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CREATIVE MICRO SYSTEMS
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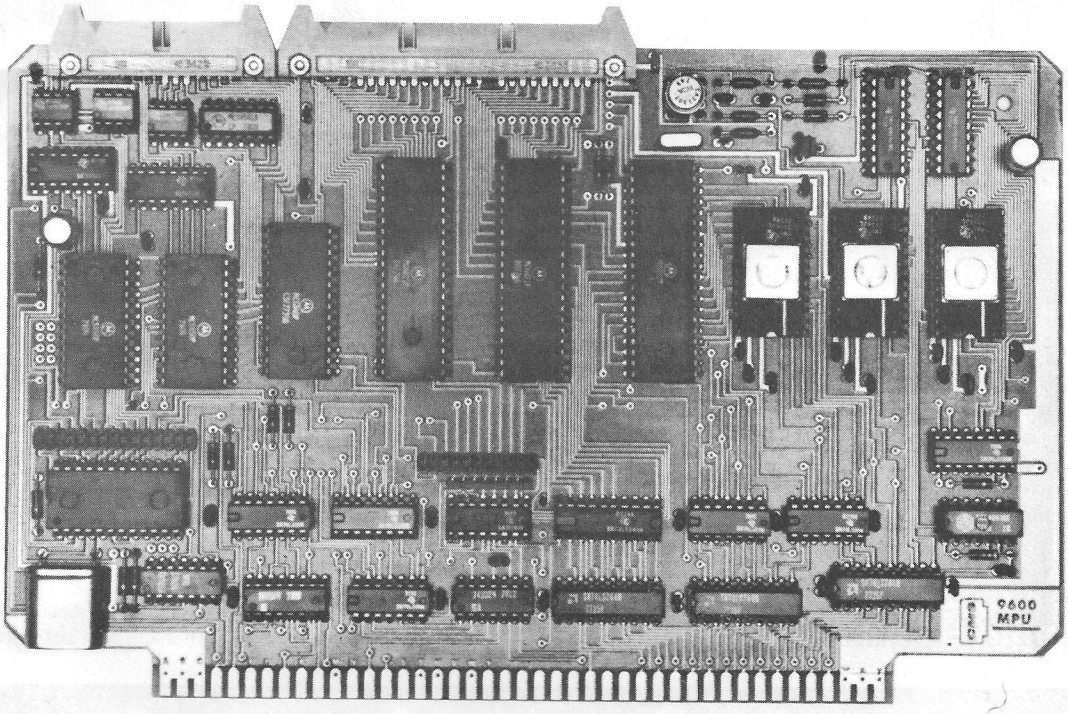
SERIES 96
SHORT FORM
PRODUCT GUIDE

GENERAL PRODUCT DESCRIPTION: The 9600 Family of Microcomputer Support Modules is a comprehensive set of devices that provides building block hardware for data communication and industrial control systems and other systems that can benefit by the use of microprocessor techniques. These cards are designed around the M6800 family of devices and are pin and outline compatible with the Motorola EXORciser* and Micromodules.* The Family is fully supported with a card cage, mother board, system power supply and accessories such as a card extractor and cable assemblies. Support software is also available to assist in development of applications programs.

* Trademark of Motorola, Inc.



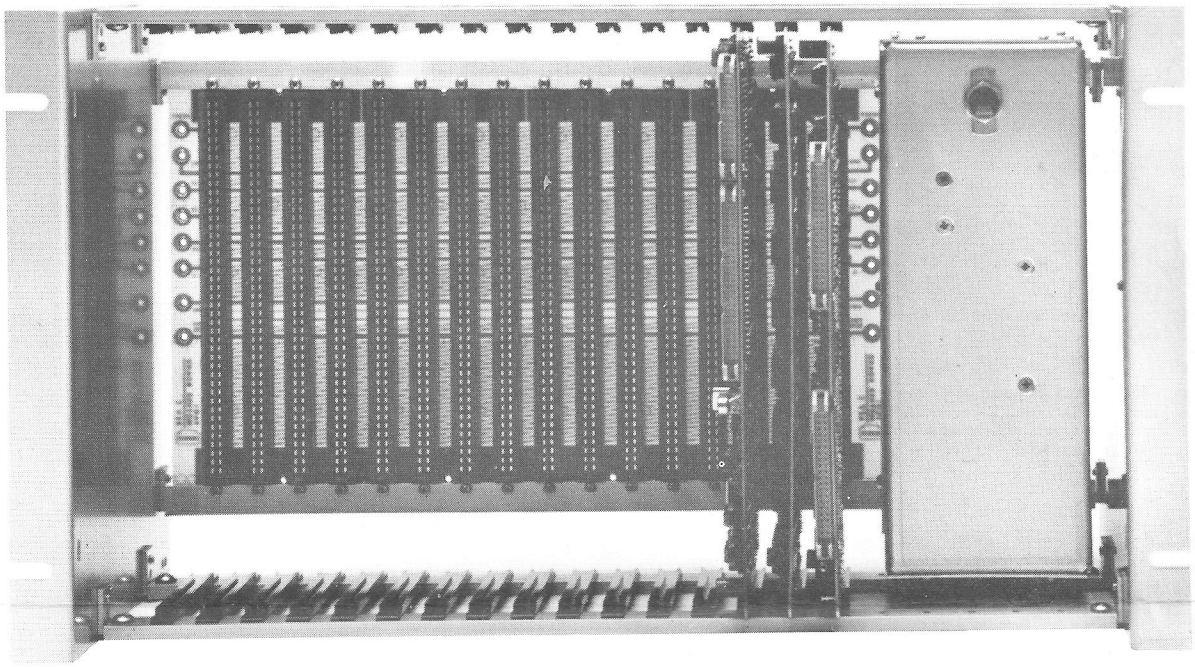
9600 MPU MODULE

The 9600 MPU Module is a complete microcomputer system on a single card. This unit provides an optimized balance of features to fill the needs of most small systems and it can be expanded as required to answer larger system demands.

The 9600 is available in standard configuration with the MC6802 MPU, 2K EPROM programmed with a resident monitor, 1.1K of static RAM, one RS-232C conditioned serial I/O channel with bit-rate generator, two parallel I/O channels with control lines, and full address and data bus buffering. In addition the card contains a priority interrupt vector generator for the on-board I/O devices, a battery backup support circuit for the on-board RAM, a power failure protect/restart circuit to permit saving and restoring the state of the system in the event of power loss, and a break-detection circuit on the serial input line to generate reset or interrupt action from the control console.

The 9600 can be expanded from the standard configuration with an additional 4K of EPROM, two more channels of parallel I/O, triple 16-bit programmable timers, and one additional serial I/O channel with RS-232C conditioning. This serial channel can be either asynchronous or synchronous. These expansions can be ordered at the time of purchase or can be installed by the user as required.

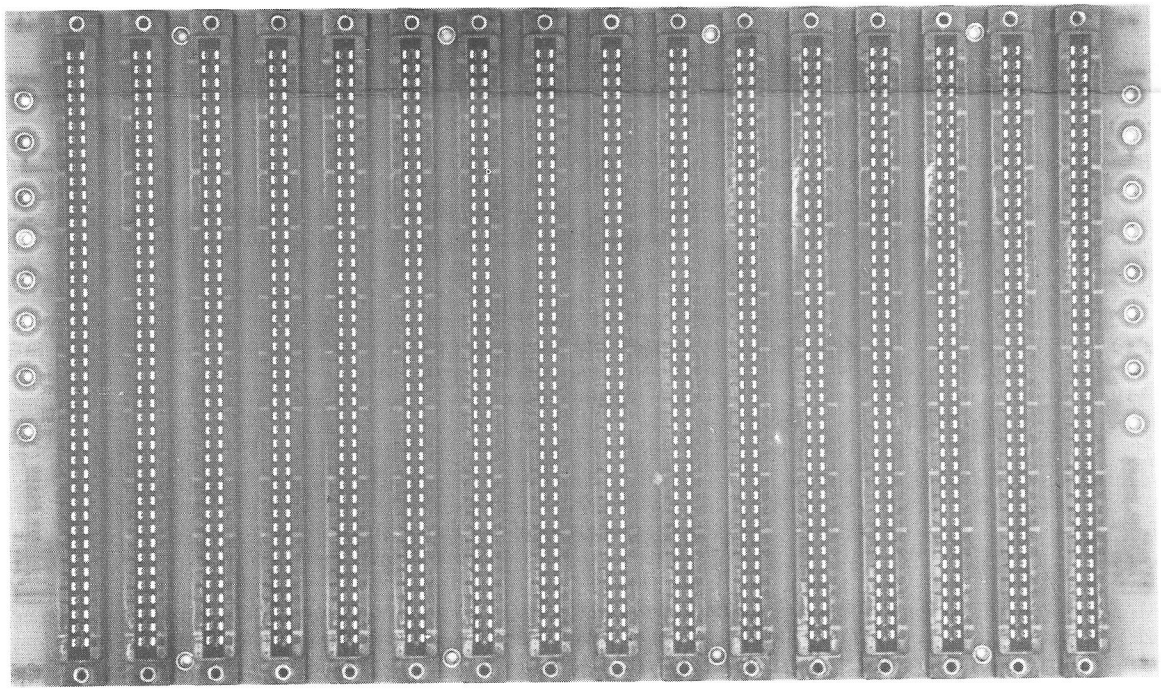
An EPROM resident software option is also available for the 9600 in the from of a powerful interactive debugger, providing several modes of memory change and search operations, single-step program execution, conditional and unconditional break-points, and hexadecimal arithmetic computations.



The 9601 Mother Board is available to provide convenient bus interconnection for multi-card systems. Sixteen connector positions are provided to distribute all power and signal lines to the cards. Threaded terminals are provided for attachment of power lines. An 8-position board, the 9603, is also available. Overall dimensions for the 9601 are 13 inches by 7.65 inches by 0.875 inches and for the 9603 they are 6.5 inches by 7.65 inches by 0.875 inches.

The 9602 Card Cage accommodates the 9601 Mother Board and a 9604 System Power Supply. The 9602 can be mounted in a RETMA rack or its end plates can be reversed for platform mounting. The overall dimensions of the 9602 with the 16 position Mother Board and System Power Supply are 19 inches by 10.5 inches by 8 inches.

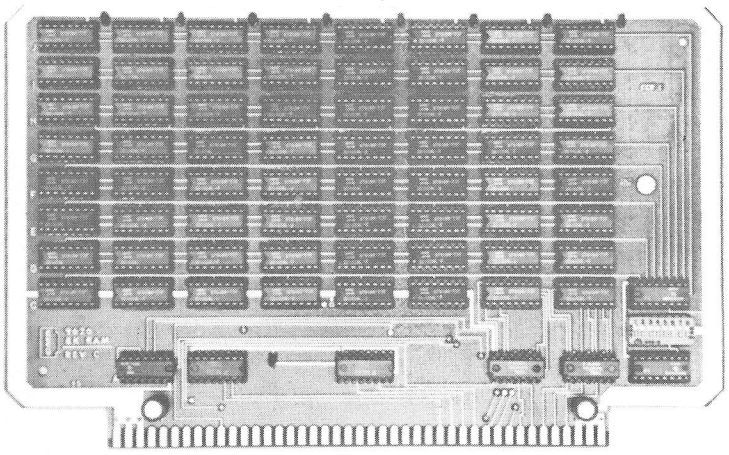
The 9604 System Power Supply is configured for mounting in the 9602 Card Cage. It is a switchmode-regulated quadruple voltage supply providing +5 VDC at 15 Amps, +12 VDC at 1 Amp, –12 VDC at 1 Amp and –5 VDC at 1 Amp. A restriction of these currents, typical for switchmode supplies is that the total regulated power from the supply is limited to 75 Watts. Efficient regulation is provided with an input variation from 92 to 138 VAC, 47 to 440 Hz. A combined switch/breaker is provided on the power supply.



9626 8K STATIC RAM MODULE

The 9626 is a fully static random access memory module specifically designed for compatibility with the M6800 Microprocessor Bus. This Module provides 8192 bytes of storage and features full 16-bit address decoding with fully buffered data, address and control lines. It can be selected for operation at any 8K boundary in the memory map by an on-board DIP switch.

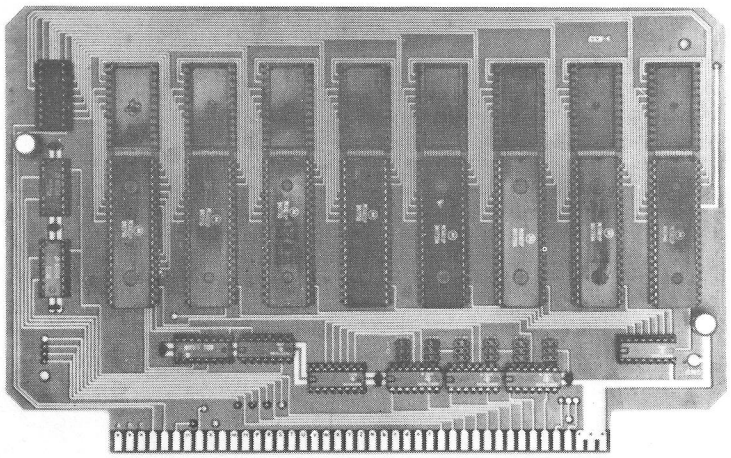
The 9626 operates from a single +5 VDC power supply and requires approximately 1.8 Amps. The maximum access time is 480 nanoseconds. It is also available as the 9626A with 300 nanoseconds maximum access time.



9620 16 PORT PARALLEL I/O

The 9620 is a parallel interface module specifically designed for compatibility with the M6800 Microprocessor Bus. It features full address decoding and fully buffered data, address and control lines. This module utilizes 8 MC6821 Peripheral Interface Adapters mounted in sockets, each with its own flat cable connector. Sixteen 8-bit parallel I/O ports with control lines are therefore provided on a single card.

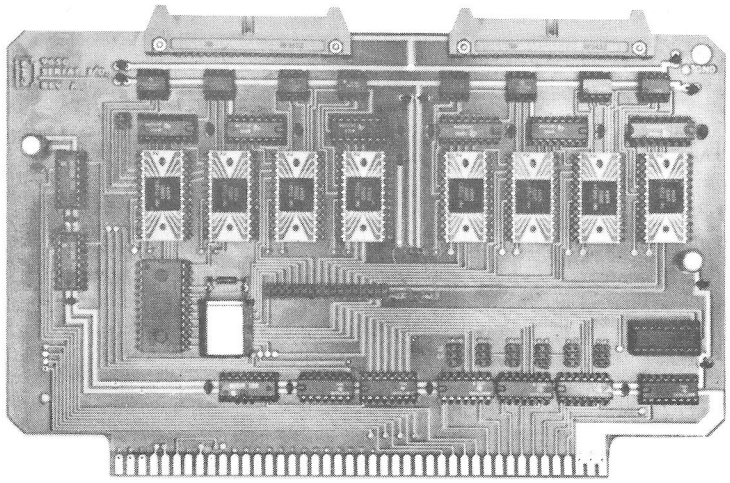
The 9620 occupies 32 sequential memory addresses. This address arrangement permits the use of a very tight polling loop for interrupt-driven systems and allows indexed addressing techniques to improve coding efficiency for multichannel I/O.



9650 8 PORT DUPLEX SERIAL I/O

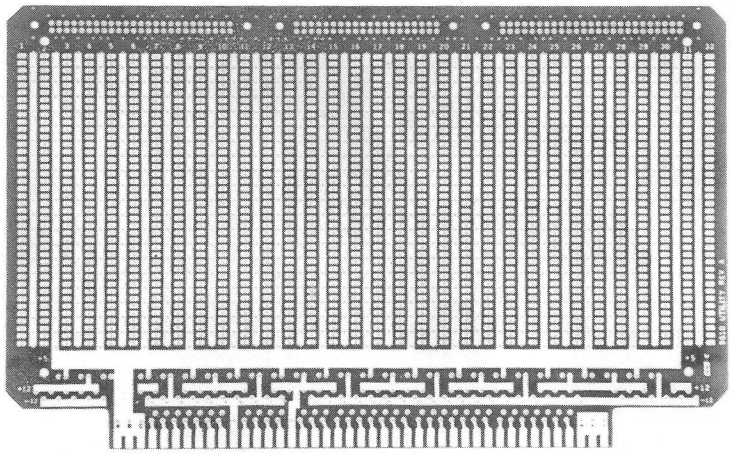
The 9650 is an asynchronous serial interface module specifically designed for compatibility with the M6800 Microprocessor Bus. It features full address decoding and fully buffered data, address and control lines. This module utilizes 8 MC6850 Asynchronous Communications Interface Adapters with full RS-232C signal conditioning. An on-board bit rate generator simultaneously provides 14 standard rates that can be individually strapped to each ACIA.

The 9650 occupies 16 consecutive memory addresses. The lowest 8 of these access the 8 control/status registers and the next 8 access the transmit/receive data registers. This map arrangement allows optimum use of indexed addressing in I/O intensive systems and permits the use of a very tight interrupt polling loop.



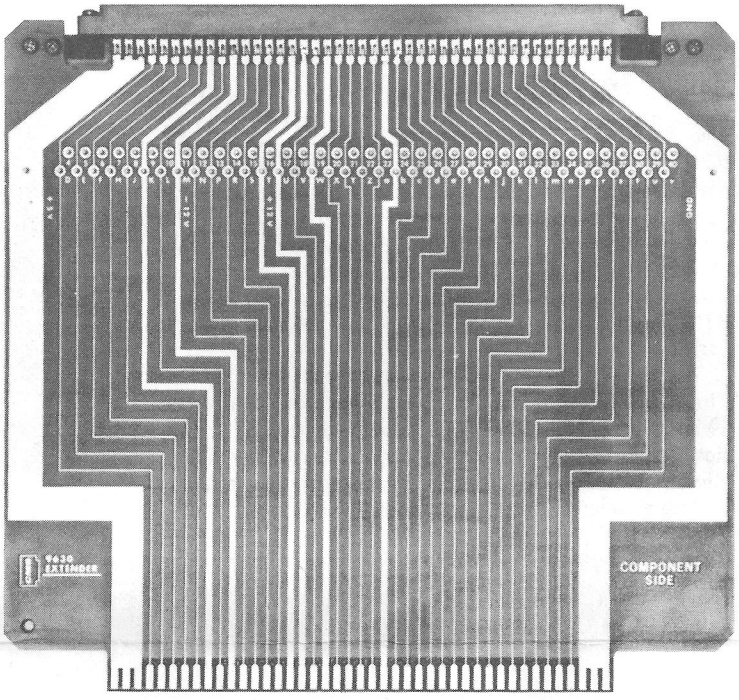
9610 UTILITY PROTOTYPING CARD

The 9610 Utility Card is a general purpose prototyping card that is pin and outline compatible with the other 9600 Family Cards. The 9610 features +5 VDC and ground distribution in a generalized pattern and pads to allow the installation of any mix of dual-inline devices with row spacings of .3 inch or .6 inch. Provisions are made for attachment of plastic wire guides to permit the use of "wiring pencil" type of interconnection if a low profile is desired, or the card can be wire-wrap terminated. The top edge of the card accommodates two 50 pin and one 40 pin flat cable connectors.



9630 CARD EXTENDER

The 9630 is a passive card extender to be used as a trouble-shooting aid. It extends any of the card family members to a position external to the card cage for easy access. The 9630 is equipped with labled test point terminals on each of the system bus lines for ease of mesurement or attachment of probes.



9690 CARD PULLER

The 9690 is a universal puller for circuit boards of any width and up tp 3/32 inches thick. Its use makes removal of any of the 9600 family of modules or boards easy, quick, and sure. It is available at $9.95 each, in any quantity.