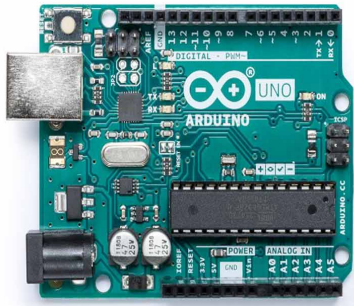


What is Arduino?

Arduino is an **open-source** electronics platform based on easy-to-use hardware and software. Arduino™ is a name given to a family of **single-board computers (SBCs)**. It consists of a circuit board, which can be programmed (referred to as a **microcontroller**) and a ready-made software called **Arduino IDE (Integrated Development Environment)**, which is used to write and upload the **computer code** to the physical board.



Arduino Uno - Component Side



Arduino Uno PCB

Open-Source refers to any program whose source code is made available for use or modification as users or other developers see fit. Open source software is usually developed as a public collaboration and made freely available.

Single-board computers (SBCs) An entire microcomputer on a single printed circuit board (PCB). Abbreviated SBC. Examples include Arduino and Raspberry Pi.

A printed circuit board mechanically supports and electrically connects electronic components or electrical components using conductive tracks, pads.

Microcontroller A complete self-contained computer in a chip, including the memory for a program and its data. This small microprocessor also contains the necessary electronics to communicate with external devices.

Microprocessor A complex electronic integrated circuit that performs the processing tasks of a computer, including input, output, and computation.

Integrated Development Environment (IDE) A collection of computer programs used to create other computer programs.

Computer code or program code is the set of instructions forming a computer program which is executed by a computer.

An integrated circuit (IC), sometimes called a chip or microchip, is a semiconductor wafer on which thousands or millions of tiny resistors, capacitors, and transistors are fabricated. An IC can function as an amplifier, oscillator, timer, counter, computer memory, or microprocessor.



Life must continue. And continue towards perfection, through progress, evolution, through self-initiative. Impatience can not lead to do that. Frustration is its enemy.