



Fig. 3. The logic associated with the CPU (IC1) is shown at left. All of the buffers and latches are on a single pc board. Connecting wiring is through a 100-line buss.

decodes the instructions and sets up the various registers, gates, etc., in the CPU for proper functioning. All system timing comes from the CPU. (The logic associated with the CPU is shown in Fig. 3, while the system clock is shown in Fig. 4.)

**Memory.** A computer memory stores the various binary 0's and 1's that make up its language. These 0's and 1's are known as *bits*. Some memories are organized to store 4, 16, 24, or 32 bits to a *word*, while others—specifically those in the 8800 computer—are organized to store eight bits to a word. Each time the CPU requests data from the memory, a complete word is transmitted. The term *byte* is interchangeable with the

*Printed circuit boards are designed so that the various mating pads are aligned. Multi-conductor ribbon cable interconnects the boards.*

