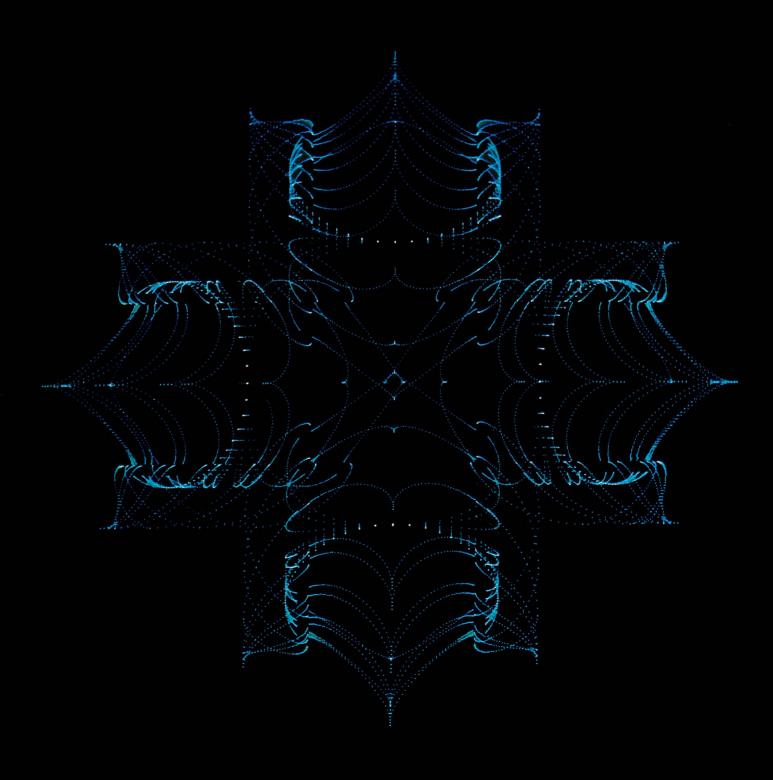
the small systems journal



Bally Introduces New Programmable Game Unit



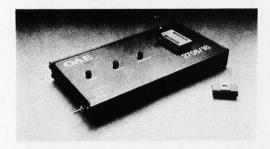
The new Bally Professional Arcade home TV entertainment center is a well-engineered example of the new breed of programmable game modules which use microprocessors for logic and control functions.

The unit features a printing keyboard calculator and can generate video games in color. The games are stored on cassettes; users can change games when desired by simply plugging a different cassette into the front of the unit. A large variety of games is available, including Checkmate, Dodgem, Seawolf, tennis, elementary math drills and poker; up to four players can participate. All games come complete with sound effects and music.

The unit sells for \$299, which includes two game cassettes. Contact Robert E Wiles, director of marketing, consumer products, Midway Manufacturing Corporation, 10750 Grand Av, Franklin Park IL 60131.

Circle 581 on inquiry card.

OAE Announces New PROM Programmer

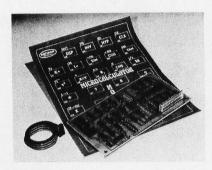


OAE's new programmable read only memory (PROM) programmer should be of interest to the experimenter. This is the PP 2708/16, designed to program the 2708 and the 2716 PROMs which are available from a variety of sources. A parallel interface is used to connect the unit to any microcomputer; an internal address unit is built into the unit, plus timing and control logic and DC to DC power conversion from unregulated 8 VDC input.

The PP 2708/16 comes complete with a black anodized aluminum case, 5 foot ribbon cable with connectors, and software. The price is \$249 for the kit, or \$299 for the assembled and tested unit. Contact Oliver Audio Engineering Inc, 7330 Laurel Canyon Blvd, North Hollywood CA 91605.

Circle 582 on inquiry card.

Turn Your Microcomputer Into a Programmable Scientific Calculator



From Artisan Electronics, 5 Eastmans Rd, Parsipanny NJ 07054, comes news of a new microcalculator called the Model 85. This new unit is the single board equivalent of a hand held scientific calculator but without a keyboard or case, designed to interface directly to a microcomputer.

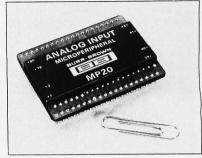
Instruction entry to the microcalculator Model 85 is under microprocessor software control. The Model 85 accepts instructions, provides a means to detect busy status, and outputs the full 14 digit display back to the microprocessor for storage or display.

Software for controlling the Model 85 in both a read and write mode requires less than 256 bytes of microprocessor system memory.

The Model 85 has scientific calculation capabilities for handling scientific, engineering, mathematical or statistical problems. Problem solving capability includes transcendental functions, such as logarithms, sines and tangents; polar to rectangular coordinate conversions for handling complex arithmetic, vector; multiple storage registers, selecting operating mode and also constants for π and e are provided as well as four metric to English unit constants for conversions between inches and centimeters, liters to gallons, and so on. Statistical routines are also provided for calculation of means and standard deviations. The price is \$189.■

Circle 583 on inquiry card.

Analog Input Module



Burr-Brown has announced their new MP20, a microprocessor compatible analog input which consists of a 16 channel analog multiplexer, high gain instrumentation amplifier, 8 bit analog to digital converter, plus all necessary address, data and control bus interfaces.

The MP20 is timing and logic level compatible with the 8080A and the 8008 processors. No external logic is needed. Gain and offset are internally laser trimmed, eliminating the need for external adjustments. Absolute accuracy is better than $\pm 0.4\%$ on the ± 5 V or 0 to ± 5 V ranges.

Low level signals such as thermocouple outputs can also be handled directly with reduced accuracy. The instrumentation amplifier can be programmed with a single external resistor to provide input signal ranges as low as ±10 mV full scale.

In actual use, the MP20 is treated as memory. Each analog input channel occupies one memory location. Any memory reference instruction can be used to access data. Thus, one LDA instruction will input data from one channel to the accumulator. Two adjacent input channels can even be acquired with one LHLD instruction. The MP20 can also be interfaced as IO.

Power requirements for the unit are ±15 VDC and +5 VDC. The price is \$195 in single unit quantities. Contact C R Teeple, product manager, Burr-Brown, International Airport Industrial Park, Tucson AZ 85734.■

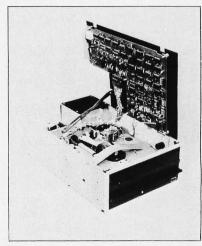
Circle 585 on inquiry card.

Innovex Introduces New Series 400 Floppy Disk Drives

Innovex Inc, 75 Wiggins Av, Bedford MA 01730, has announced their new series 400 floppy disk drives which feature automatic head unload and stepper motor timeouts, bidirectional write protect, six LED activity indicators, and 50 pin ribbon cable or twisted pair interfacing capability.

Both the Model 410, which is soft sectored and IBM compatible, and the Model 420, which is hard sectored, provide single and double density recording capability. A proprietary data separator design is said to offer improved data integrity margins in comparison with other available units.

Prices for the Innovex Series 400 start at \$575 in single quantities. Contact Innovex for further information.



Circle 584 on inquiry card.