What's an Arduino Duemilanove

(Developed by Dean Brock)

Today we will be distributing the Arduino board and a USB cable in class. You will probably receive the Arduino Duemilanove board, but you may get the older Arduino Diecimilia board. There's a minor difference in the power supply circuitry of the two boards that can largely be ignored.

- **general information**
- **Schematic**
- **Printed circuit**
- **components**
  - ATmega168 microcontroller & ATmega168-Arduino Pin Mapping—the biggest chip
  - 16Mhz quartz crystal -- shiny "oval" above the microcontroller
  - USB type B socket -- on the left side
  - FT232RL USB UART -- right of USB socket
  - NDT2955 P-channel transistor -- below USB socket
  - 500mA Fuse -- right of transistor with label something like 5O8H or HBOS
  - MC33269D-5.0 voltage regulator -- below transistor
  - Power jack for external power supply -- in corner below voltage regulator
  - Two large capacitors -- round objects on bottom to the right of power jack
  - Diode -- small black rectangle above leftmost large capacitor
  - LM358D dual op amp -- left of microcontroller
  - four LED's -- contains colorful LED in middle
  - many resistors -- black in middle with numbers, such as 102 for 1k (10×10²) Ohms
  - several small capacitors -- dull gray in middle