New Products

Long-Life MOS Memory

Cogar Corporation has announced a family of DTL/TTL compatible MOS Read/Write monolithic memories. The new memories are complete subsystems that combine logic and memory functions on a single printed circuit plug-in card. Each module on the card contains up to 2048 bits of memory. Signal buffers, word drivers, sense amplifiers and latches are also included on the same card. One clock generates the required logic timing sequence. The system is based on MOS technology for the storage arrays and bipolar technology for the interface electronics. It is designed to keep the input loading low and provide line driving capability at the output.

A Read/Write memory capacity up to 147,456 bits (16K words x 9 bits) is obtainable on a single plug-in card less than 8” x 9” card level. Access time is 250 nanoseconds and cycle time is as low as 300 nanoseconds. Subsystems (single cards) may be stacked to produce larger capacity memories up to one million bytes.

Cogar guarantees the Memories for a period of five years after shipment, when used within the stated specifications. The mean time before failure (MTBF) for the Cost Performance memories is expected to be more than 120,000 hours.

CIRCLE 41 ON READER SERVICE CARD
Rugged Core Memory

Electronic Memories has announced their most current development for severe Environment Memory System applications, the SEMS 8. This extremely rugged structure is a non-volatile, DRQ Ferrite Core Memory System organized in a 3-wire, 3D configuration with standard capacities of 4096 words of up to 32 bits and 8192 words of up to 16 bits. The SEMS 8 memory is in a self-contained unit of 89 cubic inches and weighs less than 5.0 pounds.

Characteristics of the SEMS 8 include an access time of 450 nsec. and a cycle time of 1.2 µsec. It operates at Read/Restore and Clear/Write modes in operating temperatures of -55°C to +85°C (Base Mounting Surface); non-operating at -62°C to +125°C.

The SEMS 8 satisfies applicable portions of Mil-E-5400, Mil-E-16400 (Mil-S-901), Mil-E-4158, Mil-Q-9858 and Mil-Std-883 requirements. It is modular, reliable, easily maintainable and above all offers a very low cost per bit for military class equipment.

CIRCLE 42 ON READER SERVICE CARD

Minicomputer Tape System

The Tri-Data Model 4196 CartriFile, a four-transport magnetic tape system for small digital computers has been demonstrated. The four tape transports in the unit are independently controlled by electronic circuitry that allows the computer to write data on one tape while reading from another. This capability expands the minicomputer into a true data-processing system, able to sort, match, merge, and separate data, while using only one CartriFile tape unit.

Each of the four tape loops is capable of holding over 3 million data bits, providing a total storage capacity of more than 12 megabits. The high bit rate, 18,000 bits per second, enables the CartriFile unit to transfer 16-bit computer words at a rate of 1,000 per second during either reading or writing. Word lengths of 8, 12, or 16 bits may be used. For 8-bit words, the transfer rate is 1,600 words per second.

The newly developed Bi-Track data format used in the Model 4196 is a bit-scalar, phase-encoded recording technique which uses only the two center tracks of the tape. This eliminates data dropouts due to track-edge damage—the most common cause of reliability failure in conventional minicomputer tape systems.

Tri-Data is the supplier of tape systems utilizing 1/4 inch, 1.5 mil magnetic tape, and tape cartridges specially designed for high reliability digital data applications. The unusual design approach permits achievement of bit-error rates as low as 1 part in 10^8. Tri-Data cartridges are guaranteed error-free for 200 hours of operation, or 12,000 passes over a 50 foot tape. By contrast, the conventional cassette format utilizes 1/8 inch, .5 mil tape, and generally is not sold with any guaranteed life. The CartriFile Model 4196 is available complete with interface circuitry and software for use with small computers such as the PDP-8, Nova, Hewlett-Packard, and others. The complete Model 4196 system is priced at $6050.00.

CIRCLE 43 ON READER SERVICE CARD

System/360 Channel Simulator

Datawest Corporation announced the Model 531107 IBM System 360 Simulator. The System has been developed to enable manufacturers of 360 compatible equipment to decrease the cost of testing. This unit is capable of providing responses, timing, and control for bidirectional communication in the same manner as a Selector or Multiplex Channel on an IBM System 360. With a software and a slight hardware change (which could be accomplished in the field), the Datawest Simulator provides responses in the same manner as the IBM 270X.

The unit consists of a Datawest Series 900 Controller for Program Control, ASR systems from 8 to 72 bits.

The basic building block is a core-stack of 4096 18-bit words. Systems of various capacities are built up from these core modules that include associated inhibit drivers, sense amplifiers and data registers and four additional modules used in various combinations to achieve any of the available capacities and word structures. With this architecture it is possible to achieve the highest degree of custom design while retaining the advantages in economy and reliability offered by the use of proven components. The CC-50 is mounted in a 19-inch rack. There are two chassis configurations — single or double, depending on capacity. Each chassis requires only 7 inches of panel space. System options available in any combination include: A. C. Data Save, Pluggable Memory Exerciser, Data Parity Generation and/or Check, Zone Control, Data and/or Address Indicator lights, and a Fan Pack.

CIRCLE 44 ON READER SERVICE CARD

Small Memory System

A small-to-medium capacity memory system with a half-microsecond cycle speed is available from Lockheed Electronics Data Products Division. The CC-50 Memory System makes available for the first time in small capacity systems the performance and cost advantages of 14-mil cores and 3-wire 3D organization. The CC-50 system is available in modules that provide memory capacities from 4096 to 65,536 words and word sizes.

Digital Cassette Recorder

Mobark Instruments Corporation has announced a new incremental cassette recorder responsive to terminal keyboard or computer-instructed ASCII controls for the remote terminal user. Designated the Mobark Model 400T, the recorder is EIA interfaced and is plug-to-plug compatible with many moderns, teletype and other soft and hard copy terminals. Applications include off-hours, unattended data recording, program development, low-cost program storage and high speed program loading.

The Model 400T’s unique control panel allows user selection of 110, 150 or 300 baud speeds; on-line or off-line operation; backspacing; continuous or incremental playback by character; compatibility to full or half duplex systems; and fast forward or rewind controls. The new instrument permits stopping and starting on a character in the read mode without loss of that character. The 400T, because of this feature, becomes a convenient replacement for paper tape devices. The instrument can also be made totally incremental on playback (read on command) for special user applications.

The 400T features data formatting on tape that is independent of read/write rates. Any of the nine baud rate combinations can be selected at any given time, the firm said. Editing with the 400T also is simplified because the instrument permits backspacing one character at a time. Storage capacity of the 400T, which also is independent of read/write rates, is greater than 75,000 characters on a single 300-foot Philips-type cassette of 1/4-inch-wide tape.

Off-line operations with existing teletypes are possible with the 400T, Mobark pointed out, while the data can be transmitted at rates up to 300 baud with higher speed terminals—thus reducing excessive on-line charges. The unit is priced at $1820.00 and is available for delivery within 30 days.

CIRCLE 46 ON READER SERVICE CARD