONTROL		1		
No. of I/O channels	32-64	56	Not supplied	Not supplied
Data transfer rate	650KB/second	2MB/second	Not supplied	Not supplied
COMMUNICATIONS	l	I		1
Max. number of lines	32	16	18	26
Synchronous	Opt.	Opt.; 19.2K bps	Opt. 9.6K bps	Opt. 9.6K bps
Asynchronous	Std.; 9.6K bps	Opt.; 9.6K bps	Std., 19.2K bps	Std., 19.2K bps
Protocols supported	Std., S.OK bps	2780/3780, 3770	2780/3780	2780/3780
Frotocois supported	1		2/80/3/80	2/80/3/80
		3270 BSC/SNA TTY		
Type of LAN supported	None	None	Arcnet	Arcnet
RJE terminals emulated	None	2780/3780 3770	2780/3780	None
IBM 3270 emulation	No	Yes	No	No
PERIPHERAL EQUIPMENT				
Disks supported	Fixed: 80, 200 & 300MB	Fixed: 15MB	Fixed: 64MB	Fixed 64MB
	1	Diskette: .65MB		
Serial printers	None	150-200 cps	200 cps	200 cps
Letter quality printers	None	35 cps	not supplied	not supplied
Line printers	600 lpm	300/600 lpm	150-600 lpm	150-600 lpm
Reel-to-reel tape drives	None	None	None	None
	800-1600 bpi	None	25 ips; 1600 bpi	25 ips; 1600 bpi
Streaming tape drives		ľ		
Cassette/cartridge tape drives	None	None	90 ips; 20MB	90 ips; 20MB
Other perpherals supported	1			
	İ			
SOFTWARE	Ĭ			
Assembler	Assembler	Macro	Not supplied	Not supplied
Compilers	Fortran	Cobol, Basic, Pascal,	C, Basic, Cobol	Pick Basic
		C, MUMPS		
	<u></u>			
Operating system	Real-time, batch	Multitasking	XENIX Multitasking	Pick Multitasking
Operating sys. implemented in firmware	· No	Partially	Partially	Partially
Database management system	None	MUMPS	Informix	ACCESS
Principal industry application	Distribution	General business,	General Business	General Business
, ., .,	1	1		1
Other packages	l.	Office automation	Office Automation,	Word processing,
			Word processing	graphics, spreadsheet
	1	1	p. coossing	a aprillo, apredustreet
PRICING & AVAILABILITY	1			
	0011 0040 400000	ORLL FOOKS	ODI 414D 0414D	ODLL SESIED
Basic system configuration and price	CPU, 2048-4096KB	CPU, 500KB memory,	CPU, 1MB memory, 64MB	CPU, 256KB memory,
	memory, 300MB disk-	15MB disk, 65MB	disk, cartridge tape	64MB disk, cartridge
	\$195,000	floppy disk, 1 display;	drive, 10 I/O ports,	tape drive, 10 I/O
		\$15,620	Operating System, Word	ports, Operating System,
	1		Processing UPS—\$28,900	UPS, ACCU-PLOT, JET, ar
	1	1		COMPUSHEET—\$32,450
	1	1		
	1	1		
	\$440	\$145	Contact vendor	Contact vendor
Mo. maintenance of basic configuration	New product	Dec. 83	April, 1983	April, 1983
Mo. maintenance of basic configuration Date of first delivery	Not supplied	New product	Not supplied	Not supplied
Date of first delivery				
Date of first delivery Number installed to date			1	
Date of first delivery	Includes training,			
Date of first delivery Number installed to date	Includes training, support and all appli-			1
Date of first delivery Number installed to date	Includes training,			
Date of first delivery Number installed to date	Includes training, support and all appli-			
Date of first delivery Number installed to date	Includes training, support and all appli-			
Date of first delivery Number installed to date	Includes training, support and all appli-			
Date of first delivery Number installed to date	Includes training, support and all appli-			
Date of first delivery Number installed to date	Includes training, support and all appli-			
Date of first delivery Number installed to date	Includes training, support and all appli-			

MANUFACTURER AND MODEL	General Automation, Inc. ZEBRA 5500	General Robotics Micro-main Frame	Hewlett-Packard Co. HP250	Hewlett-Packard Co
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
	1MB-1.5MB	64KB-4MB	256KB-896KB	256KB-2MB
MAIN MEMORY			1	
DISK STORAGE CAPACITY	142MB-568MB	10MB-300MB	4.7MB-262MB	10MB-3.2GB
NO. WORKSTATIONS SUPPORTED	48	32	10	[
PRICE RANGE FARGET MARKET	\$55,300-\$100,000 Small Business	\$13,000K-\$20,000 Technical/business	\$16,000-\$160,000 Small business	\$23,750-\$32,750 Scientific/Technical
CENTRAL PROCESSOR		* -		
CPU manufacturer and model	Motorola 68000	LSI-11/23-11/73	proprietary	Proprietary
Hardware floating point	No	Double	No	None/opt.
	Std.	Opt.	None	Opt.
Battery backup			Std.	None
Real-time clock or timer	None	Std.		
CPU cycle time, nanoseconds	Not supplied	Std.	170	Not supplied
MAIN STORAGE	*			· .
Bytes fetched per cycle	2	4	Not supplied]2
Memory access	Not supplied	64	Not supplied	Not supplied
Cycle/access time, nanoseconds	Not supplied	Not supplied	Not supplied	665/420
Storage protection	Std.	Not supplied	Std.	Std.
Increment size, bytes	512K	64K	64K	128K
Cache memory, bytes	None	None	Directory Cache	None
NPUT/OUTPUT CONTROL	·		1	
No. of I/O channels	Not supplied	Not supplied	8	9-14
Data transfer rate	Not supplied	Not supplied	1MB/second	900KB/sec.
	ιτοι συμριισα	Tot Supplied	vib/ second	300007360.
COMMUNICATIONS	EO	32	110	Not supplied
Max. number of lines	50		10	Not supplied
Synchronous	Opt. 9.6K bps	No 10 0K I	Opt., 19.2K bps	Opt., 9.6K bps
Asynchronous Protocols supported	Std., 19.2K bps 2780/3780	Opt.; 19.2K bps	Std.; 9.6K bps 2780/3780, ENQ/ACK,	Opt., 19.2K bps 2780/3780, X.25, HDLC
Type of LAN compared	Arcnet	Ethernet, DECnet	XON/XOFF None	None
Type of LAN supported			1	None
RJE terminals emulated	None	2780/3780, HASP	IBM 2780/3780	2780/3780
IBM 3270 emulation	No	No	No	Yes
PERIPHERAL EQUIPMENT			[·	
Disks supported	Fixed: 142MB	10MB-300MB Diskettes: 600KB-1MB	Fixed/Cart.: 16MB-262MB Integrated: 14.7MB	Fixed, 16MB-404MB Removable, 50MB-404MB
Serial printers	200 cps	30-180 cps	80,100,200 cps	30-108 cps
Letter quality printers	not supplied	45 cps	20,40,100/200 cps	40 cps
Line printers	150-600 LPM	300-1500 lpm	300 lpm	250-1000 lpm
Reel-to-reel tape drives	None	800/1600 bpi	None	800/1600 bpi
Streaming tape drives	25 ips; 1600 bpi		None	None
Cassette/cartridge tape drives	90 ips; 20MB	20MB	16MB & 67MB	None
Other perpherals supported			Laser printer, 1.2MB	Diskettes, plotters,
			floppy disk, bar code	graphics tablet
SOFTWARE			'''	10.
Assembler	Not supplied	Macro	Assembler	MACRO/1000
Compilers	Pick Basic	any DEC-compatible	HP250 Extended Business	Basic, Fortran, Pascal
Compilers	Tion Busic	any beo companie	Basic	Busio, Fortian, Fuscur
Operating system	Pick Multitasking	Real-time, Batch	HP (Prop.) B.06.00	Real-Time
Operating eye implemented in firm			1	
Operating sys. implemented in firmware	ACCECC	Fully	None	Not supplied
Database management system	ACCESS	None	IMAGE/250	Image/1000
Principal industry application	General Business	Manufacturing,	Manufacturing, accting.	Manufacturing,
	l	wholesale	Distribution, medical	engineering, measurement
Other packages	Word processing,	Office	Real Estate, Non-profit,	Manufacturing, process
	graphics, spreadsheet		Bank/Finance, Utilities,	control, graphics
		`	Trans., Energy, Constr.	
PRICING & AVAILABILITY		1	1_	L
Basic system configuration and price	CPU, 1MB memory, 142MB	CPU, 512KB memory,	Processor, 256KB memory,	E-Series CPU, 256KB
	disk, streaming tape	20MB disk, ¼" streaming	system software, 14.7MB	memory, operating
	drive, 10 I/O ports,	tape, 4 I/O ports	Integrated disk storage,	system, 10 I/O ports-
	Operating System, UPS,	\$13,000	1 workstation, 80cps	\$23,750
	ACCU-PLOT, COMPU-SHEET		printer—\$15,985	1
	JET-\$55,300			
	1		1	1
		'		
Mo. maintenance of basic configuration	Contact vendor	Not supplied	\$550	\$155
Date of first delivery	April, 1983	January 1982	Feb. 1978	December 1981
Number installed to date	Not supplied	Not supplied	8,500+	Not supplied
COMMENTS	Tot supplied	Titot supplied	Over 1000 Third Party	*Maximum dependent on
COMMENTS				the specific combination
			software programs are	
	1		available for the HP250.	of communications
	I	1	1	interfaces and/or
				Inorinhard dovices
			1	peripheral devices
				attached.

Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date CPU, 8TE-A operating system, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$13,100 CPU, 8TE-A operating system, 768KB ECC memory, 7 available I/O channels—\$124,600 Special configuration should be sometime of basic configuration available I/O channels—\$14,220 Special configuration should be sometime of basic configuration should be special configuration. Special configuration should be special configuration should be special configuration should be special configuration should be special configuration. Special configuration should be special configuration should be special configur	MANUFACTURER AND MODEL	Hewlett-Packard Co. HP 1000 Micro 26	Hewlett-Packard Co. HP 1000 Micro 27	Hewlett-Packard Co. HP 1000 Micro 29	Hewlett-Packard Co. HP 1000 Model 6 MicroSystem
MAIN MEMORY 1008-1008 10	WORD LENGT!	16 hisa	16 54-	10 his-	
10M8-10GB			* * * * * * * * * * * * * * * * * * * *		
10. WORKSTATIONS SUPPORTED 158,0240-532,000 56,0240-532,000				1	
FRICE RANGE TARGET MARKET Sile.24.05.32.000 Scientific/Technical Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not sup		TOMB-TOGB	TOMB-TOGB	10MB-10GB	16MB-10GB
Scientific/Technical Scientific/Technical		#16 240 #22 000	F #14 000	5 004 000	5 011 000
ENTRAL PROCESSOR CPU manufacturer and model HP A500 CPU manufacturer and model HP A500 None Double Non None Double Not supplied Not sup			1	1	
CPU manufacturer and model Hardware floating point Sattery backup (Opt. None Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.	IARGEI WARKEI	Scientific/ Lecunical	Scientific/ Lechnical	Scientific/ i ecnnical	Scientific/ Lechnical
CPU manufacturer and model Hardware floating point Sattery backup (Opt. None Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.	CENTRAL PROCESSOR				
Hardware floating point Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt		HB AGOO	UB 4700	HB 4000	LID AGOO
Battery backup			1	1	
Real-time clock or timer CPU cycle time, anosaconds VAIN STORAGE VEX. Exercises anosaconds VAIN STORAGE VEX. Exercises anosaconds VAIN STORAGE VAIN supplied Not				•	
CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle 2 2 2 2 3 3 4 4 4 4 4 4 4 4 5 6 6 8 7 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8				1 .	
MAIN STORAGE Where fetched per cycle Marrory access Marrory access Marrory access Marrory access Marrory access Marrory access More where More					
Bytes fetched per cycle Mormory access Cycle/aycease time, nanoseconds Stody		Not supplied	Not supplied	Not supplied	Not supplied
Memory access (Not supplied 454 500 181 Std. Std. Std. Std. Std. Std. Std. Std.		12	2	14	Not complied
Cycle/a/cease time, nanoseconds Std. Storage protection Std. Std. Std. Std. Std. Std. Std. Std.		. —		1 '	
Sid. Sid. Sid. Sid. Sid. Sid. Sid. Sid.					
Increment size, bytes Cache memory, bytes None None None None None None None None			1	1	
Cache memory, bytes No. of I/O channels No. of I/O channels No. of I/O channels Data transfer rate 200M/UNICATIONS Nax. number of lines Synchronous Opt. 13.2K bps Opt. 13.					
NeutryOuTPUT CONTROL No. of I/O channels Data transfer rate 900K8/sec. 1278/J8/sec. 4.27M8/sec. 900K8/sec. 980					
No. of I/O channels 14 900KB/sec. 12 11 3-5		140116	140116	T1.	None
Data transfer rate DOMMUNICATIONS Mex. number of lines Synchronous Opt. 19.2K bps		114	12	111	3_5
DOMMUNICATIONS Max. number of lines Synchronous Opt 57.2K bps Opt 19.2K b		1 1 1		1 1 1	
Max. number of lines Synchronous Opt., 19.2K bps Opt., 19.2K b		JOOKD/Sec.	7.27 IVID/ 36C.	JOURD/SEC.	SOURD/Sec.
Synchronous Opt., 19.2K bps Opt., 19.2K bps Control 2, 52 kps Opt., 19.2K bps		Not supplied	Not supplied	Not supplied	Not supplied
Asynchronous Opt., 19.2K bps 2780/3780, X.25, HDLC 2780/3780, X.25					
Protocols supported Type of LAN supported REI terminals emulated Removable, 50MB-404MB Removable, 50M	•				
Type of LAN supported RJE terminals emulated 2780/3780 2					
RJÉ terminals emulated IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Serial printers 30-108 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 507/1600 bpi 800/1600 bpi					2700,0700, A.20, FIDEC
RJÉ terminals emulated IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Serial printers 30-108 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 40 cps 507/1600 bpi 800/1600 bpi	Type of LAN supported	None	None	None	None
Yes Yes Yes PERPIRHERAL EQUIPMENT					
Fixed, 16MB-404MB Removable, 50MB-404MB Remo					
Disks supported Removable, 50MB-404MB Removable, 50MB-40MB Removable, 50MB-404MB Removable, 50MB-404MB Removable, 50MB-404MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-404MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-40MB Removable, 50MB-4		1.00	1 63		1163
Serial printers 30-108 cps 40 cps 40 cps 40 cps 40 cps 40 cps 250-1000 lpm 800/1600 bpi 800/1600		Fixed 16MB-404MB	Fixed 16MB-404MB	Fixed 16MR-404MR	Fixed 16MR-404MR
Serial printers Letter quality printers Letter quality printers Letter quality printers Letter quality printers Letter quality printers Line Line Line Line Line Line Line Line	Division supported	l ·	1	1	
Letter quality printers Line printers Line printers Reel-to-reel tape drives Reel-to-reel tape drives Streaming tape drives Other perpherals supported Other perpherals supported Compilers ASsembler Operating system Operating system Operating system Operating system Operating system Operating system Other packages Other packages ARCAI (1000 Real-Time Not supplied Image (1000 Manufacturing, engineering, measurement Mfg., process control, graphics graphics Stablet CPU, 512KB memory, 512	Serial printers	•			
Line printers Reel-to-reel tape drives Sol/1600 lpm Reel-to-reel tape drives Sol/1600 lpm Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Other perpherals supported Diskettes, plotters, graphics tablet Software Assembler Compilers MACRO/1000 Basic, Fortran, Pascal MACRO/1000 Basic, Fortran, Pascal MACRO/1000 Basic, Fortran, Pascal MACRO/1000 Basic, Fortran, Pascal Macro/1000 Basic, Fortran, P					
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Assembler Assemble Most supplied Assembler Assembler Assembler Assembler Assembler Assembler Assembler Assembler Assembler Assembler Assembler Ass	other perpriends supported				
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Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Other packages Other packages PRICING & AVAILABILITY Basic system configuration and price Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, STEXB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS August 1983 Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512KB m		MACRO/1000	MACRO/1000	MACRO/1000	MACRO/1000
Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packag					
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Other packages Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 512KB memory, 512KB memory, 512KB memory, 8 available I/O channels—\$124,600 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not su	Complicio	Busic, Fortium, Fascar	Busic, Fortrail, Fascar	basic, Fortiall, Fascar	basic, Fortian, Fascal
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Other packages Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 512KB memory, 512KB memory, 512KB memory, 8 available I/O channels—\$124,600 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not su			1		
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Other packages Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics Not supplied Image/1000 Manufacturing, engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 512KB memory, 512KB memory, 512KB memory, 8 available I/O channels—\$124,600 Mo. maintenance of basic configuration Other packages PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 State of first delivery Not supplied Not su	Operating system	Real-Time	Real-Time	Real-Time	Real-Time
Database management system Principal industry application Other packages Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration of communications interfaces and/or peripheral devices Manufacturing, engineering, measurement Mfg., process control, graphics Manufacturing, engineering, measurement Mfg., process control, graphics Mo. Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 612KB memory, 73 available 1/0 channels—\$24,600 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available 1/0 channels—\$24,600 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available 1/0 channels—\$24,600 Savailable 1/0 channels—\$24,600 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available 1/0 channels—\$24,600 Savailable 1/0 channels—\$24,600 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available 1/0 channels—\$24,600 Savailable 1/0 channels—\$24,600 Savailable 1/0 channels—\$24,600 Savailable 1/0 channels—\$24,600 Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512			1		1
Principal industry application Other packages Manufacturing, engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Manufacturing, engineering, measurement Mfg., process control, graphics Manufacturing, engineering, measurement Mfg., process control, graphics Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 8 available I/O channels—\$24,600 S13,100 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 S13,100 S57 August 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Naximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied of communications interfaces and/or peripheral devices Not supplied of communications interfaces and/or peripheral devices Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$24,600 S85 August 1983 Not supplied Not supplied Naximum dependent on the specific combination of communications interfaces and/or peripheral devices Manufacturing, engineering, measurement Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 S85 August 1983 Not supplied Not supplied Naximum dependent on the specific combination of communications interfaces and/or peripheral devices					
engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Pagineering, measurement Mfg., process control, graphics Price of first delivery Number installed to date COMMENTS engineering, measurement Mfg., process control, graphics PRICING & AVAILABILITY Basic system configuration operating system, 10 I/O ports; \$10,000 CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$124,600 S57 August 1983 Not supplied *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices *Maximum devices *Maximum devices *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices			0 /		
Other packages Mfg., process control, graphics Mfg., process control, graphics Mfg., process control, graphics CPU, S12KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mfg., process control, graphics CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 512KB memory, 612KB memory, 7 available I/O channels—\$14,220 S57 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mfg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$24,600 S57 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mfg., process control, graphics Mfg., process control, graphics Mfg., process control, graphics Mfg., process control, graphics Mfg., process control, graphics Mfg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics Mrg., process control, graphics CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$12KB memory, 2 available I/O channels—\$12KB memory, 3 available I/O channels—\$14,220 S45 May 1982 Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices		engineering, measurement	engineering, measurement	_	
PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices PRICING & AVAILABILITY Basic system configuration and price CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$14,220 CPU, RTE-A operating system, 512KB memory, 7 available I/O channels—\$14,220 S85 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mo. maintenance of basic configuration S61 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mo. maintenance of basic configuration S61 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices	Other packages	Mfg., process control,	Mfg., process control,		
PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices PRICING & AVAILABILITY Basic system configuration and price CPU, RTE-A operating system, 512KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$24,600 CPU, RTE-A operating system, 512KB memory, 7 available I/O channels—\$14,220 S85 August 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices					
Basic system configuration and price operating system, 10 I/O ports; \$10,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic combination of communications interfaces and/or peripheral devices Passic system configuration and price operating system, 10 I/O ports; \$12KB memory, 512KB memory, 512KB memory, 7 available I/O channels—\$14,220 CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$14,220 CPU, RTE-A operating system, 768KB ECC memory, 7 available I/O channels—\$14,220 September 1983 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices			1	1	
operating system, 10 I/O ports; \$10,000 system, 512KB memory, 8 available I/O channels—\$13,100 system, 512KB memory, 7 available I/O channels—\$24,600 channels—\$14,220 system, 512KB memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 8 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14,220 system, 768KB ECC memory, 7 available I/O channels—\$14	PRICING & AVAILABILITY	1	1	1	
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration of communications interfaces and/or peripheral devices Nort supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Nort supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mo. maintenance of basic configuration \$10	Basic system configuration and price	CPU, 512KB memory,	CPU, RTE-A operating	CPU, RTE-A operating	CPU, RTE-A operating
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration Date of first delivery Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mo. maintenance of basic configuration \$61 \$57 August 1983 Not supplied *Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscinario (*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscinario (*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscinario (*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscinario (*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscinario (*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices)		operating system, 10	system, 512KB memory,	system, 768KB ECC	system, 512KB memory,
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Moscipplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscipplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscipplied May 1982 Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Moscipplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices		I/O ports; \$10,000	512KB memory, 8	memory, 7 available	
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mo. maintenance of basic configuration August 1983 August 1983 Not supplied Not supplied Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Mo. maintenance of basic configuration Set 1 Set 2 August 1983 Not supplied Not supplied Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Maximum dependent on the specific combination of communications interfaces and/or peripheral devices Maximum dependent on the specific combination of communications interfaces and/or peripheral devices			available I/O channels	I/O channels—\$24,600	channels\$14,220
Date of first delivery Number installed to date COMMENTS August 1983 Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices August 1983 Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices August 1983 Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices August 1983 Not supplied "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices "Maximum dependent on the specific combination of communications interfaces and/or peripheral devices				1	1
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			interfaces and/or	interfaces and/or	interfaces and/or
attached. attached. attached. attached.			peripheral devices	peripheral devices	peripheral devices
		attached.			
		1			1
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					1
			1	1	1

MANUFACTURER AND MODEL	Hewlett-Packard Co. HP 1000 Model 26	Hewlett-Packard Co. HP 1000 Model 27	Hewlett-Packard Co. HP 1000 Model 29	Hewlett-Packard HP 3000 Series 39
WORD LENGTH	16 bits	16 bits	16 bits	16-bits
		512KB-4MB	768KB-6MB	512KB-3MB
MAIN MEMORY	512KB-4MB	1		
DISK STORAGE CAPACITY	16MB-50GB	16.5MB-50GB	16.5MB-50GB	28MB-3.2GB
NO. WORKSTATIONS SUPPORTED	I*	•	 *	92
PRICE RANGE	From \$16,000	From \$24,000	From \$34,000	From \$33,200
TARGET MARKET	Scientific/Technical	Scientific/Technical	Scientific/Technical	Business/Commercial
DENTE AL PROCESSOR				
CENTRAL PROCESSOR	LID ACOOL	UB 4700	LID AGOO	Bi
CPU manufacturer and model	HP A600+	HP A700	HP A900	Proprietary
Hardware floating point	No	Double	Double	Double
Battery backup	Opt.	Opt.	Opt.	Std.
Real-time clock or timer	Not supplied	Not supplied	Not supplied	Std.
CPU cycle time, nanoseconds	Not supplied	Not supplied	Not supplied	Not supplied
MAIN STORAGE				1
Bytes fetched per cycle	2	2	4	Not supplied
			Not supplied	Not supplied
Memory access	Not supplied	Not supplied		
Cycle/access time, nanoseconds	454	500	181	430
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	128K, 256K, 512K, 1M	128K, 256K, 512K, 1M	768K, 1.5M, 3M	512K, 1M
Cache memory, bytes	None	None	4K	None
NPUT/OUTPUT CONTROL		1	1	
•	18	16	15	2
No. of I/O channels	· -			_
Data transfer rate	4.27MB/sec.	4.27MB/sec.	4.27MB/sec.	1MB/sec.
COMMUNICATIONS	1	1	L	1_
Max. number of lines	Not supplied	Not supplied	Not supplied	3 synch.
Synchronous	Opt., 57.2K bps	Opt., 57.2K bps	Opt., 57.2K bps	Std.; 19.2K bps
Asynchronous	Opt., 19.2K bps	Opt., 19.2K bps	Opt., 19.2K bps	Opt.; 9.6K bps
Protocols supported	2780/3780, X.25, HDLC	2780/3780, X.25, HDLC	2780/3780, X.25, HDLC	HDLC/SDLC, X.25, RS-232-C, RS-422
Time of LAN comments of	None	None	None	,
Type of LAN supported	None	None	None	None
RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780
IBM 3270 emulation	Yes	Yes	Yes	No
PERIPHERAL EQUIPMENT			1	1
Disks supported	Fixed, 16MB-404MB	Fixed, 16MB-404MB	Fixed, 16MB-404MB	Winchester: 28-132MB
	Removable, 50MB-404MB	Removable, 50MB-404MB	Removable, 50MB-404MB	Disk Pack: 50-404MB
Serial printers	30-108 cps	30-108 cps	30-108 cps	40-200 cps
Letter quality printers	40 cps	40 cps	40 cps	25-40 cps
Line printers	250-1000 lpm	250-1000 lpm	250-1000 lpm	300-1000 lpm
Reel-to-reel tape drives	800/1600 bpi	800/1600 bpi	800/1600 bpi	45 ips-75 ips
Streaming tape drives	None	None	None	50/100 ips
Cassette/cartridge tape drives	None	None	None	132MB
Other perpherals supported	Diskettes, plotters,	Diskettes, plotters,	Diskettes, plotters,	Diskettes; laser
Other perpricials supported	graphics tablet	graphics tablet	graphics tablet	printers, plotters
DOET!!! A DE	graphics tablet	graphics tablet	grapriics tablet	printers, piotters
SOFTWARE			*** ODO (**OOO	
Assembler	MACRO/1000	MACRO/1000	MACRO/1000	Not supplied
Compilers	Basic, Fortran, Pascal	Basic, Fortran, Pascal	Basic, Fortran, Pascal	Basic, Cobol, Pascal, Fortran, RPG, SPL
		D 17	D. J. T.	Blai b
Operating system	Real-Time	Real-Time	Real-Time	Real-time, batch
Operating sys. implemented in firmware		Not supplied	Not supplied	Not supplied
Database management system	Image/ 1000	Image/1000	Image/1000	Image/3000
Principal industry application	Manufacturing,	Manufacturing,	Manufacturing,	Manufacturing
	engineering, measurement	engineering, measurement	engineering, measurement	1 -
Other packages	Mfg., process control,	Mfg., process control,	Mfg., process control,	Distribution, Mat's &
amor padragos	graphics	graphics	graphics	Prod. Mgmt., Graphics
	3.5p1105	3. 3pi 1130	3. ap	
PRICING & AVAILABILITY			1	
	CPU, RTE-A operating	CPU, RTE-A operating	CPU, RTE-A operating	CPU, 512KB memory, 2
Basic system configuration and price			, , ,	
	system, 512KB memory,	system, 512KB memory,	system, 768KB ECC	general I/O channels,
	16 available I/O	hardware floating point	memory, hardware	operating system-
	channels\$16,240	processor, 13 available	floating point	\$33,200
	1	I/O channels— \$24,000	processor, 13 available	1
	1	1 .	I/O channels—\$34,000	1 '
	1	ĺ	1.	
Mo. maintenance of basic configuration	\$67	\$72	\$90	\$243
WO. Maintenance of basic configuration	March 1982	March 1982	December 1982	April 1982
-		Not supplied	Not supplied	Not supplied
Date of first delivery	INot supplied		*Maximum dependent on	
Date of first delivery Number installed to date	Not supplied			1
Date of first delivery	*Maximum dependent on	*Maximum dependent on	the enecific combined	1
Date of first delivery Number installed to date	*Maximum dependent on the specific combination	the specific combination	the specific combination	1
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications	the specific combination of communications	of communications	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination	the specific combination	1 -	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications interfaces and/or	the specific combination of communications interfaces and/or	of communications	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications	the specific combination of communications	of communications interfaces and/or	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices	the specific combination of communications interfaces and/or peripheral devices	of communications interfaces and/or peripheral devices	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices	the specific combination of communications interfaces and/or peripheral devices	of communications interfaces and/or peripheral devices	
Date of first delivery Number installed to date	*Maximum dependent on the specific combination of communications interfaces and/or peripheral devices	the specific combination of communications interfaces and/or peripheral devices	of communications interfaces and/or peripheral devices	

MANUFACTURER AND MODEL	Hewlett-Packard HP 3000 Series 42	Hewlett-Packard HP 3000 Series 48	Hewlett-Packard HP 3000 Series 68	Honeywell DPS 6/40
	e e e			
WORD LENGTH	16-bits	16-bits	16-bits	16 bits
MAIN MEMORY	1MB-3MB	1MB-4MB	3MB-8MB	512KB-2MB
DISK STORAGE CAPACITY	28MB-3.2GB	28MB-4.2GB	50MB-9.7GB	1GB
NO. WORKSTATIONS SUPPORTED	92	152	400	28
PRICE RANGE	From \$42,400	From \$79,500	From \$186,000	From \$27,000
TARGET MARKET	Business/Commercial	Business/Commercial	Business/Commercial	
CENTRAL PROCESSOR				
CENTRAL PROCESSOR	Danamiatan :	B	Burneton and	D
CPU manufacturer and model	Proprietary	Proprietary	Proprietary	Proprietary
Hardware floating point	Double	Double	Double	Single/double
Battery backup	Std.	Std.	Std.	Opt.
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	Not supplied	Not supplied	Not supplied	250
MAIN STORAGE	•			
Bytes fetched per cycle	Not supplied	Not supplied	Not supplied	2
Memory access	Not supplied	Not supplied	Not supplied	425
Cycle/access time, nanoseconds	430	430	134	500
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	512K, 1M	1M	1M	256K
Cache memory, bytes	None	None	8K	None
INPUT/OUTPUT CONTROL	, .	1	1	1.000
No. of I/O channels	2	5	15	3
Data transfer rate	1MB/sec.	1MB/sec.	56MB/sec.	1-
COMMUNICATIONS	HVID/Sec.	IIVID/Sec.	SOIVID/SEC.	Not supplied
	3 aumah	7	24	20
Max. number of lines	3 synch.	7 synch.	24 synch.	28
Synchronous	Std.; 19.2K bps	Std.; 19.2K bps	Std.; 19.2K bps	Opt.
Asynchronous	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt.; 9.6K bps	Std.
Protocols supported	HDLC/SDLC, X.25,	HDLC/SDLC, X.25,	HDLC/SDLC, X.25,	BSC, SDLC, HDLC, HASP
•	RS-232-C, RS-422	RS-232-C, RS-422	RS-232-C, RS-422	
Type of LAN supported	None	None	None	None
RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780, HASP
IBM 3270 emulation	No	No	No '	Yes
PERIPHERAL EQUIPMENT		1		
Disks supported	Winchester: 28-132MB	Winchester: 28-132MB	Winchester: 28-132MB	Fixed: 67MB-256MB
	Disk Pack: 50-404MB	Disk Pack: 50-404MB	Disk Pack: 50-404MB	Cartridge: 40MB-80MB
Serial printers	40-200 cps	40-200 cps	40-200 cps	80-400 cps
Letter quality printers	25-40 cps	25-40 cps	25-40 cps	35 cps, 55 cps
Line printers				
•	300-1000 lpm	300-1000 lpm	300-1000 lpm	300-1200 lpm
Reel-to-reel tape drives	45 ips-75 ips	45 ips-75 ips	45 ips-75 ips	75/125 ips;1600/6250 b
Streaming tape drives	50/100 ips	50/100 ips	50/100 ips	None
Cassette/cartridge tape drives	132MB	132MB	132MB	None
Other perpherals supported	Diskettes; laser	Diskettes; laser	Diskettes; laser	Diskette: 650KB
	printers, plotters	printers, plotters	printers, plotters	
SOFTWARE		1	·	1
Assembler	Not supplied	Not supplied	Not supplied	Macro
Compilers	Basic, Cobol, Pascal,	Basic, Cobol, Pascal,	Basic, Cobol, Pascal,	Cobol, Basic, RPG.
•	Fortran, RPG, SPL	Fortran, RPG, SPL	Fortran, RPG, SPL	Fortran, Pascal
		1	,,	
Operating system	Real-time, batch	Real-time, batch	Real-time, batch	Real-time
Operating system Operating sys. implemented in firmware		Not supplied	Not supplied	None
Database management system	Image/3000	Image/3000	Image/3000	DM6
Principal industry application	Manufacturing	Manufacturing	Manufacturing	_ I
		- Vianulacturing	iviariuracturing	Manufacturing, distri-
Other packages	Distribution, Mat's &	Distribution, Mat's &	Dietribution Mat's 9	bution, pharmacy
Other packages	Prod. Mgmt., Graphics		Distribution, Mat's &	Office automation,
*	i rou. wigitit., drapnics	Prod. Mgmt., Graphics	Prod. Mgmt., Graphics	accounting
PRICING & AVAILABILITY			1	
PRICING & AVAILABILITY	CDLL 1MD	CDU 2425	CDI L ON CD	54000
Basic system configuration and price	CPU, 1MB memory, 2	CPU, 2MB memory, 2	CPU, 3MB memory, 2	512KB memory, 40MB di
	general I/O channels,	general I/O channels,	general I/O channels,	650KB diskette,
	disk caching, operating	disk caching, operating	1 intermodule bus, disk	communications
* *	system\$42,400	system—\$79,500	caching, operating	controller, 4 RS-422
		1	system—\$186,100	ports, 2 megabus slots,
		1	1	console\$27,000
				l l
		1		
Mo. maintenance of basic configuration	\$259	\$297	\$765	\$162
Date of first delivery	December 1983	December 1983	December 1983	April, 1983
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
COMMENTS				
		1		
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			1	1
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WORD LENGTH ALL AL	MANUFACTURER AND MODEL	IBM Series 1 Model 4956	IBM System/34	IBM System 36 Models Axx	IBM System 36 Models Bxx
MAIN MEMORY 256K: 1M 256K: 1M 256K: 1M 256K: 1M 256K: 1M 206K: 376R: 266K: 1M 206K: 376R: 376K: 37	WANDFACTURER AND MODEL	Wodel 4556	System/34	IVIOGEIS AXX	IVIOUEIS DXX
DBMS STORAGE CAPACITY No. WORKSTATIONS SUPPORTED PRICE RANGE TARGET MARKET Spr / O statement From \$14,000 St. / (200-\$32,000 \$34,000-\$100,000 St. / (200-\$32,000 St. / (200	WORD LENGTH	16-bit	8 bits	8-bit	8-bit
16 Code 100	MAIN MEMORY	256K-1M	32KB to 256KB	128KB-256KB	256KB-1MB
PRICE RANGE From \$14,000 S14,770-\$76,825 S21,000-\$32,200 S41,000-\$100,000 S41,000-\$100,000 Sequences	DISK STORAGE CAPACITY	256MB per I/O attachment	8.6MB to 257MB	30MB-60MB	200MB-800B
PRICE RANGE From \$14,000 S14,770-\$76,825 \$21,000-\$32,200 \$41,000-\$100,000 \$61,400-\$100,000 \$61			16 local, 64 remote	100	100
Summers Business Business General Business				\$21,000-\$32,200	\$41,000-\$100,000
Proprietary Proprietary					
Hardware floating point Opt. Opt. No Not supplied Not	CENTRAL PROCESSOR				
Battery backup Real-time clock or timer Opt. Opt. Opt. Std. Opt. Std. Not supplied None None None None None None None None	CPU manufacturer and model	Proprietary	Proprietary	Proprietary	Proprietary
Battery backup Real-time clock or timer Opt. Opt. Opt. Std. Opt. Std. Not supplied None None None None None None None None			Opt.		
Real-time clock or timer CPU cycle time, nanoseconds MAN STORIAGE White first-field per cycle Not supplied No		Opt		Not supplied	Not supplied
CPU cycle time, nanoseconds MAN STORAGE Bytes fetched per cycle Bytes fetched per cycle Not supplied None None None None None None None None					
MAIN STORACE Bytes fetched per cycle Memory access time, nanoseconds Storage protection Incoment size, bytes Not supplied	1				
Bytes fitched per cycle Not supplied Not supp		тот зарршеа	Trot supplied	Not supplied	Trot supplies
Memory access Not supplied Storage protection		Not supplied	1	Not supplied	Not supplied
Cycle Access time, nanoseconds S50 S00 S00 Not supplied Not supplied Not supplied Std. None Std. S2K, 128K 128K, 256K 256K None Non			Not ounnied		
Storage protection Increment size, bytes 256K	•				
Increment size, bytes 256K 32K, 128K 128K, 256K 256K 256K 266k 262h					
None None	J .				
INPUT_CONTROL No. of I/O barnens 2.4MB/second 2.5MB/second					l .
No. of I/O channels		None	None	None	None
Data transfer rate			1		1
COMMUNICATIONS Max. number of lines Synchronous Opt.: 56K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 36K			1	4	4
COMMUNICATIONS Max. number of lines Synchronous Opt.: 56K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 96K bps Opt.: 36K	Data transfer rate	2.4MB/second	Not supplied	2.5MB/second	2.5MB/second
Mex. number of lines Synchronous Asynchronous Opt.; 56K bps Opt.; 9.6K bps Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.		•		[
Synchronous Opt.; 9.6K bps Opt.; 9.6K bps Opt.; 9.6K bps Opt. Asynchronous Opt.; 19.2K bps BSC, X.25, HDLC/SDLC, SNA Asynchronous Opt.; 19.2K bps BSC, X.25, HDLC/SDLC, SNA Type of LAN supported RBK 3270 emulation PERIPHERAL EQUIPMENT Disks supported PERIPHERAL EQUIPMENT Disks supported PERIPHERAL EQUIPMENT Disks supported Disk supported PERIPHERAL EQUIPMENT Disks supported Disk supported Serial printers Alefe divers Assembler Assembler Boliskerte: 246KB-1.2MB 140 cps Ad-850 lpm Ad-850 lpm None None None None None Diskerte Diskstree Peripherals supported Diskstree Diskstree Diskstree Peripherals supported Diskstree Diskstree Diskstree Peripherals supported Diskstree Di		Not supplied	4	4	4
Asynchronous Opt. 19.2k Dps Protocols supported SC, X25, HDLC/SDLC, SNA SSC, SNA SSC, SNA SSC, SDLC X.25, SNA, BSC, SDL			Opt.; 9.6K bps	Std.; 56K bps	Std.; 56K bps
Protocols supported SNA None None SSP-ICF SNA SSP-ICF SNO SSP-ICF SNA SSP-ICF SNA SSP-ICF SNA SSP-ICF SNO SSP-ICF			-1		
Type of LAN supported RDL etrainals emulated 2780/3780 Yes Yes Yes Yes PERIPERAL EQUIPMENT Disks supported Dis	Protocols supported	BSC, X.25, HDLC/SDLC,			
RJE terminals emulated IBM 3270 emulation Yes			SSP-ICF	None	None
IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Fixed: 9.3-200MB Fixed: 9.3-200MB Fixed: 9.3-200MB Fixed: 9.3-200MB Fixed: 9.3-200MB Fixed: 30MB-400MB Fixed:		2780/3780	HASP		<u> </u>
PERIPHERAL EQUIPMENT Disks supported Fixed: 9.3-200MB A0-160 cps None Letter quality printers Line printers Line printers Letter quality printers Line pri				Yes	Yes
Disks supported Fixed: 9.3-200MB Fixed: 9.3-200MB Fixed: 30MB-400MB ixed: 30MB-400MB Fixed: 30MB-400MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed: 30MB-40MB Fixed:				[
Serial printers Letter quality printers Line Line printers Line Line printers Line Line Line Line Line Line Line Line		Fixed: 9.3-200MB	IN CONTRACTOR OF THE CONTRACTO	Fixed: 30MB-400MB	Fixed: 30MB-400MB
Letter quality printers Line printers Line printers Line printers Line printers Line printers Real-to-reel tape drives Streaming tape drives Cassette Cartridge tape drives Other perpherals supported Macro Cobol, Fortran IV, PL/1 Planting System Operating system Operating system Operating system Operating system Operating Sys. implemented in firmware Database management system Principal industry application Other packages Mone Other packages CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 Mone Other packages Mone Other packages Mone Other packages None One Obskette Assembler Basic, Cobol, Fortran IV, Cobol, RPG II Real-time, batch Partially Roccounting, retail Office automation Office automa	Social printers	40-160 aps	2	40-120 cps	40-120 cps
Line printers Reel-to-reel tape drives A5/75 ips; 800/1600 bpi Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Cher perpherals supported SOFTWARE Assembler Compilers Operating system Operating system Operating sys. implemented in firmware Principal industry application Other packages CPU, 512KB memory, 3 I/O slots, diskette CPU, 512KB memory, 3 I/O slots, diskette CPU, 512KB memory, 3 I/O slots, diskette CPU, 512KB memory, 3 I/O slots, diskette Mone Anone None None None None None None None					
Reel-creel tape drives Streaming tape drives Cassette/cartridge tape drives Cher perpherals supported Other perpherals supported Macro Compilers Macro Compilers Operating system Operating system Operating system Operating system Principal industry application Other packages CPU, 512KB memory, 3 I/O sites, diskette CPU, 512KB memory, 3 I/O sites, diskette CPU, 512KB memory, 3 I/O sites, diskette CPU, 512KB memory, 3 I/O sites, diskette Mone None None None Diskette None None None None None Diskette None None None None None None None Diskette Assembler Basic, Cobol, Fortran IV, Cobol, RPG II Real-time, batch Partially System/34 BRADS Not supplied None None None None None None Multitasking Not supplied None None None None None None None Multitasking Not supplied None None None None None None None None					
Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Other perpherals supported Macro Compilers Macro Cobol, Fortran IV, PL/1 Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages CPU, 512KB memory, 3 I/O slots, diskette CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Softman IV, Docember 1977 December 1977 December 1977 December 1977 December 1977 December 1977 Distribution Once Diskette Assembler Basic, Cobol, Fortran IV, RPG II Fortra	•		1 .		
Cassette/cartridge tape drives Other perpherals supported Other perpherals space, forter IV, RPG II Other perpherals space, Cobol, Other perpherals space, Cobol, Other perpheral IV, RPG II Other perpheral IV, RPG II Other perpheral IV, RPG II Other perpheral IV, RPG II Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Other IV, RPG II Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol, Other perpendic space, Cobol,			l ·	l	
Other perpherals supported Diskette Assembler Assembler Basic, Cobol, Fortran IV, RPG II Fo			I .		
Other perpherals supported Diskette Assembler Basic, Cobol, Fortran IV, RPG II For	Cassette/cartridge tape drives	None	None	None	None
SOFTWARE Assembler Compilers Macro Cobol, Fortran IV, PL/1 Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Macro Cobol, RPG II Real-time, batch Partially Pasic, Fortran IV, PL/1 Cobol, RPG II Real-time, batch Partially Pasic, Fortran IV, RPG II Real-time, batch Partially Not supplied None Multitasking Not supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000		Diskette		Diskette	Diskette
Assembler Compilers Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, Cobol, RPG II Real-time, batch Partially System/Operating system Operating spst. Operating system Operation Operating system Operation Operating system Operating system Operating system Operation Operating system Operation Operation Operation Operation Operation Operation Operation Operation Ope					
Assembler Compilers Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, PL/I Cobol, Fortran IV, Cobol, RPG II Real-time, batch Partially System/Operating system Operating spst. Operating system Operation Operating system Operation Operating system Operating system Operating system Operation Operating system Operation Operation Operation Operation Operation Operation Operation Operation Ope	SOFTWARE			•	
Compilers Cobol, Fortran IV, PL/1 Operating system Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Cobol, Fortran IV, Cobol, RPG II Real-time, batch Partially System IV, Cobol, RPG II Real-time, batch Partially System IV, RPG II Multitasking Not supplied Not supplied Not supplied Not supplied None Manufacturing, Distribution Office automation Office automation Office automation Office automation Office automation CPU, 512KB memory, 3 I/O slots, diskette drive, 36MB disk. 300 lpm printer—\$24,395 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Real-time, batch Partially Multitasking Not supplied None Manufacturing, Distribution Office automation Office automation Office automation Office automation CPU, 32KB memory, 246KB diskette, 8.6MB disk. 300 lpm printer—\$24,395 Sp6 1983 Not supplied Four new models with 256KB memory. The B18 8 B25 include GOOMB disk the B16 & B26 include Four new models with 256KB memory. The B18 8 B25 include GOOMB disk the B16 & B26 include		Macro	Assembler	Assembler	Assembler
Operating system Operating system Operating system Operating system Operating system Principal industry application Other packages Other packages CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS PL/1 Multitasking Multitasking Not supplied None Manufacturing, Distribution Office automation CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 Not supplied None Manufacturing, Distribution Office automation CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Mote automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mote automation Fortran IV, RPG II Multitasking Not supplied None Manufacturing, Distribution Office automation Office automation Office automation Fortran IV, RPG II Multitasking Not supplied None Manufacturing, Distribution Office automation Office automation Office automation Fortran IV, RPG II Multitasking Not supplied None Manufacturing, Distribution Office automation Office automation Office automation Fortran IV, RPG II Multitasking Not supplied None Manufacturing, Distribution Office automation Office aut					l .
Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price drive—\$19,355 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Multitasking Not supplied None Manufacturing, Distribution Office automation Moltitasking Not supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 600MB disk—\$79,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 600MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model B15, 256KB memory, diskette drive, 600MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB diskette drive, 600MB disk—\$21,000 Mot supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB diskette drive, 6					
Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Multitasking No Not supplied None Accounting, retail None Manufacturing, Distribution Office automation Multitasking Not supplied Not supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$1,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$1,000 Mose Manufacturing, Distribution Office automation Model B15, 256KB memory diskette drive, 30MB disk—\$1,000 Mose Manufacturing, Distribution Office automation		· -/ ·			
Operating sys. implemented in firmware Database management system Principal industry application Other packages PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS None System/34 BRADS Accounting, retail None Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Not supplied None Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Accounting, retail Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Not supplied None Manufacturing, Distribution Office automation Accounting, retail Manufacturing, Distribution Office automation Not supplied Sp6KB memory, and siskette drive, 30MB disk—\$21,000 Most automation Not supplied None Manufacturing, Distribution Office automation Sp8 diskette drive, 30MB disk—\$21,000 Most automation Not supplied None None Manufacturing, Distribution Office automation Sp8 diskette drive, 30MB disk—\$21,000 Most automation Not supplied Not supplied Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include	Operating eveters	Multitaskina	•	Multitacking	Multitacking
Database management system Principal industry application Other packages None Accounting, retail None Manufacturing, Distribution Office automation Office automation Office automation CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mo. maintenance of basic configuration Pate of first delivery Number installed to date COMMENTS None Manufacturing, Distribution Office automation CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 Accounting, retail None Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Mos. maintenance of basic configuration Pate of first delivery Number installed to date COMMENTS Not supplied Sp6 1983 Not supplied Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include					
Principal industry application Other packages Office automation Office automation Office automation Office automation Office automation Manufacturing, Distribution Office automation Office automation CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 I/O slots, diskette drive—\$19,355 Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Not supplied S241 December 1977 35,000 Manufacturing, Distribution Office automation Model A11, 128KB memory, diskette drive, 30MB disk—\$79,000 Model B15, 256KB memory diskette drive, 30MB disk—\$79,000 S241 December 1977 35,000 Not supplied Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include					
Other packages Office automation Office automation Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation Distribution Office automation Office automation Distribution Office automation Office automation Distribution Office automation And a supplied All 1, 128KB memory, diskette drive, 30MB diskette drive, 600MB disk. \$21,000 Distribution Office automation And a supplied All 1, 128KB memory, diskette drive, 600MB disk. \$21,000 Specific All 1, 128KB memory, diskette drive, 30MB diskette drive, 30MB diskette drive, 600MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 600MB diskette drive, 600MB diskette drive, 600MB diskette drive, 600MB diskette drive, 600MB diskette drive, 600MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB diskette drive, 30MB d	, ,	ivone	Accounting, retail		
Office automation Office automa	Principal industry application			J	
PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 CPU, 32KB memory, 246KB diskette, 8.6MB disk, 300 lpm printer—\$24,395 Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Availability CPU, 512KB memory, 246KB diskette, 8.6MB disk, 300 lpm printer—\$24,395 Sp6 1983 Not supplied Sp6 1983 Not supplied Not supplied Not supplied Not supplied Four new models with 256KB memory, 448CB diskette drive, 30MB disk—\$21,000 Sp6 1983 Not supplied Not supplied Four new models with 256KB memory, 246KB Model A11, 128KB memory, diskette drive, 30MB disk—\$21,000 Sp6 1983 Not supplied Four new models with 256KB memory, 246KB Not supplied Sp6 1983 Not supplied Four new models with 256KB memory, 246KB Page 1983 Not supplied Four new models with 256KB memory, 246KB Page 1983 Not supplied Four new models with 256KB memory, 246KB Page 242 Page 242 Page 244 Page 245 Page 246 Page 246 Page 247 Page 248 Page 249 Page 249 Page 240 Page 240 Page 240 Page 240 Page 241 Page 240 Page 241 Page 242 Page 244 Page 2				I	
Basic system configuration and price CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 S241 December 1977 35,000 December 1977 35,000 S242 July 1983 Not supplied Not supplied Not supplied Not supplied Four new models with 256KB memory, 246KB diskette drive, 30MB diske	Other packages		Office automation	Office automation	Office automation
Basic system configuration and price CPU, 512KB memory, 3 I/O slots, diskette drive—\$19,355 Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 CPU, 32KB memory, 246KB disk, 300 lpm printer—\$24,395 S241 December 1977 35,000 December 1977 35,000 S242 July 1983 Not supplied Not supplied Not supplied Not supplied Four new models with 256KB memory, 246KB diskette drive, 30MB diske	DDICING 9. AVAILADULTV				
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS I/O slots, diskette drive, 8.6MB disk, 300 lpm printer—\$24,395 diskette drive, 30MB disk—\$21,000 diskette drive, 600MB disk—\$79,000		CDIL E12KB assesses 2	COLL SOVE manner 346VD	Model A11 120KD marran	Model R15 256VP marray
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Additive—\$19,355 300 lpm printer—\$24,395 \$241 December 1977 1983 Not supplied \$96 \$242 July 1983 July 1983 Not supplied Not supplied Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include					
Mo. maintenance of basic configuration \$73 \$241 \$96 \$242 Date of first delivery 1983 December 1977 1983 July 1983 Number installed to date COMMENTS \$5,000 Not supplied Four new models with 256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include					
Date of first delivery Number installed to date COMMENTS December 1977 35,000 December 1977 35,000 1983 July 1983 Not supplied Four new models with E256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include		drive\$19,355	300 lpm printer—\$24,395	disk\$21,000	alsk—\$79,000
Date of first delivery Number installed to date COMMENTS December 1977 35,000 December 1977 35,000 1983 July 1983 Not supplied Four new models with E256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include					
Date of first delivery Number installed to date COMMENTS December 1977 35,000 December 1977 35,000 1983 July 1983 Not supplied Four new models with E256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include					
Date of first delivery Number installed to date COMMENTS December 1977 35,000 December 1977 35,000 1983 July 1983 Not supplied Four new models with E256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include			0244		
Number installed to date COMMENTS Not supplied Not supplied Not supplied Not supplied Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include	•		ł ·	1 7	i ·
COMMENTS Four new models with 256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include			k		
256KB memory. The B15 & B25 include 600MB disk; the B16 & B26 include	Number installed to date	Not supplied	35,000	Not supplied	Not supplied
256KB memory. The B15 8 B25 include 600MB disk; the B16 & B26 include			1	!	Four new models with
the B16 & B26 include			1		256KB memory. The B15 8
the B16 & B26 include			1		
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	I		1		l

MANUFACTURER AND MODEL	Honeywell DPS 6/45	Honeywell DPS 6/75	IBM Series 1 Model 4952	IBM Series 1 Model 4954
WORD LENGTH	16 bits	16 bits	16-bit	16 h:a
MAIN MEMORY	512KB-2MB	1MB-2MB	32K-128K	16-bit 64K-256K
DISK STORAGE CAPACITY	1GB	1GM	256MB per I/O attachment	
NO. WORKSTATIONS SUPPORTED	32	96		256MB per I/O attachment
			8 per I/O attachment	8 per I/O attachment
PRICE RANGE TARGET MARKET	From \$45,500	\$60,000 + up	From \$5,000 Business	From \$10,000 Business
CENTRAL PROCESSOR				
CPU manufacturer and model	Proprietary	proprietary	Proprietary	Proprietary
Hardware floating point	Single/double	Double	Double	Double
Battery backup	Opt.	Opt.	Opt.	Opt.
Real-time clock or timer	Std.	Std.	Opt.	Opt.
CPU cycle time, nanoseconds	250	220	Not supplied	Not supplied
MAIN STORAGE	250	220	Not supplied	Not supplied
Bytes fetched per cycle	2	2	NI-A	No
	425	425	Not supplied	Not supplied
Memory access			Not supplied	Not supplied
Cycle/access time, nanoseconds	500	500	2.1 ms	1.4 ms
Storage protection	Std.	Std.	None	None
Increment size, bytes	256K	256K	32K	64K
Cache memory, bytes	None	8K	None	None
NPUT/OUTPUT CONTROL	\	1	1	1
No. of I/O channels	3	8	4-14	3-13
Data transfer rate	Not supplied	Not supplied	2.4MB/second	2.4MB/second
COMMUNICATIONS		I		
Max. number of lines	32	96	Not supplied	1
Synchronous	Opt.	Opt.; 19.2K bps	Opt.; 56K bps	Opt.; 56K bps
Asynchronous	Std.	Opt.: 19.2K bps	Opt.; 19.2K bps	Opt.; 19.2K bps
Protocols supported	BSC, SDLC, HDLC, HASP	BSC, PUE, HDLC, SDLC	BSC, X.25, HDLC/SDLC,	BSC, X.25, HDLC/SDLC,
sapported	,,,	133, 132, 11520, OBEC	SNA	SNA
Type of LAN supported	None	None	None	None
RJE terminals emulated	2780/3780, HASP	IBM 2780/3780	2780/3780	
IBM 3270 emulation	Yes	Yes	Yes	2780/3780
	res	res	Yes	Yes
PERIPHERAL EQUIPMENT	E: 1 0784D 05084D	E: 1 0714D 05014D	-:	l
Disks supported	Fixed: 67MB-256MB	Fixed: 67MB, 258MB	Fixed: 9.3-200MB	Fixed: 9.3-200MB
0.11	Cartridge: 40MB-80MB	Removable: 40MB, 80MB		J
Serial printers	80-400 cps	80-400 cps	40-160 cps	40-160 cps
Letter quality printers	35 cps, 55 cps	35, 55 cps	None	None
Line printers	300-1200 lpm	300-1200 lpm	140-560 lpm	140-560 lpm
Reel-to-reel tape drives	75/125 ips,1600/6250 bpi	75/125 ips;1600/6250 bpi	45/75 ips; 800/1600 bpi	45/75 ips; 800/1600 bpi
Streaming tape drives	None	None	50/100 ips; 80M	50/100 ips; 80M
Cassette/cartridge tape drives	None	None	None	None
Other perpherals supported	Diskette: 650KB	Diskette: 650KB	Diskette	Diskette
				ľ
SOFTWARE		Į.		ļ
Assembler	Macro	Macro	Macro	Macro
Compilers	Cobol, Basic, RPG,	Cobol, Basic, RPG,	Cobol, Fortran IV,	Cobol, Fortran IV,
•	Fortran, Pascal	Fortran, Pascal	PL/1	PL/1
0	D. A. Carrier	B 1		
Operating system	Real-time	Real-time	Multitasking	Multitasking
Operating sys. implemented in firmware		None	No	No
Database management system	DM6	DM6	None	None
Principal industry application	Manufacturing, distri-	Manufacturing,		1
	bution, pharmacy	Distribution, Pharmacy		1
Other packages	Office automation,	Office Automation,	1	
	accounting	Accounting		1
		1		1
PRICING & AVAILABILITY				
Basic system configuration and price	512KB memory, 80MB cart.	CPU, 1MB memory; 80MB	CPU, 96KB memory, 4	CPU, 256KB memory, 3
	disk, 650KB diskette	disk, printer port; 4	I/O features, diskette	I/O feature slots,
	communications	workstation ports; 650KB	drive—\$10,346	diskette drive-
	controller, 4	diskette, console—		\$12,845
	workstation ports,	\$60,000		l .
	printer port, console—	' '		1
	\$45,500	1		1
	'			
Mo. maintenance of basic configuration	\$258	\$458	\$74	\$65
Date of first delivery	November, 1983	November 1983	1979	1982
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
COMMENTS	Cappilou			- Tot Supplied
JOHN TENT O	1	1		l
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MANUFACTURER AND MODEL	MAI/Basic Four 310	MAI/Basic Four 510	MAI/Basic Four 710	MDS Qantel Business Computers Systems 10, 20 & 40
	40	0.1:	16 140	8 bits
WORD LENGTH	16 bits	8 bits	16 bits	
MAIN MEMORY	128-256KB	96-256KB	96-512KB	96K-1MB
DISK STORAGE CAPACITY	50-120MB	40-600MB	150-600MB	20-900MB
NO. WORKSTATIONS SUPPORTED	2-16	2-16	2-32	4/32/64
PRICE RANGE	\$43,760-\$90,000	\$50,565-\$100,000	\$62,360-\$120,000	\$14,000-\$25,000
TARGET MARKET	Business	Business	Business	Business
CENTRAL PROCESSOR				
CPU manufacturer and model	Basic Four proprietary	Basic Four proprietary	Basic Four proprietary	2901 bit slice
Hardware floating point	No	No	No	no
Battery backup	Std.	Std.	Std.	none
Real-time clock or timer	Std.	Std.	Std.	Opt.
CPU cycle time, nanoseconds	200	200	200	100/100/91
MAIN STORAGE				
Bytes fetched per cycle	8	8	8	1
Memory access	8 bits	8 bits	8 bits	Not supplied
Cycle/access time, nanoseconds	600	600	600	1000/1000/585
	Std.	Std.	Std.	Std.
Storage protection	32K	32K	32K	32K/32K/128K
Increment size, bytes				
Cache memory, bytes	Option-32K	Option-32K	Option-32K	None
INPUT/OUTPUT CONTROL	100	1.0	las	14-
No. of I/O channels	16	16	32	15
Data transfer rate	20KB/second	20KB/second	20KB/second	38.4KB/sec.
COMMUNICATIONS	1		1	
Max. number of lines	16	16	32	30
Synchronous	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt.; 9.6K bps	Opt. 38.4K bps
Asynchronous	Std.; 9.6K bps	Std.; 9.6K bps	Std.; 9.6K bps	Opt. 38.K bps
Protocols supported	2780/3780, 2770/3770,	2780/3780, 2770/3770,	2780/3780, 2770/3770,	2780, 3780, 3740, HASP
Trotogois supported	3270, X.25	3270, X.25	3270, X.25	RJE
Type of LAN supported	BANET	BANET	B4NET	BEST NET
RJE terminals emulated	2770/2780, 3770/3780	2770/2780, 3770/3780	2770/2780, 3770/3780	2780/3780
IBM 3270 emulation	Yes	Yes	Yes	Yes
PERIPHERAL EQUIPMENT Disks supported	Fixed: 50-120MB	Removable: 20,35,75MB	Removable: 20,35,75MB	Fixed: 20-400MB
Serial printers	120,160 cps	120,160 cps	120,160 cps	150 cps
Letter quality printers	40 cps	40 cps	40 cps	35 cps
Line printers	150,300 lpm	150,300 lpm	150,300 lpm	300-1000 lpm
Reel-to-reel tape drives	175 ips	175 ips	175 ips	45 ips
Streaming tape drives	100 ips	100 ips	100 ips	125 ips, 16/3200 bpi
Cassette/cartridge tape drives	30 ips	None	None	18MB cartridge
Other perpherals supported				2.6MB Diskette
SOFTWARE				
Assembler	None	None	None	Macro
Compilers	Basic	Basic	Basic	QIC BASIC, COBOL
Compilers	Dasic	Dasic	Dasic	CIC BASIC, COBOL
Operating system	Multitasking	Multitasking	Multitasking	Multitasking
		Fully	· ·	Partially
Operating sys. implemented in firmware			Fully	
Database management system	Origin	Origin	Origin	None
Principal industry application	Various business	Various business	Various business	Manuf., Retail and
				Distribution
Other packages	Electronic mail,	Electronic mail,	Electronic mail,	Spread sheet, Word
	Word processing	Word processing	Word processing	processing
	J	J		
PRICING & AVAILABILITY	I		1	1
Basic system configuration and price	CPU w/128K memory, 50MB	CPU, 96K memory, two	CPU, 96K memory, two	System 10: CPU, 96K
, , , , , , , , , , , , , , , , , , , ,	disk, streamer tape,	20MB disk drives, 150	35MB disk drives, 150	memory, 20MB disk,
	terminal, & operating	Ipm printer, 2 terminals	Ipm printer, terminal,	diskette, terminal,
	system—\$43,760	& operating system—	& operating system—	150 cps printer-\$13,950
	System 43,700		\$62,360	100 cps printer
		\$50,565	ψ02,300	
Mo. maintenance of basic configuration	\$472	\$478	\$562	\$199
<u> </u>				
Date of first delivery	April 1982	September 1980	April 1982	1981
Number installed to date	Not supplied	Not supplied	Not supplied	3,000
COMMENTS	Systems 110, 210	No significant	No significant	
	available beginning	conversion to 32-bit	conversion to 32-bit	1
	at \$16,250	system - Operating	system - Operating	
		system compatibility	system compatibility	
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MANUFACTURER AND MODEL	MDS Qantel Business Computers System 64	Microdata Corp. Reality 4700	Mitsubishi Electronics America, Inc. Model 816	Modular Computer Systems Classic II/15
A/ORD LENGTH	8 bits	O bite	16 his	10 1:
WORD LENGTH MAIN MEMORY	512K-4MB	8 bits 64KB-512KB	16 bits 256-896KB	16 bits
	75-2.5GB	- · · · - · · · · · · · · · · · · · · ·		512KB
DISK STORAGE CAPACITY		32MB-514MB	100MB	13MB-1.2GB
NO. WORKSTATIONS SUPPORTED	100	48	8	16
PRICE RANGE	From \$85,000	From \$27,000	\$7,500-\$50,000	\$12,000-\$35,000
TARGET MARKET	Business	Business	Business	
CENTRAL PROCESSOR				
CPU manufacturer and model	2901 bit slice	Microdata 1600	Intel 8086/8087	Proprietary
Hardware floating point	No	None	None	Single/Double
Battery backup	None	Std.	None	Opt.
Real-time clock or timer	Opt.	Std.	Std.	Std.
CPU cycle time, nanoseconds	Not supplied	150	200	Not supplied
MAIN STORAGE	Trot supplied	1130	200	Not supplied
Bytes fetched per cycle	8	1	8	2
Memory access	Not supplied	1.	16	
•	400	Not supplied 600	500	Not supplied
Cycle/access time, nanoseconds			1	400
Storage protection	Std.	Std.	None	Std.
Increment size, bytes	512K	32K, 64K, 128K	256K	Not supplied
Cache memory, bytes	None	None	None	None
NPUT/OUTPUT CONTROL	l	1	1_	
No. of I/O channels	15	12	8	Not supplied
Data transfer rate	38.4KB/sec.	500KB/second	833KB/second	800KB/second
COMMUNICATIONS	1 .			1
Max. number of lines	30	48	4	16
Synchronous	Opt. 38.4K bps	No	Opt.; 9.6K bps	Std.
Asynchronous	Opt. 38.K bps	Std.; 9.6K bps	Opt.; 9.6K bps	Std.
Protocols supported	2780, 3780, 3740, HASP,	2780/3780,2770, 3741	2780/3780, SDLC*	X.25, 2780/3780
	RJE	l	la	I
Type of LAN supported	BEST NET	None	SNA*	None
RJE terminals emulated	2780/3780	2780/3780, HASP	2780/3780*	2780/3780
IBM 3270 emulation	Yes	No	Yes	No
PERIPHERAL EQUIPMENT				1
Disks supported	Fixed: 75-400MB	Fixed: 257MB	Fixed: 10M, 20M, & 50M*	Fixed: 60, 67MB Cartridge: 13.5-283MB
Serial printers	150 cps	33-180 cps	Not supplied	None
Letter quality printers	35 cps	33-180 cps	Not supplied	None
Line printers	300-1000 lpm	150,300,600,1200 lpm	Not supplied	300,600,1000 lpm
Reel-to-reel tape drives	45 ips	45 ips	None	75ips; 800/1600 bpi
Streaming tape drives	100 ips; 16/3200 bpi	100/50ips; 1600/3200 bpi	None	100/25 ips; 1600 bpi
Cassette/cartridge tape drives	18MB cartridge	None	None	None
Other perpherals supported			Diskettes: 1.6MB	1MB diskette
SOFTWARE				
	84	84	A CN400	
Assembler	Macro	Macro	ASM86	Macro
Compilers	QIC BASIC, COBOL	Basic, English	Basic, Cobol	Cobol 74, Fortran 66 & 77, Pascal, Cobol 66
				77, Tascal, Cobol Co
Operating system	Multitasking	Multitasking	Multitasking	Real-time
Operating sys. implemented in firmware		Partially	Not supplied	Not supplied
Database management system	None	Reality Database Mgmt.	None	Infinity
Principal industry application	Manuf., Retail and	Mfg., Accounting,	General Business	Factory Automation
par madetty approach	Distribution	Distribution		. solory / decomposition
Other packages	Spread sheet, Word	Office Automation	}	Transaction Processing
Salar pushages	processing	- Indo Automation		
ODICINO 9. ANAU ADULTN				
PRICING & AVAILABILITY	CDLL E12K maman. 2	CRIL 64K 22MB	C	CDIL E 10KD
Basic system configuration and price	CPU, 512K memory, 2	CPU, 64K memory, 32MB	Contact vendor	CPU, 512KB memory,
	work station control-	disk, streaming tape—		20MB disk, operating
	lers—\$85,000	\$27,000		system—\$21,000
			'	
Mo. maintenance of basic configuration	\$340	Contact vendor	Contact vendor	\$150
Date of first delivery	August, 1983	Nov. 1973	Not supplied	Feb. 1984
Number installed to date	70	8000	Not supplied	New Product
COMMENTS	/ `	10000	l*under development	THE W F TOUGHT
CONNICION IS			i under development	ŀ
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MANUFACTURER AND MODEL	Modular Computer Systems Classic II/25	Modular Computer Systems Classic II/45	Modular Computer Systems Classic II/75	NCR Corporation Tower 1632
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	512KB	128KB-2MB	128KB-4MB	512KB-2MB
DISK STORAGE CAPACITY	13MB-1.2GB	13MB-1.2GB	13MB-1.2GB	30MB-230MB
NO. WORKSTATIONS SUPPORTED	32	128	128+	16
PRICE RANGE TARGET MARKET	\$27,000-\$100,000	\$43,000-\$130,000	\$75,000-\$150,000 Process, Scientific, Factory	\$16,000-\$60,000 Business
CENTRAL PROCESSOR			l detery	
CPU manufacturer and model	Proprietary	Proprietary	Proprietary	Motorola M68000
Hardware floating point	Single/Double	Single/Double	Single/Double	Double
Battery backup	Opt.	Opt.	Opt.	Std.
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	Not supplied	Not supplied	320	Not supplied
MAIN STORAGE		''		
Bytes fetched per cycle	2	2	2	Not supplied
Memory access	Not supplied	Not supplied	Not supplied	Not supplied
Cycle/access time, nanoseconds	250	250	600	Not supplied
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	Not applicable	128K	128K	512K
Cache memory, bytes	None	None	None	None
INPUT/OUTPUT CONTROL		1		
No. of I/O channels	Not supplied	64	64	7
Data transfer rate	1MB/second	4MB/second	8MB/second	5MB/sec.
COMMUNICATIONS		\	1	1.
Max. number of lines	32	256	256	16
Synchronous	Std.	Std.	Opt.; 25K bps	Opt.
Asynchronous	Std.	Std.	Opt.; 19.2K bps	Std.
Protocols supported	X.25, 2780/3780	X.25, 2780/3780	X.25, 2780/3780	2780/3780, SDLC, SNA, Asynch, X.25
Type of LAN supported RJE terminals emulated	None	None	None	Ethernet
	2780/3780	2780/3780	2780/3780	3770, 2780/3780
IBM 3270 emulation	No	No	No	Yes
PERIPHERAL EQUIPMENT	Fixed: 60, 67MB	Fixed: 60, 67MB	Fixed: 60 67MB	Fixed: 30MB or 84MB
Disks supported	Cartridge: 13.5-283MB	Cartridge: 13.5-283MB	Fixed: 60, 67MB	FIXEd: SOIVID OF 64IVID
Serial printers	None	None	Cartridge: 13.5-283MB None	35-125 cps
Letter quality printers	None	None	None	33 cps
Line printers	300,600,1000 lpm	300,600,1000 lpm	300,600,1000 lpm	360-720 lpm
Reel-to-reel tape drives	75ips; 800/1600 bpi	75ips; 800/1600 bpi	75ips; 800/1600 bpi	None
Streaming tape drives	100/25 ips; 1600 bpi	100/25 ips; 1600 bpi	100/25 ips; 1600 bpi	30 ips, 800 bpi
Cassette/cartridge tape drives	None	None	None	None
Other perpherals supported	1MB diskette	1MB diskette	1MB diskette	650KB diskettes
Carrier Parking Cake			i i i i i i i i i i i i i i i i i i i	
SOFTWARE				
Assembler	Macro	Macro	Macro	68000
Compilers	Cobol 74, Fortran 66 &	Cobol 74, Fortran 66 &	Cobol 74, Fortran 66 &	RM/COBOL, BASIC,
·	77, Pascal, Cobol 66	77, Pascal, Cobol 66	77, Pascal, Cobol 66	FORTRAN, PASCAL, C
Operating system	Real-time	Real-time	Real-time	Multitasking
Operating sys. implemented in firmware		Not supplied	Not supplied	No
Database management system	Infinity	Infinity	Infinity	Ingres Relational DBMS
Principal industry application	Factory Automation	Factory Automation	Factory Automation	Com'l., Med., Educ.,
Other med and		L	 	Gov't., Fin., Retail
Other packages	Transaction Processing	Transaction Processing	Transaction Processing	Color Graphics, Elec. Spreadsheets, Word Processing, Office Auto.
PRICING & AVAILABILITY		1		
Basic system configuration and price	CPU, 512KB memory,	CPU, 512KB memory,	CPU, 512KB memory,	CPU, 512KB memory, 30M
, , ,	13.5Mb disk, operating	67MB disk, operating	67MB disk, tape,	disk, 1MB diskette, 8
	system—\$39,075	system—\$65,300	operating system-	I/O ports, 1 CRT,
	,	,	\$126,500	125 lpm printer,
		·	1	Operating System,
	1		1	COBOL-\$23,600
			1	1
			1	
Mo. maintenance of basic configuration	100	\$612	\$1,069	\$92.00 (w/o peripherals)
Date of first delivery	1979	1978	April 1978	December, 1982
Number installed to date	500+	500+	1500+	Not supplied
COMMENTS			1	
	1		1	1
	1		1	
			1	
			1	
			1	
		1	1	
		1.	1	
	1	1		
	<u> </u>	1 .	1	1

MANUFACTURER AND MODEL	Northern Telecom Inc. 503	Northern Telecom Inc. 565	Northern Telecom Inc. 585	PERQ Systems Corporation PERQ 2
A 144				1 Little 2
WORD LENGTH	8 bits	8 bits	8 bits	16 bits
MAIN MEMORY	256KB	256KB-512KB	256KB-512KB	512K-2MB
DISK STORAGE CAPACITY	1.6MB-10.8MB	22MB	22MB-342MB	35MB
NO. WORKSTATIONS SUPPORTED	1 05050	1-4	1-16	11
PRICE RANGE	From \$5,250	From \$14,950	From \$19,950	\$25,000-\$40,000
TARGET MARKET		Office Automation	Office Automation	Tech. Publishing,
OFNITRAL PROOFCOOR				CAD/CAM, Fed. Sys.
CENTRAL PROCESSOR	l-+-1 0005	 0005	1	la
CPU manufacturer and model	Intel 8085	Intel 8085	Intel 8085	Proprietary
Hardware floating point	None	None	None	None
Battery backup	None	None	None	None
Real-time clock or timer	None	None	None	Std.
CPU cycle time, nanoseconds	286	167	167	170
MAIN STORAGE				
Bytes fetched per cycle	Not supplied	Not supplied	Not supplied	4
Memory access	Not supplied	Not supplied	Not supplied	200M bits/sec.
Cycle/access time, nanoseconds	Not supplied	Not supplied	Not supplied	680
Storage protection	None	None	None	Std.
Increment size, bytes	Not applicable	128K	128K	512K-1M
Cache memory, bytes	None	None	None	16K
INPUT/OUTPUT CONTROL		.	l	_
No. of I/O channels	Not supplied	Not supplied	Not supplied	6
Data transfer rate	Not supplied	Not supplied	Not supplied	10M bits/sec.
COMMUNICATIONS	ا	l.		I_
Max. number of lines	2	6	6	2
Synchronous	Opt., 9.6K bps	Std, 9.6K bps	Std., 9.6K bps	Std., 19.2K bps
Asynchronous	Opt., 9.6K bps	Std., 9.6K bps	Std., 9.6K bps	Std., 19.2K bps
Protocols supported	2770/2780/3780,	2770/2780/3780,	2770/2780/3780,	2780/3780
	TC3500, SNA, SDLC	TC3500, SNA, SDLC	TC3500, SNA, SDLC	
Type of LAN supported	None	Omnilink	Omnilink	Ethernet
RJE terminals emulated	2780/3780, Hasp	2780/3780, Hasp	2780/3780, Hasp	2780/3780
IBM 3270 emulation	Yes	Yes	Yes	No
PERIPHERAL EQUIPMENT				
Disks supported	.8MB Floppys,	22MB Winchester	22MB Winchester,	Fixed: 35MB
	10MB Winchester		74.5MB disk pack	
Serial printers	120 cps & 180 cps	120 cps & 180 cps	120 cps & 180 cps	200 cps
Letter quality printers	40 cps	40 cps	40 cps	40 cps
Line printers	300 lpm	300/600/1000 ipm	300/600/1000 lpm	1000 lpm
Reel-to-reel tape drives	None	None	800/1600 bpi	None
Streaming tape drives	None	None	None	45 ips, 22MB
Cassette/cartridge tape drives	None	1MB per minute	1MB per minute	None
Other perpherals supported	None	None	300 cpm card reader	1MB Diskettes
		ļ		
SOFTWARE				
Assembler	Only in CP/M 3.0	Only in CP/M 2.2	Only in CP/M 2.2	PERQ Microcode
Compilers	ACOBOL3/AL2000,	ACOBOL3/AL2000,	ACOBOL3/TAL2000,	Pascal, Fortran 77, C
	CP/M 3.0	CP/M 2.2	CP/M 2.2	Į
	L	1		
Operating system	Multitasking	Multitasking	Multitasking	Real-time
Operating sys. implemented in firmware		No	No	No
Database management system	dBASE II using CP/M	dBASE II using CP/M	dBASE II using CP/M	No
Principal industry application	1			CAD/CAM, Elec. Pub.,
				Univ., Gov't.
Other packages	Word processing	Word processing,	Word processing,	Decision support sys.,
		Electronic mail	Electronic mail	CAD/CAM, Elec. Pub.,
				Research and Education
PRICING & AVAILABILITY				1.
Basic system configuration and price	256K RAM, 15" CRT,	256K RAM, O/S 4.1,	256K RAM, O/S 4.1,	CPU, 1MB memory, 35M
	CP/M and 2 (.8MB)	memory parity, 22MB	memory parity, 22MB	disk, tablet, detachable
	diskettes—\$5,250	disk, 15" CRT,	disk, 15" CRT,	keyboard, Ethernet
		1 cartridge—\$14,950	1 cartridge tape\$19,950	\$35,500
				1
		1	1	1
		l.		1.
Mo. maintenance of basic configuration		\$507	\$696	\$210
Date of first delivery	1981	1983	1981	March 1983
Number installed to date	Not supplied	Not supplied	Not supplied	Over 2000
COMMENTS		1	1	
		1		
		1		1
				1
				1
I				
I				
		1		
	1	1	1	I .

Commercial Commercial Business Business Business CENTRAL PROCESSOR CCHI manufacturar and model Mc68000 Mc68000 Mc68000 POINT 4 MARK 2 POINT 4 MARK 3 None No	MANUFACTURER AND MODEL	Plexus Computers, Inc. P/35	Plexus Computers, Inc. P/60 and P/65	Point 4 Data Corp. Mark 2T	Point 4 Data Corp. Mark 3
	MORD LENGTH	16 hito	16 hito	16 hita	16 hito
1,14GB					
100					
PRICE RANGE TARGET MARKET S20,000-\$40,000 S45,000-\$160,000 S22,895 S38,100 S38,100 Commercial Commercial Commercial Business S22,895 S38,100 Commercial Commercial Commercial Business S22,895 S38,100 Commercial Commercial Commercial Business S22,895 S38,100 Commercial Commercial Commercial Business S22,895 S38,100 Commercial Commerci	DISK STORAGE CAPACITY	288MB		19MB-92MB	35MB-336MB
Commercial Commercial Business Business Business CENTRAL PROCESSOR CCHI manufacturar and model Mc68000 Mc68000 Mc68000 POINT 4 MARK 2 POINT 4 MARK 3 None No	NO. WORKSTATIONS SUPPORTED	16	40	17	1 -
CPU manufacturer and model Hardware floating point Amanufacturer and model Hardware floating point None	PRICE RANGE	\$20,000-\$40,000	\$45,000-\$160,000	\$22,695	\$38,100
CPU manufacturer and model Mc68000	TARGET MARKET		Commercial		
Hardware floating point None Not supplied	CENTRAL PROCESSOR	1			
Battery backup					1
Real-time clock or timer Std. S	Hardware floating point	Opt.	Opt.	No	No
Real-time clock or timer Std. S	Battery backup	None	None	None	None
CPU cycle time, nanoseconds 80 80 80 80 80 80 80 8		Std	Std.	Std	Std
MAIN STORAGE 4 4 6 6 6 6 6 6 6 6				I .	
Bytes fetched per cycle 4 80M bits/sec. 4 80M bits/sec. 500/200 600/200		180	60	1000	140t supplied
Memory access		1_		1_	1_
Cycle/access time, nanoseconds 400 400 600/200 600/200 600/200 600/200 Storage protection 64K		1 -		1=	
Storage protection Std.	Memory access	80M bits/sec.	80M bits/sec.	16	16
Storage protection Std.	Cycle/access time, nanoseconds	400	400	600/200	600/200
Increment size, bytes 512K or 1024K 512K or 1024K 64		I .			
Cache memory, bytes None					
No. of Ordinane s				l ·	
No. of //O channels		14N	4KB	None	ivone
No. of //O channels		1		1	1
Data transfer rate		4	8	63	63
20MMUNICATIONS 19.2K bps		1.		l .	4
Max. number of lines Synchronous 19.2K bps 19.2K bps 19.2K bps 19.2K bps 19.2K bps 19.2K bps 19.2K bps 19.2K bps 19.2K bps None None None None None None None None		5,555.	1		1
Synchronous 19.2K bps None 19.2K bps None 19.2K bps None 19.2K bps None 19.2K bps None 19.2K bps None 19.2K bps None 19.2K bps None None None None None None None None		16	40	-	1-
Asymptotic and the properties of the properties		1		-	
Protocols supported Type of LAN supported RLE terminals emulated IRM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester: 35MB-168MB Winchester: 19MB-46MB Winchester: 35MB-168MB Winchester: 4-285MB Winchester: 4-				1	1
Protocols supported Type of LAN supported RLE terminals emulated IRM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester: 35MB-168MB Winchester: 19MB-46MB Winchester: 35MB-168MB Winchester: 4-285MB Winchester: 4-	Asynchronous	19.2K bps	19.2K bps	Std., 9.6K bps	Std., 9.6K bps
RJÉ terminals emulated IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester: 20-180 PS cps 20-600 [pm 20-600	Protocols supported	None	None		
RJÉ terminals emulated IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester: 20-180 PS cps 20-600 [pm 20-600					1
RJÉ terminals emulated IBM 3270 emulation Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester: 20-180 cps Tyber 20-600 [pm 100-600 [p	Type of LAN supported	Ethernet/NOS	Ethernet/NOS	None	None
IBM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester 19MB-46MB Winchester		No	No	None	None
PERIPHERAL EQUIPMENT Disks supported Winchester: 4-145MB Winchester: 4-285MB Winchester: 19MB-46MB Winchester 19MB-46MB Winchester 19MB-46MB Winchester 19MB-46MB Winchester 19MB-46MB Winchester 19MB-46MB Winchester 35MB-168MB Any RS-232 device Any Centronics device None Solice					
Disks supported Winchester: 4-145MB Winchester: 4-285MB Any RS-232 device Any		1	'''	1	
Letter quality printers Line printers Line printers Reel-to-reel tape drives Streaming tape drives Cassette/Cartridge tape drives Other perpherals supported Assembler Compilers Operating system Operating system Principal industry application Other packages Ot		Winchester: 4-145MB	Winchester: 4-285MB	Winchester 19MB-46MB	Winchester 35MB-168MB
Letter quality printers Line printers Line printers Reel-to-reel tape drives Streaming tape drives Cassette/Cartridge tape drives Other perpherals supported Assembler Compilers Operating system Operating system Principal industry application Other packages Ot	Carial animeans	Anu BC 222 device	Amy BC 222 devices	20 180	20 180
Line printers Reel-to-reel tape drives None None Streaming tape drives Cassette/cartridge tape drives Other perpherals supported Assembler Compilers Assembler Compilers Assembler Operating system Operating system Opter packages Other packages Other packages Other packages Other packages Other packages Other packages Other packag					
Reel-to-reel tape drives Streaming tape drives Cassette/Cartridge tape drives Other perpherals supported SOFTWARE Assembler Compilers Operating system Onn Operating system Onn Operating system Operating system Operating system Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Operating system Onn Onn Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Op					
Streaming tape drives Cassette/cartridge tape drives Other perplexals supported Assembler Compilers Operating system Operat	Line printers	Any Centronics device	Any Centronics device	200-600 lpm	200-600 lpm
Streaming tape drives Cassette/cartridge tape drives Other perplexals supported Assembler Compilers Operating system Operat	Reel-to-reel tane drives	None	None	None	None
Cassette/cartridge tape drives Other perpherals supported SOFTWARE Assembler Compilers Assembler COBOL, FORTRAN, PASCAL, SMC BASIC UNIX III Operating system Opterating sys. implemented in firmware Principal industry application Other packages Other pa			1 1 - 1 1 - 1		
Other perpherals supported SOFTWARE Assembler Compilers COBOL, FORTRAN, PASCAL, SMC BASIC Operating system Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packages					
Assembler Compilers Assembler COBOL, FORTRAN, PASCAL, SMC BASIC Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other pac		liaone	livone	None	I.
Assembler Compilers Assembler COBOL, FORTRAN, PASCAL, SMC BASIC Operating system Operation Operating system Operation Opera	Other perpherals supported	j			Diskette
Assembler Compilers Assembler COBOL, FORTRAN, PASCAL, SMC BASIC Operating system Operation Operating system Operation Opera		ì			
Compilers COBOL, FORTRAN, PASCAL, SMC BASIC Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packages Other packages	SOFTWARE				
Operating system Operation Oper	Assembler	Assembler	Yes	Assembler	Assembler
Operating system Operation Oper	Compilers	COBOL FORTRAN	COBOL FORTRAN	Basic	Basic
Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packag	ocmpilor a			500.0	Basic
Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packag		ASCAE, SINIC BASIC	Adeal, olde Basic	!	
Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packag	Operating system	LINIX III	LINIX III	IRIS time-sharing	IRIS time-sharing
Database management system Principal industry application Other packages Oth					
Principal industry application Other packages Other packages Word processing, Spreadsheet Word processing, Spreadsheet CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet CPU, 512KB memory, CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 COntact vendor December 1983 June 1981 June 1981 June 1981 June 1981 June 1981 June 1981					
Other packages Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet CPU, 512KB memory, 22MB winchester, and cartridge tape—\$17,950 Word processing, Spreadsheet CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 Mo. maintenance of basic configuration Date of first delivery Number installed to date Word processing, Spreadsheet Word processing, Spreadsheet CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 Spreadsheet CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 Contact vendor December 1983 June 1981 June 1981 June 1981 June 1981		UNIFY	UNIFY		
Other packages Other packages Word processing, Spreadsheet PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Spreadsheet Word processing, Spreadsheet Spreadsheet CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 and \$47,950 for the P/65 Spreadsheet CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 and \$47,950 for the P/65 Contact vendor December 1983 June 1981 June 1981 June 1981 June 1981	Principal industry application	1		General Purpose	General Purpose
Other packages Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Word processing, Spreadsheet Spreadsheet Word processing, Spreadsheet Spreadsheet Spreadsheet CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date Word processing, Spreadsheet Spreadsheet Word processing, Spreadsheet Spr		1	1	Business	
Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet FORCE Application generator CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$9,995 disk, 20MB streaming tape, 4 ports—\$13,990 Mo. maintenance of basic configuration Date of first delivery Number installed to date Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet Spreadsheet FORCE Application generator CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$13,990 Contact vendor December 1983 June 1981 2,000	Other packages	Word processing.	Word processing.		
PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$9,995 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$13,990 Contact vendor December 1983 June 1981 2,000	previnger			•	
PRICING & AVAILABILITY Basic system configuration and price CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date CPU, 512KB memory, 22MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 512KB memory, 72MB Winchester, and tape drive—\$42,950 for the P/65 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$9,995 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$13,990 Contact vendor December 1983 June 1981 2,000		obi cangi icet	Opreadancet		
Basic system configuration and price CPU, 512KB memory, 22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 CPU, 512KB memory, 72MB winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 \$450 April, 1983 December 1983 200 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$9,995 CPU, 64KB memory, 19MB disk, 20MB streaming tape, 4 ports—\$13,990 Contact vendor December 1983 200 Longton Public P	DDIONIO A ANAMARI'S	1	l	generator	generator
22MB Winchester, and cartridge tape—\$17,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date 22MB Winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 32MB Winchester, and tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 Contact vendor December 1983 June 1981 2,000					
Cartridge tape—\$17,950 tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 tape, 4 ports—\$9,995 tape, 4 ports—\$13,990 Mo. maintenance of basic configuration pate of first delivery April, 1983 April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000	Basic system configuration and price	CPU, 512KB memory,	CPU, 512KB memory,	CPU, 64KB memory, 19MB	CPU, 64KB memory, 35MB
cartridge tape—\$17,950 tape drive—\$42,950 for the P/60 and \$47,950 for the P/65 tape, 4 ports—\$9,995 tape, 4 ports—\$13,990 tape, 4 p		22MB Winchester, and	72MB Winchester, and	disk, 20MB streaming	disk, 20MB streaming
the P/60 and \$47,950 for the P/65 Mo. maintenance of basic configuration \$225 \$450 \$April, 1983			tane drive-\$42,950 for		
Mo. maintenance of basic configuration \$225 \$450 Contact vendor Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000		loan thago tapo \$17,000		1 tape, 4 ports 40,000	tape, 4 ports \$10,000
Mo. maintenance of basic configuration \$225 \$450 Contact vendor Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 100 200 2,000					(-
Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000		1	uie 7/05		
Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000		1			
Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000		1			
Date of first delivery April, 1983 April, 1983 December 1983 June 1981 Number installed to date 200 200 2,000		1	ŀ	Contact vender	Contact vander
Number installed to date 200 100 200 2,000	Mo maintanance of books and investigation	\$225	\$450	ICOILLAGE VENDOR	
			F *		
COMMENTS	Date of first delivery	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	
	Date of first delivery Number installed to date	April, 1983	April, 1983	December 1983	

### ARIOE ### AR	MANUFACTURER AND MODEL	Point 4 Data Corp. Mark 5	Point 4 Data Corp. Mark 9	Point 4 Data Corp. Mark 8	PolyComputers Inc. Polyette
256KB-1748 128KB 256KB-1748 128KB 256KB-1748 10MCRSTATIONS SUPPORTED 25070-5100.0000 25070-5100.000 25070-5100.000 25070-5100.000 25070-5	ACORD LENGTH	40.1%	40.1	40.1	1
SISK STORAGE CAPACITY O. WORKSTATIONS SUPPORTED 25.70.00 2					•
150, WORKSTATIONS SUPPORTED 32 72 54 528,700-\$100,000 528,					
### ARIGET MARKET Saliness S	DISK STORAGE CAPACITY	35MB-672MB	35MB-672MB	35MB-672MB	10MB-160MB
PARSET Business	NO. WORKSTATIONS SUPPORTED	32	72	64	16
PARSET Business	PRICE RANGE	\$26,700-\$100,000	\$30,900-\$100,000	\$28,700-\$100,000	\$15,000-\$25,000
ENTRAL PROCESSOR CPU manufacturer and model Hardware floring point No No No No No No No No No No No No No					
POINT 4 MARK 9	ANGEL WANKEL	Dusiness	Dusiness	business	
CPU manufacturer and model Hardware floating point MARK 5 No.			1		Business Applications
No	CENTRAL PROCESSOR				
Std. Std.	CPU manufacturer and model	POINT 4 MARK 5	POINT 4 MARK 9	POINT 4 MARK 8	AMD-290 bit slice
Std. Std.	Hardware floating point	No	No	None	No
Real-time clock or timer Std. S		1.77	1111	1	
CPU cycle time, nanoseconds		4			
AMN STORAGE Bytes fetched per cycle Memory access 15					
Bytes fetched per cycle 2 2 2 2 2 2 3 2 3 3	CPU cycle time, nanoseconds	400	300	400	200
Bytes fetched per cycle 2 2 2 2 2 300/8/second 300/200 300/150 400/200 400/200 400/200 500	MAIN STORAGE	1	İ		
Memory access 16		2	2	12	9
Cycled xiccess time, nenoseconds Storage protection None None None None None None None No					
Sicroleg protection None N					
Storage protection None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. None Std. Std. None Std. Std. None Std. Std. None Std. Std. None Std. St	Cycle/access time, nanoseconds	400/200	300/150	400/200	400/200
Increment size, bytes		None	Std	None	
None		l .		I	•
NPUT/COUTRUT CONTROL No. of I/O channels Data transfer rate Data Data Data Data Data Data Data Data			•		1
No. of I/O channels 64 64 2MB/second		None	Inoue	None	∠K .
Data transfer rate DAM xumber of lines Max. number of lines Max. number of lines Std. 19.2K bps Std. 19.2	NPUT/OUTPUT CONTROL	1	1	1	I
Data transfer rate DAM xumber of lines Max. number of lines Max. number of lines Std. 19.2K bps Std. 19.2	No. of I/O channels	164	64	64	32
DOMMUNICATIONS Mix. number of lines 32 No. No. No. No. No. No. No. No. No. No.					1
Max. number of lines Synchronous No Asynchronous Stid., 19.2K bps Stid., 1		2.000/3000/10	_ TVID/ 3000Hu	LIVID/360.	I WID/ Second
Synchronous Syd., 19,2K bps Si		1	I	1	
Asynchronous Std., 19.2K bps None Std., 19.2K bps None Std., 19.2K bps None Std., 19.2K bps Std., 19.2K bps Std., 19.2K bps Std., 19.2K bps 2780/3780/SDLC Type of LAN supported None No None None No No No Yes Std., 19.2K bps None Std., 19.2K bps Std., 19.	Max. number of lines	32	72	64	100
Asynchronous Std., 19.2K bps None Std., 19.2K bps None Std., 19.2K bps None Std., 19.2K bps Std., 19.2K bps Std., 19.2K bps Std., 19.2K bps 2780/3780/SDLC Type of LAN supported None No None None No No No Yes Std., 19.2K bps None Std., 19.2K bps Std., 19.	Synchronous	No	No	None	Opt.; 9.6K bps
Protocols supported None None None None None None None None	•	l e	• · · · · · · · · · · · · · · · · · · ·		
Type of LAN supported RIE terminals emulated RIE terminals emulated RIM 3270 emulation No No No No No No No No No No No No No				July 19.2K pps	
RIÉ terminals emulated IBM 3270 emulation No No No No No No No No No No No No No	rrotocols supported	INONE	Inone	1	2780/3780/SDLC
RIÉ terminals emulated IBM 3270 emulation No No No No No No No No No No No No No					İ
RIÉ terminals emulated IBM 3270 emulation No No No No No No No No No No No No No	Type of LAN supported	None	None	None	Polynet
IBM 3270 emulation EFIRHPIERAL EQUIPMENT Disks supported Fixed: 35MB-168MB Fixed: 35MB-				I	
Fixed: 35MB-168MB Fixed: 35MB-16BB Fixed: 35MB-16BBB Fixed: 35MB-16BB Fixed: 35MB-16BBB Fixed: 35MB-16BB Fixed: 35MB-16BB			•	I -	
Disks supported Fixed: 35MB-168MB Fixed: 35MB-168B Fixed: 35MB-16B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-168B Fixed: 35MB-16B Fixed: 35MB-16B Fixed: 35MB-16B Fixed: 35MB-		No	No	No	Yes
Serial printers Letter quality printers Letter quality printers Line pri	PERIPHERAL EQUIPMENT	1			<u>†</u>
Letter quality printers Line printers Line printers Line printers Line printers Reel-to-reel tape drives Streaming tape drives Other perpherals supported Operating system Opera	Disks supported	Fixed: 35MB-168MB	Fixed: 35MB-168MB	Fixed: 35MB-168MB	Winchester: 10-160MB
Letter quality printers Line printers Line printers Line printers Line printers Reel-to-reel tape drives Streaming tape drives Other perpherals supported Operating system Opera					
Line printers Reel-to-reel tape drives Streaming tape drives Cassette/cartridge tape drives Obskette Diskette D	Serial printers	20-180 cps	20-180 cps	20-180 cps	up to 2400 cps
Line printers Reel-to-reel tape drives Streaming tape drives Cassette/cartridge tape drives Obskette Diskette D	Letter quality printers	75 cps	75 cps	75 cps	up to 200 cps
Reel-to-reel tape drives Streaming tape drives Streaming tape drives Other perpherals supported Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Compilers Assembler Basic Assembler Basic BISI time-sharing No None None None Conerating system Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware Operating sys. implemented in firmware None None One One One One One One One One One O					
Streaming tape drives Cassette/cartridge tape drives Cother perpherals supported Operating system Operating					
Cassette/cartridge tape drives Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other packages Ot		1	•		
Other perpherals supported Diskette Assembler Basic Cobol, Fortran, Pascal Multitasking Partially None General Purpose Business Coprided in software General Purpose Business Systems Business B	Streaming tape drives	90 ips; 45MB	90 ips; 45MB	90 ips; 45MB	None
Other perpherals supported Diskette Assembler Basic Cobol, Fortran, Pascal Multitasking Partially None General Purpose Business Coprided in software General Purpose Business Systems Business B	Cassette/cartridge tape drives	None	į.	None	90 ips: 8120 bpi
Assembler Compilers Assembler Compilers Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Basic Assembler Cobol, Fortran, Pascal Multitasking Partially Included in software Business Business Business Business Business Business Business Business Business Business Blectronic Office, FORCE Application generator FRICING & AVAILABILITY Basic system configuration and price CPU, 128KB memory, 35MB disk, 8 ports, 20MB streaming tape— \$26,700 Assembler Basic Assembler Basic Assembler Basic Assembler Basic RISI time-sharing No None General Purpose Business Busin		1	Diskette		4-, - · · · · · · · ·
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Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Other packag	Compilers	Basic	Basic	Basic	Cobol, Fortran, Pascal
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PRICING & AVAILABILITY Basic system configuration and price CPU, 128KB memory, 35MB disk, 8 ports, 20MB streaming tape— \$26,700 CPU, 256KB memory, 35MB disk, 20MB streaming tape, \$30,900 CPU, 128KB memory, 35MB disk, 8 ports, 10MB disk, 20MB tape cassette, high speed printer port, TTY port, 4 RS-232 asynch. ports; operating system plus one compiler—\$14,950 Contact vendor Date of first delivery Number installed to date COMMENTS COMMENTS Disk caching feature optional. Generator CPU, 128KB memory, 35MB disk, 8 ports, 10MB disk, 20MB tape cassette, high speed printer port, TTY port, 4 RS-232 asynch. ports; operating system plus one compiler—\$14,950 Contact vendor January 1984 New product Disk caching feature optional. Disk caching feature optional.		FORCE Application	FORCE Application	FORCE Application	gen., BLIS Cobol Trans-
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\$26,700 \$30,900 \$28,700 printer port, TTY port, 4 RS-232 asynch. ports; operating system plus one compiler—\$14,950 Mo. maintenance of basic configuration Date of first delivery Number installed to date 5,000 Disk caching feature optional. Contact vendor January 1984 September 1981 December, 1983 300 3 3 Disk caching feature optional. Disk caching feature optional. Disk caching feature optional.				The state of the s	
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Number installed to date 5,000 Disk caching feature optional. New product Disk caching feature optional. Optional. Something feature optional. Disk caching feature optional. Optional. Something feature optional. Optional. Something feature optional. Opti	Date of first delivery	June 1979	January 1984	September 1981	December, 1983
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	OMMENTS				one to 7 CPUs

MANUFACTURER AND MODEL	PolyComputers Inc. Poly-X	PolyMorphic Systems System 8813	Rexon Business Machines Corp. RX100	Rexon Business Machines Corp. RX200
WORD LENGTH	16-bits	16 bits	16 bits	16 bits
MAIN MEMORY	4.3MB	256K-4MB	128KB—960KB	128KB-960KB
DISK STORAGE CAPACITY	2GB	1.6MB-300MB	10MB—30MB	28MB-56MB
NO. WORKSTATIONS SUPPORTED	256	16	1-8	1-12
	\$30,000-\$100,000	\$6,000-\$80,000	\$15,000-\$27,000	\$20,000-\$37,000
TARGET MARKET	Transaction Processing/ On-line Bus. Applica.	Business, Education	Business & professional data processing	Business & professional data processing
CENTRAL PROCESSOR				*
CPU manufacturer and model	AMD-2901 bit slice	Intel iAPX186	Intel 8086-2	Intel 8086-2
Hardware floating point	No	None	No	No
Battery backup	Opt.	Opt.	No	No
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	200	125	137	137
MAIN STORAGE		•		
Bytes fetched per cycle	2	2	2	2
Memory access	90MB/second	4M bytes/sec.	7.38 Mbits/sec.	7.38 Mbits/sec.
Cycle/access time, nanoseconds	400/200	500	542	542
Storage protection	Std.	None	None	None
Increment size, bytes	512K	256K	128KB	128K
Cache memory, bytes	2K	None	64KB (opt.)	64K (opt.)
INPUT/OUTPUT CONTROL		1.		
No. of I/O channels	32	2	14	18
Data transfer rate	1MB/second	2MB/sec.	To 625K bytes/sec.	To 625K bytes/sec.
COMMUNICATIONS				
Max. number of lines	100	16	9	13
Synchronous	Opt.; 9.6K bps	Opt., 250K bps	Opt., 2,400 bps	Opt., 2.4K bps
Asynchronous	Std.; 19.2K bps	Std., 19.2K bps	Std., 19.2K bps	Std., 19.2K bps
Protocols supported	2780/3780/SDLC	SDLC/HDLC	2780/3780	2780/3780
Time of LAN supported	Polymot	PolyNet, Ethernet	None	None
Type of LAN supported RJE terminals emulated	Polynet 2780/3780	None	2780/3780	2780/3780
IBM 3270 emulation	Yes	No	No	No
PERIPHERAL EQUIPMENT	1	"	l'**	110
Disks supported	160-500MB	Cart: 5MB-80MB; floppys; Fixed:18MB-110MB	Fixed: 10MB-30MB	Fixed: 28MB-56MB
Serial printers	up to 2400 cps	Not offered by mfr.	150 cps	150 cps
Letter quality printers	up to 200 cps	Not offered by mfr.	35 cps	35 cps
Line printers	up to 1200 lpm	Not offered by mfr.	300 LPM	300 lpm
Reel-to-reel tape drives	75 ips	None	None	None
Streaming tape drives	25ips; 1600 bpi	Available 1st qtr. 84	None	None
Cassette/cartridge tape drives	90 ips; 8120bpi	None	90 ips	90 ips
Other perpherals supported	•		Diskettes: 1.2MB	1.2MB Diskettes
		1		
SOFTWARE			ĺ	
Assembler	Assembler	Macro	Intel	Intel
Compilers	Basic, Iris Basic, C	BASIC, FORTRAN, PASCAL, COBOL, C	BASIC (interpretive)	BASIC (interpretive)
Operating system	Multitasking	Multitasking	Multi-tasking	Multitasking
Operating sys. implemented in firmware	Partially	Not supplied	No	No
Database management system	Included in software	Third party	IDOL	IDOL
Principal industry application	Business systems	General	General accounting	General accounting
Others	M/		lander to the second	
Other packages	Word Proc., Applications	Accounting, Office	Medical, spreadsheet,	Medical, spreadsheet,
	generator, BLIS Cobol	Automation, CAD/CAM	word processing	word processing
PRICING & AVAILABILITY	Translator, Accounting		1	
	756KB, HOST processor,	CPU, 2MB memory, 8	CPU, 128KB memory, 10MB	CBLL 129KB
Basic system configuration and price	two user processors,	users, 55MB disk,	disk, streaming tape,	28MB disk, streaming
	34MB Winchester,	terminals w/high res.	1 CRT, 150 cps printer—	tape, 1 CRT, 150 cps
	streaming tape, high	graphics, concurrent	\$15,445	printer—\$19,995
	speed printer port, TTY	CP/M86 and GSX graphics	0.0,770	Printel
j	port, 8 RS-232 ports,	software—\$36,000		
	operating system & one	30,000		
•	compiler—\$35,950			
Mo. maintenance of basic configuration	\$300	Not supplied	\$149	\$192
Date of first delivery	June, 1983	January 1984	November, 1982	November 1983
Number installed to date	10	Not supplied	850	160
COMMENTS	User processor may be	System unit will support	1	
	added or deleted without	an additional 8 users	1	
	software changes-	after which systems of		
	provides expansion from	up to 16 users can be	1	
•	one to 17 CPUs	tied together		
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MANUFACTURER AND MODEL	Rexon Business Machines Corp. RX400	Sentinel Computer Corp. Model 40	Sentinel Computer Corp. Model 80	Sperry Corp. System 80 Models 4 & 6
WORD LENGTH	16 bits	16 bits	16 bits	16 bits
MAIN MEMORY	128KB-960KB	160KB-1MB	160KB-1MB	524KB-4MB
DISK STORAGE CAPACITY	56MB-280MB	29-1200MB	80-1200MB	128MB-1.3GB
NO. WORKSTATIONS SUPPORTED	1-16	17	32	40
PRICE RANGE FARGET MARKET	\$26,000-\$75,000 Business & professional data processing	\$36,650-\$100,000 Business	\$49,800-\$150,000 Business	\$66,082-\$300,000 Commercial
CENTRAL PROCESSOR	and processing			
CPU manufacturer and model	Intel 8086-2	Intel 8086	Intel 8086	Proprietary
Hardware floating point	No	No	No	Single/Double
Battery backup	No	No	No	Not supplied
Real-time clock or timer	Std.	Std.	Std.	Std.
CPU cycle time, nanoseconds	137	125	125	180
MAIN STORAGE Bytes fetched per cycle	2	2	2	4
Memory access	7.38 Mbits/sec.	29 bits/sec.	29 bits/sec.	Not supplied
Cycle/access time, nanoseconds	542	460	460	400
Storage protection	None	Std.	Std.	Std.
	128K	32K	32K	l
Increment size, bytes Cache memory, bytes	64K (opt.)	None	None	262K, 524K None
NPUT/OUTPUT CONTROL	22	17	32	3
No. of I/O channels Data transfer rate		1200KB/sec.		=
	To 625K bytes/sec.	1200RB/Sec.	1200KB/sec.	6MB/second
COMMUNICATIONS May symbol of lines	1,7	172		
Max. number of lines	17	17	32 10 24 hms	8
Synchronous	Opt., 2.4K bps	19.2K bps	19.2K bps	Opt.; to 56K bps
Asynchronous	Std., 19.2K bps	19.2K bps	19.2K bps	Opt.; to 19.2K bps
Protocols supported	2780/3780	2780/3780	2780/3780	BSC, TTY, Univac, BC-7 X.25, DCA, 3270, UTS
Type of LAN supported	None	No	No	None
RJE terminals emulated	2780/3780	2780/3780	2780/3780	HASP
IBM 3270 emulation	No	No	No	Yes
PERIPHERAL EQUIPMENT	E: 1 5014D 44014D	E: 1.44 E 0014D	F:	E:
Disks supported	Fixed: 56MB-140MB	Fixed: 14.5-29MB	Fixed: 14.5-29MB	Fixed: 118.2MB-491MB
• • • • • • • • • • • • • • • • • • • •	450	Removable: 80-300MB	Removable: 80-300MB	Removable: 72.3MB
Serial printers	150 cps	55-200 cps	55-200 cps	80-200cps
Letter quality printers	35 cps	55 cps	55 cps	55cps
Line printers	300 lpm	300-600 lpm	300-600 lpm	180-1200lpm
Reel-to-reel tape drives	None	45 ips; 800, 1600 bpi	45 ips; 800/1600 bpi	Not supplied
Streaming tape drives	None	25 ips; 1600 bpi	25 ips; 1600 bpi	Start/stop; 100/25ips
Cassette/cartridge tape drives	90 ips	None	No	25 ips; 200-1600 bpi
Other perpherals supported	1.2MB Diskettes	Diskettes	Diskettes	Card equipment, diskette
SOFTWARE				
Assembler	Intel	Macro (DBL)	Macro (DBL)	Basic assembler
Compilers	BASIC (interpretive)	Basic, Cobol,	Basic, Cobol,	Cobol, Fortran IV,
	,	Pascal, Fortran	Pascal, Fortran	Basic, RPGII, Escort
Operating system	Multitasking	Multitasking, batch	Multitasking, batch	Batch, Real-time
Operating sys. implemented in firmware	No	Partially	Partially	Partially
Database management system	IDOL	DBOS	DBOS	DMS
Principal industry application	General accounting	Industrial, Distribution	Industrial, Distribution	Office automation,
• •	1			decision support
Other packages	Medical, spreadsheet, word processing	Hospitals, Credit Union, Personnel, Construction	Hospitals, Credit Union, Personnel, Construction	Accounting, wholesale/ distribution
ODIOINO A ANAH ADII ITV				
PRICING & AVAILABILITY	CBIT SECKB	CDLL 160KB	CDU 160KD	M- d-1 4, OBU 50485
Basic system configuration and price	CPU, 256KB memory, 56MB disk, streaming	CPU, 160KB memory,	CPU, 160KB memory,	Model 4: CPU, 524KB
		29MB disk, 2 terminals,	80MB disk, 2 terminals,	memory; 118.2MB disk;
	tape, 1 CRT, 150 cps printer—\$26,795	150 cps printer, Data Base Operating System—	150 cps printer, Data Base Operating System—	console w/keyboard; 2
	Printer—\$20,735	\$36,650	\$49,800	workstations w/keyboard 1MB diskette; 180 lpm
		\$00,000	¥+3,000	printer—\$91,689
Mo. maintenance of basic configuration	\$270	\$435	\$485	\$618
Date of first delivery	June 1982	July 1979	September, 1980	July 1982
Number installed to date	720	Not supplied	Not supplied	Not supplied
COMMENTS	1	Fully integrated data	Fully integrated Data	, , , , , , ,
	1	base system; can have	Base system; can have	
	1	multiple CPUs.	multiple CPUs.	1

MANUFACTURER AND MODEL	Sperry Corp. System 80 Model 8	STC Systems, Inc. System 5000	STC Systems, Inc. System 6000	Tandem Computers In NonStop I Plus
WORD LENGTH	16 bits	16 bits	16 bits	16-bits
	1MB-8MB	64KB-256KB	512KB-1024KB	2MB/processor
MAIN MEMORY		,		
DISK STORAGE CAPACITY	617MB-12GB	1.2GB	1.2GB	OTIVID IIIIII.
NO. WORKSTATIONS SUPPORTED	120	113	113	No set limit
PRICE RANGE	\$123,900-\$700,000	\$53,000	\$138,000	From \$94,000
TARGET MARKET	Commercial	Distr., Publishing,	Distr., Publishing,	On-line transaction
		Bldg. Matls. Suppliers	Bldg. Matls. Suppliers	processing
CENTRAL PROCESSOR				
CPU manufacturer and model	Proprietary	DG NOVA 4	DG NOVA 4	Proprietary
Hardware floating point	Single/Double	Double	Double	Double
	Not supplied	Std.	Std.	Std.
Battery backup			Std.	Std.
Real-time clock or timer	Std.	Std.		
CPU cycle time, nanoseconds	120	400	400	100
MAIN STORAGE				* *
Bytes fetched per cycle	8	2	2	Not supplied
Memory access	Not supplied	Not supplied	Not supplied	Not supplied
Cycle/access time, nanoseconds	480	400	400	500
Storage protection	Std.	Std.	Std.	Std.
Increment size, bytes	1MB. 2MB	32K	256K	384K
	None	None	None	None
Cache memory, bytes	NOTE	HOUSE	AOHE	INOTIE
NPUT/OUTPUT CONTROL		110	1.0	1.0
No. of I/O channels	0	12	12	13
Data transfer rate	8MB/second	10M words/sec.	10M words/sec.	5MB/second
COMMUNICATIONS	Ť.	1	Ì	
Max. number of lines	28	113	113	252
Synchronous	Opt.; to 56K bps	Opt.; to 9.6K bps	Opt.; to 9.6K bps	Opt.; 56K bps
Asynchronous	Opt.; to 19.2K bps	Opt.; to 9.6K bps	Opt.; to 9.6K bps	Opt.; 19.2K bps
		Bisync IBM 2780/3780	1	
Protocols supported	BSC, TTY, Univac, BC-7	DISYTIC IDIVI 2/00/3/80	Bisync IBM 2780/3780	SNA, X.25, SDLC/HDLC,
•	X.25, DCA, 3270, UTS	1		2780/3780
Type of LAN supported	None	None	None	FOX
RJE terminals emulated	HASP	2780/3780	2780/3780	2780/3780
IBM 3270 emulation	Yes	No	No	Yes
PERIPHERAL EQUIPMENT			İ	
Disks supported	Fixed: 118.2MB-491MB	Cart: 50MB, 80MB, and	Cart: 50MB, 80MB, and	Winchester: 64MB-264MB
	Removable: 29MB-200MB	300MB	300MB	Removable: 240MB
Serial printers	80-200 cps	180 cps (64 lpm)	180 cps (64 lpm)	340 cps
		1		1 .
Letter quality printers	55 cps	None	None	55 cps
Line printers	180-1200 lpm	300-1000 lpm	300-1000 lpm	600-1300 lpm
Reel-to-reel tape drives	Not supplied	800/1600 bpi	800/1600 bpi	125 ips, 800/1600 bpi
Streaming tape drives	Start/stop; 100/25 ips	None	None	None
Cassette/cartridge tape drives	25-125ips; 200-1600 bpi	None	None	None
Other perpherals supported	Card equipment, diskette		•	FAX, OCR, video
out proposed depression	,			monitors
SOFTWARE				
Assembler	Basic assembler	Assembler	Assembler	None
	1		I	
Compilers	Cobol, Fortran IV,	BASIC, RPG	BASIC, RPG	TAL, Cobol, Fortran,
	Basic, RPGII, Escort		· ·	Extended Basic, MUMPS
Operating system	Batch, Real-time	Real-time	Real-time	Mulitasking
Operating sys. implemented in firmware	Partially	No	No	Partially
Database management system	DMS	None	None	Encompass
Principal industry application	Office automation,	Distribution	Distribution	On-line applications
Trincipal industry application		Distribution	Distribution	Of the applications
	decision support	A	A B A	Tong of an Dodhause
Other packages	Accounting, wholesale/	Accts. Rec., Accts.	Accts. Rec., Accts.	Transfer, Pathway,
	distribution	Pay., Gen'l. Ledger	Pay., Gen'l. Ledger	Expand
PRICING & AVAILABILITY			į.	
Basic system configuration and price	CPU, 1MB memory; 3MB	CPU with 64KB memory,	CPU with 256KB memory,	2 processor system, each
,	add-on memory; two 1MB	50MB Disk, 1 CRT,	600MB disk, 10 CRTs,	with 384KB memory,
	diskette drives; four	64 lpm printer,	300 lpm printer,	console, tape drive &
	491MB disk drives; four	DISTRIBU-DATA PKG.,	DISTRIBU-DATA PKG.,	controller—\$94,975
				CONTROLL \$34,373
	tape units; eight 200	and 5-Days Training—	and 5-Days Training—	
	cps printers; 1200 lpm	\$53,000	\$138,000	1
	printers; 40 terminals/	1		1
	keyboards—\$651,914	1	1	1
Mo. maintenance of basic configuration		\$397	\$1,155	\$726
Date of first delivery	December 1983	1973	1982	May 1976
Number installed to date	Not supplied	180	10	Not supplied
			System price includes	Can be expanded from 2
COMMENTS	Supports variety of	System price includes		
	Series 90 peripherals	hardware, software,	hardware, software,	to 16 processors, and
		training and 30-days	training and 30-days	in a network with up to
	i .	hardware warranty with	hardware warranty with	255 nodes, without re-
	l .			I
		six-months software	six-months software	programming.
			six-months software warranty.	programming.
		six-months software		programming.
		six-months software		programming.
		six-months software		programming.
		six-months software		programming.

MORD LENGTH MAIN MEMORY 16-bits Up to 16MB SGB-64GB 18.5-126MB 43MB-476MB 440 44					
WALN MEMORY Subsect Section	MANUFACTURER AND MODEL		Business System	Business System	Business System
WALN MEMORY Subsect Section	WORD LENGTH	16-hite		16-bit	16 bit
18.5 T26MB			512KR-1MR		1
No. WORKSTATIONS SUPPORTED No. set limit 18					
FRICE RANGE TARGET MARKET Or of line transaction processing CHATRACT PROCESSOR CHATRACT PROCESSOR CHATRACT PROCESSOR CHATRACT PROPERTY AND CONTROL PROPERTY					
ARRET MARKET On-Inertansaction processing Pr		1			
ENTRAL PROCESSOR CPU amarifacturer and model CPU amarifacturer and model CPU cycle time, nonoseconds Stud. S					
CPU manufacturer and model Hardware floating point Early Double No Non Battery backup Std. Non None None Std. Std. None None None None None Std. Std. Std. Std. Std. Std. Std. Std.	TARGET MARKET		Business	Business	Business
Hardware floating point Battery backly or timer Std. None Std. None Std. Std. None Std.	CENTRAL PROCESSOR			-	
Batterly backup Real-sime clock or trimer CPU cycle trine, nanoseconds AMAIN STORAGE Systes fetched per cycle Systes fet					
Real-time clock or timer CDU cycle time, annoseconds ANN STORAGE Bytes fetched per cycle Momory access Momory access Momory access Momory access Momory access Stad. Sta					
CPU cycle sime, nanoseconds MAIN STORAGE Bytes fetched per cycle More supplied Most su	Battery backup	Std.	None	None	None
MAIN STORACE Pieze fetched per cycle 2 per processor 400 bits/second 400 bit	Real-time clock or timer	Std.	Std.	Std.	Std.
Bytes fetched per cycle 2 per processor 40M bits/second 40	CPU cycle time, nanoseconds	100	Not supplied	Not supplied	Not supplied
Memory access 40M bits/second 400 600 430/380 303/380	MAIN STORAGE				-
Cyclel/access time, nanoseconds A00 Std. St	Bytes fetched per cycle	2 per processor	Not supplied	Not supplied	Not supplied
Cyclel/access time, nanoseconds A00 Std. St	Memory access	40M bits/second	Not supplied	Not supplied	Not supplied
Stord, protection increment size, bytes (and increment size, bytes (both care) and the protection increment size, bytes (both size, bytes (both size, bytes) and the protection increment size, bytes (both size, bytes) and the protection increment size, bytes (both size, bytes) and the protection increment size, bytes (both size, bytes) and the protection increment size, bytes (both size, bytes) and the protection increment size, bytes (both size, bytes) and the protection increment size, bytes (both size,	Cycle/access time, nanoseconds	400			
Increment size, bytes					
Cache memory, bytes None		512K or 2M			
NPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate					
13 13 13 13 13 13 13 13		1	1		l '''
Data transfer rate		23	13	13	12
DOMMUNICATIONS Max. number of lines Domity of lines Do					
Max. number of lines 252		JAID! SECOILO	SIVID/Second	SIVID/SECOND	Sivis/second
Synchronous		252	14		l.
Asynchronous			l •	·	·
Protocols supported SNA, X.25, SDLC/HDLC, 2780/3780 Type of LAN supported FOX 2780/3780 RM 3270 emulation PSERIPHERAL ECUMPENT Disks supported Winchester: 64MB-540MB Removable: 40MB to 125MB 78-150 cps 45					
Type of LAN supported RJE terminals emulated RIM 3270 emulation PERIPHERAL EQUIPMENT Disks supported Sarial printers Louise apported Sarial printers Louise apported Sarial printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Louise-Louise drives Line printers Line print					
Type of LAN supported RDE terminals emulated 2780/3780 3780/2780 3008 3008 3008 3008 3008 3008 3008 3	Protocols supported		SNA, X.25	SNA, X.25	SNA, X.25
RJE terminals emulated BBM 3270 emulation Yes Yes 780/2780 Yes 780/2780 Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 3270 emulation Yes 7818M 320 emulat	•			•	
Serial printers Serial pri			None	None	None
PERIPHERAL EQUIPMENT Disks supported Winchester: 64MB-540MB Removable: 240MB 340 cps 340 cps 340 cps 75-150 cps 75-150 cps 75-150 cps 75-150 cps 75-150 cps 300-800 lpm 300-8	RJE terminals emulated	2780/3780	3780/2780	3780/2780	3780/2780
Disks supported Removable: 240MB Famovable: 10MB to 125MB 75-150 cps 75-150 c	IBM 3270 emulation	Yes	Yes	Yes	Yes
Removable: 240MB 125MB 300MB 300MB 300MB 300 MB 300	PERIPHERAL EQUIPMENT				
Serial printers Litter quality printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Line printers Rob-1300 lpm 125 ips, 800/1600 bpi None Rose-to-reel tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Cother perpherals supported Line printers Line printers Rob-1300-600 lpm 125 ips, 800/1600 bpi None None None None None None None None	Disks supported	Winchester: 64MB-540MB	Fixed/Removable: 10MB to	Fixed/Removable: 43MB to	Fixed/Removable: 43MB to
Latter quality printers Line printers 600-1300 lpm Reel-to-reel tape drives Reel-to-reel tape drives Reel-to-reel tape drives Reel-to-reel tape drives Reel-to-reel tape drives Roon-1300 lpm Reel-to-reel tape drives Roon-1300 lpm Reel-to-reel tape drives Roon-1300 lpm Reel-to-reel tape drives Roon-1300 lpm Roon-125 lps, 800/1600 bpi None Roon-1300-800 lpm Roon-145 lps; 1600 bpi None Roon-14.5MB Roon-		Removable: 240MB	125MB	300MB	300MB
Line printers Reel-to-reel tape drives Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives CASSETTE/CARTRIDGE STAX, OCR, video monitors None Other perpherals supported SOFTWARE Assembler Compilers Operating system Operating system Principal industry application Other packages Transfer, Pathway, Expand Other packages Transfer, Pat	Serial printers	340 cps	75-150 cps	75-150 cps	75-150 cps
Line printers Reel-to-reel tape drives Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives CASSETTE/CARTRIDGE STAX, OCR, video monitors None Other perpherals supported SOFTWARE Assembler Compilers Operating system Operating system Principal industry application Other packages Transfer, Pathway, Expand Other packages Transfer, Pat	Letter quality printers	55 cps	45 cps		
Reel-to-reel tape drives Streaming tape drives Cassette/cartridge tape drives Other perpherals supported None None None None None None None Non					
Streaming tape drives Cassette/cartridge tape drives Cassette/cartridge tape drives Other perpherals supported SOFTWARE Assembler Compilers None TAL, Cobol, Fortran, Extended Basic, MUMPS Operating system Op					
Cassette/cartridge tape drives Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other perpherals supported Other packages Other pa					
Other perpherals supported monitors Assembler Compilers None Compilers None Compilers TAL. Cobol, Fortran, Extended Basic, MUMPS Mulitasking Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Transfer, Pathway, Expand Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Assembler Cobol, Basic, Fortran, RPG II, Pascal Multitasking Nultitasking No DBMS Word processing Word processing Word processing Word processing Word processing Word processing CPU, 512KB memory, 80MB disk, 13 I/O slots—\$65,840 September 1983 Not supplied Not supplied					
Assembler Compilers None TAL, Cobol, Fortran, Extended Basic, MUMPS Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mone TAL, Cobol, Fortran, RPG II, Pascal Mulitiasking Nultitasking Nultitasking Nultitasking Nultitasking Nultitasking No DBMS DBMS Mulitiasking No DBMS DBMS Mulitiasking No DBMS DBMS CPU, 512KB memory, 2008 disk, 13 I/O slots—\$86,050 September 1983 Not supplied Not supplied			14.500	14.500	14.5WB
Assembler Compilers None TAL, Cobol, Fortran, Extended Basic, MUMPS Operating system Operating sys. implemented in firmware Partially Database management system Principal industry application Other packages Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price No. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Assembler Cobol, Basic, Fortran, RPG II, Pascal Multitasking No. DBMS Multitasking No. DBMS DBMS Multitasking No. DBMS Multitasking No. DBMS Multitasking No. DBMS Multitasking No. DBMS DBMS Word processing Word processing Word processing CPU, 512KB memory, 256MB disk, 13 I/O slots—\$38,850 September 1983 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- 255 nodes, without re- Cobol, Basic, Fortran, RPG II, Pascal Multitasking No. DBMS Multitasking No. DBMS Word processing Word processing CPU, 512KB memory, 250MB disk, 13 I/O slots—\$65,840 September 1983 Not supplied	Other perpherals supported	1			·
Assembler Compilers None TAL, Cobol, Fortran, Extended Basic, MUMPS Mulitasking Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system Operating system On-line applications Other packages Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price assembler Octobol, Basic, Fortran, RPG II, Pascal Multitasking No DBMS Word processing Word processing Word processing CPU, 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Assembler Cobol, Basic, Fortran, RPG II, Pascal Multitasking No DBMS Word processing Word processing CPU, 512KB memory, 26MB disk, 13 I/O slots—\$65,840 \$4602 September 1983 Not supplied Not supplied Not supplied Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- Data of first delivery No DBMS Assembler Cobol, Basic, Fortran, RPG II, Pascal Multitasking No No No No No No No No No No No No No	COETWARE	Intoritors			*
Compilers TAL, Cobol, Fortran, Extended Basic, MUMPS Operating system Operating system implemented in firmware Operating sys. implemented in firmware Database management system Principal industry application Other packages Transfer, Pathway, Expand Other packages Transfer, Pathway, Expand Other packages Transfer, Pathway, Expand Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Transfer, Pathway, Expand Other packages Other packages Other packages Transfer, Pathway, Expand Other packages Other packag		Name	A	A	
Operating system Operating system Operating sys. implemented in firmware Database management system Principal industry application Other packages Transfer, Pathway, Expand Operating & AVAILABILITY Basic system configuration and price Multitasking No DBMS Word processing Word processing Word processing CPU, 512KB memory, console, operatinos & service processor, tape drive, 256MB disk, operating system Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery No DBMS Word processing CPU, 512KB memory, 20 kots—\$86,050 CPU, 512KB memory, 20 kots—\$86,050 CPU, 512KB memory, 20 kots—\$86,050 \$296 September 1983 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re-			l .		
Operating sys. implemented in firmware Database management system Principal industry application On-line applications On-line applications Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS On-line applications No DBMS No DBMS No DBMS Word processing Word processing CPU, 512KB memory, 20MB disk, 13 I/O slots—\$65,840 September 1983 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- On-line applications No DBMS No DB	Compilers				
Operating sys. implemented in firmware Database management system Principal industry application On-line applications On-line applications Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS On-line applications No DBMS No DBMS No DBMS Word processing Word processing CPU, 512KB memory, 20MB disk, 13 I/O slots—\$65,840 September 1983 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- On-line applications No DBMS No DB	Operating eveters	Mulitophina	NA. deien alrin a	B. B Isisa malain m	A de deixa a laina a
Database management system Principal industry application Other packages Transfer, Pathway, Expand Word processing Word processing Word processing Word processing Word processing Word processing Word processing CPU, 512KB memory, 256MB disk, 13 I/O slots—\$38,850 Mo. maintenance of basic configuration Encompass & Cobol—\$195,000. Mo. maintenance of first delivery Number installed to date COMMENTS DBMS TOTA SPUT 512KB memory, 126MB disk, 13 I/O slots—\$65,840 Slots—\$65,840 Slots—\$65,840 September 1983 Not supplied Compass on the processor, tape drive, 256MB disk, 13 I/O slots—\$602 September 1983 Not supplied Compass on the processing without re- DBMS DBM					
Other packages Transfer, Pathway, Expand Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS On-line applications Word processing Word processing CPU, 512KB memory, 20MB disk, 13 I/O slots—\$100			1		
Other packages Transfer, Pathway, Expand PRICING & AVAILABILITY Basic system configuration and price 2 processor system, each with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Transfer, Pathway, Expand Word processing			SINIBU	PINIP	DRIM2
PRICING & AVAILABILITY Basic system configuration and price 2 processor system, each with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Expand CPU, 512KB memory, 20MB disk, 13 I/O slots—\$38,850 CPU, 512KB memory, 2126MB disk, 13 I/O slots—\$65,840 September 1983, Not supplied September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied	rrincipal industry application	Un-line applications			
PRICING & AVAILABILITY Basic system configuration and price 2 processor system, each with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Expand CPU, 512KB memory, 20MB disk, 13 I/O slots—\$38,850 CPU, 512KB memory, 2126MB disk, 13 I/O slots—\$65,840 September 1983, Not supplied September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied	Other markets -	Tanada Bill		Maria and a	
PRICING & AVAILABILITY Basic system configuration and price 2 processor system, each with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS April 1981 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- CPU, 512KB memory, 26MB disk, 13 I/O slots—\$38,850 Solts—\$65,840 Solts—\$86,050 CPU, 512KB memory, 26MB disk, 13 I/O slots—\$86,050 Solts—\$86,050 CPU, 512KB memory, 27,512KB memory, 27	Other packages		vvora processing	vvora processing	vvora processing
Basic system configuration and price with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Not supplied CPU, 512KB memory, 80MB disk, 13 I/O slots—\$38,850 CPU, 512KB memory, 126MB disk, 13 I/O slots—\$65,840 CPU, 512KB memory, 126MB disk, 13 I/O slots—\$65,840 Solots—\$86,050 \$296 September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied		Expand			
Basic system configuration and price with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Not supplied CPU, 512KB memory, 80MB disk, 13 I/O slots—\$38,850 CPU, 512KB memory, 126MB disk, 13 I/O slots—\$65,840 CPU, 512KB memory, 126MB disk, 13 I/O slots—\$65,840 Solots—\$86,050 \$296 September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied	DD10410 0 41444 45***				
with 512KB memory, console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Not supplied Date of first delivery Number installed to date COMMENTS April 1981 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- Not supplied Samb disk, 13 I/O slots—\$65,840 Slots—\$65,840 Slots—\$86,050 \$707 September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied					
console, operations & service processor, tape drive, 256MB disk, operating system, Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery April 1981 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re-	Basic system configuration and price				
service processor, tape drive, 256MB disk, operating system, Encompass & Cobol—\$195,000. Mo. maintenance of basic configuration Date of first delivery April 1981 September 1983 September 1983 Not supplied Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re-					
drive, 256MB disk, operating system, Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS April 1981 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- drive, 256MB disk, operating system, Encompass & Cobol— \$195,000 \$296 \$296 \$602 \$707 \$29tember 1983 Not supplied Not supplied Not supplied Not supplied Not supplied		console, operations &	slots—\$38,850	slots—\$65,840	slots\$86,050
operating system, Encompass & Cobol— \$195,000. Mo. maintenance of basic configuration Date of first delivery April 1981 Not supplied Comments Comm					
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Compass & Cobol— \$195,000. September 1983 September 1983 September 1983					
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Compass & Cobol— \$195,000. September 1983 September 1983 September 1983		operating system,			
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mos supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- \$296 September 1983 Not supplied \$296 September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied		Encompass & Cobol—	j		
Mo. maintenance of basic configuration Date of first delivery Number installed to date COMMENTS Mos supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- \$296 September 1983 Not supplied \$296 September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied					
Date of first delivery Number installed to date COMMENTS April 1981 Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re- September 1983 Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied Not supplied	Mo. maintenance of basic configuration	Not supplied	\$296	\$602	\$707
Number installed to date COMMENTS Not supplied Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re-				• • • • •	
COMMENTS Can be expanded from 2 to 16 processors, and in a network with up to 255 nodes, without re-			•		•
to 16 processors, and in a network with up to 255 nodes, without re-					ouppilou
in a network with up to 255 nodes, without re-	·····				
255 nodes, without re-					
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programming.		f -	į l		
	-	programming.			
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16 bits 1286-256KB 16 bits 1286-256KB 1286-256K	MANUFACTURER AND MODEL	The Ultimate Corp. Model 750	The Ultimate Corp. Model 1000	The Ultimate Corp. Model 2000/2000S	The Ultimate Corp. Model C/2
128KB_256KB 128KB_256KB	MODD LENGTH	40.1.	40.1%	1	
SISK STORAGE CAPACITY				1	
16					
RICE RANGE RAGET MARKET Small Business Small Business Small Business Small Business Small Business Small Business Small Business Small Business Small Business Medium care Model Small Business Small Business Small Business Medium care Model Small Business Small Business Medium care Model Small Business Medium care Model Small Business Small Business Medium care Medium care Model Small Business Small Business Medium care Medium care Medium care Small Business Medium care Medium care Medium care None Opt. Opt. Opt. Opt. Opt. Opt. Opt. Opt.					
ARGET MARKET Small Business Small Business Small Business Medium Size Business				1	
ENTRAL PROCESSOR DEC LSI 11/2 DEC LSI 11/2 Single Single Double Double Dec LSI 11/2 Single Single Double Double Dec LSI 11/2 Dec LSI 11/2 Dec LSI 11/2 Double Double Double Dec LSI 11/2 Dec LSI 11/2 Double Double Double Dec LSI 11/2 Dec LSI 11/2 Dec LSI 11/2 Double Double Double Dec LSI 11/2 Dec LSI 11/2 Double Double Dec LSI 11/2 Dec LSI 11/2 Dec LSI 11/2 Double Double Double Dec LSI 11/2 Double Double Dec LSI 11/2 Double Dec LSI 11/2 Double Double Dec LSI 11/2 Double Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Dec LSI 11/2 Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2 Double Dec LSI 11/2					\$80,000-\$150,000
DEC LSI 1/2 DEC LSI 1/2 DEC LSI 1/2 Single Double	TARGET MARKET	Small Büsiness	Small Business	Small Business	Medium Size Business
Single S	CENTRAL PROCESSOR				
None	CPU manufacturer and model	DEC LSI 11/2	DEC LSI 11/2	DEC LSI 11/2	Honeywell DPS 6
Real-time clock or timer	Hardware floating point	Single	Single	Single	Double
165	Battery backup	None	None	Opt.	Opt.
All STORAGE Value	Real-time clock or timer	Std.	Std.	Std.	Std.
2	CPU cycle time, nanoseconds	165	165	165	300
2	MAIN STORAGE				
175 ns. 175		2	2	اوا	4
276 275 375			1		Not supplied
Std. Std.		*	1		
ncrement size, bytes Zache memory, bytes None None None None None None None None				l ·	
None None None None None None None None None AK words					
PUT/OUTPUT CONTROL. Not supplied None None None 1040 0pt 192K bps 1040 0pt 192K bps 1040 0pt 192K bps 1040 0pt 192K bps 1040 0pt 192K bps 1040 0pt					
No. of I/O channels Date transfer rate OMMUNICATIONS Date transfer rate OMMUNICATIONS Sid. 9.6K bps		ivone	INONE	Ivone	4K Words
Data transfer rate				1	1
22 124 124 124 124 124 124 124 124 124 125 125 124 124 125					
Max. number of lines	Data transfer rate	Not supplied	Not supplied	Not supplied	16MB/second
Opt. Synchronous Asynchronous Protocols supported Asynch Asynch None Asynch Asy	COMMUNICATIONS	*	1		1
Synchronous Asynchronous Std., 9.6k bps Asynch None Literminals emulated BM 3270 emulation BM 300 emulation BM 300 emulation BM 300 emulation BM 300-600 lpm	Max. number of lines	8	16	32	124
Asynch	Synchronous	Opt.	Opt.	Opt. 19.2K bps	
Protocols supported Asynch None 2780/3780 None 2780/3780 No No No No No 2780/3780 No No No Asynch None 2780/3780 No No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No No Asynch None 2780/3780 No Asynch None 2780/3780 No No Asynch None 2780/3780 No Asynch None 2780/3780 No Asynch None 2780/3780 No Asynch None 2780/3780 No Asynch None 2780/3780 No Booloal pm 35-55 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 35-56 cps 30-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 300-600 lpm 400-70 lpm Asynch Asynch Allifelian Asynch As	Asynchronous		. ·		
Age controller, and process an	Protocols supported				
Age controller, and process an			1		'
BM 3270 emulation CRIPHERIAL ECUIPMENT Disks supported Winchester: 19MB Winchester: 35MB Winchester: 33MB-308MB 75MB-1G	Type of LAN supported	None	None	None	None
BM 3270 emulation CRIPHERIAL ECUIPMENT Disks supported Winchester: 19MB Winchester: 35MB Winchester: 33MB-308MB 75MB-1G 7	RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780
Disks supported Winchester: 19MB Winchester: 35MB Winchester: 35MB Winchester: 35MB Winchester: 35MB Winchester: 35MB Winchester: 35MB T5MB-1GB T5C cps T5C	IBM 3270 emulation	No	No	No	
Disks supported Winchester: 19MB Winchester: 35MB Winchester: 33MB-308MB 75MB-1GB 20-180 cps 35-55 cps 36-56 cps 36-57 cps None None None None None None None None	PERIPHERAL EQUIPMENT	1	1	l e e e	1
atter quality printers ine printers fieel-to-reel tape drives fieel-to-reel tape drives fireaming tape drives Streaming tape drives Streaming tape drives Streaming tape drives Other perpherals supported Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Multitasking Poperating system Operating system Operating sys, implemented in firmware Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system operating system or special and ladustrial applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system or special and ladustrial applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system configuration special and ladustrial applications ultiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiP	Disks supported	Winchester: 19MB	Winchester: 35MB	Winchester: 33MB-308MB	75MB-1GB
atter quality printers ine printers fieel-to-reel tape drives fieel-to-reel tape drives fireaming tape drives Streaming tape drives Streaming tape drives Streaming tape drives Other perpherals supported Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Multitasking Poperating system Operating system Operating sys, implemented in firmware Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system operating system or special and ladustrial applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system or special and ladustrial applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Sasic system configuration and price calculation and price special system configuration special and ladustrial applications ultiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiP	Carial maintana	20 180	20 180	20 100	100
300-800 pm 300-800 pm None					
Reel-to-reel tape drives Crassette/cartridge tape drives Cher perpherals supported Macro Basic, Recall Macro Basic, Recall Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Compilers Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Compilers Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Compilers Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, Calinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Sa45 January, 1982					
Streaming tape drives 30 ips, 7600 bpi None 30 ips, 7600 bpi None None 30 ips, 7600 bpi None None None None None None None None	Line printers	300-600 lpm	300-600 lpm	300-600 lpm	150-900 lpm
Departing system Operat	Reel-to-reel tape drives	None	None	None	45/75 bpi
Detecting system Operat	Streaming tape drives	None	None	25 ips	None
Detecting system Operat	Cassette/cartridge tape drives	30 ips, 7600 bpi	30 ips, 7600 bpi	None	None
DETWARE Assembler Compilers Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Macro Basic, Recall Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Miltitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$245 January, 1982 45 Macro Basic, Recall Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Squad slot chassis, power supply, 36" cabinet, 128KB memory, 33MB disk, controller, 7 open ports—streaming tape & controller—\$34,000 \$365 January, 1982 45 Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Squad slot chassis, power supply, 36" cabinet, 128KB memory, 33MB disk, controller, 7 open ports—streaming tape & controller—\$34,000 \$365 January, 1982 45 Anuary, 1982 Anu					
Assembler Compilers Macro Basic, Recall Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, Bequad slot chassis, power supply, table-top cabinet, 128KB memory, 19MB disk & controller, carridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, Bequad slot chassis, power supply, 1able-top cabinet, 128KB memory, 33MB disk, & controller, or open ports—\$32,000 \$345 January, 1982 45 Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Bequad slot chassis, power supply, 36" cabinet, 128KB memory, 33MB disk, & controller, or open ports—\$32,000 \$345 January, 1982 45 January, 1982 61 Multitasking Fully ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Bequad slot chassis, power supply, 36" cabinet, 128KB memory, 128KB memory, 128KB memory, 35MB disk, & controller, 7 open ports—\$32,000 Sa45 January, 1	, , , , , , , , , , , , , , , , , , , ,				·
Departing system Operat	SOFTWARE		1	1	
Deparating system Deparating s	Assembler				
Departing sys. implemented in firmware Database management system Principal industry application Other packages ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Sasic system configuration and price Model 750 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 S245 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 S345 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 S345 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, Sabre and Model 2000 CPU, Rev. 100, Sabre and Model 2000 CPU, Rev.	Compilers	Basic, Recall	Basic, Recall	Basic, Recall	Basic, Recall
Departing sys. implemented in firmware Database management system Principal industry application Other packages ULTIMATE (PICK) Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Sasic system configuration and price Model 750 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 S245 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 S345 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 S345 January, 1982 A5 Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Sabre and Model 2000 CPU, Rev. 100, Sabre and Model 2000 CPU, Rev. 100, Sabre and Model 2000 CPU, Rev.					
Database management system Principal industry application Other packages Other pa	Operating system		Multitasking	Multitasking	Multitasking
Database management system Principal industry application Other packages Other pa	Operating sys. implemented in firmware	Fully	Fully	Fully	Fully
Various Commercial and Industrial Applications Other packages Various Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Equad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Squad slot chassis, power supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, Squad slot chassis, power supply, table-top cabinet, 128KB memory, 13MB disk & controller, cartridge tape, 3 open ports—\$20,000 S245 January, 1982 45 Warious Commercial and Industrial Applications UltiWord, UltiPlot, UltiCalc Word, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, Squad slot chassis, power supply, 36" cabinet, 128KB Memory, 33MB disk, & controller, cart.tape controller, cart.tape controller, 7 open ports—\$32,000 \$345 January, 1982 45 January, 1982 45 Anuary, 1982 An	Database management system	ULTIMATE (PICK)			
Industrial Applications UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiCalc Model 750 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 S245 January, 1982 January, 1982 45 Industrial Applications UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 128KB memory, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$345 January, 1982 45 Industrial Applications UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$345 January, 1982 45 Industrial Applications UltiWord, UltiPlot, UltiCalc Model 2000 CPU, Rev. 100, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, CPU, Rev.100, UltiWord, UltiPlot, UltiWor					
UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev.100, UltiWord, UltiPlot, 8-quad slot chassis, power supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration on ports—\$20,000 S245 January, 1982 45 UltiWord, UltiPlot, UltiCalc Model 1000 CPU, Rev.100, UltiWord, UltiPlot, 8-quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$3465 January, 1982 45 UltiWord, UltiPlot, UltiPlot, UltiPlot, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiWord, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiPlot, UltiPlot, UltiCalc UltiWord, UltiPlot, UltiPlot, UltiCalc CPU, Release 10, UltiWord, UltiPlot, Pull Control Panel, 10-slot Assis, power supply, 128KB memory, 128KB memory, 35MB disk, & controller, 7 open ports—\$32,000 \$345 January, 1982 45 Anuary, 1982 61 Anuary, 1982 April 1979 Not supplied	· · · · · · · · · · · · · · · · · · ·				
UltiCalc CPU, Rev.100, UltiWord, UltiPlot, 8-quad slot chassis, power supply, 36" cabinet, 128KB memory, 33MB disk, & controller, 27 open ports. 425 (controller, 7 open ports. 425 (controller, 534,000 \$345 (controller, 534,000 \$365 (controller, 54,000 \$365 (controller, 54,000 \$365 (controller, 54,000 \$365 (controller, 54,	Other packages				
ACICING & AVAILABILITY Basic system configuration and price Model 750 CPU, Rev. 100, UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$245 January, 1982 April, 1982 April, 1979 Nodel 1000 CPU, Rev.100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cart.tape controller, cart.tape controller, 5345 January, 1982 45 Model 1000 CPU, Rev.100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, 36" cabinet, 128KB Memory, 33MB disk, & controller, 7 open ports—\$32,000 \$345 January, 1982 45 Model 2000 CPU, Rev.100, UltiWord, UltiPlot, 8- quad slot chassis, power supply, 36" cabinet, 128KB Memory, 33MB disk, & controller, 2000 \$35MB disk, & controller, 2000 \$345 January, 1982 45 April, 1979 Not supplied					
Model 750 CPU, Rev. 100, UltiWord, UltiPlot, 8-quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 \$245 \$January, 1982 \$45 \$45 \$January, 1982 \$45 \$					1
UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$220,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cart.tape controller, 7 open ports—\$32,000 \$345 January, 1982 45 UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top supply sup	PRICING & AVAILABILITY			1	1
UltiWord, UltiPlot, 8- quad slot chassis, Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$220,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top cabinet, 128KB memory, 35MB disk & controller, cart.tape controller, 7 open ports—\$32,000 \$345 January, 1982 45 UltiWord, UltiPlot, 8- quad slot chassis, power supply, table-top supply sup	Basic system configuration and price	Model 750 CPU, Rev. 100.	Model 1000 CPU, Rev. 100.	Model 2000 CPU, Rev. 100.	CPU. Release 10. Ulti-
quad slot chassis, power supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date OMMENTS Quad slot chassis, power supply, 128KB memory, 128KB memory, 128KB memory, 23MB disk, a controller, cart. tape controller, cart. tape controller, cart. tape controller, cart. tape controller, and the supply of the ports, streaming tape and controller and the supply of the supply of the supply, 36" cabinet, 128KB memory, 33MB disk, and controller, 7 open ports, streaming tape and controller—\$34,000 \$345 January, 1982 45 April, 1979 Not supplied Control Panel, 10-slot chassis, power supply, 128KB Memory, 33MB disk, and controller, 7 open ports, streaming tape and controller—\$34,000 \$365 January, 1982 45 April, 1979 Not supplied	and the proof				
Power Supply, table-top cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date OMMENTS Power Supply, table-top cabinet, 128KB memory, 35MB disk & controller, cart. tape controller, cart. tape controller, and controller, cart. tape controller, and c			1		
cabinet, 128KB memory, 19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS Cabinet, 128KB memory, 34B disk, a controller, cartridge tape, 3 open ports—\$20,000 \$345 January, 1982 45 Cabinet, 128KB memory, 33MB disk, a controller, cartridge tape, 3 open ports—\$32,000 \$345 January, 1982 45 Controller—\$34,000 \$365 January, 1982 45 Controller—\$107,000 \$410 April, 1979 Not supplied Not supplied				1 '	
19MB disk & controller, cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS 19MB disk & controller, cart.tape controller, 7 open ports—\$32,000 \$345 January, 1982 45 35MB disk & controller, 7 open ports, streaming tape & controller—\$4,000 \$345 January, 1982 45 45 45 45 46 35MB disk & controller, 7 open ports—\$32,000 \$345 January, 1982 45 45 45 46 47 48 Controller, 7 open ports, streaming tape & controller—\$107,000 \$40 April, 1979 Not supplied Memory, 80MB disk & controller, 7 open ports, streaming tape & controller—\$107,000 \$40 April, 1979 Not supplied Not supplied					
cartridge tape, 3 open ports—\$20,000 Mo. maintenance of basic configuration Date of first delivery Number installed to date DMMENTS Cartridge tape, 3 open ports—\$20,000					
Mo. maintenance of basic configuration \$245					
Mo. maintenance of basic configuration \$245			1 '		
Date of first delivery Number installed to date January, 1982 45 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 April, 1979 Not supplied Model 2000S has same configuration as 2000 w/ the Ultimate Peripheral Processor "S Version",					
Date of first delivery Number installed to date January, 1982 45 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 January, 1982 April, 1979 Not supplied Model 2000S has same configuration as 2000 w/ the Ultimate Peripheral Processor "S Version",	Mo. maintenance of basic configuration	\$245	\$345	\$365	\$610
Number installed to date DMMENTS 45	Date of first delivery				
OMMENTS Model 2000S has same configuration as 2000 w/ the Ultimate Peripheral Processor "S Version",			1		
configuration as 2000 w/ the Ultimate Peripheral Processor "S Version",		· ·	1		
the Ultimate Peripheral Processor "S Version",	COMMENTO		1		1
Processor "S Version",			1		1
					!
Cost: \$36,000, MMC 375.			1		
				Cost: \$36,000, MMC 375.]
			l .	I	1

WORD LENGTH MAIN MEMORY DISK STORAGE CAPACITY NO. WORKSTATIONS SUPPORTED PRICE RANGE TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	\$107,000-\$250,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	16 bits 1MB-2MB 80-2.3GB 126 \$180,000-\$400,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300	16 bits 512KB-1MB 34-76MB 10 \$25,000-\$40,500 DDP, networked office auto., elec. comm. Proprietary Double Not supplied	16 bits 512KB-1MB 34MB-2.5GB 20 \$26,000-\$61,000 DDP, networked office auto., elec. comm. Proprietary Double
MAIN MEMORY DISK STORAGE CAPACITY NO. WORKSTATIONS SUPPORTED PRICE RANGE TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes NPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	256K-2MB 80MB-2.3GB 126 \$107,000-\$250,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	1MB-2MB 80-2.3GB 126 \$180,000-\$400,000 Medium Size Business Honeywell DPS 6 Double Opt. Std.	512KB-1MB 34-76MB 10 525,000-\$40,500 DDP, networked office auto., elec. comm. Proprietary Double Not supplied	512KB-1MB 34MB-2.5GB 20 \$26,000-\$61,000 DDP, networked office auto., elec. comm.
DISK STORAGE CAPACITY NO. WORKSTATIONS SUPPORTED PRICE RANGE TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes NPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	80MB-2.3GB 126 \$107,000-\$250,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	80-2.3GB 126 \$180,000-\$400,000 Medium Size Business Honeywell DPS 6 Double Opt. Std.	34-76MB 10 \$25,000-\$40,500 DDP, networked office auto., elec. comm. Proprietary Double Not supplied	34MB-2.5GB 20 \$26,000-\$61,000 DDP, networked office auto., elec. comm.
NO. WORKSTATIONS SUPPORTED PRICE RANGE TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	\$107,000-\$250,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	126 \$180,000-\$400,000 Medium Size Business Honeywell DPS 6 Double Opt. Std.	10 \$25,000-\$40,500 DDP, networked office auto., elec. comm. Proprietary Double Not supplied	20 \$26,000-\$61,000 DDP, networked office auto., elec. comm.
PRICE RANGE TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	\$107,000-\$250,000 Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	\$180,000-\$400,000 Medium Size Business Honeywell DPS 6 Double Opt. Std.	\$25,000-\$40,500 DDP, networked office auto., elec. comm. Proprietary Double Not supplied	\$26,000-\$61,000 DDP, networked office auto., elec. comm.
TARGET MARKET CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Medium Size Business Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	Medium Size Business Honeywell DPS 6 Double Opt. Std.	DDP, networked office auto., elec. comm. Proprietary Double Not supplied	DDP, networked office auto., elec. comm. Proprietary
CENTRAL PROCESSOR CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Honeywell DPS 6 Double Opt. Std. 300 4 Not supplied 420 read/520 write	Honeywell DPS 6 Double Opt. Std.	auto., elec. comm. Proprietary Double Not supplied	auto., elec. comm. Proprietary
CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Double Opt. Std. 300 4 Not supplied 420 read/520 write	Double Opt. Std.	Proprietary Double Not supplied	Proprietary
CPU manufacturer and model Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Double Opt. Std. 300 4 Not supplied 420 read/520 write	Double Opt. Std.	Double Not supplied	
Hardware floating point Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Double Opt. Std. 300 4 Not supplied 420 read/520 write	Double Opt. Std.	Double Not supplied	
Battery backup Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Opt. Std. 300 4 Not supplied 420 read/520 write	Opt. Std.	Not supplied	
Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Std. 300 4 Not supplied 420 read/520 write	Opt. Std.	Not supplied	
Real-time clock or timer CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Std. 300 4 Not supplied 420 read/520 write	Std.		Not supplied
CPU cycle time, nanoseconds MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	300 4 Not supplied 420 read/520 write		Std.	Std.
MAIN STORAGE Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	4 Not supplied 420 read/520 write	300	500	500
Bytes fetched per cycle Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Not supplied 420 read/520 write		500	1500
Memory access Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	Not supplied 420 read/520 write	1.	1	
Cycle/access time, nanoseconds Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	420 read/520 write	4	Not supplied	Not supplied
Storage protection Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS		Not supplied	Not supplied	Not supplied
Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	lo. 1	420 read/520 write	480	480
Increment size, bytes Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	IStd.	Std.	Std.	Std.
Cache memory, bytes INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	256K	256K	256K	256K
INPUT/OUTPUT CONTROL No. of I/O channels Data transfer rate COMMUNICATIONS	4K words	4K words	None	None
No. of I/O channels Data transfer rate COMMUNICATIONS	TI WOLUS	TK WOIGS	None	INOTIE
Data transfer rate COMMUNICATIONS	1.004	1,004		 _
COMMUNICATIONS	1024	1024	6	7
	16MB/sec.	16MB/second	Not supplied	Not supplied
	l		1	
Max. number of lines	124	124	68	68
Synchronous	Opt.	Opt.	Opt.; 9.6K bps	Opt.; 9.6K bps
Asynchronous	Std.	Std.	Opt.; 9.6K bps	Opt.; 9.6K bps
	II.		1	
Protocols supported	Asynch	Asynch	2780/3780; 3270; 3274,	2780/3780; 3270; 3274,
	l.		3777; TTY	3777; TTY
Type of LAN supported	None	None	WangNet	WangNet
RJE terminals emulated	2780/3780	2780/3780	2780/3780	2780/3780
IBM 3270 emulation	No	No	Yes	Yes
PERIPHERAL EQUIPMENT	ł			
Disks supported	75MB-1GB	75MB-1GB	Fixed: 34-76MB	Fixed/cartridge 90MB
bisks supported	70MB TGB	75NB-10B	Tixed. 54-70191B	Removable: 75MB-288MB
Contain and a sour	100	400 000	100 100	
Serial printers	180 cps	180 CPS	120-192 cps	120-192 cps
Letter quality printers	35-55 cps	35-55 cps	20; 35 cps	20; 35 cps
Line printers	150-900 lpm	150-900 lpm	250-1100 lpm	250-1100 lpm
Reel-to-reel tape drives	45/75 bpi	45/75 bpi	30-75ips	30-75 ips
Streaming tape drives	None	None	None	None
Cassette/cartridge tape drives	None	None	30 ips	30 ips
	THORE .	None	1	
Other perpherals supported			Laser printer 12ppm	Laser printer 12ppm
				Fixed disk: 640MB
SOFTWARE				
Assembler	Macro	Macro	Assembler	Assembler
Compilers	Basic, Recall	Basic, Recall	Cobol, Basic, Fortran,	Cobol, Basic, Fortran,
	1		PL/1, RPG	PL/1, RPG
			1 ' '	' ' -
Operating system	Multitasking	Multitasking	Real-time	Real-time
Operating system Operating sys. implemented in firmwa		Fully	No	No
	I <u></u>	1		
Database management system	ULTIMATE (PICK generic)	ULTIMATE (PICK generic)	VS DMS; Wang Total	VS DMS; Wang Total
Principal industry application	Various Commercial and	Various Commercial and	Accounting, Pension,	Accounting, Pension,
	Industrial Applications	Industrial Applications	Personnel	Personnel
Other packages	UltiWord, UltiPlot,	UltiWord, UltiPlot,	Modeling and Simulation	Modeling and Simulation
	UltiCalc	UltiCalc	1	
			1	
PRICING & AVAILABILITY				
Basic system configuration and price	CPU, Release 10, full	CPU, Release 10, Ulti-	CPU, 512KB memory, 34MB	CPU, 512KB memory, 34N
,	control panel, 10-slot	Word, UltiPlot, Full	disk, 1.2MB DSDD	disk, 1.2MB DSDD
	chassis, power supply,	Control Panel, 20-slot	I :	diskette drive, 32-port
		•	diskette drive, 16-port	· · ·
	512K memory, 288MB disk	chassis, power supply,	serial device controller	serial device controller
	& controller, tape drive	Two 60" cabinets, 1MB	250 lpm printer,	Assembler, 250lpm
	two 60" cabinets, Ulti-	memory, 288MB disk &,	Assembler, Operating	printer, Operating
	Word, & UltiPlot	controller, tape drive &	system-\$34,000	system\$42,000
	\$107,000	controller—180,000	1	
Mo. maintenance of basic configurati		\$1,030	\$238	\$247
Date of first delivery	April, 1979	April, 1979	July 1982	September 1982
				1 -
Number installed to date	Not supplied	Not supplied	Not supplied	Not supplied
COMMENTS			1	
COMMENTO		}		
COMMENTS			1	
OCHAINELA I O				
COMMILITY	1		I	l
CONNICION				
COMMENTS				
COMMITTEE				
CONTIVILITY				
CONTRICT				
COMMUNICATION				

MANUFACTURER AND MODEL	Wang Laboratories Inc. VS 80			
WORD LENGTH	16 bits			
MAIN MEMORY DISK STORAGE CAPACITY	256KB-512KB 90MB-5.1GB			* **
NO. WORKSTATIONS SUPPORTED	32			
PRICE RANGE	\$19,000-\$29,000			
TARGET MARKET	DDP, networked office			
	auto., elec. comm.			
CENTRAL PROCESSOR				'
CPU manufacturer and model	Proprietary	·		
Hardware floating point	Double			
Battery backup	Not supplied			
Real-time clock or timer	Std.			
CPU cycle time, nanoseconds MAIN STORAGE	660			
Bytes fetched per cycle	Not supplied			
Memory access	Not supplied			
Cycle/access time, nanoseconds	660			
Storage protection	Std.	:		
Increment size, bytes	128K			
Cache memory, bytes	None			· ·
INPUT/OUTPUT CONTROL	[1	<u> </u>	
No. of I/O channels	8 I/O Processors			
Data transfer rate	Not supplied			
COMMUNICATIONS				
Max. number of lines	21			
Synchronous	Opt.; 9.6K bps			
Asynchronous Protocols supported	Opt.; 9.6K bps 2780/3780; 3270; 3274,			k.
Trotocois supported	3777; TTY			
Type of LAN supported	WangNet			
RJE terminals emulated	2780/3780			
IBM 3270 emulation	Yes]	
PERIPHERAL EQUIPMENT				
Disks supported	Fixed/cartridge: 90MB		ļ	
	Removable: 75MB-288MB			
Serial printers	120-192 cps			
Letter quality printers	20; 35 cps			
Line printers	250-1100 lpm			
Reel-to-reel tape drives	30 ips			
Streaming tape drives Cassette/cartridge tape drives	None 30 ips			
Other perpherals supported	Laser printer 12ppm			
other perpherals supported	Fixed disk: 640MB			
SOFTWARE]	
Assembler	Assembler		· .	
Compilers	Cobol, Basic, Fortran,			
	PL/1, RPG			
Operating system	Real-time			
Operating sys. implemented in firmware				
Database management system	VS DMS; Wang Total			
Principal industry application	Accounting, Pension, Personnel			
Other packages	Modeling and Simulation			
other publicages	l l l l l l l l l l l l l l l l l l l			
	ĺ		ĺ	
PRICING & AVAILABILITY				
Basic system configuration and price	CPU, 256KB memory, 75MB			
	disk, 300KB diskette,			
	16-port serial IOP, 250		l i	
	lpm printer, Assembler,			
	Operating system—\$40,000			
Mo maintenance of basis configuration	\$503			
Mo. maintenance of basic configuration Date of first delivery	1978			
Number installed to date	Not supplied			
COMMENTS	Supplied			
	1			
	i	i e e e e e e e e e e e e e e e e e e e	1	