

MCS® 51 Microcontroller Family

- Key Features of the MCS® 51 Microcontroller Family Which Make it Popular For Embedded Control are:
 - 8-Bit CPU Optimized For Control Applications
 - Extensive Boolean Processing (Single Bit) Capabilities
- 64K Program Memory Address Space
- 64K Data Memory Address Space
- On-Chip Program Memory (Up to 32 Kbytes)
- On-Chip Data RAM (Up to 512 Kbytes)
- Bi-Directional and Individually Addressable I/O Lines
- Full Duplex UART
- Efficient Event Control Design
- Easy and Simple Bit Manipulation
- Enables Single Chip Design

Intel's 8-bit MCS 51 microcontroller family consists of CHMOS versions of the original 8-bit microcontrollers. The MCS 51 architecture is optimized for control-oriented applications. A variety of fast addressing modes for accessing the internal RAM facilities bytes processing and numerical operations on small data structures. Extensive on-chip support is provided for 1-bit variables as a separate data type, allowing direct bit manipulation and testing in control and logic systems that require Boolean processing.

Intel offers a wide variety of MCS 51 controllers with different levels of on-chip peripherals and memory. The MCS 51 controller family includes versions with on-chip EPROM, One-Time Programmable (OTP) and ROM memory, as well as CPU-only microcontrollers. Intel's proven CHMOS technology provides lower power, higher integration and higher performance in this line of controllers.



MCS 51 Microcontroller Family Consists of: MCS 51 Microcontroller — Classic

Intel's 8-bit MCS 51 microcontrollers have become widely accepted in the industry for embedded control. This Classic family consists of CHMOS versions of all the original 8-bit microcontrollers introduced in the MCS 51 family of microcontrollers. Intel offers a wide variety of on-board memory in EPROM and ROM as well as CPU-only microcontrollers. Intel's proven CHMOS technology provides lower power, higher integration and higher performance.

MCS 51 Microcontroller — Low Voltage

The 8XL5X and 8XL51FX are redesigned true 3V versions of the MCS 51 family of microcontrollers. Operating V_{CC} ranges from 2.7V to 3.6V and a maximum frequency of 20 MHz provide both low-voltage and high-performance benefits. Both products provide a compatible and ideal low-voltage migration path for customers who want to design low-power versions of their embedded designs.

PRODUCT FAMILY:

80C31BH, 80C32, 8xC51, 8xC51KB, 8xC51FA, 8xC51FB, 8xC51FC, 8xC51RA, 8xC51RB, 8xC51RC, 8xC52, 8xC54, 8xC58, 8xC51GB, 8xC152JA, 8xC152JB, 8xC152JC, 8xC152JD, 8xC51SLAL, 8xC51SLAH, 8xL51FA, 8xL51FB, 8xL51FC, 8xL52, 8xL54, 8xL58

DEVELOPMENT PLATFORMS:

8xC51FX Project Builder
8xC51FX Eval Board
8xC51GB Eval Board

ENVIRONMENT:

PC (Windows), PC (DOS)

AVAILABILITY:

Now

CONTACT:

Local Intel Sales Office

WWW: <http://www.intel.com>