INTEL CORP. 3065 Bowers Ave., Santa Clara, California 95051 • 408/246-7501

COMPUTERS APRIL 1973

MICRO

# SIM4-03 PROTOTYPING SYSTEM

Complete Micro Computer System for Prototyping and/or Production

into

- Pin for Pin Replacement for SIM4-02/Plugs Directly into MCB4-20
- Programs Developed for SIM4-01/ SIM4-02 May be Used Directly on SIM4-03 with No Modifications
- Uses 4008/4009 Memory and I/O Interface Set to Replace TTL
- Additional Pins Brought Out to Interface with Standard Intel RAMs for Program Storage

During the development phase of systems using the MCS-4 micro computer set, the designer will often find it helpful to have a means for developing and testing out his programs. The SIM4-03, a prototyping card, in which the 1702A electrically programmable and erasable read only memories simulate the 4001 mask programmable read only memories will help serve this purpose. Using this card, it is possible for the system designer to assemble and simulate his programs, program the 1702As, plug them into the system, check out the programs, and make corrections as necessary. In this way, the development cycle can be reduced considerably.

- Reprogrammable PROMs Simulate 4001s
- Two Phase Crystal Clock Generator on Card
- Teletype Interface on Card
- Test and Reset Signal Generator on Card
- Eight 4-bit ROM Input Ports/ Eight 4-bit ROM Output Ports
- Sixteen 4-bit RAM Output Ports
- Sockets for 16 RAMs and 16 ROMs Included on Card





### SIM4-03 System Specifications

#### CARD DIMENSIONS:

11.5" wide 8.0" high

intel

#### COMPONENTS ON BOARD:

one 4004	Crystal Clock
one 4008	Eight TTL input ports
one 4009	Eight TTL output ports
four 4002s	Sockets for memory expansion

### MAXIMUM MEMORY CONFIGURATION:

sixteen 4002 RAMs – 1280 x 4 sixteen 1702A ROMs – 4096 x 8

#### **OPERATING SPEED:**

 $1.35\mu s$  clock period  $10.8\mu s$  instruction cycle

#### D.C. POWER REQUIREMENT:

#### Voltage -

 $V_{CC} = V_{SS} = 5V \pm 5\%$ TTL GND = 0V  $V_{DD} = -10V \pm 5\%$ 

#### Current -

Typical Operation<sup>[1]</sup> (1-1702A PROM)  $I_{CC}$  = .980 amp  $I_{DD}$  = .440 amp Maximum Current<sup>[2]</sup> (16-1702A PROMs)  $I_{CC}$  = 2.66 amps  $I_{DD}$  = 1.70 amps

#### CONNECTOR:

Wire wrap type/Amphenol 86 pin connector P/N 261-10043-2

#### NOTES:

1. Typical values are for  $T_A = 25^{\circ}C$  and nominal supply voltages.

2. Maximum values are for  $T_A = 0^{\circ}C$  and + 5% supply voltages.

MP7-03



#### MCB4-20 System Interconnect and Control Module

This module provides control, display, and I/O interconnect capability for the SIM4-03. In addition, it provides complete interconnection between the SIM4-03 and the MP7-03. This allows automatic PROM programming, duplicating and comparing.

## **Ordering Information**

The SIM4-03 is available from all Intel Distributors:

ALMAC/STROUM Electronics – Washington/Oregon CRAMER Electronics – Nationwide HAMILTON/AVNET Electronics – Nationwide INDUSTRIAL COMPONENTS, Inc. – Minneapolis SHERIDAN ASSOCIATES, Inc. – Mid-America L.A. VARAH Ltd. – Western Canada

	1-9	10-up
Price:	\$625.00	\$562.50
Product Code:	SIM4-03	