

# SAGE

COMPUTER TECHNOLOGY

195 NORTH EDISON WAY, SUITE 14 • RENO, NEVADA 89502 • (702)322-6868

Greetings Computer Professional:

Sage Computer Technology is now manufacturing and shipping the Sage II microcomputer system. This system, as described in the accompanying literature, delivers the highest performance for its price range of any computer in history. This feat is accomplished using the latest in processor, memory and disk drive technology as well as a top-down system design and excellent manufacturing techniques.

Application software for the UCSD system is available from more than 80 different sources and ranges from simple mailing list programs to data base systems. A full list and description of each program is available from the Sage Computer Technology marketing department.

All products manufactured by Sage Computer Technology are warranted for one full year. Peripheral products such as disk drives, not manufactured by Sage Computer Technology, are warranted by Sage Computer Technology for the manufacturer's warranty period.

Our current service policy is to repair defective systems at the factory and then perform a 24 hour burn-in to give a 72-hour turn-around time. Units should be returned to the factory via UPS insured.

Our systems are being delivered on a first-come, first-served basis, though we are currently giving priority to the shipping of evaluation units. Early rumors of our product introduction have already produced a steady demand for our system and we expect to begin ramping up our production shortly.

If we can provide any other information about our system or policies please contact our marketing department at 702-322-6868. If you are interested in an evaluation unit we recommend that you call us immediately for a firm shipping date.

Sincerely,

Rod Coleman  
President



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## Sales Order Form

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone number (    ) \_\_\_\_\_ Purchase order # \_\_\_\_\_

Check                       VISA                       Master Charge

Credit card # \_\_\_\_\_ Expiration date \_\_\_\_\_

Signature \_\_\_\_\_

Description	Price	Qty	Extended
Sage II with one 320K disk drive	\$3600.00		
Sage II with one 640K disk drive	\$4000.00		
Sage II with two 320K disk drives	\$4400.00		
Sage II with two 640K disk drives	\$4800.00		
128K of RAM memory - standard	00.00		
256K of RAM memory - optional	\$400.00		
384K of RAM memory - optional	\$800.00		
512K of RAM memory - optional	\$1200.00		
UCSD p-SYSTEM with Pascal	\$400.00		
UCSD FORTRAN	\$400.00		
UCSD BASIC	\$250.00		
Subtotal			
Nevada residents add 5.75% sales tax			
<b>Total</b>			

A refundable \$200.00 deposit is required before a shipping date can be assigned.



# THE UCSD p-SYSTEM™

**SOFTech**  
MICROSYSTEMS

## VERSION IV.0

The UCSD p-System is the fastest growing software development system for microcomputers. Microcomputer manufacturers, applications developers and more than 30,000 end-users already have made the UCSD p-System their choice. And more are doing so every day. The reasons are simple. The UCSD p-System offers microcomputer users the best of all worlds.

■ A complete, portable microcomputer software development and execution environment.

■ Fully compatible and integrated Pascal, FORTRAN and BASIC compilers.

■ The same system for most major microprocessors: Z80, 8080/8085, 6502, 6809, 9900, PDP-11™ and LSI-11™.

You get this in a proven, field tested software system that is available today. A system that is growing and keeping up with the micro world. And, most important, with the UCSD p-System you get software portability that protects your software investment without restricting your hardware options. It's all available with the UCSD p-System. From SofTech Microsystems.

### Portable and Complete

The UCSD p-System is more portable than any other micro-

computer system. So application programs written for one microcomputer can run on another microcomputer—without recompilation. This protects your software investment . . . without restricting your hardware options. UCSD p-System software can be used on many microcomputer systems—not just one. That's because UCSD p-System programs are compiled into a universal pseudo code (P-code) that can be executed on any microcomputer with a P-machine emulator—quickly. These programs can be moved in combined object code form among implementations of Version IV.0 of the UCSD p-System. And because the P-code programs are smaller, they save memory space, too. With Version IV.0 of the UCSD p-System, programs written in Version II.0 of the UCSD p-System, Apple Pascal™, or UCSD Pascal™ for the Western Digital MicroEngine™ can be recompiled to run on any processor supported by the UCSD p-System.

The UCSD p-System software package is available from SofTech Microsystems—ready to run on most microcomputer systems. Here's what you get:

The best interactive microcomputer operating system available today with program chaining, standard input and output redirection (including command files), dynamic overlays, dynamic memory allocation, disk file handling capabilities, single keystroke commands, runtime support routines, block I/O service routines, and support for asynchronous processes and concurrency primitives in Pascal.

Fast compilers for FORTRAN, Pascal, and BASIC, all supporting

separate compilation and producing universal P-code.

A powerful, screen-oriented editor that runs in both programming and text-editing modes.

A character-oriented editor with a wide variety of commands for context editing with hardcopy terminals.

A very powerful file handler to manipulate disks and disk files.

A conditional macro assembler for your microprocessor that produces code that can be linked with your FORTRAN, Pascal and BASIC programs.

A linker for link-editing assembly code into Pascal, FORTRAN, and BASIC modules.

Dynamic runtime binding of separately compiled or linked modules into a host program so one copy of the object code for a library module can be shared by many programs that use it.

An efficient compact interpreter for executing P-code.

A library of program modules and other utilities.

### With Your Choice of Pascal, FORTRAN, BASIC or Any Combination!

The Pascal everyone is talking about is UCSD Pascal . . . with tens of thousands of users and growing.

The UCSD Pascal language has the key features of Pascal as defined by its founder, Niklaus Wirth. The structured programming constructs that make programs easy to write and maintain. The flexible syntax that makes them easy to understand.

But it goes beyond that. With extensions for systems development and commercial applications programming. With a complete, portable operating

environment that makes it easy to develop Pascal or assembly language programs on most microcomputers. And in Version IV.0 convenient support for large libraries of separately compiled modules. These modules can themselves be large and contain numerous overlays. The bottom line: very large application systems can be built on Version IV.0.

Or FORTRAN if you prefer to use the most popular language for scientific and engineering programming. Not just any FORTRAN but an up-to-date ANSI-77 FORTRAN subset.

Or BASIC, which supports structured programming, separate compilation, direct access files, virtual arrays, and much more.

Or any combination. Each is fully compatible allowing modules written in one language to be used in programs written in another language. You can write programs using the advantages and existing routines for each language.

And the UCSD p-System won't stop there. Implementation on popular 16-bit microcomputers is underway, as well as the development of code generators to convert P-code to native machine code. All of which means that the UCSD p-System will continue to meet the needs of the microcomputer industry.

### **With Optional Cross-Assemblers Package**

A complete set of native code generating cross-assemblers for the Z80, 8080, Z8, PDP-11/LSI-11, 6502, 6800, 6809 and 9900 microprocessors. This collection of assemblers allows you to program on the host machine of your choice for the object machine of your choice. Available as an option with your UCSD p-System from SofTech Microsystems.

### **Complete Documentation**

A complete set of documentation is part of every UCSD p-System software package. It includes manuals that explain all the constructs of the UCSD p-System and its languages in detail.

The UCSD p-System documentation contains over 600 pages and is a detailed reference for the UCSD p-System, describing all instructions and features. Also included is a handy Installation Guide to facilitate an easy transition onto your hardware, as well as our Internal Architecture Guide which is a useful guide to system internals for the sophisticated user. FORTRAN-77, UCSD Pascal, and/or BASIC manuals also are included, depending on your choice of compiler(s).

### **For Most Micros**

The complete, ready-to-run package is available now for these computers: all 8080/8085 and Z80 based microcomputers with the CP/M® operating system, and Digital Equipment Corporation's LSI-11 and PDP-11 computers. For 6502, and 8080/8085 and Z80 microcomputers without CP/M, SofTech Microsystems offers its Adaptable System. We also offer the UCSD p-System on the 6809, 6800 and 9900 microprocessors. Contact SofTech Microsystems for technical information and details.

### **System Requirements**

The UCSD p-System, with either FORTRAN-77, UCSD Pascal, or BASIC, requires a minimum of 48K bytes of contiguous RAM, a floppy disk system and a terminal. The DEC LSI-11 and PDP-11 packages include file transfer utilities for RT11 conversions plus a complete set of alternative interpreter configurations—with and without Extended Instruction Set (EIS) and Floating Point Instruction Set (FIS not FPP),

and for RK05, RX01, RX02 and RL01 type disk drives.

All UCSD p-System software comes as object code packaged on 8-inch, IBM 3740 compatible diskettes (single density, single-sided, soft-sectored) diskettes. Adaptable System disks are recorded with 1 to 1 interleaving and zero skew. The software is formatted to facilitate downloading to 5¼ inch mini-diskettes and many other disk formats. RK05 cartridge platters are also available for DEC PDP-11 and LSI-11 systems.

### **About SofTech Microsystems**

SofTech Microsystems is a subsidiary of SofTech, Inc.—a leading system software company for over 11 years. SofTech Microsystems is dedicated to providing users with reliable software products. Products that are easy for anyone to use—from the programming novice to the programming expert. And products that are supported by experienced software engineers.

As a result of these capabilities, the University of California at San Diego has awarded sole responsibility for continued licensing and maintenance of the UCSD p-System to SofTech Microsystems.

Academic and educational discounts, source code licenses, and distribution licenses are available. Contact SofTech Microsystems.

(UCSD p-System and UCSD Pascal are trademarks of the Regents of the University of California. CP/M is a registered trademark of Digital Research Corporation. LSI-11 and PDP-11 are trademarks of Digital Equipment Corporation. Apple Pascal is a trademark of Apple Computers, Inc. MicroEngine is a trademark of Western Digital Corporation.)

**SOFTech**  
**MICROSYSTEMS**  
A SUBSIDIARY OF SOFTECH

## VERSION IV.0

The Pascal everyone is talking about is UCSD Pascal . . . with over 30,000 users and growing. This fully developed Pascal is available with support from a professional software company. Implemented on most major microprocessors. With UCSD Pascal you get:

- The de facto Pascal standard for microcomputers throughout the world.

- A fully developed Pascal with extensions for systems development and commercial applications programming.

- The same Pascal available for most major microprocessors: 8080/8085, Z80, 6502, 6809, 9900, PDP-11™ and LSI-11™.

- The completeness and portability of the UCSD p-System™.

The UCSD Pascal language has the key features of Pascal as defined by its founder, Niklaus Wirth. The structured programming constructs that make programs easy to write and maintain. The flexible syntax that makes them easy to understand.

But it goes beyond that. With portability features so programs that run on one microcomputer can run on another. With a complete,

portable operating environment that makes it easy to develop Pascal or assembly language programs on most microcomputers. And in Version IV.0 convenient support for large libraries of separately compiled modules. These modules can themselves be large and contain numerous overlays. The bottom line: very large application systems can be built on Version IV.0. A development environment that protects your software investment without restricting your hardware options. And it's available today with complete documentation and software support. From SofTech Microsystems.

### Portable and Complete

UCSD Pascal is more portable than other Pascals. So application programs written for one microcomputer can run on another microcomputer—without recompilation. This protects your software investment . . . without restricting your hardware options. UCSD Pascal can be used on many microcomputer systems—not just one. That's because UCSD Pascal programs are compiled into a universal pseudo code (P-code) that can be executed on any microcomputer with a P-machine emulator—quickly. These programs can be moved in combined object code form among implementations of Version IV.0 of the UCSD p-System. And because the P-code programs are smaller, they save memory space, too.

With Version IV.0 of the UCSD p-System, programs written in Version II.0 of the UCSD p-System, Apple Pascal™, or UCSD Pascal for the Western

Digital MicroEngine™ can be recompiled to run on any processor supported by the UCSD p-System.

With UCSD Pascal extensions for commercial applications and systems program development, disk files can be randomly accessed. Individual modules can be separately compiled. Assembly language routines can be linked with the Pascal programs. Interactive input/output is supported.

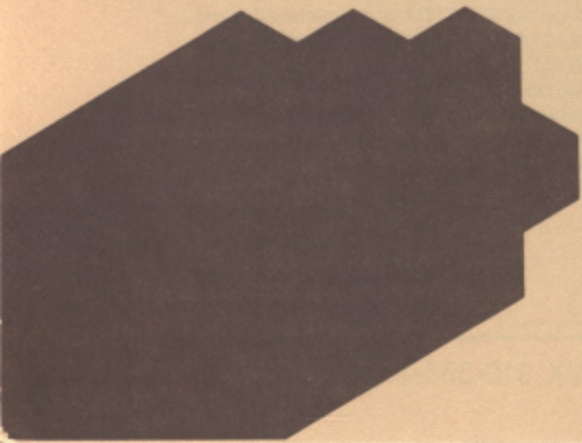
And with UCSD Pascal's complete development software—from operating system to full screen editor, you can develop and execute a Pascal program for your microcomputer system today.

### With FORTRAN And/Or BASIC When You Want It

Because the UCSD p-System is modular, you can add our FORTRAN-77 or BASIC compiler when you want it. FORTRAN-77, BASIC, and UCSD Pascal are fully compatible, allowing modules written in one language to be used in programs written in another language. You can write applications combining the best features of each.

### And Optional Cross-Assemblers Package

A complete set of native code generating cross-assemblers for the Z80, Z8, 8080, PDP-11/LSI-11, 6502, 6800, 6809 and 9900 microprocessors. This collection of assemblers allows you to program on the host machine of your choice for the object machine of your choice. And available as an option with your UCSD p-System from SofTech Microsystems.



## Available From SofTech Microsystems

The UCSD p-System with UCSD Pascal is available from SofTech Microsystems—ready to run on most microcomputer systems. Here's what you get:

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An efficient compact interpreter for executing P-code.

A library of program modules and other utilities.

## And Complete Documentation

A complete set of documentation is part of every UCSD p-System software package with UCSD Pascal. It includes tutorial texts to help non-programmers and experienced

programmers learn Pascal and manuals that explain all the constructs of the UCSD p-System with UCSD Pascal in detail.

The Beginner's Guide for the UCSD Pascal System by Pascal expert Kenneth Bowles explains how to use the basic UCSD p-System. A set of tutorial programs on diskette, which will give you hands-on practice, accompanies this text.

The Pascal User Manual and Report by Jensen and Wirth is the original reference and definition for Pascal. The UCSD p-System User's Manual is a detailed reference manual for the UCSD p-System, describing all instructions and features. The Installation Guide facilitates an easy transition onto your hardware. And the Internal Architecture Guide is a useful guide to system internals for the sophisticated user. All are part of the UCSD p-System package.

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