

DramaLab

Arduino Hardware

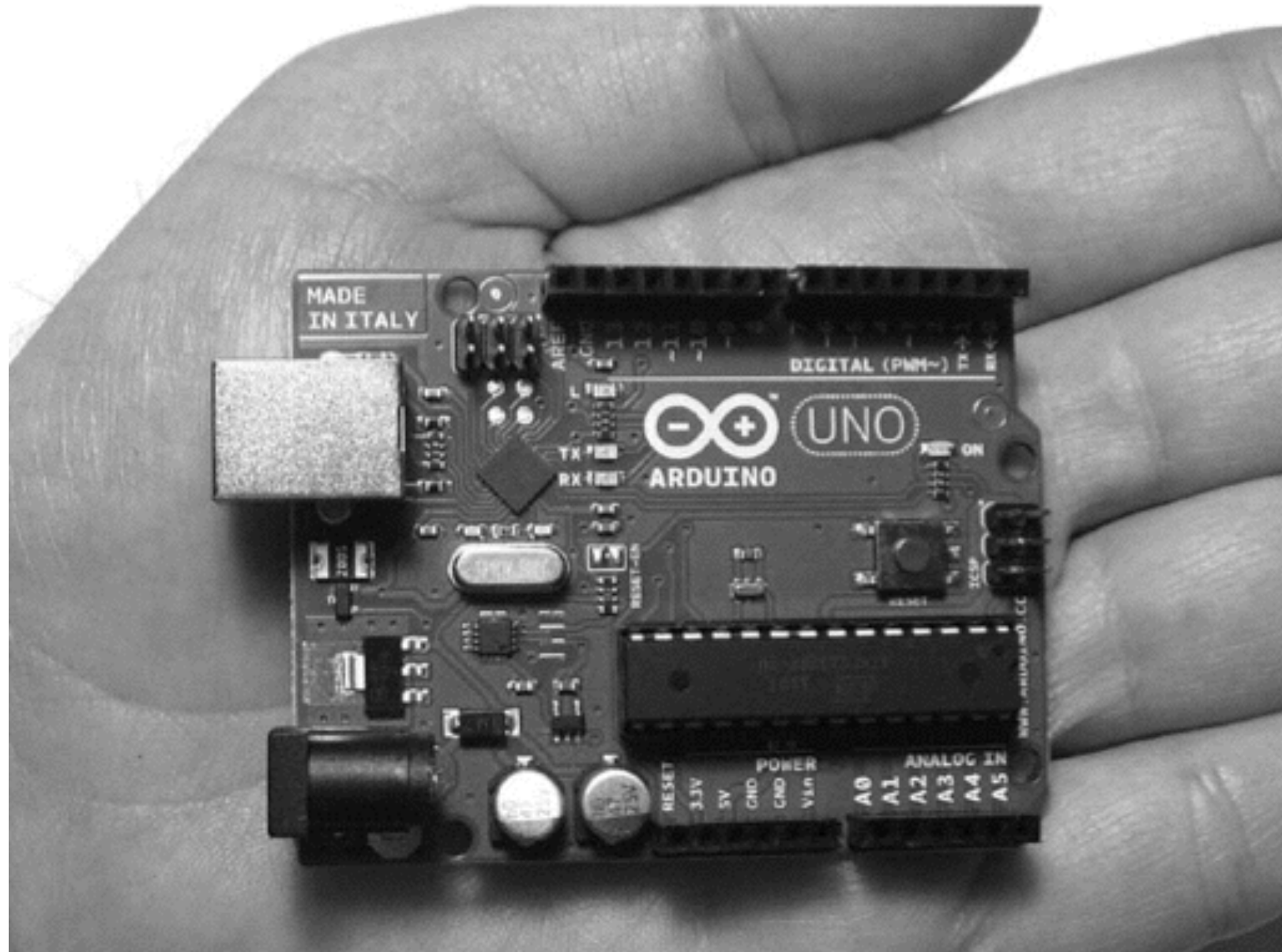
„an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. It's intended for artists, designers, hobbyists, and anyone interested in creating interactive objects or environments.“

– arduino.cc

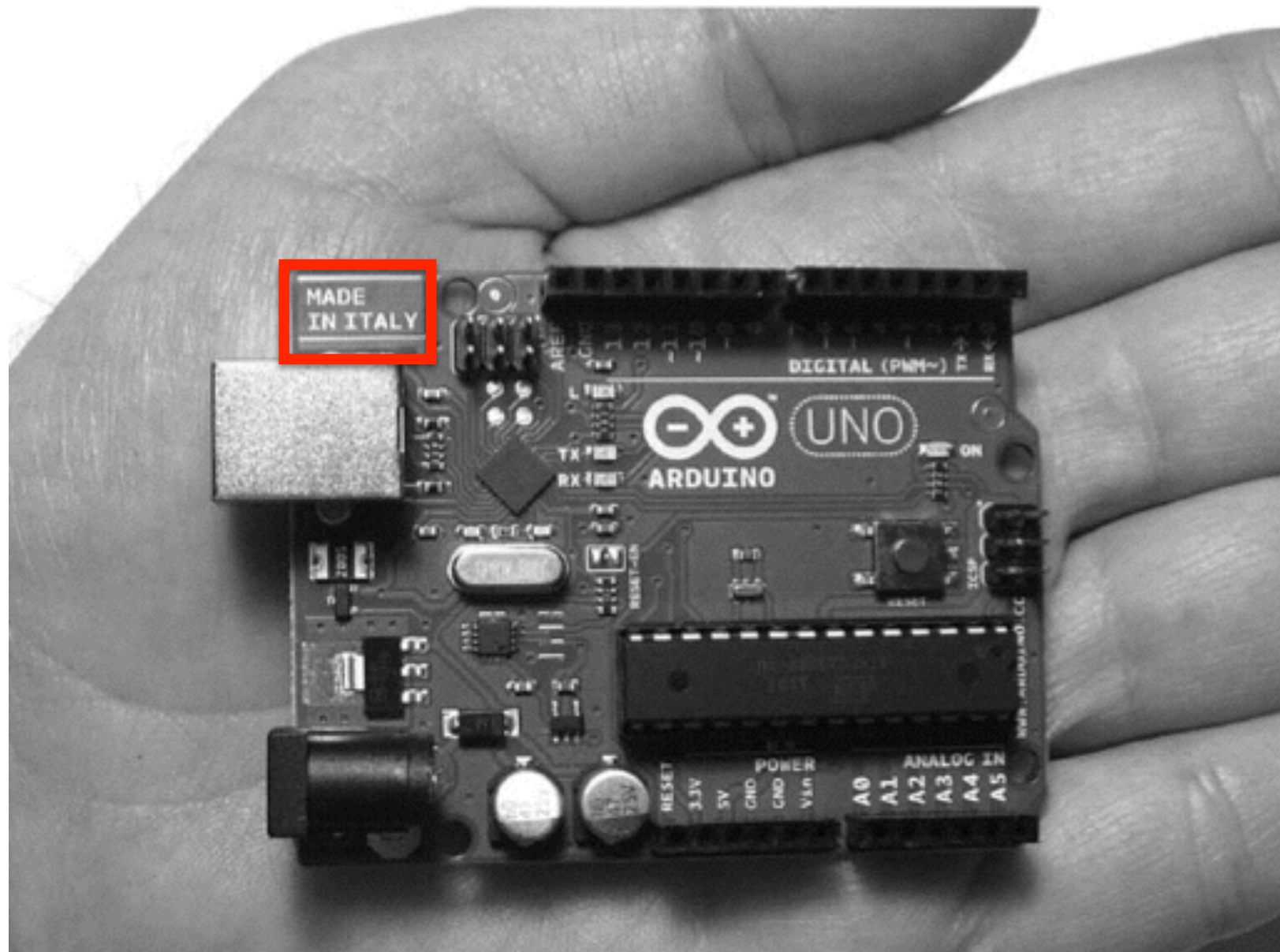
Summarizing

- tiny computer
- limited processing power
- various forms of input and output

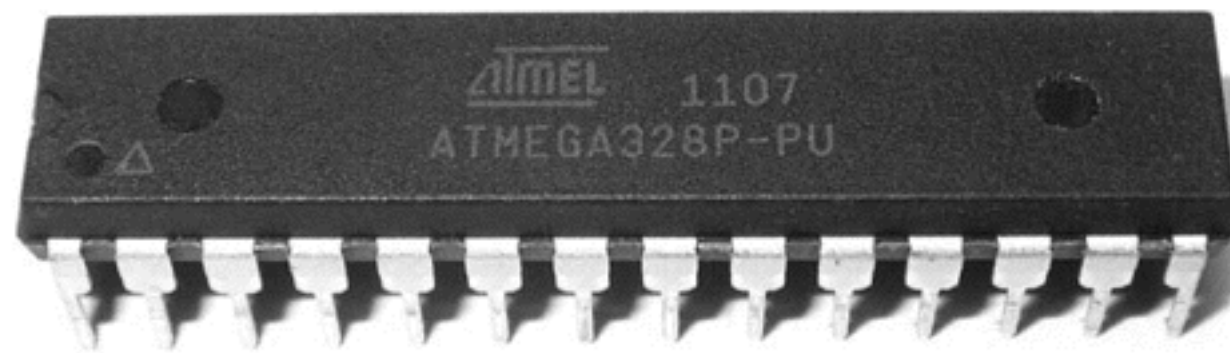
The Arduino Board



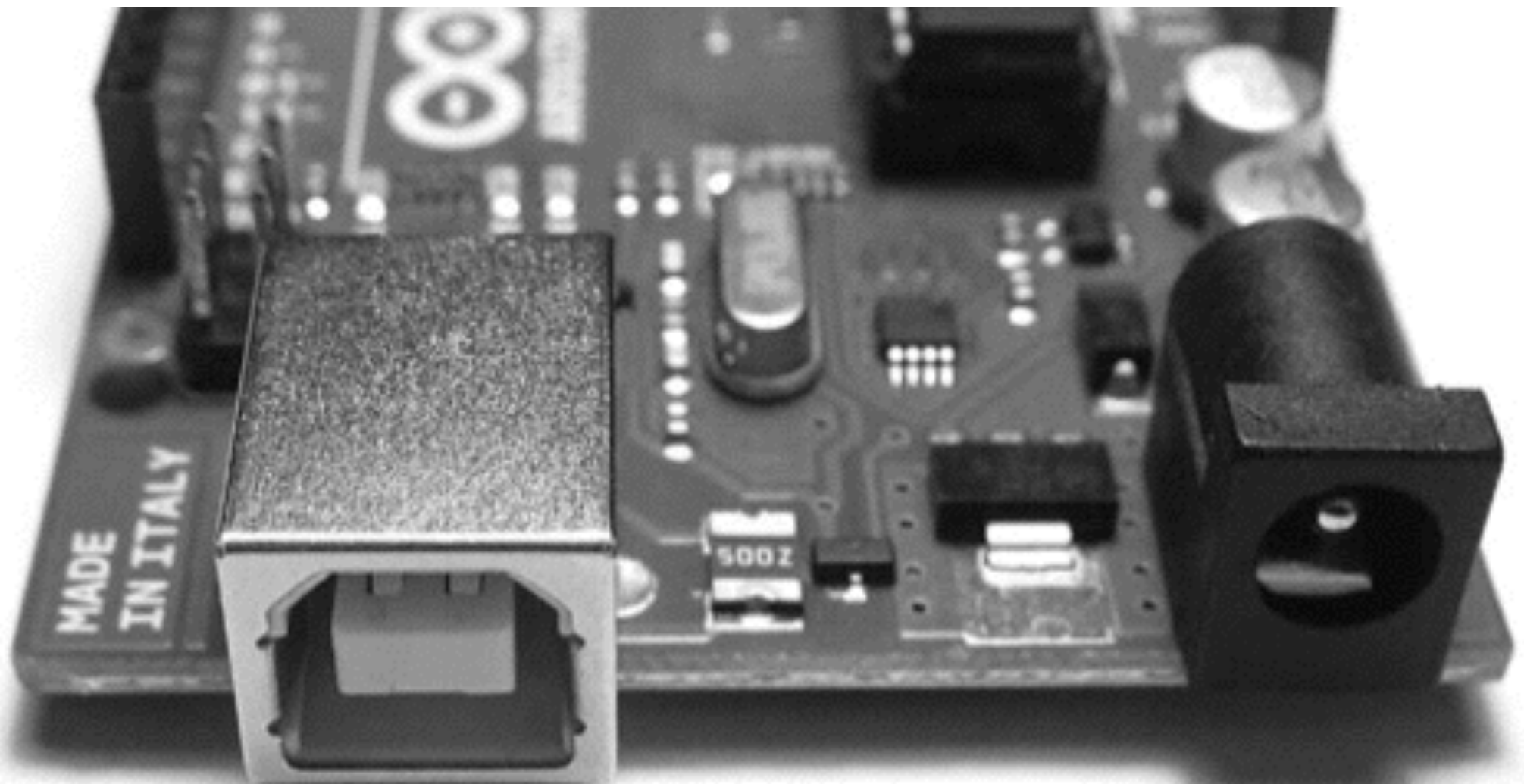
The Arduino Board



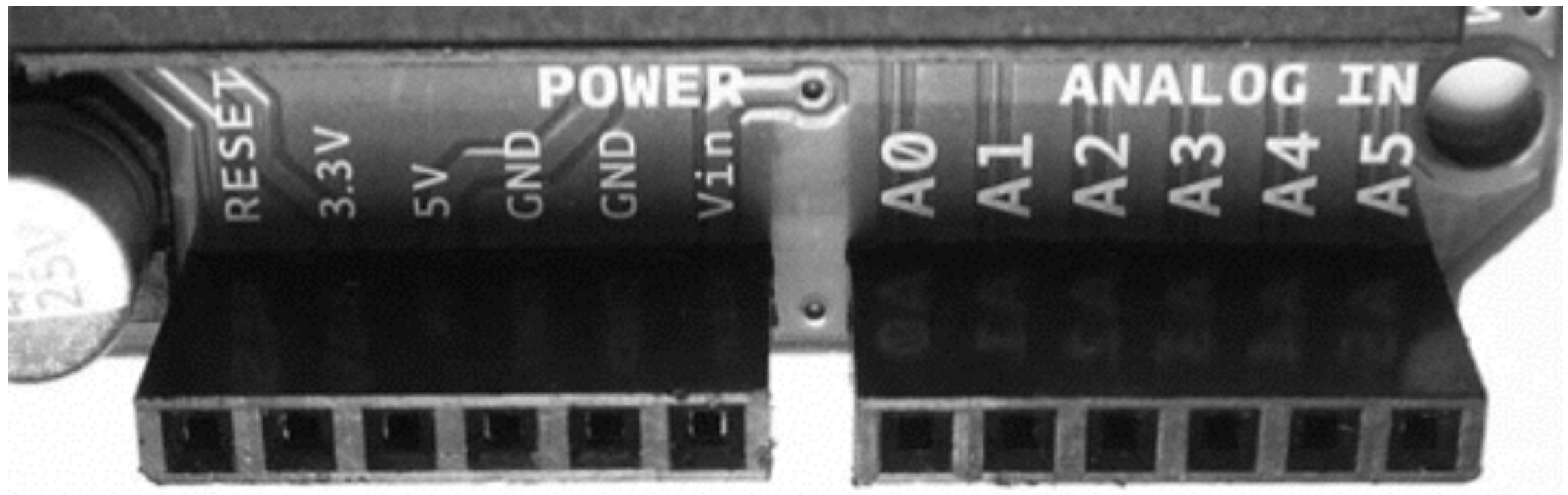
Microcontroller Chip



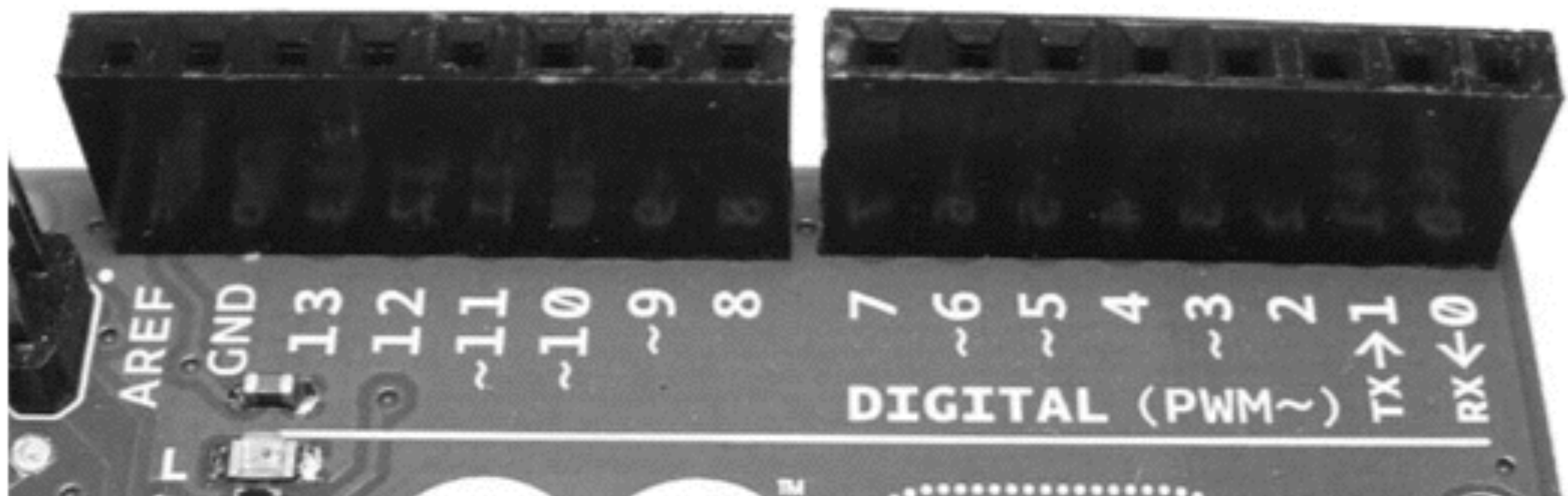
Usb and power connections



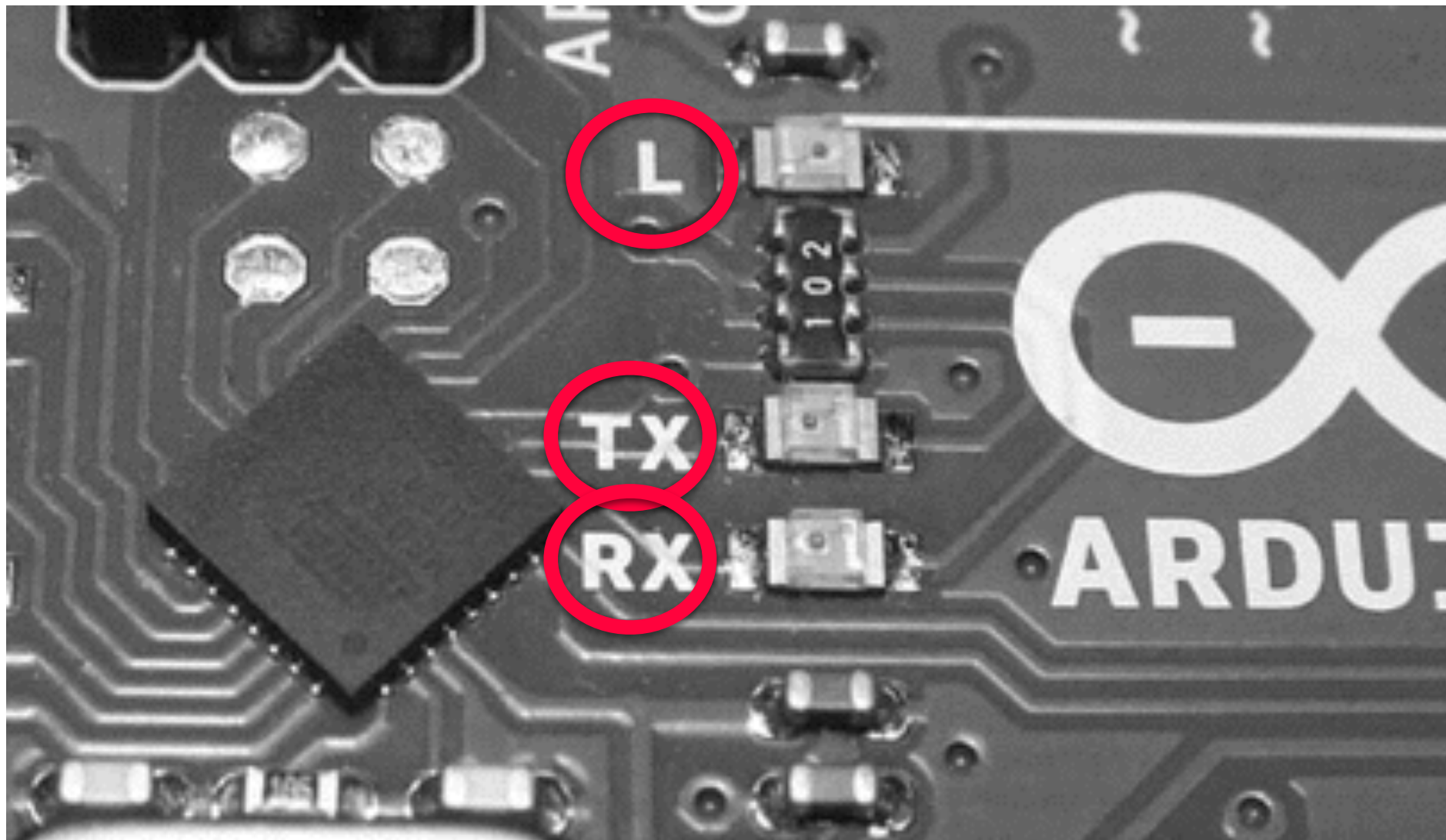
Power and analog sockets



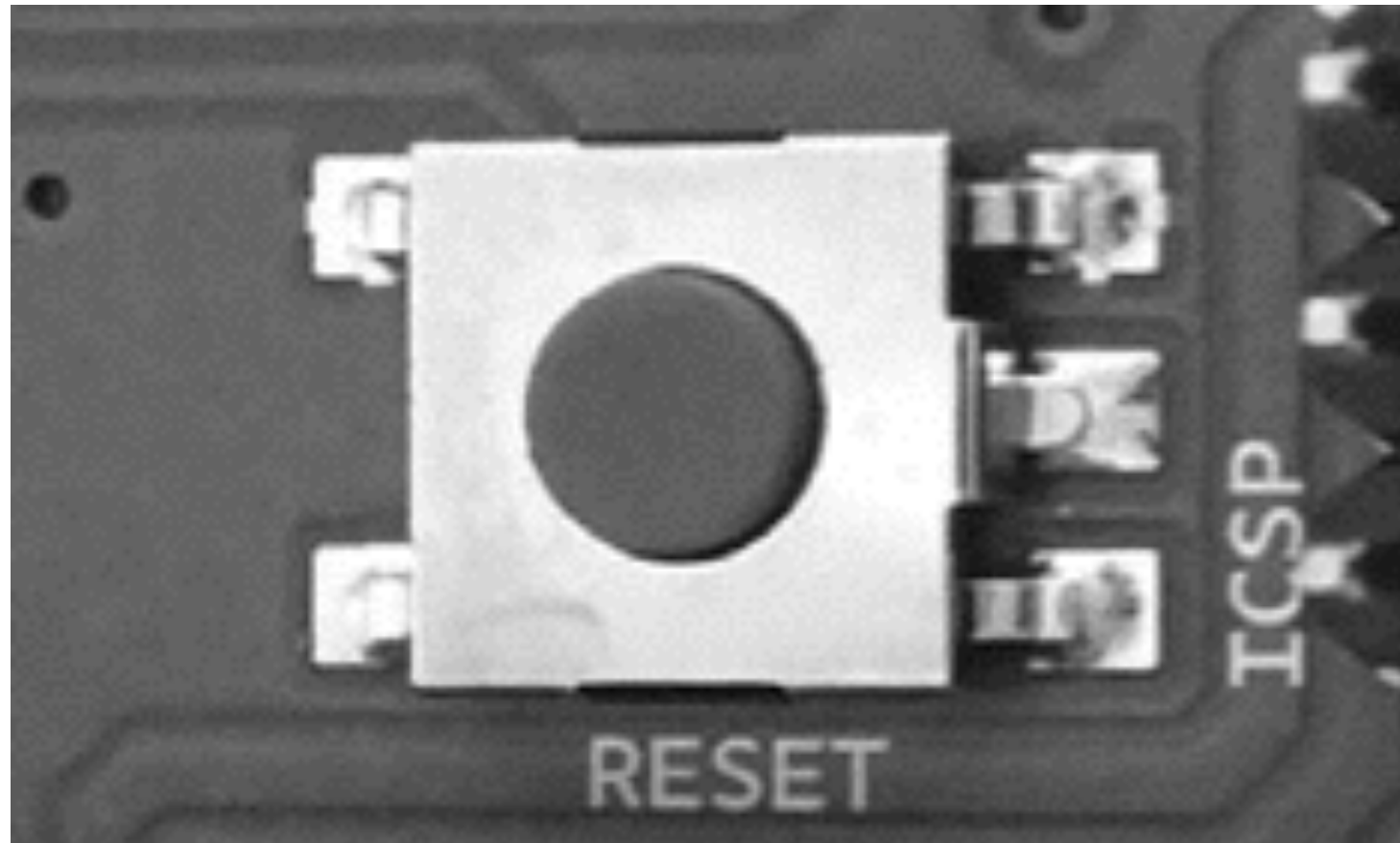
Digital input / output pins



Onboard Leds



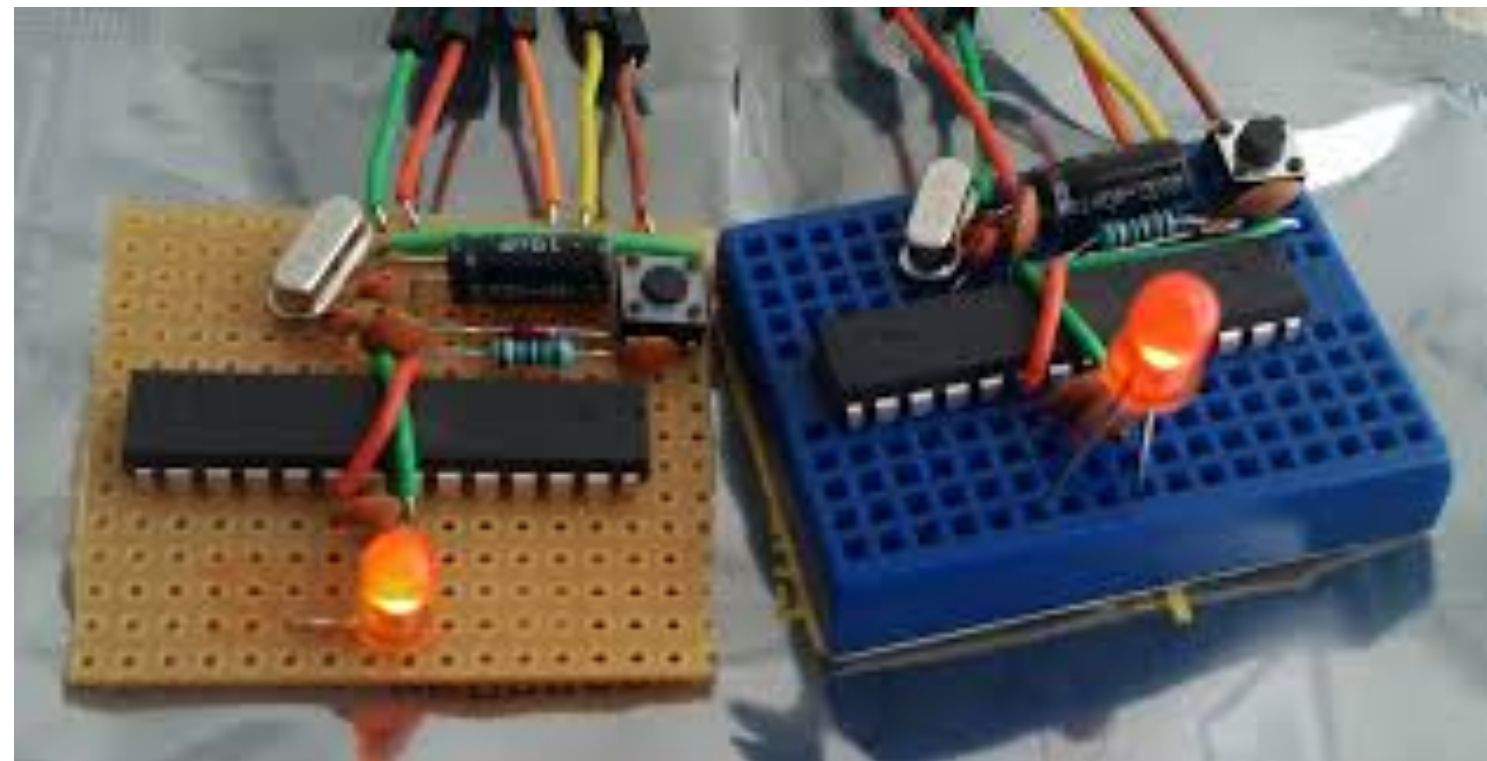
Reset button



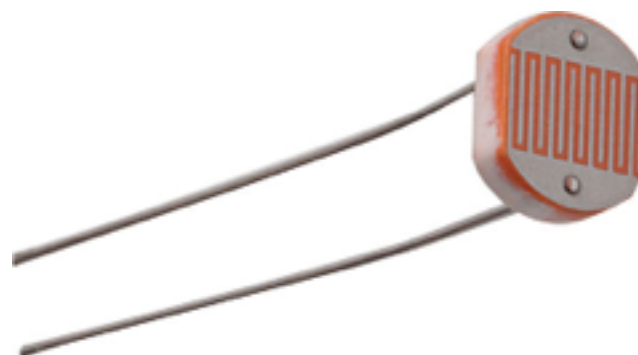
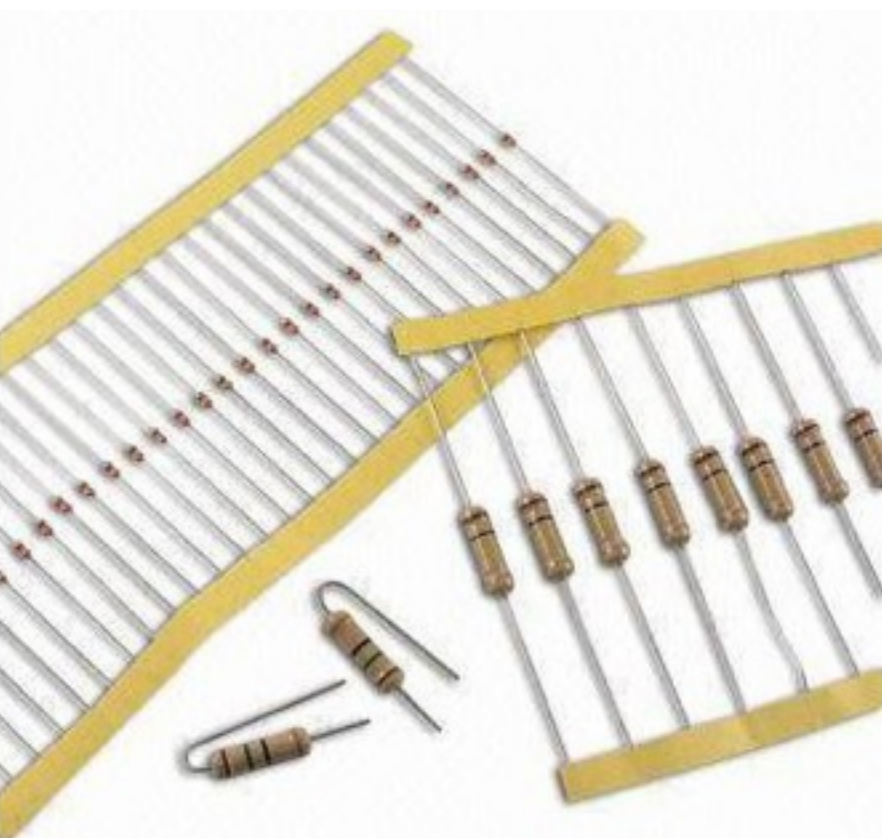
Specifications

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

Breadboard



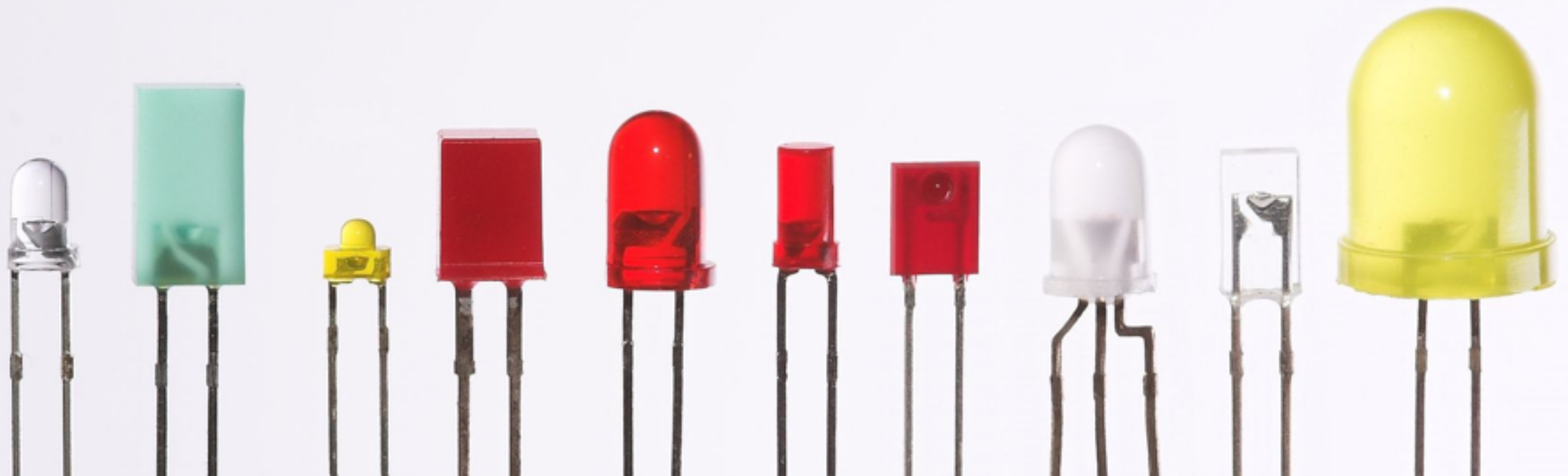
Resistors



Push Button



LEDs



Display

