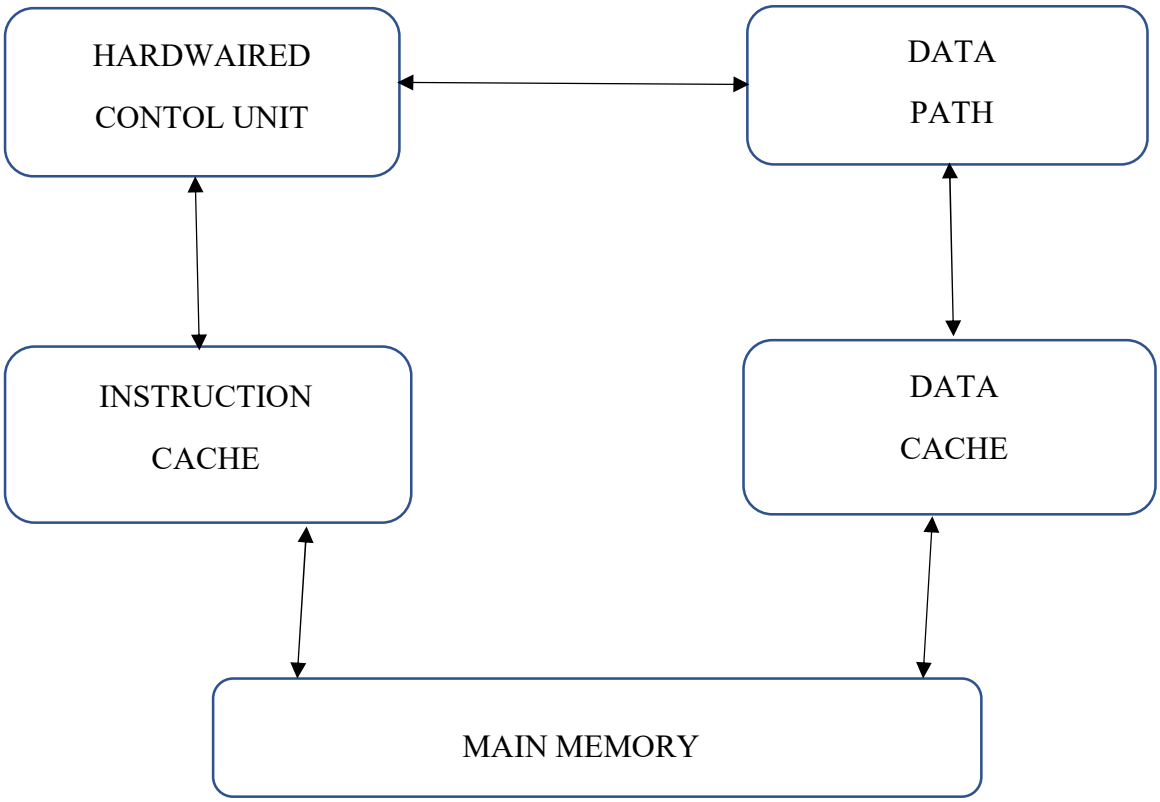
RISC Architecture

It is a highly customized set of instructions used in portable devices due to system reliability such as Apple iPod, mobiles/smartphones, Nintendo DS,



Features of RISC Processor

Some important features of RISC processors are:

1. **One cycle execution time:** For executing each instruction in a computer, the RISC processors require one CPI (Clock per cycle). And each CPI includes the fetch, decode and execute method applied in computer instruction.
2. **Pipelining technique:** The pipelining technique is used in the RISC processors to execute multiple parts or stages of instructions to perform more efficiently.
3. **A large number of registers:** RISC processors are optimized with multiple registers that can be used to store instruction and quickly respond to the computer and minimize interaction with computer memory.
4. It supports a simple addressing mode and fixed length of instruction for executing the pipeline.
5. It uses LOAD and STORE instruction to access the memory location.
6. Simple and limited instruction reduces the execution time of a process in a RISC.

CISC Processors Architecture

The CISC architecture helps reduce program code by embedding multiple operations on each program instruction, which makes the CISC processor more complex. The CISC architecture-based computer is designed to decrease memory costs because large programs or instruction required large memory space to store the data, thus increasing the memory requirement, and a large collection of memory increases the memory cost, which makes them more expensive.