GENERAL DESCRIPTION

The Z8400/Z84C00 CPUs are fourth-generation enhanced microprocessors with exceptional computational power. They offer higher system throughput and more efficient memory utilization than comparable second- and third-generation microprocessors. The speed offerings from 6-20 MHz suit a wide range of applications which migrate software. The internal registers contain 208 bits of read/write memory that are accessible to the programmer. These registers include two sets of six general purpose registers which may be used individually as either 8-bit registers or as 16-bit register pairs. In addition, there are two sets of accumulator and flag registers. A group of “Exchange” instructions makes either set of main or alternate registers accessible to the programmer. The alternate set allows operation in foreground-background mode or it may be reserved for very fast interrupt response.

The CPU also contains a Stack Pointer, Program Counter, two index registers, a Refresh register (counter), and an Interrupt register. The CPU is easy to incorporate into a system since it requires only a single +5V power source. All output signals are fully decoded and timed to control standard memory or peripheral circuits; the CPU is supported by an extensive family of peripheral controllers.
GENERAL DESCRIPTION (Continued)

Figure 1. Z8400/C00 Functional Block Diagram

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