

## Low cost keyboard



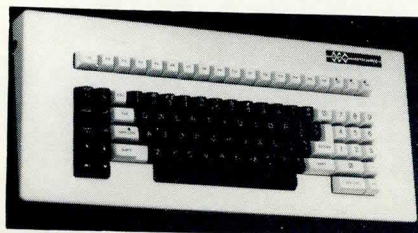
A microprocessor-based keyboard, the **INDUCTRIC®** is designed to DIN standards. Contactless keyswitch modules require no physical connection to the PCB and can be easily replaced. Additional features include true n-key rollover and 100M life cycle. Key locations, encoding, interface electronics, and keycap legends and colors are user defined. Other options are custom enclosures, tactile feel, and on- or offboard electronics. Style 84KT-14, without enclosure, is \$200, and style 84KT-14E, with enclosure is \$250. **Keytek Div, Elco Corp**, 6424 Warren Dr, Norcross, GA 30093. **Circle 290**

## Clock oscillators

Available at any frequency in the 1- to 15-MHz range, the CO-412 series are CMOS clock oscillators. Qualified Products Listed to MIL-0-55310/18, stability is  $\pm 50$  ppm total over  $-55$  to  $125$  °C, with an option of  $\pm 5$  ppm over the 0 to  $50$  °C range. The oscillator series meets MIL-STD-883 fine leak of  $10^{-8}$  atm cc/s, and internal hybrid conforms to MIL-M-38510. Random vibration of 20 g to 2 kHz is met through the use of a 3-point crystal mount. Housed in a 0.2" (5.1-mm) resistance welded case, the series is available with either a 4- or 14-pin DIP compatible header. **Vectron Laboratories, Inc**, 166 Glover Ave, Norwalk, CT 06850. **Circle 291**

## High-tech keyboard

The 8000 series microprocessor keyboard is a 96-key system that is compatible with computer systems having a serial keyboard interface. The key layout consists of a std 53-key typewriter arrangement, a left-hand function keypad of 10 keys, and a 13-key numeric keypad on



the right. Each keyboard uses a single-chip microcomputer controller that handles all keyboard functions. All keycaps are nonglare, 2 shot molded sculptured style. A metal frame provides easy mounting, resistance to static electricity and ESD, and acts as a barrier to foreign objects and spills. **George Risk Industries, Inc**, GRI Plaza, Kimball, NE 69145. **Circle 292**

## SOFTWARE

### Circuit design software

An Electrical Ladder Diagramming (ELD) software module has applications in electromechanical and process control. With minimal input, design automation features enable designers to create up to 128 sheets of both intricate and unusual ladder structures in full compliance with ANSI and JIC stds. For component placement, features include a potent symbol capacity, intelligent device library, and a snap-to-position function. Auto generation of wire net lists ensures that documentation identifies production requirements. The module is base priced at \$15,000. **Gerber Systems Technology, Inc**, 40 Gerber Rd East, South Windsor, CT 06074. **Circle 293**

### Enhanced Unix system

Aux is an enhanced version of the Unix operating system and is offered as a supplement to the operating system for the DN series of workstations. The user has access to a network-wide virtual memory and will not experience performance degradation as workstations are added to the network. The combination of Berkeley and Bell Unix allows over 100 commands, including vi Editor and c shell. Also supported is the Unix-to-Unix communications program for sending electronic mail between local and remote Unix systems. The license for the operating environment is priced at \$1000 per workstation. **Apollo Computer Inc**, 15 Elizabeth Dr, Chelmsford, MA 01824. **Circle 294**

### 16-bit assembler

A structured macro cross assembler, designated the ASM-68200, offers assembly language programming for the MK68200 16-bit single-chip computer. It consists of the cross assembler and a relocating linkage editor. The assembler will

generate absolute or relocatable code and assemble std instruction mnemonics and directives. The linkage editor combines relocatable object code modules into an absolute load module. The package will run on any PDP-11 under RSX-11M or on any VAX under VMS in compatibility mode. The software package is priced at \$3000; a software license agreement is required. **Mostek Corp, sub of United Technologies Corp**, 1215 W Crosby Rd, Carrollton, TX 75006. **Circle 295**

### Pascal cross assembler

The NSX16 Cross Software package includes a Pascal compiler, linker, assembler, target-system debugger, and librarian. The ASM16 Cross Assembler package includes all NSX16 components, except the Pascal compiler. This software is designed to run on CP/M 2.2 operating systems and can be used to create, link, and run Pascal or NS16000 assembler programs on NS16000 based systems. Once generated, the code is downloaded via a serial port to the development board for execution and debugging. The cross assembler supports macroinstructions and directly generates files. The NSX16 is priced at \$1500; the ASM16 is \$1000. **Solutionware Corp**, 1283 Mountain View-Alviso Rd, Sunnyvale, CA 94086. **Circle 296**

### Microfloppy system

The MicroDOS operating system, the CDP18S845 is designed for microfloppies. The system provides program construction, storage, editing, assembly, and program checkout while supporting 4 microfloppy drives. Supporting MicroDOS is a monitor program that allows users to examine and alter memory and begin programs at selected locations. File management software provides rapid access to programs and supports file name structure for dynamic allocation of file space. It contains a translation program to convert files from 8" to 3½" format. MicroDOS is \$300; the monitor program is \$49. **RCA Microsystems**, Box 3200, Somerville, NJ 08876. **Circle 297**

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