

The difference Harvard and Von Neumann:

The main difference between the two architectures is that in von Neumann architecture all memory is capable of storing all program elements, data, and instructions whereas in von Neumann architecture all memory is capable of storing all program elements, data and instructions. In the Harvard architecture, the memory is divided into two memories, one for data and one for instructions.

The difference between RISC and CISC:

The main difference between RISC and CISC architectures is that RISC-based machines execute one instruction per clock cycle. In a CISC processor, each instruction performs so many operations that it takes several clock cycles to execute.

The difference between HSE & HSI & PLL:

The advantage of HSE quartz is **that** it can generate very accurate rates on the master clock. The HSI clock signal is generated by an internal oscillator and can be used **directly** as a **system clock** or as a PLL input. The HSI RC oscillator has the advantage of being able to

provide a clock source at low cost (no external components required)