



Arduino

Prepared by

Pratheesh V Nair

Arduino



ARDUINO BOARD

“Strong Friend” Created in Ivrea, Italy
in 2005 by Massimo Banzi & David Cuartielles
Open Source Hardware



 Processor

Coding is accessible & transferrable → (C++, Processing, java)

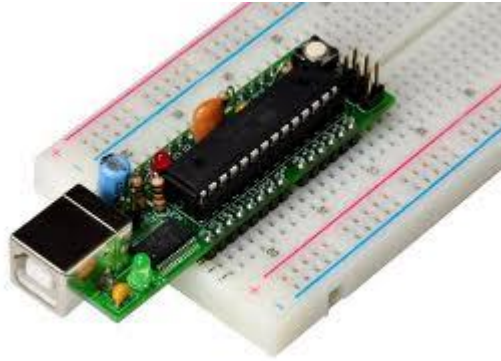


WHAT IS ARDUINO?

- ◆ A programmable micro controller for prototyping electromechanical devices
- ◆ You can connect Digital and Analog electronic signals:
- **Sensors (Gyroscopes, GPS Locators, accelerometers)**
- **Actuators (LEDS or electrical motors)**



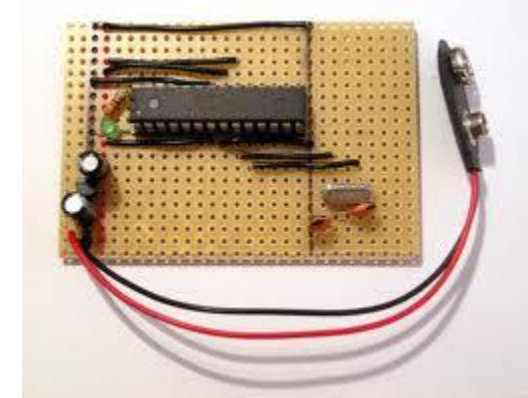
DIFFERENT TYPES OF ARDUINOS



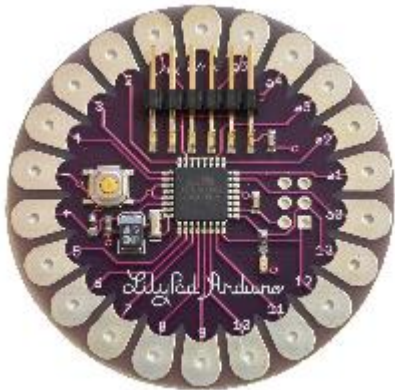
Boardduino Kit



Arduino Uno



DIY Arduino

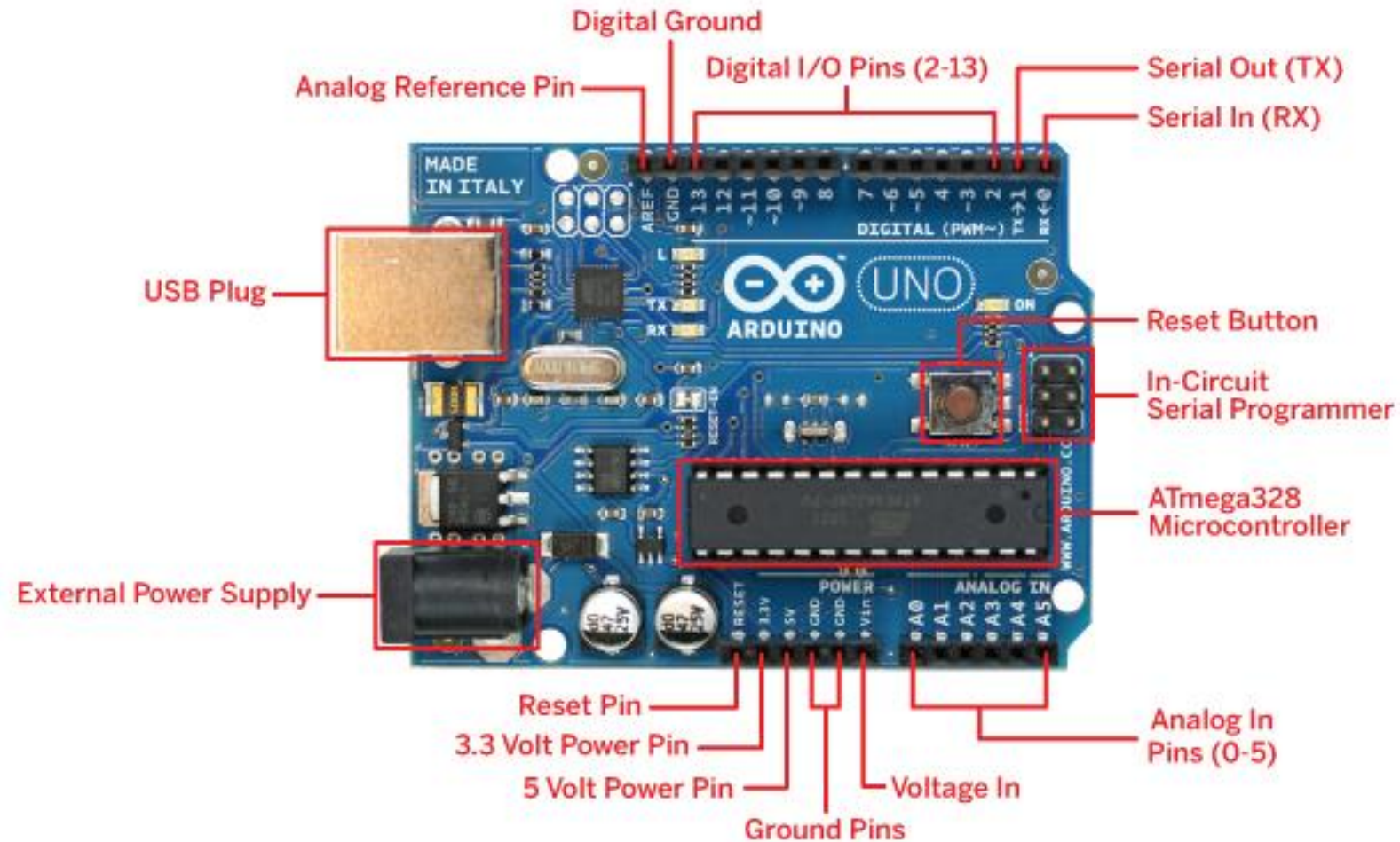


Arduino LilyPad

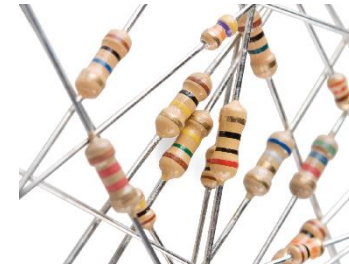


Arduino Mega 2560

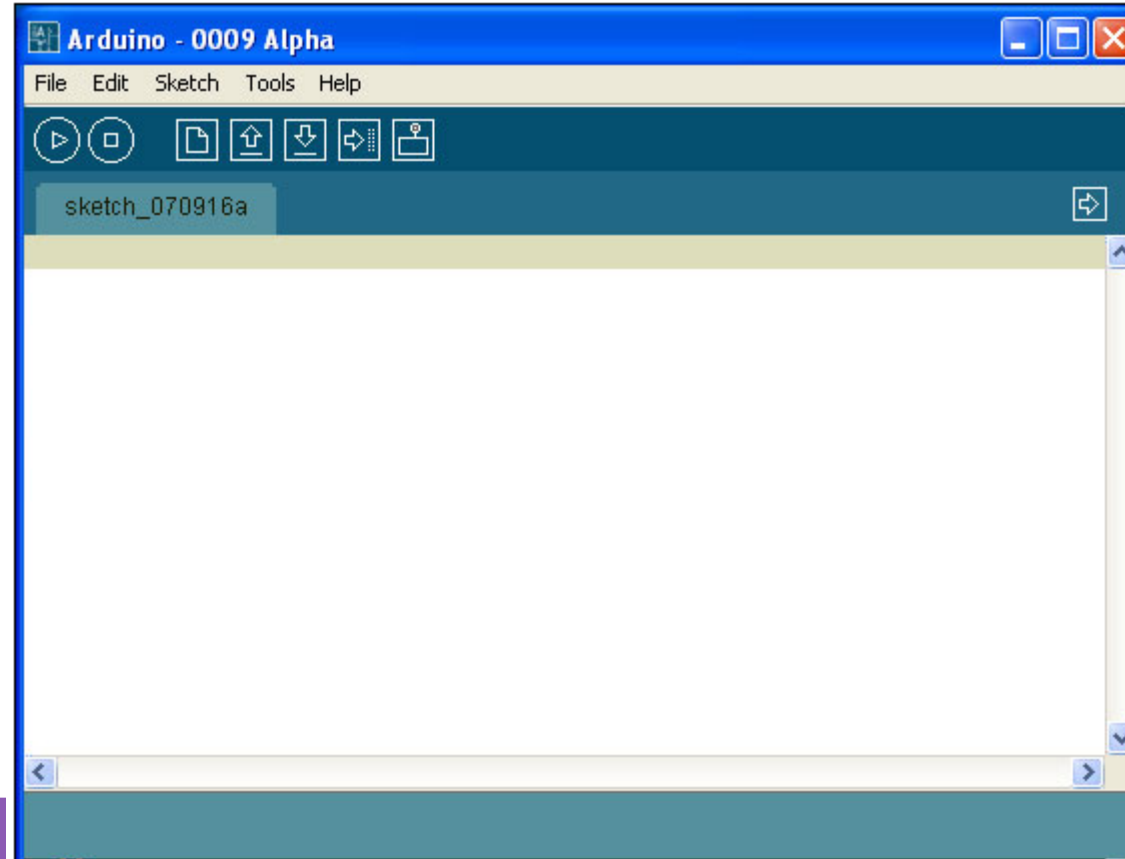
ARDUINO COMPONENTS



WHAT DO WE NEED?

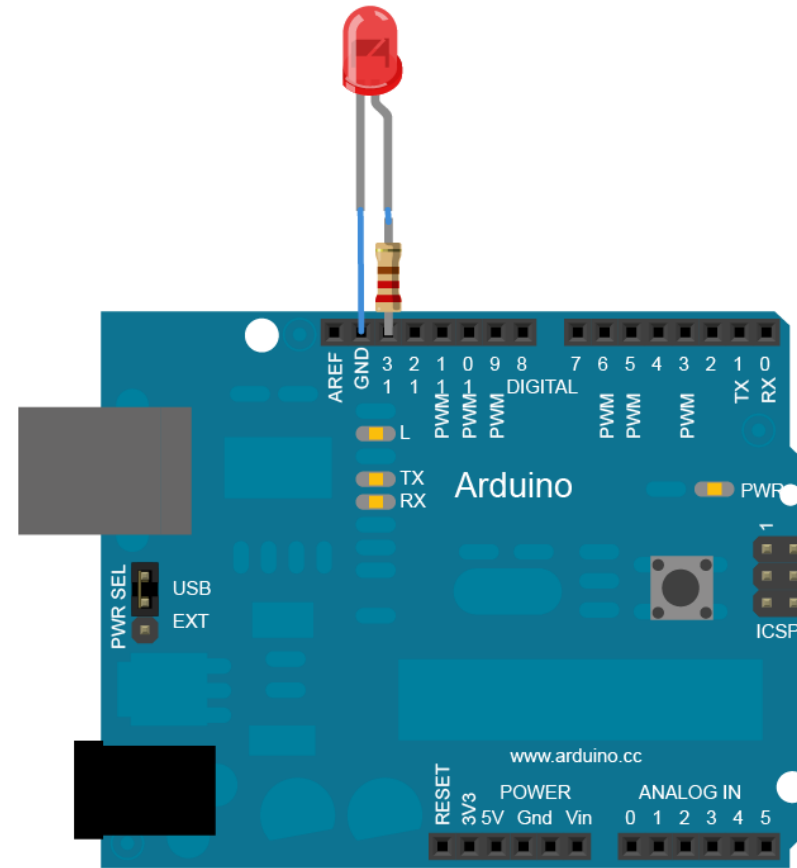


◆ 1.- Download and install the Arduino Software



◆ 9.- Insert LED

◆ It is blinking!!!



CODE

```
int ledPin = 13;           // LED connected to digital pin 13

void setup()               // run once, when the sketch starts
{
  pinMode(ledPin, OUTPUT); // sets the digital pin as output
}

void loop()                // run over and over again
{
  digitalWrite(ledPin, HIGH); // sets the LED on
  delay(1000);                // waits for a second
  digitalWrite(ledPin, LOW);  // sets the LED off
  delay(1000);                // waits for a second
}
```

Thank you...