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Generates relocatable object code using MOS Technology mnemonics. Disk file input (can edit files larger than memory). Links , multiple object programs as one memory load. Listing output to screen or printer. Enhanced editor operates in both command mode and cursor oriented window" mode.

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4K or 8K bytes of soft ROM with optional battery backup.

RAM/ROM is compatible with any large keyboard machine. Plugs into one of the ROM sockets above screen memory to give you switch selected write protectable RAM.

Use RAM/ROM as a software development tool to store data or machine code beyond the normal BASIC range. Use RAM/ROM TO LOAD A ROM image where you have possible conflicts with more than one ROM requiring the same socket. Possible applications include machine language sort (such as SUPERSORT), universal wedge, Extramon, etc.

RAM/ROM 4K	\$85
RAM/ROM 8K	120
Battery Backup Option	30

SUPERSORT by James Strasma

Supersort is an excellent general purpose machine language sort routine for PET/CBM computers. Sorts both one and two dimensioned arrays at lightning speed in either ascending or descending order. Other fields can be subsorted when a match is found, and fields need not be in any special order. Sort arrays may be specified by name, and fields are random length. Allows sorting by bit to provide 8 categories per byte. The routine works with all PET BASICs, adjusts to any memory size, and can co-exist with other programs in high memory.

SuperGraphics

by John Fluharty

SuperGraphics provides machine language extensions to Commodore BASIC to allow fast and easy plotting and manipulation of graphics on the PET/CBM video display, as well as SOUND commands.

Animations that previously were too slow or impossible without machine language subroutines now can be programmed directly in BASIC. Move blocks (or rocketships, etc.), or entire areas of the screen with a single, easy to use BASIC command. Scroll any portion of the screen up, down, left, or right. Turn on or off any of the 4000 (8000 on 8032) screen pixels with a single BASIC command. In high resolution mode, draw vertical, horizontal, and diagonal lines. Draw a box, fill a box, and move it around on the screen with easy to use BASIC commands

The SOUND commands allow you to initiate a note or series of notes (or even several songs) from BASIC, and then play them in the background mode without interfering with your BASIC program. This allows your program to run at full speed with simultaneous graphics and music.

SuperGraphics commands include GRAPHIC, TEXT, RVS, SET, DRAW, FILL, PLOT, MOVE, PRINT, CSET, CMOVE, DISPLAY, PUT, SWAP, PAUSE, and SOUND. Please specify machine type and ROM version, disk or tape

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Print any field in any column. For numeric fields, use decimal point justification (and round to any accuracy). Define any column as a series of mathematical functions performed on other columns. These functions include arithmetic operations and various log and trig functions. Pass results of operations such as running total from row to row. At the end of the report, print total and/or average for any column. Complete record selection, including field within range, pattern match, and logical functions can be specified individually or in combination with other parameters \$60

FLEX-FILE by Michael Riley

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FORTH for PET

BY L. C. Cargile and Michael Rilev Features include

- full FIG FORTH model.
- all FORTH 79 STANDARD extensions.
- structured 6502 Assembler with nested decision making macros.
- full screen editing (same as when programming in BASIC)
- auto repeat key.
- sample programs.
- standard size screens (16 lines by 64 characters). 150 screens per diskette on 4040, 480 screens on 8050. ability to read and write BASIC sequential files.
- introductory manual
- reference manual.

Runs on any 16K or 32K PET/CBM (including 8032) with ROM 3 or 4, and CBM disk drive. Please specify configuration when ordering.

Available soon Metacompiler for FORTH

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\$50

simple metacompiler for creating compacted object code which can be executed independently (without the FORTH system).

PaperMate **60 COMMAND** WORD PROCESSOR by Michael Riley



Paper-Mate is a full-featured word processor for CBM/PET. Paper-Mate incorporates 60 commands to give you full screen editing with graphics for all 16K or 32K machines (including 8032), all printers, and disk or tape drives.

For writing text, Paper-Mate has a definable keyboard so you can use either Business or Graphics machines. Shift lock on letters only, or use keyboard shift lock. All keys reneat

Paper-Mate text editing includes floating cursor, scroll up or down, page forward or back, and repeating insert and delete keys. Text block handling includes transfer, delete, append, save, load, and insert.

All formatting commands are imbedded in text for complete control. Commands include margin control and release, column adjust, 9 tab settings, variable line spacing, justify text, center text, and auto print form letter (variable block). Files can be linked so that one command prints an entire manuscript. Auto page, page headers, page numbers, pause at end of page, and hyphenation pauses are included. Unlike most word processors, CBM graphics as well as text can be used. Paper-Mate can send any ASCII code over any secondary address to any printer.

Paper-Mate functions with 16/32K CBM/PET machines. with any printer, and with either cassette or disk.

To order Paper-Mate, please specify configuration.

Paper-Mate on disk or tape

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Sirius Software Announces Addition To Their Product Line

The Joyport for the Apple Computer provides expansion of the game paddle port to allow the use of four paddles (with all buttons functional) or to allow the use of one or two Atari[™] type joysticks. Atari type joysticks are fast, simple and typically retail for less than \$10.00 each. Some of the features of the Joyport are:

Two connectors to accept Atari type joysticks. All four axis and the fire buttons are fully functional. Since the analog inputs are not used with the Atari type joystick the response is very fast. No delays between reads is needed. The Atari joystick can be read just as fast as the keyboard.

Two 16 pin sockets to accept standard Apple style paddles, joysticks or other devices designed to operate from the Apple's game paddle port.

A switch to change from Atari to Apple controls. Both may remain plugged in. No need to unplug one control to use the other.

A switch to select either of the two Joyport game paddle sockets to be read as paddles 0 and 1 or even to allow your software to select which set of paddles will be read as paddles 0 and 1.

Total compatibility with existing software and hardware. Even the use of the Shift Key to TTL input #3 modification that many people use is compatible. No modification to the Apple is necessary and the Joyport does not take up any peripheral slots.

The Joyport sets next to the Apple with all sockets and switches easily accessible. The Atari type sockets are mounted on the front of the device and the Apple type sockets are inside the box. A convenient snap on cover provides a strain relief for the Apple type sockets and still allows changing them without getting inside the Apple.

A wide variety of software is being developed to take advantage of the added features of the Joyport. This includes most products that Sirius Software will be publishing as well as software from other vendors. New products available from Sirius Software that will be compatible include Foosball — a four player action game that is included FREE with each Joyport purchased prior to Christmas, 1981. Cops and Robbers, PGE — The Pascal Graphics Editor, and Outpost are compatible with the Joyport.

Existing software may be easily modified. The small (20 to 100 bytes) driver is relocatable. The presence or absence of the Joyport can be determined by your software and automatically enabled. The software can also allow simultaneous use of the keyboard and either the game paddles or the Atari type joysticks.

The custom PC board is machine wave-soldered, hand inspected and bench tested.

Fully documented with source code listings of sample driver routines.

Write for details to Sirius Software Inc., Joyport, 2001 Arden Way, #2, Sacramento, CA 95825.

Dial/Data Gives Micro Users Access To Financial Markets

A new software program that will give microcomputer users immediate access to financial markets has been developed by Remote Computing Corporation (RCC). The program is called "Dial/Data" since users can dial RCC's network over normal telephone lines, log on and automatically retrieve data on commodities, securities and options. According to Alan J. Schnelwar, Vice President of Eastern Support and Development at RCC, Dial/Data will add a new dimension to the microcomputer.

"We've developed a complete, easy-to-use data service that will allow users to sit in their homes and offices and have all the daily and historical price information necessary to track any investment.

Schnelwar explained that micro users will receive the same data used in the Merlin service by investment professionals.

Dial/Data features the largest collection of time-shared data on commodity futures, including open, high, low, close, volume and open interest for all commodities on all major exchanges.

The program will also supply all New York and American Stock Exchange closing prices including open, high, low, close, volume and uptick volume, and all currently traded option prices including high, low, close, volume, open interest and the closing price of the underlying stock.

"For Apple II users, RCC provides programs to dial our Burroughs B-7700 main frame and automatically retrieve prices and to create and maintain data files on diskette.

"In addition," she said, "The Apple II data files are compatible with statistical software packages available from other sources such as Compu-trac and Orion."

An important feature of Dial/ Data is its ability to handle dynamic symbol changing.

New Product releases are selected from submissions for reasons of timeliness, available space, and general interest to our readers. We regret that we are unable to select all new product submissions for publication. Readers should be aware that we present here some edited version of material submitted by vendors and are unable to vouch for its accuracyat time of publication.

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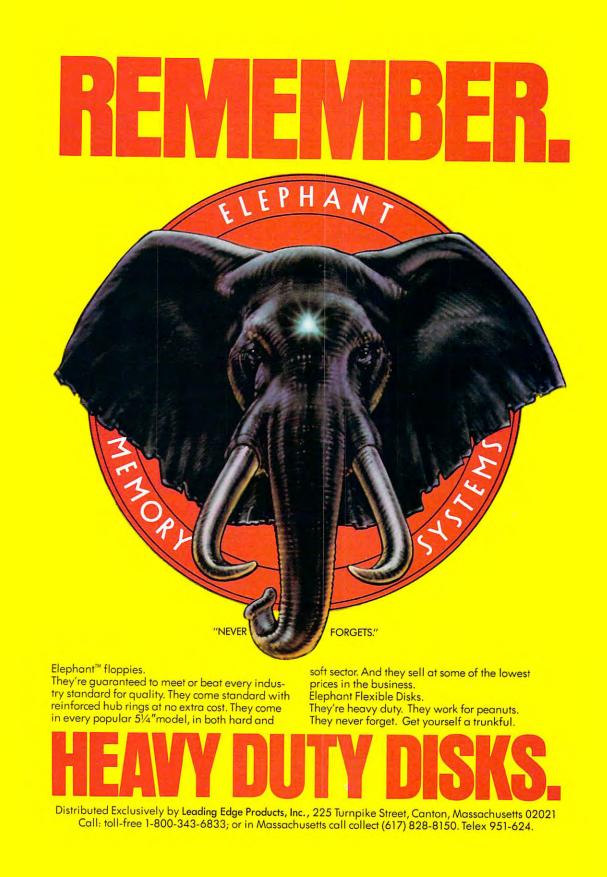
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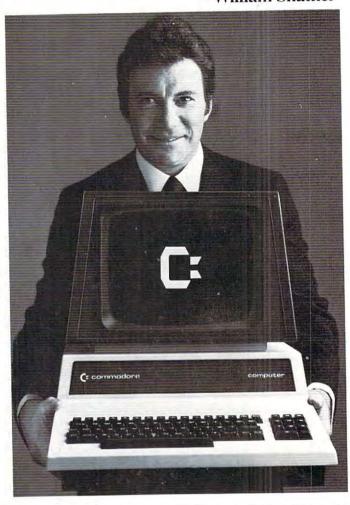
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