

510 CPU Board

Description:

The Model 510 CPU Board is the most technically advanced CPU Board available today for small computers. It is always supplied with three processors; 6502A, 6800, and Z-80. One processor is run at a time; an optional software switch is available to permit the user to change processors under software control. When the user switches processors, memory contents are preserved. The board can also be provided with "megabyte memory pager" allowing up to 1 megabyte of memory to be addressed. The CPU board can be configured to handle up to 16 users on a single system. Other features of the board include a serial interface with crystal controlled baud rate generator capable of operating from 110 to 19,200 baud. Up to three PROM Monitors can be provided for the 6502 and one for the 6800. The 510 Board is automatically configured for disk use.

Applications:

The Model 510 allows the user to have three processors for about \$200 more than one processor. This is ideal for industrial development applications where an engineer wishes to compare three different processors. It is also ideal for small business systems as it allows up to 16 users. The three processors insure the businessman that his machine won't become obsolete when a new software package comes along--simply because he chose the wrong processor. These same reasons make the 510 ideal for educational as well as home use. Since the 510 is fully compatible with all of Ohio Scientific's peripherals (it is also used as the heart of the Challenger III systems), and since it is fully expandable, it is the ideal CPU for almost all applications. It allows the user to have the flexibility of owning three powerful computer systems at slightly over the cost of owning one!

Specifications:

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

Electrical: +5V at 2amps
-9V at 500ma

Processors: Comes standard with 6502A, 6800, and Z-80

PROM: Supports up to three 1702 type PROMs for the 6502, and one PROM for the 6800

Serial I/O: One Serial Interface can be configured for RS-232 or 20ma loop. Crystal controlled baud rate can be set from 110 baud to 19,200 baud

Parallel I/O: Offers one PIA based parallel port (optional)

Other Features: Allows one-megabyte memory management
Allows up to 16 users on a system
Comes configured for disk operation
Software Switch Option enables user to change from processor to processor under software control. When processors are changed (even if change is manual) memory is preserved.

OHIO SCIENTIFIC

product name/number

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date

8/77

revision

A

page

48

status

Production

sheet 1 of 1

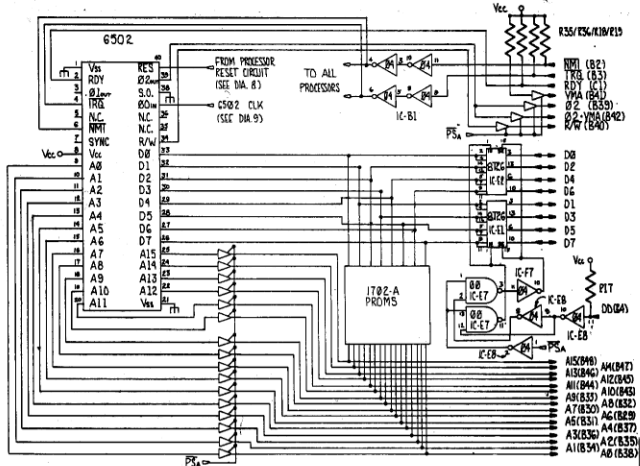


DIAGRAM 2 - 6502 CIRCUITRY

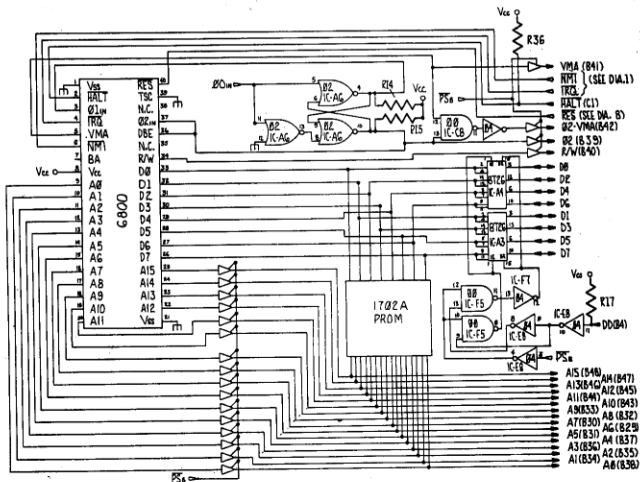


DIAGRAM 3 - 6800 AND CIRCUITRY

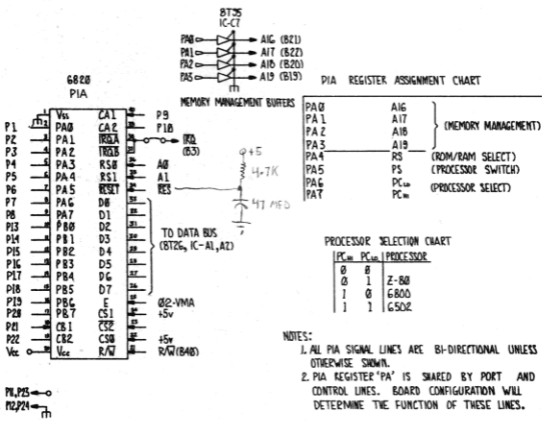
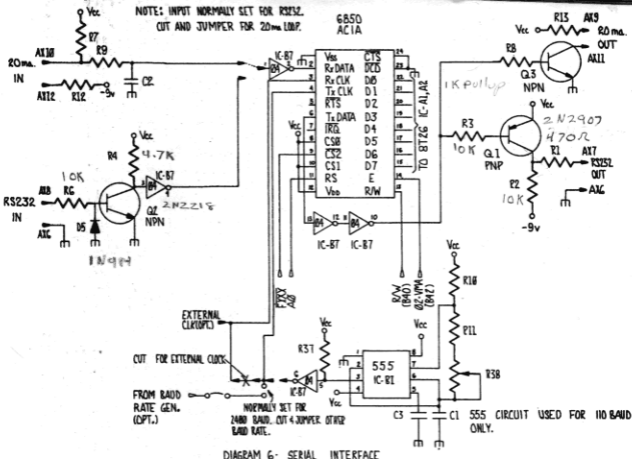


DIAGRAM 7- PIA IMPLEMENTATION

