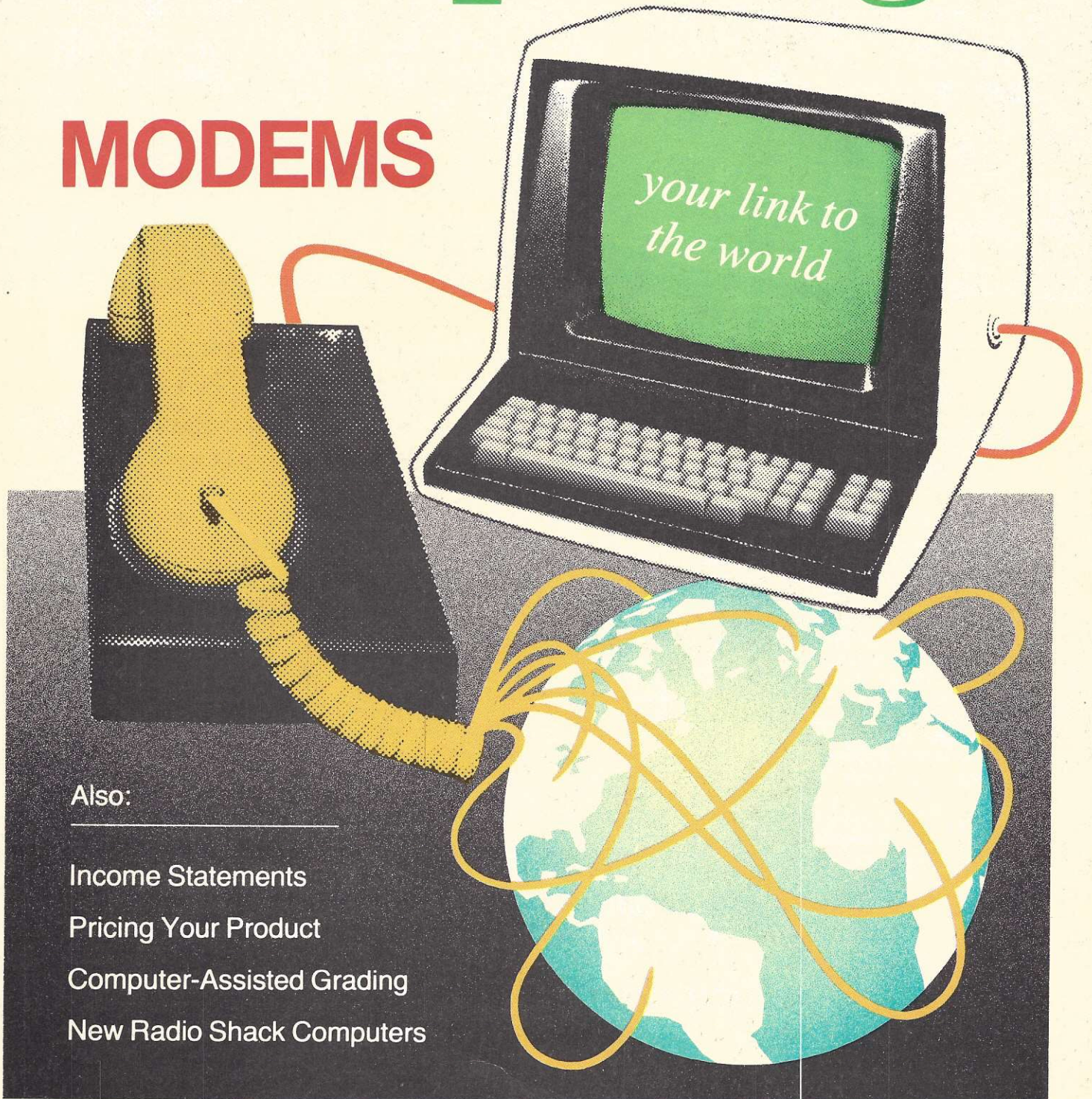


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Altos Computer Systems announced a price reduction averaging 10 percent on its single-user floppy disk systems utilizing single or dual floppy drives.

The reduction positions the Altos systems within the price performance range of smaller floppy disk based systems costing from \$3500 to \$4500, the company said. The systems feature Shugart floppy disk drives, fully socketed single board computers with Z80A processors, and communications capabilities including asynchronous, bisynchronous and networking. All systems are available for immediate delivery. For more information contact Altos Computer Systems, 2360 Bering Dr., San Jose, CA 95131.

Circle No. 146

**New Single Board Computer**

Vector Graphics Inc., has introduced a new single board computer. Designed to function as the center of an approach to system design, the new ZCB single board computer generates all standard S-100 bus signals, including emulation of an 8080 CPU, and contains a Z80-A operating at 4 MHz, 1K of high-speed static RAM memory, 3 sockets for up to 12K of PROM, one serial port and three 8-bit programmable parallel ports.

According to Vector, circuitry is provided to support static or dynamic memories. Use of 2708, 2716 or 2732 PROMs is jumper selectable and the addressing of the PROM and RAM is completely variable. Use of wait states on bus cycle and/or instruction fetch cycle is also jumper selected.

The serial port makes use of the Intel 8251 USART, which enables software to control the format of the transmitted data and to vary the mode of transmission. A dip-switch is used to specify the basic rate between 110 and 9600 baud. The parallel ports use the Intel 8255 which allows the same lines to be used for input and output under program control, and allows a great deal of flexibility in the assigning of lines to

I/O addresses, also under program control, said the company.

The use of the ZCB single board computer in Vector's own computers enables efficient development of special-purpose systems. For process-control or instrumentation problems, a designer can compose and test new software and interface-hardware entirely within the full-strength computer system, connected directly to the process being controlled, said the company. Vector's variety of I/O boards, supplemented by dozens of S-100 I/O boards from other vendors, can be inserted directly in the full system. When testing is complete, the target software and hardware, centering around the ZCB single board computer, is then moved to its final chassis with no downloading or in-circuit-emulation required.

The ZCB single board computer has a suggested retail price of \$395. Immediate delivery is available from off the shelf inventory. For further information contact Carole Ely or Robert Harp at Vector Graphic, Inc., 31364 Via Colinas, Westlake Village, CA 91361; (213) 991-2302.

Circle No. 153

**Intelligence Provided  
By Single Board Microcomputer**

A single board microcomputer, the M-80, which has a Z-80 CPU, sockets for 2K/4K of PROM, 2.1K of RAM, 16 highly flexible I/O lines and a system clock, has been introduced by Miller Technology. The board also provides a breadboard area and 12 decoded address strobes for easy user customizing, the company said.

The 4.5 inch by 6.5 inch board was designed for test equipment, smart peripheral controllers and dedicated control and processing applications. The board may be mounted in a card cage or by standoffs.

Two software packages are currently available. A monitor contained in a single ROM enables you to dump or enter data into memory, set breakpoints, control I/O lines or download programs from another computer. An integer Basic provides 30 functions and commands, and permits calling machine language routines. Both monitor and



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