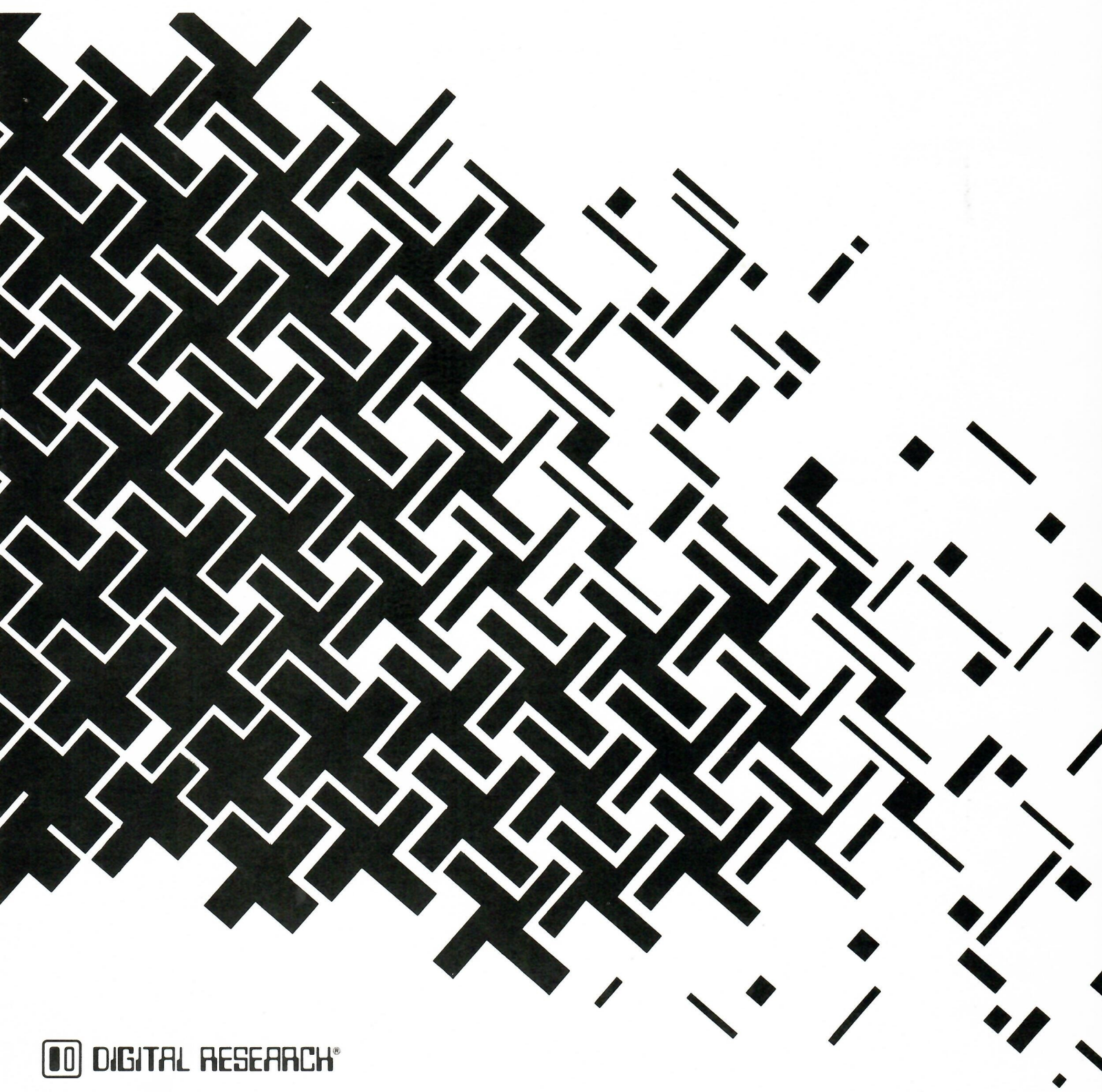


DIGITAL RESEARCH

POWERFUL MICROCOMPUTER SOFTWARE



 DIGITAL RESEARCH®

DIGITAL RESEARCH

Digital Research leads the industry in microcomputer operating systems with widespread industry acceptance due to speed, economy, and portability between hardware systems. If you write software, portability provides the largest market for your products. If you use software, Digital Research operating systems give you access to a virtually unlimited supply of software packages. Digital Research languages are written for professional programmers to aid in the development of commercial software packages.

Digital Research software is licensed for use by the purchaser, and is registered and serialized to prevent unauthorized copying and distribution. Registered owners receive support through notices of updates and field changes at little or no cost and a quarterly newsletter describing new products, technical features and applications stories.

You may purchase all of our products directly from Digital Research using our standard order form. If you don't have one, or if you have more questions, drop a note to our marketing staff. We will be happy to assist you.

OPERATING SYSTEMS FOR YOUR GROWING BUSINESS NEEDS

Digital Research's family of operating systems are designed for Zilog Z-80®, and Intel 8080-8085 and 8086-8088 based-microcomputers. Times change, and needs change with them. That's why Digital Research's operating systems are designed for maximum compatibility in the changing 8-bit and 16-bit world. Their design allows simple re-configuration to different microcomputer systems by separating the logical and physical functions into separate modules of the operating system. Operating systems, as sold by Digital Research, are configured only for Intel's MDS800 microcomputer. If the operating system you need for your specific computer is not offered by us, contact your local dealer or manufacturing representative.

Industry Standard from the Source—Digital Research **CP/M®** **Single-User Operating System**

CP/M is a general-purpose operating system designed for microcomputers using the 8080/8085 or Z-80 microprocessor. CP/M provides cost-effective computing through a wide variety of mature, specialized software products available for it. CP/M features include dynamic file management, a fast assembler, and a general-purpose editor and advanced debugger. Additional utilities, high-level languages and application packages are available from Digital Research and independent suppliers.

Requirements:

- 8080/8085 or Z-80 microprocessor
- 20K bytes of Read/Write main memory, contiguous from location zero
- One to 16 disk drives of up to eight megabytes capacity each
- An ASCII console

The Next Step **MP/M II™** **Multi-Programming Operating System**

MP/M II is our multi-user CP/M-compatible, multi-tasking operating system, which supports real-time multi-programming at each terminal. MP/M II features record and file locking for use in business environments where data base integrity is essential. MP/M II can be used to run simultaneous editors, program translators and background printer spoolers, as well as data entry or data base access from remote terminals. MP/M II features can be used to monitor real-time events and schedule programs for execution throughout the day.

Requirements:

- 8080/8085 or Z-80 microprocessor
- 64K bytes of resident memory
- One to sixteen disk drives of up to 512 megabytes capacity each
- One or more ASCII consoles
- Real-time clock



Networking is Here

CP/NET™

Logical Network Operating System

CP/NET is our hardware independent microcomputer network operating system. CP/NET can be configured in a number of ways, with masters operating under MP/M™, and slaves operating under CP/M. Peripherals, programs and data bases can be shared, and all the software utilities, languages and applications written for CP/M can operate with CP/NET. Since, CP/NET is transparent to CP/M, your application programs can run without modification. In its simplest form, a slave can consist of a processor, memory and an interface to the network. Thus, an intelligent CRT with sufficient RAM can execute CP/M programs; computing locally while depending on the network to provide all disk, printer and other I/O facilities.

Requirements:

- 64K bytes at each master location
- 20K bytes at each slave location
- One to sixteen disk drives of up to 512 megabytes capacity each at every master and one to sixteen disk drives of up to eight megabytes capacity at each slave location
- An ASCII console at each slave location

The New Standard

CP/M-86™

Single-User Operating System

CP/M-86 is the 16-bit version of the popular CP/M operating system. CP/M-86 is a general purpose operating system designed especially for microcomputers that use the 8086 or 8088 microprocessor. CP/M-86 is efficient and powerful with a time-tested, modular design.

CP/M-86 systems can support application programs that range from small to complex. Managing up to a full megabyte (1,048,576 bytes) of main memory, CP/M-86 gives your application programs full advantage of the 8086 address space. Complete file compatibility simplifies conversion from the 8-bit CP/M system to the 16-bit CP/M-86 system.

Requirements:

- 8086/8088 microprocessor
- Minimum of 56K of RAM
- One to sixteen disk drives of up to 8 megabytes each
- An ASCII console device such as a CRT

Today's Multi-User Environment

MP/M-86™

Multi-User Operating System

MP/M-86 is a multi-user, 16-bit multi-tasking operating system designed for microcomputers that use the 8086/8088 microprocessor. Upward compatible with our CP/M, MP/M II and CP/M-86 operating systems, MP/M-86 provides record and file locking with password protection for use in business settings where data base integrity is essential. MP/M-86 supports up to sixteen logical drives managing up to 512 megabytes each. MP/M-86 features extensive error-handling and reporting, real-time capabilities, and date and time stamps on files.

Requirements:

- A compatible 8086/8088 microprocessor
- 64K of RAM
- One to sixteen disk drives of up to 512 megabytes capacity each
- One or more ASCII consoles
- Real-time clock
- CP/M-86 must be implemented on the target machine
- 128K of RAM for implementation

LANGUAGES & PROGRAMMING TOOLS FOR PROFESSIONALS

For maximum programming efficiency and productivity, Digital Research languages are written for professional programmers to aid in the development of commercial software packages. Compatibility is our standard. Digital Research languages provide a range of commercial solutions today and in the future for both our 8-bit and 16-bit operating systems.

The Business Choice

CBASIC™

Programming Language

CBASIC is the most widely used BASIC dialect in the business community today. The precision and easy-to-use format of CBASIC gives programmers one of the most accurate tools for implementing business applications. CBASICs portability allows software and hardware OEMs to upgrade to more powerful hardware without losing their software investment.

Requirements:


- 8080/8085 or Z-80 microprocessor
- 24K CP/M, MP/M or CP/NET system

Simplicity Plus Speed

CB-80™

Programming Language

CB-80 is a native code compiler of our CBASIC language. As a direct enhancement of CBASIC, CB-80 offers all the features of CBASIC plus the speed and versatility of a compiler. Other enhancements include support of 32K byte strings, external multiple line functions, run-time error trapping and extended file handling capabilities. CB-80 also



includes our LK-80™ linker. LK-80 easily links assembler routines into CB-80 programs and is used to create overlay modules. CB-80 supports our multi-user operating system, MP/M II.

Requirements:

- 8080/8085 or Z-80 microprocessor
- CP/M version 2 or MP/M II system
- 48K bytes of memory

The Structured Standard

PL/I-80™

Application Programming Language

PL/I-80 is a standard, structured, commercial applications programming language. Based on ANSI standard PL/I Subset G, PL/I-80 is upward compatible with full PL/I, as well as mini-computer subset versions. PL/I-80 saves design time, minimizes debugging and maintenance problems, and designs high-quality output with picture specifications, structures, arrays, based and pointer variables, and exception processing. PL/I-80 includes the compiler, run-time library, linkage editor and relocating macro-assembler.

Requirements:

- 56K CP/M, MP/M or CP/NET system

For Upward Compatibility

CBASIC-86™

Programming Language

CBASIC-86 is an implementation for CP/M-86 of our popular CBASIC language. CBASIC-86 supports all the features of CBASIC. Intermediate files can be executed by CBASIC-86. CBASIC-86 supports 128K bytes of main memory, providing up to twice as much space for user programs.

Requirements:

- 32K CP/M-86, or MP/M-86 system

Unix Solutions

CBASIC-16™

Programming Language

CBASIC-16 is our popular CBASIC language designed to run under the UNIX™ operating system. CBASIC-16 offers all the features that made CBASIC the most widely used Basic dialect in the business community, for 8-bit microcomputers. Commercial programmers find CBASIC-16 one of the most accurate tools for implementing business and vertical market applications. CBASIC-16 enables programs written in CBASIC to operate in a UNIX environment.

Requirements:

- Operates with any UNIX-based operating system
- Minimum of 128K bytes of memory

Complex File Management

BT-80™

Record Retrieval System

BT-80 is a comprehensive single-user record retrieval system intended for use in PL/I-80 applications where single or multi-keyed access to data records is required. BT-80 can also be used to develop Data Base Management Systems. Using the B-Tree index organization technique, BT-80 keys are maintained in balanced, multi-way tree structures called indexes that offer efficient key insertion, retrieval and deletion characteristics over the broad range of access situations required by a general record retrieval system. Although all access to BT-80 records is made through an index, the details of this interface are transparent to the user.

Requirements:

- CP/M, version 2, MP/M, or CP/NET system
- PL/I-80 Run-time Library and LINK-80 Linkage Editor

Enhanced Assembler

MAC™

Macro Assembler

MAC, the CP/M Macro Assembler, is upward compatible from our standard assembler and the Intel macro assembler. MAC adds extensive macro processing capability to the standard CP/M assembler, as well as full expression analysis, conditional assembly and a sorted symbol table for use in debugging.

Requirements:

- 24K byte CP/M system (MAC occupies a 12K region)

The Investment Saver

XLT86™

Assembly Language Translator

XLT86 is an aid to software and hardware manufacturers wanting to convert their existing 8-bit 8080 programs to the 16-bit 8086 microcomputer. XLT86 allows a user to translate an 8080 assembly source code file into an optimized 8086 assembly source code file, while preserving all existing labels, comments, and symbols from the 8080 source program. This feature reduces the amount of time required to develop and support 8086 code. XLT86 uses extensive program flow analysis, to perform the translation. XLT86 is available in two versions: the CP/M or MP/M microcomputer version, or the Vax™ 11/780 or 11/750, running under the VMS operating system minicomputer version. Both versions are written in Subset G of PL/I.

Requirements:

The CP/M version

- Minimum of 64K CP/M system
- One disk drive (2 or more recommended)
- 8080/8085 or Z-80 microprocessor

The Vax version

- Vax 11/780 or 11/750
- VMS operating system
- Magnetic tape drive (1600 BPI)
- 128K memory

UTILITIES FOR MORE CP/M POWER

Digital Research utilities are designed especially for our operating systems, to expand your capabilities.

Increase Throughput

DESPOOL™ Background Printing Utility

DESPOOL printing utility for CP/M allows disk file printing during editing or debugging. DESPOOL allows the operator to print a disk file during the inactive time that CP/M is waiting for console input. Thus, background printing can take place during normal interactive CP/M operations, such as program editing and data entry under ED, our test program debugging using SID, ZSID or DDT.

Requirements:

- 16K byte CP/M system

Programmer Productivity

SID™ ZSID™ Symbolic Instruction Debuggers

SID and ZSID expand upon the features of the CP/M standard debugger and provide greatly enhanced facilities for assembly level program checkout. Features include real-time breakpoints, fully-monitored execution, symbolic disassembly, assembly, and memory display and

fill functions. Debugging utilities can be dynamically loaded with SID or ZSID to provide traceback and histogram facilities. SID uses the 8080/8085 assembly language mnemonics, while ZSID incorporates the Z-80 instruction set. In all other respects, SID and ZSID are functionally equivalent.

Requirements:

- CP/M or MP/M operating system
- 20K byte useable memory
- Symbolic information from MAC, LINK-80, or Microsoft assembler is required in order to use the symbolic features

Format Specialist

TEX Text Formatter

TEX prepares documents for printout under CP/M. Features include automatic index and table of contents, pagination, margins, headings, paragraphs and right justification, special features including super- and sub-scripts, bold type and underlining support for Diablo 1640/1650 printers with the word processing enhancement option.

Requirements:

- 20K byte CP/M system

INDEPENDENT SOFTWARE VENDORS TAKE YOUR MARKET BY STORM

Independent Software Vendors are those individuals and companies who write application packages for the special computer needs of business and industry. We are committed to support ISVs by providing the basic tools, information and licensing required to conduct a viable and profitable software business. To learn more about the ISV support program write to:

Lori Forrest
ISV Coordinator
Digital Research
P.O. Box 579
Pacific Grove, CA 93950

Your Guide to Software Vendors **CP/M COMPATIBLE SOFTWARE CATALOG**

A listing of over 100 Independent Software Vendors (ISVs) who write CP/M compatible software. Your guide to accounting packages, word processors, languages, utilities and more.

Applications for Business Solutions **CBASIC SOFTWARE DIRECTORY**

A listing of general accounting packages and vertical market software applications written in CBASIC. A brief description of each application package is provided along with memory and disk requirements.



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