Arduino

we'll use it here for experimenting. thanks to our sponsors (www.tinker.it)
builds upon the ATmega168 chip
very similar to ATmega8 - pin compatible, more memory, more pwm outputs

arduino is basically chip + usb-to-rs232, voltage regulator, crystal, leds, button, connectors
+ bootloader - firmware acting as programmer, talks to the computer
arduino-0010 application: simplified coding in c
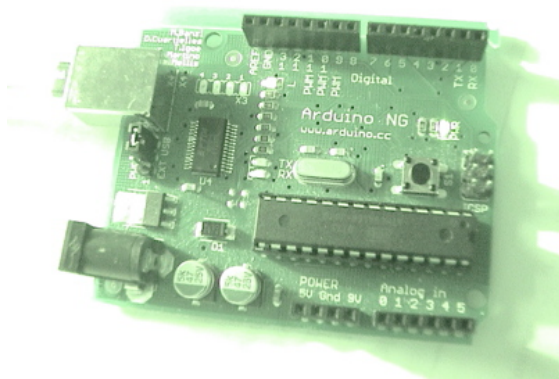
very good way to start with microcontrollers
also used in many serious projects
open source
loads of tutorials and intro material online (www.arduino.cc)
different boards available: ng, bt, lilypad, mini, diecimila, barebone, freeduino etc
buy finished, as kit or build from scratch

drawbacks for us in this project: size, cost, not the low-power version chip, bootloader steals memory

demo

show the blink example
explain how to compile and upload
compare with c code demo in part1
try with speaker, change to audible frequency