

MICROCOMPUTING^{T.M.}

Scroll Over, Beethoven

Tune Up Your Micro for Music



Special Music/Sound Generation Issue

□ ZX-80, CompuColor II and Imagination Machine Reviews □ Book Publishing with an Apple □ Connecting to The Source □ A Systems House Rides the Bumpy Rainbow □ Wine Making with the SWTP □ Software Reviews for North Star, Heath and CP/M

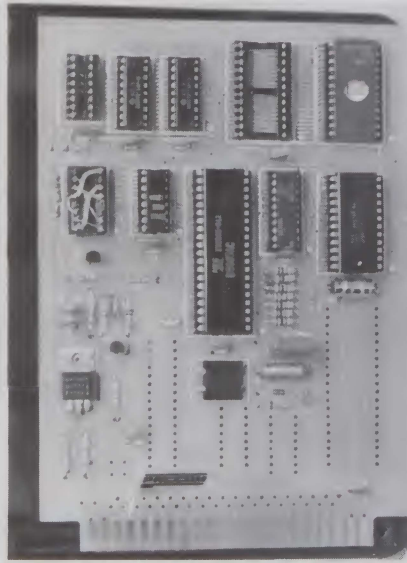


cross-assembler for 6802 program development and HUMBUG ROMs for other 6800 systems.

Star-Kits, PO Box 209, Mt. Kisco, NY 10549. Reader Service number 484.

8085AAC Controller

Pacom, 14905 N.E. 40th St., Redmond, WA 98052, has recently introduced the 8085AAC controller. It includes a CPU card with 1K RAM, 1K PROM and 1K EPROM memory, programmable I/O, 44-pin edge connector that allows configuration to any bus structure and a 20 mA asynchronous port. The CPU card provides area for custom wire-wrap design or user-defined interface circuitry. Price is \$179.95 (assembled), \$149.95 (kit). Reader Service number 481.



Pacom's 8085AAC controller.

TRS-80 Printer/Memory Expansion Module

The MT-32 is a new printer/memory expansion module for the TRS-80. The unit can add 16K or 32K of dynamic RAM to your basic 16K machine without a full-blown expansion interface. The module also contains circuitry to drive the MT-80P dot-matrix printer or any other Centronics-compatible printer.

The 3 × 7 × 16.5 inch module sits under the CRT and is available with no RAM (\$99.50), 16K RAM (\$159.50) or 32K RAM (\$199.50).

Microtek, Inc., 9514 Chesapeake Drive, San Diego, CA 92123. Reader Service number 480.

Eight-Inch Disk Drive

The MS-800 is a new eight-inch disk drive compatible with TRS-80 Models I and II, Apple II and S-100 systems. The MS-800 has a ca-



Matchless Systems' MS-800 disk drive.

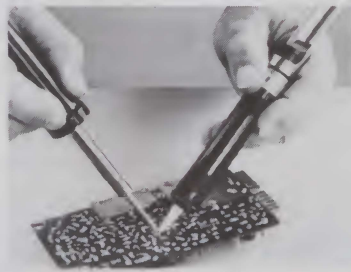
capacity of 77 tracks, 26 sectors per track, 128 bytes per sector—for a total of 256,256 bytes. It features a data transfer rate of 256,000 bits per second and also has a track-to-track access time of 10 ms. The drives are powered independently of the systems, and each drive is completely assembled and tested. The price range of \$995–\$1595 includes all hardware (such as controller and CP/M, depending on system configuration), software and documentation.

Matchless Systems, 18444 South Broadway, Gardena, CA 90248. Reader Service number 475.

Desolder Pump

The DSP-1 desolder pump features all-metal construction with precision components and compact size for easy one-hand operation. Suction is precisely regulated for efficient solder removal without damage to delicate circuitry. Self-cleaning on each stroke, the DSP-1 is quickly disassembled without special tools for maintenance or repairs. The Teflon tip can be easily replaced. Price is \$9.95.

OK Machine and Tool Corporation, 3455 Conner St., Bronx, NY 10475. Reader Service number 474.



OK Machine's DSP desolder pump.

Interactive Video Interface

The CAVI (computer-assisted video interface) Model 400 is a single board video tape controller for Apple II microcomputers. The system hardware/software permits precise video tape positioning by counting pulses from the control track of the tape. The interface contains a video/audio switcher to allow alternate display of computer-generated or taped video

on a single monitor. The system will control industrial-type VHS, Beta and 3/4-inch video recorder/players. No modifications to the computer or recorder are required.

BASIC software is included on disk to allow you to search to the beginning of a video scene and play until the end of that scene. Starting and ending frame numbers of each scene may be saved to the disk for future reference. An advanced computer-assisted instruction (CAI) software system is available on a separate disk. The Instructor allows you to create and modify CAI lessons and video tape logs. The Model 400 is \$495; the Instructor lesson authoring software is \$295.

BCD Associates, Inc., 1216 N. Blackwelder Ave., Oklahoma City, OK 73106. Reader Service number 476.



BCD's video interface package.

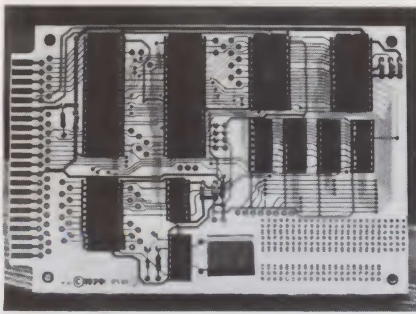
Exorciser-Compatible 64K-256K Memory Board

The Pachyderm is a dynamic RAM memory board for the Exorciser bus which packs from 64K to 256K bytes, plus parity, on a single 9.75 × 6 inch card. Other features include 5 V battery backup, memory mapping and write protect in 2K increments, custom memory mapping using a PAL (programmable array logic) and refresh during non-RAM cycles. Because of this refresh approach, time-critical I/O operations will not be interrupted by refresh requests. Price is \$975 for 64K × 9, and \$500 for each additional 64K × 9.

Novex, Inc., PO Box 3006, Gaithersburg, MD 20760. Reader Service number 478.

M-80 Single-Board Microcomputer

The M-80 is a single-board microcomputer that has a Z-80 CPU, sockets for 2K/4K of PROM, 2.1K of RAM, 16 flexible I/O lines and a system clock. The board also provides a breadboard area and 12 decoded address strobes for easy customizing. The 4.5 × 6.5 inch board was designed for test equipment, smart peripheral controllers and dedicated control and processing applications. The board may be



Miller Tech's single-board microcomputer.

mounted in a card cage or by standoffs.

Two software packages that use serial I/O for communications are currently available. A powerful monitor contained in a single ROM enables you to dump or enter data into memory, set breakpoints, control I/O lines or download programs from another computer. An integer BASIC provides 30 functions and commands and permits calling machine-language routines. Prices are \$28.50 for the bare board, \$69 for a kit and \$185 for a fully assembled and tested board.

Miller Technology, 16930 Sheldon Rd., Los Gatos, CA 95030. Reader Service number 485.

1800 High-Speed Matrix Printer

The CDP18S050 is a high-speed dot-matrix line printer that features 340 cps bidirectional print speed, Centronics-type parallel interface

and built-in self-test and diagnostics display. Compatible with all RCA COSMAC development system models, this printer can also be used with any system having a Centronics-type parallel interface. It offers throughput speeds of 200 lines per minute at 72 characters per line or 300 lpm at 40 cpl. The printer character font is a 7x7 dot matrix and includes a set of 96 ASCII plus 32 commonly used international characters.

The CDP18S050 features a long-life printer head designed to print 3×10^8 characters, or approximately one year of normal operation, and is designed for easy replacement. The built-in diagnostics display allows you to immediately determine the nature of the problems as they occur. Price is \$2995, available at 115 volts, 60 Hz, or 220 volts, 50 Hz.

RCA Solid State Division, Box 3200, Somerville, NJ 08876. Reader Service number 477.

Port Switching Device

A transfer switching device from Inmac (Dept. 1025, 2465 Augustine Drive, Santa Clara, CA 95051) facilitates easy port switching between CPUs, modems and terminals, and includes a free null modem for circuit compatibility. The T-Switch permits you to switch to 24-signal lines without switching all cables. An all-purpose asynchronous null modem—generally not present in terminal and CPU cabling—is included free with each T-Switch and ensures compatibility between communicating devices.

The T-Switch has three A-800 series 25-pin



RCA's CDP18S050 dot-matrix printer.



Inmac's T-Switch.

female connectors. Pin one, common to all connectors, is used as system ground and is not switched. The other 24 pins permit the transfer of 24 digital data lines between devices. Price is \$175. Reader Service number 479.

Edited by Dennis Brisson

NEW SOFTWARE

TRS-80 Telecommunications Program

SMART80C is the first cassette-based smart terminal software for the TRS-80. It permits the transfer of BASIC programs between the host computer and the cassette storage device and also permits the transfer of source code files. SMART80C recognizes the automatic buffer open/close codes transmitted by another

message format. It is designed for use with the Microconnection modem.

The MicroPeripheral Corp., Box 529, Mercer Island, WA 98040. Reader Service number 498.

North Star Business Software

Integrated business application software packages have recently become available for

other statements. With Accounts Receivable, you can establish and maintain up to 1500 customer accounts. You can retain credit limits, year-to-date sales, last year's sales and date and amount of last invoice and payment. Accounts Payable establishes and maintains up to 1500 vendor accounts and includes flexible controls for printing checks, remittance notices and reports. Each package can stand alone or be used in combination with other packages.

North Star Computers, 1440 Fourth St., Berkeley, CA 94710. Reader Service number