Arduino
ATmega328 is a low-power CMOS 8-bit microcontroller based on the AVR enhanced RISC architecture.

The AVR line of microcontrollers, originally developed in the early 1990s by two students at the Norwegian University of Science and Technology, Alf-Egil Bogen and Vegard Wollan.

AVR’s use a “Harvard architecture,” in which program memory and working RAM are kept separate.

Easily programmed (and reprogrammed) flash memory was added to the processor core, and the first commercial AVR chip, the AT90S8515, was released in 1996.
What is the Arduino?

- Open source hardware
- A software development environment
- A huge community of hobbyists and materials

Operating Voltage 5V
Input Voltage (recommended) 7-12V
Input Voltage (limits) 6-20V
Digital I/O Pins 14 (of which 6 provide PWM output)
Analog Input Pins 6
DC Current per I/O Pin 40 mA
DC Current for 5V Pin 400 mA, 3.3V Pin 50 mA
Flash Memory 32 KB (ATmega328) of which 0.5 KB used by bootloader
SRAM 2 KB (ATmega328)
EEPROM 1 KB (ATmega328)
Clock Speed 16 MHz