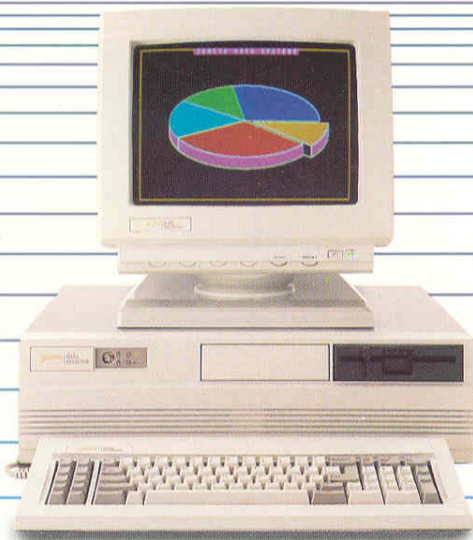


## Personal Computer Desktop System **Z-248**

Ultra high speed processing with ample expansion for the future—designed for stand alone or multi-user, multi-tasking operations.



*Zero wait states make the Z-248 much faster than the IBM PC/AT, and 6 open expansion slots make system upgrades simple.*

When you consider the speed, memory, expansion capacity, multi-user capability and *standard* EGA card, it's not surprising that the Z-248 has become the industry standard. In fact, the United States Department of Defense has made the Z-248 its standard high performance desktop PC used in office, hangars and guard posts.

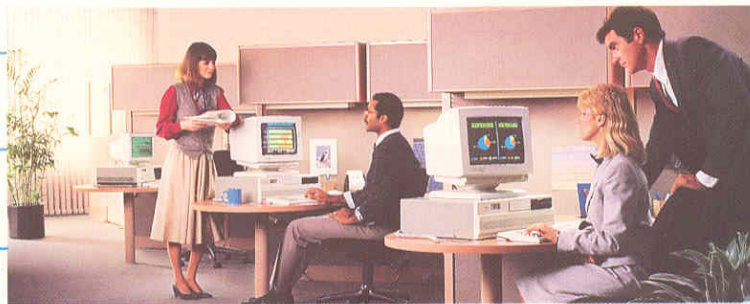
Whether creating networks or simply building multi-user systems, the Z-248 is designed to be the system's hub. "Zero wait state" means dramatically faster processing compared with the IBM PC/AT, especially in high volume applications.

As your needs grow, so can the Z-248. Six open expansion slots make memory upgrades or addition of peripherals such as modem, network, and multiport cards a simple process.

Don't settle for less computer than you want. The Z-248 has the power to handle complex applications, yet is easy on your budget.

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## ***Power to spare. Performance to envy.***

### **Advanced microprocessors meet professional demands.**

For applications with heavy mathematical computations, the Z-248 provides a socket for an optional 80287 microprocessor. The Z-248 features the high powered 80286 microprocessor. It runs at 8 MHz and processes data more than six times as fast as the standard PC with an 8088 microprocessor.

### **Switch from MS-DOS to Xenix.**

The Z-248 can be configured as a stand-alone or multi-user system. This feature allows users to add terminals to the configuration as system requirements grow.

Because the Z-248 is IBM PC/AT compatible, it can run virtually all of the MS-DOS 16 bit software written for the PC or AT.

The ability to run the Xenix operating system is what makes the conversion to a multi-user configuration possible. Add data terminals and use the Z-248 as a low-cost "mainframe" computer. Or, connect with other PCs and create a network with file and peripheral sharing, plus independent processing.

### **A great memory.**

The Z-248 comes with 512K standard RAM. For even more computing power, Z-248 memory expansion in 1.5 MB increments is achieved simply by adding Z-445 memory cards to the main board. Memory expansion of the Z-248 to 15 MB of dynamic RAM is possible.

### **Abundant data storage capacity and expansion capability.**

The Z-248 system can be configured with a 1.2 MB floppy drive and a 20MB or 40MB Winchester hard disk from Zenith. For users building their own systems, the Z-248 has a self-configuring start-up mode that saves hours of time with mass storage devices. The Z-248 cabinet accommodates up to two full-height and two half-height disk drives for ample data storage.

### **Enhanced Graphics Adapter Card Standard.**

The Z-248 can accommodate those applications which require the new standard in color graphics. When used with a Zenith ZVM 1380 Enhanced Graphics monitor, the Z-248's standard EGA card generates high resolution graphics—640 x 350 pixel definition in up to 64 colors (16 at a time). To the user, this results in vivid on-screen images that enhance the work experience. Text is output in an 8 x 14 character cell design instead of the standard 8 x 8 design. This makes text sharper and easier to read.

### **Six open expansion slots.**

The Z-248 can grow with your expanding needs. Five AT-compatible and one PC-compatible slots provide virtually unlimited potential for memory cards, communications devices, additional serial or parallel ports, plus much more.

### **Ergonomic design for easy operation.**

Many features of the Z-248 make it easier for users to work on the system for extended periods. A detached keyboard with clearly labeled keys helps minimize input errors. A separate calculator pad allows users to enter numbers quickly and accurately.

### **Total Support from Zenith Data Systems.**

Zenith Data Systems provides comprehensive documentation for our full line of quality computer products and software. If desired, we can also supply maintenance agreements. We even offer a special telephone hotline to provide you with "on-the-spot" technical assistance, if required.



## Zenith Data Systems Z-248 Specifications

<b>Processor:</b>	Intel 16 bit 80286. 8MHz. 0 wait state. Optional 80287 microprocessor.
<b>Memory:</b>	512K Dynamic RAM; internal parity check standard; expandable in 1.5MB blocks; addresses up to 3.5 MB RAM using Z-445 memory card. 128K ROM address space. 4K special RAM.
<b>Operating System:</b>	Supports Microsoft MS DOS 3.x and Microsoft Xenix.
<b>Video Characteristics:</b>	Enhanced Graphics Adapter standard (IBM compatible). Provides high resolution, 16 of 64 colors in a 640 x 350 pixel resolution (8 x 14 character cell); alternate CGA-compatible 640 x 200 mode (8 x 8 character cell).
<b>Optional Video:</b>	Compatible cards include: Z-409 for Zenith Z-150 emulation, Z-419 for Zenith Z-100 emulation, IBM Monochrome Display Adapter, IBM Color Graphics Adapter (CGA), IBM Enhanced Graphics Adapter (EGA), IBM Professional Graphics Controller (PGC), Hercules, Tecmar Graphics Master, Persyst, Paradise, and others.
<b>Drives:</b>	Basic system—Single 5.25" 1.2MB floppy, double sided/double density floppy drive (brackets and power supply included for additional 5.25" floppy drive and two Winchester). Enhanced system—Single 5.25" drive 1.2MB floppy double sided/double density drive; 20MB 80 millisecond or 42MB 30 millisecond access time Winchester drive. Power supply brackets for additional floppy drive and another Winchester.
<b>Disk Controllers:</b>	Floppy Disk System—Floppy controller supporting up to 2-360K 5.25" floppy drives or 2-1.2MB 5.25" drives or one 360K and 1.2MB floppy drives. Winchester System—combined Winchester and floppy controller supports 2-360K 5.25" or 2 1.2MB 5.25" drives plus two Winchester devices.
<b>Keyboard:</b>	Detachable, low-profile to conform with DIN standards; 6 ft. coiled cord expandable to 9 ft.; 10 function keys; 17 keypad keys; 57 alphanumeric caps lock. CAPS LOCK, NUM LOCK, and SCROLL LOCK are lit; audible click on each keypress; auto-repeat with rate advance. Enhanced 101 key keyboard available early 1987.

<b>Cursor:</b>	Blinking underline or reverse.
<b>Cursor Controls:</b>	Up, down, left, right, home, end, page up, page down.
<b>Cursor Addressing:</b>	Relative or direct.
<b>Tab:</b>	8 column tab (software application dependent).
<b>Edit Function:</b>	Insert and delete character or line (software application dependent).
<b>Erase Function:</b>	Erase line; erase to beginning of line; erase to end of page; erase to end of line (software application dependent).
<b>Refresh Rate:</b>	60Hz, 50Hz.
<b>Bell:</b>	Audible alarm in receipt of the ASCII BEL command.
<b>Clock:</b>	Continuous running real time clock with Lithium battery.
<b>Diagnostics:</b>	Automatic power-on with LED indicators; ROM-based user-invoked diagnostics.

### I/O PORTS

<b>Serial Ports:</b>	One male DB 9 EIA RS-232C connector; asynchronous RS-232C compatible. User software selectable: Number of start bits—1; Number of data bits—5, 6, 7, or 8; Number of stop bits—1 or 2; Baud rate—110, 150, 300, 600, 1200, 2400, 4800, 9600, and 19,200; Signals monitored—receive data, clear to send, data set ready, and carrier detect. Signals controlled—transmit data, request to send, data terminal ready. Supports both full and half duplex operation. Odd, even or null parity. Connector accessible from the rear.
<b>Parallel Ports:</b>	One Centronics compatible bidirectional parallel printer port with a 25 female pin D-connector accessible from the rear of the unit.

### EXPANSION

<b>Capability:</b>	10 bus slots; six open for expansion, one 8-bit PC-compatible, five 8/16-bit PC/AT compatible expansion slots.
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### PHYSICAL

<b>Weight:</b>	Single floppy drive—35 lbs. (15.9kg); Winchester & floppy drive 38 lbs. (17.2Kg).
<b>Size:</b>	21"W x 16.5"D x 6.5"H (53.3 x 41.9 x 16.5 cm).

### OPERATING ENVIRONMENT

<b>Temperature:</b>	50-90 degrees F
<b>Humidity:</b>	20-80% relative humidity.
<b>FCC Approvals:</b>	FCC class B, and UL approval.

### POWER

<b>Requirements:</b>	105-125 volts at 50/60 Hz at 200 watts; 210-240 volts at 50/60 Hz switch mode power supply.
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### ORDER NUMBERS

<b>ZF-248-81:</b>	Single 1.2MB floppy disk drive.
<b>ZW-248-82:</b>	1.2MB floppy disk drive and 20MB Winchester.
<b>ZW-248-84:</b>	1.2MB floppy disk drive and 40MB Winchester.

### OPTIONAL DISK DRIVES

<b>ZD-12:</b>	Single 1.2MB floppy disk drive.
<b>Z-207-7:</b>	Single 360KB floppy disk drive.
<b>Z-217-22:</b>	20MB, 80 millisecond Winchester disk drive.
<b>ZD-200:</b>	20MB, 40 millisecond Winchester disk drive.
<b>ZD-400:</b>	42MB, 30 millisecond Winchester disk drive.

### OPTIONAL CONTROLLERS

<b>Z-417:</b>	Winchester Disk Drive Controller (consumes one expansion slot, and is needed for upgrades of all floppy-based systems).
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### OPTIONAL CARDS

<b>Z-419:</b>	High resolution, 8 color, 640 x 225 or 640 x 450 (interlaced) pixel-mapped graphics. Emulates Z-100 video attributes.
<b>Z-409:</b>	Supports both monochrome and RGB output (IBM "Standard" video) resolution, 320 x 200 in color and 640 x 200 in monochrome.

Specifications subject to change without notice.

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