

# Electronics Club



## Arduino Basics



## MICRO PROCESSOR

- Part of computer systems
- Memory and i/o components should be added via external circuitry
- SO
- whole system cost is relatively high
- Not suitable in compact systems.
- Relatively slow due to external processing.

## MICRO CONTROLLER

- Part of embedded systems
- Memory and i/o components are internally present.
- SO
- whole system cost is less
- Can be used in compact systems.
- Fast due to internal processing.

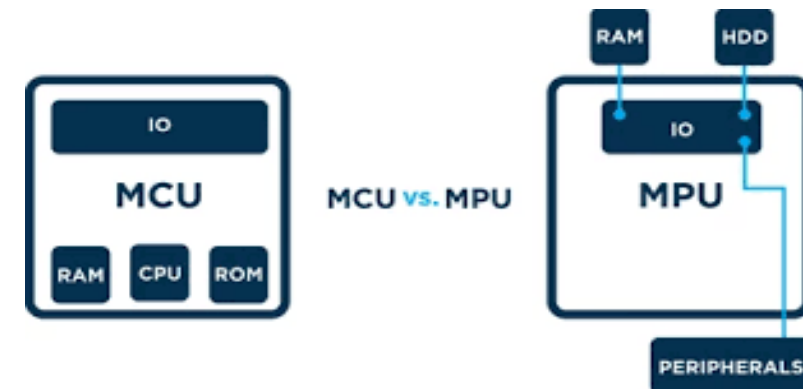
## POWER CONSUMPTION:-

### MPU:-

- Relatively high power consumption
- No special power saving modes

### MCU:-

- Lower power consumption
- Has power saving modes





# What is an Arduino?

Single-board microcontroller, intended to make the application of interactive objects or environments more accessible.

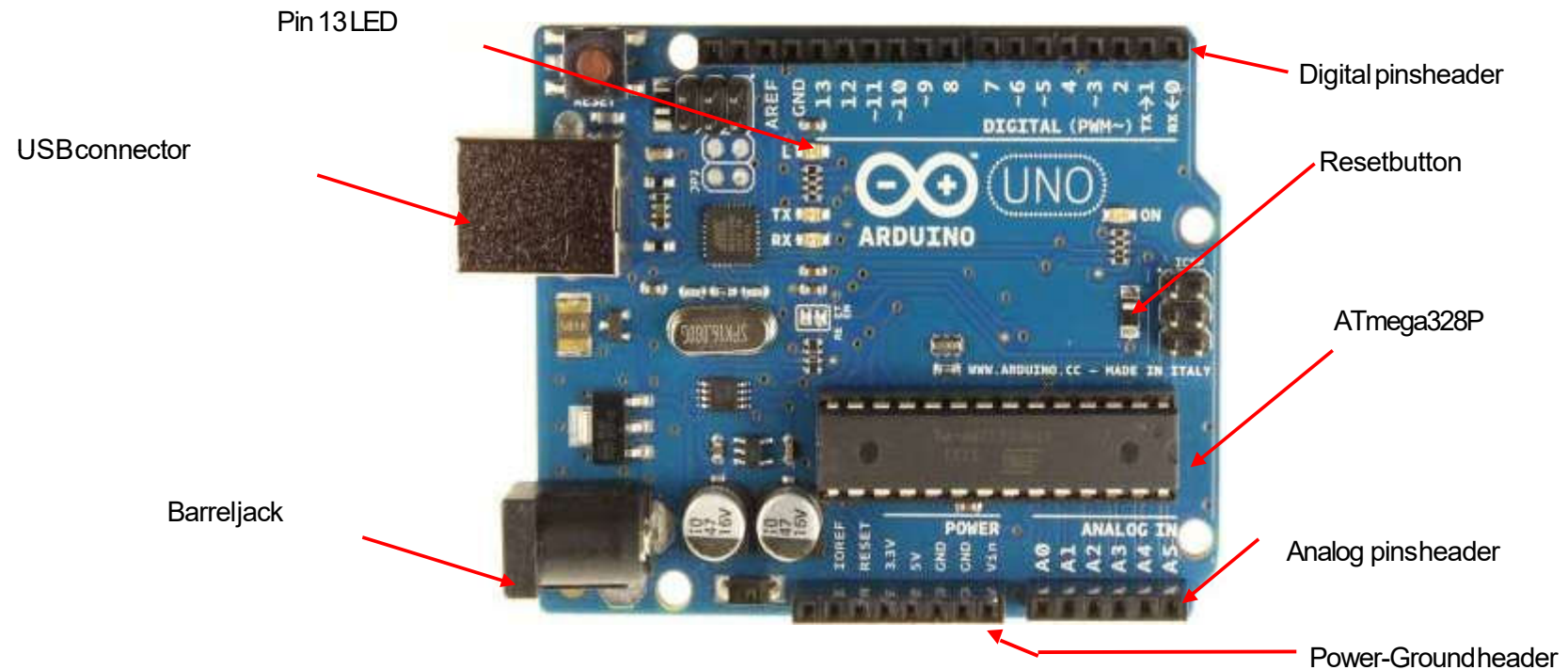
Designed to make the process of using electronics multidisciplinary projects more accessible.







# *The basic Arduino board*



*Arduino UNO Board*



# Writing Code for Arduino

- Uses its own language similar to C ++, called Processing
- Has its own IDE with examples (open source)



# **A d v a n t a g e s o f A r d u i n o**

- Open source
- Simplified and user-friendly programming language
- No additional programmer/burner hardware required for programming board
- Portable
- Low power consumption