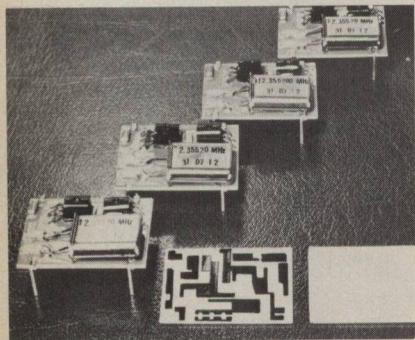




Crystal oscillators are TTL and CMOS compatible



Erie Elektronik GmbH, 85 Nurnburg, Kreuzsteinstrasse 1, West Germany. (0911) 66065. See text.

Erie-crystal oscillators, series 547, use thick-film technology and are designed for TTL and CMOS logic. Applications include timing circuits, computers and transceivers. The hermetically sealed quartz oscillators span a frequency range of 1 through 25 MHz. Input voltage can range from 3 through 18 V. Rise and fall times are 10 ns (max), and a fan-out of 10 is specified. Output is 2.4 V minimum at nominal load. Operating temperature is -40°C to $+100^{\circ}\text{C}$ with stability specified as less than or equal to ± 50 ppm between the temperature limits of -30°C and $+100^{\circ}\text{C}$. Tighter tolerances (± 10 ppm) between 0 and 60°C are available upon request. Shipment time is four weeks or less. The price is \$10 each for quantities of 1000 or more.

Stand No. 9304

Circle No. 448

Logic circuit models evaluated by simulator

Membrain Ltd., 23 Cobham Rd., Wimborne, Dover, BH21 7PE, England. Ferndown (0202)893535. \$66,000.

The Membrain MB7464 FLASH system—a dedicated, stand-alone programming station for logic simulation and fault finding—provides two essential functions. It enables the test program for a digital logic circuit to be developed and evaluated on a software model of the circuit and permits fault analysis to be undertaken on this software



model. The MB7464 is based on a minicomputer with 48-k store and includes a fast printer and a visual display unit (VDU) with keyboard. The test program and diagnostic data are produced on a single floppy disc and may be read directly by a Membrain MB2420 or MB-2460 test system. Optionally, the test program may be punched on paper tape for use with any Membrain automatic test system. The price quoted (station plus software) is f.o.b. Ferndown, U.K.

Stand No. 19321 Circle No. 449

Hall-effect keyswitches give bounceless output

RAFI-Raimund Finsterholz, Elektrotechnische Spezialfabrik, D-798 Ravensburg-Berg, Ravensburger Strasse 128-134, Postfach 2050, West Germany.

A new switching technique for keyboard system RS 76 uses a Hall-effect IC to ensure that switching is bouncefree and reliable. Two-shot molded keys guarantee wear-



resistant legends. Complete keyboards or single keyswitches allow for the manufacture of standard or special configurations. Keyboard height is 15 mm. Operating strokes of 4 mm allow control of force-displacement characteristics of the keys to provide a particularly comfortable typewriting feel. The keyswitches are also available in a mechanical version, and both types can be illuminated or nonilluminated.

Stand No.

Circle No. 450