

80xx

80xx Compatible Intellectual Property (IP).

Description

It is 100% code compatible with the original 8051/52 and uses modern processor techniques. The extra processing power can be used to perform high speed applications, or to run the same software at a slower clock speed, for saving power consumption, or even to increase the complexity of your 8051/52 based application.

Features

- Full binary code compatibility with the original 8051/52
- The I/O ports (P0, P1, P2, P3) and the alternate functions like external interrupts are separated, providing extra port pins when compared with the standard 8051/52
- Extra bus for easy integration of extra peripherals and Special Function Registers.
- 6-source/5-vector interrupt structure with two priority levels
- 64K Program Memory address space
- 64K Data Memory address space
- Two / Three 16-bit timer/counters
- Full duplex UART
- 4x Faster than the original 8051/52

Application Area : 8-bit data processing applications, Low power consumption applications, Complex processing applications, High speed applications

Available Documents : Data Sheet

Design File Formats : TARGET ASIC/FPGA Netlist.

Verification : Verilog Testbench

Simulation Tool Used : Model Technology ModelSim™ 6.4