

# 400 CPU

## Description:

The OSI 400 CPU Board is the heart of any OSI 400 or Challenger System. It minimally contains the microprocessor chip, the system PROM monitor, and bus drivers. It can maximally be configured as a complete stand-alone computer with two PROMs, 1,024 words of RAM, a serial I/O port, and a parallel I/O port and still maintain full system expansion capability. The minimized address logic and Schottky data buffering allow ultra-high speed operation.

## Applications:

The OSI 400 can be used as a complete, stand-alone computer in conjunction with a serial terminal and power supply. It is used as the CPU in any OSI 400 or Challenger system. An OSI 400 and 440 board can be populated as a complete computer and CRT terminal!

## Specifications:

Mechanical: 8" X 10" G-10 Double Sided Plated Through Hole Board

Electrical: +5V at 800 ma Maximum  
-9V at 100 ma Maximum

Processors: Supports any one of the following: MOS Technology 6502, 6502A, 6501, or 6512, Motorola 6800, 6800A, 6802, 6802B

PROM: Supports up to two of the following: OSI 65A Serial Monitor, OSI 65V Video Monitor, OSI 65F Floppy Disk Bootstrap.

RAM: Optional 1K by 8 of 2102 type parts.

Serial I/O: ACIA based 20 ma loop or RS-232  
Up to 100,000 baud

Parallel I/O: Supports one of the following PIA type devices  
for 16 parallel I/O lines: 6820, 6520, 6522, 6530, 6830

Other Features: Buffering to drive up to 250 OSI system boards  
Provisions for user supplied front panel and DMA  
capability

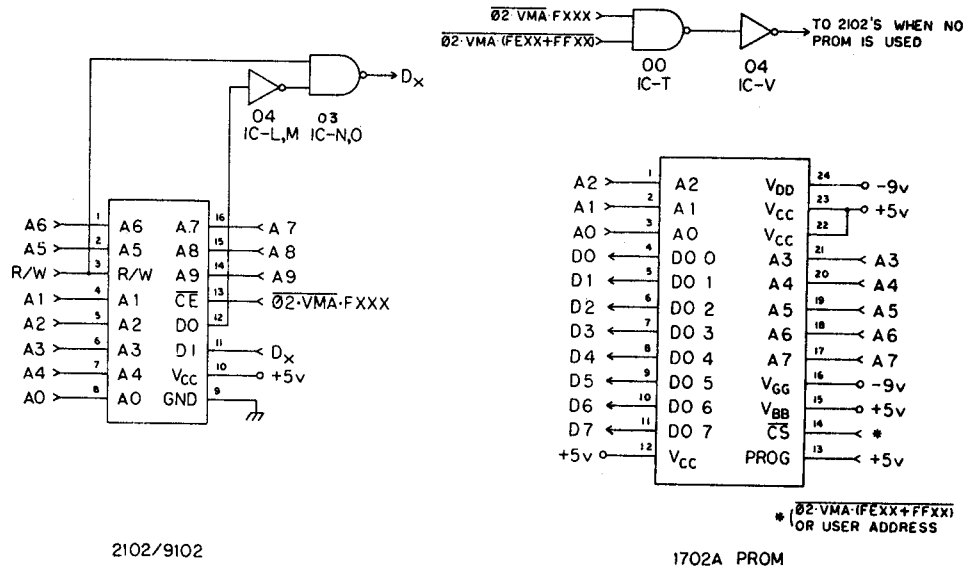


DIAGRAM 2- RAM/PROM IMPLEMENTATION

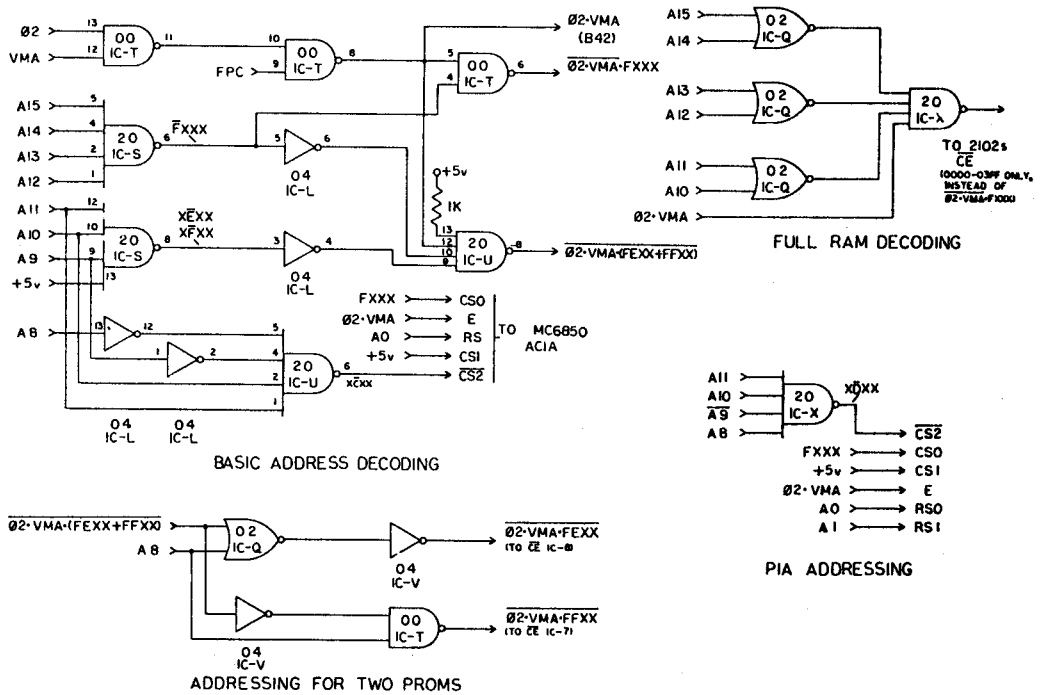


DIAGRAM 1

