

# Pascal Computer Design

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PENN YAN, NEW YORK

25 CENTS Cheap

## IMP Debuts

**A Generation Beyond  
MuMath and FORTRAN**

Penn Yan-Programmer/Engineer John Clarke has released his IMP (Instant Mathematical Programming) for use with all UCSD p-System machines, as well as for CP/M users with Pascal/M. The program, which was introduced at \$225, permits anyone (yes, a non-programmer) to generate sophisticated Pascal programs to solve complex linear and non-linear equations.

### IMP Writes It

The IMP software first simplifies an algebraic problem statement (entered in simple text form), then writes a Pascal source program which, when compiled, gives the user a solution. The compiled program then permits the user to *Interactively* redefine constants or variables, or to maximize given parameters. Reviewers claim this system may replace FORTRAN as the engineer's computer standard.

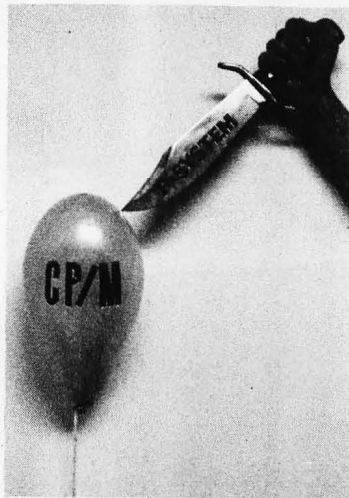
## TURNKEY CHEAPER THAN CP/M

**Eliminate Need for Operating  
System Boot to Run  
Applications Approach (End  
Users Relieved)**

P-System Turnkey Packages are now available for applications developers to distribute with their programs. The software allows the end-user to "Boot and Run" without needing to learn about operating system commands. Full backup, editing and file handling capabilities also available at a fraction of the full system cost. This should prove to be a boon to systems houses...and it's cheaper than CP/M!

## LOGICALC (TM) moves "Calc" Software to UCSD Environs

**LOGICALC (TM) gives  
spreadsheet capability to all  
those other micros. Does  
-Does Regression Analysis  
-Accepts Database In-Out**  
Penn Yan- Logicalc (TM) has swept the Pascal world by storm. Only \$295 a complete package.



## RADIO SHACK II, III GET p-SYSTEM

**Now Can Share Programs  
with Apple, DEC and IBM**

Penn Yan-PCD Systems, who originally installed the p-System on the TRS-80 Model II have announced release of the complete system for the TRS-80 Model III. The p-System requires a 48K Model III with 2 disk drives. Now Radio Shack users can write programs compatible with Apple, Commodore, IBM (Personal Computer) and DEC machines (and vice versa).

A spokesman from the company noted that p-System software for DEC, Altos, Terak and Apple are already available from PCD Systems, Inc.

## Chapin Refuses to Reveal True Meaning of CPR

Penn Yan- Chip Chapin, who recently released his CPR "text formatter" refuses to reveal the true meaning of his new program's title.

CPR, which was designed for use with the UCSD p-System operating system software, takes raw text files produced from the Editor and formats them for printing. At \$195, CPR provides sophisticated word processing capabilities for a fraction of the cost.

So, when someone mentions CPR, don't think "first aid", think "text aid".

Now available at PCD Systems, Inc.

§CP/M is a tm of Digital Research  
†DEC, PDP-11, LSI-11 & RT-11 are tm  
of Digital Equipment Corp.  
•MuMath is a tm of Microsoft  
\*p-System is a tm of the Regents of  
California  
†TRS Model II, III & TRSDOS are tm of  
the Tandy Corp.  
★Z-80 is a tm of Zilog Corp.

## UCSD p-System To Burst CP/M's Balloon

**Experts predict 8-Bit to 16-Bit Portability Crucial  
Support from IBM, Texas Instruments, Philips, Hewlett  
Packard, Commodore Announced**

San Diego- Sources close to the battle predict that recent Version IV.O release and the master design that allows programs compiled on an 8-bit machine to run unchanged on the new 16-bit micros will give the p-System the "industry standard" status presently enjoyed by CP/M. They say that SofTech and PCD Systems have come up with the most viable system for the 80's.

Cross assemblers and "Pseudo-Code" allow programs developed on an 8-bit 6502 (such as Apple or Commodore) to be transported to a 16-bit 8088 (IBM) or LSI-11 (DEC) in **OBJECT CODE FORM**. A program can be executed without change on dozens of different machines with any common terminal.

### Structured Programming lowers Maintenance Costs

P-System structured languages give developers powerful tools. A complete implementation of Pascal (plus many useful extensions) is available, as is FORTRAN-77, which supports the ANSI-77 subset for that language. A new BASIC compiler and a full range LISP interpreter round out the high level languages available. The structured approach to programming eliminates maintenance headaches which plague present users of standard BASIC and FORTRAN systems.

### Speed No Longer an Issue

Linkage of Code segments in assembly language and/or use of the **NATIVE CODE** generators give compact code *without the sacrifice of speed* expected from p-Code interpretation. One can have one's cake and eat it too!

### Dynamic Memory Management

Virtual operating system characteristics with nearly unlimited overlaying of program segments allows the user to run larger programs than other microcomputer operating systems. Program chaining, print spooling, 128K addressing capability and efficient use of system library units, universal screen control coding, and many peripherals configurations are fully supported. Command files, asynchronous I/O processing, p-Code debugger, procedural cross referencer and many more capabilities are being hailed by thousands of users.

### Cross Assemblers, File Conversion Transfer

A complete set of native code generating cross assemblers generate absolute or relocatable code for the Z-80, Z-8, 8080, PDP-11, LSI-11, 6502, 6800, 6809 and 9900 microprocessors and are available through PCD Systems. File conversion programs for transferring data between TRSDOS, CP/M, RT-11, Microengine and IBM 3741 formats and p-System format add depth to system capabilities.

### Complete Portable Environment

The standard p-System still includes that amazing screen editor (with its programming and word processing modes), file handler, interpreter, formatter, backup and configuration programs, and your choice of compiler. PCD Systems together with UCSD and SofTech have advanced the state of the art!

## 20% Off List

Penn Yan-PCD Systems is giving purchasers 20% off SofTech Microsystems suggested list price for those who buy a complete UCSD Development System by July 1st. Operating System, File Handler, Screen Editor (with word processing capabilities) system Library, Assembly Code Linker, Pascal Compiler and full documentation over 1000 pages is being sold for only \$600 complete. Compare other systems of this power and capability at three times the price!

## For a Catalog of UCSD p-System and Applications Software

write to **PCD Systems, Inc.**  
P O Box 143  
Penn Yan, NY 14527  
(315) 536-7428

(or stop in, Penn Yan is no stranger than Armonk)

Circle 307 on Inquiry card.