Microcomputers: Market Overview

In this report:

Synopsis

Editor's Note

This Market Overview examines important market trends and describes the marketing strategies of major vendors. The accompanying Technology Overview (Report 550-201) describes components common to all microcomputers. The Comparison Columns (Report 550-301) include a list of vendors with their addresses and phone numbers, a description of the entries, and columns with detailed specifications and pricing for microcomputer systems offered by the responding vendors.

Our survey was sent to nearly 400 microcomputer vendors. The response from 96 vendors details 534 products.

Market Highlights

When IBM introduced the IBM PC in 1981, 1.24 million personal computers were in use in the workplace. More than 10 times that number will be sold in the United States this year alone. The industry, despite its rapid growth, retains much of the innovative and entrepreneurial characteristics that distinguished its early history.

Several significant issues have been debated by industry leaders and have been placed before the voters—corporate buyers. The competing MCA and EISA input/output buses, as well as the 80286 and 80386 processor architectures, have distracted some buyers from usually dominant issues: reliability, expansion options, performance, and price.

550-**102**
Microcomputer Systems

Microcomputers:
Market Overview

Datapro Reports on
PC Communications

Analysis

Market Leaders

Apple Computer Corporation
Both the Macintosh product line and Apple's sales continue to grow. The Macintosh IIx provides 32-bit processing power, 16MHz speed, and six NuBus expansion slots. The Mac IIcx is comparable but provides only three slots—and a less expensive entry point into the Mac II line. Both models also use a 1.44M-byte diskette drive that can read and write PC-/MS-DOS and OS/2 diskettes. Responding to corporate needs has been a successful tactic for Apple since 1987, when the NuBus expansion slots and high-resolution color options were added to the line. As a result, Apple's sales are now nearly $5 billion.

Compaq Corporation
In September 1988, Compaq led an industry consortium (nicknamed the "Gang of Nine") to fend off the challenge of IBM's 32-bit Micro Channel Architecture. By introducing an alternate 32-bit bus architecture with downward compatibility, the EISA consortium touched off a battle royal with proponents of the incompatible MCA. Compaq also introduced the multiprocessor Systempro— more a minicomputer than a micro—and increased top system speed to 33MHz. To compete with the graphics capability of workstations, Compaq introduced a graphics board and a 16-inch color monitor, providing 1,024-by-768 pixel graphics resolution. In addition, Compaq severed ties with Businessland, ending a seven-year dispute over dealer margins.

Dell Computer Corporation
Once known as PC's Limited, this direct-response (mail order) company is known as much for its service and support as for its quality and low prices. In April 1988, Dell announced it would offer MCA-compatible clones. With MCA demand lacking, Dell reconsidered its decision and did not introduce the new models. Although the company has announced support for the EISA initiative, it was not one of the founding members. Dell has filled two gaps in its product line with the System 316SX, an 80386SX-based desktop model, and with the 316LT laptop.
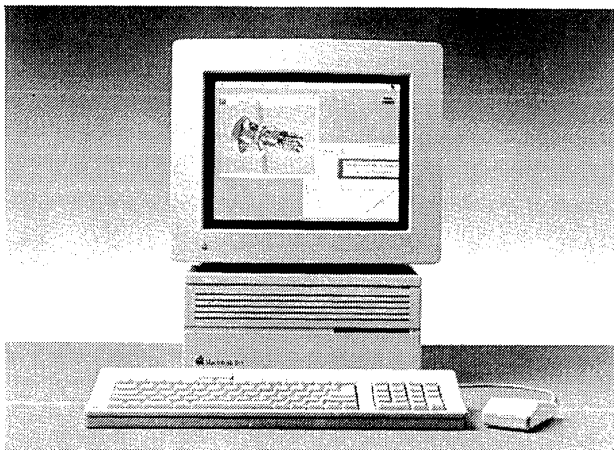
IBM
Once the clear industry leader with over 60 percent of the market, IBM now shares the limelight (and the profits) with successful clone vendors such as Compaq, Dell, Tandy, and Zenith and newcomers such as AST, Everex, and NEC. IBM currently holds less than a 30 percent share in the microcomputer market, although acceptance MCA has gradually increased. The latest enhancements to its PS/2 product line are the i486 Power Platform upgrade to the Model 70-A21 and an i486-based version of the Model 70.

Tandy Corporation
In April 1988, Tandy became the only major vendor to announce an MCA-compatible machine. The 20MHz 5000 MC, which competes against the PS/2 Model 70-A21, began shipping in December 1988. Tandy is also an EISA proponent. Tandy subsidiary GRiD Systems, a high-end laptop vendor, operates 61 GRiD Systems Centers (former Radio Shack Computer Center locations). More importantly, however, GRiD's success in the government market and its corporate direct sales channel enable Tandy to profit from these lucrative markets. Tandy also manufactures microcomputers for Digital Equipment Corporation and for Matsushita Electric, the latter to be sold under the Panasonic label.

Zenith Electronics Corporation
In an effort to focus its resources on the consumer electronics market, Zenith Electronics sold its Zenith Data Systems (ZDS) division to Groupe Bull. The French computer vendor, a leader in Europe, lacks market share in the United States. ZDS, on the other hand, is among the largest microcomputer suppliers to the U.S. government. At least initially, ZDS continues to operate under the Zenith name with its own product line. Products from Bull probably will be sold in the U.S. under the Zenith name, and vice versa.

Datapro Reports on
PC Communications

Microcomputers:
Market Overview

550-**103**
Microcomputer Systems

The Apple Macintosh IIci is a high-performance version of Apple's Macintosh IIcx system using a 25MHz 68030 microprocessor.

Survey Results

Among vendors that responded to our survey, 11 provide MCA-compatible products; only 9 offer EISA products. One vendor, Leading Edge, includes both MCA and EISA products in its line. Since EISA-based products were first introduced in the fall of 1989, the number of EISA products should increase over the next year.

The number of products using IBM and compatible bus architectures reveals the range of choices offered by each bus.

Processors

The overwhelming majority of systems included in these columns use a microprocessor manufactured by or under license from Intel. Half the remainder use Intel-compatible processors manufactured by NEC.

Our survey reveals that more products are based on the Intel 80386 microprocessor than on the 80286. Of the floorstanding systems, 83 percent use the 80386. As previously noted, the variety of products does not indicate relative market share.

Intel Processor Usage (percent of all models)

CPU	Desktop	Floor
i486	2	7
80386	37	83
80386SX	14	2
80286 *(1)*	33	9
8086/88 *(2)*	7	0

(1) Includes CMOS version (80C286) and products of licensees.
(2)Includes CMOS versions.

I/O Bus Architectures

Architecture	Percent
AT	73
AT based *(1)*	9
XT	12
MCA	4
EISA	2

(1) Includes split bus, passive backplane, and separate memory bus designs.

This table does not necessarily reflect the relative sales of each bus in the market. It is, however, a good indicator of market interest, as perceived by these vendors. The AT bus remains the dominant microcomputer architecture.

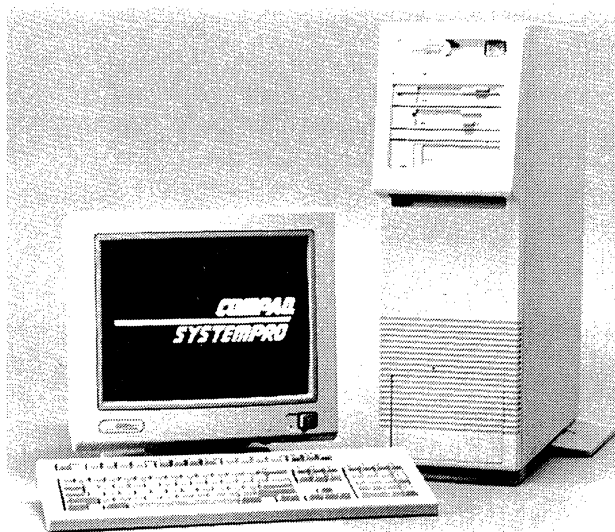*November 6, 1989— The COMPAQ SYS-TEMPRO 25MHZ i486 EISA-based system, is designed for network server and multi-user host environments.*

550-**104**
Microcomputer Systems

Microcomputers:
Market Overview

Datapro Reports on
PC Communications

The HP Vectra 486 PC is the first of Hewlett-
Packard Company's new generation of PCs
based on the Intel i486 microprocessor and the
extended industry standard architecture
(EISA).

80386SX vs. 80286

According to the data compiled by Datapro Re-
search, 80386SX-based systems are *not* priced as
low as 80286 systems. A more detailed analysis,
however, shows that several factors contribute to
the disparity. The two most significant factors of a
system's cost (other than the processor itself) are
RAM and hard disk capacity. A comparison of the
mean values for these factors explains part of the
price differential.

Cost Factors (Mean Values)

	80286	80386SX
RAM	839K	1,197K
Hard Disk	20.2M	39.5M
Price	$2,139	$2,952

While the 80386SX is associated with higher sys-
tem cost than 80286 systems, it is also associated
with more RAM *and* greater mass storage. The
high standard deviations associated with these
mean values reflect the diverse range of available
products.

Trends and Issues

Architecture Wars: AT vs. EISA vs. MCA

IBM's 1981 entry into the market impelled a thriv-
ing industry, but subsequent tremendous market
growth was at IBM's expense. Until the advent of
the 80386 microprocessor, the AT bus was more
than adequate for the 16-bit demands of the 32-bit
80286. Intel's introduction of the 80386 presented
a problem for vendors—if the full potential of the
80386 was to be achieved, a new bus was needed.

In April 1987, responding to this need to ad-
vance technology and a desire to regain market
share, IBM introduced the Micro Channel Archi-
tecture (MCA) in its Personal System/2 (PS/2) sys-
tems. MCA provides more advanced internal
expansion capabilities, leaving the limitations of
the AT bus—and compatibility with it—behind.
IBM also indicated it would enforce legal protec-
tions for its new technology. Vendors that had lib-
erally copied IBM's microcomputers in the past
would now have to pay royalties to do so.

Initially, most vendors were unconcerned,
particularly Compaq Computer, which introduced
increasingly fast 80386-based systems (now up to
33MHz) based on the AT bus. Late in 1988, an
industry-led consortium proposed an alternate bus
called Extended Industry Standard Architecture
(EISA). EISA is an extension of the current AT bus
that maintains compatibility with the 8MHz AT
standard. Both the EISA bus and the MCA bus are
32 bit; therefore, both will outperform the current
16-bit AT bus.

MCA represents IBM's vision of the future.
Sales have been disappointing during its first three
years, however, and much of MCA's potential re-
mains untapped. On the other hand, EISA-based
systems are just now reaching market. Although
MCA is generally regarded as technologically supe-
rior, EISA provides an alternative to proprietary
technology. The success of both MCA and EISA
depends more on marketing prowess than on tech-
nological superiority.

Microprocessor Choices

Intel microprocessors continue to dominate the
microcomputer industry. Systems based on the
i486, Intel's latest processor, are currently avail-
able. The i486 has the equivalent of over 1 million

Datapro Reports on
PC Communications

Microcomputers:
Market Overview

550-**105**
Microcomputer Systems

transistors and includes floating-point, cache memory, and paging support. This processor will be important for servers and multiuser systems.

Since the i486 is compatible with the 80386 processor architecture, the market has temporarily shed some of its uncertainty. The 80386 provides 32-bit processing and, in addition to the 80286's protected mode, includes a virtual mode that can simulate multiple 8086 machines. With these advanced capabilities and with higher clock speeds, the 80386 costs significantly more than an 80286 processor. The lack of true 32-bit software applications further inhibits sales of systems using these processors.

The original Intel 80286 was rated at a maximum speed of 12MHz. Advanced Micro Devices and the Harris Semiconductor Corporation, licensed by Intel to manufacture the 80286, now produce 16MHz and 20MHz versions of the 80286.

The 80386SX, like the 80386, can process 32 bits of data internally. The 80386SX supports 80286 protected mode and 8086 virtual mode but has a 16-bit data path. At approximately 50 percent less than a comparable 16MHz 80386 microprocessor, the 386SX offers a cost-effective entry into 32-bit computing.

Intel positions the 80386SX against the 80286 in an attempt to recapture sales lost to second-source manufacturers. The lack of a 20MHz 80386SX will be addressed soon, but the first casualty of this move could be the 20MHz version of the *80386*.

With the advent of 32-bit microprocessors at 25MHz and 33MHz, microcomputers can compete successfully with low-end technical workstations. While microcomputers are usually used as standalone machines for moderate work loads, workstations are designed for multitasking on a multilayered network with more demanding applications, such as CAD/CAE. The growth rate and profit potential are much higher in this market sector.

Graphical User Interface

Apple's successful Macintosh line provides an alternative to the conservative world of IBM and compatible microcomputers. Attesting to the acceptance of the Macintosh approach to computing in the business market are vendor attempts to imitate and adopt the "look and feel" of the Mac graphical user interface. Although the approach was once spurned by the industry, many operating systems are now providing windows, icons, pull-down menus, and mouse-driven control on a graphical display. ■

Microcomputers: Technology Overview

Synopsis

Editor's Note

This Technology Overview describes components common to all microcomputers. For an examination of the important market trends and a description of the marketing strategies of major vendors, see the Market Overview (Report 550-101). The accompanying Comparison Columns (Report 550-301) include a list of vendors with their addresses and telephone numbers, a description of the entries, and columns with detailed specifications and pricing for microcomputer systems offered by the responding vendors.

Technology Highlights

A microcomputer is a reprogrammable electronic device used for processing information. The information is encoded as a digital signal and is manipulated over circuits etched on wafers of silicon. Microcomputer sophistication has progressed from the simplicity of hardwired devices with a few circuits on a single silicon wafer to the complexity of Very Large Scale Integration (VLSI) that places over 100,000 circuits on a chip.

550-**202**
Microcomputer Systems

Microcomputers:
Technology Overview

Datapro Reports on
PC Communications

Analysis

Technology Basics

Current microcomputer technology combines a microprocessor with interrelated subsystems and VLSI support circuitry. A basic microcomputing system comprises the following main components and subsystems: a single *microprocessor* or *CPU* for controlling the system; *memory*, which temporarily stores programs and data; a *mass storage* subsystem for permanent storage of programs and files; a digital or analog *display* for viewing system output; and a *keyboard* for inputting data and responding to the system.

Microprocessors

The microprocessor, also known as the central processing unit (CPU), is the single most important component in a microcomputer. The CPU executes program instructions, reads information from and writes to memory, and accesses peripheral devices. The microprocessor is an integrated digital circuit that processes information sequentially via a series of on/off electronic states.

All IBM microcomputers and compatibles use the Intel 80X86 series microprocessors—the 8088/8086, 80286, 80386SX, 80386, and i486. Other choices include the Motorola 680X0 series—68000, 68020, 68030, and 68040—typically found in Apple Macintosh computers and high-end workstations.

Microprocessor performance is a function of several factors:

- clock speed;
- processor instruction set;
- address and data bus widths; and
- word size.

Clock speed refers to the frequency of CPU timing cycles, determined by the number of pulses generated by a quartz crystal oscillator. During each pulse, the CPU performs one small operation.

CPU Architectures

Processor Type	Word Size (bits)	Data Bus (bits)	Adress Bus (bits)
Intel			
8088	16	8	20
8086	16	16	20
80286	16	16	24
80386SX	32	16	24
80386DX	32	32	32
i486	32	32	32
Motorola			
68000	32	16	24
68020	32	32	32
68030	32	32	32

These cycles are measured in megahertz (MHz), or millions of cycles per second. The higher the clock speed, the faster the microprocessor executes instructions. The CPU manufacturer determines the finished chip's highest acceptable clock speed through empirical testing.

The processor's instruction set determines what processes can be carried out directly. Simple instructions can be carried out in a few processor cycles, while more complex instructions generally require more cycles. Reduced instruction set computer (RISC) architectures provide fewer hard-coded instructions, since complex instructions can be built from many simple instructions; as a result, the circuitry is less complex and higher clock speeds are possible. For most general-purpose applications on microcomputers, however, a rich instruction set is favored.

The address bus determines the total physical amount of memory that can be addressed directly by the CPU. Every memory location must have a unique binary address. The 20-bit address bus of the 8088/8086 microprocessors allows 1 megabyte of memory ($2^{20} = 1,048,576$). A 24-bit address bus (80286) supports 16 megabytes, while a 32-bit address bus (80386 and i486) allows up to four gigabytes. With more memory a processor can handle more data without slow input/output (I/O) access and can also run more complex programs.

Word size refers to the size of the operand registers internal to the CPU. A larger word size

Datapro Reports on
PC Communications

Microcomputers:
Technology Overview

550-**203**
Microcomputer Systems

means that larger pieces of data can be manipu-
lated internally, increasing processing speed. The
width of the data bus (also known as the I/O bus)
determines the amount of data that can be trans-
ferred into and out of the CPU on a single pass. A
wider data bus means faster performance. For ex-
ample, the 16MHz 80386SX (with its 16-bit data
bus) is slower than the 16MHz 80386, which has a
32-bit bus—even though the processors are identi-
cal internally.

With Intel's 80286, a protected mode was
added to the real mode of the 8088/8086 micropro-
cessors. Applications developed for the 8088/8086
will run on the newer processors in real mode, ben-
efiting from increased processor speed.

Protected mode allows the 80286 to address
16M bytes of memory and also uses four privilege
levels to manage system memory and I/O devices.
The 80386's protected mode expands those func-
tions and also supports a virtual-8086 mode that
simulates an 8086 machine. Through the 80386's
paging functions and virtual-8086 mode, multiple
8088/8086 machines can be simulated (allowing
concurrent processing of 8088/8086 applications)
under an 80386 protected-mode operating system.
The 80386 can run a single copy of an 80286
protected-mode operating system, but it cannot
run multiple copies. Therefore, 80386 multitasking
can be accomplished more easily with 8088/8086
applications and applications written specifically
for the 80386.

Memory
For the CPU to receive its start-up information
and access the operating systems, programs, and
software applications, a microcomputer needs a
memory subsystem. Microcomputer memories are
classified into two major categories: read-only
memory (ROM) and random-access memory
(RAM).

All ROM is nonvolatile memory—data is not
lost when power is turned off. The program code
needed for system start-up, including the Basic
Input/Output System (BIOS), is stored in ROM.
The BIOS is the direct interface between the pro-
cessor and subsystems such as mass storage, video,
and keyboard. In addition, application programs
can access the hardware through the ROM BIOS.
Some microcomputer ROMs also contain the oper-
ating system or application programs.

Most microcomputer ROMs are nonprogram-
mable; their contents cannot be changed. Some
kinds of ROM can be erased and reprogrammed.
For example, Erasable Programmable ROMs
(EPROMs) can be erased by exposure to ultraviolet
light and reprogrammed.

RAM is volatile: it will hold its contents only
while power is on. The CPU can read from and
write to RAM, which is usually used to store code
and data during operation. Two kinds of RAM are
used in microcomputers: the more common, lower
cost Dynamic RAM (DRAM) and expensive Static
RAM (SRAM).

DRAM consists of a series of capacitors that
store bits as charges. The presence of a charge rep-
resents a "one" bit (on); the absence of a charge
represents a "zero" bit (off). Unfortunately, this
kind of electronic memory arrangement by itself
will completely discharge before the CPU has time
to decode it. To be useful in a microcomputing sys-
tem, therefore, DRAM must be refreshed fre-
quently to maintain the proper charge. This refresh
cycle consumes approximately 7 percent of the
CPU's time.

SRAM stores bits in a series of flip-flops or
registers that can be switched to either a zero or a
one state. SRAM maintains its contents without
the need for a refresh cycle, providing a faster ac-
cess time than DRAM. Once a bit has been stored
in SRAM, it retains that state until explicitly
changed. The more complex circuitry makes
SRAM much more expensive.

In addition to its capacity, a memory chip is
rated for its access time in nanoseconds (billionths
of a second). As microprocessor clock speeds have
increased, however, RAM access times have not
decreased in proportion. If the clock speed out-
paces the RAM access time, data in RAM cannot
be accessed as quickly as the CPU requires. In such
cases, the processor inserts one or more wait states
to synchronize with slower memory, decreasing
CPU performance.

Among the methods used to improve CPU
performance is direct memory access (DMA).
DMA circuitry allows a subsystem to bypass the
CPU and directly read from and write to RAM.
Shadow RAM is a technique that loads system
BIOS or video BIOS directly into fast RAM on
start-up. The BIOS or video instructions can then
be accessed much faster.

550-**204**
Microcomputer Systems

Microcomputers:
Technology Overview

Datapro Reports on
PC Communications

Static-column RAM is a technique using DRAM that operates like DRAM for initial random access and like SRAM for subsequent sequential accesses. The first row address and the second column address work just like static RAM if the row address stays the same and only the column address changes. The Compaq Deskpro 386 was designed with a static-column memory subsystem.

Cache memory was first used in mainframes and minicomputers. Data that is frequently accessed by the CPU is stored in a small amount (typically 32K or 64K bytes) of very fast SRAM (35 ns. or less). If data needed by the CPU happens to be in the cache, it is accessed without wait states. The resulting improvement in CPU performance depends on the cache size and on the algorithm used to determine what data remains in the cache.

To get around the 1M-byte limit of Intel 8088/8086 CPUs, vendors introduced several schemes that took advantage of bank switching. With specialized hardware and software, bank switching uses part of the CPU's address space as a window into extra pages of RAM, and memory is thus "expanded." Emerging from the confusion, Expanded Memory Specification (EMS) Version 4.0 has become a standard. Expanded memory is often confused with extended memory (the amount of memory above the 8086/8088 1M-byte limit) and conventional memory (the traditional 640K-byte limit of MS-DOS).

Mass Storage
The earliest microcomputers to advance beyond cassette tape for mass storage used eight-inch diskette drives. The 5.25-inch size became popular with the CP/M operating system and a standard with MS-DOS. In 1984 the Macintosh was among the first to use 3.5-inch diskette drives; laptop computers and IBM's PS/2 line have provided further impetus. Zenith recently introduced the two-inch diskette drive, which may approach a practical size limit.

Diskettes vary in their density, or capacity, for data storage. This capacity is partly determined by the microcomputer manufacturer's formatting design (preparing areas of the magnetic surface for data storage). Capacity also depends on whether the medium is single or double sided.

Inexpensive and reliable, 5.25-inch diskettes are circular Mylar disks coated with magnetic particles. The disks are enclosed in a protective PVC jacket that has openings for the drive spindle, the read/write head, the timing hole, and a write-protect notch. The 3.5-inch diskettes are comparable but have a hard plastic case with a sliding metal door to protect the medium.

Hard disk drives are designed for larger storage requirements. A hard disk consists of several circular aluminum platters coated with a film of iron oxide or other magnetized metal and spinning at 3,600 revolutions per minute. The read/write heads hover above each surface on a cushion of air. To read or write data on the hard disk, a stepper motor or voice coil moves the heads above the appropriate track and sector of the disk where the data resides. Hard disks are usually enclosed in a sealed box to protect the drive heads and the medium from environmental contaminants such as dust.

Hard disk speed, or access time, is measured in milliseconds. The access time is the interval required for a hard disk to retrieve or deliver data from the disk after the CPU signals a request. Another factor affecting speed is the disk interleave, the number of physical sectors between consecutively numbered logical sectors. For example, an interleave of three means that the drive reads every third sector as contiguous. The interleave should allow the operating system enough time to process data before the disk's read/write head reaches the next logical sector.

Disk speeds can be improved with a disk cache. Similar to a memory cache, a disk cache is a software implementation that stores copies of recently used disk sectors in a reserved area of RAM. When the system accesses sectors that are in a cache, no disk access is required and the response time is much faster. If the sector is not found, the caching algorithm places the sector in the cache for the next access. A disk cache can improve disk access time by as much as 50 percent.

The hard disk controller is the on-board circuitry that controls hard disk operations, determining data transfer rates and the data encoding scheme. Popular data encoding schemes include the common Modified Frequency Modulation (MFM) and Run Length Limited (RLL), the latter providing higher densities and faster transfer rates.

Datapro Reports on
PC Communications

Microcomputers:
Technology Overview

550-**205**
Microcomputer Systems

The hard disk interface determines data transfer rates. Seagate's serial ST506/412 interface, used in the IBM PC XT and PC AT, has a 5M bit-per-second data transfer rate. For high-performance hard disks, both the Enhanced Small Disk Interface (ESDI) and the Small Computer Systems Interface (SCSI) are popular. Established by a consortium of 22 disk drive manufacturers, ESDI has a 10M bit-per-second serial data transfer rate. SCSI is a parallel interface with a 32M bit-per-second transfer rate. SCSI requires a dedicated microprocessor-based controller and allows up to seven daisychained devices.

Displays

In April 1987, the Video Graphics Array (VGA) adapter debuted with the IBM PS/2 Models 50, 60, and 80 as the new display standard. The VGA 640-by-480 resolution is an incremental step forward from IBM's previous EGA standard, with 640-by-350 resolution. The VGA is unique; it uses analog signals rather than the digital inputs of all the previous color adapters. Analog signals allow the video controller to vary voltage output on-screen, which results in more gradations of colors. For example, the VGA offers 256 simultaneous on-screen colors from a palette of 256,000.

A video adapter consists of three elementary components: the video controller, the video BIOS, and the video RAM (VRAM). The video controller generates the appropriate CRT scan signals for the graphics or characters that appear on-screen. The video BIOS provides a smooth interface to perform various video and screen tasks—e.g., mode selection, cursor positioning, and character writing. The video RAM (VRAM) is dedicated video memory that contains information defining the CRT image.

Keyboards

The Qwerty key arrangement was designed in the 19th Century to inhibit fast typists, who frequently jammed the type bars. Alternatives, such as the Dvorak keyboard, have been advocated to improve typing efficiency, but the old design remains entrenched from typewriters to microcomputers.

In 1986, IBM introduced the 101-key Enhanced Keyboard. Twelve function keys are included in a single row across the top. The numeric keypad was relieved of double duty as separate cursor-control keys were added. Control and Alternate keys were placed on each side of the spacebar. In 1987 IBM adopted the Enhanced Keyboard across the entire PS/2 line. Although the 101-key arrangement is not the most ergonomically designed or satisfying, it has become common on most desktop and floorstanding microcomputers. IBM's keyboards have responsive audible and tactile feedback.

Apple's original Macintosh keyboard was compact, with little more than the alphanumeric and punctuation keys. This was not much of a limitation, however, since the graphical user interface used a mouse and was common to all Mac applications. With the open architecture of the newer Macintosh models, however, Apple introduced an extended keyboard with 15 function keys to accommodate alternate operating systems and terminal emulation.

Operating Systems

The operating system is a set of software programs that acts as the middle layer between applications software and hardware resources. The functions of an operating system include tracking memory, managing disk information flow, recognizing keyboard interrupts, displaying messages, formatting media, and performing input and output. There are four main operating systems in today's market: MS-DOS, OS/2, UNIX, and Macintosh.

Since 1981 Microsoft's MS-DOS (and IBM's version, PC-DOS) has remained the dominant single-user, single-tasking operating system for microcomputers, with an existing base of tens of thousands of available applications. The reason for this large base of third-party software is the binary standard that links the Intel 8086, 8088, 80286, 80386, and i486 microprocessors at the object code level. Third-party software vendors provide utilities for MS-DOS that further enhance its capabilities. More advanced systems, however, require a more advanced operating system.

OS/2, developed jointly by IBM and Microsoft, is a single-user, multitasking operating system. Released in December 1987, OS/2 offers a larger addressable memory than MS-DOS (16M bytes versus 640K bytes) and the ability to run more than one program at the same time. OS/2 takes advantage of the protected mode of the Intel 80286 microprocessor. While OS/2 can run on the

550-206
Microcomputer Systems

Microcomputers:
Technology Overview

Datapro Reports on
PC Communications

80386 microprocessor, it does not take advantage of that CPU's inherent capabilities.

UNIX is a multiuser, multitasking operating system first developed at AT&T Bell Laboratories. Written in C, UNIX is available in two versions: the original AT&T version, now labeled System V, and the BSD (Berkeley Software Development) Version 4.2 created at the University of California at Berkeley. Microsoft's Xenix/386 (a version of UNIX) was developed around the 80386 chip. Unlike OS/2, UNIX can take advantage of the 80386's capabilities. Thus, UNIX is an attractive alternative for high-end workstations based on the 32-bit chip.

The Macintosh operating system, known as MultiFinder/System, has a consistent user interface across applications. Based on concepts originally developed at Xerox PARC, the graphical interface uses windows, icons, and a mouse. The Macintosh operating system is especially well suited to working with high-quality graphic images, making it an appropriate tool for desktop publishing. The Macintosh interface's success has spawned imitators. Two such products, Microsoft Windows and the OS/2 Presentation Manager, provide similar Mac-like interfaces for IBM-compatible microcomputers.

Selection Guidelines

The decision to purchase microcomputer systems and to implement a microcomputer strategy has never been easy and will not likely be any simpler in the future. Strategic planning is best thought of in terms of time and technology. What hardware/software is needed for present and future needs? Will the financial investment be worth the cost of implementation and administration?

Do the circumstances warrant the immediate purchase of equipment, or will it depend on market conditions? Will individual and organizational productivity be increased? The rapid changes in microcomputing technology make these decisions critical to the success of the project.

Once the necessary applications are determined, other hardware parameters are more easily determined. Implementing an effective LAN will require 80386- or i486-based servers with a true 32-bit operating system. Sophisticated graphics applications such as CAD/CAM or scientific workstations will typically require a high-performance 80386 with UNIX. Where cost is a concern, DOS and OS/2 applications running on 80386SX systems will be sufficient. In some cases, for word processing, modest spreadsheet accounting, and medium-sized databases, an upgrade to present equipment proves sufficient. ∎

Microcomputers: Comparison Columns

In this report:

Synopsis

Editor's Note
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The Columns
During November and December 1989, Datapro Research surveyed nearly 400 vendors that manufacture microcomputers. The response from 103 manufacturers detailed 561 desktop and floorstanding microcomputers. The comparison columns highlight the systems' characteristics.

The absence of a company or a particular system from the columns indicates that the company failed to respond to our repeated requests for information or the product is no longer actively marketed. In those instances where we were unable to obtain a response from a manufacturer that impacts the marketplace, we obtained the information from in-house sources.

Below are descriptions of the formal column entries and explanations of computer specifications. These definitions should help potential microcomputer users recognize state-of-the-art features and functions of current microcomputers.

550-**302**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendors

Acer America Corp.
401 Charcot Avenue
San Jose, CA 95131 (408) 922-0333

Acma Computers, Inc.
117 Fourier Avenue
Fremont, CA 94539 (415) 623-1212

Advanced Digital Corp.
5432 Production Drive
Huntington Beach, CA 92649 (714) 891-4004

Advanced Logic Research, Inc.
9401 Jeronimo
Irvine, CA 92718 (714) 581-6770

Amdek Corp.
3471 N. First Street
San Jose, CA 95134 (408) 922-5700

American Mitac Corp.
410 E. Plumeria Drive
San Jose, CA 95134 (408) 432-1160

Amstrad, Inc.
1915 Westridge Drive
Irving, TX 70538 (214) 518-0668

Apple Computer, Inc.
20525 Mariani Avenue
Cupertino, CA 95014 (408) 996-1010

Arche Technologies, Inc.
48881 Kato Road
Fremont, CA 94539 (415) 623-8100

Area Electronics Systems, Inc.
330 E. Orangethorpe Avenue, Suite F
Placentia, CA 92670 (714) 993-0300

Ark Science Corp.
500 Laurelwood Drive #5, Suite 5
Santa Clara, CA 95054 (408) 988-6421

AT&T
Technologies Information Systems
1 Speedwell Avenue
Morristown, NJ 07962-1954 (201) 898-2000

Atari Corp.
1196 Borregas Avenue, P.O. Box 3427
Sunnyvale, CA 94086 (408) 745-2000

Atronics International, Inc.
1830 McCandless Drive
Milpitas, CA 95035 (408) 942-3344

Austin Computer Systems
10300 Metric Boulevard
Austin, TX 78758 (512) 338-7932

Blackship Computer Systems, Inc.
4031 Clipper Court
Fremont, CA 94538 (415) 770-9300

Broadax Systems, Inc.
9440 Telstar Avenue
El Monte, CA 91731 (818) 442-0200

Canon U.S.A., Inc.
One Canon Plaza
Lake Success, NY 11042 (516) 488-6700

Cardinal Technologies, Inc.
New Products Div.
1827 Freedom Road
Lancaster, PA 17601 (717) 293-3000

Chartered Electronics Inc.
21 Airport Boulevard, Suites G & H
San Francisco, CA 94080 (415) 875-3636

Citizen America Corp.
2401 Colorado Avenue, Suite 190
Santa Monica, CA 90404 (213) 453-0614

Club American Technology, Inc.
3401 W. Warren Avenue
Fremont, CA 94539 (415) 683-6600

Comark Corp.
93 West Street
Medfield, MA 02052 (508) 359-8161

Commodore International Ltd.
1200 Wilson Drive
West Chester, PA 19380 (215) 431-9100

Compaq Computer Corp.
P.O. Box 692000
Houston, TX 77269 (713) 370-0670

Compuadd Corp.
12303 Technology Boulevard
Austin, TX 78727 (512) 250-1489

Cordata, Inc.
1055 W. Victoria Street
Compton, CA 90220 (213) 603-2901

CSR
370 North Street
Teterboro, NJ 07608 (201) 288-6655

CCS Custom Computer Systems, Inc.
191 Woodport Road
Sparta, NJ 07871 (201) 729-6762

Data Bank Computer
48363 Warm Springs Boulevard
Fremont, CA 94539 (415) 490-5002

Data General Corp.
4400 Computer Drive
Westboro, MA 01580 (508) 366-8911

Data Storage Marketing, Inc.
5541 Central Avenue
Boulder, CO 80301 (303) 442-4747

Dataworld
3733 San Gabriel River Parkway
Pico Rivera, CA 90660 (213) 695-3777

Daytronic Corp.
2589 Corporate Place
Miamisburg, OH 45342 (513) 866-3300

Dell Computer Corp.
9505 Arboretum Boulevard
Austin, TX 78759 (512) 338-4400

Delta Data Systems Corp.
7175 Columbia Gateway Drive
Columbia, MD 21046 (301) 290-6400

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**303**
Microcomputer Systems

Digitech Research Inc.
800 Monterey Pass Road
Monterey, CA 91754 (213) 267-1638

DSC Communications
P.O. Box 110940
Campbell, CA 95011 (408) 954-5729

Electrified Discounters Inc.
1066 Sherman Avenue
Hamden, CT 06514 (203) 287-1976

Emerald Computers, Inc.
7324 SW Durham Road
Portland, OR 97224 (503) 620-6094

Emerson Computer Corp.
5500 E. Slauson
Commerce, CA 90040 (213) 722-9800

Epson America, Inc.
Computer Products Div.
23530 Hawthorne Blvd., P.O. Box 2842
Torrance, CA 90505 (213) 539-9140

Everex Systems, Inc.
48431 Milmont Drive
Fremont, CA 94538 (415) 498-1111

First Class Systems Inc.
2875 Northwestern Parkway
Santa Clara, CA 95051 (408) 496-0237

Fortis Information Systems, Inc.
6070 Rickenbacker Road
Commerce, CA 90040 (213) 727-1227

Fortron Corp.
2380 Kume Drive, Suite F
San Jose, CA 95131 (408) 432-1191

Fountain Technologies, Inc.
12K Worlds Fair Drive
Somerset, NJ 08873 (201) 563-4800

GCH Systems, Inc.
777 E. Middlefield Road
Mountain View, CA 94043 (415) 968-3400

GMX, Inc.
1337 W. 37th Place
Chicago, IL 60609 (312) 927-5510

Herko Electronics, Inc.
4655 Ridge Road W.
Spencerport, NY 14559 (716) 352-1102

Hetra Computer & Communications Industries, Inc.
P.O. Box 9000
Sebastian, FL 32958 (407) 589-7331

Hewlett-Packard Co.
Business Computing Systems
19091 Pruneridge Avenue
Cupertino, CA 95014 (800) 752-0900

IBC/Integrated Business Computers
21621 Nordhoff Street
Chatsworth, CA 91311 (818) 882-9007

ICL Datachecker
800 Central Expressway, P.O. Box 58112
Santa Clara, CA 95052 (408) 748-0194

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

Isotropic Computer Inc.
E. 5920 Seltice Way
Post Falls, ID 83854 (208) 667-1447

Kaypro, Inc.
533 Stevens Avenue
Solana Beach, CA 92075 (619) 259-4713

Leading Edge Products, Inc.
225 Turnpike Street
Canton, MA 02021 (617) 828-8150

Lee Data Corp.
7075 Flying Cloud Drive
Eden Prairie, MN 55344 (612) 828-0300

Logix Microcomputers
375 Morgan Lane, 12 Oak Business Park
West Haven, CT 06516 (203) 932-4881

Mark Computer Products Corp.
Birchwood Business Park, 25 Birch Street
Milford, MA 01757 (508) 634-3455

Maxar P.C.
710 Lakeway, Suite 285
Sunnyvale, CA 94086 (408) 733-0810

Memorex Telex
6422 E. 41st Street
Tulsa, OK 74135 (918) 627-1111

Micro Express
1801 Carnegie Avenue
Santa Ana, CA 92705 (714) 852-1400

Mission Cyrus Corp.
18303 8th Avenue S.
Seattle, WA 98148 (604) 432-7727

Mitsuba Corp.
650 Terrace Drive
San Dimas, CA 91773 (714) 592-2866

Mitsubishi Electronics America, Inc.
991 Knox Street
Torrance, CA 90502 (213) 515-3993

NCR Corp.
1700 S. Patterson Boulevard, USG-3
Dayton, OH 45479 (513) 445-5000

NEC Information Systems, Inc.
1414 Massachusetts Avenue
Boxborough, MA 01719 (508) 264-8000

Octave Systems, Inc.
1715 Dell Avenue
Campbell, CA 95008 (408) 866-8424

Otec Technologies, Inc.
1031 E. Duane Avenue, Suite A
Sunnyvale, CA 94086 (408) 736-3356

Packard Bell
9425 Canoga Avenue
Chatsworth, CA 91311 (818) 773-4400

Panasonic Industrial Co.
Office Automation Group
Panazip 76-1
Secaucus, NJ 07094 (201) 392-4688

PC Pros
8205 S. Cass Avenue
Darien, IL 60559 (312) 810-1010

Philips Information Systems
15301 Dallas Parkway, Suite 300 LB 35
Dallas, TX 75248 (214) 980-2000

550-**304**

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Polywell Computers Inc.
61-C Airport Boulevard
South San Francisco, CA 94080 (415) 583-7222

Precision Systems Group
7660-20 Phillips Highway
Jacksonville, FL 32256 (904) 730-3867

QIC Research
1961 Concourse Drive, Suite C
North San Jose, CA 95131 (408) 432-8880

Rexon Business Machines Corp.
An Alpha Microsystems Co.
3501 W. Sunflower Avenue
Santa Ana, CA 92704 (714) 641-6500

Sanyo Business Systems Corp.
51 Joseph Street
Moonachie, NJ 07074 (201) 440-9300

S.F. Micro, Inc.
1143 Post Street
San Francisco, CA 94109 (415) 929-1505

Silver Dollars International, Inc.
2550 W. Main Street No. 202
Alhambra, CA 91803 (818) 281-6878

Sirex USA, Inc.
132-14 11th Avenue
College Point, NY 11356 (718) 746-7500

Sun Moon Star
1941 Ringwood Avenue
San Jose, CA 95131 (408) 452-1119

Suntronics Co., Inc.
12603 Crenshaw Boulevard
Hawthorne, CA 90250 (213) 644-1140

Swan Technologies
3075 Research Drive
State College, PA 16801 (814) 238-1820

Systems Integration Associates
222 E. Pearson, Suite 502
Chicago, IL 60611 (312) 440-1275

Systex & Associates
3033 Kellway Drive, Suite 120
Carrollton, TX 75066 (214) 418-6699

Tandon Computer Corp.
609 Science Drive
Moorpark, CA 93021 (805) 378-3010

Tandy Corp./Radio Shack
1800 One Tandy Center
Fort Worth, TX 76102 (817) 390-3011

Tatung Company of America, Inc.
2850 El Presidio Street
Long Beach, CA 90810 (213) 979-7055

Teconomics, Inc.
755 5th Avenue SW
Calgary, AB, Canada T2P 0N2 Canada (403) 265-0707

TeleVideo Systems, Inc.
550 E. Brokaw Road, P.O. Box 49048
San Jose, CA 95161 (408) 954-8333

Texas Instruments
P.O. Box 181153
Austin, TX 78718 (800) 527-3500

Third Coast Technologies, Inc.
219 N. Milwaukee
Milwaukee, WI 53202 (414) 272-4220

Toshiba America, Inc.
Information Systems Div.
9740 Irvine Boulevard
Irvine, CA 92718 (714) 583-3000

Tri-Star Computers
1520 W. Mineral Road
Tempe, AZ 85283 (602) 838-1222

Twinhead Corp.
1537 Centre Pointe Drive
Milpitas, CA 95035 (408) 945-0808

Unisys
Township Line & Jolly Roads, P.O. Box 500
Blue Bell, PA 19424 (215) 542-3501

Versyss, Inc.
One Dedham Place
Dedham, MA 02026 (617) 461-6400

VNS America Corp.
910 Boston Post Road, #270
Marlboro, MA 01752 (508) 481-7192

Zendex Corporation
6700 Sierra Lane
Dublin, CA 94568 (415) 828-3000

Zenith Data Systems Corp.
1000 Milwaukee Avenue
Glenview, IL 60025 (312) 699-4800.

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**305**
Microcomputer Systems

Microcomputer
Comparison Column
Entry Descriptions

Vendor and Product Name

Vendor and **Product**. The *vendor* and *product* listings show all desktop and floorstanding microcomputers that we were able to identify for this report. We define a microcomputer as any general-purpose programmable device intended for placement on a desk or a floor stand or in any general work area.

Processor/Memory

CPU/Clock Speed. *CPU* indicates the name of the microprocessor, the most common being the 80X86 family (Intel), 680X0 (Motorola), and V-series (NEC). Harris Semiconductor and American Micro Devices also manufacture the 80286 chip under license from Intel. *Clock speed* is a measure of the speed, in MHz, with which the microprocessor executes its instructions. Comparing microcomputer systems on clock speeds alone can be deceptive, since several other factors also affect microcomputer performance.

Co-Processor Options. *Co-processors* are microprocessors dedicated to number crunching; they process floating-point instructions to reduce the main processor load. This entry indicates the co-processors supported by the system and notes any that are included.

Standard RAM/Speed. This entry shows the minimum amount of *random-access memory* (RAM), in bytes, included in the base configuration. Like all memory, it is measured in thousands (K) or millions (M) of bytes. *Speed* refers to the memory access time, measured in nanoseconds (billionths of a second).

RAM Expansion Capacity. This entry shows the maximum amount of memory, in bytes, that can be installed on the system board before an expansion slot must be used.

Maximum System RAM. This entry indicates the total memory supported, in bytes, by each system.

RAM Cache, Size/Speed. Several vendors, especially of 80386-based systems, provide a high-speed *RAM cache* to reduce or eliminate wait states. We asked vendors to provide the cache controller type, size (in bytes), and speed (in ns.).

Input/Output

Bus Architecture. This entry describes the system bus type. The emergence of new bus architectures has made this an important buying consideration, since it determines what type of expansion boards can be used.

Bus Speed. Some timing-dependent expansion boards function only in systems with a particular bus speed, here given in MHz. (The processor clock speed is usually the same as or an integral fraction of the bus speed.)

Total Expansion Slots. This entry indicates how many 8-, 16-, and 32-bit expansion slots are built into the system.

Available Expansion Slots. Some expansion slots may be taken by video adapters, drive controllers, and I/O boards included in the system. This entry indicates how many slots are left.

Serial Ports. This entry provides the number of serial ports on the system board, as well as any that are on adapters included with the base system. A serial port may be needed to attach an external peripheral, such as a mouse or a modem.

Parallel Ports. This entry provides the number of parallel ports on the system board, as well as any that are on adapters included with the base system. Parallel ports are mainly used to attach printers.

Other I/O Devices Included. Noted here is whether or not a mouse, modem, or other peripheral device is included with the system.

Other I/O Interfaces. Any other interfaces included with the system are noted here.

Mass Storage

Internal Drive Bays Available. This entry indicates the maximum number of full-height, half-height, and/or third-height devices that can be installed internally. Note that a full-height bay will accommodate two half-height devices and that a third-height device can be installed in a half-height bay with an appropriate mounting kit.

Diskette Drives Included. Most systems include one or more diskette drives. The number of drives and their capacity in bytes are shown here. In nearly all cases, the capacity also indicates the diskette size: 360K- and 1.2M-byte drives use older, more common 5¼-inch media; 720K-, 800K-, and 1.44M-byte drives use the increasingly popular 3½-inch media.

Diskette Drive Options. Optional diskette drives offered by the vendor are listed here, in bytes. If a particular drive format is not offered by the vendor, third-party products may be available to fill the gap.

Hard Disk Interface. The type of hard disk interface determines which hard disk drives are supported. Also part of this entry is the implementation: integrated on the system board, or on an adapter included with the system.

Hard Disk Size/AAT. This entry provides the hard disk capacity, in bytes,

550-**306**

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

included with the system. Also shown is the average access time (AAT), in ms., a measure of the drive's speed; lower numbers imply higher performance.

Optional Mass Storage. Optional hard disks offered by the vendor are listed here, along with tape drives and optical mass storage media.

Keyboard
Availability. This entry indicates whether a keyboard is included with the system and whether it is detachable or in a fixed position.

Number of Keys/Function Keys. In addition to the requisite alphanumeric keys, most computer keyboards include cursor control keys and function keys. Typically, a keyboard with 83 or more keys has 10 function keys and a separate keypad that provides cursor-control and numeric modes. The popular 101-key keyboard includes 12 function keys and dedicated cursor-control keys.

Video/Display
Video Controller/
Resolution. This entry indicates whether the controller is integrated on the system board, provided on an adapter, or optional. Unless the controller is optional, also given is its maximum resolution in pixels, or picture elements.

Display. If the system includes a display, this entry indicates its diagonal screen size and the type of display.

Local Area Network
Support
Vendor LAN Options. A local area network (LAN) allows sharing of resources, such as databases and printers. This entry indicates whether a vendor sells and supports hardware to connect to a LAN. If the vendor offers no LAN options for a system, third-party vendors often do.

Product Design
Type of Unit. This entry indicates whether the system is a desktop or a floorstanding microcomputer.

Tempest Version. Tempest-protected devices meet National Security Agency standards for reduction of radio frequency emissions. Such emissions could be monitored electronically, resulting in interception of sensitive information. This entry indicates whether a Tempest version of the system is available from the manufacturer or from a third party.

Dimensions. The dimensions of the system unit (height, width, and depth) are given in inches.

Weight. The weight of the system unit is indicated in pounds.

AC Power Supply. This entry indicates the amount of power, in watts, the system is capable of delivering.

Software
Operating System(s)
Bundled. This entry indicates the operating systems included with the system.

Operating System(s)
Supported. Any additional operating systems supported by the microcomputer are listed here.

Additional Software Included. Vendors may include programs ranging from diagnostics, communications, and desk accessory software (such as schedulers and phone lists), to word processing, spreadsheets, or other major applications. Multitasking shells—such as Windows and DesqView— are sometimes bundled with high-end systems.

Service/Support
Distribution Channels. Microcomputers may be sold by computer retailers, general retail stores, value-added resellers (VARs), or directly by the manufacturer.

Parts Warranty. This entry indicates the length of the vendor's warranty on parts.

Labor Warranty. This entry indicates the length of the vendor's warranty on labor.

Service Supplied by. This entry indicates the source of support and maintenance for a microcomputer system.

Service Features. Noted here is whether the vendor provides toll-free user support, a 30-day money-back guarantee, and/or an on-site service contract.

Base Price
We asked each vendor to provide information on the base configuration of each model. Therefore, the base price, given in dollars, reflects the manufacturer's list price for the system as described in the column. The availability of General Services Administration (GSA) pricing for government buyers is also indicated. If no price is indicated, contact the vendor for further information.

Other Terms Used
within the Columns
Vendor did not specify indicates the vendor did not supply us with all of the information. *Not applicable* means the question was not pertinent to a particular system. A dash appears in a combination entry where only one of the features is provided or does not apply.

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**307**
Microcomputer Systems

Vendor	Acer America Corp.	Acma Computers, Inc.	Acma Computers, Inc.	Acma Computers, Inc.
Product	Acer 1200	Acma 286-16	Acma 286/12 Desktop System	Acma 386-25 Business System
Processor/Memory				
CPU/Clock Speed (MHz)	I486/25	80286/16	80286/12	80386/25
Co-Processor Options	Weitek 4167	80287	80287	80387
Standard RAM (bytes)/Speed (ns)	4.0M/80	1.0M/80	1.0M/100	4.0M/5
RAM Expansion Capacity (bytes)	64M	8.0M	8.0M	16.0M
Maximum System RAM (bytes)	64M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 128K/35	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	EISA	AT	AT	AT/separate memory bus
Bus Speed (MHz)	Vendor did not specify	8	8	12.5, 8.33; 8
Total Expansion Slots	6 32-bit	3 8-bit, 5 16-bit	3 8-bit, 5 16-bit	2 8-bit, 5 16-bit, 2 32-bit
Available Expansion Slots	4 32-bit	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	1 8-bit, 3 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Mouse	Vendor did not specify	None	None
Other I/O Interfaces	Vendor did not specify	101-key keyboard port	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	5 half-height	3 half-height, 1 third-height	3 half-height, 1 third-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	Vendor did not specify	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	40M/28	20M/40	60M/28
Optional Mass Storage	170M, 380M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.3 x 20.9 x 16.5	6.0 x 17.0 x 16.0	6 x 17 x 16	6 x 20 x 16
Weight (pounds)	22.00	45.00	45.00	47.00
AC Power Supply (watts)	230	200	200	Vendor did not specify
Software				
Operating System(s) Bundled	MS-DOS	None	None	None
Operating System(s) Supported	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.
Additional Software Included	BIOS, setup, windows, util./diagn., Basic	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	2 years	2 years	2 years
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site	Toll free, 30-day money back	Toll free, 30-day money back	Toll free
Base Price ($)	10,995	1,785	1,610	2,785

550-**308**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Acma Computers, Inc.	Acma Computers, Inc.	Acma Computers, Inc.	Acma Computers, Inc.
Product	Acma 386/20 Professional System	Acma 386/25 Cache	Acma 386/33	Acma 386SX
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	80386/33	80386sx/16
Co-Processor Options	80387, 80287	80387	80387	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/80	1.0M/60	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	Vendor did not specify	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Chips & Tech., 64K/25	64K/25	Not supported
Input/Output				
Bus Architecture	AT/separate memory bus	AT/separate memory bus	Vendor did not specify	Vendor did not specify
Bus Speed (MHz)	10	12.5, 8.33; 8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 5 16-bit, 2 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 1 32-bit	1 8-bit, 3 16-bit, 1 32-bit	1 8-bit, 3 16-bit, 1 32-bit	1 8-bit, 4 16-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	3 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	60M/28	60M/28	60M/28	40M/28
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 120M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6 x 20 x 16	6 x 20 x 16	6 x 20 x 16	X 17 x 16
Weight (pounds)	47.00	47.00	47.00	45.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	2 years	2 years	2 years	2 years
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back
Base Price ($)	2,485	3,085	4,285	1,885

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**309**
Microcomputer Systems

Vendor	Acma Computers, Inc.	Advanced Digital Corp.	Advanced Digital Corp.	Advanced Logic Research, Inc.
Product	Acma Diskless Workstation	Powerlite System 386SX 100	Powerlite System 486 100	MicroFlex 3300 Model 120
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386sx/16	I486/25	80386/33
Co-Processor Options	80287	80387SX	None	80387
Standard RAM (bytes)/Speed (ns)	640K/100	1.0M/80	4.0M/80	2.0M/60
RAM Expansion Capacity (bytes)	8.0M	5M	16.0M	Vendor did not specify
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	64M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Proprietary	Vendor did not specify	Intel, 128K/25
Input/Output				
Bus Architecture	AT	AT	AT	MCA
Bus Speed (MHz)	8	12.5	12.5	10
Total Expansion Slots	2 8-bit, 3 16-bit	4 16-bit	4 16-bit	4 16-bit, 2 32-bit
Available Expansion Slots	0 8-bit, 3 16-bit	3 16-bit	3 16-bit	Vendor did not specify
Serial Ports	2 on adapter	2 on main board	2 on main board	1 on main board
Parallel Ports	2 on adapter	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	101-key keyboard port	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	2 third-height	Vendor did not specify	Vendor did not specify	Vendor did not specify
Diskette Drives Included (bytes)	None	Vendor did not specify	Vendor did not specify	1 1.44M
Diskette Drive Options (bytes)	720K, 1.44M	Vendor did not specify	Vendor did not specify	1.44M
Hard Disk Interface	ST506/412, AT/IDE; ESDI	None	SCSI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None/28	Vendor did not specify	Vendor did not specify	120M
Optional Mass Storage	20M, 30M, 40M, 50M, 60M	40M, 100M	40M, 100M, 20M, 1G	70M, 120M, 150M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/10	101/10	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/, 720 x 350	Integrated on system board/640 x 480	Integrated on system board/640 x 480	On included adapter/640 x 480
Display	Included, 12-inch, digital monochrome	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	ARCnet	Ethernet, ARCnet	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	2.5 x 16 x 16	4 x 13 x 15	4 x 13 x 15	6 x 17.6 x 15
Weight (pounds)	Vendor did not specify	12.00	12.00	50.00
AC Power Supply (watts)	190	80	80	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Util./diagn.	BIOS, diagnostics, util./diagn.	BIOS, diagnostics, util./diagn.	BIOS, setup
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	2 years	1 year	1 year	1 year
Service Supported by	Vendor	Vendor, third party	Vendor, third party	Vendor
Service Features	Toll free, 30-day money back	On site, toll free	On site, toll free	On site
Base Price ($)	1,060	1,575	6,195	7,990

550-310
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Advanced Logic Research, Inc.	Advanced Logic Research, Inc.	Advanced Logic Research, Inc.	Advanced Logic Research, Inc.
Product	MicroFlex 3300 Model 150	MicroFlex 3300 Model 340H	MicroFlex 3300 Model 650H	MicroFlex 3300 Model 70
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/33	80386/33	80386/33
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	2.0M/60	2.0M/60	2.0M/60	2.0M/60
RAM Expansion Capacity (bytes)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Maximum System RAM (bytes)	64M	64M	64M	64M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 128K/25	Intel, 128K/25	Intel, 128K/25	Intel, 128K/25
Input/Output				
Bus Architecture	MCA	MCA	MCA	MCA
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	4 16-bit, 2 32-bit	4 16-bit, 2 32-bit	4 16-bit, 2 32-bit	4 16-bit, 2 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Mouse	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.44M	1.44M	1.44M	1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	150M	340M	650M	70M
Optional Mass Storage	70M, 120M, 150M	340M, 650M	340M, 650M	70M, 120M, 150M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	23 x 7.4 x 17.5	23 x 7.4 x 17.5	23 x 7.4 x 17.5	6 x 17.6 x 15
Weight (pounds)	80.00	80.00	80.00	50.00
AC Power Supply (watts)	300	300	300	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup	BIOS, setup	BIOS, setup	BIOS, setup
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site	On site	On site	On site
Base Price ($)	8,990	10,990	12,990	5,795

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**311**
Microcomputer Systems

Vendor	Amdek Corp.	Amdek Corp.	American Mitac Corp.	American Mitac Corp.
Product	AM/212-01	AM/212-40	MPC2386	MPC2386-003
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80286/12	80386SX/16	80386SX/16
Co-Processor Options	80287	80287	None	None
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	4.0M	4.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	MCA
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	10	10
Total Expansion Slots	3 8-bit, 4 16-bit	3 8-bit, 4 16-bit	1 8-bit, 5 16-bit	6 16-bit
Available Expansion Slots	3 8-bit, 4 16-bit	3 8-bit, 4 16-bit	Vendor did not specify	Vendor did not specify
Serial Ports	1 on adapter	1 on adapter	2 on main board	1 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	None	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	4 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.22M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	1.44M	1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	40M	None	None
Optional Mass Storage	40M	40M	20M, 40M, 100M	20M, 40M, 100M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	6.4 x 17.3 x 16.4	6.4 x 17.3 x 16.4	6.20 x 14.08 x 16.50	6.20 x 14.08 x 16.50
Weight (pounds)	33.00	33.00	25.00	Vendor did not specify
AC Power Supply (watts)	200	200	145	145
Software				
Operating System(s) Bundled	None	None	MS-DOS	MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	BIOS, util./diagn., Basic	BIOS, util./diagn., Basic	Vendor did not specify	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	Vendor did not specify	Vendor did not specify	2,495	2,695

550-312
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	American Mitac Corp.	American Mitac Corp.	American Mitac Corp.	American Mitac Corp.
Product	MPC2400V	MPC2400VE	MPC3400E-1A	MPC4000E
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80286/16	80386/20	80386/20
Co-Processor Options	80287	80287	80387	None
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	8.0M	16.0M	24M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Intel, 32K/30
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit	1 8-bit, 4 16-bit	7 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	1 8-bit, 5 16-bit	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	Mouse, 101-key keyboard port, ext. video	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 half-height, 2 third-height	1 half-height, 1 third-height	2 half-height, 2 third-height	6 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.44M	1.2M, 1.44M	1.44M	1.44M
Hard Disk Interface	AT/IDE	None	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	Vendor did not specify	None	None
Optional Mass Storage	20M, 40M, 100M	40M, 100M	20M, 40M, 100M	20M, 40M, 100M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Not available	From manufacturer	Not available	Not available
Dimensions (H x W x D, inches)	6.20 x 14.08 x 16.50	6.2 x 14.8 x 16.6	6.20 x 14.08 x 16.50	19.00 x 9.00 x 16.50
Weight (pounds)	25.00	25.00	25.00	45.00
AC Power Supply (watts)	145	145	145	220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, MS-DOS, UNIX derivative, C-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	Util./diagn.	BIOS	None	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	Vendor did not specify	On site, toll free	Vendor did not specify	Vendor did not specify
Base Price ($)	1,195	2,295	3,350	3,995

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**313**

Microcomputer Systems

Vendor	American Mitac Corp.	American Mitac Corp.	American Mitac Corp.	Amstrad, Inc.
Product	**MPC4000F**	**MPC4000G**	**MPS3000F**	**PC1640**
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/33	80386/25	8086/8
Co-Processor Options	None	80387	80387	8087
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M	1.0M	640K/150
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	640K
Maximum System RAM (bytes)	24M	24M	16.0M	640K
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/25	Intel, 128K/20	Intel, 32K/30	Not supported
Input/Output				
Bus Architecture	Vendor did not specify	AT	MCA	XT
Bus Speed (MHz)	10	Vendor did not specify	Vendor did not specify	8
Total Expansion Slots	7 16-bit, 1 32-bit	7 16-bit, 1 32-bit	4 16-bit, 2 32-bit	4 8-bit
Available Expansion Slots	Vendor did not specify	7 16-bit, 1 32-bit	4 16-bit, 2 32-bit	Vendor did not specify
Serial Ports	2 on main board	2 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	Mouse, 101-key keyboard port	Mouse, joystick
Mass Storage				
Internal Drive Bays Available	6 half-height	1 half-height	1 third-height	2 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 720M; 1 1.44M	2 360K
Diskette Drive Options (bytes)	Vendor did not specify	1.2M	1.2M	Vendor did not specify
Hard Disk Interface	AT/IDE	None	None	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	None	None	None	20M/60
Optional Mass Storage	20M, 40M, 100M	40M, 100M	40M, 100M	20M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	84/10
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Vendor did not specify
Display	Optional	Optional	Optional	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Token-ring	Token-ring	Vendor did not specify
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	Not available	From manufacturer	From manufacturer	Vendor did not specify
Dimensions (H x W x D, inches)	19.00 x 9.00 x 16.50	17 x 9 x 18	Vendor did not specify	5.30 x 14.60 x 15.10
Weight (pounds)	45.00	42.00	Vendor did not specify	20.00
AC Power Supply (watts)	220	200	145	264
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative, C-DOS	Vendor did not specify
Additional Software Included	None	BIOS	BIOS	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	90 days
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor did not specify
Service Features	Vendor did not specify	On site, toll free	On site, toll free	Toll free
Base Price ($)	5,195	5,995	4,995	899

550-314
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Amstrad, Inc.	Amstrad, Inc.	Amstrad, Inc.	Amstrad, Inc.
Product	PC20	PC2086	PC2286	PC2386
Processor/Memory				
CPU/Clock Speed (MHz)	8086/8	8086/8	80286/12	80386/20
Co-Processor Options	8087	8087	80287	80387
Standard RAM (bytes)/Speed (ns)	512K/150	640K/65	1.0M	4.0M/40
RAM Expansion Capacity (bytes)	640K	640K	4.0M	16.0M
Maximum System RAM (bytes)	640K	640K	4.0M	Vendor did not specify
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	XT	AT	AT
Bus Speed (MHz)	4.77	8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit	3 8-bit	5 16-bit	4 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	4 16-bit	1 8-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Vendor did not specify	Mouse	Vendor did not specify	Mouse
Mass Storage				
Internal Drive Bays Available	2 half-height	Vendor did not specify	1 full-height	1 full-height, 1 half-height
Diskette Drives Included (bytes)	1 720K	1 720M	2 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 720K	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Interface	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	30M/150	30M/65	40M/65	65/40
Optional Mass Storage	20M	Vendor did not specify	40M	Vendor did not specify
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/320 x 200	Vendor did not specify	Vendor did not specify	Vendor did not specify
Display	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	17.75 x 13.25 x 11.90	5.50 x 14.40 x 15.60	6.30 x 16.40 x 19.10	6.30 x 16.40 x 19.10
Weight (pounds)	12.00	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	180	180	180	180
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	Vendor did not specify	Vendor did not specify	Vendor did not specify
Additional Software Included	Gem	Vendor did not specify	Windows	Windows
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD	VAR/VAD	Vendor did not specify
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	90 days	1 year	1 year	1 year
Service Supported by	Vendor did not specify	Vendor did not specify	Vendor, authorized dealers	Vendor did not specify
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	Vendor did not specify	Vendor did not specify	2,000	6,000

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**315**
Microcomputer Systems

Vendor	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.
Product	Macintosh II	Macintosh II Hard Disk 40	Macintosh II Hard Disk 80	Macintosh IIci
Processor/Memory				
CPU/Clock Speed (MHz)	68020/15.7	68020/15.7	68020/15.7	68030/25
Co-Processor Options	68881	68881	68881	68882
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	4.0M	1.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Optional PMMU	Optional PMMU	Optional PMMU	Proprietary
Input/Output				
Bus Architecture	NuBus	NuBus	NuBus	NuBus
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	6 32-bit	6 32-bit	6 32-bit	3 32-bit
Available Expansion Slots	6 32-bit	6 32-bit	6 32-bit	3 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	None	None	None	None
Other I/O Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	SCSI, audio	SCSI, audio	SCSI, audio	Ext. diskette drive, audio (AppleTalk), Apple Desktop Bus
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	Vendor did not specify	Vendor did not specify	1 third-height
Diskette Drives Included (bytes)	1 800K (3.5-inch)	1 800K (3.5-inch)	1 800K (3.5-inch)	1 1.44M
Diskette Drive Options (bytes)	Vendor did not specify	Vendor did not specify	Vendor did not specify	1.4M
Hard Disk Interface	SCSI	SCSI	SCSI	SCSI
Hard Disk Size (bytes)/AAT (ms)	None/65 - 20	40M/65 - 20	80M/65 - 20	None
Optional Mass Storage	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160, tape drive, CD-ROM
Keyboard				
Availability	Optional	Optional	Optional	Optional
Number of Keys/Function Keys	Vendor did not specify	Vendor did not specify	Vendor did not specify	Optional
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	EtherTalk, TokenTalk, AppleTalk, IBM SNA
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Through VARs	Through VARs	Through VARs	Through VARs
Dimensions (H x W x D, inches)	5.51 x 18.66 x 14.37	5.51 x 18.66 x 14.37	5.51 x 18.66 x 14.37	5.5 x 11.9 x 14.4
Weight (pounds)	24.00	26.00	24.00	14.00
AC Power Supply (watts)	250	250	250	90
Software				
Operating System(s) Bundled	Apple System/Finder	Apple System/Finder	Apple System/Finder	Apple System/Finder
Operating System(s) Supported	Vendor did not specify	Vendor did not specify	Vendor did not specify	A/UX
Additional Software Included	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	90 days	90 days	90 days	90 days
Labor Warranty	90 days	90 days	90 days	90 days
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	4,869/available for GSA	6,169/available for GSA	8,069/available for GSA	6,269

550-316
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.
Product	Macintosh IIci 1/40	Macintosh IIci 4/80	Macintosh IIci 4/80/AUX	Macintosh IIcx
Processor/Memory				
CPU/Clock Speed (MHz)	68030/25	68030/25	68030/25	68030/15.667
Co-Processor Options	68882	68882	68882	68882
Standard RAM (bytes)/Speed (ns)	1.0M/80	4.0M/80	4.0M/80	1.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	32
RAM Cache, Size (bytes)/Speed (ns)	Proprietary	Proprietary	Proprietary	Not supported
Input/Output				
Bus Architecture	NuBus	NuBus	NuBus	NuBus
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	3 32-bit	3 32-bit	3 32-bit	3 32-bit
Available Expansion Slots	3 32-bit	3 32-bit	3 32-bit	3 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	None	None	None	None
Other I/O Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	Mouse	Ext. diskette drive, audio, network interface (AppleTalk), Apple Desktop Bus	Ext. diskette drive, audio, network interface (AppleTalk), Apple Desktop Bus	SCSI, ext. diskette drive, audio, ADB
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.4M	1.4M	1.4M	1.4M
Hard Disk Interface	SCSI	SCSI	SCSI	SCSI
Hard Disk Size (bytes)/AAT (ms)	40M	80M	80M	None
Optional Mass Storage	20M, 40M, 80M, 160, tape drive, CD-ROM	20M, 40M, 80M, 160, tape drive, CD-ROM	20M, 40M, 80M, 160, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM
Keyboard				
Availability	Optional	Optional	Optional	Optional
Number of Keys/Function Keys	Optional	Optional	Optional	Optional
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	EtherTalk, TokenTalk, AppleTalk, IBM SNA	EtherTalk, TokenTalk, AppleTalk, IBM SNA	EtherTalk, TokenTalk, AppleTalk, IBM SNA	Ethernet, Token-ring, AppleTalk
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Through VARs	Through VARs	Through VARs	Through VARs
Dimensions (H x W x D, inches)	5.5 x 11.9 x 14.4	5.5 x 11.9 x 14.4	5.5 x 11.9 x 14.4	5.50 x 11.90 x 14.40
Weight (pounds)	14.00	14.00	14.00	14.00
AC Power Supply (watts)	90	90	90	90
Software				
Operating System(s) Bundled	Apple System/Finder	Apple System/Finder	A/UX	Apple System/Finder
Operating System(s) Supported	A/UX	A/UX	Apple System/Finder	A/UX
Additional Software Included	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., Hyper Card	Util./diagn., HyperCard
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	Vendor did not specify	90 days	Vendor did not specify	90 days
Labor Warranty	Vendor did not specify	90 days	Vendor did not specify	90 days
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	6,969	8,669	9,152	4,669/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**317**
Microcomputer Systems

Vendor	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.
Product	Macintosh IIcx 1/40	Macintosh IIcx 4/80	Macintosh IIx	Macintosh IIx Hard Disk 80
Processor/Memory				
CPU/Clock Speed (MHz)	68030/15.667	68030/15.667	68030/15.667	68030/15.667
Co-Processor Options	68882	68882	68882	68882
Standard RAM (bytes)/Speed (ns)	1.0M	4.0M	1.0M	4.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	32	32	128M	128M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Varies	Varies
Input/Output				
Bus Architecture	NuBus	NuBus	NuBus	NuBus
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	3 32-bit	3 32-bit	6 32-bit	6 32-bit
Available Expansion Slots	3 32-bit	3 32-bit	6 32-bit	6 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	None	None	None	None
Other I/O Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	SCSI, ext. diskette drive, audio, ADB	SCSI, ext. diskette drive, audio, ADB	SCSI, audio, ADB	SCSI, audio, ADB
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.4M, 800K	1.4M, 800K	1.4M	1.4M
Hard Disk Interface	SCSI	SCSI	SCSI	SCSI
Hard Disk Size (bytes)/AAT (ms)	40M	80M	None/optional	80M
Optional Mass Storage	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM
Keyboard				
Availability	Optional	Optional	Optional	Optional
Number of Keys/Function Keys	Optional	Optional	Varies	Varies
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk, IBM SNA, remote systems	Ethernet, Token-ring, AppleTalk, IBM SNA, remote systems
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Through VARs	Through VARs	Through VARs	Through VARs
Dimensions (H x W x D, inches)	5.50 x 11.90 x 14.40	5.50 x 11.90 x 14.40	5.51 x 18.66 x 14.37	5.51 x 18.66 x 14.37
Weight (pounds)	14.00	14.00	24.00	26.00
AC Power Supply (watts)	90	90	230	230
Software				
Operating System(s) Bundled	Apple System/Finder	Apple System/Finder	Apple System/Finder	Apple System/Finder
Operating System(s) Supported	A/UX	A/UX	A/UX	A/UX
Additional Software Included	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	90 days	90 days	90 days	90 days
Labor Warranty	90 days	90 days	90 days	90 days
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	5,369/available for GSA	7,069/available for GSA	5,269/available for GSA	7,669/available for GSA

550-318

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.
Product	**Macintosh Plus**	**Macintosh SE**	**Macintosh SE Hard Disk 20**	**Macintosh SE Hard Disk 40**
Processor/Memory				
CPU/Clock Speed (MHz)	68000/7.83	68000/7.83	68000/7.83	68000/7.83
Co-Processor Options	None	None	None	None
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M	2.0M
RAM Expansion Capacity (bytes)	4.0M	4.0M	4.0M	4.0M
Maximum System RAM (bytes)	4.0M	4.0M	4.0M	4.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	Proprietary	Macintosh SE	Macintosh SE	Macintosh SE
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	None	1 16-bit, 32-bit	1 16-bit	1 16-bit
Available Expansion Slots	Vendor did not specify	1 16-bit, 32-bit	1 16-bit	1 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	None	None	None	None
Other I/O Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	Mouse, SCSI, ext. diskette drive, audio	SCSI, ext. diskette drive, audio, ADB	SCSI, ext. diskette drive, audio, ADB	SCSI, ext. diskette drive, audio, ADB
Mass Storage				
Internal Drive Bays Available	None	None	None	None
Diskette Drives Included (bytes)	1 800K (3.5-inch)	2 800K (3.5-inch)	1 800K	2 800K (3.5-inch)
Diskette Drive Options (bytes)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Interface	SCSI	SCSI	SCSI	SCSI
Hard Disk Size (bytes)/AAT (ms)	None	None	20M	40M
Optional Mass Storage	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Optional	Optional	Optional
Number of Keys/Function Keys	78/0	Vendor did not specify	Vendor did not specify	Vendor did not specify
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/512 x 342	Integrated on system board/, 512 x 342	Integrated on system board/512 x 342	Integrated on system board/512 x 342
Display	Included, 9-inch	Included, 9-inch	Included, 9-inch	Included, 9-inch
Local Area Network Support				
Vendor LAN Options	AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	Through VARs	Through VARs	Through VARs
Dimensions (H x W x D, inches)	13.50 x 9.70 x 10.90	13.60 x 9.60 x 10.90	13.60 x 9.60 x 10.90	13.60 x 9.60 x 10.90
Weight (pounds)	16.00	17.00	21.00	17.00
AC Power Supply (watts)	60	100	100	100
Software				
Operating System(s) Bundled	Apple System/Finder	Apple System/Finder	Apple System/Finder	Apple System/Finder
Operating System(s) Supported	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Additional Software Included	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	90 days	90 days	90 days	90 days
Labor Warranty	90 days	90 days	90 days	90 days
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	1,799/available for GSA	2,869/available for GSA	3,469/available for GSA	4,069/available for GSA

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**319**
Microcomputer Systems

Vendor	Apple Computer, Inc.	Apple Computer, Inc.	Apple Computer, Inc.	Arche Technologies, Inc.
Product	Macintosh SE/30	Macintosh SE/30 Hard Disk 40	Macintosh SE/30 Hard Disk 80	Legacy 386-33
Processor/Memory				
CPU/Clock Speed (MHz)	68030/15.667	68030/15.667	68030/15.667	80386/33, keyboard selectable
Co-Processor Options	68882	68882	68882	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/120	1.0M	4.0M/120	1.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	128M	128M	128M	32M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Proprietary, 128K/25
Input/Output				
Bus Architecture	Macintosh SE/30	Macintosh SE/30	Macintosh SE/30	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	8, 11, Selectable
Total Expansion Slots	1 32-bit	1 32-bit	1 32-bit	6 16-bit, 2 32-bit
Available Expansion Slots	1 32-bit	1 32-bit	1 32-bit	4 16-bit, 2 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	None	None	None	1 on main board; 1 on adapter
Other I/O Devices Included	Mouse	Mouse	Mouse	None
Other I/O Interfaces	SCSI, ext. diskette drive, audio, ADB	SCSI, ext. diskette drive, audio, ADB	SCSI, ext. diskette drive, audio, ADB	None
Mass Storage				
Internal Drive Bays Available	1 half-height	1 half-height	1 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	1.4M, 800K	Vendor did not specify	1.4M, 800K	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	SCSI	SCSI	SCSI	ST506/412, AT/IDE, ESDI
Hard Disk Size (bytes)/AAT (ms)	None	40M	80M	18, 28, 65
Optional Mass Storage	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 160M, tape drive, CD-ROM	20M, 40M, 80M, 120M, tape drive
Keyboard				
Availability	Optional	Optional	Optional	Included (detachable)
Number of Keys/Function Keys	Optional	Vendor did not specify	Optional	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/512 x 342	Integrated on system board/512 x 342	Integrated on system board/512 x 342	On included adapter/720 X 348
Display	Included, 9-inch	Included, 9-inch	Included, 9-inch	Included, 14-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, Token-ring, AppleTalk	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Through VARs	Through VARs	Through VARs	Vendor did not specify
Dimensions (H x W x D, inches)	13.60 x 9.60 x 10.90	13.60 x 9.60 x 10.90	13.60 x 9.60 x 10.90	6.25 x 21 x 16.25
Weight (pounds)	21.00	21.00	21.00	30.00
AC Power Supply (watts)	75	75	75	275
Software				
Operating System(s) Bundled	Apple System/Finder	Apple System/Finder	Apple System/Finder	None
Operating System(s) Supported	Vendor did not specify	Vendor did not specify	Vendor did not specify	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	Util./diagn., HyperCard	Util./diagn., HyperCard	Util./diagn., HyperCard	BIOS, setup, diagnostics, FastLane Disk Cache
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD
Parts Warranty	90 days	90 days	90 days	2 years
Labor Warranty	90 days	90 days	90 days	2 years
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Vendor, authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Toll free
Base Price ($)	4,369/available for GSA	4,869/available for GSA	6,569/available for GSA	5,995/available for GSA

550-320

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Arche Technologies, Inc.	Arche Technologies, Inc.	Arche Technologies, Inc.	Arche Technologies, Inc.
Product	Legacy 486	Pro-File 386-25	Pro-File 386-33	Pro-File 386SX
Processor/Memory				
CPU/Clock Speed (MHz)	I486/25	80386/25	80386/338	80386sx/16
Co-Processor Options	On chip	80387	80387,Weitek 3167	80387SX
Standard RAM (bytes)/Speed (ns)	4.0M/80	1.0M/80	1.0M/80	1.0M/100
RAM Expansion Capacity (bytes)	16.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	64M	16.0M	32M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 256K/25	Not supported	Proprietary, 128/25	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5	8	8	8
Total Expansion Slots	6 16-bit, 2 32-bit	7 16-bit	6 16-bit, 2 32-bit	3 8-bit, 5 16-bit
Available Expansion Slots	4 16-bit, 2 32-bit	5 16-bit	4 16-bit, 2 32-bit	2 8-bit, 4 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board; 1 on adapter	1 on main board; 1 on adapter	1 on main board; 1 on adapter	1 on main board; 1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Vendor did not specify	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	1 full-height, 5 half-height, 2 third-height	1 full-height, 5 half-height, 2 third-height	1 full-height, 5 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	18, 28, 65	18, 28, 65	18, 28, 65	18, 28, 65
Optional Mass Storage	20M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 X 348	On included adapter/720	On included adapter/720 X 348	On included adapter/720 X 368
Display	Included, 14-inch, digital mono	Included, 14-inch, digital monochrome	Digital monochrome	Included, 14-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Floorstanding	Floorstanding	Desktop
Tempest Version	Not available	Not available	Not available	Vendor did not specify
Dimensions (H x W x D, inches)	6.35 x 21 x 16.25	19.5 x 5.5 x 24	19.5 x 5.5 x 24	19.5 x 5.5 x 243
Weight (pounds)	30.00	52.00	52.00	52.00
AC Power Supply (watts)	275	275	275	275
Software				
Operating System(s) Bundled	Vendor did not specify	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	2 years	2 years	2 years	2 years
Labor Warranty	2 years	2 years	2 years	2 years
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	To be announced	2,995/available for GSA	6,395/available for GSA	2,395/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**321**
Microcomputer Systems

Vendor	Arche Technologies, Inc.	Arche Technologies, Inc.	Arche Technologies, Inc.	Arche Technologies, Inc.
Product	Pro-File 486	Rival 286 Plus	Rival 386-25	Rival 386-33
Processor/Memory				
CPU/Clock Speed (MHz)	I486/33	80286/12	80386/25	80386/338
Co-Processor Options	None	80287	80387	8087, Weitek 3167
Standard RAM (bytes)/Speed (ns)	4.0M/80	640K/100	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	4.0M	8.0M	8.0M
Maximum System RAM (bytes)	64M	16.0M	16.0M	16M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 256K/25	Not supported	Not supported	Proprietary, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5, selectable	8	8	8, 11, selectable
Total Expansion Slots	6 16-bit, 2 32-bit	2 8-bit, 6 16-bit	8-bit, 7 16-bit	6 16-bit, 2 32-bit
Available Expansion Slots	4 16-bit, 2 32-bit	1 8-bit, 5 16-bit	8-bit, 5 16-bit	4 16-bit, 2 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board; 1 on adapter	1 on main board; 1 on adapter	1 on main board; 1 on adapter	1 on main board; 1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 5 half-height, 2 third-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, EDI
Hard Disk Size (bytes)/AAT (ms)	18, 28, 65	18, 28, 65	18, 28, 65	18, 28
Optional Mass Storage	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 X 348	On included adapter/720 X 368	On included adapter/720 X 365	On included adapter/720 X 348
Display	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	19.5 x 5.5 x 24	6.18 x 17.13 x 16.5	6.18 x 17.13 x 16.5	6.18 x 17.13 x 16.5
Weight (pounds)	52.00	28.00	28.00	28.00
AC Power Supply (watts)	275	200	200	200
Software				
Operating System(s) Bundled	None	None	None	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative
Additional Software Included	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	2 years	2 years	2 years	2 years
Labor Warranty	2 years	2 years	2 years	2 years
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	To be announced/avail. for GSA	1,595/available for GSA	2,595/available for GSA	4,995/available for GSA

550-322
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Arche Technologies, Inc.	Arche Technologies, Inc.	Arche Technologies, Inc.	Area Electronics Systems, Inc.
Product	Rival 386SX	Triumph 280 Plus	Triumph 88 Plus	Topline 286-12
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80286/12	NEC V-20/10	80286/12
Co-Processor Options	80387SX	80287	8087	80287
Standard RAM (bytes)/Speed (ns)	1.0M/100	512K/100	512K/100	512K/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	640K	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	4.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	XT	AT
Bus Speed (MHz)	8	8	4.77	8
Total Expansion Slots	3 8-bit, 5 16-bit	2 8-bit, 3 16-bit	5 8-bit	2 8-bit, 6 16-bit
Available Expansion Slots	2 8-bit, 4 16-bit	2 8-bit, 2 16-bit	4 8-bit	2 8-bit, 6 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board; 1 on adapter	1 on main board; 1 on adapter	1 on main board	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 half-height	2 half-height, 2 third-height	2 half-height, 2 third-height	1 full-height, 1 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412, AT/IDE, ESDI	ST506/412, AT/IDE, ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	18, 28, 65	18, 28, 65	18, 28, 65	40M/28
Optional Mass Storage	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	20M, 40M, 80M, 120M, tape drive	30M, 40M, 60M, 70M, 100M, 150M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 X 368	On included adapter/720 X 368	On included adapter/, 720 X 368	On included adapter/Hercules compatible
Display	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome	Included, 12-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	6.18 x 17.13 x 16.5	3.18 x 17.13 x 15.63	3.88 x 16.13 x 15.63	6.1 x 17.1 x 16.5
Weight (pounds)	28.00	Vendor did not specify	Vendor did not specify	35.00
AC Power Supply (watts)	200	150	150	200
Software				
Operating System(s) Bundled	Enhanced MS-DOS, MS-DOS, vendor MS-OS/2, UNIX, UNIX derivative	None	None	MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	BIOS, setup, diagnostics, FastLane Disk Cache	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	2 years	2 years	2 years	1 year
Labor Warranty	2 years	2 years	2 years	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers, third party
Service Features	Toll free	Toll free	Toll free	On site, toll free, 30-day money back
Base Price ($)	1,995/available for GSA	1,395/available for GSA	To be announced	900

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**323**
Microcomputer Systems

Vendor	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.
Product	Topline 286-16	Topline 286.ALL.12	Topline 286.ALL.16	Topline 386.20
Processor/Memory				
CPU/Clock Speed (MHz)	80286/16	80286/12	80286/16	80386/20
Co-Processor Options	80287	80287	80287	80387, Weitek 1167, Weitek 3167
Standard RAM (bytes)/Speed (ns)	512K/80	512K/100	512K/100	1.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	Vendor did not specify	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on main board	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Game	Game	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 1 half-height	1 full-height, 1 half-height	1 full-height, 1 half-height	5 full-height, 6 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	Vendor did not specify
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	1.2M
Hard Disk Interface	ST506/412	AT/IDE	AT/IDE	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None/28	40M/28	40M/28	40M/28
Optional Mass Storage	40M, 60M, 70M, 100M, 150M	40M, 60M, 70M, 80M	30M, 40M, 60M, 70M, 80M	40M, 60M, 70M, 100M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/ Hercules compatible	On included adapter/ Hercules compatible	On included adapter/800 x 600
Display	Included, 14-inch, analog color	Included, 14-inch, digital monochrome	Included, 14-inch, digital monochrome	Included, 14-inch, multifrequency
Local Area Network Support				
Vendor LAN Options	None	None	None	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.1 x 17.1 x 16.5	6.1 x 17.1 x 16.5	6.1 x 17.1 x 16.5	6.1 x 17.1 x 16.5
Weight (pounds)	35.00	35.00	35.00	Vendor did not specify
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,600	900	850	3,000

MAY 1990

550-**324**

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.	Area Electronics Systems, Inc.
Product	Topline 386.25	Topline 386.25C	Topline 386.33C	Topline 386E
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/33	80386/33
Co-Processor Options	80387, Weitek 1167, Weitek 3167	80387, Weitek 1167, Weitek 3167	80387	80387, Weitek 1167, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/100	4.0M/80	4.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel, 32K/30	Intel, 32K/30	Intel, 64K/25
Input/Output				
Bus Architecture	AT	Vendor did not specify	AT	EISA
Bus Speed (MHz)	8	8	8	12.5
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	2 8-bit, 5 16-bit, 1 32-bit	Vendor did not specify	2 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	Vendor did not specify	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	Mouse	Mouse	Mouse
Other I/O Interfaces	None	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	3 full-height, 6 half-height	3 full-height, 6 half-height	3 full-height, 6 half-height	2 full-height, 4 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	None
Hard Disk Size (bytes)/AAT (ms)	40M/28	70M/28	150M/28	None
Optional Mass Storage	40M, 60M, 70M, 100M, 150M, 300M, tape drive	40M, 60M, 70M, 100M, 150M, 300M, tape drive	40M, 60M, 70M, 100M, 150M, 300M, tape drive	40M, 70M, 80M, 100M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12, 2	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	On included adapter/1,024 x 768	Adapter optional/1,024 x 768	On included adapter/1,024 x 768
Display	Included, 14-inch, multifrequency	Included, 14-inch, multifrequency	Included, 14-inch, multifrequency	Included, 14-inch, multifrequency
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Floorstanding
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.1 x 17.1 x 16.5	6.1 x 17.1 x 16.5	21.2 x 7 x 16.9	21.2 x 7 x 16.9
Weight (pounds)	45.00	43.00	50.00	50.00
AC Power Supply (watts)	200	200	200	220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	None	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	3,500	3,500	4,000	5,000

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**325**
Microcomputer Systems

Vendor	Area Electronics Systems, Inc.	Ark Science Corp.	Ark Science Corp.	Ark Science Corp.
Product	Topline 386SX	286-12	386-24	MI-386-20
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80286/12	80386/25	80386/20
Co-Processor Options	80387SX	80287	80387, 80287	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	512K/100	1.0M/80	1.0M/100
RAM Expansion Capacity (bytes)	8.0M	4.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	8.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Chips & Tech., 64K/30
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8.33	Vendor did not specify	8	10, 8
Total Expansion Slots	2 8-bit, 6 16-bit	3 8-bit, 5 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 6 16-bit	3 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 2 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on main board	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on main board	1 on adapter
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 1 half-height	1 half-height	1 half-height	1 half-height
Diskette Drives Included (bytes)	None	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	40M/28	40M/28
Optional Mass Storage	40M, 60M, 70M, 100M, 150M, tape drive	None	None	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	Adapter optional	Adapter optional	Adapter optional
Display	Included, 14-inch, analog color	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Not available	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	6.1 x 17.1 x 16.5	16.875 x 7.50 x 15.75	16.875 x 7.50 x 15.75	24.25 x 7.375 x 16.50
Weight (pounds)	38.00	35.00	35.00	35.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	MS-DOS	Vendor did not specify	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor	Vendor	Vendor
Service Features	On site, toll free, 30-day money back	30-day money back	30-day money back	30-day money back
Base Price ($)	2,500	1,120	1,650	2,190

550-326
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Ark Science Corp.	AT&T	AT&T	AT&T
Product	XT-10	6286 WGS	6386/25 WGS CPU311	6386/25 WGS CPU313
Processor/Memory				
CPU/Clock Speed (MHz)	8088/10	80286/12	80386/25	80386/25
Co-Processor Options	8087	80287	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	640K/120	1.0M	4.0M	4.0M
RAM Expansion Capacity (bytes)	640K	8M	8.0M	8.0M
Maximum System RAM (bytes)	Vendor did not specify	16.0M	32M	32M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Not supported	Intel, 64K	Intel, 64K
Input/Output				
Bus Architecture	XT	AT	AT	AT
Bus Speed (MHz)	4.77	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	6 8-bit	3 8-bit, 5 16-bit	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 2 32-bit
Available Expansion Slots	4 8-bit	3 8-bit, 5 16-bit	1 8-bit, 3 16-bit, 2 32-bit	1 8-bit, 3 16-bit, 2 32-bit
Serial Ports	1 on adapter	1 on main board	2 on main board	2 on main board
Parallel Ports	1 on adapter	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Mouse	Mouse
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 half-height	3 half-height	1 full-height, 3 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 360K	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	ST506/412	None	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	20M/65	None	None	80M
Optional Mass Storage	None	20M, 40M, tape drive	300M, 135M, tape drive	300M, 135M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter	Adapter optional	On included adapter/800 x 600	On included adapter/800 x 600
Display	Included, 12-inch, analog monochrome	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5 x 19 x 16	5.50 x 14.00 x 15.40	6.5 x 21.25 x 18.5	6.5 x 21.25 x 18.5
Weight (pounds)	Vendor did not specify	26.00	42.00	42.00
AC Power Supply (watts)	150	135	Vendor did not specify	Vendor did not specify
Software				
Operating System(s) Bundled	MS-DOS	Vendor did not specify	None	None
Operating System(s) Supported	IBM PC-DOS, MS-DOS	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	None	None	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	30-day money back	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	700	2,095	6,695/available for GSA	8,495/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**327**
Microcomputer Systems

Vendor	AT&T	AT&T	AT&T	AT&T
Product	6386/25 WGS CPU314	6386/SX WGS CPU301	6386/SX WGS CPU302	6386/SX WGS CPU303
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386sx/16	80386sx/16	80386sx/16
Co-Processor Options	80387, Weitek 3167	80387SX	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	4.0M	2.0M	2.0M	2.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	32M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 2 32-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O·Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	2 half-height, 1 third-height	2 half-height, 1 third-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	ESDI	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	135M	None	40M	80M
Optional Mass Storage	300M, 135M, tape drive	40M, 80M, tape drive	40M, 80M, tape drive	40M, 80M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	Integrated on system board/800 x 600	Integrated on system board/800 x 600	Integrated on system board/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.5 x 21.25 x 18.5	6 x 14 x 15.75	6 x 14 x 15.75	6 x 14 x 15.75
Weight (pounds)	42.00	21.50	21.50	21.50
AC Power Supply (watts)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site, toll free	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	8,995/available for GSA	2,995/available for GSA	3,995/available for GSA	4,795/available for GSA

550-328
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	AT&T	AT&T	AT&T	AT&T
Product	6386E/33 WGS CPU324	6386E/33 WGS Model 5 Base System	6386E/33 WGS Model 5 Multiuser System	6386E/33 WGS Model 5 Server System
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/33	80386/33	80386/33
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	4.0M	4.0M	8M	8M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	40M	40M	40M	40M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K	Intel, 64K	Intel, 64K	Intel, 64K
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 7 16-bit, 2 32-bit	1 8-bit, 7 16-bit, 2 32-bit	1 8-bit, 7 16-bit, 2 32-bit	1 8-bit, 7 16-bit, 2 32-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 2 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board; 16 on adapter	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	Mouse	Mouse	Mouse
Other I/O Interfaces	None	None	None	Ntwrk adp incl Starlan
Mass Storage				
Internal Drive Bays Available	2 full-height, 4 half-height	2 full-height, 4 half-height	2 full-height, 4 half-height	2 full-height, 4 half-height
Diskette Drives Included (bytes)	None	1 1.44M	None	None
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	ESDI	SCSI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	135M/18	300M/18	135M/18	135M/18
Optional Mass Storage	300M, tape drive	300M, tape drive	300M, tape drive	300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	On included adapter/800 x 600	On included adapter/800 x 600	On included adapter/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	25.5 x 7.75 x 29.38	25.5 x 7.75 x 29.38	25.5 x 7.75 x 29.38	25.5 x 7.75 x 29.38
Weight (pounds)	80.00	80.00	80.00	80.00
AC Power Supply (watts)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Software				
Operating System(s) Bundled	None	UNIX	None	None
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site, toll free	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	12,095/available for GSA	17,400/available for GSA	21,875/available for GSA	22,225/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**329**
Microcomputer Systems

Vendor	AT&T	Atari Corp.	Atari Corp.	Atronics International, Inc.
Product	6386E/33 WGS CPU325	1040 STE	TT030/2	ATI-386SX-16
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	68000/8	68030/16	80386sx/16
Co-Processor Options	80387	None	68881, 68882	80287, 80387SX
Standard RAM (bytes)/Speed (ns)	4.0M	1.0M/120	2.0M/100	1.0M/70
RAM Expansion Capacity (bytes)	8.0M	1.0M	8.0M	4.0M
Maximum System RAM (bytes)	40M	4.0M	8.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K	Not supported	On chip, 512K/Brust fill	Not supported
Input/Output				
Bus Architecture	AT	Vendor did not specify	A24/D16 VME	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Async	8
Total Expansion Slots	1 8-bit, 7 16-bit, 2 32-bit	Vendor did not specify	8-bit, 1 16-bit	2 8-bit, 6 16-bit, 0 32-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	Vendor did not specify	8-bit, 1 16-bit	0 8-bit, 5 16-bit, 0 32-bit
Serial Ports	2 on main board	1 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Mouse	Mouse	Mouse	Vendor did not specify
Other I/O Interfaces	None	Mouse, ext. diskette drive, ext. video, ext. hard disk, audio, MIDI	Mouse, SCSI, ext. diskette drive, ext. video, ext. hard disk, audio, network interface (LocalTalk), MIDI	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 full-height, 4 half-height	1 half-height	2 half-height	5 half-height
Diskette Drives Included (bytes)	None	1 720K	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	720K	720K, 1.44M	1.44M
Hard Disk Interface	ESDI	ACSI	SCSI, ACSI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	300M/18	None/28	40M/28	40M/28
Optional Mass Storage	300M, tape drive	30M, 60M, CD-ROM	40M, 60M, 80M, 120M, CD-ROM	50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, WORM
Keyboard				
Availability	Included (detachable)	Included (fixed position)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	94/10	94/10	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	Integrated on system board/640 x 400	Integrated on system board/, 1280 X 960	On included adapter/320 x 200
Display	Optional	Optional	Optional	Included, 14-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	Starlan	None	Ethernet	Vendor did not specify
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Not available	Not available	Vendor did not specify
Dimensions (H x W x D, inches)	25.5 x 7.75 x 29.38	2.75 x 18.75 x 11.5	3.75 x 19.5 x 11.25	5.00 x 21.00 x 16.50
Weight (pounds)	80.00	9.50	15.00	Vendor did not specify
AC Power Supply (watts)	Vendor did not specify	60	60	220
Software				
Operating System(s) Bundled	None	TOS	TOS	Vendor did not specify
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, TOS	MS-DOS, UNIX, TOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Additional Software Included	BIOS, setup, util./diagn.	BIOS, operating system, comm., util./diagn., desk accessory	BIOS, operating system, comm., util./diagn., desk accessory	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail	Computer retail	VAR/VAD, direct from vendor
Parts Warranty	1 year	90 days	90 days	1 year
Labor Warranty	1 year	90 days	90 days	1 year
Service Supported by	Vendor, authorized dealers	Authorized dealers	Authorized dealers	Third party
Service Features	On site, toll free	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	15,095/available for GSA	899.95	2,999.95	2,485/available for GSA

550-330
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Austin Computer Systems	Austin Computer Systems	Austin Computer Systems	Austin Computer Systems
Product	Austin 286-12.5 Cache	Austin 286-16 Cache	Austin 386-20 Cache	Austin 386-33 Cache
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12.5	80286/16	80386/20	80386/33
Co-Processor Options	80287	80287, 80C287	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	4.0M	1.0M, 4.0M, 16.0M	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 32K/100	Proprietary, 8K/80	Proprietary, 64K/30	Intel, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	1 8-bit, 3 16-bit	8-bit, 5 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 3 16-bit	8-bit, 5 16-bit	1 8-bit, 5 16-bit,	1 8-bit, 4 16-bit, 0 32-bit
Serial Ports	2 on main board	2 on main board	2 on adapter	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 half-height, 1 third-height	3 half-height, 1 third-height	1 full-height, 3 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1,2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	40M/28	40M/28
Optional Mass Storage	70M, 100M, tape drive	70M, 100M, tape drive	70M, 100M, 150M, 300M, tape drive	70M, 100M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/800 x 600	Integrated on system board/800 x 600	On included adapter/800 x 600	On included adapter/800 x 600
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.5 x 16 x 16	6.5 x 16 x 16	6.5 x 21 x 18	6.5 x 21 x 18
Weight (pounds)	25.00	25.00	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,995	2,195	2,995	4,795

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**331**
Microcomputer Systems

Vendor	Austin Computer Systems	Austin Computer Systems	Blackship Computer Systems, Inc.	Broadax Systems, Inc.
Product	Austin 386-SX	Austin 486 Cache	Blackship 286-25 MHz	BSI 386 25 MHz System BSI 386-25
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	—/25	80286/25	80386/25
Co-Processor Options	80387SX	Integrated	80287	80387, 80287
Standard RAM (bytes)/Speed (ns)	1.0M/100	4.0M/60	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	1.0M	4.0M	4.0M	8.0M
Maximum System RAM (bytes)	16.0M	32M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Proprietary, 64K/25	Chips & Technologies	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	8-bit, 5 16-bit, 3 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 5 16-bit	8-bit, 3 16-bit, 2 32-bit	0 8-bit, 4 16-bit, 0 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	1 on adapter
Parallel Ports	1 on adapter	2 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	101-key keyboard port, ext. video, game port	101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	3 half-height, 1 third-height	1 full-height, 3 half-height	2 half-height, 1 third-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M	1
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.44M
Hard Disk Interface	AT/IDE	ESDI	ST506/412	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	40M/28	150M/18	40M/28	30M/, 25
Optional Mass Storage	70M, 100M, tape drive	40M, 70M, 100M, 300M, tape drive	40M, 70M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	On included adapter/800 x 600	On included adapter/text mode only	On included adapter
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch digital monochrome	Inch
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	From manufacturer
Dimensions (H x W x D, inches)	6.5 x 16 x 16	6.5 x 21 x 18	6.50 x 21.00 x 16.50	6.13 x 21.13 x 16.50
Weight (pounds)	25.00	Vendor did not specify	50.00	40.00
AC Power Supply (watts)	200	220	220	200
Software				
Operating System(s) Bundled	None	None	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	None
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Direct from vendor	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	90 days
Service Supported by	Third party	Third party	Vendor	Vendor
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	Vendor did not specify	Vendor did not specify
Base Price ($)	2,495	14,995	1,295	2,109

Vendor	Canon U.S.A., Inc.	Canon U.S.A., Inc.	Canon U.S.A., Inc.	Cardinal Technologies, Inc.
Product	A200 EXII	A200 SX	A-200SX/25	PC50plus
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386/16	80386/25	80386sx/16
Co-Processor Options	80287	80387	80387	Vendor did not specify
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	2.0M	1.0M
RAM Expansion Capacity (bytes)	1.0M	1.0M	8.0M	8.0M
Maximum System RAM (bytes)	Vendor did not specify	16.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 32K	Vendor did not specify
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 2 16-bit, 0 32-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 2 32-bit	4 16-bit
Available Expansion Slots	2 8-bit, 1 16-bit, 0 32-bit	2 8-bit, 3 16-bit, 1 32-bit	Vendor did not specify	4 16-bit
Serial Ports	1 on main board	1 on adapter	2 on main board	1 on main board
Parallel Ports	1 on main board	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	None	Mouse, ext. video
Mass Storage				
Internal Drive Bays Available	1 half-height	1 full-height	2 half-height	Vendor did not specify
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	None	None	Vendor did not specify	Vendor did not specify
Hard Disk Interface	ST506/412	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	100M/25	40M
Optional Mass Storage	None	None	None	20M, 40M
Keyboard				
Availability	Optional	Optional	Optional	Included (detachable)
Number of Keys/Function Keys	Vendor did not specify	Vendor did not specify	101/12	101
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 350	Adapter optional	Adapter optional	Integrated on system board/1,024 x 768
Display	Included, 14-inch, multifrequency	Included, 14-inch, multifrequency	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	None	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	4.75 x 14.13 x 16.13	6.50 x 21.00 x 17.00	6.5 x 21 x 17	5.625 x 14 x 15.5
Weight (pounds)	28.00	42.00	37.50	19.50
AC Power Supply (watts)	Vendor did not specify	200	200	Vendor did not specify
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, UNIX	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, UNIX	MS-DOS	MS-DOS
Additional Software Included	Util./diagn.	Util./diagn.	BIOS	Operating system
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail, general retail	Vendor did not specify
Parts Warranty	1 year	1 year	1 year	Vendor did not specify
Labor Warranty	1 year	Vendor did not specify	1 year	Vendor did not specify
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor	Vendor did not specify
Service Features	Vendor did not specify	Vendor did not specify	On site	Vendor did not specify
Base Price ($)	3,330/available for GSA	5,500/available for GSA	7,995/available for GSA	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**333**
Microcomputer Systems

Vendor	Chartered Electronics Inc.	Chartered Electronics Inc.	Chartered Electronics Inc.	Chartered Electronics Inc.
Product	CEI 286 SINGA 286/12	CEI 286 SINGA NEAT 286/20	CEI 386 SINGA 386/20	CEI 386 SINGA 386/25
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80C286/20	80386/20	80386/25
Co-Processor Options	80287	80287	80287, 80387, Weitek 1167, Weitek 3167	80387, 80287
Standard RAM (bytes)/Speed (ns)	1.0M/120	1.0M/100	1.0M/100	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	8.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	8.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	10, 8	10, 8	12.5, 8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit,	2 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	2 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height, 2 third-height	1 full-height, 2 half-height, 2 third-height	1 full-height, 2 half-height, 2 third-height	1 full-height, 2 half-height, 3 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	None	None	None	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	None	None	None	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter	On included adapter	On included adapter	On included adapter/ optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	From manufacturer	From manufacturer
Dimensions (H x W x D, inches)	6.25 x 15.00 x 16.00	6.25 x 15.00 x 16.00	25 x 15 x 16	6.25 x 16.00 x 16.00
Weight (pounds)	32.00	32.00	Vendor did not specify	35.00
AC Power Supply (watts)	200	200	200	200, 220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD	VAR/VAD	VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back
Base Price ($)	795	995	1,395	1,695

550-334
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Chartered Electronics Inc.	Chartered Electronics Inc.	Citizen America Corp.	Citizen America Corp.
Product	CEI 386 SX SINGA P9	CEI 386-33 SINGA 386/33	286/16	386SX/16
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/20	80386/33	80286/16	80386sx/16
Co-Processor Options	80387SX	80387, Weitek 1167, Weitek 3167	None	None
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	8.0M	16.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Proprietary, 64K/25	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT/separate memory bus, AT	AT	AT
Bus Speed (MHz)	10, 8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit,	2 8-bit, 5 16-bit	8-bit, 5 16-bit	8-bit, 5 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	8-bit, 5 16-bit	8-bit, 5 16-bit
Serial Ports	2 on adapter	2 on adapter	2 on main board	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	None	Optional	None	None
Other I/O Interfaces	None	101-key keyboard port, ext. video	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height, 2 third-height	Vendor did not specify	3 half-height, 1 third-height	3 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M	Opt. 1.2M or 1.44M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	360K, 1.2M, 720K, 1.44M	None	None
Hard Disk Interface	None	Optional	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	Optional	None	None
Optional Mass Storage	None	20M, 40M, 80M, 100M, 120M, 300M	None	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter	On included adapter/640 x 480	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	Optional	None	None
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	Not available	Not available
Dimensions (H x W x D, inches)	25 x 15 x 16	23.5 x 6.5 x 29.5	Vendor did not specify	Vendor did not specify
Weight (pounds)	32.00	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	220	140	140
Software				
Operating System(s) Bundled	MS-DOS	Optional	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	None	BIOS, setup, diagnostics, util./diagn., Setup program	BIOS, setup, diagnostics, operating system, util./diagn., Turbo Pascal	BIOS, setup, diagnostics, operating system, util./diagn., Turbo Pascal
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Authorized dealers	Authorized dealers, third party	Authorized dealers, third party
Service Features	Toll free, 30-day money back	30-day money back	Vendor did not specify	Vendor did not specify
Base Price ($)	1,095	3,695	Vendor did not specify	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**335**

Microcomputer Systems

Vendor	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.
Product	210	210D	212	212D
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/10	80286/12	80286/12
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	512K/120	512K/120	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	12	12
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	4 8-bit, 4 16-bit	4 8-bit, 4 16-bit
Available Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	4 8-bit, 3 16-bit	4 8-bit, 3 16-bit
Serial Ports	On main board	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	On main board	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	Vendor did not specify
Mass Storage				
Internal Drive Bays Available	5 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive	20M, 40M, 70M, 90M, 120M, 150M, 650M, tape drive	20M, 40M, 70M, 100M, 150M, 300M, 650M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5.75 x 21.25 x 16.50	6.20 x 17.20 x 16.50	5.75 x 21.25 x 16.50	6.20 x 17.20 x 16.50
Weight (pounds)	50.00	40.00	40.00	40.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	On site, 30-day money back	30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	842	803	1,092	1,053

550-336
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.
Product	316SX	320	325C	325CT
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/20	80386/25	80386/25
Co-Processor Options	80387SX	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	2.0M	1.0M	2.0M	2.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, 64K/25	Proprietary, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	12.5, 8.33	12.5, 8.33
Total Expansion Slots	2 8-bit, 6 16-bit	8-bit, 6 16-bit, 2 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 5 16-bit	8-bit, 5 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 1 32-bit
Serial Ports	1 on adapter	2 on main board	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive	20M, 40M, 70M, 90M, 100M, 150M, 300M, 650M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.20 x 17.20 x 16.50	5.75 x 21.25 x 16.50	5.75 x 21.25 x 16.50	25.00 x 7.00 x 18.50
Weight (pounds)	Vendor did not specify	50.00	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	200	250
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	1,345	1,855	2,571	2,857

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**337**

Microcomputer Systems

Vendor	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.	Club American Technology, Inc.
Product	333C	333CT	Club 316	Hawk II Tower
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/33	80386/16	I486/25
Co-Processor Options	80387, Weitek 3167	80387	80287	Weitek 4167
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/100	1.0M/80	4.0M/100
RAM Expansion Capacity (bytes)	2.0M	2.0M	1.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K/25	Proprietary, 64K/25	Proprietary, 64K/25	Proprietary, 256K/20
Input/Output				
Bus Architecture	AT	XT	AT	AT
Bus Speed (MHz)	16.66	16.66	8	12.5
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit	8-bit, 7 16-bit, 1 32-bit
Available Expansion Slots	0 8-bit, 5 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit	8-bit, 5 16-bit, 1 32-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	None	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	2 full-height, 4 half-height	5 half-height	2 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	None	None	71M/18
Optional Mass Storage	Tape drive	40M, 70M, 150M, 650M, tape drive	20M, 40M, 70M, 100M, 150M, 300M, 650M, tape drive	150M, 300M, 650M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/1,024 x 768
Display	Included	Included	Optional	Included, 14-inch, multifrequency
Local Area Network Support				
Vendor LAN Options	None	None	Ethernet, ARCnet	None
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5.75 x 21.25 x 16.5	25 x 7 x 18.5	5.75 x 21.25 x 16.60	25 x 7 x 18.5
Weight (pounds)	50.00	70.00	Vendor did not specify	70.00
AC Power Supply (watts)	200	250	200	250
Software				
Operating System(s) Bundled	None	None	Vendor did not specify	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics	BIOS, setup, diagnostics	None	BIOS, setup, diagnostics
Service/Support				
Distribution Channels	Computer retail	Direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor, authorized dealers, third party	Vendor
Service Features	30-day money back	30-day money back	On site, 30-day money back	30-day money back
Base Price ($)	3,642	3,975	1,971	4,995

550-338
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Comark Corp.	Comark Corp.	Commodore International Ltd.	Commodore International Ltd.
Product	IWS 286	IWS 386	Amiga A2000	Amiga A2000HD
Processor/Memory				
CPU/Clock Speed (MHz)	80286/20	80386/25	68000/7.14	68000/7.14
Co-Processor Options	80287	80387	68020, 68030	68020, 68030, 6888 1/2
Standard RAM (bytes)/Speed (ns)	1.0M/85	2.0M/85	1.0M/120	1.0M/120
RAM Expansion Capacity (bytes)	8.0M	16.0M	1.0M	9M
Maximum System RAM (bytes)	16.0M	16.0M	9M	9M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, variable	Proprietary, variable
Input/Output				
Bus Architecture	AT passive backplane	AT passive backplane	Amiga	XT, Amiga Bus
Bus Speed (MHz)	8	8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 8 16-bit	2 8-bit, 8 16-bit	2 8-bit, 2 16-bit	2 8-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	2 8-bit	2 8-bit
Serial Ports	2 on adapter	1 on adapter	1 on main board	1 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	None	None	Mouse	Mouse
Other I/O Interfaces	None	None	Mouse, ext. diskette drive, 101-key keyboard port, ext. video, audio	Mouse, SCSI, ext. diskette drive, 101-key keyboard port, ext. hard disk, audio
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	1 half-height, 2 third-height	1 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 880K	1 880K
Diskette Drive Options (bytes)	360K, 1.2M, 720K	360K, 1.2M, 720K	360K, 1.2M, 720K, 1.44M, 800, 400	360K, 1.2M, 720K, 1.44M, 800K, 400K
Hard Disk Interface	ST506/412	ST506/412	ST506/412, ESDI, SCSI	ST506/412, SCSI
Hard Disk Size (bytes)/AAT (ms)	40M/28	100M, 40M/28	None	40M/28
Optional Mass Storage	20M, 100M, tape drive	20M, tape drive	40M	None
Keyboard				
Availability	Included (fixed position)	Included (fixed position)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101, 84/15, 10	101/15	101/10	101/10
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/1,024 x 768	On included adapter	Integrated on system board/768 x 480	Integrated on system board/, 768 x 480
Display	Included, 19-inch, analog color	Included, 19-inch, analog color	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet, MAP	Ethernet, ARCnet, MAP	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Floorstanding	Floorstanding	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	63 x 24 x 24.5	63 x 24 x 24.5	6.00 x 17.40 x 15.40	6.00 x 17.40 x 15.40
Weight (pounds)	275.00	275.00	22.00	25.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	None	Amiga DOS	Amiga DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	Vendor did not specify	IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Windows, DesqView, util./diagn.	Windows, DesqView	Util./diagn., desk accessory	Util./diagn., desk accessory
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	90 days	90 days
Labor Warranty	1 year	1 year	90 days	90 days
Service Supported by	Vendor	Vendor	Authorized dealers, third party	Authorized dealers, third party
Service Features	On site	On site	Vendor did not specify	Vendor did not specify
Base Price ($)	14,000	6,000	2,195/available for GSA	2,999/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**339**
Microcomputer Systems

Vendor	Commodore International Ltd.	Commodore International Ltd.	Compaq Computer Corp.	Compaq Computer Corp.
Product	Amiga A2500	Amiga A500	DESKPRO 286e 1	DESKPRO 286e 20
Processor/Memory				
CPU/Clock Speed (MHz)	68020/14.26	68000/7.14	80286/12	80286/12
Co-Processor Options	68881, 68851, 68030, 68882	68020, 68030	80287, 80C287	80287, 80C287
Standard RAM (bytes)/Speed (ns)	3M/120	512K/120	1.0M	1.0M
RAM Expansion Capacity (bytes)	9M	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	9M	9M	Vendor did not specify	Vendor did not specify
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, variable	Proprietary, variable	Not supported	Not supported
Input/Output				
Bus Architecture	XT, Amiga Bus	AT	Split AT	Split AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	8	8
Total Expansion Slots	2 8-bit	1 16-bit	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit	1 16-bit	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	Mouse	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, SCSI, ext. diskette drive, 101-key keyboard port, ext. video, ext. hard disk, audio	Mouse, 101-key keyboard port, expansion unit	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	1 half-height, 2 third-height	1 third-height	1 half-height, 3 third-height	1 half-height, 3 third-height
Diskette Drives Included (bytes)	1 880K	1 880K	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M, 800, 400	360K, 1.2M, 720K, 1.44M, 800K, 400K	360K, 1.44M	360K, 1.44M
Hard Disk Interface	ST506/412	ESDI, SCSI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	Vendor did not specify	None	20M/, 29
Optional Mass Storage	Vendor did not specify	20M	20M, 40M, 110M, tape drive	40M, 110M, tape drive
Keyboard				
Availability	Included (detachable)	Included (fixed position)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/10	101/10	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/768 x 480	Integrated on system board/768 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.00 x 17.40 x 15.40	2.44 x 12.75 x 18.50	5.90 x 15.80 x 14.80	5.90 x 15.80 x 14.80
Weight (pounds)	26.00	8.00	24.00	28.00
AC Power Supply (watts)	200	Vendor did not specify	140	140
Software				
Operating System(s) Bundled	Amiga DOS	Amiga DOS	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Vendor did not specify	MS-DOS	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Util./diagn., desk accessory	Util./diagn., desk accessory	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail	Computer retail
Parts Warranty	90 days	90 days	1 year	1 year
Labor Warranty	Vendor did not specify	90 days	1 year	1 year
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	4,699/available for GSA	799/available for GSA	2,699	3,199/available for GSA

550-340
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.
Product	DESKPRO 286e 40	DESKPRO 386/20e 1	DESKPRO 386/20e 110	DESKPRO 386/20e 40
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386/20	80386/20	80386/20
Co-Processor Options	80287, 80C287	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	4.0M	4.0M	4.0M
Maximum System RAM (bytes)	Vendor did not specify	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel, 32K/35	Intel, 32K/35	Intel, 32K/35
Input/Output				
Bus Architecture	Split AT	Split AT	Split AT	Split AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit
Available Expansion Slots	8-bit, 4 16-bit, 1 32-bit	8-bit, 4 16-bit, 1 32-bit	4 16-bit, 1 32-bit	4 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	1 half-height, 3 third-height	1 half-height, 3 third-height	1 half-height, 3 third-height	1 half-height, 3 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.44M	360K, 1.44M	1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/29	None	110M/, 25	40M/, 29
Optional Mass Storage	20M, 110M, tape drive	40M, 110M, tape drive	40M, tape drive	110M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.90 x 15.80 x 14.80	5.90 x 15.80 x 14.80	5.90 x 15.80 x 14.80	5.90 x 15.80 x 14.80
Weight (pounds)	28.00	27.00	28.00	28.00
AC Power Supply (watts)	140	140	140	140
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail	Computer retail
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	3,599/available for GSA	5,199/available for GSA	6,999	6,099

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**341**
Microcomputer Systems

Vendor	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.
Product	DESKPRO 386/25 110	DESKPRO 386/25 300	DESKPRO 386/25 60	DESKPRO 386/25 84
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/25	80386sx/25
Co-Processor Options	80387	80387, Weitek 3167	80387, Weitek 3167	Vendor did not specify
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	1.0M	12M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/25	Intel, 32K/25	Intel, 32K/25	Intel, 32K/25
Input/Output				
Bus Architecture	Split AT	Split AT	Split AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	4 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.44M	360K, 1.44M	360K, 1.44M
Hard Disk Interface	ST506/412	AT/IDE	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	110M/25	300M/19	60M/28	84/, 25
Optional Mass Storage	60M, 300M, tape drive	60M, 110M, tape drive	300M, 110M, tape drive	60M, 300M, 110M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.40 x 19.80 x 16.50	6.40 x 19.80 x 16.50	6.40 x 19.80 x 16.50	6.4 x 19.8 x 16.5
Weight (pounds)	42.00	44.00	42.00	42.00
AC Power Supply (watts)	192	192	192	192
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	8,999/available for GSA	11,999/available for GSA	8,299/available for GSA	8,499

550-342

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.
Product	DESKPRO 386/33 320	DESKPRO 386/33 650	DESKPRO 386/33 84	DESKPRO 386S 1
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/33	80386/33	80386sx/16
Co-Processor Options	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167	80387SX
Standard RAM (bytes)/Speed (ns)	2.0M/80	2.0M/80	2.0M/80	1.0M
RAM Expansion Capacity (bytes)	2.0M	2.0M	2.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	13M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K/25	Intel, 64K/25	Intel, 64K/25	Not supported
Input/Output				
Bus Architecture	Split AT	Split AT	Split AT	Split AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	8-bit, 5 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 1 32-bit	8-bit, 4 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	4 half-height, third-height	1 half-height, 3 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.44M	360K, 1.44M	360K, 1.44M
Hard Disk Interface	ESDI	ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	320M	650M/, 18	84M/, 25	None
Optional Mass Storage	300M, tape drive	300M, tape drive	300M, tape drive	84M 110M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.50 x 19.20 x 17.70	6.50 x 19.20 x 17.70	6.50 x 19.20 x 17.70	5.90 x 15.80 x 14.80
Weight (pounds)	40.00	43.00	38.00	27.00
AC Power Supply (watts)	300	300	300	140
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail	Computer retail
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	14,999/available for GSA	17,999/available for GSA	10,499/available for GSA	3,299/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**343**
Microcomputer Systems

Vendor	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.	Compaq Computer Corp.
Product	DESKPRO 386S 40	DESKPRO 386S 84	DESKPRO 486/25 120	DESKPRO 486/25 320
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	I486/25	I486/25
Co-Processor Options	80387SX	80387SX	On chip, Weitek 4167	On chip, Weitek 4167
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	4.0M/80	4.0M/80
RAM Expansion Capacity (bytes)	1.0M	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	13M	13M	100M	100M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, 128K	Proprietary, 128K
Input/Output				
Bus Architecture	Split AT	Split AT	EISA	EISA
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	8-bit, 5 16-bit	8-bit, 5 16-bit	0 8-bit, 7 16-bit, 1 32-bit	0 8-bit, 7 16-bit, 1 32-bit
Available Expansion Slots	8-bit, 4 16-bit	8-bit, 4 16-bit	8-bit, 7 16-bit, 1 32-bit	7 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	None
Other I/O Interfaces	Mouse	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	1 half-height, 3 third-height	1 half-height, 3 third-height	1 full-height, 4 half-height	1 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	40M/, 29	84M/, 25	120M/18	320M/18
Optional Mass Storage	110M, tape drive	40M, 110M, tape drive	120M, 300M, 210M, 320M, 650M, tape drive	120M, 210M, 320M, 650M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	5.90 x 15.80 x 14.80	5.90 x 15.80 x 14.80	6.5 x 19.2 x 17.7	6.5 x 19.2 x 17.7
Weight (pounds)	28.00	28.00	40.40	40.40
AC Power Supply (watts)	140	140	300	300
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative, COMPAQ LAN Manager	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative, Compaq LAN Manager
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	None, util./diagn.
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail	Computer retail
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	4,199	4,699/available for GSA	13,999	17,499

550-**344**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Compaq Computer Corp.	Compuadd Corp.	Compuadd Corp.	Compuadd Corp.
Product	DESKPRO 486/25 650	212W 64760	286/12	286/16
Processor/Memory				
CPU/Clock Speed (MHz)	I486/25	80286/12	80286/12	80286/16
Co-Processor Options	On chip, Weitek 4167	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	4.0M/80	512K/100	512K/80	1.0M/80
RAM Expansion Capacity (bytes)	1.0M	1.0M	1.0M	5.0M
Maximum System RAM (bytes)	100M	4.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 128K	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	EISA	AT	AT	AT
Bus Speed (MHz)	8	6	6	8
Total Expansion Slots	0 8-bit, 7 16-bit, 1 32-bit	2 8-bit, 3 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	7 16-bit, 1 32-bit	2 8-bit, 3 16-bit	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit
Serial Ports	1 on main board	2 on main board	Vendor did not specify	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on adapter	1 on main board
Other I/O Devices Included	None	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse	101-key keyboard port	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 4 half-height	1 half-height, 1 third-height	1 full-height	1 full-height
Diskette Drives Included (bytes)	1 1.2M	None	1 360K; 1 1.2M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	AT/IDE	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	650M/18	None	30M/65	40M/65
Optional Mass Storage	120M, 300M, 210M, 320M, 650M, tape drive	20M, 40M, 80M, 150M, 110M, tape drive	30M, 40M, 60M, 70M, 80M, 90M, 150M, 300M, 320M, tape drive	60M, 70M, 80M, 90M, 150M, 320M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Vendor did not specify	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	Vendor did not specify	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional	On included adapter/720 X 348	On included adapter/720 X 348
Display	Optional	Optional	Included, 12-inch, analog color	Included, 12-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	None	Ethernet, Token-ring, ARCnet	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.5 x 19.2 x 17.7	4.0 x 16.4 x 15.5	6.31 x 21.12 x 16.87	6.31 x 21.12 x 16.87
Weight (pounds)	40.40	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	300	145	200	200
Software				
Operating System(s) Bundled	None	None	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative, Compaq LAN Manager	IBM PC-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS
Additional Software Included	Util./diagn.	BIOS, setup, util./diagn.	Vendor did not specify	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail	Vendor did not specify	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Vendor	Vendor	Vendor
Service Features	Vendor did not specify	Toll free, 30-day money back	Toll free	Toll free, 30-day money back
Base Price ($)	3,999	795	895	995

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**345**
Microcomputer Systems

Vendor	Compuadd Corp.	Compuadd Corp.	Compuadd Corp.	Compuadd Corp.
Product	286/20	316S 64787	386/16	386/20
Processor/Memory				
CPU/Clock Speed (MHz)	80286/20	80386sx/16	80386/16	80386/20
Co-Processor Options	80287	80387SX	80387, Weitek 3167	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/100	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	5.0M	1.0M	1.0M	16.0M
Maximum System RAM (bytes)	16.0M	4.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Proprietary, 32K/30
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	10
Total Expansion Slots	2 8-bit, 6 16-bit	3 8-bit, 2 16-bit	2 8-bit, 5 16-bit	1 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	Vendor did not specify	1 8-bit, 4 16-bit	8-bit, 5 16-bit
Serial Ports	2 on main board	2 on main board	On main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on adapter	1 on main board; 1 on adapter
Other I/O Devices Included	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	101-key keyboard port	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height	1 half-height, 1 third-height	1 full-height	1 full-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	AT/IDE	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/65	None	40M/65	40M/65
Optional Mass Storage	60M, 70M, 80M, 90M, 150M, tape drive	20M, 40M, 80M, 150M, 110M, tape drive	70M, 80M, 90M, 150M, tape drive	70M, 80M, 90M, 150M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	Vendor did not specify	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 X 348	Adapter optional	On included adapter/720 X 348	On included adapter/720 X 348
Display	Included, 12-inch, digital monochrome	Optional	Included, 12-inch, digital monochrome	Included, 12-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Ethernet, Token-ring, ARCnet	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.31 x 21.12 x 16.87	4.0 x 16.4 x 15.5	6.31 x 21.12 x 16.87	6.31 x 21.12 x 16.87
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	145	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, Enhanced MS-DOS, MS-DOS	IBM PC-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, Enhanced MS-DOS, MS-DOS
Additional Software Included	Vendor did not specify	BIOS, setup, util./diagn.	Vendor did not specify	None
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Vendor did not specify	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, third party	Third party	Vendor, third party	Vendor, third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,704	1,495	1,904	2,350

550-346
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Compuadd Corp.	Compuadd Corp.	Cordata, Inc.	Cordata, Inc.
Product	386/25	810 64700	Daewoo CPC-8105	Daewoo CPC-8110
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	NEC V-20/9.54	80386sx/16	80386sx/16
Co-Processor Options	80387	8087	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M/80	640K/100	1.0M	1.0M
RAM Expansion Capacity (bytes)	16.0M	640K	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	640K	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 32K/30	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	XT	AT	AT
Bus Speed (MHz)	10	6	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 6 16-bit	5 8-bit, 16-bit	2 8-bit, 6 16-bit,	2 8-bit, 6 16-bit
Available Expansion Slots	8-bit, 5 16-bit	5 8-bit, 16-bit	2 8-bit, 6 16-bit,	2 8-bit, 6 16-bit
Serial Ports	2 on main board	2 on main board; 0 on adapter	2 on main board	2 on main board
Parallel Ports	1 on main board; 1 on adapter	1 on main board; 0 on adapter	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	None
Other I/O Interfaces	None	101-key keyboard port	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height	1 half-height, 1 third-height	4 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 360K	1 1.2M	2 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	ST506/412	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/65	None	None	None
Optional Mass Storage	70M, 80M, 90M, 150M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 X 348	Integrated on system board/320 x 200	Integrated on system board/800 x 600	Integrated on system board/800 x 600
Display	Included, 12-inch, digital monochrome	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Ethernet, Token-ring, ARCnet	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.31 x 21.12 x 16.87	4.0 x 16.4 x 15.5	6.5 x 15.6 x 16.5	6.5 x 15.6 x 16.5
Weight (pounds)	Vendor did not specify	Vendor did not specify	28.00	28.00
AC Power Supply (watts)	200	145	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	None	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, Enhanced MS-DOS, MS-DOS	IBM PC-DOS, MS-DOS	MS-DOS	MS-DOS
Additional Software Included	Vendor did not specify	BIOS, util./diagn.	BIOS, util./diagn.	BIOS, util./diagn.
Service/Support				
Distribution Channels	Computer retail, direct from vendor	VAR/VAD, direct from vendor	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, third party	Vendor	Authorized dealers	Authorized dealers
Service Features	On site, toll free, 30-day money back	Toll free, 30-day money back	Toll free	Toll free
Base Price ($)	3,154	546	Vendor did not specify	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**347**
Microcomputer Systems

Vendor	Cordata, Inc.	Cordata, Inc.	Cordata, Inc.	Cordata, Inc.
Product	Daewoo CPC-8120	Daewoo CPC-8125	Daewoo CPC-8140	Daewoo CPC-8145
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	80386sx/16	80386sx/16
Co-Processor Options	80387SX	80387SX	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M	1.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	4 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M	2 1.2M	1 1.2M	2 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	20M	20M	40M	40M
Optional Mass Storage	20M, 40M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/800 x 600	Integrated on system board/800 x 600	Integrated on system board/800 x`600	Integrated on system board/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.5 x 15.6 x 16.5	6.5 x 15.6 x 16.5	6.5 x 15.6 x 16.5	6.5 x 15.6 x 16.5
Weight (pounds)	28.00	28.00	28.00	28.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Additional Software Included	BIOS, util./diagn.	BIOS, util./diagn.	BIOS, util./diagn.	BIOS, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify

550-348
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Cordata, Inc.	Cordata, Inc.	Cordata, Inc.	Cordata, Inc.
Product	Daewoo CPC-8205	Daewoo CPC-8210	Daewoo CPC-8220	Daewoo CPC-8240
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	80386sx/16	80386sx/16
Co-Processor Options	80387SX	80387SX	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M	1.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit
Available Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	4 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M	2 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	None	20M	40M
Optional Mass Storage	20M, 40M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive	20M, 40M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/800 x 600	Integrated on system board/800 x 600	Integrated on system board/800 x 600	Integrated on system board/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5 x 16 x 18	5 x 16 x 18	5 x 16 x 18	5 x 16 x 18
Weight (pounds)	32.00	32.00	32.00	32.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Additional Software Included	BIOS, util./diagn.	BIOS, util./diagn.	BIOS, util./diagn.	BIOS, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**349**
Microcomputer Systems

Vendor	CSR	CSR	CSR	CSR
Product	CSR 286/14 Deluxe	CSR 286/14 Slimline	CSR 286/20 Deluxe	CSR 286/20 Slimline
Processor/Memory				
CPU/Clock Speed (MHz)	80286/14	80286/14	80286/20	80286/20
Co-Processor Options	80287, 802C287, Weitek 1167	80287, 802C287, Weitek 1167	80287, 80C287, Weitek 1167	80287, 80C287, Weitek 1167
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	1.0M
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 3 16-bit	2 16-bit, 6 32-bit	2 8-bit, 3 16-bit
Available Expansion Slots	1 8-bit, 4 16-bit	1 8-bit, 1 16-bit	1 8-bit, 4 16-bit	1 8-bit, 1 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on main board; 1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 full-height, 2 half-height	Vendor did not specify	3 full-height, 2 half-height	Vendor did not specify
Diskette Drives Included (bytes)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 720K	360K, 720K
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/22	40M/, 22ns	40M/22	40M/22
Optional Mass Storage	20M, 60M, 90M, 150M, 322M, tape drive	20M, 40M, 60M, 70M, 90M, 150M, 322M, tape drive	20M, 60M, 90M, 150M, 322M, tape drive	20M, 60M, 90M, 150M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 400	On included adapter/640 x 480
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	From manufacturer	From manufacturer
Dimensions (H x W x D, inches)	5.5 x 21.0 x 16.5	4.5 x 17.0 x 15.5	5.5 x 21.0 x 16.5	4.5 x 17.0 x 15.5
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year on-site	1 year on-site	1 year on-site	1 year
Labor Warranty	1 year on parts	1 year on parts	1 year on-site	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify

550-**350**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	CSR	CSR	CCS Custom Computer Systems, Inc.	CCS Custom Computer Systems, Inc.
Product	CSR 386/20 Deluxe 286/25C Deluxe	CSR 386/25C Deluxe	CCS 386-16S U1VM4	CCS 386-20c F2VMS
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	80386sx/16	80386/20
Co-Processor Options	80387	80387	80387SX	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/80	1.0M/100	2.0M/100
RAM Expansion Capacity (bytes)	1.0M	4.0M	8.0M	8.0M
Maximum System RAM (bytes)	32M	32M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Austek, 32K/25	Not supported	Proprietary, 64K/35
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 4 16-bit	1 8-bit, 4 16-bit	1 8-bit, 4 16-bit	1 8-bit, 3 16-bit, 1 32-bit
Serial Ports	1 on adapter	1 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Mouse	101-key keyboard port	SCSI, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height	1 full-height, 2 half-height	2 half-height, 3 third-height	6 half-height
Diskette Drives Included (bytes)	Vendor did not specify	Vendor did not specify	1 1.2M; 1 1.44M	1 1.44M
Diskette Drive Options (bytes)	None	None	Vendor did not specify	None
Hard Disk Interface	ST506/412	ESDI	ST506/412	SCSI
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	40M	40M/28	80M/28
Optional Mass Storage	20M, 40M, 60M, 90M, 150M, tape drive	20M, 40M, 60M, 90M, 150M, tape drive	20M, 80M, tape drive, CD-ROM	40M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 400	On included adapter/640 x 400	On included adapter/800 x 600	On included adapter/640 x 480
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	None	None
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Floorstanding
Tempest Version	From manufacturer	From manufacturer	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.5 x 21.0 x 16.5	5.5 x 21.0 x 16.5	14 x 7 x 16	25 x 8 x 17
Weight (pounds)	Vendor did not specify	Vendor did not specify	20.00	40.00
AC Power Supply (watts)	200	200	200	220
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative
Additional Software Included	None	None	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD
Parts Warranty	1 year on-site	1 year on-site	1 year	1 year
Labor Warranty	1 year parts	1 year parts	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor	Vendor
Service Features	Vendor did not specify	30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	Vendor did not specify	Vendor did not specify	2,805	4,422

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**351**
Microcomputer Systems

Vendor	CCS Custom Computer Systems, Inc.	Data Bank Computer	Data General Corp.	Data General Corp.
Product	CCS 386-25C G2VME	DBC 386-33	Dasher/286	Dasher/386
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/3325	80286/10	80386/16
Co-Processor Options	80387	80387	80287	80387
Standard RAM (bytes)/Speed (ns)	2.0M/80	1.0M/70	640K/120	1.0M/100
RAM Expansion Capacity (bytes)	8.0M	16.0M	640K	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	8.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K/25	Intel, 32K/35	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT passive backplane
Bus Speed (MHz)	12.5	12.5	10	Vendor did not specify
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	5 8-bit, 2 16-bit, 1 32-bit	1 8-bit, 5 16-bit	1 8-bit, 3 16-bit, 10 32-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 1 32-bit	5 8-bit, 1 16-bit	1 8-bit, 5 16-bit	Vendor did not specify
Serial Ports	2 on adapter	None	2 on main board	1 on main board
Parallel Ports	1 on adapter	None	1 on main board	1 on main board
Other I/O Devices Included	None	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	None	101-key keyboard port, ext. hard disk	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	6 half-height	5 half-height	4 half-height	2 full-height, 2 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	None	360K, 720K, 1.44M	360K, 1.2M, 720K	360K, 1.2M
Hard Disk Interface	ESDI	WD 1:1	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	150M/18	None	None	None
Optional Mass Storage	80M, 300M, tape drive, CD-ROM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive	20M, tape drive	20M, 40M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Optional	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	107/15	101/15
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	Adapter optional	Adapter optional/640 x 350	Adapter optional/1280 x 800
Display	Included, 14-inch, analog color	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	Ethernet, Token-ring, Starlan	Ethernet, Token-ring, Starlan
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Not available	Not available	Not available
Dimensions (H x W x D, inches)	25 x 8 x 17	Vendor did not specify	6.25 x 17.50 x 16.25	21.00 x 15.00 x 6.25
Weight (pounds)	40.00	49.00	30.00	Vendor did not specify
AC Power Supply (watts)	220	220	185	200
Software				
Operating System(s) Bundled	None	None	MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS, UNIX derivative	Enhanced MS-DOS, UNIX derivative, 386/ix
Additional Software Included	BIOS, setup, util./diagn.	None	None	None
Service/Support				
Distribution Channels	Computer retail, general retail, VAR/VAD	Direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site, 30-day money back	30-day money back	On site, toll free	On site, toll free
Base Price ($)	6,119	2,220	2,295	3,595/available for GSA

550-352
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Data General Corp.	Data General Corp.	Data Storage Marketing, Inc.	Data Storage Marketing, Inc.
Product	Dasher/386-25	Dasher/386SX	DataStor 286-12	DataStor 286-16D
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/25	80386sx/16	80286/12	80286/16
Co-Processor Options	80387	80387SX	80287	80287
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/100	1.0M/100	1.0M/80
RAM Expansion Capacity (bytes)	4.0M	Vendor did not specify	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	8.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K/35	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	10	10
Total Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	1 8-bit, 3 16-bit	3 8-bit, 5 16-bit	3 8-bit, 5 16-bit
Available Expansion Slots	Vendor did not specify	1 8-bit, 3 16-bit	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit
Serial Ports	2 on main board	2 on main board	2 on adapter	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	Vendor did not specify	None	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port (1 game port)	101-key keyboard port (1 game port)
Mass Storage				
Internal Drive Bays Available	5 half-height	4 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.44M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M	1.2M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	156M, 322M, tape drive	40M, 100M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 480	Integrated on system board/640 x 480	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, Starlan	Ethernet, Token-ring, Starlan	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.5 x 21.3 x 18.7	6.25 x 17.5 x 16.25	6.5 x 19.5 x 16.1	6.5 x 19.5 x 16.1
Weight (pounds)	44.00	Vendor did not specify	35.00	35.00
AC Power Supply (watts)	220	185	200	200
Software				
Operating System(s) Bundled	MS-DOS, 386/IX	MS-DOS	None	None
Operating System(s) Supported	MS-DOS, 386/IX, VP/IX	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	Util./diagn., GW Basic	Setup, diagnostics, GW Basic	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site, toll free	On site, toll free	Toll free, 30-day money back	Toll free, 30-day money back
Base Price ($)	6,700/available for GSA	2,900/available for GSA	810/available for GSA	879/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**353**
Microcomputer Systems

Vendor	Data Storage Marketing, Inc.	Data Storage Marketing, Inc.	Data Storage Marketing, Inc.	Data Storage Marketing, Inc.
Product	DataStor 286-20D	DataStor 386-20	DataStor 386-20C	DataStor 386-25
Processor/Memory				
CPU/Clock Speed (MHz)	80286/20	80386/20	80386/20	80386/25
Co-Processor Options	80287	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	1.0M/80	1.0M/70
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Chips & Tech., 32K/25	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	3 8-bit, 5 16-bit	7 16-bit, 1 32-bit	6 16-bit, 2 32-bit	7 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 4 16-bit	5 16-bit, 1 32-bit	4 16-bit, 2 32-bit	5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	None
Other I/O Interfaces	101-key keyboard port (1 game port)	101-key keyboard port (1 game port)	101-key keyboard port (1 game port)	101-key keyboard port (1 game port)
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.5 x 19.5 x 16.1	6.5 x 19.5 x 16.1	6.5 x 19.5 x 16.1	6.5 x 19.5 x 16.1
Weight (pounds)	35.00	35.00	35.00	35.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics	BIOS, setup, diagnostics
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back
Base Price ($)	989/available for GSA	1,595/available for GSA	1,825/available for GSA	1,795/available for GSA

550-**354**
Microcomputer Systems

**Microcomputers:
Comparison Columns**

Datapro Reports on
PC Communications

Vendor	Data Storage Marketing, Inc.	Data Storage Marketing, Inc.	Dataworld	Daytronic Corp.
Product	DataStor 386-25C	DataStor 386-SXD	Data 386-25	Industrial Personal Computer IPC-2
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386sx/16	80386/25	8086/10
Co-Processor Options	80387, Weitek 3167	80387SX	80387	8087
Standard RAM (bytes)/Speed (ns)	1.0M/70	1.0M/80	1.0M/80	640K/120
RAM Expansion Capacity (bytes)	8.0M	8.0M	16.0M	640K
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	640K
RAM Cache, Size (bytes)/Speed (ns)	Chips & Tech., 32K/25	Not supported	Intel, 32K/35	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	XT
Bus Speed (MHz)	10	10	8.33	10
Total Expansion Slots	6 16-bit, 2 32-bit	1 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 1 32-bit	8 8-bit
Available Expansion Slots	4 16-bit, 2 32-bit	0 8-bit, 5 16-bit	0 32-bit	5 8-bit
Serial Ports	2 on adapter	2 on adapter	None; 2 on adapter	1 on adapter
Parallel Ports	1 on adapter	4 on adapter	None; 1 on adapter	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	None
Other I/O Interfaces	101-key keyboard port (1 game port)	101-key keyboard port (1 game port)	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	6 half-height	2 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	2 360K
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 1.44M	None
Hard Disk Interface	ST506/412	ST506/412	ST506/412	None
Hard Disk Size (bytes)/AAT (ms)	None	None	66/, 25	None
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 40M, 150M, 300M, tape drive	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/1,024 x 768	On included adapter/640 x 350
Display	Optional	Optional	Included, 14-inch, multifrequency	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Vendor did not specify	None
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Desktop
'Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	6.5 x 19.5 x 16.1	6.5 x 19.5 x 16.1	25.63 x 7.50 x 16.75	5.25 x 19.00 x 18.37
Weight (pounds)	35.00	35.00	55.00	Vendor did not specify
AC Power Supply (watts)	200	200	230	150
Software				
Operating System(s) Bundled	None	None	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	MS-DOS
Additional Software Included	BIOS, setup, diagnostics	BIOS, setup, diagnostics, util./diagn.	Comm., util./diagn.	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor	Vendor
Service Features	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back	On site
Base Price ($)	2,045/available for GSA	989/available for GSA	4,214	2,495

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**355**
Microcomputer Systems

Vendor	Daytronic Corp.	Daytronic Corp.	Daytronic Corp.	Dell Computer Corp.
Product	Industrial Personal Computer IPC-386	Industrial Personal Computer IPC-AT	Industrial Personal Computer IPC-XT	Dell System 210 100MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386/16	80286/10	8088/10	80286/12.5
Co-Processor Options	80387	80287	8087	80287
Standard RAM (bytes)/Speed (ns)	640K/80	512K/100	640K/120	512K
RAM Expansion Capacity (bytes)	2.0M	512K	640K	6M
Maximum System RAM (bytes)	8.0M	640K	640K	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT passive backplane	AT passive backplane	XT	AT
Bus Speed (MHz)	16MHz	10	10	6.25
Total Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit,	8 8-bit	3 16-bit,
Available Expansion Slots	1 8-bit	1 8-bit, 1 16-bit,	4 8-bit	3 16-bit,
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height	2 half-height	2 half-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 360K	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K	360K, 720K, 1.44M	360K	1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/40	40M/40	20M/40	100M/25
Optional Mass Storage	20M, 100M	20M, 100M	40M, 100M	20M, 40M, 100M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 350	On included adapter/640 x 350	On included adapter/640 x 350	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Included, analog monochrome
Local Area Network Support				
Vendor LAN Options	None	None	None	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5.25 x 19.00 x 15.50	5.25 x 19.00 x 15.50	5.25 x 19.00 x 18.37	4.0 x 15.1 x 15.6
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	21.70
AC Power Supply (watts)	150	150	150	85
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	None
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	None	None	None	BIOS, setup, util./diagn., tutorial
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Third party
Service Features	On site	On site	On site	On site, toll free, 30-day money back
Base Price ($)	7,995	4,295	2,995	2,399

550-**356**

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 210 20MB/VGA Monochrome	Dell System 210 40MB/VGA Monochrome	Dell System 220	Dell System 310 1MB/100MB/TTL Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12.5	80286/12.5	80286/20	803869/20
Co-Processor Options	80287	80287	80287	80387SX, Weitek 3167
Standard RAM (bytes)/Speed (ns)	512K	512K	1.0M	1.0M
RAM Expansion Capacity (bytes)	6M	6M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Intel, 32K/35
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	6.25	6.25	Vendor did not specify	8
Total Expansion Slots	3 16-bit	3 16-bit	3 16-bit	2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	3 16-bit	3 16-bit	3 16-bit	2 8-bit, 3 16-bit, 1 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	None
Other I/O Interfaces	None	None	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	2 half-height, 1 third-height	1 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	1.44M	1.44M	1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	20M/40	40M/, 29	None	100M/, 25
Optional Mass Storage	40M, 100M, tape drive	20M, 40M, 100M, tape drive	40M, 100M, tape drive	40M, 100M, 150M, 322M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	On included adapter/320 x 200
Display	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	4.0 x 15.1 x 15.6	4.0 x 15.1 x 15.6	Vendor did not specify	6.4 x 21.1 x 17.6
Weight (pounds)	21.70	21.70	Vendor did not specify	37.00
AC Power Supply (watts)	85	85	Vendor did not specify	200
Software				
Operating System(s) Bundled	None	None	Vendor did not specify	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn., tutorial	None	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,599	1,799	2,299	4,199

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**357**

Microcomputer Systems

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 310 1MB/150MB/TTL Monochrome	Dell System 310 1MB/322MB/TTL Monochrome	Dell System 310 1MB/40MB/TTL Monochrome	Dell System 310 2MB/100MB/TTL Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/20	80386/20
Co-Processor Options	80387SX, Weitek 3167	80387SX, Weitek 3167	80387, Weitek 3167	80387SX, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M	2.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/35	Intel, 32K/35	Intel, 32K/35	Intel, 32K/35
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 3 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on main board	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	ESDI	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	150M/18	322M/18	40M/28	100M/25
Optional Mass Storage	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M322M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200
Display	Included, 12-inch, digital monochrome	Included, 12-inch, digital monochrome	Included, 12-inch, digital monochrome	Included, 12-inch, digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6
Weight (pounds)	37.00	37.00	37.00	37.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	4,699	5,499	3,599	4,398

550-358
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 310 2MB/150MB/TTL Monochrome	Dell System 310 2MB/322MB/TTL Monochrome	Dell System 310 2MB/40MB/TTL Monochrome	Dell System 316SX 2MB/100MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/20	80386sx/16
Co-Processor Options	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX
Standard RAM (bytes)/Speed (ns)	2.0M	2.0M	2.0M	2.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/35	Intel, 32K/35	Intel, 32K/35	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	3 16-bit
Available Expansion Slots	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 3 16-bit, 1 32-bit	Vendor did not specify
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	1.44M
Hard Disk Interface	ESDI	Vendor did not specify	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	150M/18	322M/18	40M/28	100M/25
Optional Mass Storage	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	20M, 40M, 100M, 170M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200	Integrated on system board/640 x 480
Display	Included, 12-inch, digital monochrome	Included, 12-inch, digital monochrome	Included, 12-inch digital monochrome	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	4.0 x 15.1 x 15.6
Weight (pounds)	37.00	37.00	37.00	21.70
AC Power Supply (watts)	200	200	200	85
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn., desk accessory	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn., tutorial
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	4,898	5,698	3,798	2,999

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**359**
Microcomputer Systems

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 316SX 2MB/170MB/VGA Monochrome	Dell System 316SX 2MB/40MB/VGA Monochrome	Dell System 316SX 512KB/100MB/VGA Monochrome	Dell System 316SX 512KB/170MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	80386sx/16	80386sx/16
Co-Processor Options	80387SX	80387SX	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	2.0M	2.0M	512K	512K
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	3 16-bit	3 16-bit	3 16-bit,	3 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	2 half-height, 1 third-height	2 half-height, 1 third-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	1.44M	1.44M	1.44M	1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	170M/15	40M/28	100M/25	170M/15
Optional Mass Storage	20M, 40M, 100M, 170M, tape drive	20M, 40M, 100M, 170M, tape drive	20M, 40M, 100M, 170M, tape drive	20M, 40M, 100M, 170M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	4.0 x 15.1 x 15.6	4.0 x 15.1 x 15.6	4.0 x 15.1 x 15.6	4.0 x 15.1 x 15.6
Weight (pounds)	21.70	21.70	21.70	21.70
AC Power Supply (watts)	85	85	85	85
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn., tutorial
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	3,499	2,399	2,699	3,199

550-**360**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 316SX 512KB/20MB/VGA Monochrome	Dell System 325 1MB/100MB/Super VGA Color	Dell System 325 1MB/100MB/VGA Monochrome	Dell System 325 1MB/150MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/25	80386/25	80386/25
Co-Processor Options	80387SX	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX, Weitek 3167
Standard RAM (bytes)/Speed (ns)	512K	1.0M	1.0M	1.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel, 32K/25	Intel, 32K/25	Intel, 32K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	3 16-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	2 8-bit, 3 16-bit,	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit
Serial Ports	2 on main board	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	ESDI
Hard Disk Size (bytes)/AAT (ms)	20M/40	100M/25	100M/25	150M/18
Optional Mass Storage	20M, 40M, 100M, 170M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	On included adapter/800 x 600	On included adapter/640 x 480	On included adapter/640 x 480
Display	Included, 12-inch, analog monochrome	Included, 14-inch, analog color	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	4.0 x 15.1 x 15.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6
Weight (pounds)	21.70	55.00	55.00	55.00
AC Power Supply (watts)	85	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,899	5,199	4,799	5,299

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**361**
Microcomputer Systems

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 325 1MB/322MB/VGA Monochrome	Dell System 325 1MB/40MB/VGA Monochrome	Dell System 325 2MB/100MB/VGA Monochrome	Dell System 325 2MB/150MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/25	80386/25
Co-Processor Options	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	2.0M	2.0M
RAM Expansion Capacity (bytes) Maximum System RAM (bytes) RAM Cache, Size (bytes)/Speed (ns)	8.0M 16.0M Intel, 32K/25	8.0M 16.0M Intel, 32K/25	8.0M 16.0M Intel, 32K/25	8.0M 16.0M Intel, 32K/25
Input/Output				
Bus Architecture Bus Speed (MHz) Total Expansion Slots	AT 8 2 8-bit, 6 16-bit, 1 32-bit	AT 8 2 8-bit, 6 16-bit, 1 32-bit	AT 8 2 8-bit, 6 16-bit, 1 32-bit	AT 8 2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	AT/IDE	AT/IDE	ESDI
Hard Disk Size (bytes)/AAT (ms)	322M/18	40M/28	100M/25	150M/18
Optional Mass Storage	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive
Keyboard				
Availability Number of Keys/Function Keys	Included (detachable) 101/12	Included (detachable) 101/12	Included (detachable) 101/12	Included (detachable) 101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring	Ethernet, Token-ring
Product Design				
Type of Unit Tempest Version Dimensions (H x W x D, inches) Weight (pounds) AC Power Supply (watts)	Desktop Not available 6.4 x 21.1 x 17.6 55.00 200	Desktop Not available 6.4 x 21.1 x 17.6 55.00 200	Desktop Not available 6.4 x 21.1 x 17.6 55.00 200	Desktop Not available 6.4 x 21.1 x 17.6 55.00 200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty Labor Warranty Service Supported by	1 year 1 year Third party	1 year 1 year Third party	1 year 1 year Third party	1 year 1 year Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	6,099	4,199	4,998	5,498

550-362
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.	Dell Computer Corp.
Product	Dell System 316SX 512KB/40MB/VGA Monochrome	Dell System 325 2MB/322MB/VGA Monochrome	Dell System 325 2MB/40MB/VGA Monochrome	System 316SX 2MB/20MB/VGA Monochrome
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/25	80386/25	80386sx/16
Co-Processor Options	80387SX	80387SX, Weitek 3167	80387SX, Weitek 3167	80387SX
Standard RAM (bytes)/Speed (ns)	512K	2.0M	2.0M	2.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not Supported	Intel, 32K/25	Intel, 32K/25	Not Supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	3 16-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	3 16-bit
Available Expansion Slots	None	2 8-bit, 3 16-bit	2 8-bit, 3 16-bit	None
Serial Ports	2 on main board	2 on adapter	2 on adapter	2 on main board
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	5 half-height	5 half-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	1.44M
Hard Disk Interface	AT/IDE	ESDI	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/28	322M	40M/28	20M/40
Optional Mass Storage	20M, 40M, 100M, 170M, tape drive	40M, 100M, 150M, 322M, tape drive	40M, 100M, 150M, 322M, tape drive	20M, 40M, 100M, 170M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	Integrated on system board/640 x 480
Display	Included, 12-inch, analog monochrome	Included, 12-inch, analog mono	Included, 12-inch, analog monochrome	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-Ring	Ethernet, Token-Ring	Ethernet, Token-Ring	Ethernet, Token-Ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	4.0 x 15.1 x 15.6	6.4 x 21.1 x 17.6	6.4 x 21.1 x 17.6	4.0 x 15.1 x 15.6
Weight (pounds)	21.70	55.00	55.00	21.70
AC Power Supply (watts)	85	200	200	85
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn., tutorial	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn., tutorial
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	2,099	6,298	4,398	2,199

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**363**
Microcomputer Systems

Vendor	Delta Data Systems Corp.	Delta Data Systems Corp.	Delta Data Systems Corp.	Digitech Research Inc.
Product	Tempest 286 8700T	Tempest 386-16 8732T-16	Tempest 386-25 8732T-25	Digitech DR-80386/33
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386/16	80386/25	80386/33
Co-Processor Options	80287	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/120	1.0M/100	1.0M/80	1.0M/60
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Zymos, 32K/25	Intel, 32K/25
Input/Output				
Bus Architecture	AT passive backplane	AT passive backplane	AT passive backplane	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	4 8-bit, 8 16-bit	4 8-bit, 8 16-bit	4 8-bit, 8 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	4 8-bit, 6 16-bit	4 8-bit, 6 16-bit	4 8-bit, 5 16-bit	1 8-bit, 4 16-bit, 0 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	On main board
Parallel Ports	1 on main board	1 on main board	1 on main board	On main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height	1 full-height, 2 half-height	1 full-height, 2 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	80M/28
Optional Mass Storage	40M, 80M, 120M, 300M, tape drive	40M, 80M, 120M, 300M, tape drive	40M, 80M, 120M, 300M, tape drive	150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/, 720 x 358 monochrome
Display	Optional	Optional	Optional	Included, 12-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Ethernet	Ethernet, ARCnet
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Desktop
Tempest Version	From manufacturer	From manufacturer	From manufacturer	Vendor did not specify
Dimensions (H x W x D, inches)	26.00 x 10.00 x 27.00	26.00 x 10.00 x 27.00	26.00 x 10.00 x 27.00	Vendor did not specify
Weight (pounds)	58.00	58.00	58.00	Vendor did not specify
AC Power Supply (watts)	230	230	230	220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	None
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	90 days	90 days	90 days	1 year
Service Supported by	Vendor, third party	Vendor, third party	Vendor, third party	Vendor
Service Features	On site	On site	On site	On site
Base Price ($)	3,983/available for GSA	5,549/available for GSA	7,092	4,255

550-364
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	DSC Communications	Electrified Discounters Inc.	Electrified Discounters Inc.	Emerald Computers, Inc.
Product	DSC NEXOS Network Server-386	Quadrant AT	Super System 10	LANstation I
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80286/6	8088/10	80286/16
Co-Processor Options	80387	80287	8087	80287
Standard RAM (bytes)/Speed (ns)	2.0M/80	512K/150	512K/150	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	1.0M	640K	4.0M
Maximum System RAM (bytes)	16.0M	1.0M	640K	4.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	XT	AT
Bus Speed (MHz)	8	6	10	8
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit	8 8-bit	1 16-bit
Available Expansion Slots	0 8-bit, 3 16-bit, 0 32-bit	2 8-bit, 6 16-bit	8 8-bit	1 16-bit
Serial Ports	2 on adapter	1 on adapter	1 on adapter	2 on main board
Parallel Ports	3 on adapter	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	None
Other I/O Interfaces	Network Interface (Ethernet, ARCnet, or Token Ring)	101-key keyboard port	101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	6 half-height	3 half-height	4 half-height	Vendor did not specify
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 360K	Vendor did not specify
Diskette Drive Options (bytes)	None	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	None
Hard Disk Interface	ESDI	ST506/412	Vendor did not specify	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	130/18	20M/65	None	None/40
Optional Mass Storage	260M or 520M, tape drive	30M, 40M, 50M, 60M, 70M	20M, 30M, 40M, 50M, 60M	20M, none
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	84/10	101/12	85/10
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/text mode only	On included adapter/640 x 400	Adapter optional	Integrated on system board/640 x 350
Display	Included, 14-inch digital monochrome	Included, optional, digital color	Included, optional	Included, 5.5-inch, electroluminescent
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	None	None	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Vendor did not specify
Dimensions (H x W x D, inches)	26.25 x 10.50 x 19.50	5 x 22 x 17	5 x 22 x 17	9.75 x 14.5 x 5.75
Weight (pounds)	Vendor did not specify	30.00	20.00	10.50
AC Power Supply (watts)	238	200	150	40
Software				
Operating System(s) Bundled	NEXOS	Vendor did not specify	MS-DOS	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, MS-DOS, NEXOS, NOVELL	IBM PC-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS	MS-DOS, Vendor MS-OS/2, DR-DOS
Additional Software Included	Comm., util./diagn., desk accessory	BIOS	None	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor	Vendor	Vendor
Service Features	On site, toll free	Vendor did not specify	Vendor did not specify	Toll free
Base Price ($)	11,495	1,024	665	2,095

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**365**
Microcomputer Systems

Vendor	Emerson Computer Corporation	Epson America, Inc.	Epson America, Inc.	Epson America, Inc.
Product	386T33 H4	Equity 386/20	Equity 386SX	Equity I+
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/20	80386sx/16	8088/10
Co-Processor Options	80387, Weitek 3167	80387	80387SX	8087
Standard RAM (bytes)/Speed (ns)	4.0M/80	1.0M/80	1.0M/70	640K/120
RAM Expansion Capacity (bytes)	8.0M	16.0M	14M	640K
Maximum System RAM (bytes)	24M	16.0M	14M	640K
RAM Cache, Size (bytes)/Speed (ns)	Chips & Technologies, 64K	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	XT
Bus Speed (MHz)	12.5, 8	8.33	8	10
Total Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	3 8-bit, 6 16-bit	1 8-bit, 4 16-bit	5 8-bit, 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 8 32-bit	2 8-bit, 6 16-bit	1 8-bit, 4 16-bit	5 8-bit, 16-bit
Serial Ports	2 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse	101-key keyboard port	Mouse, 101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	5 half-height	3 half-height	2 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.44M	1 360K
Diskette Drive Options (bytes)	1.2M, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 720K
Hard Disk Interface	None	None	AT/IDE	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	Vendor did not specify	None
Optional Mass Storage	40M, 100M, 200M	40M, 90M, tape drive	40M, 100M	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	None	Vendor did not specify
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	23.0 x 6.6 x 16.7	6.60 x 19.60 x 17.40	6.1 x 15.7 x 16.4	5.70 x 14.40 x 14.80
Weight (pounds)	Vendor did not specify	32.00	21.60	20.00
AC Power Supply (watts)	240	193	110	80
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS, Vendor MS-OS/2, UNIX derivative	IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX derivative	Vendor did not specify
Additional Software Included	BIOS, setup, util./diagn., Quattro, Reflex, PFS: Professional Write	Util./diagn.	BIOS, util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	On site, toll free	Toll free	Vendor did not specify	Toll free
Base Price ($)	4,995	3,599	2,299	1,099/available for GSA

550-366
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Epson America, Inc.	Epson America, Inc.	Epson America, Inc.	Epson America, Inc.
Product	Equity Ie	Equity II+	Equity IIe	Equity III+
Processor/Memory				
CPU/Clock Speed (MHz)	8086/10	80286/12	80286/812	80286/12
Co-Processor Options	8087	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	640K/120	640K/120	1.0M	640K/120
RAM Expansion Capacity (bytes)	640K	640K	5M	640K
Maximum System RAM (bytes)	640K	15.5M	5M	15.5M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Vendor did not specify	Vendor did not specify	Vendor did not specify
Input/Output				
Bus Architecture	XT	AT	AT	AT
Bus Speed (MHz)	10	12	8	12
Total Expansion Slots	4 8-bit, 16-bit	3 8-bit, 3 16-bit	1 8-bit, 4 16-bit	3 8-bit, 6 16-bit
Available Expansion Slots	4 8-bit, 16-bit	3 8-bit, 2 16-bit	1 8-bit, 4 16-bit	3 8-bit, 6 16-bit
Serial Ports	1 on main board	1 on adapter	1 on main board	1 on adapter
Parallel Ports	1 on main board	1 on adapter	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port, ext. video	Vendor did not specify	Mouse, 101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	1 half-height, 1 third-height	3 half-height	Vendor did not specify	5 half-height
Diskette Drives Included (bytes)	1 720K	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	720K	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	Vendor did not specify	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M	40M	40M	40M
Keyboard				
Availability	Included (fixed position)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	4.50 x 13.76 x 15.94	6.10 x 15.70 x 16.30	6.1 x 15.7 x 16.4	6.60 x 19.60 x 19.40
Weight (pounds)	16.00	20.00	21.55	32.00
AC Power Supply (watts)	62	110	110	192
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS, UNIX derivative	MS-DOS
Operating System(s) Supported	Vendor did not specify	Vendor MS-OS/2	MS-DOS, MS OS/2	Vendor MS-OS/2
Additional Software Included	Util./diagn.	Util./diagn.	BIOS, diagnostics	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers, third party	Authorized dealers
Service Features	Toll free	Toll free	Vendor did not specify	Toll free
Base Price ($)	1,149/available for GSA	1,599	1,799	2,199

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**367**
Microcomputer Systems

Vendor	Everex Systems, Inc.	First Class Systems, Inc.	First Class Systems, Inc.	Fortis Information Systems, Inc.
Product	Step 486Is	F16/SX	F20/DX	CP286B

Processor/Memory				
CPU/Clock Speed (MHz)	I486/25	80386SX/15	80386/20	80286/12
Co-Processor Options	None	80387SX	80387	80287
Standard RAM (bytes)/Speed (ns)	4.0M/100	1.0M/—	4.0M/—	512K/100
RAM Expansion Capacity (bytes)	8.0M	4.0M	8.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	32.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 256K/35	Not supported	Optional 64K/30	Not supported

Input/Output				
Bus Architecture	AT	MCA	MCA	AT
Bus Speed (MHz)	12.5	10	10	8
Total Expansion Slots	2 8-bit, 6 16-bit, 1 32-bit	3 16-bit	3 16-bit, 2 32-bit	3 8-bit, 5 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 1 32-bit	3 16-bit	3 16-bit, 2 32-bit	3 8-bit, 5 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	Mouse	Mouse	None
Other I/O Interfaces	None	None	None	None

Mass Storage				
Internal Drive Bays Available	5 half-height	Vendor did not specify	Vendor did not specify	4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.44M	1 1.44M	Vendor did not specify
Diskette Drive Options (bytes)	1.2M	Vendor did not specify	Vendor did not specify	1.2M
Hard Disk Interface	None	SCSI	SCSI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	40M/19	80M/19	None
Optional Mass Storage	160M, 330M, tape drive	80M, tape drive	140M, tape drive	20M, 40M

Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12

Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Integrated on system board/ 800 x 600	Integrated on system board/ 800 x 600	Adapter optional
Display	Optional	Optional	Optional	Optional

Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet, Token-Ring	Ethernet, Token-Ring	None

Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	From manufacturer
Dimensions (H x W x D, inches)	6 x 21.25 x 16.5	Vendor did not specify	Vendor did not specify	6.25 x 17 x 16.5
Weight (pounds)	31.50	Vendor did not specify	Vendor did not specify	43.00
AC Power Supply (watts)	200	100	100	200

Software				
Operating System(s) Bundled	MS-DOS	None	None	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	MS-DOS	MS-DOS	IBM PC-DOS, MS-DOS
Additional Software Included	BIOS, setup, diagnostics, util./diagn.	None	None	Setup

Service/Support				
Distribution Channels	Computer retail, VAR/VAD	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor did not specify	Vendor did not specify	Vendor
Service Features	On site	Vendor did not specify	Vendor did not specify	Toll free

Base Price ($)	9,699	4,260	8,250	1,049

MAY 1990

550-368
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Fortis Information Systems, Inc.	Fortis Information Systems, Inc.	Fortron Corp.	Fortron Corp.
Product	CP286L	CP386T	NetSet 386 Model 320 333	NetSet 386 Model 325 333
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386/25	80386/20	80386/25
Co-Processor Options	80287	80387, 80287, Weitek 1167	80387, Weitek 1167, Weitek 3176	80387, Weitek 1167, Weitek 3167
Standard RAM (bytes)/Speed (ns)	512K/100	1.0M/80	4.0M/60	4.0M/80
RAM Expansion Capacity (bytes)	1.0M	8.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, 64K/35	Proprietary, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 3 16-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 3 16-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 4 16-bit, 1 32-bit
Serial Ports	2 on main board	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	Vendor did not specify
Other I/O Interfaces	None	None	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 half-height, 2 third-height	2 full-height, 4 half-height	1 full-height, 2 half-height, 2 third-height	1 full-height, 2 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1	1
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	None	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	70M/28	70M/28
Optional Mass Storage	20M, 40M	20M, 40M, 80M	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, 680M, tape drive	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, 680M, tape drives
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (fixed position)	Included (fixed position)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/800 x 600	On included adapter/800 x 600
Display	Optional	Optional	Included, 14-inch	Included, 14-inch
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Floorstanding	Floorstanding	Floorstanding
Tempest Version	From manufacturer	From manufacturer	From manufacturer	From manufacturer
Dimensions (H x W x D, inches)	4 x 16.25 x 15.5	23 x 5.5 x 19	23.25 x 6.50 x 19.25	23.25 x 6.50 x 19.25
Weight (pounds)	30.00	53.00	70.00	70.00
AC Power Supply (watts)	150	200	220	220
Software				
Operating System(s) Bundled	IBM PC-DOS, MS-DOS	MS-DOS	None	None
Operating System(s) Supported	IBM PC-DOS, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Additional Software Included	BIOS, setup	Setup	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail	Computer retail	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Third party	Third party
Service Features	Toll free	Toll free	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	959	2,195	3,500	4,500

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**369**

Microcomputer Systems

Vendor	Fortron Corp.	Fountain Technologies, Inc.	GCH Systems, Inc.	GCH Systems, Inc.
Product	NetSet 386 Model 333	FTN-386SX	Easy Data 216HI	Easy Data 316SX
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386sx/16	80286/16	80286/16
Co-Processor Options	80387, Weitek 3167	80387SX	80287	None
Standard RAM (bytes)/Speed (ns)	4.0M/60	1.0M/80	1.0M/100	2.0M/100
RAM Expansion Capacity (bytes)	16.0M	4.0M	4.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K/25	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	6 16-bit, 2 32-bit	2 8-bit, 6 16-bit, 0 32-bit	2 8-bit, 6 16-bit, 0 32-bit
Available Expansion Slots	1 8-bit, 4 16-bit, 1 32-bit	6 16-bit, 2 32-bit	1 8-bit, 5 16-bit, 0 32-bit	2 8-bit, 5 16-bit, 0 32-bit
Serial Ports	2 on adapter	None	None; 2 on adapter	None; 2 on adapter
Parallel Ports	1 on adapter	None	None; 1 on adapter	None; 1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	101-key keyboard port	None	Ext. video	Ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height, 2 third-height	1 full-height, 3 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	1.2M	1.44M	1.44M
Hard Disk Interface	ST506/412	ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	70M/28	None	None	None
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, 680M, tape drive	20M, 40M, 80M, 300M, tape drive	30M, 70M, tape drive	40M, 80M, tape drive
Keyboard				
Availability	Included (fixed position)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	Adapter optional	Adapter optional	Adapter optional
Display	Included, 14-inch	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Ethernet, ARCnet	Vendor did not specify	None
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	23.25 x 6.50 x 19.25	Vendor did not specify	7.0 x 15.0 x 16.0	7.0 x 15.0 x 16.0
Weight (pounds)	70.00	Vendor did not specify	50.00	Vendor did not specify
AC Power Supply (watts)	220	200	200	200
Software				
Operating System(s) Bundled	None	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	Util./diagn.	BIOS	BIOS, setup, diagnostics, operating system, util./diagn.	BIOS, setup, diagnostics, operating system, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	Computer retail, general retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Vendor, authorized dealers	Vendor did not specify	Third party
Service Features	On site, toll free, 30-day money back	On site	On site, 30-day money back	On site, 30-day money back
Base Price ($)	6,500	1,500	1,176	1,875

550-**370**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	GCH Systems, Inc.	GCH Systems, Inc.	GCH Systems, Inc.	GCH Systems, Inc.
Product	Easy Data 320	Easy Data 320HI	Easy Data 325	Easy Data 325HI
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/20	80386/25	80386/25
Co-Processor Options	80387	80387	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/100	4.0M/100	4.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 32K/25	Intel, 32K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 0 32-bit
Serial Ports	None; 2 on adapter	None; 2 on adapter	None; 2 on adapter	None; 2 on adapter
Parallel Ports	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Ext. video	Ext. video	Ext. video	Ext. video
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	1.44M	1.44M	None	None
Hard Disk Interface	ST506/412	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	40M, 80M, tape drive, CD-ROM	40M, 80M, tape drive	150M, 300M, tape drive, CD-ROM	150M, 300M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	Vendor did not specify	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	7.0 x 21.5 x 17.5	7.0 x 15.0 x 16.0	7.0 x 21.5 x 17.5	7.0 x 15.0 x 16.0
Weight (pounds)	50.00	50.00	Vendor did not specify	50.00
AC Power Supply (watts)	200	200	200	Vendor did not specify
Software				
Operating System(s) Bundled	None	None	None	UNIX
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics, operating system, util./diagn.	BIOS, setup, diagnostics, operating system, util./diagn.	BIOS, setup, diagnostics, operating system, util./diagn.	BIOS, setup, diagnostics, operating system, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Third party	Third party
Service Features	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	2,190	2,190	4,599	4,599

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**371**
Microcomputer Systems

Vendor	GCH Systems, Inc.	GMX, Inc.	Herko Electronics, Inc.	Hetra Computer & Communications Industries, Inc.
Product	Easy Data 333	Micro-20 M20	HEI 386/20 VFS	Tempest PC 105T-286

Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	68030/20	80386/20	80286/10
Co-Processor Options	80387	None	Weitek 1167, 80387	80287
Standard RAM (bytes)/Speed (ns)	4.0M/100	2.0M/80	1.0M/80	1.0M/120
RAM Expansion Capacity (bytes)	16.0M	2.0M, 4.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	4.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/20	Not supported	Chips & Tech., 64K/25	Not supported
Input/Output				
Bus Architecture	AT	Proprietary	AT	AT passive backplane
Bus Speed (MHz)	10	12.5	8	8
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	3 16-bit	7 16-bit, 1 32-bit	8 16-bit
Available Expansion Slots	1 8-bit, 4 16-bit	3 16-bit	5 16-bit	7 16-bit
Serial Ports	2 on adapter	1 on main board	On main board	2 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	Vendor did not specify	Mouse
Other I/O Interfaces	Ext. video	SCSI	101-key keyboard port, numeric keypad port	Mouse, 101-key keyboard port, ext. video, network interface (Ethernet)
Mass Storage				
Internal Drive Bays Available	5 half-height	3 full-height	1 full-height, 3 half-height	4 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	None	1	None
Diskette Drive Options (bytes)	None	720K	360K, 720K	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	None	ESDI	ST506/412, SCSI
Hard Disk Size (bytes)/AAT (ms)	None	None	760M/18	None
Optional Mass Storage	150M, 300M, tape drive, CD-ROM	40M, tape drive	80M, 150M, tape drive, CD-ROM	20M, 30M, 40M, 100M, tape drive, Bernoulli cartridge
Keyboard				
Availability	Included (detachable)	Optional	Included (detachable)	Optional
Number of Keys/Function Keys	101/12	Vendor did not specify	84, 101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/800 x 600	Adapter optional
Display	Optional	Optional	Included, 14-inch, multifrequency	Optional
Local Area Network Support				
Vendor LAN Options	None	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	From manufacturer
Dimensions (H x W x D, inches)	7.0 x 21.5 x 17.5	17.4 x 17 x 23	21.00 x 7.00 x 16.50	6.50 x 17.50 x 17.50
Weight (pounds)	50.00	50.00	50.00	43.00
AC Power Supply (watts)	200	200	220	220
Software				
Operating System(s) Bundled	UNIX	None	MS-DOS	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	OS9, Uriflex	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX	IBM OS/2 Standard, MS-DOS
Additional Software Included	BIOS, setup, diagnostics, util./diagn.	Diagnostics, util./diagn.	Util./diagn., desk accessory	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Direct from vendor	Computer retail, VAR/VAD, direct from vendor	Direct from vendor
Parts Warranty	1 year	90 days	1 year	90 days
Labor Warranty	1 year	90 days	1 year	90 days
Service Supported by	Third party	Vendor	Vendor, authorized dealers, third party	Vendor
Service Features	On site, 30-day money back	Vendor did not specify	On site	On site, toll free
Base Price ($)	5,769/available for GSA	Vendor did not specify	4,409/available for GSA	3,600

550-**372**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Hetra Computer & Communications Industries, Inc.	Hetra Computer & Communications Industries, Inc.	Hewlett-Packard Company	Hewlett-Packard Company
Product	Tempest PC 105T-386/16	Tempest PC 105T-386/20	Vectra 486 PC Model 150	Vectra 486 PC Model 330
Processor/Memory				
CPU/Clock Speed (MHz)	80386/16	80386/20	I486/25	I486/25
Co-Processor Options	80387	80387	None	None
Standard RAM (bytes)/Speed (ns)	2.0M/80	2.0M/100	2.0M	2.0M
RAM Expansion Capacity (bytes)	16.0M	16.0M	2.0M	2.0M
Maximum System RAM (bytes)	16.0M	16.0M	64M	64M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Vendor did not specify	Vendor did not specify
Input/Output				
Bus Architecture	AT passive backplane	AT	EISA	EISA
Bus Speed (MHz)	8	8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	8 16-bit	8 16-bit	16-bit, 8 32-bit	16-bit, 8 32-bit
Available Expansion Slots	7 16-bit	7 16-bit	16-bit, 7 32-bit	16-bit, 7 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	None	None	None
Other I/O Interfaces	Mouse, SCSI, 101-key keyboard port, ext. video, network interface (Ethernet)	Mouse, 101-key keyboard port, ext. video	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	6 half-height	6 half-height
Diskette Drives Included (bytes)	None	None	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	Vendor did not specify	Vendor did not specify	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	None	None	152M/17	330M/15 ms
Optional Mass Storage	20M, 30M, 40M, 100M, tape drive, Bernoulli cartridge	20M, 40M, 100M, tape drive, Bernoulli cartridge	84M, 108M, 152M, 670M, tape drive	84M, 108M, 152M, 670M, tape drive
Keyboard				
Availability	Optional	Optional	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/10	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Included, optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Floorstanding
Tempest Version	From manufacturer	From manufacturer	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.50 x 17.50 x 17.50	6.5 x 17.5 x 17.5	24 x 8.3 x 20	24 x 8.3 x 20
Weight (pounds)	43.00	43.00	60.00	60.00
AC Power Supply (watts)	220	220	260	260
Software				
Operating System(s) Bundled	Vendor did not specify	None	None	None
Operating System(s) Supported	IBM OS/2 Standard, MS-DOS	MS-DOS	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	Vendor did not specify	BIOS, diagnostics	BIOS, util./diagn.	BIOS, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	90 days	90 days	1 year	1 year
Labor Warranty	90 days	90 days	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site, toll free	On site, toll free	Toll free	Toll free
Base Price ($)	6,100	6,100	Vendor did not specify	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**373**
Microcomputer Systems

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra 486 PC Model 670	Vectra CS 10	Vectra CS 15	Vectra CS 16
Processor/Memory				
CPU/Clock Speed (MHz)	I486/25	NEC V-30/7.16	NEC V-30/7.16	NEC V-30/7.16
Co-Processor Options	None	8087	8087	8087
Standard RAM (bytes)/Speed (ns)	2.0M	640K	640K	640K
RAM Expansion Capacity (bytes)	2.0M	640K	640K	640K
Maximum System RAM (bytes)	64M	640K	640K	640K
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	EISA	XT	XT	XT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	16-bit, 8 32-bit	7 8-bit, 16-bit	7 8-bit, 16-bit	7 8-bit, 16-bit
Available Expansion Slots	16-bit, 7 32-bit	7 8-bit, 16-bit	7 8-bit, 16-bit	6 8-bit, 16-bit
Serial Ports	2 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	6 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 360K	1 1.44M	2 360K
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.44M	360K, 1.44M	360K, 1.44M
Hard Disk Interface	Vendor did not specify	None	None	None
Hard Disk Size (bytes)/AAT (ms)	670M/15 ms	None	None	None
Optional Mass Storage	84M, 108M, 152M, 670M, tape drive	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/640 x 350
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	24 x 8.3 x 20	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	60.00	29.00	29.00	29.00
AC Power Supply (watts)	260	134	134	134
Software				
Operating System(s) Bundled	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS
Additional Software Included	BIOS, util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	Vendor did not specify	1,195/available for GSA	1,295/available for GSA	1,695/available for GSA

MAY 1990

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra CS 20	Vectra CS 26	Vectra CS 27	Vectra ES 10
Processor/Memory				
CPU/Clock Speed (MHz)	NEC V-30/7.16	NEC V-30/7.16	NEC V-30/7.16	80286/8
Co-Processor Options	8087	8087	8087	80287
Standard RAM (bytes)/Speed (ns)	640K	640K	640K	640K
RAM Expansion Capacity (bytes)	640K	640K	640K	640K
Maximum System RAM (bytes)	640K	640K	640K	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	XT	XT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	7 8-bit, 16-bit	7 8-bit	7 8-bit	2 8-bit, 5 16-bit
Available Expansion Slots	6 8-bit, 16-bit	5 8-bit	5 8-bit	2 8-bit, 4 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height,	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 360K	1 360K	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.44M	360K, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM	20M, 40M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 350	On included adapter/640 x 350	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	29.00	29.00	29.00	30.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	1,895/available for GSA	2,295/available for GSA	2,295/available for GSA	1,995/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**375**
Microcomputer Systems

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra ES 15	Vectra ES 20	Vectra ES 26	Vectra ES 27
Processor/Memory				
CPU/Clock Speed (MHz)	80286/8	80286/8	80286/8	80286/8
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	640K	640K	640K	640K
RAM Expansion Capacity (bytes)	640K	640K	640K	640K
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit
Available Expansion Slots	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit	1 8-bit, 4 16-bit	1 8-bit, 4 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, tape drive, CD-ROM	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM	20M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/640 x 350	On included adapter/640 x 350
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	30.00	30.00	30.00	30.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	1,995/available for GSA	2,395/available for GSA	2,795/available for GSA	2,795/available for GSA

550-376
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	**Vectra ES/12 10**	**Vectra ES/12 15**	**Vectra ES/12 20**	**Vectra ES/12 26**
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80286/15	80286/20	80286/26
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	640K	640K	640K	640K
RAM Expansion Capacity (bytes)	640K	640K	640K	640K
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit
Available Expansion Slots	2 8-bit, 4 16-bit,	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, tape drive, CD-ROM	20M, 40M, tape drive, CD-ROM	20M, 40M, tape drive, CD-ROM	20M, 40M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	30.00	30.00	30.00	30.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	2,495/available for GSA	2,495/available for GSA	2,895/available for GSA	3,195/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**377**
Microcomputer Systems

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra ES/12 27	Vectra ES/12 40	Vectra ES/12 46	Vectra ES/12 47
Processor/Memory				
CPU/Clock Speed (MHz)	80286/27	80286/20	80286/26	80286/27
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	640K	640K	640K	640K
RAM Expansion Capacity (bytes)	640K	640K	640K	640K
Maximum System RAM (bytes)	8.0M	8.0M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 5 16-bit,	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit
Available Expansion Slots	2 8-bit, 4 16-bit,	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	30.00	30.00	30.00	30.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	3,195/available for GSA	3,295/available for GSA	3,595/available for GSA	3,595/available for GSA

550-378
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra QS/16 10	Vectra QS/16 40	Vectra QS/16 46	Vectra QS/16 47
Processor/Memory				
CPU/Clock Speed (MHz)	80386/16	80386/16	80386/16	80386/16
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 6 16-bit	1 8-bit, 6 16-bit	6 16-bit	6 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit	5 16-bit	5 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	40M	40M	40M
Optional Mass Storage	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	33.00	33.00	33.00	33.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	3,995/available for GSA	5,095/available for GSA	5,495/available for GSA	5,495/available for GSA

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**379**
Microcomputer Systems

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra QS/16S 10	Vectra QS/16S 47	Vectra QS/20 100e	Vectra QS/20 10e
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	80386/20	80386/20
Co-Processor Options	80387SX	80387SX	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 6 16-bit	6 16-bit	1 8-bit, 6 16-bit	1 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	5 16-bit	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.44M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	None	None/80	None/80
Optional Mass Storage	20M, 40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	108M, tape drive, CD-ROM	108M, 152M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	On included adapter	On included adapter
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40
Weight (pounds)	33.00	33.00	33.00	33.00
AC Power Supply (watts)	134	134	134	134
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	4,495/available for GSA	5,995/available for GSA	Vendor did not specify	4,495/available for GSA

550-380

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra QS/20 15e	Vectra QS/20 46	Vectra QS/20 47	Vectra RS/20C 100e
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/20	80386/20
Co-Processor Options	80387	80387	80387	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not Supported	Not supported	Intel, 32K
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	1 8-bit, 6 16-bit	6 16-bit	6 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	5 16-bit	5 16-bit	2 8-bit, 5 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	6 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.2M, 1.44M	360K, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	ST506/412	ST506/412	ESDI
Hard Disk Size (bytes)/AAT (ms)	None/80	40M/, 80	40M/80	103
Optional Mass Storage	108M, 152M, tape drive, CD-ROM	40M, tape drive, CD-ROM	40M, tape drive, CD-ROM	Tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter	On included adapter/640 x 480	On included adapter/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	6.30 x 16.70 x 15.40	24.00 x 8.30 x 20.00
Weight (pounds)	33.00	33.00	33.00	60.00
AC Power Supply (watts)	134	134	134	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	4,495/available for GSA	5,995/available for GSA	5,995/available for GSA	7,595

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**381**

Microcomputer Systems

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company
Product	Vectra RS/20C 150e	Vectra RS/20C 154e	Vectra RS/25C 100e	Vectra RS/25C 150e
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/25	80386/25
Co-Processor Options	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/100	4.0M/100	1.0M/80	4.0M/80
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K	Intel, 32K	Intel, 32K	Intel, 32K
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	HP-HIL
Mass Storage				
Internal Drive Bays Available	6 half-height	6 half-height	6 half-height	6 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	Vendor did not specify	103	Vendor did not specify
Optional Mass Storage	Tape drive, CD-ROM	Tape drive, CD-ROM	Tape drive, CD-ROM	Tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Starlan
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	24.00 x 8.30 x 20.00	24.00 x 8.30 x 20.00	24.00 x 8.30 x 20.00	24.00 x 8.30 x 20.00
Weight (pounds)	60.00	60.00	60.00	60.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	8,195	10,145	10,295	10,895

550-**382**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Hewlett-Packard Company	Hewlett-Packard Company	Hewlett-Packard Company	IBC/Integrated Business Computers
Product	Vectra RS/25C 154e	Vectra RS/25C 304e	Vectra QS/165 46	XL Series XLM
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386sx/16	25
Co-Processor Options	80387, Weitek 3167	80387, Weitek 3167	80387SX	
Standard RAM (bytes)/Speed (ns)	4.0M/80	4.0M/80	1.0M/100	1.0M/60
RAM Expansion Capacity (bytes)	16.0M	16.0M	8.0M	96M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	96M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K	Intel, 32K	Not supported	Integrated, 8K
Input/Output				
Bus Architecture	AT	AT	AT	Proprietary
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	25
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	6 16-bit	16-bit, 7 32-bit
Available Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	5 16-bit	16-bit, 6 32-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	None
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	None
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	HP-HIL	HP-HIL	HP-HIL	SCSI, network interface (Ethernet)
Mass Storage				
Internal Drive Bays Available	6 half-height	6 half-height	3 half-height	4 full-height, 1 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	1.44M
Hard Disk Interface	ESDI	ESDI	ST506/412	SCSI
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	Vendor did not specify	None	300M/18
Optional Mass Storage	Tape drive, CD-ROM	Tape drive, CD-ROM	40M, tape drive, CD-ROM	760M, tape drive, erasable optical
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Vendor did not specify
Number of Keys/Function Keys	101/12	101/12	101/12	Vendor did not specify
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/640 x 480	Vendor did not specify
Display	Optional	Optional	Optional	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	Starlan	Starlan	Starlan	Vendor did not specify
Product Design				
Type of Unit	Floorstanding	Floorstanding	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	24.00 x 8.30 x 20.00	24.00 x 8.30 x 20.00	6.30 x 16.70 x 15.40	24 x 11 x 18
Weight (pounds)	60.00	60.00	33.00	Vendor did not specify
AC Power Supply (watts)	200	200	134	350
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	UNIX, UNIX derivative, THEOS/PICK
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	Comm., util./diagn.	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Third party
Service Features	Toll free	Toll free	Toll free	On site, toll free, 30-day money back
Base Price ($)	13,295	15,695	5,995/available for GSA	10,000/available for GSA

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**383**
Microcomputer Systems

Vendor	ICL Datachecker	ICL Datachecker	ICL Datachecker	ICL Datachecker
Product	ISP (In Store Processor) Model 30	ISP (In Store Processor) Model 40	ISP (In Store Processor) Model 45	ISP (In Store Processor) Model 80
Processor/Memory				
CPU/Clock Speed (MHz)	8086/9.54	80286/16	80286/16	80386/20
Co-Processor Options	8087	80287	80287	80387
Standard RAM (bytes)/Speed (ns)	640K/100	1.0M/100	1.0M/100	4.0M/80
RAM Expansion Capacity (bytes)	2.64M	5.0M	5.0 M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit	1 8-bit, 1 16-bit	1 8-bit, 3 16-bit	2 8-bit, 6 16-bit, 4 32-bit
Available Expansion Slots	2 8-bit	1 8-bit, 1 16-bit	1 8-bit, 3 16-bit	1 8-bit, 5 16-bit, 4 32-bit
Serial Ports	1 on main board	2 on main board	2 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 third-height	2 third-height	1 half-height, 2 third-height	2 full-height, 3 half-height
Diskette Drives Included (bytes)	1 720K	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K	360K	360K, 1.2M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	IBM host adapter	IBM host adapter	IBM host adapter	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/65	40M/28	40M/28	80M/18
Optional Mass Storage	Tape drive	Tape drive	100M, tape drive	45M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/10	101/10	101/10	101/10
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	640 x 480	On included adapter/640 x 480
Display	Optional, analog color	Optional, analog color	Optional, analog color	Optional, analog color
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	3.5 x 14.4 x 16.7	3.5 x 14.4 x 16.7	5.2 x 14.4 x 16.7	7 x 23 x 16.8
Weight (pounds)	17.00	17.00	33.00	38.00
AC Power Supply (watts)	72	72	145	192
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	None	None	Vendor did not specify	Vendor did not specify
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	90 days	90 days	90 days	90 days
Labor Warranty	90 days	90 days	90 days	Vendor did not specify
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site, toll free	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	2,890.00	3,795.00	3,995.00	8,700.00

550-384
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 30 8530-001	Personal System/2 Model 25 8525-001	Personal System/2 Model 25 8525-004	Personal System/2 Model 25 8525-G01
Processor/Memory				
CPU/Clock Speed (MHz)	8086/8	8086/8	8086/8	8086/8
Co-Processor Options	8087	8087	8087	8087
Standard RAM (bytes)/Speed (ns)	640K	512K	512K	512K
RAM Expansion Capacity (bytes)	640K	640K	640K	640K
Maximum System RAM (bytes)	640K	640K	640K	640K
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	XT	XT	XT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	3 8-bit	2 8-bit, 16-bit	2 8-bit	2 8-bit
Available Expansion Slots	3 8-bit	2 8-bit, 16-bit	2 8-bit	2 8-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port, audio	Mouse, 101-key keyboard port, audio	Mouse, 101-key keyboard port, audio
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 720K	1 720K	1 720K	1 720K
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 720K	360K, 720K
Hard Disk Interface	None	None	None	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, tape drive, WORM	20M, tape drive, WORM	20M, tape drive, WORM	20M, tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	84/12	84/12	84/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/, 640 x 480	Integrated on system board/, 640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Included, 12-inch, analog monochrome	Included, 12-inch, analog color	Included, 12-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	4.00 x 16.00 x 15.60	15.38 x 12.63 x 14.88	15.38 x 12.63 x 14.88	15.38 x 12.63 x 14.88
Weight (pounds)	17.00	31.00	36.00	31.00
AC Power Supply (watts)	70	90	115	90
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS	IBM PC-DOS	IBM PC-DOS	IBM PC-DOS
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	1,695/available for GSA	1,350/available for GSA	1,695/available for GSA	1,395/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**385**
Microcomputer Systems

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 25 8525-G04	Personal System/2 Model 25 LS 8525-L01	Personal System/2 Model 25 LS 8525-L04	Personal System/2 Model 30 286 8530-E01
Processor/Memory				
CPU/Clock Speed (MHz)	8086/8	8086/8	8086/8	80286/10
Co-Processor Options	8087	8087	8087	80287
Standard RAM (bytes)/Speed (ns)	512K	640K	640K	1.0M
RAM Expansion Capacity (bytes)	640K	640K	640K	4.0M
Maximum System RAM (bytes)	640K	640K	640K	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	XT	XT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit	2 8-bit	2 8-bit	3 16-bit
Available Expansion Slots	2 8-bit	1 8-bit	1 8-bit	3 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port, audio	Mouse, 101-key keyboard port, audio, network interface (Token Ring)	Mouse, 101-key keyboard port, audio, network interface (Token Ring)	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 720K	1 720K	1 720K	1 1.44M
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 720K	360K, 1.2M, 1.44M
Hard Disk Interface	None	None	None	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, tape drive, WORM	20M, tape drive, WORM	20M, tape drive, WORM	20M, 30M, tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	84/12	84/12	84/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Included, 12-inch, analog color	Included, 12-inch, analog monochrome	Included, 12-inch, analog color	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	15.38 x 12.63 x 14.88	15.38 x 12.63 x 14.88	15.38 x 12.63 x 14.88	4.00 x 16.00 x 15.60
Weight (pounds)	36.00	31.00	36.00	19.00
AC Power Supply (watts)	115	90	115	90
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS	IBM PC-DOS	IBM PC-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	1,740/available for GSA	2,139/available for GSA	2,484/available for GSA	1,995/available for GSA

550-386

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 30 286 8530-E21	Personal System/2 Model 30 286 8530-E31	Personal System/2 Model 50 Z 8550-031	Personal System/2 Model 50 Z 8550-061
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/10	80286/10	80286/10
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M/85	1.0M/85
RAM Expansion Capacity (bytes)	4.0M	4.0M	2.0M	2.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	MCA	MCA
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	10	10
Total Expansion Slots	3 16-bit	3 16-bit	3 16-bit	3 16-bit
Available Expansion Slots	3 16-bit	3 16-bit	3 16-bit	3 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ESDI
Hard Disk Size (bytes)/AAT (ms)	20M/80	30M/39	30M/39	60M/27
Optional Mass Storage	20M, 30M, tape drive, WORM	20M, 30M, tape drive, WORM	60M, tape drive, WORM	Tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	4.00 x 16.00 x 15.60	4.00 x 16.00 x 15.60	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50
Weight (pounds)	19.00	19.00	21.00	21.00
AC Power Supply (watts)	90	90	94	94
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	2,495/available for GSA	2,595/available for GSA	3,250/available for GSA	3,650/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**387**
Microcomputer Systems

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 55 SX 8555-031	Personal System/2 Model 55 SX 8555-061	Personal System/2 Model 60 0560-041	Personal System/2 Model 60 8560-071
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386sx/16	80286/10	80286/10
Co-Processor Options	80387SX	80387SX	80287	80287
Standard RAM (bytes)/Speed (ns)	2.0M	2.0M	1.0M	1.0M
RAM Expansion Capacity (bytes)	4.0M	4.0M	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	MCA	MCA	MCA	MCA
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	3 16-bit	3 16-bit	7 16-bit	7 16-bit
Available Expansion Slots	3 16-bit	3 16-bit	7 16-bit	7 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 full-height, 1 third-height	1 full-height, 1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ESDI	ST506/412	ESDI
Hard Disk Size (bytes)/AAT (ms)	30M/39	60M/27	44/40	70M/30
Optional Mass Storage	60M, tape drive, WORM	Tape drive, WORM	44, tape drive, WORM	70M, 44M, 115M, tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	4.00 x 14.00 x 16.50	4.00 x 14.00 x 16.50	23.50 x 6.50 x 19.00	23.50 x 6.50 x 19.00
Weight (pounds)	19.00	19.00	47.00	47.00
AC Power Supply (watts)	90	90	207	225
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	3,895/available for GSA	4,295/available for GSA	5,295/available for GSA	5,795/available for GSA

550-388

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 70 386 8570-061	Personal System/2 Model 70 386 8570-121	Personal System/2 Model 70 386 8570-A21	Personal System/2 Model 70 386 8570-A61
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/25	80386/25
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	4.0M	4.0M	4.0M	4.0M
RAM Expansion Capacity (bytes)	6M	6M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 64K	Intel, 64K
Input/Output				
Bus Architecture	MCA	MCA	MCA	MCA
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit
Available Expansion Slots	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	60M/23	120M/23	120M/23	60M/23
Optional Mass Storage	Tape drive, WORM	Tape drive, WORM	Tape drive, WORM	Tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50
Weight (pounds)	21.00	21.00	21.00	21.00
AC Power Supply (watts)	132	132	132	132
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	5,795/available for GSA	6,395/available for GSA	8,995/available for GSA	8,395/available for GSA

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-389

Microcomputer Systems

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)
Product	Personal System/2 Model 70 386 8570-E61	Personal System/2 Model 70 486	Personal System/2 Model 70 486 (60M hard disk)	Personal System/2 Model 80 386 8580-041
Processor/Memory				
CPU/Clock Speed (MHz)	80386/16	I486/25	I486/25	80386/16
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M	4.0M	4.0M	1.0M
RAM Expansion Capacity (bytes)	6M	8.0M	8.0M	2.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel, 64K	Intel, 64K	Not supported
Input/Output				
Bus Architecture	MCA	MCA	MCA	MCA
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	4 16-bit, 3 32-bit
Available Expansion Slots	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	1 16-bit, 2 32-bit	4 16-bit, 3 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 third-height	1 third-height	1 third-height	1 full-height, 1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	60M/27	120M/, 23	60M/23	44/40
Optional Mass Storage	Tape drive, WORM	Tape drive, WORM	Tape drive, WORM	44, tape drive, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50	5.50 x 14.20 x 16.50	23.50 x 6.50 x 19.00
Weight (pounds)	21.00	21.00	21.00	52.00
AC Power Supply (watts)	132	132	132	207
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	5,495/available for GSA	12,990/available for GSA	12,390/available for GSA	6,995/available for GSA

550-390

Microcomputer Systems

**Microcomputers:
Comparison Columns**

Datapro Reports on
PC Communications

Vendor	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	International Business Machines Corp. (IBM)	Isotropic Computer Inc.
Product	Personal System/2 Model 80 386 8580-071	Personal System/2 Model 80 386 8580-111	Personal System/2 Model 80 386 8580-311	ISO BT 286 BT1641-10
Processor/Memory				
CPU/Clock Speed (MHz)	80386/16	80386/20	80386/20	80286/10
Co-Processor Options	80387	80387	80387	80287
Standard RAM (bytes)/Speed (ns)	2.0M	2.0M	2.0M	1.0M/100
RAM Expansion Capacity (bytes)	4.0M	4.0M	4.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	MCA	MCA	MCA	AT
Bus Speed (MHz)	10	10	10	10
Total Expansion Slots	4 16-bit, 3 32-bit	4 16-bit, 3 32-bit	4 16-bit, 3 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	4 16-bit, 3 32-bit	4 16-bit, 3 32-bit	4 16-bit, 3 32-bit	1 8-bit, 4 16-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 1 third-height	1 full-height, 1 third-height	1 full-height, 1 third-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	70M/, 30	115M/28	314M/, 23	40M/28
Optional Mass Storage	70M, 44M, 115M, 314M, tape drive, WORM	70M, 44M, 115M, 314M, tape drive, WORM	70M, 44M, 115M, 314M, tape drive, WORM	20M, 80M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480	On included adapter/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Token-ring	Token-ring	Token-ring	None
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	23.50 x 6.50 x 19.00	23.50 x 6.50 x 19.00	23.50 x 6.50 x 19.00	6 x 21 x 16
Weight (pounds)	52.00	52.00	52.00	45.00
AC Power Supply (watts)	225	225	225	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, AIX PS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX deriv., Pick
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	BIOS, setup, diagnostics, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor
Service Features	On site	On site	On site	30-day money back
Base Price ($)	7,995/available for GSA	8,995/available for GSA	11,295/available for GSA	1,795

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**391**

Microcomputer Systems

Vendor	Isotropic Computer Inc.	Isotropic Computer Inc.	Isotropic Computer Inc.	Isotropic Computer Inc.
Product	ISO BT 286 BT1641-12	ISO BT 286 BT1641-20	ISO BT 386 BT3241-16	ISO BT 386 BT3241-20
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80286/20	80386/16	80386/20
Co-Processor Options	80287	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	1.0M/80	1.0M/60
RAM Expansion Capacity (bytes)	1.0M	1.0M	10.0M	10.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT/separate memory bus	AT/separate memory bus
Bus Speed (MHz)	12	8	8	10
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 2 32-bit	2 8-bit, 5 16-bit, 2 32-bit
Available Expansion Slots	1 8-bit, 4 16-bit	1 8-bit, 4 16-bit	1 8-bit, 3 16-bit, 1 32-bit	1 8-bit, 3 16-bit, 1 32-bit
Serial Ports	1 on adapter	2 on main board	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	101-key keyboard port, ext. video	101-key keyboard port, ext. video	101-key keyboard port, ext. video	Ext. video, numeric keypad port
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	1 full-height, 3 half-height	1 full-height, 3 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	40M/28	40M/28
Optional Mass Storage	20M, 80M	20M, 80M	80M	80M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/800 x 600	On included adapter/800 x 600	On included adapter/800 x 600	On included adapter/800 x 600
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6 x 21 x 16	6 x 21 x 16	6 x 21 x 16	6 x 21 x 16
Weight (pounds)	45.00	45.00	45.00	45.00
AC Power Supply (watts)	200	200	Vendor did not specify	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX deriv., Pick	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX deriv., Pick	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	30-day money back	30-day money back	30-day money back	30-day money back
Base Price ($)	1,825	1,995	2,095	2,395

550-392

Microcomputer Systems

**Microcomputers:
Comparison Columns**

Datapro Reports on
PC Communications

Vendor	Kaypro, Inc.	Leading Edge Products, Inc.	Leading Edge Products, Inc.	Leading Edge Products, Inc.
Product	KC-1	D/3S	D3/MC	D4
Processor/Memory				
CPU/Clock Speed (MHz)	NEC V-20/8	80386sx/16	80386sx/16	I486/33
Co-Processor Options	None	80387SX	80387SX	None
Standard RAM (bytes)/Speed (ns)	640K/150	1.0M	1.0M	4.0M
RAM Expansion Capacity (bytes)	640K	4.0M	4.0M	8.0M
Maximum System RAM (bytes)	1.0M	4.0M	4.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Vendor did not specify	Proprietary, 32K
Input/Output				
Bus Architecture	XT	Vendor did not specify	MCA	EISA
Bus Speed (MHz)	10	Vendor did not specify	10	Vendor did not specify
Total Expansion Slots	8 8-bit	2 8-bit, 4 16-bit	4 16-bit	2 16-bit, 6 32-bit
Available Expansion Slots	5 8-bit	1 8-bit, 4 16-bit	4 16-bit	Vendor did not specify
Serial Ports	1 on main board	2 on main board	1 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	None
Other I/O Interfaces	Joystick port	Mouse	Mouse	Mouse
Mass Storage				
Internal Drive Bays Available	2 half-height	3 half-height	3 third-height	3 half-height, 2 third-height
Diskette Drives Included (bytes)	1 360K	1 1.2M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	None	360K, 720K, 1.44M	None	360K, 720K, 1.44M
Hard Disk Interface	None	Vendor did not specify	None	None
Hard Disk Size (bytes)/AAT (ms)	None	65M/28	None	None
Optional Mass Storage	None	None	None	60M, 80M, 100M, 300M, 220M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	Integrated on system board/640 x 480	On included adapter/text mode only
Display	Included, 12-inch digital monochrome	Included, 14-inch, analog monochrome	Included, 14-inch, analog monochrome	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.50 x 19.50 x 16.00	6 x 15.5 x 15.75	4 x 14 x 15	6.25 x 22 x 16.5
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	150	200	100	200
Software				
Operating System(s) Bundled	DR DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	DR DOS	MS-DOS	MS-DOS, Vendor MS-OS/2	MS-DOS, Vendor MS-OS/2
Additional Software Included	None	BIOS, Basic	BIOS	BIOS, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	20 months	20 months	20 months
Labor Warranty	1 year	20 months	20 months	20 months
Service Supported by	Authorized dealers, third party	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	On site	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	895	1,895	2,295	Vendor did not specify

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**393**

Microcomputer Systems

Vendor	Lee Data Corp.	Lee Data Corp.	Logix Microcomputer	Mark Computer Products Corp.
Product	Series 90 Personal Computer Model 95	Series 90 Personal Computer Model 96	LGX386 -20	Mark 286
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386sx/16	80386/20	80286/12
Co-Processor Options	80287	80287	80387, 80287	80287
Standard RAM (bytes)/Speed (ns)	1.0M/120	2.0M/100	2.0M/80	2.0M/100
RAM Expansion Capacity (bytes)	2.0M	4.0M	16.0M	12.0M
Maximum System RAM (bytes)	10.0M	16.0M	16.0M	12.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	8	12.5
Total Expansion Slots	3 16-bit	1 8-bit, 5 16-bit	1 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	2 16-bit	1 8-bit, 2 16-bit	Vendor did not specify	2 8-bit, 6 16-bit
Serial Ports	1 on main board	1 on adapter	1 on adapter	2 on main board
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on main board
Cther I/O Devices Included	None	None	Mouse	Vendor did not specify
Other I/O Interfaces	Mouse, ext. video	Mouse, ext. video	Mouse	Mouse, audio, expansion unit
Mass Storage				
Internal Drive Bays Available	3 third-height	1 full-height, 2 third-height	Vendor did not specify	3 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.44M	1.2M, 1.44M	360K, 720K, 1.44M	360K, 720K, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	100M/28	70M/28	50M/28
Optional Mass Storage	20M, 40M	20M, 40M, 100M	20M, 40M, 150M, 300M, tape drive, WORM	80M, 120M, 150M, 300M, 675M, tape drive
Keyboard				
Availability	Optional	Optional	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	Vendor did not specify	Vendor did not specify	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	On included adapter/640 x 480	On included adapter/1,024 x 768	Integrated on system board/640 x 400
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch, multifrequency	Included, 14-inch, analog monochrome
Local Area Network Support				
Vendor LAN Options	None	None	Ethernet, ARCnet	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	Vendor did not specify	From manufacturer
Dimensions (H x W x D, inches)	7.3 x 15.4 x 14.2	4.3 x 15.5 x 16.2	Vendor did not specify	5 x 14 x 12
Weight (pounds)	27.00	19.00	48.00	25.00
AC Power Supply (watts)	135	78	220	200
Software				
Operating System(s) Bundled	None	None	Vendor did not specify	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics	BIOS, setup, diagnostics	Comm., util./diagn.	Comm., applications, util./diagn., desk accessory
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	2 years
Labor Warranty	1 year	1 year	1 year	2 years
Service Supported by	Vendor, third party	Vendor, third party	Vendor	Vendor, third party
Service Features	On site, toll free	On site, toll free	30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,995	3,299	3,695	1,695/available for GSA

550-394
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Mark Computer Products Corp.	Maxar P.C.	Maxar P.C.	Maxar P.C.
Product	Mark 386 386F	Maxar 286/16	Maxar 286L	Maxar 386
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80286/16	80286/12	80386/16
Co-Processor Options	80387, Weitek 3167	80287	80287	80387
Standard RAM (bytes)/Speed (ns)	4.0M/85	1.0M/120	1.0M/120	4.0M/120
RAM Expansion Capacity (bytes)	16.0M	Vendor did not specify	16.0M	4.0M
Maximum System RAM (bytes)	16.0M	Vendor did not specify	16.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K/30	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5	8	8	Vendor did not specify
Total Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	2 8-bit, 6 16-bit	6 16-bit	6 16-bit, 2 32-bit
Available Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	2 on main board	1 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	None	Vendor did not specify	None
Other I/O Interfaces	Mouse, audio, expansion unit	None	Mouse, ext. diskette drive, 101-key keyboard port, joystick	None
Mass Storage				
Internal Drive Bays Available	6 full-height	5 half-height	1 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M	None	1 1.2M
Diskette Drive Options (bytes)	360K, 720K	360K, 1.44M	None	360K, 1.44M
Hard Disk Interface	ESDI	ST506/412	None	ST506/412
Hard Disk Size (bytes)/AAT (ms)	120M/16 ms	None	None	None
Optional Mass Storage	80M, 150M, 300M, 67.5M, tape drive, CD-ROM	None	None	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/15	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 400	Adapter optional	Adapter optional	Adapter optional
Display	Included, 14-inch, multifrequency	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	None	Ethernet, Token-ring, ARCnet	None
Product Design				
Type of Unit	Floorstanding	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	23 x 5 x 14	13 x 26 x 22	10.00 x 22.60 x 20.50	13 x 26 x 22
Weight (pounds)	40.00	51.00	55.00	51.00
AC Power Supply (watts)	275	200	150	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	Vendor did not specify	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX
Additional Software Included	Comm., applications, util./diagn., desk accessory	Setup, util./diagn.	Util./diagn., Basic	Setup, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	Vendor did not specify	Direct from vendor	Vendor did not specify
Parts Warranty	2 years	1 year	1 year	1 year
Labor Warranty	2 years	1 year	1 year	1 year
Service Supported by	Vendor, third party	Third party	Vendor, authorized dealers	Third party
Service Features	On site, toll free, 30-day money back	On site	On site	On site
Base Price ($)	4,945/available for GSA	Vendor did not specify	1,768	Vendor did not specify

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**395**
Microcomputer Systems

Vendor	Maxar P.C.	Maxar P.C.	Maxar P.C.	Maxar P.C.
Product	Maxar 386 SXL	Maxar 386/20	Maxar 386/25	Maxar 386/33
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/20	80386/25	80386/33
Co-Processor Options	80387 Weitek 3167	80387, Weitek 1167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	2.0M	1.0M/100	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	Vendor did not specify	1.0M	5.0M	5.0M
Maximum System RAM (bytes)	8.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	64K/30	64K/30
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	Vendor did not specify
Total Expansion Slots	2 8-bit, 3 16-bit	1 8-bit, 5 16-bit, 2 32-bit	7 16-bit, 1 32-bit	7 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	1 8-bit, 4 16-bit, 2 32-bit	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	1 full-height, 2 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M	1.2M	360K, 1.44M	360K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	Vendor did not specify	None	None
Optional Mass Storage	None	70M	None	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	Adapter optional	On included adapter
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	10 x 22.6 x 20.5	13.00 x 26.00 x 22.00	13 x 26 x 22	13 x 26 x 27
Weight (pounds)	35.20	50.00	51.00	51.00
AC Power Supply (watts)	150	200	200	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX	IBM PC-DOS, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX
Additional Software Included	Setup	Util./diagn.	Setup, util./diagn.	Setup, util./diagn.
Service/Support				
Distribution Channels	Vendor did not specify	VAR/VAD	Vendor did not specify	Vendor did not specify
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Vendor, authorized dealers	Third party	Third party
Service Features	On site	On site	On site	On site
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify

550-396
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Maxar P.C.	Memorex Telex	Memorex Telex	Memorex Telex
Product	Maxar 88L	7006	7025	7040
Processor/Memory				
CPU/Clock Speed (MHz)	8088-2/9.54	8086/10	80286/12.56.25	80286/12
Co-Processor Options	80287, 8087	8087	80287	80287
Standard RAM (bytes)/Speed (ns)	640K/120	640K/100	1.0M/120	640K/100
RAM Expansion Capacity (bytes)	640K	4.0M	8.0M	640K
Maximum System RAM (bytes)	640K	8.0M	8.0M	2.6M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Vendor did not specify	Not supported	Vendor did not specify
Input/Output				
Bus Architecture	XT	XT	AT	AT
Bus Speed (MHz)	9.54	10	12.5	12
Total Expansion Slots	4 8-bit	5 8-bit	1 8-bit, 1 16-bit	1 8-bit, 2 16-bit
Available Expansion Slots	Vendor did not specify	5 8-bit	1 8-bit, 1 16-bit	1 8-bit, 2 16-bit
Serial Ports	1 on main board	1 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	Vendor did not specify
Other I/O Interfaces	Vendor did not specify	Mouse, network interface	Mouse, 101-key keyboard port, ext. video	Mouse, ext. hard disk
Mass Storage				
Internal Drive Bays Available	1 full-height, 1 half-height	2 half-height	1 third-height	2 half-height
Diskette Drives Included (bytes)	2 1.2M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K	None	None	None
Hard Disk Interface	None	ST506/412	AT/IDE	SCSI
Hard Disk Size (bytes)/AAT (ms)	None	None	None	Vendor did not specify
Optional Mass Storage	None	20M, 40M	20M, 40M, tape drive	40M, 80M, tape drive
Keyboard				
Availability	Included (detachable)	Optional	Included (detachable)	Optional
Number of Keys/Function Keys	101/12	Vendor did not specify	84/10	Vendor did not specify
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Token-ring	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	10.00 x 22.60 x 20.50	Vendor did not specify	3.8 x 12.0 x 15.3	4.00 x 16.00 x 15.25
Weight (pounds)	Vendor did not specify	Vendor did not specify	15.50	25.00
AC Power Supply (watts)	150	100	55	75
Software				
Operating System(s) Bundled	Vendor did not specify	MS-DOS	None	MS-DOS
Operating System(s) Supported	MS-DOS	Vendor did not specify	MS-DOS, Vendor MS-OS/2	MS-DOS
Additional Software Included	Vendor did not specify	None	Util./diagn.	Vendor did not specify
Service/Support				
Distribution Channels	Vendor did not specify	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	Vendor did not specify	1 year	Vendor did not specify
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor	Vendor	Vendor
Service Features	Vendor did not specify	Vendor did not specify	On site, toll free	Vendor did not specify
Base Price ($)	1,093	1,495	1,995/available for GSA	2,095

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**397**
Microcomputer Systems

Vendor	Memorex Telex	Memorex Telex	Memorex Telex	Memorex Telex
Product	7045	7065	7070	7255
Processor/Memory				
CPU/Clock Speed (MHz)	80286/1612	80386/20	80386/20	80386sx/16
Co-Processor Options	80287	80387	80387	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M/100	2.0M/80	2.0M/80	1M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	20M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	MCA
Bus Speed (MHz)	12.5	8 and 10	8	10
Total Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 4 16-bit	2 8-bit, 5 16-bit, 1 32-bit	6 32-bit
Available Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 4 16-bit	2 8-bit, 5 16-bit, 1 32-bit	6 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	2 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port	Mouse, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	4 half-height	4 half-height	5 half-height	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M	360K, 1.2M	360K, 1.44M	1.2M, 1.44M
Hard Disk Interface	Vendor did not specify	ST506/412	ESDI	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, 80M	20M, 40M, 80M	150M, 94M, 338M, tape drive	20M, 40M
Keyboard				
Availability	Optional	Optional	Optional	Included (detachable)
Number of Keys/Function Keys	Vendor did not specify	Vendor did not specify	Vendor did not specify	101/10
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional/640 x 480	Integrated on system board/720 x 348	Integrated on system board/800 x 600
Display	Optional	Optional	Included, 14-inch, analog color	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Token-ring
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.20 x 18.70 x 16.40	6.20 x 18.70 x 16.40	6.30 x 20.90 x 16.50	6 x 14.84 x 16.46
Weight (pounds)	Vendor did not specify	25.00	40.00	25.30
AC Power Supply (watts)	150	145	200	145
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	None
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	MS-DOS, Vendor MS-OS/2
Additional Software Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	Vendor did not specify	Vendor did not specify	Vendor did not specify	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	On site, toll free
Base Price ($)	2,595	4,195	5,060	2,695/available for GSA

550-398
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Micro Express	Micro Express	Micro Express	Micro Express
Product	ME 286-16SL	ME 386-25	ME 386-25LC	ME 386-33LC
Processor/Memory				
CPU/Clock Speed (MHz)	80286/16	80386/25	80386/25	80386/33
Co-Processor Options	80287	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	640K/100	1.0M/80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	4.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	4.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Chips & Tech., 64K/25	Chips & Tech., 32K/25	Chips & Tech., 32K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 3 16-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	2 8-bit, 2 16-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	1 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port, ext. video	101-key keyboard port, ext. video	101-key keyboard port, ext. video	101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	1 full-height, 3 half-height	1 full-height, 3 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 70M, 80M, 100M, 150M, tape drive, CD-ROM, WORM	40M, 70M, 80M, 100M, 150M, 300M, 630, tape drive, CD-ROM, WORM, erasable optical	40M, 70M, 80M, 100M, 150M, 300M, 630, tape drive, CD-ROM, WORM, erasable optical	40M, 70M, 80M, 100M, 150M, 300M, 630, tape drive, CD-ROM, WORM, erasable optical
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 x 350	Adapter optional	Adapter optional	Adapter optional
Display	Included, 14-inch digital monochrome	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	4 x 16.5 x 15.25	5.50 x 21.00 x 16.50	6.5 x 14.5 x 16.5	6.5 x 14.5 x 16.5
Weight (pounds)	Vendor did not specify	50.00	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	15 months	15 months	15 months	15 months
Labor Warranty	15 months	15 months	15 months	15 months
Service Supported by	Vendor, third party	Vendor, third party	Vendor, third party	Vendor, third party
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,199	1,999	1,999	2,749

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**399**

Microcomputer Systems

Vendor	Micro Express	Mission Cyrus Corp.	Mission Cyrus Corp.	Mission Cyrus Corp.
Product	ME 386-SX	Darius CentralNtelligence - AT AT Version 33 MHz	Darius CentralNtelligence - MCA MCA Version 25 MHz	Darius ProFessional - AT AT Version 16 MHz
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/33	80386/25	80386/16
Co-Processor Options	80387	80387	80387, Weitek 3167	80387SX
Standard RAM (bytes)/Speed (ns)	1.0M/80	4.0M/80	4.0M/80	1.0M/100
RAM Expansion Capacity (bytes)	16.0M	8.0M	16.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Chips & Tech., 32K/25	Intel, 32K/25	Intel, 32K/25	Not supported
Input/Output				
Bus Architecture	AT	AT	MCA	AT
Bus Speed (MHz)	8	8	10	8
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	10 16-bit	8 32-bit	2 16-bit
Available Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	7 16-bit	7 32-bit	2 16-bit
Serial Ports	2 on adapter	2 on main board	2 on main board	1 on main board
Parallel Ports	1 on adapter	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Mouse	Mouse, int. modem	Mouse, int. modem
Other I/O Interfaces	101-key keyboard port, ext. video	Mouse, SCSI, 101-key keyboard port, ext. video, network interface	Mouse, SCSI, 101-key keyboard port, ext. video, network interface, Ethernet	Mouse, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	4 full-height, 3 third-height	4 full-height, 2 third-height	3 third-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	1.2M	1.2M	None
Hard Disk Interface	ESDI	ESDI	SCSI	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	200M/18	200M/18	50M/23
Optional Mass Storage	40M, 70M, 80M, 100M, 150M, 300M, 630, tape drive, CD-ROM,WORM, erasable optical	760M, tape drive, CD-ROM, WORM, erasable optical	760M, tape drive, CD-ROM, WORM, erasable optical	100M, 200M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	Integrated on system board/640 x 480	Integrated on system board/800 x 600
Display	Optional	Optional	Optional	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Floorstanding	Floorstanding	Desktop
Tempest Version	Not available	From manufacturer	From manufacturer	Vendor did not specify
Dimensions (H x W x D, inches)	6.5 x 14.5 x 16.5	Vendor did not specify	Vendor did not specify	4.25 x 17.25 x 12.25
Weight (pounds)	Vendor did not specify	Vendor did not specify	100.00	20.00
AC Power Supply (watts)	200	400 UPS	400 UPS	220
Software				
Operating System(s) Bundled	Vendor did not specify	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2 Util./diagn.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv. Util./diagn.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv. Util./diagn.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv. Util./diagn.
Additional Software Included				
Service/Support				
Distribution Channels	Direct from vendor	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	15 months	120 days	120 days	120 days
Labor Warranty	15 months	120 days	120 days	120 days
Service Supported by	Vendor, third party	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	On site, toll free, 30-day money back	Toll free	Toll free	Toll free
Base Price ($)	999	14,999	14,999	3,699

550-400
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Mission Cyrus Corp.	Mission Cyrus Corp.	Mission Cyrus Corp.	Mitsuba Corp.
Product	Darius ProFessional - AT AT Version 16 MHz (hard disk)	Darius ProFessional - MCA MCA Version	Darius ProPortable - ISA ISA Version 33 MHz	Mitsuba 286 MIT-WSN
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/25	80386/33	80286/12
Co-Processor Options	80387SX	80387, Weitek 1167	80387, Weitek 3167	80287
Standard RAM (bytes)/Speed (ns)	1.0M/100	4.0M/100	1.0M/80	512K/100
RAM Expansion Capacity (bytes)	8.0M	16.0M	32M	Vendor did not specify
Maximum System RAM (bytes)	16.0M	16.0M	32M	4.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel, 32K/30	Intel, 64K/25	Not supported
Input/Output				
Bus Architecture	AT	MCA	AT, AT passive backplane	AT
Bus Speed (MHz)	8	10	8	8
Total Expansion Slots	Vendor did not specify	2 32-bit	2 16-bit	2 8-bit, 3 16-bit,
Available Expansion Slots	Vendor did not specify	2 32-bit	2 16-bit	Vendor did not specify
Serial Ports	1 on main board	2 on main board	1 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse, int. modem	Mouse, int. modem	Mouse, int. modem	None
Other I/O Interfaces	Mouse	Mouse, SCSI, 101-key keyboard port, ext. video, network interface	Mouse, SCSI	Mouse, ext. diskette drive, ext. video
Mass Storage				
Internal Drive Bays Available	3 third-height	3 third-height	3 third-height	2 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	None	1.44M	None	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	50M/23	100M/10ms	None
Optional Mass Storage	40M, 200M, tape drive, CD-ROM	100M, 200M, tape drive, CD-ROM, WORM, erasable optical	40M, 200M, tape drive, CD-ROM	20M,30M,40M,50M,60M,70M, 80M, 90M, 100M, 120M, 150M, none
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/800 x 600	Integrated on system board/640 x 480	Integrated on system board	Integrated on system board/, 720 x 348
Display	Included, 14-inch, optional analog color	Included, 14-inch, analog color	Included, 14-inch, optional analog color	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify	4.25 x 17.25 x 12.25	4.25 x 17.25 x 12.25	4 x 15.25 x 16.25
Weight (pounds)	12.25	Vendor did not specify	17.00	Vendor did not specify
AC Power Supply (watts)	220	220	220	150
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, MS-DOS, UNIX derivative
Additional Software Included	BIOS, setup	Util./diagn.	DesqView	None
Service/Support				
Distribution Channels	Computer retail	Computer retail	Computer retail	Computer retail, VAR/VAD
Parts Warranty	1 year	120 days	1 year	1 year
Labor Warranty	1 year	Vendor did not specify	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Toll free	Toll free	Toll free	Vendor did not specify
Base Price ($)	2,499	6,499	7,999	Vendor did not specify

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**401**
Microcomputer Systems

Vendor	Mitsuba Corp.	Mitsuba Corp.	Mitsuba Corp.	Mitsuba Corp.
Product	Mitsuba 286-10 MIT286-10	Mitsuba 286-20 MIT286-20	Ninja 286-12	Professional XT MIT-XT640B
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/20	80286/12	8088/10
Co-Processor Options	80287	80287	80287	8087
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M/80	512K/100	640K/120
RAM Expansion Capacity (bytes)	Vendor did not specify	4.0M	640K	640K
Maximum System RAM (bytes)	Vendor did not specify	8.0M	640K	640K
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	XT
Bus Speed (MHz)	8	8	8	4.77
Total Expansion Slots	2 8-bit, 6 16-bit,	2 8-bit, 6 16-bit,	4 8-bit, 4 16-bit	8 8-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	None; 0 on adapter	None	2 on main board	None
Parallel Ports	None; 0 on adapter	None	1 on main board	None
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Vendor did not specify	Mouse	None
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	2 full-height	3 half-height	2 full-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 360K
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	720K
Hard Disk Interface	ST506/412	ST506/412	ST506/412	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	Vendor did not specify
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70M 80M, 90M, 100M, 120M, 150M	20M, 30M, 40M, 50M, 60M, 70M 80M, 90M, 100M, 120M, 150M	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M	20M, 30M, 40M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify	Vendor did not specify	6 x 17 x 16.5	Vendor did not specify
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	200	150
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, MS-DOS, UNIX derivative	IBM PC-DOS, MS-DOS, UNIX derivative	IBM PC-DOS, MS-DOS, UNIX derivative	IBM PC-DOS, MS-DOS
Additional Software Included	None	BIOS, setup, util./diagn.	BIOS	BIOS
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify

550-402

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Mitsubishi Electronics America, Inc.	Mitsubishi Electronics America, Inc.	Mitsubishi Electronics America, Inc.	Mitsubishi Electronics America, Inc.
Product	mp386/25 103	mp386/25 105	mp386/25 13	mp386/25 15
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/25	80386/25
Co-Processor Options	80387	80387	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	2.0M	2.0M	2.0M/80	2.0M/80
RAM Expansion Capacity (bytes)	2.0M	18M	18M	18M
Maximum System RAM (bytes)	16.0M	18M	18M	18M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/25	Intel, 32K/25	Intel, 32K/25	Intel, 32K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5	12.5	12.5	12.5
Total Expansion Slots	2 8-bit, 7 16-bit	2 8-bit, 7 16-bit,	2 8-bit, 7 16-bit	2 8-bit, 7 16-bit,
Available Expansion Slots	2 8-bit, 7 16-bit	2 8-bit, 7 16-bit,	2 8-bit, 7 16-bit	2 8-bit, 7 16-bit,
Serial Ports	2 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	5 full-height	5 full-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	Vendor did not specify	1.2M, 1.44M
Hard Disk Interface	ESDI	AT/IDE	Vendor did not specify	None
Hard Disk Size (bytes)/AAT (ms)	100M/29	100M/29	Vendor did not specify	Vendor did not specify
Optional Mass Storage	100M, 300M	100M, 300M	100M, 300M	100M, 300M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 480	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	6.38 x 22.83 x 16.77	6.38 x 22.83 x 16.77	6.38 x 22.83 x 16.77	6.38 x 22.83 x 16.77
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	230	230	230	230
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, diagnostics, GW Basic 3.2, Super Disk Caching	BIOS, setup, diagnostics, GW Basic, Super Disk Caching	BIOS, setup, diagnostics, GW Basic, Super Disk Caching	BIOS, setup, diagnostics, GW Basic, Super Disk Caching
Service/Support				
Distribution Channels	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	Vendor did not specify	Vendor did not specify
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party	Authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	6,195	6,195	4,495	4,495

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**403**
Microcomputer Systems

Vendor	Mitsubishi Electronics America, Inc.	Mitsubishi Electronics America, Inc.	NCR Corp.	NEC Information Systems, Inc.
Product	mp386/25 333	mp386/25 335	PC486/MC	PowerMate 286 Plus

Processor/Memory

CPU/Clock Speed (MHz)	80386/25	80386/25	I486/25	80286/12
Co-Processor Options	80387	None	None	80287
Standard RAM (bytes)/Speed (ns)	2.0M/80	2.0M	2.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	Vendor did not specify	16.0M	4.0M
Maximum System RAM (bytes)	18.0M	Vendor did not specify	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported, 32K/25	Not supported	Intel	Not supported

Input/Output

Bus Architecture	AT	AT	MCA	AT
Bus Speed (MHz)	12.5	12.5	10	8
Total Expansion Slots	2 8-bit, 7 16-bit,	2 8-bit, 7 16-bit,	4 16-bit, 3 32-bit	4 16-bit
Available Expansion Slots	2 8-bit, 6 16-bit,	2 8-bit, 6 16-bit,	2 16-bit, 2 32-bit	Vendor did not specify
Serial Ports	2 on main board	2 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Mouse	None	None	None
Other I/O Interfaces	None	None	Mouse, SCSI, 101-key keyboard port, ext. video	Mouse

Mass Storage

Internal Drive Bays Available	3 half-height	3 half-height	Vendor did not specify	2 half-height, 1 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	Vendor did not specify	1.2M, 1.44M	1.44M	1.2M, 1.44M
Hard Disk Interface	Vendor did not specify	AT/IDE	SCSI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	330M/18	330M/29	200M/15	42M/28
Optional Mass Storage	100M, 330M, 160M	100M, 300M	100M, 200M	100M, 140M, tape drive

Keyboard

Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/15	101/12

Video/Display

Video Controller/Resolution (pixels)	Adapter optional/800 x 600	Adapter optional	On included adapter/800 x 600	Integrated on system board/640 x 400
Display	Optional	Optional	Optional	Optional

Local Area Network Support

Vendor LAN Options	None	None	None	None

Product Design

Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Not available	Vendor did not specify
Dimensions (H x W x D, inches)	6.38 x 22.83 x 16.77	6.38 x 22.83 x 16.77	5.2 x 15 x 16.6	4.8 x 17.0 x 16.0
Weight (pounds)	Vendor did not specify	Vendor did not specify	24.00	22.00
AC Power Supply (watts)	Vendor did not specify	230	175	110

Software

Operating System(s) Bundled	Vendor did not specify	MS-DOS	None	Enhanced MS-DOS
Operating System(s) Supported	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	Vendor MS-OS/2, UNIX derivative
Additional Software Included	BIOS, setup, diagnostics, Disk Caching SW	BIOS, setup, diagnostics, GW Basic 3.2, Super Disk Caching	BIOS, setup, none	None

Service/Support

Distribution Channels	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers, third party	Authorized dealers, third party	Vendor, authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	On site, toll free, 30-day money back	Vendor did not specify

Base Price ($)	7,995	7,995	9,995/available for GSA	2,899

550-404
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	NEC Information Systems, Inc.	NEC Information Systems, Inc.	NEC Information Systems, Inc.	NEC Information Systems, Inc.
Product	PowerMate 286	PowerMate 286 ZPlus	PowerMate 386/20 APC-H601E-xB	PowerMate 386/20 APC-H603E-xB
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/12	80386/20	80386/20
Co-Processor Options	80287	80287	80387	80387
Standard RAM (bytes)/Speed (ns)	512K/-	1.0M/80	2.0M/80	2.0M/80
RAM Expansion Capacity (bytes)	1.0M	4.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	Split AT	Split AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	4 16-bit	4 16-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	4 16-bit	Vendor did not specify	2 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 4 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Mouse	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	2 half-height, 1 third-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	1.2M, 720K	360K, 1.2M, 720K	360K, 1.2M, 720K
Hard Disk Interface	Vendor did not specify	None	ST506/412	ESDI
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	None	42M/28	130M/28
Optional Mass Storage	100M, 42M, 140, tape drive	100M, 42M, 140M, tape drive	20M, 80M, tape drive	20M, 80M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.0 x 14.2 x 16.2	4.8 x 17.0 x 16.0	6.30 x 21.20 x 16.50	6.30 x 21.20 x 16.50
Weight (pounds)	1.00	22.00	41.00	41.00
AC Power Supply (watts)	85	110	237	237
Software				
Operating System(s) Bundled	MS-DOS	Enhanced MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	UNIX derivative	Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	None	None	Windows	Windows
Service/Support				
Distribution Channels	Computer retail	Vendor did not specify	Vendor did not specify	Vendor did not specify
Parts Warranty	1 year	Vendor did not specify	Vendor did not specify	Vendor did not specify
Labor Warranty	1 year	Vendor did not specify	Vendor did not specify	Vendor did not specify
Service Supported by	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	Vendor did not specify	1,999	Vendor did not specify	Vendor did not specify

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**405**
Microcomputer Systems

Vendor	NEC Information Systems, Inc.	NEC Information Systems, Inc.	NEC Information Systems, Inc.	Octave Systems, Inc.
Product	PowerMate 386/20 APC-H605E-xB	PowerMate SX APC-H801-1B	PowerMate SX APC-H804-1B	PC/386 DO
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386sx/16	80386sx/16	80386/20
Co-Processor Options	80387	80387SX	80387SX	80387
Standard RAM (bytes)/Speed (ns)	2.0M/80	2.0M/80	2.0M/80	1.0M/120
RAM Expansion Capacity (bytes)	8.0M	2.0M	2.0M	8.0M
Maximum System RAM (bytes)	16.0M	10.0M	10.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Intel/25
Input/Output				
Bus Architecture	Split AT	AT	AT	Vendor did not specify
Bus Speed (MHz)	8	8	8	12.5
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 4 16-bit,	1 8-bit, 4 16-bit,	Vendor did not specify
Available Expansion Slots	2 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 3 16-bit,	1 8-bit, 3 16-bit,	Vendor did not specify
Serial Ports	1 on main board	1 on main board	1 on main board	On main board
Parallel Ports	1 on main board	11 on main board	11 on main board	On main board
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	None	None	None	Mouse, ext. diskette drive, ext. hard disk, numeric keypad port, expansion unit, propr. modem slot
Mass Storage				
Internal Drive Bays Available	5 half-height	3 half-height	3 half-height	Vendor did not specify
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.2M	Vendor did not specify
Diskette Drive Options (bytes)	360K, 1.2M, 720K	360K, 720K, 1.44M	360K, 720K, 1.44M	1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ST506/412	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	300M/28	42M/28	140M	70M/28
Optional Mass Storage	20M, 80M, tape drive	140M, tape drive	42M, tape drive	150M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Vendor did not specify
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/800 x 600
Display	Optional	Optional	Optional	Included, 14-inch digital color
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	Vendor did not specify	Ethernet, ARCnet, Tiara
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	6.30 x 21.20 x 16.50	6.40 x 16.50 x 19.80	6.40 x 16.50 x 19.80	Vendor did not specify
Weight (pounds)	41.00	43.00	43.00	Vendor did not specify
AC Power Supply (watts)	237	193	193	Vendor did not specify
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	IBM PC-DOS, MS-DOS
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	IBM PC-DOS, MS-DOS
Additional Software Included	Windows	Windows	Windows	BIOS, setup, diagnostics, operating system
Service/Support				
Distribution Channels	Vendor did not specify	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, general retail
Parts Warranty	Vendor did not specify	1 year	1 year	1 year
Labor Warranty	Vendor did not specify	1 year	1 year	1 year
Service Supported by	Vendor did not specify	Vendor, authorized dealers	Vendor, authorized dealers	Vendor
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	On site
Base Price ($)	Vendor did not specify	4,495	5,995	1,425

550-406

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Otec Technologies, Inc.	Otec Technologies, Inc.	Otec Technologies, Inc.	Otec Technologies, Inc.
Product	OPC 188-10	OPC 286-10	OPC 286-12	OPC 286-8
Processor/Memory				
CPU/Clock Speed (MHz)	8088/10	80286/10	80286/12	80286/8
Co-Processor Options	8087	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	640K/120	512K/120	512K/100	512K/120150
RAM Expansion Capacity (bytes)	640K	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	640K	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	AT	AT	AT
Bus Speed (MHz)	4.77	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	8 8-bit, 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	6 8-bit, 6 16-bit
Available Expansion Slots	8 8-bit, 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	6 8-bit, 6 16-bit
Serial Ports	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter
Parallel Ports	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	2 full-height, 4 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 360K	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 50M, 60M, 70, 80M	20M, 40M, 70M	20M, 40M, 70M	20M, 40M, 70M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	84/10
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 350	Adapter optional/640 x 480, 640 x 350, 320 x 200	Adapter optional/640 x 480, 640 x 350, 320 x 200	Adapter optional/640 x 480, 640 x 350, 320 x 200
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Novell
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5 x 19 x 16.5	5.5 x 21 x 16.5	5.5 x 21 x 16.5	6.125 x 21.125 x 16.56
Weight (pounds)	25.00	38.00	38.00	38.00
AC Power Supply (watts)	120	200	200	238
Software				
Operating System(s) Bundled	MS-DOS	Vendor did not specify	Vendor did not specify	MS-DOS
Operating System(s) Supported	MS-DOS, CPM/86, CCP/M	IBM OS/2 Standard, MS-DOS, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn., low-level disk formatting utility	Util./diagn.	Util./diagn., GW-Basic
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	525	736	752	719

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**407**
Microcomputer Systems

Vendor	Otec Technologies, Inc.	Otec Technologies, Inc.	Otec Technologies, Inc.	Packard Bell
Product	OPC 386-20	OPC 386-25	OPC 386-33	Force 386/25
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	80386/33	80386/25
Co-Processor Options	80387, Weitek 1167, Weitek 3167	80387, Weitek 1167, Weitek 3167	80387, Weitek 1167, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/80	4.0M/60	2.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, 64K/15 SRAM	Intel, 64K/35
Input/Output				
Bus Architecture	AT	AT	AT	ISA
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	Vendor did not specify	8
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 2 32-bit
Available Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	Vendor did not specify
Serial Ports	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter	2 on main board
Parallel Ports	None; 0 on adapter	None; 0 on adapter	None; 0 on adapter	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	Vendor did not specify	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, 70M	20M, 40M, 70M	20M, 40M, 70M	60M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 480, 640 x 350, 320 x 200	Adapter optional/640 x 480, 640 x 350, 320 x 200	Adapter optional/640 x 480, 640 x 350, 320 x 200	Adapter optional/-
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5.5 x 21 x 16.5	5.5 x 21 x 16.5	5.5 x 21 x 16.5	6.5 x 21.25 x 17.0
Weight (pounds)	39.00	38.00	38.00	45.00
AC Power Supply (watts)	220, 110/220	220, 110/220	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	MS-DOS
Operating System(s) Supported	IBM OS/2 Standard, MS-DOS, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX derivative	MS-DOS
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	BIOS, setup, GW Basic
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Third party
Service Features	Toll free	Toll free	Toll free	On site, toll free
Base Price ($)	1,461	1,673	Vendor did not specify	5,595

550-408
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Packard Bell	Packard Bell	Packard Bell	Packard Bell
Product	Force 386SX	PB 1000/12X	PB 686	PB 800/16
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80286/12	80286/12	80286/16
Co-Processor Options	80387SX	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	1.0M/80	640K/80	640K/100	1.0M/80
RAM Expansion Capacity (bytes)	4.0M	640K	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	8.0M	Vendor did not specify	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	1 8-bit, 4 16-bit,	2 8-bit, 4 16-bit,	5 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 4 16-bit,	2 8-bit, 4 16-bit,	5 16-bit	6 16-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	None	None	Vendor did not specify
Other I/O Interfaces	Mouse	None	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	4 half-height	3 half-height, 1 third-height	3 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	None	1.44M	None	1.44M
Hard Disk Interface	AT/IDE	None	None	None
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	40M	40M, 60M, 100M	40M	40M, 60M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Optional
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional	Adapter optional/-	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Not available	Vendor did not specify
Dimensions (H x W x D, inches)	6.3 x 17.7 x 16.3	Vendor did not specify	5.5 x 15.2 x 15.5	Vendor did not specify
Weight (pounds)	32.00	Vendor did not specify	24.20	Vendor did not specify
AC Power Supply (watts)	145	145	135	145
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	MS-DOS, Vendor MS-OS/2
Additional Software Included	BIOS, setup, GW Basic	GW-Basic	BIOS, setup, applications	GW-Basic
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, general retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Authorized dealers, third party	Authorized dealers	Authorized dealers
Service Features	On site, toll free	Toll free	On site, toll free	Toll free
Base Price ($)	2,795	2,099	1,495	2,249

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**409**

Microcomputer Systems

Vendor	Packard Bell	Panasonic Industrial Company	Panasonic Industrial Company	Panasonic Industrial Company
Product	VX588	Business Partner FX-1650	Business Partner FX-1750	Business Partner FX-1850
Processor/Memory				
CPU/Clock Speed (MHz)	NEC V-40	8086/8	80286/8	80286/12
Co-Processor Options	8087	8087	80287	80287
Standard RAM (bytes)/Speed (ns)	640K/120	640K/120	640K/120	640K/100
RAM Expansion Capacity (bytes)	640K	640K	768K	8.0M
Maximum System RAM (bytes)	640K	640K	Vendor did not specify	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Vendor did not specify	Vendor did not specify
Input/Output				
Bus Architecture	XT	XT	XT	AT
Bus Speed (MHz)	8	8	8	10
Total Expansion Slots	4 8-bit, 16-bit	5 8-bit	5 8-bit	3 8-bit, 4 16-bit
Available Expansion Slots	4 8-bit, 16-bit	5 8-bit	Vendor did not specify	Vendor did not specify
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	101-key keyboard port, ext. video	101-key keyboard port, ext. video	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 half-height	1 half-height, 2 third-height	1 half-height, 2 third-height	2 half-height, 2 third-height
Diskette Drives Included (bytes)	1 360K	1 760K	1 720K	1 1.44M
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 720K	360K, 1.2M, 1.44M
Hard Disk Interface	None	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	30M	20M	20M	40M, WORM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	84/10	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/320 x 200	Integrated on system board/320 x 200	Integrated on system board/320 x 200	Adapter optional
Display	Optional	Optional	Inch	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Not available	Not available	Not available
Dimensions (H x W x D, inches)	Vendor did not specify	5.10 x 15.50 x 13.10	5.10 x 15.50 x 13.10	6.25 x 15.75 x 17.00
Weight (pounds)	Vendor did not specify	33.00	33.00	33.00
AC Power Supply (watts)	135	67	67	135
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Additional Software Included	GW-Basic	None	None	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, general retail, VAR/VAD	Computer retail, VAR/VAD	Vendor did not specify	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Toll free	Toll free	Toll free	Toll free
Base Price ($)	1,299	999	1,299	1,799

MAY 1990

550-410
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Panasonic Industrial Company	PC Pros	Philips Information Systems	Philips Information Systems
Product	Business Partner FX-1950	Touche 5550T/5500T/5000T	P3120	P3230
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/3325, 20	8088/10	80286/12.5
Co-Processor Options	80387	80387, Weitek 3167	8087	80287
Standard RAM (bytes)/Speed (ns)	2.0M/80	4.0M/70	640K/120	1.0M/120
RAM Expansion Capacity (bytes)	16.0M	8.0M	768K	4.0M
Maximum System RAM (bytes)	16.0M	16.0M	768K	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	AMI, 64K/25	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	XT	AT
Bus Speed (MHz)	10	8	Vendor did not specify	Vendor did not specify
Total Expansion Slots	2 8-bit, 6 16-bit	1 8-bit, 6 16-bit, 1 32-bit	5 8-bit	1 8-bit, 4 16-bit
Available Expansion Slots	Vendor did not specify	1 8-bit, 4 16-bit, 1 32-bit	4 8-bit	0 8-bit, 4 16-bit
Serial Ports	1 on main board	2 on adapter	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	None	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	3 half-height	6 half-height	2 half-height	2 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M, 1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	150M/16	None	40M/28
Optional Mass Storage	40M, WORM	80M, 120M, 150M, 300M, tape drive, WORM	20M, 30M	20M, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 400	On included adapter/800 x 600	On included adapter/320 x 200	Adapter optional
Display	Vendor did not specify	Included, 14-inch, analog color	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.50 x 19.00 x 18.00	28 x 7 x 18	5.47 x 15.25 x 14.25	5.47 x 15.25 x 14.25
Weight (pounds)	47.00	Vendor did not specify	17.00	Vendor did not specify
AC Power Supply (watts)	200	230	100	100
Software				
Operating System(s) Bundled	Vendor did not specify	None	Vendor did not specify	Enhanced MS-DOS, MS-DOS
Operating System(s) Supported	MS-DOS, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX	MS-DOS	MS-DOS
Additional Software Included	None	None	Vendor did not specify	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	Vendor did not specify	1 year	1 year
Service Supported by	Authorized dealers	Vendor	Vendor	Vendor
Service Features	Toll free	Toll free	Vendor did not specify	Vendor did not specify
Base Price ($)	3,799	3,799	950	1,435

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**411**

Microcomputer Systems

Vendor	Philips Information Systems	Philips Information Systems	Philips Information Systems	Polywell Computers Inc.
Product	P3345	P3360 High Performance	P3370 Base Tower	Poly 386-20/Cache M1386-20-1-40-M
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/16	80386/25	80386/33	80386/20
Co-Processor Options	80387SX	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	1.0M/100	4.0M/100	1.0M/100
RAM Expansion Capacity (bytes)	Vendor did not specify	Vendor did not specify	Vendor did not specify	8.0M
Maximum System RAM (bytes)	5.0M	24K	Vendor did not specify	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel	Intel, 64K	Intel, 64K/100	Dir wri mem cache, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	Vendor did not specify	8	10	8
Total Expansion Slots	1 8-bit, 4 16-bit	1 8-bit, 7 16-bit	1 8-bit, 7 16-bit, 2 32-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 3 16-bit	1 8-bit, 6 16-bit	Vendor did not specify	0 8-bit, 4 16-bit, 1 32-bit
Serial Ports	On main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	On main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 half-height	2 half-height	3 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 720K, 1.44M
Hard Disk Interface	ST506/412	ESDI	ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	150M/28	180M	40M/28
Optional Mass Storage	100M, CD-ROM	None, CD-ROM	300M	60M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM
Keyboard				
Availability	Vendor did not specify	Included (detachable)	Optional	Included (detachable)
Number of Keys/Function Keys	Vendor did not specify	101/12	Vendor did not specify	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/720 x 348(MGA)
Display	Optional	Optional	Optional	Included, 14-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Ethernet, ARCnet, polynet
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	From manufacturer
Dimensions (H x W x D, inches)	5.50 x 15.20 x 14.30	6.22 x 19.70 x 16.60	23.70 x 8.27 x 23.70	5.75 x 21.00 x 16.50
Weight (pounds)	19.00	24.00	Vendor did not specify	60.00
AC Power Supply (watts)	100	230	330	220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	MS-DOS	MS-DOS	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, MS-DOS
Additional Software Included	Vendor did not specify	Vendor did not specify	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Computer retail, general retail
Parts Warranty	1 year	1 year	1 year	1 year, M 2-yrs
Labor Warranty	1 year	1 year	1 year	5-years
Service Supported by	Vendor	Vendor	Vendor	Vendor, authorized dealers
Service Features	On site	On site	On site	Toll free, 30-day money back
Base Price ($)	Vendor did not specify	Vendor did not specify	Vendor did not specify	2,280.00/available for GSA

550-412

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Polywell Computers Inc.	Polywell Computers Inc.	Polywell Computers Inc.	Polywell Computers Inc.
Product	Poly 386-33/Cache 386-33-1	Poly 386/486-25 Cache P1386-25-1	Poly 386SX-20 386SX-1-40-M	Poly286-16FB 140MGP
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/25	80386sx/20	80286/16
Co-Processor Options	80387	80387	80387SX	80287
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	16.0M	16.0M	8.0M	4.0M
Maximum System RAM (bytes)	16.0M	16.0M	8.0M	4.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/20	Intel, 32K/25	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8, 6	8, 10	12
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 0 32-bit	2 8-bit, 5 16-bit, 0 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 0 32-bit	1 8-bit, 3 16-bit, 0 32-bit	0 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 4 16-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	2 on adapter
Other I/O Devices Included	Gameport	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port	Gameport
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 720K, 1.44M	360K, 720K, 1.44M	360K, 720K, 1.44M	360K, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	40M/28	40M/28
Optional Mass Storage	60M, 70M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM	60M, 70M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM	70M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM	100M, 150M, 760M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/10
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/1,024 x 768	On included adapter/1,024 x 768	On included adapter/720 x 348(MGA)	On included adapter/1,024 x 768
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch digital monochrome	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet, polynet	Ethernet, ARCnet, polynet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	From manufacturer	Vendor did not specify
Dimensions (H x W x D, inches)	5.75 x 21.00 x 16.50	5.75 x 21.00 x 16.50	53 x 21 x 16.5	14.2 x 6.75 x 16.2
Weight (pounds)	58.00	58.00	60.00	30.00
AC Power Supply (watts)	220	220	220	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	BIOS, setup, diagnostics, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year, M 2-years	1 year, M 2-yrs.	1 year, M 2-year	1 year
Labor Warranty	5-yrs.	5-yrs.	5-years	5 years
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	Toll free, 30-day money back	Toll free, 30-day money back	Toll free, 30-day money back	Toll free
Base Price ($)	4,400.00	3,600.00	1,685.00/available for GSA	1,220

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**413**
Microcomputer Systems

Vendor	Polywell Computers Inc.	Polywell Computers Inc.	Polywell Computers Inc.	Polywell Computers Inc.
Product	Poly386-25VD 2401024	Poly386-33HD 1401024	Poly386/20 Cache Poly386-20MD	Poly386/486-25 Cache Poly386-25CD
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/33	80386/20	80386/25
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	2.0M/80	80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes) Maximum System RAM (bytes) RAM Cache, Size (bytes)/Speed (ns)	8.0M 8.0M Not supported	16.0M 16.0M Intel, 32K/25	8.0M 16.0M Proprietary, 64K/30	16.0M 16.0M Intel, 32K/25
Input/Output				
Bus Architecture Bus Speed (MHz) Total Expansion Slots	AT 8 2 8-bit, 5 16-bit, 0 32-bit	AT 8 2 8-bit, 5 16-bit, 1 32-bit	AT 8 1 8-bit, 6 16-bit, 1 32-bit	AT 8 2 8-bit, 5 16-bit, 0 32-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 0 32-bit	1 8-bit, 3 16-bit, 0 32-bit	0 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 3 16-bit, 0 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Game port	Gameport	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	5 half-height	5 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 720K, 1.44M	360K, 720K, 1.44M	360K, 720K, 1.44M	360K, 720K, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/28	28	40M/28	40M/28
Optional Mass Storage	60M, 80M, 100M, 150M, 760M, CD-ROM	60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, 760M, CD-ROM	60M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM	60M, 70M, 80M, 90M, 120M, 150M, 300M, 760M, CD-ROM
Keyboard				
Availability Number of Keys/Function Keys	Included (detachable) 101/10	Included (detachable) 101/12	Included (detachable) 101/12	Included (detachable) 101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/1,024 x 768	On included adapter/1,024 x 768	On included adapter/720 x 348	On included adapter/1,024 x 768
Display	Optional	Included, 14-inch, analog color	Included, 14-inch digital monochrome	Included, 14-inch, analog color
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet, Polynet	Ethernet, ARCnet, Polynet	ARCnet, Polynet
Product Design				
Type of Unit Tempest Version Dimensions (H x W x D, inches) Weight (pounds) AC Power Supply (watts)	Desktop Vendor did not specify 21 x 6.75 x 16.5 30.00 220	Desktop Vendor did not specify 5.75 x 21 x 16.5 58.00 Vendor did not specify	Desktop From manufacturer 5.75 x 21 x 16.5 60.00 220	Desktop Vendor did not specify 5.75 x 21 x 16.5 58.00 220
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS, Pick	MS-DOS, Pick	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, vendor MS-OS/2, UNIX, UNIX deriv.
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty Labor Warranty Service Supported by	1 year 5 years Vendor, authorized dealers	1 year 5 yrs. Vendor, authorized dealers	1 year 5 years Vendor, authorized dealers	1 year 5 years Vendor, authorized dealers
Service Features	Toll free	Toll free, 30-day money back	Toll free	Toll free
Base Price ($)	2,525	3,200	2,220	2,900

550-414
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Polywell Computers Inc.	Precision Systems Group	Precision Systems Group	Precision Systems Group
Product	Poly386SX-20D 140MGP	Power Tower PSG 486254	PSG 386-16 186162	PSG 386-20 386202
Processor/Memory				
CPU/Clock Speed (MHz)	80386sx/20	I486/25	80386/16	80386/20
Co-Processor Options	80387SX	Weitek 4167, I860	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	4.0M/80	1.0M/100	2.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	Vendor did not specify	4.0M
Maximum System RAM (bytes)	8.0M	300M	16.0M	20M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Intel, 256K/25	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	8.33	8	10
Total Expansion Slots	2 8-bit, 5 16-bit, 0 32-bit	1 8-bit, 6 16-bit	3 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	0 8-bit, 4 16-bit	Vendor did not specify	2 8-bit, 3 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on main board	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Vendor did not specify	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	6 full-height, 5 half-height, 1 third-height	1 full-height, 3 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	AT/IDE	Vendor did not specify	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	40M/28	150M/, 5	Vendor did not specify	Vendor did not specify
Optional Mass Storage	60M, 80M, 120M, 150M, 300M, 760M, CD-ROM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, 4G, tape drive, CD-ROM, WORM, erasable	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM, erasable	40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM, erasable optical
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101	101/12	101
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/720 x 348	On included adapter/1,024 x 768	Adapter optional	Adapter optional
Display	Included, 14-inch digital monochrome	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	Not available	Not available
Dimensions (H x W x D, inches)	5.75 x 21 x 16.5	Vendor did not specify	6 x 21 x 16	6 x 21 x 16
Weight (pounds)	60.00	Vendor did not specify	41.00	41.00
AC Power Supply (watts)	220	275	220	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	VAR/VAD, direct from vendor	Computer retail, general retail, VAR/VAD, direct	Computer retail, general retail, VAR/VAD, direct
Parts Warranty	1 year	2 years	1 year	1 year
Labor Warranty	5 years	2 years	Vendor did not specify	Vendor did not specify
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	Toll free, 30-day money back	Toll free	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	1,560	6,900/available for GSA	4,595	3,179

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**415**

Microcomputer Systems

Vendor	Precision Systems Group	Precision Systems Group	QIC Research	QIC Research
Product	PSG 386-25 386252	PSG 386-33 386332	286-12 MHz 1700C	286-8 MHz 1800-8

Processor/Memory

CPU/Clock Speed (MHz)	80386/25	80386/33	80286/12	80286/8mhz
Co-Processor Options	80387	80387	80287	80287
Standard RAM (bytes)/Speed (ns)	4.0M/80	4.0M/70	1.0M/100	512K/150
RAM Expansion Capacity (bytes)	4.0M	4.0M	1.0M	1.0M
Maximum System RAM (bytes)	64M	64M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 64K/80ns	Intel, 64K/20	Not supported	Not supported

Input/Output

Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	6	8	12mhz	8
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 7 32-bit	4 8-bit, 4 16-bit	2 8-bit, 6 16-bit
Available Expansion Slots	0 8-bit, 5 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit	Vendor did not specify	Vendor did not specify
Serial Ports	2 on adapter	2 on adapter	1 on main board	None
Parallel Ports	I on adapter	1 on adapter	1 on main board	None
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None

Mass Storage

Internal Drive Bays Available	1 full-height, 3 half-height	1 full-height, 3 half-height	3 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	Vendor did not specify	Vendor did not specify	None	None
Optional Mass Storage	40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM, erasable optical	40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M, 150M, 300M, tape drive, CD-ROM, WORM	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive

Keyboard

Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12

Video/Display

Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Vendor did not specify	Optional

Local Area Network Support

Vendor LAN Options	Ethernet, Token-ring, ARCnet	Ethernet, Token-ring, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet

Product Design

Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6 x 21 x 16	6 x 21 x 16	6.2 x 17.2 x 16.4	6.5 x 21.2 x 16.5
Weight (pounds)	41.00	41.00	48.00	50.00
AC Power Supply (watts)	220	220	200	200

Software

Operating System(s) Bundled	MS-DOS	MS-DOS	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2, UNIX
Additional Software Included	None	None	None	None

Service/Support

Distribution Channels	Computer retail, general retail, VAR/VAD, direct	Computer retail, general retail, VAR/VAD, direct	VAR/VAD	VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	Vendor did not specify	Vendor did not specify	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor	Vendor
Service Features	On site, toll free, 30-day money back	On site, toll free, 30-day money back	30-day money back	30-day money back

Base Price ($)	2,945	6,355	1,000.00	829.00

550-416

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	QIC Research	QIC Research	QIC Research	QIC Research
Product	286/10-0 10-B	286/10-1 17-A	386-16SX 30-G	386-20 MHz 30 D
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/10	80386sx/16	80386/20
Co-Processor Options	80287	80287	80387SX, 80387SX	80387, Weitek 1167, Weitek 3167
Standard RAM (bytes)/Speed (ns)	512K/120	512K/150	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	1.0M	1.0M	2.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	10	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	6 16-bit, 2 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	1 on main board	On main board	2 on main board
Parallel Ports	1 on main board	1 on main board	On main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	5 half-height	3 half-height	3 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 70M, 80M, 102M, 150M, 300M, tape drive	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.5 x 21.2 x 16.5	6.2 x 17.2 x 16.4	6.2 x 17.2 x 16.4	6.2 x 21.1 x 17.9
Weight (pounds)	50.00	48.00	48.00	40.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, vendor MS-OS/2	None	None	None
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, Vendor MS-OS/2
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD	VAR/VAD	VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	30-day money back	30-day money back	30-day money back	30-day money back
Base Price ($)	1,088	765.00	1325.00	1753.00

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**417**

Microcomputer Systems

Vendor	QIC Research	Rexon Business Machines Corp.	Rexon Business Machines Corp.	Sanyo Business Systems Corp.
Product	8088 XT	RBM 1386	RBM 2386	MBC-16LX Small Footprint XT MBC-16LX
Processor/Memory				
CPU/Clock Speed (MHz)	8088/10	80386sx/16	80386/25	8088/8
Co-Processor Options	8087	80387SX	80387	8087
Standard RAM (bytes)/Speed (ns)	256k/120	1.0M/100	1.0M/80	640K
RAM Expansion Capacity (bytes)	640K	2.0M	8.0M	640K
Maximum System RAM (bytes)	640K	8.0M	24M	2.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 64K/35	Not supported
Input/Output				
Bus Architecture	XT	AT	AT	XT
Bus Speed (MHz)	10	Vendor did not specify	Vendor did not specify	Vendor did not specify
Total Expansion Slots	8 8-bit	2 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 5 16-bit, 2 32-bit	3 8-bit, 16-bit
Available Expansion Slots	Vendor did not specify	0 8-bit, 3 16-bit, 1 32-bit	0 8-bit, 2 16-bit, 2 32-bit	3 8-bit, 16-bit
Serial Ports	On main board	None; 2 on adapter	2 on main board	1 on main board
Parallel Ports	On main board	None; 1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	None	1/4″ tape drive	1/4″ tape drive	Vendor did not specify
Other I/O Interfaces	None	101-key keyboard port	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 full-height, 4 half-height	5 half-height	5 half-height	2 half-height
Diskette Drives Included (bytes)	1 360K	1 1.2M	1 1.2M	1 360K
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	None	None	360K, 720K
Hard Disk Interface	None	Vendor did not specify	ST506/412	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	None	None	None	Vendor did not specify
Optional Mass Storage	20M, 30M, 40M, 70M, 80M, 120M, 150M, 300M, tape drive	50M, 80M, 150M, 300M	50M, 80M, 150M, 300M	None
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	84/10	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.2 x 21.1 x 17.9	6.2 x 21.1 x 16.5	6.2 x 21.1 x 16.5	6.13 x 13.38 x 13.38
Weight (pounds)	42.00	85.00	85.00	Vendor did not specify
AC Power Supply (watts)	150 watts	200	200	85
Software				
Operating System(s) Bundled	IBM PC-DOS, MS-DOS	MS-DOS	MS-DOS	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative, PICK, RECAP	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative, PICK, RECAP	MS-DOS
Additional Software Included	None	BIOS, setup, diagnostics, util./diagn.	BIOS, setup, diagnostics, util./diagn.	Basic
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD	VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	180 days	1 year	1 year	1 year
Labor Warranty	180 days	1 year	1 year	1 year
Service Supported by	Vendor	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Authorized dealers
Service Features	30-day money back	On site	On site	On site, toll free
Base Price ($)	329.00	4,455	6,455	869

550-418
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Sanyo Business Systems Corp.	Sanyo Business Systems Corp.	Sanyo Business Systems Corp.	Sanyo Business Systems Corp.
Product	MBC-16LX5	MBC-17LX	MBC-17Plus Small Footprint 286 AT MC-17Plus	MBC-18Plus
Processor/Memory				
CPU/Clock Speed (MHz)	8088/10	80286/12	80286/10	80386/16
Co-Processor Options	8087	80287	80287	80387
Standard RAM (bytes)/Speed (ns)	640K/120	1.0M/85	1.0M	1.0M/85
RAM Expansion Capacity (bytes)	640K	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	640K	15.0M	15M	15.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	AT passive backplane	AT	AT passive backplane
Bus Speed (MHz)	4.77	10	Vendor did not specify	8
Total Expansion Slots	3 8-bit	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit	2 8-bit, 4 16-bit, 1 32-bit
Available Expansion Slots	3 8-bit	2 8-bit, 3 16-bit	Vendor did not specify	2 8-bit, 3 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	Vendor did not specify	None
Other I/O Interfaces	None	None	101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	1 half-height	2 half-height	3 half-height	2 half-height
Diskette Drives Included (bytes)	1 360K	1 1.2M	Vendor did not specify	1 1.2M
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 1.2M, 720K, 1.44M	360K, 720K
Hard Disk Interface	Vendor did not specify	None	None	None
Hard Disk Size (bytes)/AAT (ms)	None/28	None/28	None	None
Optional Mass Storage	20M, 40M, 80M, tape drive, CD-ROM	20M, 40M, 80M, tape drive, CD-ROM	20M, 30M, 40M, 50M, 60M, 70M, 80M, 90M, 100M, 120M	20M, 40M, 80M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	Vendor did not specify	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	From manufacturer	From manufacturer	Vendor did not specify	From manufacturer
Dimensions (H x W x D, inches)	6.4 x 13.4 x 13.4	6.81 x 13.27 x 16.14	6.80 x 13.30 x 16.10	6.8 x 13.0 x 16.6
Weight (pounds)	22.00	23.81	Vendor did not specify	30.00
AC Power Supply (watts)	Vendor did not specify	135	183	135
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	Vendor did not specify	MS-DOS
Operating System(s) Supported	IBM PC-DOS, MS-DOS	IBM PC-DOS, MS-DOS	MS-DOS	IBM PC-DOS, MS-DOS
Additional Software Included	BIOS	BIOS, setup	Basic	BIOS
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Vendor, authorized dealers	Authorized dealers	Authorized dealers
Service Features	Toll free	Toll free	On site, toll free	Toll free
Base Price ($)	905	1,689	1,689	3,199

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**419**
Microcomputer Systems

Vendor	S.F. Micro, Inc.	S.F. Micro, Inc.	S.F. Micro, Inc.	S.F. Micro, Inc.
Product	386/25 3000L	386/25 Tower 3900A	386/33 3000K	386/33 Tower 3900B
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/33	80386/33
Co-Processor Options	80387	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	4.0M/100	4.0M/100	4.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	64K/30	Proprietary, 64K/30	64K/30	Proprietary, 64K/30
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5	12.5, 8	12.5, 8	12.5
Total Expansion Slots	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	0 8-bit, 5 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit	0 8-bit, 5 16-bit, 1 32-bit
Serial Ports	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter
Parallel Ports	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter	None; 1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Vendor did not specify	101-key keyboard port	None
Mass Storage				
Internal Drive Bays Available	5 half-height	2 full-height, 4 half-height	5 half-height	2 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, 300M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.5 x 21.2 x 16.5	25.5 x 7 x 18	6.5 x 21.2 x 16.5	25.5 x 7 x 18
Weight (pounds)	50.00	58.00	50.00	58.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	None	Optional	None	Optional
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS	IBM PC-DOS, IBM OS/2 Standard, MS-DOS
Additional Software Included	BIOS, setup	BIOS, setup	BIOS, setup	BIOS, setup
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, third party	Vendor, third party	Vendor, third party	Vendor, third party
Service Features	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	2,549	3,250	3,250	3,595

550-420
Microcomputer Systems

**Microcomputers:
Comparison Columns**

Datapro Reports on
PC Communications

Vendor	S.F. Micro, Inc.	S.F. Micro, Inc.	S.F. Micro, Inc.	S.F. Micro, Inc.
Product	AGI 1700A	AGI 1700C	AGI 1800A	AGI 1800C
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/12	80286/10	80286/12
Co-Processor Options	None	80287	None	80287
Standard RAM (bytes)/Speed (ns)	512K/120	1.0M/100	512K/120	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	1.0M	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	4 8-bit, 4 16-bit	2 8-bit, 6 16-bit	4 8-bit, 4 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	3 8-bit, 3 16-bit	1 8-bit, 5 16-bit	3 8-bit, 3 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 80M, 120M, 150M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.20 x 17.20 x 16.40	6.20 x 17.20 x 16.40	6.50 x 21.20 x 16.50	6.50 x 21.20 x 16.50
Weight (pounds)	48.00	48.00	50.00	50.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2,	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	None	None	None	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back	On site, 30-day money back
Base Price ($)	799	1,049	829	1,099

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**421**
Microcomputer Systems

Vendor	S.F. Micro, Inc.	S.F. Micro, Inc.	S.F. Micro, Inc.	Silver Dollars International, Inc.
Product	AGI 3000D	AGI 3000G	XT-12 1600D	PC-88

Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386sx/16	NEC V-20/12	8088/10
Co-Processor Options	80387	80387SX	8087	None
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	256K/100	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	2.0M	1.0M	1.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	1.0M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Not supported	Not supported	Not supported

Input/Output				
Bus Architecture	AT	AT	XT	XT
Bus Speed (MHz)	8	8	4.77	8.33
Total Expansion Slots	6 16-bit, 2 32-bit	2 8-bit, 6 16-bit	8 8-bit, 0 16-bit, 0 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	Vendor did not specify	1 8-bit, 5 16-bit	8 8-bit, 0 16-bit, 0 32-bit	Vendor did not specify
Serial Ports	1 on adapter	None; 1 on adapter	None; 0 on adapter	1 on adapter
Parallel Ports	1 on adapter	None; 1 on adapter	None; 0 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	Game
Other I/O Interfaces	None	None	None	None

Mass Storage				
Internal Drive Bays Available	5 half-height	3 half-height	3 half-height, 1 third-height	Vendor did not specify
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 360K	1 360K
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	Any
Hard Disk Interface	ST506/412	ST506/412	None	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 30M, 40M, 80M, 120M, 150M, tape drive	20M, 30M, 40M, 80M, 120M, 150M, tape drive	20M, 30M, 40M, tape drive	20M, 30M, 40M, 80M, 120M

Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12

Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/, Vendor did not specify
Display	Optional	Optional	Optional	Included, 14-inch

Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	None	Ethernet, ARCnet

Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.50 x 21.20 x 16.50	6.20 x 17.20 x 16.40	6.25 x 17 x 15	5 x 15 x 15
Weight (pounds)	50.00	48.00	38.00	26.00
AC Power Supply (watts)	200	200	200	150

Software				
Operating System(s) Bundled	Vendor did not specify	None	Optional	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, MS-DOS	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, UNIX, UNIX derivative, Pick
Additional Software Included	None	None	BIOS, EMS Manager	BIOS, setup

Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	Direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor	Vendor	Vendor, third party
Service Features	On site	On site, 30-day money back	30-day money back	On site, 30-day money back

Base Price ($)	1,749	1,349	459	550

550-422
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Silver Dollars International, Inc.	Silver Dollars International, Inc.	Sirex USA, Inc.	Sirex USA, Inc.
Product	SD-286	SD-386	SpeedMaster SP386-25	StationMaster SM286-12
Processor/Memory				
CPU/Clock Speed (MHz)	80286/16	80386/16	80386/25	80286/12.5
Co-Processor Options	None	None	80387	80287
Standard RAM (bytes)/Speed (ns)	640K	640K/100	1.0M/80	640K/100
RAM Expansion Capacity (bytes)	4.0M	4.0M	16.0M	1.0M
Maximum System RAM (bytes)	4.0M	4.0M	16.0M	1.0M
RAM Cache, Size (bytes)/Speed (ns)	Vendor did not specify	Chips & Tech., 64K/30	Intel, 32K/20	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	10	10	10	8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	1 8-bit, 5 16-bit, 1 32-bit	1 8-bit, 1 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	1 8-bit, 4 16-bit, 1 32-bit	1 8-bit, 1 16-bit
Serial Ports	2 on adapter	2 on adapter	1 on adapter	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	None
Other I/O Interfaces	101-key keyboard port, ext. video	101-key keyboard port, ext. video	Vendor did not specify	Vendor did not specify
Mass Storage				
Internal Drive Bays Available	2 half-height	2 half-height	6 half-height	half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.44M
Diskette Drive Options (bytes)	360K, 720K, 1.44M	360K, 720K, 1.44M	1.44M	Vendor did not specify
Hard Disk Interface	ST506/412	ST506/412	AT/IDE	None
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	None	None
Optional Mass Storage	80M, 120M, tape drive, WORM	80M, 120M, tape drive, WORM	40M, 80M, 150M, 300M, tape drive, CD-ROM	20M, 40M, 80M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 350	On included adapter/640 x 350	On included adapter/1,024 x 768	Integrated on system board/720 x 350
Display	Included, 12-inch digital monochrome	Included, 12-inch digital monochrome	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Desktop
Tempest Version	Not available	Not available	From manufacturer	From manufacturer
Dimensions (H x W x D, inches)	5.00 x 25.00 x 18.00	5.00 x 25.00 x 18.00	Vendor did not specify	3 x 11 x 14
Weight (pounds)	31.00	31.00	Vendor did not specify	12.00
AC Power Supply (watts)	220	220	200	60
Software				
Operating System(s) Bundled	Enhanced MS-DOS, MS-DOS, Phoenix DOS/BIOS	Enhanced MS-DOS, MS-DOS, Phoenix DOS/BIOS	None	None
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Phoenix DOS/BIOS	Enhanced MS-DOS, MS-DOS, Phoenix DOS/BIOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	Vendor did not specify	Vendor did not specify	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, third party	Vendor, third party
Service Features	On site, 30-day money back	On site, 30-day money back	On site, toll free	On site, toll free
Base Price ($)	1,475	2,095	1,495	659

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**423**

Microcomputer Systems

Vendor	Sirex USA, Inc.	Sirex USA, Inc.	Sirex USA, Inc.	Sun Moon Star
Product	TaskMaster TM286-12	WorkMaster SX WM386SX-16	WorkMaster WM386-20	System 386SX
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12.5	80386/16	80386/20	80386sx/16
Co-Processor Options	None	80387SX	80387	80387SX
Standard RAM (bytes)/Speed (ns)	640K/100	1.0M/80	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	4.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	4.0M	8.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit	2 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 3 16-bit
Available Expansion Slots	1 8-bit, 5 16-bit	1 8-bit, 5 16-bit	1 8-bit, 4 16-bit, 1 32-bit	2 8-bit, 3 16-bit
Serial Ports	1 on adapter	1 on adapter	1 on adapter	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on main board
Other I/O Devices Included	None	None	None	Mouse
Other I/O Interfaces	Vendor did not specify	Vendor did not specify	Vendor did not specify	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	2 half-height, 2 third-height	2 half-height, 2 third-height	3 half-height, 1 third-height	3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.44M	1.44M	1.44M	1.2M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	None	None	40M/28
Optional Mass Storage	20M, 40M, 80M, 150M, 300M, tape drive	40M, 80M, tape drive, CD-ROM	40M, 80M, 150M, 300M, tape drive, CD-ROM	20M, 100M, 200M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/640 x 480
Display	Optional	Optional	Optional	Included, 14-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	None
Product Design				
Type of Unit	Desktop	Desktop	Floorstanding	Desktop
Tempest Version	From manufacturer	From manufacturer	From manufacturer	Not available
Dimensions (H x W x D, inches)	6 x 15 x 16	6 x 15 x 16	16 x 6 x 15	Vendor did not specify
Weight (pounds)	35.00	35.00	40.00	Vendor did not specify
AC Power Supply (watts)	200	200	200	145
Software				
Operating System(s) Bundled	None	None	None	DB-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, MS-DOS
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS, comm., applications, util./diagn., desk accessory
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	3 yrs.
Labor Warranty	1 year	1 year	1 year	3 yrs.
Service Supported by	Vendor, third party	Vendor, third party	Vendor, third party	Authorized dealers
Service Features	On site, toll free	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	699	795	1,295	2,995

550-424

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Suntronics Co., Inc.	Swan Technologies	Swan Technologies	Swan Technologies
Product	Computer System SYN-386	Swan 386/33	Swan 286/12	Swan 386/20
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/33	80286/12.5	80386/20
Co-Processor Options	80387	80387	80287	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	512K/100	1.0M/85
RAM Expansion Capacity (bytes)	Vendor did not specify	8.0M	5M	16.0M
Maximum System RAM (bytes)	8.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Intel/25	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT/separate memory bus	AT	AT
Bus Speed (MHz)	8	8.25	6.25	8
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 6 16-bit	3 8-bit, 4 16-bit, 1 32-bit
Available Expansion Slots	1 8-bit, 3 16-bit, 1 32-bit	1 8-bit, 3 16-bit	5 16-bit	1 8-bit, 3 16-bit
Serial Ports	1 on adapter	2 on main board	1 on main board	2 on adapter
Parallel Ports	1 on adapter	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Mouse	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	Mouse, ext. video	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	6 half-height	1 full-height	1 full-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M; 1 1.44M	1 1.2M, 1 1.44M	1 1.2M, 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	Vendor did not specify	360K, 1.2M, 720K, 1.44M	360K
Hard Disk Interface	ST506/412	SCSI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	None	50M	50M
Optional Mass Storage	40M, 60M, 70M, 80M, 120M, 300M, tape drive	600M, tape drive, CD-ROM	30M, 40M, 80M, 150M, tape drive, CD-ROM	40M, 80M, 150M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	Adapter optional	Adapter optional	Adapter optional
Display	Included, 14-inch, analog color	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Tops	TOPS	TOPS
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	From manufacturer	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	6.5 x 21.5 x 16.5	24.5 x 7.5 x 17.5	7.00 x 21.00 x 17.00	7.00 x 21.00 x 17.00
Weight (pounds)	30.00	50.00	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	230	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	MS-DOS	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, MS-DOS, Vendor MS-OS/2	IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative
Additional Software Included	Vendor did not specify	BIOS, setup, hard drive utilities, util./diagn., desk accessory	Vendor did not specify	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor	Vendor, third party	Third party	Third party
Service Features	Toll free	On site, toll free, 30-day money back	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	2585	2,999	849	1,599

MAY 1990

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**425**
Microcomputer Systems

Vendor	Swan Technologies	Swan Technologies	Systems Integration Associates	Systems Integration Associates
Product	Swan 386SX	Swan XT/10	SIA 386/20	SIA 386/25

Processor/Memory

CPU/Clock Speed (MHz)	80386sx/16	8088/10	80386/20	80386/25
Co-Processor Options	80387SX	8087	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/100	640K/120	1.0M/100	4.0M/80
RAM Expansion Capacity (bytes)	8.0M	640K	24M	24M
Maximum System RAM (bytes)	16.0M	8.0M	24M	24M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Proprietary, 64K/20	Proprietary, 64K/20

Input/Output

Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	Vendor did not specify	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	8 8-bit	2 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	5 16-bit	6 8-bit	Vendor did not specify	Vendor did not specify
Serial Ports	1 on main board	1 on main board	1 on adapter	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	101-key keyboard port	101-key keyboard port

Mass Storage

Internal Drive Bays Available	1 third-height	1 full-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	360K, 720K	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	50M	None	None	None
Optional Mass Storage	30M, 40M, 50M, 80M, 90M, 150M, tape drive, CD-ROM	20M, 30M, 40M, tape drive	40M, 90M, 150M, 65M, 340M, 680M, tape drive	40M, 90M, 150M, 65M, 340M, 680M, tape drive

Keyboard

Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12

Video/Display

Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional

Local Area Network Support

Vendor LAN Options	TOPS	TOPS	Vendor did not specify	Ethernet, Token-ring, ARCnet

Product Design

Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.0 x 17.0 x 16.0	6.00 x 20.00 x 17.00	5.50 x 21.00 x 16.00	5.50 x 21.00 x 16.00
Weight (pounds)	Vendor did not specify	Vendor did not specify	55.00	55.00
AC Power Supply (watts)	200	150	200	200

Software

Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM OS/2 Standard, MS-DOS, UNIX, UNIX derivative	MS-DOS	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Additional Software Included	Vendor did not specify	Vendor did not specify	Util./diagn.	Util./diagn., LIM

Service/Support

Distribution Channels	Direct from vendor	Direct from vendor	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor did not specify	Third party	Authorized dealers, third party	Authorized dealers, third party
Service Features	Toll free, 30-day money back	On site, toll free, 30-day money back	On site, 30-day money back	On site, 30-day money back

| **Base Price ($)** | 1,199 | 499 | 3,245 | 4,585 |

550-426
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Systems Integration Associates	Systems Integration Associates	Systems Integration Associates	Systex & Associates
Product	SIA 386/33	SIA 486/25	SIA 486/33C	Systex 286-12
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	I486/25	80386486 optional/33	80286/12
Co-Processor Options	80387	4167	80387	80287
Standard RAM (bytes)/Speed (ns)	4.0M/70	4.0M/80	4.0M/60	512K/100
RAM Expansion Capacity (bytes)	24M	8.0M	4.0M	4.0M
Maximum System RAM (bytes)	24M	32M	32M	4.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K/20	Proprietary, 128K/25	Proprietary, 64K/25	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8-16MHz	8	8
Total Expansion Slots	2 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 6 16-bit, 1 32-bit	2 8-bit, 6 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	1 on adapter	1 on adapter	On main board	1 on adapter
Parallel Ports	1 on adapter	1 on adapter	On main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	None	None	None
Mass Storage				
Internal Drive Bays Available	10 half-height	10 half-height	10 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ESDI	ESDI	ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	90M/16.5 ms	90M/, 16.5 ms	None
Optional Mass Storage	90M, 150M, 340M, 680M, tape drive	90M, 150M, 340, 680, tape drive	90M, 150M, 340, 680, tape drive	20M, 40M, 60M, 80M, 120M, 150M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	Adapter optional/800 x 600	Adapter optional/800 x 600	On included adapter/320 x 200
Display	Optional	Included, 14-inch, optional analog color	Included, 14-inch, analog color	Included, 12-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, ARCnet	None	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	24.00 x 9.00 x 23.00	24.5 x 9 x 23.5	24.5 x 9 x 23.5	Vendor did not specify
Weight (pounds)	70.00	70.00	70.00	Vendor did not specify
AC Power Supply (watts)	350	350	350	200, 220
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative
Additional Software Included	Util./diagn.	BIOS, setup, diagnostics, util./diagn.	Util./diagn.	None
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	VAR/VAD	VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	2 years
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers, third party	Authorized dealers	Authorized dealers	Third party
Service Features	On site, 30-day money back	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	7,410	7,870	6,578	999

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**427**

Microcomputer Systems

Vendor	Systex & Associates	Systex & Associates	Tandon Computer Corp.	Tandon Computer Corp.
Product	**Systex 386-20**	**Systex 386-25**	**Tandon 386/25**	**Tandon 386/33**
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	80386/25	80386/33
Co-Processor Options	80387	80387, Weitek 3167	80387	80387
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	1.0M/100	1.0M
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Proprietary, 64K/25	Proprietary, 64K/25	Proprietary, 64K/25
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	6	8	8
Total Expansion Slots	1 8-bit, 5 16-bit, 2 32-bit	2 8-bit, 3 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	0 8-bit, 4 16-bit, 2 32-bit	1 8-bit, 4 16-bit, 1 32-bit	Vendor did not specify	1 8-bit, 5 16-bit, 1 32-bit
Serial Ports	2 on main board	1 on adapter	1 on adapter	1 on adapter
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Vendor did not specify	None	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 full-height, 3 half-height	1 full-height, 3 half-height	5 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	1.44M	1.44M
Hard Disk Interface	ST506/412	ST506/412	Vendor did not specify	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	None	None
Optional Mass Storage	40M, 60M, 80M, 120M, tape drive	60M, 80M, 120M, 150M	110M, 330M, Personal Data Pac rem. drive	110M, 330M, 660M, Personal Data Pac rem. drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	Adapter optional	Adapter optional
Display	Included, 14-inch digital color	Included, 14-inch digital color	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify	Vendor did not specify	6.30 x 21.00 x 16.30	6.30 x 21.00 x 16.30
Weight (pounds)	Vendor did not specify	Vendor did not specify	40.00	40.00
AC Power Supply (watts)	220	220	190	190
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Enhanced MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2
Additional Software Included	None	None	Windows, GW Basic	Windows, GW Basic
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Vendor did not specify	Computer retail, general retail, VAR/VAD
Parts Warranty	2 years	2 years	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Third party	Third party	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party
Service Features	Vendor did not specify	Vendor did not specify	On site	On site
Base Price ($)	1,999	2,699	Vendor did not specify	4,899

550-428
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Tandon Computer Corp.	Tandon Computer Corp.	Tandon Computer Corp.	Tandy Corp./Radio Shack
Product	Tandon PCA/12	Tandon 486/25	Tandon PCA/12 SL	Tandy 1000 HX 25-1053
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80486/25	80286/12	8088/7.16
Co-Processor Options	80287	4167 Weitek	80287	None
Standard RAM (bytes)/Speed (ns)	1.0M/100	2.0M	640K	256K/150
RAM Expansion Capacity (bytes)	5M	2.0M	1.0M	640K
Maximum System RAM (bytes)	16.0M	64M	Vendor did not specify	640K
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	EISA	Vendor did not specify	XT
Bus Speed (MHz)	8	Vendor did not specify	Vendor did not specify	4.77, 7.16
Total Expansion Slots	2 8-bit, 6 16-bit	2 16-bit, 6 32-bit	Vendor did not specify	Vendor did not specify
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	1 on main board	2 on main board	2 on main board	On main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	None	None	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	None	None	Ext. diskette drive, ext. video, audio, 2 joystick ports
Mass Storage				
Internal Drive Bays Available	5 half-height	Vendor did not specify	Vendor did not specify	2 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 720K
Diskette Drive Options (bytes)	1.44M	None	None	720K
Hard Disk Interface	None	SCSI	None	None
Hard Disk Size (bytes)/AAT (ms)	None	Vendor did not specify	Vendor did not specify	None
Optional Mass Storage	40M	100M, 300M, 600	20M, 40M	None
Keyboard				
Availability	Included (detachable)	Vendor did not specify	Included (detachable)	Included (fixed position)
Number of Keys/Function Keys	101/12	101/12	101/12	90/12
Video/Display				
Video Controller/Resolution (pixels)	640 x 480	Vendor did not specify	Vendor did not specify	Integrated on system board/640 X 200
Display	Optional	Vendor did not specify	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	None	Vendor did not specify	Tandylink
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	6.30 x 21.10 x 16.30	6.3 x 21.1 x 16.3	5 x 18.3 x 16	3.25 x 17.00 x 14.50
Weight (pounds)	Vendor did not specify	39.90	Vendor did not specify	19.00
AC Power Supply (watts)	190	230	130	25
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Vendor did not specify	MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2	Vendor did not specify	MS-DOS	Enhanced MS-DOS, MS-DOS
Additional Software Included	Windows, GW Basic	Windows	Windows	Applications
Service/Support				
Distribution Channels	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Computer retail, general retail, VAR/VAD	Direct from vendor
Parts Warranty	1 year	1 year	1 year	90 days
Labor Warranty	1 year	1 year	1 year	90 days
Service Supported by	Vendor, authorized dealers, third party	Authorized dealers	Authorized dealers	Vendor, authorized dealers
Service Features	On site	Vendor did not specify	Vendor did not specify	On site
Base Price ($)	1,682/available for GSA	9,000	1,409	699

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**429**
Microcomputer Systems

Vendor	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack
Product	Tandy 1000 SL 25-1401	Tandy 1000 TL/2 25-1602	Tandy 3000 NL 25-4072/4043	Tandy 4000 25-5000/4043
Processor/Memory				
CPU/Clock Speed (MHz)	8086	80286/84 (selectable)	80286/10	80386/16
Co-Processor Options	8087	80287	80287	80387
Standard RAM (bytes)/Speed (ns)	384K/150	640K/150	512K/150	1.0M/100
RAM Expansion Capacity (bytes)	640K	768K	640K	8.0M
Maximum System RAM (bytes)	640K	768K	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	XT, PC	AT	AT
Bus Speed (MHz)	8, 4	8	10, 8	8, 6
Total Expansion Slots	5 8-bit	4 8-bit	3 8-bit, 5 16-bit	2 8-bit, 6 16-bit, 1 32-bit
Available Expansion Slots	5 8-bit	4 8-bit	3 8-bit, 5 16-bit	6 16-bit, 1 32-bit
Serial Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	None	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port, audio, 2 joystick ports	101-key keyboard port, 2 joystick ports	101-key keyboard port	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 half-height, 1 third-height	1 half-height, 2 third-height	1 full-height, 2 half-height	1 full-height, 1 half-height, 1 third-height
Diskette Drives Included (bytes)	1 360K	1 720K	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 720K	360K, 720K	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	Vendor did not specify	Smart Drive	None	Vendor did not specify
Hard Disk Size (bytes)/AAT (ms)	None	None	None	None
Optional Mass Storage	20M, 40M, CD-ROM	20M, 40M, CD-ROM	20M, 40M, 70M, 80M, 170M 344M, tape drive, CD-ROM	20M, 40M, 70M, 80M, 170M 344M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 X 200	Integrated on system board/320 x 200, 640 x 200	Adapter optional	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	ARCnet, Tandylink	Ethernet, ARCnet, TandyLink	Ethernet, ARCnet, Tandylink	Ethernet, ARCnet, Tandylink
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	Not available
Dimensions (H x W x D, inches)	5.10 x 15.50 x 13.10	5.1 x 15.5 x 13.1	6.25 x 15.75 x 17.00	6.50 x 19.00 x 18.00
Weight (pounds)	33.00	33.00	33.00	47.00
AC Power Supply (watts)	67	67	135	192
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS	Enhanced MS-DOS, MS-DOS	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Applications, GW-Basic	Operating system, DeskMate, applications	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Direct from vendor
Parts Warranty	90 days	90 days	1 year	1 year
Labor Warranty	90 days	90 days	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	899	1,299	1,999	2,999

550-**430**
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack	Tandy Corp./Radio Shack
Product	Tandy 4000 LX 25-5100	Tandy 4000 SX 25-4900	Tandy 4020 LX 25-5120	Tandy 4025 LX 25-5125
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386sx/16	80386/20	80386/25
Co-Processor Options	80387	80387SX	80387	80387
Standard RAM (bytes)/Speed (ns)	2.0M/80	1.0M/100	1.0M/100	2.0M/100
RAM Expansion Capacity (bytes)	8.0M	5.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 32K/35	Intel/25
Input/Output				
Bus Architecture	AT	AT	AT/separate memory bus	AT/separate memory bus
Bus Speed (MHz)	10, 8	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit, 1 32-bit	1 8-bit, 4 16-bit	6 16-bit, 2 32-bit	6 16-bit, 2 32-bit
Available Expansion Slots	6 16-bit, 1 32-bit	4 16-bit	5 16-bit, 1 32-bit	5 16-bit, 1 32-bit
Serial Ports	1 on adapter	1 on main board	1 on main board	1 on main board
Parallel Ports	1 on adapter	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	None
Other I/O Interfaces	101-key keyboard port	101-key keyboard port	Mouse	Mouse, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 1 half-height, 1 third-height	1 full-height, 2 half-height, 1 third-height	1 full-height, 2 half-height, 2 third-height	1 full-height, 2 half-height, 2 third-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	None	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	40M/19	None	None
Optional Mass Storage	20M, 40M, 70M, 80M, 170M 344M, tape drive, CD-ROM	20M, 40M, 70M, 80M, 170M 344M, tape drive	40M, 80M, 150M, 170M, 344M, tape drive, CD-ROM	40M, 80M, 150M, 170M, 344M, tape drive, CD-ROM
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet, Tandylink	Ethernet, ARCnet, Tandylink	Ethernet, ARCnet, TandyLink	Ethernet, ARCnet, TandyLink
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Vendor did not specify	Not available	Not available
Dimensions (H x W x D, inches)	6.50 x 19.00 x 18.00	6.25 x 15.75 x 17.00	6.5 x 15.75 x 17	6.5 x 15.75 x 17
Weight (pounds)	47.00	Vendor did not specify	47.00	47.00
AC Power Supply (watts)	192	200	200	200
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	None	None
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, UNIX derivative
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers	Vendor	Vendor
Service Features	On site	On site	On site, toll free, 30-day money back	On site, toll free, 30-day money back
Base Price ($)	4,399	2,599	3,999	4,999

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**431**
Microcomputer Systems

Vendor	Tandy Corp./Radio Shack	Tatung Company of America, Inc.	Tatung Company of America, Inc.	Teconomics, Inc.
Product	Tandy 5000 MC 25-6000	TCS-8600T	TCS-9270	BT 386-25
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/33	I486/25	80386/25
Co-Processor Options	80387	Integrated on chip	Vendor did not specify	80387
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/80	2.0M	2.0M/60
RAM Expansion Capacity (bytes)	16.0M	16.0M	64M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	Vendor did not specify	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/25	64K/20 ns	64K	Intel, 256K/25
Input/Output				
Bus Architecture	MCA	AT	MCA	AT
Bus Speed (MHz)	10	8	25	25 for 32B+ bus
Total Expansion Slots	3 16-bit, 4 32-bit	3 8-bit, 5 16-bit, 1 32-bit	1 16-bit, 3 32-bit	1 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	3 16-bit, 4 32-bit	3 8-bit, 5 16-bit, 0 32-bit	1 16-bit, 3 32-bit	2 8-bit, 16-bit
Serial Ports	1 on main board	2 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Mouse, 101-key keyboard port	Vendor did not specify	Vendor did not specify	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height, 1 third-height	6 half-height	5 half-height	1 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.2M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	1.2M	Vendor did not specify	1.44M
Hard Disk Interface	None	ESDI	ST506/412, ESDI, SCSI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	Vendor did not specify	Vendor did not specify	80M/28
Optional Mass Storage	20M, 40M, 70M, 80M, 170M 344M, tape drive	106M, 150M, 383M, 760M	Vendor did not specify	40M, 60M, 100M, 120M, 150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Adapter optional	Integrated on system board/640 x 480	Adapter optional/1,024 x 768
Display	Optional	Optional	Optional	Optional, Analog color
Local Area Network Support				
Vendor LAN Options	Ethernet	None	None	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	From manufacturer
Dimensions (H x W x D, inches)	6.13 x 17.00 x 15.50	162 mm x 540 mm x 440 mm	6.75 x 17 x 21.25	Vendor did not specify
Weight (pounds)	38.00	Vendor did not specify	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	192	230	Vendor did not specify	220
Software				
Operating System(s) Bundled	Vendor did not specify	MS-DOS	Vendor did not specify	IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX derivative	IBM OS/2 Extended	IBM OS/2 Extended	IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS, MS-DOS, UNIX, UNIX deriv.
Additional Software Included	Util./diagn.	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Vendor did not specify	Vendor did not specify	Direct from vendor
Parts Warranty	1 year	1 year	1 year	6 months
Labor Warranty	1 year	1 year	1 year	Vendor did not specify
Service Supported by	Vendor, authorized dealers	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor
Service Features	On site	On site, toll free	On site, toll free	On site
Base Price ($)	4,999	5,895	8,995	Contact vendor

550-432

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	TeleVideo Systems Inc.	TeleVideo Systems Inc.	TeleVideo Systems Inc.	Texas Instruments
Product	Tele286SE	Tele386SX	TS2 TeleStation	1000 Series System SP1000 SP1001
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80386sx/16	80286/10	80386/16
Co-Processor Options	None	80387SX	80287	None
Standard RAM (bytes)/Speed (ns)	1.0M/80100	1.0M/80	1.0M/80	1.0M/100
RAM Expansion Capacity (bytes)	1.0M	4.0M	2.5M	Vendor did not specify
Maximum System RAM (bytes)	16.0M	16.0M	2.5M	9M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Proprietary, 8K
Input/Output				
Bus Architecture	AT	AT	XT	AT
Bus Speed (MHz)	8	8	8	Vendor did not specify
Total Expansion Slots	3 16-bit	3 16-bit	Vendor did not specify	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	3 16-bit	2 16-bit	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	None	None	Vendor did not specify
Other I/O Interfaces	Ext. video	Ext. video	None	Vendor did not specify
Mass Storage				
Internal Drive Bays Available	2 third-height	2 third-height	Vendor did not specify	2 full-height
Diskette Drives Included (bytes)	Vendor did not specify	1 1.44M	None	2 1.2M
Diskette Drive Options (bytes)	1.44M	1.44M	None	None
Hard Disk Interface	ST506/412	ST506/412	None	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/28	40M/28	None	Vendor did not specify
Optional Mass Storage	None	20M, 40M, 100M	None	48M, 87M, 140M, tape drive, standard
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Optional
Number of Keys/Function Keys	101/12	101/12	101/12	Vendor did not specify
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	Integrated on system board/640 x 480	Integrated on system board/720 X 348	Vendor did not specify
Display	Included, 14-inch, analog color	Included, 14-inch, analog color	Included, 14-inch digital monochrome	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Ethernet	Ethernet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Floorstanding
Tempest Version	Vendor did not specify	From third party	From third party	Vendor did not specify
Dimensions (H x W x D, inches)	4.0 x 14.5 x 15.5	4 x 14.5 x 15.5	15.4 x 12.5 x 12.8	21.00 x 6.50 x 17.00
Weight (pounds)	20.00	20.00	25.70	46.00
AC Power Supply (watts)	100	100	50	200
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	TI System V
Operating System(s) Supported	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	IBM PC-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	MS-DOS	MS-DOS, UNIX, UNIX derivative
Additional Software Included	BIOS, setup, util./diagn.	BIOS, setup, util./diagn.	BIOS	Vendor did not specify
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Vendor did not specify
Parts Warranty	Vendor did not specify	1 year	1 year	90 days
Labor Warranty	Vendor did not specify	1 year	1 year	90 days
Service Supported by	Vendor, third party	Vendor, third party	Third party	Vendor
Service Features	On site, toll free	On site	On site	On site, toll free
Base Price ($)	1,495	2,399	1,429	3,495

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**433**

Microcomputer Systems

Vendor	Texas Instruments	Texas Instruments	Texas Instruments	Third Coast Technologies, Inc.
Product	386/33	1000 Series System 1200 S1205NT	1000 Series System 1300 S1325	EL386
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/16	80386/20	80386/16
Co-Processor Options	80387	None	None	80387
Standard RAM (bytes)/Speed (ns)	2.0M/80	2.0M	4.0M	1.0M/120
RAM Expansion Capacity (bytes)	4.0M	8.0M	8.0M	16.0M
Maximum System RAM (bytes)	36M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 32K/25	Proprietary, 8K	Proprietary, 16K	Not supported
Input/Output				
Bus Architecture	AT passive backplane	AT	AT	EISA
Bus Speed (MHz)	8	Vendor did not specify	Vendor did not specify	10
Total Expansion Slots	Vendor did not specify	3 8-bit, 11 16-bit	3 8-bit, 10 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	2 on main board	1 on main board	1 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	2 on adapter
Other I/O Devices Included	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	None	Vendor did not specify	Vendor did not specify	101-key keyboard port
Mass Storage				
Internal Drive Bays Available	Vendor did not specify	2 full-height, 4 half-height	2 full-height, 4 half-height	5 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	Vendor did not specify	360K	1.44M
Hard Disk Interface	ESDI	ST506/412	SCSI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/18	48M/18	182M/18	30M/40
Optional Mass Storage	100M, tape drive	87M, 182M	182M, tape drive, standard	50M, 70M, 90M, 120M, 150M, 240, tape drive, CD-ROM, WORM, erasable, optical
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101	101/12	101/12	101/15
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional/640 x 480	On included adapter	On included adapter	On included adapter/320 x 200
Display	Included, 14-inch, optional analog color	Included, 14-inch	Included, 14-inch	Included, 14-inch digital monochrome
Local Area Network Support				
Vendor LAN Options	None	Ethernet	Ethernet	Ethernet, ARCnet
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Desktop
Tempest Version	Not available	Vendor did not specify	Vendor did not specify	Not available
Dimensions (H x W x D, inches)	6.25 x 19.25 x 16.5	18.60 x 7.80 x 18.50	18.60 x 7.80 x 18.50	6.00 x 21.00 x 16.50
Weight (pounds)	Vendor did not specify	58.00	58.00	45.00
AC Power Supply (watts)	220	400	220	220
Software				
Operating System(s) Bundled	MS-DOS	TI System V	TI System V	Vendor did not specify
Operating System(s) Supported	MS-DOS, UNIX, UNIX derivative	MS-DOS, UNIX, UNIX derivative	MS-DOS, UNIX, UNIX derivative	MS-DOS, UNIX, UNIX derivative, Theos, Pick
Additional Software Included	BIOS, util./diagn.	Vendor did not specify	Vendor did not specify	Util./diagn.
Service/Support				
Distribution Channels	VAR/VAD	Vendor did not specify	Vendor did not specify	VAR/VAD, direct from vendor
Parts Warranty	1 year	90 days	90 days	180 days
Labor Warranty	1 year	90 days	90 days	180 days
Service Supported by	Vendor	Vendor	Vendor	Vendor
Service Features	On site	On site, toll free	On site, toll free	On site
Base Price ($)	6,995	8,995	22,655	2,763

550-**434**

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.
Product	EL386 EL386-DR	FS386 FS386 FT	FS386 FS386 HP	Talos Talos-B
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/20	80386/16
Co-Processor Options	80387, Weitek 1167, Weitek 3167	80387	80387	80387
Standard RAM (bytes)/Speed (ns)	4.0M/100	4.0M/100	4.0M/100	4.0M/120
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Austek, 32K/20	Austek, 32K/20	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	12.5	8	8	8
Total Expansion Slots	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	1 on adapter	1 on adapter	1 on adapter	8 on adapter
Parallel Ports	2 on adapter	2 on adapter	2 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	101-key keyboard port	101-key keyboard port, network interface (Ethernet)	101-key keyboard port, ext. video, network interface (Ethernet)	SCSI, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	5 half-height	1 full-height, 4 half-height	1 full-height, 4 half-height	1 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M
Hard Disk Interface	Vendor did not specify	ESDI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	240M/18	150 mirrored/0.5	90M/0.5	70M/28
Optional Mass Storage	50M, 70M, 90M, 120M, 150M, tape drive, CD-ROM, WORM, erasable, optical	90M, 120M, 150M, 300M, 765M, tape drive	90M, 120M, 150M, 300M, 240, 765, tape drive	50M, 70M, 90M, 120M, 150M, 300M, 765M, tape drive, CD-ROM, WORM, erasable, optical
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Optional
Number of Keys/Function Keys	101/15	101/15	101/15	101/15
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200
Display	Included, 14-inch digital monochrome	Included, 14-inch digital monochrome	Included, 14-inch digital monochrome	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Desktop	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.00 x 21.00 x 16.50	22.00 x 7.00 x 24.00	22.00 x 7.00 x 24.00	22.00 x 7.00 x 24.00
Weight (pounds)	45.00	Vendor did not specify	55.00	50.00
AC Power Supply (watts)	220	220	220	220
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	MS-DOS, UNIX, UNIX derivative, Theos, Pick	UNIX, UNIX derivative	UNIX, UNIX derivative	MS-DOS, UNIX, UNIX derivative, Theos, Pick
Additional Software Included	Util./diagn.	Vendor did not specify	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	VAR/VAD	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	180 days	180 days	180 days	180 days
Labor Warranty	180 days	180 days	180 days	180 days
Service Supported by	Vendor	Vendor, authorized dealers	Vendor, authorized dealers	Vendor
Service Features	On site	On site	On site	On site
Base Price ($)	7,274	9,188	6,043	3,989

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**435**
Microcomputer Systems

Vendor	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.
Product	Talos Talos-T	Talos Talos-U	Talos Talos-U/64	URX URX-25/64
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	80386/33	80386/25
Co-Processor Options	80387	80387, Weitek 1167, Weitek 3167	80387	80387, Weitek 1167, Weitek 3167
Standard RAM (bytes)/Speed (ns)	4.0M/100	8.0M/100	16M/80	8.0M/100
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Austek, 32K/20	Austek, 32K/20	Austek, 32K/20
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	12.5
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 6 16-bit	2 8-bit, 6 16-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	16 on adapter	32 on adapter	64 on adapter	64 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	SCSI, 101-key keyboard port, ext. video	SCSI, 101-key keyboard port, ext. video	SCSI, 101-key keyboard port, ext. video	SCSI, 101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	1 full-height, 4 half-height	1 full-height, 4 half-height	1 full-height, 4 half-height	16 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 720K	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	Vendor did not specify	ESDI	ESDI	Fault tol. ESDI
Hard Disk Size (bytes)/AAT (ms)	120M/, 0.5	300M/0.5	765M/0.5	765 mirrored/0.5
Optional Mass Storage	50M, 70M, 90M, 120M, 150M, 300M, 765M, tape drive, CD-ROM, WORM	70M, 90M, 120M, 150M, 300M, 765M, tape drive, CD-ROM, WORM, erasable, optical	70M, 90M, 120M, 150M, 300M, 765M, tape drive, CD-ROM, WORM, erasable, optical	150M, 300M, 765M, tape drive, CD-ROM, WORM, erasable optical
Keyboard				
Availability	Optional	Optional	Optional	Included (detachable)
Number of Keys/Function Keys	101/15	101/15	101/15	101/15
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	On included adapter/320 x 200	320 x 200
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet	Ethernet, ARCnet
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	22.00 x 7.00 x 24.00	22.00 x 7.00 x 24.00	22.00 x 7.00 x 24.00	33.00 x 10.00 x 28.00
Weight (pounds)	50.00	55.00	58.00	70.00
AC Power Supply (watts)	220	Vendor did not specify	220	250
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	MS-DOS, UNIX, UNIX derivative, Theos, Pick	MS-DOS, UNIX, UNIX derivative, Theos, Pick	MS-DOS, UNIX, UNIX derivative, Theos, Pick	MS-DOS, UNIX, UNIX derivative, Theos, Pick
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD
Parts Warranty	180 days	180 days	180 days	180 days
Labor Warranty	180 days	180 days	180 days	180 days
Service Supported by	Vendor	Vendor, authorized dealers	Authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	7,343	13,511	Vendor did not specify	25,672

550-436
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.	Third Coast Technologies, Inc.
Product	URX URX-25/8	URX URX-33/128	V VFR386/20	V VFR386/25
Processor/Memory				
CPU/Clock Speed (MHz)	80386	80386/33	80386/20	80386/25
Co-Processor Options	80387, Weitek 1167, Weitek 3167	80387, Weitek 1167, Weitek 3167	80387	80387
Standard RAM (bytes)/Speed (ns)	4.0M/100	16.0M/80	4.0M/100	4.0M/80
RAM Expansion Capacity (bytes)	16.0M	16.0M	16.0M	16.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Austek, 32K	Austek, 32K/20	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	Proprietary	Proprietary
Bus Speed (MHz)	12.5	16.5	10	12.5
Total Expansion Slots	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 6 16-bit	12 16-bit	12 16-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Serial Ports	8 on adapter	128 on adapter	16 on adapter	64 on adapter
Parallel Ports	1 on adapter	1 on adapter	On main board	On main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	SCSI, 101-key keyboard port, ext. video	SCSI, 101-key keyboard port, ext. video, network interface	SCSI	SCSI
Mass Storage				
Internal Drive Bays Available	16 half-height	16 half-height	8 half-height	8 half-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M	1.2M
Hard Disk Interface	Fault tol. ESDI	Fault tol. ESDI	SCSI	ESDI
Hard Disk Size (bytes)/AAT (ms)	150M mirrored/0.5	765 mirrored/0.5	28	765M/0.5
Optional Mass Storage	150M, 300M, 765M, tape drive, CD-ROM, WORM, erasable optical	765M, tape drive, CD-ROM, WORM, erasable optical	70M, 90M, 120M, 150M, 300M, 765M, 240M, tape drive	150M, 300M, tape drive
Keyboard				
Availability	Included (detachable)	Included (fixed position)	Vendor did not specify	Vendor did not specify
Number of Keys/Function Keys	101/15	101/15	Vendor did not specify	Vendor did not specify
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	On included adapter/320 x 200	Vendor did not specify	Vendor did not specify
Display	Optional	Optional	Vendor did not specify	Vendor did not specify
Local Area Network Support				
Vendor LAN Options	Ethernet, ARCnet	Ethernet	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Floorstanding	Floorstanding	Floorstanding	Floorstanding
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	33.00 x 10.00 x 28.00	33.00 x 10.00 x 28.00	28.00 x 9.50 x 25.50	28.00 x 9.50 x 25.50
Weight (pounds)	70.00	70.00	95.00	95.00
AC Power Supply (watts)	250	400	660	660
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	MS-DOS, UNIX, UNIX derivative, Theos, Pick	MS-DOS, UNIX, UNIX derivative, Theos, Pick	Theos	Theos
Additional Software Included	Util./diagn.	Util./diagn.	Vendor did not specify	Vendor did not specify
Service/Support				
Distribution Channels	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	VAR/VAD, direct from vendor
Parts Warranty	180 days	180 days	180 days	180 days
Labor Warranty	180 days	180 days	180 days	180 days
Service Supported by	Vendor, authorized dealers	Vendor	Vendor, authorized dealers	Vendor, authorized dealers
Service Features	On site	On site	On site	On site
Base Price ($)	13,070	Vendor did not specify	6,833	15,994

Datapro Reports on
PC Communications

Microcomputer :
Comparison Columns

550-**437**
Microcomputer Systems

Vendor	Toshiba America, Inc.	Tri-Star Computers	Tri-Star Computers	Twinhead Corp.
Product	T8500	386 Business Systems	Reliant 386 20	SUPERSET-200
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/20	8088/9.54
Co-Processor Options	80387, Weitek 3167	80387, 80287, Weitek 1167	80387, 80287	8087
Standard RAM (bytes)/Speed (ns)	2.0M	1.0M/80	1.0M/100	640K/120
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	640K
Maximum System RAM (bytes)	8.0M	16.0M	16.0M	640K
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K/40	Chips & Technologies	Chips & Technologies, 8K/35	Not supported
Input/Output				
Bus Architecture	Split AT	AT	Vendor did not specify	XT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	1 8-bit, 3 16-bit	2 8-bit, 5 16-bit, 1 32-bit	2 8-bit, 5 16-bit, 1 32-bit	3 8-bit
Available Expansion Slots	1 8-bit, 3 16-bit	Vendor did not specify	1 8-bit, 3 16-bit, 1 32-bit	3 8-bit
Serial Ports	21 on main board	2 on adapter	1 on main board; 1 on adapter	1 on main board
Parallel Ports	1 on main board	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	SCSI, ext. diskette drive, ext. video	101-key keyboard port	Game port	Mouse
Mass Storage				
Internal Drive Bays Available	3 third-height	1 full-height, 3 half-height	Vendor did not specify	3 third-height
Diskette Drives Included (bytes)	1 360K	1 1.2M; 1 1.44M	1 1.2M; 1 1.44M	1 720K
Diskette Drive Options (bytes)	Vendor did not specify	360K, 1.2M, 720K, 1.44M	Vendor did not specify	360K, 720K
Hard Disk Interface	Vendor did not specify	Vendor did not specify	RLL	None
Hard Disk Size (bytes)/AAT (ms)	100M/25	Vendor did not specify	Vendor did not specify	None
Optional Mass Storage	100M, tape drive	40M, 80M, 100M, 120M, 150M, 300M	40M, 80M, 100M, 150M, 300M, tape drive	40M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Optional
Number of Keys/Function Keys	101/12	101/12	101/12	84/10
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/640 x 480	On included adapter/1,024 x 768	On included adapter/1,024 x 768, 800 x 600	Integrated on system board/320 x 200
Display	Optional	Included, 14-inch, multifrequency	Included, 14-inch, analog color	Inch
Local Area Network Support				
Vendor LAN Options	Ethernet	None	None	Ethernet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	From manufacturer	Not available	Not available
Dimensions (H x W x D, inches)	4.13 x 15.8 x 16	6 x 21.5 x 16.75	6.00 x 21.25 x 16.75	4.2 x 15.35 x 15.75
Weight (pounds)	Vendor did not specify	55.00	55.00	17.60
AC Power Supply (watts)	Vendor did not specify	200	200	85
Software				
Operating System(s) Bundled	MS-DOS	None	None	MS-DOS
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative	IBM PC-DOS, Enhanced MS-DOS, MS-DOS, Vendor MS-OS/2, UNIX, UNIX deriv.	IBM PC-DOS, IBM OS/2 Standard, IBM OS/2 Extended, Enhanced MS-DOS	IBM PC-DOS, MS-DOS
Additional Software Included	Util./diagn.	BIOS, setup, diagnostics, none	BIOS, setup, diagnostics, none	BIOS
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	VAR/VAD, direct from vendor	Vendor did not specify	Computer retail, VAR/VAD
Parts Warranty	1 year	15 months	15 months	1 year
Labor Warranty	1 year	15 months	Vendor did not specify	1 year
Service Supported by	Authorized dealers	Vendor	Vendor	Authorized dealers
Service Features	On site, toll free	Toll free, 30-day money back	Toll free, 30-day money back	30-day money back
Base Price ($)	7,799	2,895	3,000	655

550-438

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Twinhead Corp.	Twinhead Corp.	Twinhead Corp.	Twinhead Corp.
Product	SUPERSET-400	SUPERSET-490	SUPERSET-600 33C	SUPERSET-600 425
Processor/Memory				
CPU/Clock Speed (MHz)	80C286/12	80386sx/16	80386/33	I486/25
Co-Processor Options	80287	80387SX	80387, Weitek 3167	Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M/120	1.0M/100	1.0M/80	1.0M/80
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	8.0M	8.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Intel, 64K/15	Proprietary, 64K/15
Input/Output				
Bus Architecture	AT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	4 16-bit	4 16-bit
Available Expansion Slots	1 8-bit, 3 16-bit	1 8-bit, 3 16-bit	4 16-bit	4 16-bit
Serial Ports	1 on main board	1 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	Mouse	Mouse, 101-key keyboard port, ext. video	None	None
Mass Storage				
Internal Drive Bays Available	2 half-height, 1 third-height	2 half-height, 1 third-height	1 half-height, 3 third-height	1 half-height, 3 third-height
Diskette Drives Included (bytes)	1 1.2M	1 1.2M	1 1.2M	1 1.2M
Diskette Drive Options (bytes)	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M	1.2M, 1.44M
Hard Disk Interface	AT/IDE	AT/IDE	AT/IDE	AT/IDE
Hard Disk Size (bytes)/AAT (ms)	None	Vendor did not specify	None	None
Optional Mass Storage	40M, 100M	40M, 100M	40M, 100M, tape drive	40M, 100M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Integrated on system board/320 x 200	Integrated on system board/320 x 200	Integrated on system board/800 x 600	Integrated on system board/800 x 600
Display	Inch	Inch	Vendor did not specify	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Ethernet	Ethernet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Not available	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	5.28 x 15.75 x 15.75	5.28 x 15.75 x 15.75	5.28 x 15.75 x 15.75	5.28 x 15.75 x 15.75
Weight (pounds)	25.30	25.30	25.30	25.30
AC Power Supply (watts)	145	145	145	145
Software				
Operating System(s) Bundled	MS-DOS	MS-DOS	MS-DOS	MS-DOS
Operating System(s) Supported	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX	IBM PC-DOS, IBM OS/2 Standard, MS-DOS, UNIX
Additional Software Included	BIOS, setup	BIOS, setup	BIOS, setup	BIOS, setup
Service/Support				
Distribution Channels	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD	Computer retail, VAR/VAD
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor did not specify	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	30-day money back	30-day money back	30-day money back	30-day money back
Base Price ($)	1,195	1,495	2,995	4,995

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**439**
Microcomputer Systems

Vendor	Unisys	Unisys	Unisys	Unisys
Product	**Personal Workstation 2 300/10**	**Personal Workstation 2 500/12**	**Personal Workstation 2 500/16A**	**Personal Workstation 2 800/16**
Processor/Memory				
CPU/Clock Speed (MHz)	80286/10	80286/12	80386sx/16	80386/16
Co-Processor Options	80287	80287	80387SX	80387
Standard RAM (bytes)/Speed (ns)	640K	640K	1.0M/100	1.0M
RAM Expansion Capacity (bytes)	1.6M	4.6M	8.0M	1.0M
Maximum System RAM (bytes)	1.6M	4.6M	8.0M	9.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	AT	AT	AT	Split AT
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	10, 8	Vendor did not specify
Total Expansion Slots	Vendor did not specify	Vendor did not specify	1 8-bit, 4 16-bit, 0 32-bit	Vendor did not specify
Available Expansion Slots	Vendor did not specify	Vendor did not specify	16-bit, 0 32-bit	Vendor did not specify
Serial Ports	1 on main board	1 on main board	2 on main board	2 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	Vendor did not specify
Other I/O Interfaces	Ext. video	Ext. video	None	101-key keyboard port, ext. video
Mass Storage				
Internal Drive Bays Available	2 half-height	2 half-height	2 half-height, 1 third-height	2 full-height, 3 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	None	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K	360K, 1.2M, 720K	360K, 1.2M	360K, 1.2M, 720K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412, SCSI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	20M/50	20M/50	None	40M/, 30
Optional Mass Storage	Tape drive	40M, 70M, 120M, tape drive	20M, 40M, 80M, tape drive	40M, 70M, 120M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Optional	Included (detachable)
Number of Keys/Function Keys	105/12	105/12	101/12	105/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	Adapter optional/640 x 480	Adapter optional/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, Omninet	Ethernet, Token-ring, Omninet	Ethernet, Token-ring, Omninet	Ethernet, Token-ring, Omninet
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Not available	Not available	Not available	From manufacturer
Dimensions (H x W x D, inches)	4.00 x 15.00 x 15.70	4.00 x 15.00 x 15.70	5.0 x 15.0 x 15.0	6.50 x 21.00 x 17.00
Weight (pounds)	23.00	22.00	22.00	48.00
AC Power Supply (watts)	114	135	220/110 switchable	194
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	None	Vendor did not specify
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Comm., util./diagn.	Comm., util./diagn.	BIOS, setup, util./diagn.	Comm., util./diagn.
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor	Vendor, authorized dealers, third party
Service Features	On site, toll free	On site, toll free	On site, toll free	On site, toll free
Base Price ($)	1,006/available for GSA	2,695/available for GSA	2,256	4,318

550-440
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Unisys	Unisys	Versyss, Inc.	VNS America Corp.
Product	Personal Workstation 2 800/20	Personal Workstation 2 800/25A	DS/PC 200	American Tall 386/25 386T
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/25	8088/10	80386/25
Co-Processor Options	80387	80387, Weitek 3167	8087	80387, 80287
Standard RAM (bytes)/Speed (ns)	1.0M	2.0M	640K/100	1.0M/80
RAM Expansion Capacity (bytes)	1.0M	16.0M	640K	8.0M
Maximum System RAM (bytes)	9.0M	18M	8.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Proprietary, 64K	Not supported	Not supported
Input/Output				
Bus Architecture	Split AT	AT	XT	AT passive backplane
Bus Speed (MHz)	Vendor did not specify	Vendor did not specify	4.77	10
Total Expansion Slots	Vendor did not specify	1 8-bit, 5 16-bit, 2 32-bit	4 8-bit	2 8-bit, 5 16-bit, 1 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	4 8-bit	1 8-bit, 3 16-bit, 1 32-bit
Serial Ports	2 on main board	2 on main board	1 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	None
Other I/O Interfaces	101-key keyboard port, ext. video	Mouse, SCSI, ext. diskette drive, 101-key keyboard port, ext. video, ext. hard disk, numeric keypad port	None	None
Mass Storage				
Internal Drive Bays Available	2 full-height, 3 half-height	5 half-height	3 third-height	2 full-height, 6 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 720K	1 1.2M; 1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 720K, 1.44M	1.2M, 1.44M	1.2M, 720K	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	SCSI	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	40M/30	80M/23	None	40M/28
Optional Mass Storage	40M, 70M, 120M, tape drive	320M, tape drive	20M, 40M	40M, 70M, tape drive
Keyboard				
Availability	Included (detachable)	Optional	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	105/12	Vendor did not specify	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Integrated on system board/720 x 348	On included adapter/ Hercules
Display	Optional	Optional	Included, 12-inch digital monochrome	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet, Token-ring, Omninet	Ethernet, Token-ring, Omninet	None	Vendor did not specify
Product Design				
Type of Unit	Desktop	Floorstanding	Desktop	Floorstanding
Tempest Version	From manufacturer	Not available	Not available	Not available
Dimensions (H x W x D, inches)	6.50 x 21.00 x 17.00	21.30 x 6.50 x 18.70	4.5 x 15.2 x 15.1	Vendor did not specify
Weight (pounds)	48.00	52.00	22.00	Vendor did not specify
AC Power Supply (watts)	194	220	85	220
Software				
Operating System(s) Bundled	Vendor did not specify	Vendor did not specify	MS-DOS	MS-DOS, UNIX, UNIX derivative, customer request
Operating System(s) Supported	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS, Vendor MS-OS/2, UNIX derivative	MS-DOS	MS-DOS, Vendor MS-OS/2, UNIX, UNIX derivative
Additional Software Included	Comm., util./diagn.	Windows, util./diagn.	BIOS, comm., applications, util./diagn., desk accessory	BIOS, setup
Service/Support				
Distribution Channels	Computer retail, VAR/VAD, direct from vendor	Computer retail, VAR/VAD, direct from vendor	VAR/VAD, direct from vendor	Computer retail, general retail, VAR/VAD, direct
Parts Warranty	1 year	1 year	18 months	1 year
Labor Warranty	1 year	1 year	Vendor did not specify	1 year
Service Supported by	Vendor, authorized dealers, third party	Vendor, authorized dealers, third party	Vendor, authorized dealers	Vendor, authorized dealers, third party
Service Features	On site, toll free	On site, toll free	On site	On site, toll free, 30-day money back
Base Price ($)	4,075	7,315/available for GSA	1,750	2,495

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**441**
Microcomputer Systems

Vendor	Zendex Corp.	Zendex Corp.	Zendex Corp.	Zenith Data Systems Corp.
Product	ZX-310/17AC	ZX-310/40B	ZX-310/82A	Z-159 2
Processor/Memory				
CPU/Clock Speed (MHz)	80286/20	80286/20	80286/20	8088/8
Co-Processor Options	80287	80287	80287	8087
Standard RAM (bytes)/Speed (ns)	1.0M/80	1.0M/80	2.0M/80	768K/150
RAM Expansion Capacity (bytes)	1.0M	1.0M	2.0M	1.2M
Maximum System RAM (bytes)	2.0M	2.0M	2.0M	5M
RAM Cache, Size (bytes)/Speed (ns)	Intel, 8K/30	Intel, 8K/30	Intel, 8K/30	Not supported
Input/Output				
Bus Architecture	Multibus	Multibus	Multibus	XT
Bus Speed (MHz)	10	10	10	8
Total Expansion Slots	10 8-bit, 8 16-bit	10 8-bit, 8 16-bit	10 8-bit, 8 16-bit	6 8-bit, 0 16-bit, 0 32-bit
Available Expansion Slots	Vendor did not specify	Vendor did not specify	Vendor did not specify	5 8-bit, 0 16-bit, 0 32-bit
Serial Ports	2 on main board	2 on main board	14 on adapter	1 on main board
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Other I/O Interfaces	SCSI, ext. diskette drive, ext. video, ext. hard disk, audio	SCSI, ext. diskette drive, ext. video, ext. hard disk, audio	SCSI, ext. diskette drive, ext. video, ext. hard disk, audio	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height	1 full-height, 2 half-height	1 full-height, 2 half-height	3 half-height
Diskette Drives Included (bytes)	1	1	1	2 360K
Diskette Drive Options (bytes)	None	None	None	720K
Hard Disk Interface	SCSI	SCSI	SCSI	None
Hard Disk Size (bytes)/AAT (ms)	20M/40	40M/40	80M/40	None
Optional Mass Storage	Tape drive	Tape drive	Tape drive	20M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	84/10
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	Adapter optional	Adapter optional	On included adapter/320 x 200
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Ethernet	Ethernet	Ethernet	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify	Vendor did not specify	Vendor did not specify	6.30 x 16.00 x 16.50
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	42.00
AC Power Supply (watts)	120	120	120	168
Software				
Operating System(s) Bundled	None	None	None	Enhanced MS-DOS
Operating System(s) Supported	UNIX derivative, RMX-86	UNIX derivative, RMX-86	UNIX derivative, RMX-86	MS-DOS
Additional Software Included	Util./diagn.	Util./diagn.	Util./diagn.	Util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Direct from vendor	Computer retail, direct from vendor
Parts Warranty	90 days	90 days	90 days	1 year
Labor Warranty	90 days	90 days	90 days	1 year
Service Supported by	Vendor	Vendor	Vendor	Authorized dealers
Service Features	Toll free	Toll free	Toll free	Vendor did not specify
Base Price ($)	7,950	7,950	7,950	1,599/available for GSA

550-442

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.
Product	Z-159 3	Z-248/12 1	Z-248/12 20	Z-248/12 40
Processor/Memory				
CPU/Clock Speed (MHz)	8088/8	80286/12	80286/12	80286/12
Co-Processor Options	8087	80287	80287	80287
Standard RAM (bytes)/Speed (ns)	768K/150	1.0M/85	1.0M/85	1.0M/85
RAM Expansion Capacity (bytes)	1.2M	6M	6M	6M
Maximum System RAM (bytes)	5M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Not supported
Input/Output				
Bus Architecture	XT	AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	6 8-bit, 0 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 0 32-bit	2 8-bit, 5 16-bit, 0 32-bit
Available Expansion Slots	5 8-bit, 0 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 4 16-bit, 0 32-bit	1 8-bit, 3 16-bit, 0 32-bit
Serial Ports	1 on main board	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on main board	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	None	None	None	None
Other I/O Interfaces	None	Vendor did not specify	Vendor did not specify	Vendor did not specify
Mass Storage				
Internal Drive Bays Available	3 half-height	2 full-height, 2 half-height	2 full-height, 2 half-height	2 full-height, 2 half-height
Diskette Drives Included (bytes)	1 360K	1 1.2M	1 1.2M; 1 1.44M	1 1.44M
Diskette Drive Options (bytes)	720K	360K, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ESDI	ST506/412
Hard Disk Size (bytes)/AAT (ms)	20M/85	None	160M/18	40M/28
Optional Mass Storage	None	40M, 80M, 160M	40M, 80M, 160M	40M, 80M, 160M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	84/10	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/320 x 200	Adapter optional	Adapter optional	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.30 x 16.00 x 16.50	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50
Weight (pounds)	42.00	35.00	35.00	35.00
AC Power Supply (watts)	168	200	200	200
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	MS-DOS	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Util./diagn.	Util./diagn.	Windows, util./diagn.	Windows, util./diagn.
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	2,199/available for GSA	2,099	2,099	3,399

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**443**

Microcomputer Systems

Vendor	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.
Product	Z-286 LP/12 1	Z-286 LP/12 20	Z-286 LP/12 40	Z-386/16 40
Processor/Memory				
CPU/Clock Speed (MHz)	80286/12	80286/12	80286/12	80386/16
Co-Processor Options	80287	80287	80287	80387, 80287
Standard RAM (bytes)/Speed (ns)	1.0M/85	1.0M/85	1.0M/85	1.0M/100
RAM Expansion Capacity (bytes)	6M	6M	6M	Vendor did not specify
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	16.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported	Not supported	Not supported	Proprietary, 64K
Input/Output				
Bus Architecture	AT	AT	AT	AT passive backplane
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	0 8-bit, 3 16-bit, 0 32-bit	0 8-bit, 3 16-bit, 0 32-bit	0 8-bit, 3 16-bit, 0 32-bit	1 8-bit, 2 16-bit, 7 32-bit
Available Expansion Slots	0 8-bit, 2 16-bit, 0 32-bit	0 8-bit, 2 16-bit, 0 32-bit	0 8-bit, 2 16-bit, 0 32-bit	1 8-bit, 1 16-bit, 3 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	1 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	None	None	Mouse
Other I/O Interfaces	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 2 half-height	1 full-height, 2 half-height	1 full-height, 2 half-height	1 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.2M
Diskette Drive Options (bytes)	360K	360K	360K	360K, 1.44M
Hard Disk Interface	ST506/412	ST506/412	ST506/412	ST506/412
Hard Disk Size (bytes)/AAT (ms)	None	20M/85	40M/85	40M/28
Optional Mass Storage	20M, 40M	20M, 40M	20M, 40M	80M, 160M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	3.88 x 14.00 x 15.00	3.88 x 14.00 x 15.00	3.88 x 14.00 x 15.00	6.50 x 21.00 x 16.50
Weight (pounds)	18.00	18.00	18.00	35.00
AC Power Supply (watts)	80	80	80	200
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	None	Windows	Windows	Windows
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	2,299/available for GSA	2,699/available for GSA	3,099/available for GSA	5,499/available for GSA

550-444

Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.
Product	Z-386/20 1	Z-386/20 40	Z-386/20 70	Z-386/25 1
Processor/Memory				
CPU/Clock Speed (MHz)	80386/20	80386/20	80386/20	80386/25
Co-Processor Options	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	1.0M	1.0M	1.0M	2.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	16.0M	16.0M	16.0M	32M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary	Proprietary	Proprietary	Proprietary, 64K
Input/Output				
Bus Architecture	AT	AT	AT	Split AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	3 16-bit, 4 32-bit	3 16-bit, 4 32-bit	3 16-bit, 4 32-bit	0 8-bit, 2 16-bit, 5 32-bit
Available Expansion Slots	3 16-bit, 4 32-bit	3 16-bit, 4 32-bit	3 16-bit, 4 32-bit	0 8-bit, 2 16-bit, 3 32-bit
Serial Ports	2 on main board	2 on main board	2 on main board	2 on adapter
Parallel Ports	1 on main board	1 on main board	1 on main board	1 on adapter
Other I/O Devices Included	None	None	None	Vendor did not specify
Other I/O Interfaces	None	None	None	Vendor did not specify
Mass Storage				
Internal Drive Bays Available	3 half-height	3 half-height	3 half-height	1 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M, 1.44M	360K, 1.2M
Hard Disk Interface	ESDI	ESDI	ESDI	ESDI
Hard Disk Size (bytes)/AAT (ms)	None	40M/18	70M/18	None
Optional Mass Storage	40M, 70M, tape drive	40M, 70M, tape drive	40M, 70M, tape drive	70M, 150M, 320M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	Adapter optional	On included adapter/640 x 480	On included adapter/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify	Vendor did not specify	Vendor did not specify	6.50 x 21.00 x 16.50
Weight (pounds)	Vendor did not specify	Vendor did not specify	Vendor did not specify	35.00
AC Power Supply (watts)	Vendor did not specify	Vendor did not specify	Vendor did not specify	200
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX derivative
Additional Software Included	BIOS, setup, windows, util./diagn.	BIOS, setup, windows, util./diagn.	BIOS, setup, windows, util./diagn.	None
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	4,299	5,299	5,699	6,199/available for GSA

Datapro Reports on
PC Communications

**Microcomputers:
Comparison Columns**

550-**445**

Microcomputer Systems

Vendor	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.
Product	Z-386/25 150	Z-386/25 320	Z-386/25 70	Z-386/33 1
Processor/Memory				
CPU/Clock Speed (MHz)	80386/25	80386/25	80386/25	80386/33
Co-Processor Options	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167	80387, Weitek 3167
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/100	2.0M/100	2.0M/100
RAM Expansion Capacity (bytes)	8.0M	8.0M	8.0M	8.0M
Maximum System RAM (bytes)	32M	32M	32M	32M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K	Proprietary, 64K	Proprietary, 64K	Proprietary, 64K
Input/Output				
Bus Architecture	Split AT	Split AT	Split AT	Split AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	0 8-bit, 2 16-bit, 5 32-bit	0 8-bit, 2 16-bit, 5 32-bit	0 8-bit, 2 16-bit, 5 32-bit	0 8-bit, 2 16-bit, 5 32-bit
Available Expansion Slots	0 8-bit, 1 16-bit, 3 32-bit	0 8-bit, 1 16-bit, 3 32-bit	0 8-bit, 1 16-bit, 3 32-bit	0 8-bit, 2 16-bit, 3 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on adapter	2 on adapter
Parallel Ports	1 on adapter	1 on adapter	1 on adapter	1 on adapter
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Other I/O Interfaces	Vendor did not specify	Vendor did not specify	Vendor did not specify	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 4 half-height	1 full-height, 4 half-height	1 full-height, 4 half-height	1 full-height, 4 half-height
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M	360K, 1.2M	360K, 1.2M	360K, 1.2M
Hard Disk Interface	ESDI	ESDI	ESDI	None
Hard Disk Size (bytes)/AAT (ms)	150M/18	320M/16	70M/18	None
Optional Mass Storage	70M, 150M, 320M	70M, 150M, 320M	70M, 150M, 320M	150M, 320M
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 480	Adapter optional
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	None	None
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50
Weight (pounds)	35.00	35.00	35.00	35.00
AC Power Supply (watts)	200	200	200	200
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS	Enhanced MS-DOS
Operating System(s) Supported	Enhanced MS-DOS, MS-DOS, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX derivative	Enhanced MS-DOS, MS-DOS, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative
Additional Software Included	Windows	Windows	Windows	None
Service/Support				
Distribution Channels	Computer retail, direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor	Direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	8,299/available for GSA	9,999/available for GSA	7,499/available for GSA	7,499

550-446
Microcomputer Systems

Microcomputers:
Comparison Columns

Datapro Reports on
PC Communications

Vendor	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.	Zenith Data Systems Corp.
Product	Z-386/33 150	Z-386/33 320	Z-386SX 1	Z-386SX 40
Processor/Memory				
CPU/Clock Speed (MHz)	80386/33	80386/33	80386sx/16	80386sx/16
Co-Processor Options	80387, Weitek 3167	80387Weitek 3167	80387SX	80387SX
Standard RAM (bytes)/Speed (ns)	2.0M/100	2.0M/100	2.0M	2.0M
RAM Expansion Capacity (bytes)	8.0M	8.0M	16.0M	16.0M
Maximum System RAM (bytes)	32M	32M	8.0M	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Proprietary, 64K	Proprietary, 64K	Not supported	Not supported
Input/Output				
Bus Architecture	Split AT	Split AT	AT	AT
Bus Speed (MHz)	8	8	8	8
Total Expansion Slots	0 8-bit, 2 16-bit, 5 32-bit	0 8-bit, 2 16-bit, 5 32-bit	3 16-bit, 1 32-bit	3 16-bit, 1 32-bit
Available Expansion Slots	0 8-bit, 1 16-bit, 3 32-bit	0 8-bit, 1 16-bit, 3 32-bit	3 16-bit, 1 32-bit	3 16-bit, 1 32-bit
Serial Ports	2 on adapter	2 on adapter	2 on main board	2 on main board
Parallel Ports	1 on adapter	1 on adapter	1 on main board	1 on main board
Other I/O Devices Included	Vendor did not specify	Vendor did not specify	None	None
Other I/O Interfaces	None	None	None	None
Mass Storage				
Internal Drive Bays Available	1 full-height, 4 half-height	1 full-height, 4 half-height	Vendor did not specify	Vendor did not specify
Diskette Drives Included (bytes)	1 1.44M	1 1.44M	1 1.44M	1 1.44M
Diskette Drive Options (bytes)	360K, 1.2M	360K, 1.2M	1.2M, 1.44M	Vendor did not specify
Hard Disk Interface	ESDI	ESDI	None	ST506/412
Hard Disk Size (bytes)/AAT (ms)	150M/18	320M/, 16	None	40M/25
Optional Mass Storage	150M, 320M	150M, 320M	40M, 80M, tape drive	40M, 80M, tape drive
Keyboard				
Availability	Included (detachable)	Included (detachable)	Included (detachable)	Included (detachable)
Number of Keys/Function Keys	101/12	101/12	101/12	101/12
Video/Display				
Video Controller/Resolution (pixels)	On included adapter/640 x 480	On included adapter/640 x 480	On included adapter/640 x 350	On included adapter/640 x 350
Display	Optional	Optional	Optional	Optional
Local Area Network Support				
Vendor LAN Options	None	None	Vendor did not specify	Vendor did not specify
Product Design				
Type of Unit	Desktop	Desktop	Desktop	Desktop
Tempest Version	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Dimensions (H x W x D, inches)	6.50 x 21.00 x 16.50	6.50 x 21.00 x 16.50	Vendor did not specify	Vendor did not specify
Weight (pounds)	35.00	35.00	Vendor did not specify	Vendor did not specify
AC Power Supply (watts)	200	200	150	150
Software				
Operating System(s) Bundled	Enhanced MS-DOS	Enhanced MS-DOS	Vendor did not specify	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2, UNIX derivative	Enhanced MS-DOS, Vendor MS-OS/2	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	Windows	Windows	BIOS, setup, util./diagn.	BIOS, setup, windows, util./diagn.
Service/Support				
Distribution Channels	Direct from vendor	Direct from vendor	Computer retail, direct from vendor	Computer retail, direct from vendor
Parts Warranty	1 year	1 year	1 year	1 year
Labor Warranty	1 year	1 year	1 year	1 year
Service Supported by	Authorized dealers	Authorized dealers	Authorized dealers	Authorized dealers
Service Features	Vendor did not specify	Vendor did not specify	Vendor did not specify	Vendor did not specify
Base Price ($)	9,599	11,299	2,333	3,999

Datapro Reports on
PC Communications

Microcomputers:
Comparison Columns

550-**447**
Microcomputer Systems

Vendor	Zenith Data Systems Corp.
Product	Z-386SX 80

Processor/Memory

CPU/Clock Speed (MHz)	80386sx/16
Co-Processor Options	80387SX
Standard RAM (bytes)/Speed (ns)	2.0M
RAM Expansion Capacity (bytes)	16.0M
Maximum System RAM (bytes)	8.0M
RAM Cache, Size (bytes)/Speed (ns)	Not supported

Input/Output

Bus Architecture	AT
Bus Speed (MHz)	8
Total Expansion Slots	3 16-bit, 1 32-bit
Available Expansion Slots	3 16-bit, 1 32-bit
Serial Ports	2 on main board
Parallel Ports	1 on main board
Other I/O Devices Included	None
Other I/O Interfaces	None

Mass Storage

Internal Drive Bays Available	Vendor did not specify
Diskette Drives Included (bytes)	1 1.44M
Diskette Drive Options (bytes)	Vendor did not specify
Hard Disk Interface	ST506/412
Hard Disk Size (bytes)/AAT (ms)	80M/18
Optional Mass Storage	40M, 80M, tape drive

Keyboard

Availability	Included (detachable)
Number of Keys/Function Keys	101/12

Video/Display

Video Controller/Resolution (pixels)	On included adapter/640 x 350
Display	Optional

Local Area Network Support

Vendor LAN Options	Vendor did not specify

Product Design

Type of Unit	Desktop
Tempest Version	Vendor did not specify
Dimensions (H x W x D, inches)	Vendor did not specify
Weight (pounds)	Vendor did not specify
AC Power Supply (watts)	150

Software

Operating System(s) Bundled	Vendor did not specify
Operating System(s) Supported	Enhanced MS-DOS, Vendor MS-OS/2
Additional Software Included	BIOS, setup, windows, util./diagn.

Service/Support

Distribution Channels	Computer retail, direct from vendor
Parts Warranty	1 year
Labor Warranty	1 year
Service Supported by	Authorized dealers
Service Features	Vendor did not specify

Base Price ($)	4,699