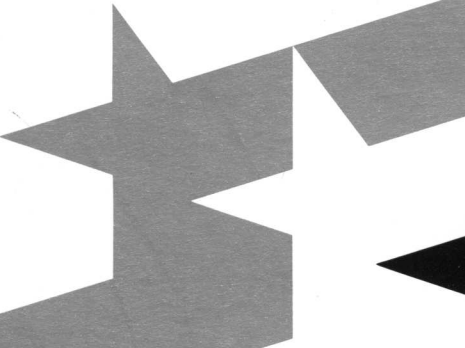


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VECTOR GRAPHIC MICROCOMPUTER SOFTWARE

MDOS/MBASIC

MDOS, the Micropolis Disk Operating System, comes standard with the Vector MZ. This package provides the user with a complete program development system consisting of an extended line editor, a full Z-80 linking assembler, a powerful debugger and a symbol-saving program. Utilities provided include disk and file copying programs. Interfacing routines for several types of printers are also offered. MBASIC, the Micropolis Extended BASIC, is one of the most powerful in existence. Fully record-oriented disk I/O, precision up to 60 digits, true CHAINing and many other features make MBASIC a versatile application and system language to program and operate.

MZOS

MZOS is our Micropolis/Z-80 Operating System. Although not nearly as powerful as MDOS, MZOS is fully North Star DOS compatible with many other features. In addition, MZOS has an expanded capability, since a Micropolis disk has 3.5 times the capacity of a Shugart disk. A program to make an exact copy from a North Star diskette to a Micropolis diskette is provided based on a North Star controller and drive.

CP/M

CP/M is an advanced disk operating system featuring a powerful executive structure and unmatched disk handling capability. Additionally, CP/M has more software available from other sources than any other microcomputer operating system, including CBASIC, Fortran and many others. CP/M incorporates a powerful text editor, assembler, debugger, peripheral interchange program, formatter and many other utility programs. For business applications, CP/M, along with the collection of software available for it, is an exceptional operating system.

CIS COBOL

With CIS COBOL, the powerful business language of large computers is available to microcomputer users. This is a compact, interactive and standard COBOL. It is compact because it can compile a sizable program easily in 32K; almost anything can be done on the Vector MZ microcomputer with 48K. It's interactive because the batch COBOL language has been extended to allow screen-oriented interaction between the program and the user. This is a major enhancement to the normal language; COBOL has many advantages including the fact that it is self-documenting and easy to read. CIS COBOL comes with both a language reference manual and operating instructions, and runs under CP/M.

The UnAssembler

For assembly language programmers, the UnAssembler is a necessity. Superseding the Sourcerer in our product line, the UnAssembler features full Z-80 disassembly and enhanced error-catching features. Mnemonic and data word formats, production of a complete cross reference table and an output that is ZSM-compatible make the UnAssembler an invaluable tool. The UnAssembler runs under MDOS.

SOFTWARE MICROCOMPUTER



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CCA Data Management System

The CCA system represents a breakthrough in data management software. Useful for anything from mailing lists to inventory to accounting, this system has many features not found on any other. For each file in the system, the user can define all relevant information, including what each field is to be called, its length and other information. Maintenance features include the ability to add, delete, update, inspect or search records. Sorting can be done on any field, and can be nested up to ten levels deep.

Additionally, the sort package uses a special algorithm for the fastest possible sorting and can sort files that are over a thousand records long. When printing reports, the user specifies exactly what files are to be printed, and where; both report and label formats are possible. Subtotals and totals can be generated at certain points, and numeric fields may be printed in any format. A portion of the full file may be printed by specifying a range applicable to any field. Another unique feature: one or more fields can be computed on the basis of information in other fields. This opens even more possibilities for the system. Since file structuring is straightforward, other programs can easily be written to further enhance the system. The CCA Data Management System runs under MDOS and MBASIC.

EVIOS

Vector Graphic's Extended Video Input/Output System — EVIOS — is designed for our Flashwriter I board. Since it is memory mapped, Flashwriter has infinite capability as a terminal. EVIOS makes available many of the features found only in intelligent terminals: full cursor positioning, either relative or absolute; full control over reverse video; reduced intensity and graphics; protected fields; creation of bar grids; screen transmission as input; extensive selective screen erasure; and several other modes.

UniVid

UniVid is Vector Graphic's Universal Video Driver. While EVIOS is designed to take full advantage of the Flashwriter I board, UniVid is designed for the 24x80 Flashwriter II board. This system is called universal because it is actually three drivers in one. First, it is a simple driver that also allows plotting. Second, it is an emulator for the Lear Siegler ADM-3A terminal. Finally, it is an emulator for the Hazeltine 1500 terminal. Each of the emulation modes allows software using the special functions of one of the terminals to also work on Vector Graphic's Mindless Terminal.

Extended Monitor

Standard with Vector Graphic systems, the Extended Monitor is a multi-faceted software package. As a system monitor, it provides 23 commands for such functions as memory dumping, entering data into memory, testing memory, polling I/O ports, booting the disk, moving blocks of memory and many others. In this way, it is invaluable as a debugging tool. Additionally, it provides all of the console input and output for the system. Because the Monitor is set up for the particular configuration of the system, all other software will automatically run on it without system-dependent modifications.

ZSM

ZSM is Vector Graphic's powerful assembler. Structured similarly to the Micropolis assembler, ZSM also assembles all Z-80 code using the 8080 superset (TDL) mnemonics for easy upgrading of 8080 programs. ZSM can request information from the user during assembly and print information during assembly and conditional assembly. It can also link several files together for assembly. This allows otherwise huge or unmanageable files to be broken down into as many source modules as desired. ZSM runs under MDOS and is included as part of MDOS with MZ systems or MDOS updates.

Word Management System

The Word Management System is a complete word processor matching the most advanced stand-alone systems. Major features include: a) continuous typing without regard for lines; b) freely changeable tabs; c) no typing of names of documents, especially good for assembly of large documents from several small ones; d) one-step updating of the disk; e) direct typing to printer; f) character-oriented editing for typing anywhere on the screen; g) delete or move by character, word, line or any other portion of text, i.e., automatic realignment of text on the screen; h) full document in working memory; i) scrolling by lines or full screens; j) global search and replace; k) original document on disk is not changed unless told to; l) complete formatting flexibility including right justification; m) mid-text (dynamic) format changes; n) variable page length; o) automatic heading, footing and page numbering, with optional reversal of layout for two-sided printing; p) print-stop for changing type-face or ribbon color; q) continuous or page-by-page printing; r) stop printing in mid-document, even in mid-line; and s) many safety features to avoid erasing memory or disk.

The list processing feature of the system is, in fact, a small data management system designed solely for mailing lists or similar lists of up to 1500 members. Each member of the list is assigned "qualifiers" which can be used to identify characteristics of that member. Using this, a subset of the entire list can be sorted, stored on disk for later use and printed in 1 or 2 columns on mailing labels or continuous form paper. Moreover, by using the merge feature, mailing lists can be combined with text such as form letters, providing a sophisticated mass mailing capability.

The Word Management System contains its own disk operating system. With WMS, the Vector MZ computer becomes a completely integrated information processing system.