

# PRELIMINARY W78C516



## 8-BIT MICROCONTROLLER

### GENERAL DESCRIPTION

The W78C516 is a derivative of the W78C52 microcontroller family that provides extended internal ROM. The chip has 64K bytes of mask ROM and 256 bytes of RAM.

This device provides an enhanced architecture that makes it more powerful and suitable for a variety of applications for general control systems. It provides on-chip 64KB mask ROM to accommodate large program codes, 256-bytes of non-volatile on-chip RAM, four 8-bit I/O ports, one 4-bit I/O port, three 16-bit timer/counters, eight sources with two-level interrupt structures, and on-chip oscillator clock circuits.

### FEATURES

- DC to 40 MHz extensive operating frequency
- 256-byte on-chip scratch pad RAM
- 64K-byte on-chip mask ROM
- 64K-byte address space for external Program Memory
- 64K-byte address space for external Data Memory
- Three 16-bit timer/counters
- Four 8-bit bit-addressable I/O ports
- One extra 4-bit bit-addressable I/O port (available on 44-pin PLCC/QFP package)
- Six-source, two priority-level interrupts
- Built-in programmable power-saving modes - Idle mode & Power-down mode
- Packages:
  - DIP 40: W78C516-24/40
  - PLCC 44: W78C516P-24/40
  - QFP 44: W78C516F-24/40