

Evolution of Microcontroller

Microprocessor is an essential component of computer. As well as it is one of the chip that is combined with memory and special purpose chips and preprogrammed by software. The main function is to send and receive data to make the function of the computer well. It has the essential part of many gadgets. Also, there are five types such as CISC, RISC, ASIC, superscalar processor, etc.

Advantages of Microcontrollers

- The flexibility [Embedded Operating System](#) are specifying the processor chips that are due to the programmable nature.
- In fact, faster speed of execution is fully integrated into the processor such as a computer on a chip. These devices are operating at a faster speed to executing the instructions to the general purpose of microprocessors.
- Programming the logical controllers (PLCs) are subsets of the microcontrollers that will design the set of instructions for manufacturing the robots and also the industrial equipment planning for specific automated tasks.
- More than one task may perform the PLCs and microcontrollers are repetitive for human attention.
- The microcontrollers are controlling the read-only memory that is rather than the random access memory.

Applications of Microcontrollers

We know that microcontrollers are used for most of the household and industrial applications. The huge areas of applications are as follows.

- Evolution of Microcontrollers measuring the physical quality for example force, acceleration, stress, pressure, velocity and also strain.
- The microcontroller is based upon the laboratory instruments to measuring the voltage, phase angle, energy, frequency and also power.
- Traffic light controlling system
- Robot ARM positioning control
- As a matter of fact, both the stepper motor control and DC motor
- Angular speed measurement
- Household appliances for example light control, TV, washing machine, VCR, and video games.

Future of Microcontrollers

The reconfigurable accelerator which it's directly accessing on-chip buses, I/O and also cache. It covers more than one needs, and customers will achieve higher performance.

Programmable I/O

Evolution of Microcontrollers are often into the lots of variations to the accommodate client requirements among the several combinations of a serial-like USART, SPI, UART and so on. Due to, the clients realize to using the eFPGA to manufacturing the program different from each SKU.