

MCS-51

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The **MCS-51** (commonly termed 8051) is a single chip [Microcontroller](#) (MCU) series developed by Intel in 1980 for use in embedded systems. The architect of the Intel MCS-51 instruction set was John H. Wharton. Intel's original versions were popular in the 1980s and early 1990s and enhanced binary compatible derivatives remain popular today. It is an example of a complex instruction set computer, and has separate memory spaces for program instructions and data.

Intel's original MCS-51 family was developed using N-type metal-oxide-semiconductor (NMOS) technology like its predecessor Intel MCS-48, but later versions, identified by a letter C in their name (e.g., 80C51) use complementary metal-oxide-semiconductor (CMOS) technology and consume less power than their NMOS predecessors. This made them more suitable for battery-powered devices.

The family was continued in 1996 with the enhanced 8-bit MCS-151 and the 8/16/32-bit MCS-251 family of binary compatible microcontrollers. While Intel no longer manufactures the MCS-51, MCS-151 and MCS-251 family, enhanced binary compatible derivatives made by numerous vendors remain popular today. Some derivatives integrate a digital signal processor (DSP). Beyond these physical devices, several companies also offer MCS-51 derivatives as IP cores for use in field-programmable gate array (FPGA) or application-specific integrated circuit (ASIC) designs.

Source: https://en.wikipedia.org/wiki/Intel_MCS-51

Datasheet	
Developer	Intel
Bits	
Introduced	1980
Design	
Type	
Encoding	
Endianness	
Extensions	
Official Website	

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