

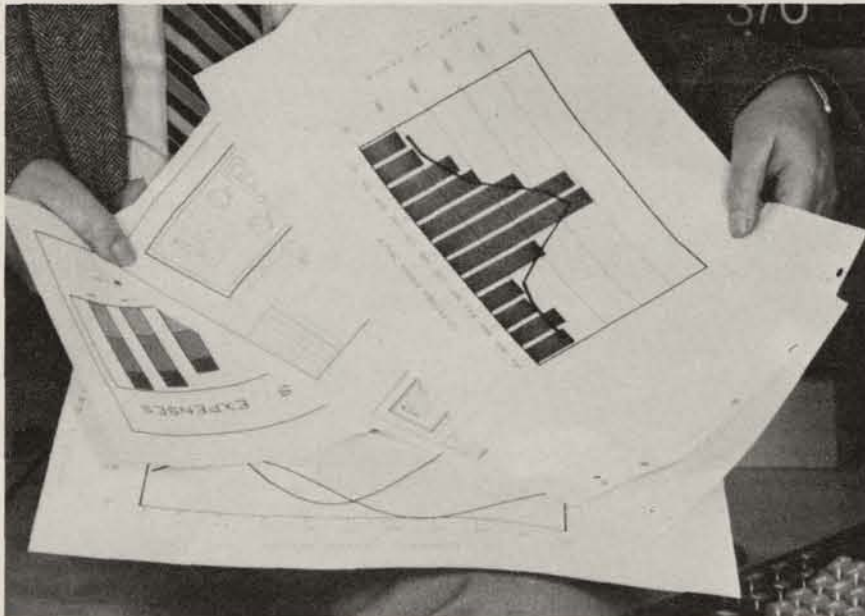


DIGITAL RESEARCH NEWS

FOR DIGITAL RESEARCH USERS EVERYWHERE

JULY 1982 VOLUME 2, NO. 2

Digital Research moves into graphics field



Digital Research systems software will be enhanced with graphics capabilities under a joint development and marketing agreement with Graphic Software Systems, Inc. of Wilsonville, Ore.

Digital Research will offer graphics software for programmers through a joint development and marketing agreement with Graphic Software Systems, Inc. of Wilsonville, Ore., announced Fred Langhorst, Digital Research manager of graphics development.

Digital Research will soon begin shipping graphics products that provide application developers a programming interface which is consistent with the emerging ANSI standards for computer graphics. GSS-CORE is a library of graphic primitives, and GSS-PLOT provides a higher level library of functions for data plotting such as bar graphs and pie charts.

"We believe graphics software will be the fastest growing segment of the microcomputer software market," said Langhorst. "With this agreement Digital Research will become the first

microcomputer systems software company to offer standard graphics extensions for its languages that are consistent with standards on mainframes and minicomputers."

Will modify DRI compilers

The Digital Research/Graphic Software Systems agreement includes a significant amount of technology sharing, over and above the marketing aspects of the joint relationship, according to Langhorst. Involved is modification of DRI compilers to include graphic extensions and integration of graphic functions at the operating system level.

Eventually, Digital Research will sell these products for any hardware that can use a DRI operating system—and will support graphic displays and peripherals that include color

see Graphics page 3

Agreement with Micro Focus adds COBOL compilers

Digital Research now provides a COBOL compiler produced by Micro Focus. The companies have signed an agreement that allows Digital Research to market and distribute the popular CIS COBOL™ and Level II COBOL™ microcomputer languages developed by Micro Focus.

The agreement means that Digital Research now has another strong language product to offer to users of 8-bit 8080-based and 16-bit 8086/8088-based microcomputers that run any of the CP/M® or CP/M-generic operating systems, according to Gordon Eubanks Jr., DRI Language Division vice president.

The addition of the COBOL products complements the language division's current line of 8- and 16-bit languages, including CBASIC®, CBASIC Compiler (CB-80)™, CBASIC-86™,

CBASIC-16™, PL/I-80™, Pascal/MT+™ and Pascal/MT+86™.

Customization will continue

"Micro Focus will continue to handle customization of the two COBOLs to other operating systems," explained Paul O'Grady, Micro Focus president, "and we'll continue to handle sales of our software construction tools and maintenance tools. We'll also continue to offer CP/M family-compatible products to our own customers, but more and more we'll rely on Digital Research for sales and marketing."

COBOL (Common Business Oriented Language) is a powerful programming language designed for complex business applications. CIS COBOL is certified by the General
see Micro Focus page 2



CIS COBOL and Level II COBOL will be marketed and distributed by Digital Research under an agreement between Micro Focus, represented by Direct Sales Manager Chris Barnes (right), and Digital Research, represented by Language Division Vice President Gordon Eubanks Jr.

Change in royalty policy favors ISVs

Digital Research has announced that Independent Software Vendors no longer will have to pay the company royalties for programs they sell written with DRI's compiler languages. Those ISVs who have paid these royalties to DRI in the past may credit the amounts to future purchases.

Now any ISV selling programs written in PL/I-80, Pascal/MT+, CBASIC Compiler (CB-80), CBASIC-86 and Pascal/MT+86, will not have to meet Digital Research's run-time licensing requirements.

Vendors have responded positively to the elimination of the royalties, according to Carmen Governale, DRI product marketing manager for the language division. "Large as well as small software companies are pleased that DRI has dropped the run-time licensing fees," Governale said. "For the large companies, it means they are no longer required to
see Royalties page 3

IN THIS ISSUE

New programming tools introduced	3
San Diego firm finds Pascal/MT+ is ideal solution	4
Support Center offers technical help	5
Two technical seminars scheduled	7
Are you using the most current releases of our products? Check the Order Form on pages 7 and 8 for the latest information. Inquiries may be made to Customer Service at (408) 649-5500.	

Concurrent CP/M-86 turns one computer into many

Now microcomputer users can print a letter, examine information from a data base and receive electronic mail on their computers all at the same time, thanks to Concurrent CP/M-86™, the newest 8086/8088-compatible operating system from Digital Research.

"Concurrent CP/M-86 allows you to list a directory without terminating the program that's currently running," said Gary Kildall, Digital Research president, commenting on the company's latest operating system. "Or you can go from one screen of information to another with just a push of a button. It's as if you had several personal computers in front of you, each doing a different job."

Programmers also benefit from Concurrent CP/M-86. "Increased productivity is the immediate payoff," Kildall stressed, "because while one program is being compiled, and another is being edited, still a third can be debugged. In the world of software development, saving time means saving money."

CP/M-86 and MP/M-86 compatible

Concurrent CP/M-86 is compatible with CP/M-86™, Digital Research's 16-bit single-user, single-tasking operation system, and with MP/M-86™, which permits more than one operator to use a single 16-bit CPU simultaneously. Concurrent CP/M-86 offers file structure compatibility with all DRI operating systems, including CP/NET™ which permits a number of separate computers to operate in a processing network, and CP/M, the industry standard operating system for 8-bit microcomputers.

Programs running under Concurrent CP/M-86 can directly access up to one megabyte of main memory. The operating system can support up to 16 logical drives, each with a capacity of 512 megabytes, for a maximum of four gigabytes of on-line storage.

Other features include a real-time kernel; record and file locking; date and time stamps; password protection on files; error-handling and reporting;
see Concurrent page 6

Digital Research schedules two technical seminars; ISV Conference/Language Workshop expanded to 4 days

Technical seminars for Independent Software Vendors and hardware manufacturers have been scheduled by Digital Research for mid-summer and early fall. The two distinct series of workshops are part of the ongoing technical support program provided by Digital Research.

Language workshop added for ISVs

The ISV Conference and Language Workshop is set for July 20-23 at Asilomar Conference Center in Pacific Grove, Calif. in an expanded four-day format that will include an optional two-day language workshop.

Like other parts of the ISV program, the seminar is designed to teach participants how to market, protect and document their products. It also will provide intensive training in Digital Research languages.

During the first two days, enrollees will attend sessions on the present and future of operating systems and languages, documenting products, dynamic advertising, generating publicity, software protection, copy-righting, technical customer support and marketing.

During days three and four, in-depth workshops will be offered in PL/I-80, CBASIC, Pascal/MT+ and CIS COBOL. Each language workshop will cover data types, I/O, file accessing, flow of control, application programming and systems programming. Participants will receive tips and techniques from the language implementers as they are taught how to use a powerful, new language.

Cost of the ISV Conference and the Language Workshop is \$600. Fee for the ISV Conference only is \$300, or \$400 for the Language Workshop only. Registration fee includes documentation of the language workshop attended, a notebook with outlines of speaker presentations, and lunch each day.

Sessions begin at 8:30 a.m. daily and conclude at 5 p.m. except the final day when sessions end at 3 p.m. A cocktail party will be presented the first evening of the ISV Conference. During a round table discussion, the first evening of the Language Workshop, participants will meet with Digital Research technical staff to discuss problems and ideas in a relaxed setting.

Through ISV seminars, Digital Research encourages the production of quality application software for use with Digital Research operating systems. More than 3500 programmers have joined Digital Research's ISV plan. Other services include the *ISV FORUM Newsletter*, the *CP/M Compatible Software Catalog* and a hotline.

Operating Systems Seminar scheduled

The three-day Operating Systems Seminar for Original Equipment Manufacturers and systems integrators is scheduled Sept. 22-24, also at Asilomar Conference Center in Pacific Grove. This seminar is designed specifically to help participants understand the capabilities of Digital Research's family of operating systems and software utilities. A technical overview of CP/M and CP/M-86 will be given by Thomas A. Rolander, operating systems developer and vice president of DRI Operating Systems Division.

Participants may register for either the 8- or 16-bit systems implementation sessions on CP/M or CP/M-86; MP/M II or MP/M-86; or CP/NET. Topics include: structure and configuration of the hardware-dependent BIOS; preparation of a disk definition table for disk subsystems; disk file random access techniques; memory

management; overview of CP/NET; implementation of CP/M-based CP/NET slaves and MP/M based CP/NET masters; overviews of MP/M II; and a new session on programming in a shared environment.

One evening will be devoted to a round table discussion during which

attendees will be encouraged to express their expectations about operating systems. Digital Research uses this information to help develop its new products, policies, and licensing and support practices.

Cost of the Operating Systems Seminar is \$500 which includes

breakfast and lunch each day and a notebook of speakers' materials.

More information on these and other Digital Research seminars is available from Seminar Coordinator Peggy Anderson, P. O. Box 579, Pacific Grove, CA 93950, (408) 646-6065.

DIGITAL RESEARCH™							Products	
Product Description	Media Formats 8" Diskettes:		Diskette Only:		Documentation Only Price	Documentation Description	Order Details	
	Single Density	Double Density	Single Density	Double Density				
Operating Systems and Utilities								
CP/M® 2.2	\$150	\$200	\$135	\$185	\$25.00	Seven manual set includes: CP/M Alterations, Interface, Dynamic Debugging Tool, Context Editor, Assembler, Features & Facilities and User's Guides.	NA	
CP/M SBC 80/20	\$200	NA	\$185	NA	\$25.00	Same as CP/M 2.2 Documentation.	System & Disk Only include ROM.	
CP/M-86™ 1.1	\$250	NA	\$220	NA	\$40.00	Three manual set includes: CP/M-86 System, User's and Programmer's Guides.	PROM set available for \$100	
MP/M II™ 2.1	\$450	NA	\$420	NA	\$40.00	Five manual set includes: MP/M II User's, Programmer's and System Guides. LINK-80 Operator's Guide and MAC Language Manual and Applications Guide.	LINK-80 Guide and MAC manual included with system only.	
MP/M-86™ 2.0	\$650	NA	\$610	NA	\$50.00	Three manual set includes: MP/M-86 User's, Programmer's and System Guide.	NA	
CP/NET™ 1.1	\$200	NA	\$195	NA	\$15.00	CP/NET User's Guide.	NA	
TEX 2.1	\$100	\$125	\$ 95	\$120	\$10.00	TEX User's Guide.	NA	
DESPOOL™ 2.0	\$ 50	\$ 75	\$ 45	\$ 70	\$ 2.50	DESPOOL Operator's Guide.	NA	
Languages and Programming Tools								
PL/I-80™ 1.3	\$500	\$500	\$475	\$475	\$35.00	Five manual set includes: PL/I-80 Applications, Language and LINK-80 Operator's Guides. PL/I-80 Command Summary and MAC Language and Applications Guide.	MAC manual included with system only.	
CBASIC® 2.8	\$150	\$150	\$130	\$130	\$30.00	CBASIC Reference Guide.	NA	
CBASIC-86™ 1.1	\$325	\$325	\$305	\$305	\$30.00	CBASIC-86 Reference Manual.	NA	
CBASIC-16™ 1.3	\$325*	NA	\$305*	NA	\$30.00	CBASIC-16 Reference Manual.	*Please contact Digital Research for available formats.	
CB-80™ 1.3	\$500	\$500	\$480	\$480	\$30.00	CB-80 Language Manual	NA	
Pascal/MT+™ 5.5	\$350	NA	\$335	NA	\$30.00	Pascal/MT User's Guide	NA	
Speed-Programming Package™ 5.5	\$200	NA	\$195	NA	\$10.00	SpeedProgramming Package User's Guide.	Requires Pascal/MT+ version 5.2 or greater	
Pascal/MT+ with Speed-Programming Package 5.5	\$500	NA	\$485	NA	\$35.00	Two manual set includes: Pascal/MT+ User's Guide and SpeedProgramming Package User's Guide.	NA	
MAC™ 2.0	\$ 90	\$115	\$ 80	\$105	\$15.00	MAC Language & Applications Guide	NA	
RMAC™, LINKLIB & XREF 1.1	\$200	NA	\$185	NA	\$25.00	Two manual set includes: LINK-80 Operator's Guide, MAC Language & Applications Guide.	NA	
BT-80™ 1.0	\$200	NA	\$185	NA	\$25.00	BT-80 Reference Guide.	NA	
XLT86™ 1.0	\$150	NA	\$145	NA	\$10.00	XLT86 User's Guide.	XLT86 is available in the VAX VMS version for \$8000.00.	
SID™ 1.4	\$ 75	\$100	\$ 70	\$ 95	\$10.00	Two manual set includes: SID User's Guide and SID Command Summary.	NA	
ZSID™ 1.4	\$100	\$125	\$ 95	\$120	\$10.00	Two manual set includes: SID User's Guide and ZSID Command Summary.	NA	
IBM Displaywriter™ Compatible Products								
CP/M-86 DW 1.0	\$325	NA	NA	NA	\$50.00	CP/M-86 DW documentation.	These products are designed for a Displaywriter with the following configuration: Electronic Module, Display, Disk Drive and Printwheel Printer.	
CBASIC-86 DW 1.0	\$325	NA	NA	NA	\$30.00	CBASIC-86 Reference Manual.		
CP/M-86 DW & CBASIC-86 1.0	\$600	NA	NA	NA	\$80.00	Two manual set includes: CP/M-86 DW documentation and CBASIC-86 Reference Manual.		

DIGITAL RESEARCH™							New Products	
Product Description	Media Formats 8" Diskettes:		Diskette Only:		Documentation Only Price	Documentation Description	Order Details	
	Single Density	Double Density	Single Density	Double Density				
New Languages and Programming Tools								
Pascal/MT+86™ 3.0	\$600	NA	\$580	NA	\$30.00	Pascal/MT+86 Language Reference Manual and ASMT-86 Reference Manual.	NA	
Speed-Programming Package™ 1.0	\$250	NA	\$245	NA	\$10.00	SpeedProgramming Package User's Guide.	Requires Pascal/MT+86.	
Pascal/MT+86 with Speed-Programming Package 3.0	\$800	NA	\$775	NA	\$35.00	Pascal/MT+86 Language Reference Manual, ASMT-86 Reference Manual and SpeedProgramming Package User's Guide.	NA	
SID-86™ 1.0	\$150	NA	\$145	NA	\$10.00	SID-86 User's Guide.	NA	
Display Manager™ 1.0	\$400	NA	\$380	NA	\$30.00	Display Manager Programmer's Guide.	NA	
Access Manager™	\$300	NA	\$280	NA	\$30.00	Access Manager Programmer's Guide.	NA	
CIS COBOL™ 4.4	\$800	NA	NA	NA	NA	Two manual set includes the CIS COBOL Language Reference Manual and CIS COBOL Operator's Guide.	Please specify if for CP/M-80 or CP/M-86 Operating System.	

