

Aim

To familiarize with MCU 8051 IDE.

Theory

5 The Intel MCS-51 is a Harvard architecture, single chip microcontroller series which was developed by Intel in 1980 for use in embedded systems. They have 8-bit ALU, Accumulator & 8-bit registers, 16-bit address bus, Boolean processing engine which allows bit-level Boolean logic operation to be carried out directly & efficiently on select internal registers & select RAM locations etc.

10 Main Components of MCU 8051 IDE

1. Editor: The code editor is featured with syntax highlighting & validation, auto completion & spell checking for comments, as well as the command line that speeds up the access to various editor options. It also provides a panel showing line numbers, bookmarks, breakpoints & warnings from syntax validator.

2. Assembler: The assembler is one of the integral parts of MCU 8051 IDE. It is a macro assembler with support for dozens of directives & capable of performing peephole optimizations.

3. Simulator: The simulator is a software component intended for the simulation of the chosen microcontroller in a virtual environment.

4. Scientific Calculator: MCU 8051 IDE scientific calculator is implemented as a simple scientific calculator capable of computation in 4 number system: decimal, hexadecimal, octal & binary, & with 3 angle units: radians, degree & grad.

Result

25 Familiarized with MCU 8051 IDE.

Teacher's Signature: _____