Basics of microprocessor systems

Concepts

Definitions

Microprocessor

- It is an electronic element with a large scale of integration, intended for the implementation of arithmetic and logical operations on digital information vectors, called **data**, introduced from its environment, which is the memory and registers of input-output circuits.
- The type of operation performed is determined by other digital information vectors called **instructions** that the microprocessor retrieves from memory.
- The microprocessor can transfer the results of performed operations to the memory or registers of input-output circuits.

Microprocessor system

an electronic system consisting of the elements it consists of:

Microprocessor

Memory that stores microprocessor commands, **data** and **results of operations**

Input-output systems	enabling memory storage of commands and data and output of results

Microprocessor system

a system designed to perform any task that can be reduced to the processing of digital information vectors, which includes:

A)

electronic equipment, such as microprocessors, microcomputers, external devices, information transmitters and receivers, systems coupling the system with the environment, communication buses

B)

software that determines the operation of the microprocessor system hardware that will ensure the performance of the task