

Vector Graphic's MZ is an advanced Z-80 microcomputer designed for exceptional system reliability and versatility. Its superior quality is based on standard features usually found only in minicomputers. The MZ has four times the disk storage capacity of most other micros with built-in floppies — 630K bytes formatted and 48K byte

random access memory — easily expandable to 56K. With its 18-slot motherboard, all Vector Graphic circuit boards can be utilized even as technological advances occur. Vector Graphic's MZ microcomputer is the lowest cost system commercially available that offers so many standard features.

## *The Vector MZ Microcomputer*

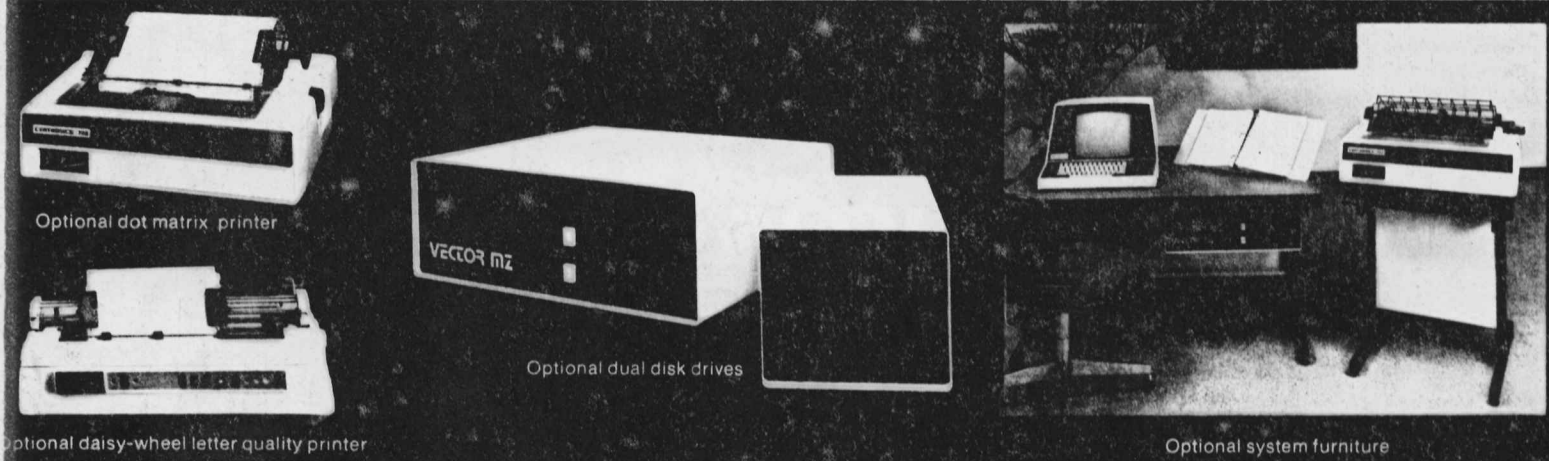


# How to make the best microcomputer even better.

## System B

The Vector MZ microcomputer is the heart of the new multi-function SYSTEM B — Vector Graphic's Mindless Terminal completes the most practical system alternative to the stand-alone display monitor and keyboard/printer. Its applications are limitless because the SYSTEM B can perform all standard accounting functions as well as word processing tasks. The MT accepts separate TTL video and

sync, and interfaces with most existing alpha-numeric display boards. When used with the Flashwriter II 80 X 24 video board, it provides instantaneous positioning of the cursor, split screen copy, immediate copy access and upper/lower case characters. The 12" monitor projects character-by-character reversed video, reduced intensity and block graphics for unmatched versatility in custom programming.



### MZ SPECIFICATIONS: Standard Model

MAINFRAME	
Bus	S-100 compatible
Slots	18
Power Supply	+8 Vdc @ 22 A; ±16 Vdc @ 4 A
Cooling	55 CFM
Size	W 20 1/4", H 7-7/16", D 16 1/4"
Weight	50 lbs.
CPU	
Processor	Mostek Z-80A (MK-3880N)
Number of Data Bits	8
Number of Address Bits	16
Instructions	158-including all 78 instructions (8080A)
Clock	2 or 4 MHz Jumper selectable
Power Requirements	+8 Vdc @ .750 A (Typ)
Interrupts	All three Z-80 modes
I/O Devices	256 Input/Output Addresses
MEMORY (PROM)	
Capacity	12K bytes PROM/EPROM 1K bytes Static RAM
Speed	Static RAM — 450 ns PROM — User Selected; (Typ 450 ns)
Memory Type	PROM — 2704 or 2708; RAM — 2102 Static
Addressing	8K blocks on 8K boundaries; Jumper selectable
Power Required	+8 Vdc @ 450 mA (Typ) +16 Vdc @ (Depends on qty. of PROM) -16 Vdc @ (Depends on qty. of PROM)
I/O	
Ports	1 Serial, 2 Parallel
Serial Port	
Signal Levels	EIA RS-232, 20 mA Current Loop, TTL
Data Rate	Asynchronous 110-9600; BPS (Switch selectable)
Controller	8251 Programmable; USART
Data Bits, Stop Bits	5-8 Programmable; 1, 1 1/2, 2 Programmable
Parallel Port	
Signal Level	TTL (Input — 1 TTL Load)
No. of Lines	16 Output, 16 Input, 2 Control
Data Transfer Rate	>100K bytes/second
MEMORY (RAM)	
Capacity	48K bytes
Type	16K Dynamic RAM
Access Time	Compatible with Z-80 at 4 MHz
Power Required	+8 Vdc @ 250 mA (Typ); +16 Vdc @ 200 mA; -16 Vdc @ 10 mA
Phantom	Output Buffer Disable

### FLOPPY DISK

Drive	Two Micropolis MOD II
Storage	630K bytes
Format	5 1/4" 16 Hard Sectors, 77 Tracks

### SOFTWARE

OPERATING SYSTEM	Micropolis MDOS, including 20K Extended BASIC Editor, Z-80 Assembler and Debugger
	Pre-configured routines for Qume, Centronics, Teletype and similar printers

### SYSTEM B: Includes the Above Plus the Following

#### VIDEO: Flashwriter II Board

Screen Format	24 lines of 80 characters
Character Matrix	8 X 10 upper & lower case
Video Output	Conforms to RS-170 levels
Keyboard Port	8 bits & latched strobe
PROM	1K/2K PROM location available
Power Required	+8 Vdc @ 1.1 A; +16 Vdc @ 70 mA; -16 Vdc @ 40 mA

#### MINDLESS TERMINAL

Screen Size	12" diagonal CRT
Resolution	900 lines at center
Keyboard	60 keys, capacitance type with numerical keypad & cursor control

#### ADDITIONAL SOFTWARE

Micropolis CP/M by Lifeboat Associates  
Vector Graphic MZOS Disk Operating System  
(Software-compatible with North Star DOS)

#### OPTIONAL FEATURES

Precision Analog (Board)	
Output Channels	2
Input Channels	8
Resolution	1 part in 4096
Conversion Time	360 us for full 12-bit conversion
Control Ports	1 Input Port; 5 Output Ports
Power Required	+8 Vdc @ 200 mA; +16 Vdc @ 40 mA; -16 Vdc @ 70 mA
DAC	Analog Devices; AD 563J/Bin converter
DAC Setting Time	1.2 us

#### HIGH RESOLUTION GRAPHICS (BOARD)

Video Output	Composite video — conforms to RS-170
Resolution	Digital; 256H X 240V; Grayscale; 128H X 120V
Monitor Required	Standard raster scan
Memory	Vector Graphic 8K; Static RAM board; (not included)
Power Requirement	+8 Vdc @ 750 mA (Typ)

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<u>MODEL</u>	<u>SYSTEMS</u>	<u>RETAIL</u>
SB	System B	\$4750.00
VMZ	Vector MZ	3750.00

<u>MODEL</u>	<u>STARTER SYSTEMS</u>	<u>RETAIL</u>
V1-18A	Vector Mainframe	\$ 575.00
RM	Rackmount	225.00
MPS	Modular Power Supply	125.00

<u>MODEL</u>	<u>INTERFACE BOARDS</u>	<u>RETAIL</u>
Z80	Z-80	\$ 215.00
I/O	Bitstreamer I/O	195.00
I/O II	Bitstreamer I/O II	235.00
MB	Motherboard with 18 connectors	175.00
AI	Analog Interface	115.00
PA	Precision Analog	390.00
GR	High Resolution Graphics	235.00
VD	Video Digitizer	175.00
FW 64	Flashwriter Video 64 X 16	235.00
FW80 UC	Flashwriter Video 80 X 24 upper case only	295.00
FW80 U/LC	Flashwriter Video 80 X 24 upper and lower case	320.00

<u>MODEL</u>	<u>PROM/RAM BOARDS</u>	<u>RETAIL</u>
PR1	PROM/RAM, 1702	\$ 129.00
PR2	PROM/RAM, 2708	175.00

*CONTINUUM  
COMPUTERS*