

term word in an 8-bit processor. (The basic 8800 memory is shown in Fig 5.)

The time required from when the address first appears until the data is stable is called "access time." In most modern semiconductor-memory minicomputers, it ranges from 15 ns to 30 μ s. With proper adjustments, any memory speed can be used in the 8800 computer, although standard memory time is 850 ns for a static random-access memory (RAM) and 420 ns for a dynamic RAM. Higher-speed memories will not appreciably affect the performance of the computer, while slower-speed memories will result in an overall reduction in system speed.

In addition to semiconductor RAM's, the processor will also service ROM's (read-only-memories) and PROM's (programmable read-only memories). Access time should be reinforced for the particular memory used.

Any conventional memory can be used in the computer if the input loading on the buss does not exceed 50 TTL loads and if the buss is driven by standard TTL loads. Normal expansion loads to the buss would be one

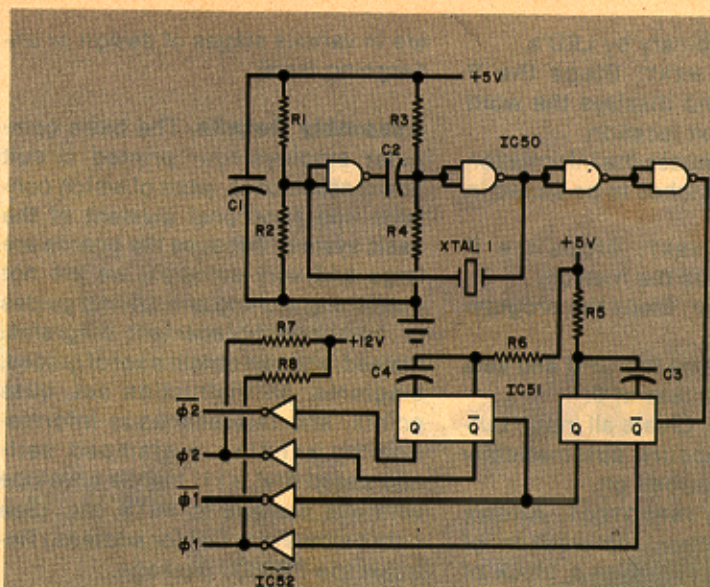


Fig. 4. Computer operation is controlled by signals from this 2-MHz clock circuit.

standard low-power load per expansion card.

Front Panel. The front-panel logic permits the following functions:

1. STOP: Stops the processor immediately after it completes the cur-

rent instruction. An automatic stop occurs when power is turned on (interrupts are disabled).

2. RUN: Starts the processor at the current address.

3. EXAMINE: Causes the data stored at the location (set by the switches) to

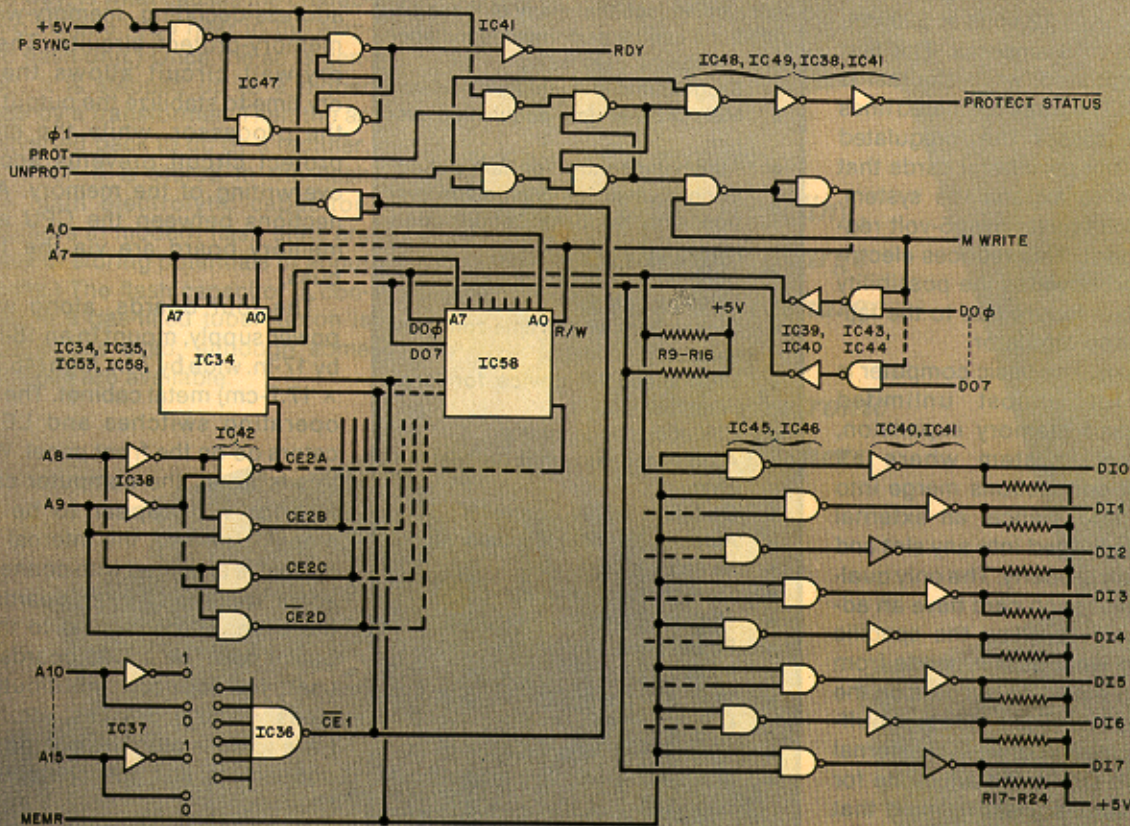


Fig. 5. The basic memory contains up to eight 256 x 4 RAM's.