

# ECSESS

# Roboelectronics

H-bridge build slides

# Goals for Today

- Connect your motors to the H-bridge chip
  - Use the voltage regulator to get the correct voltage
- Connect your pic16f88 to the H-bridge and control your motors
  - Write some functions to control the movement of your robot

## Next Week

- Combined concepts: Putting all the elements together to get a working robot

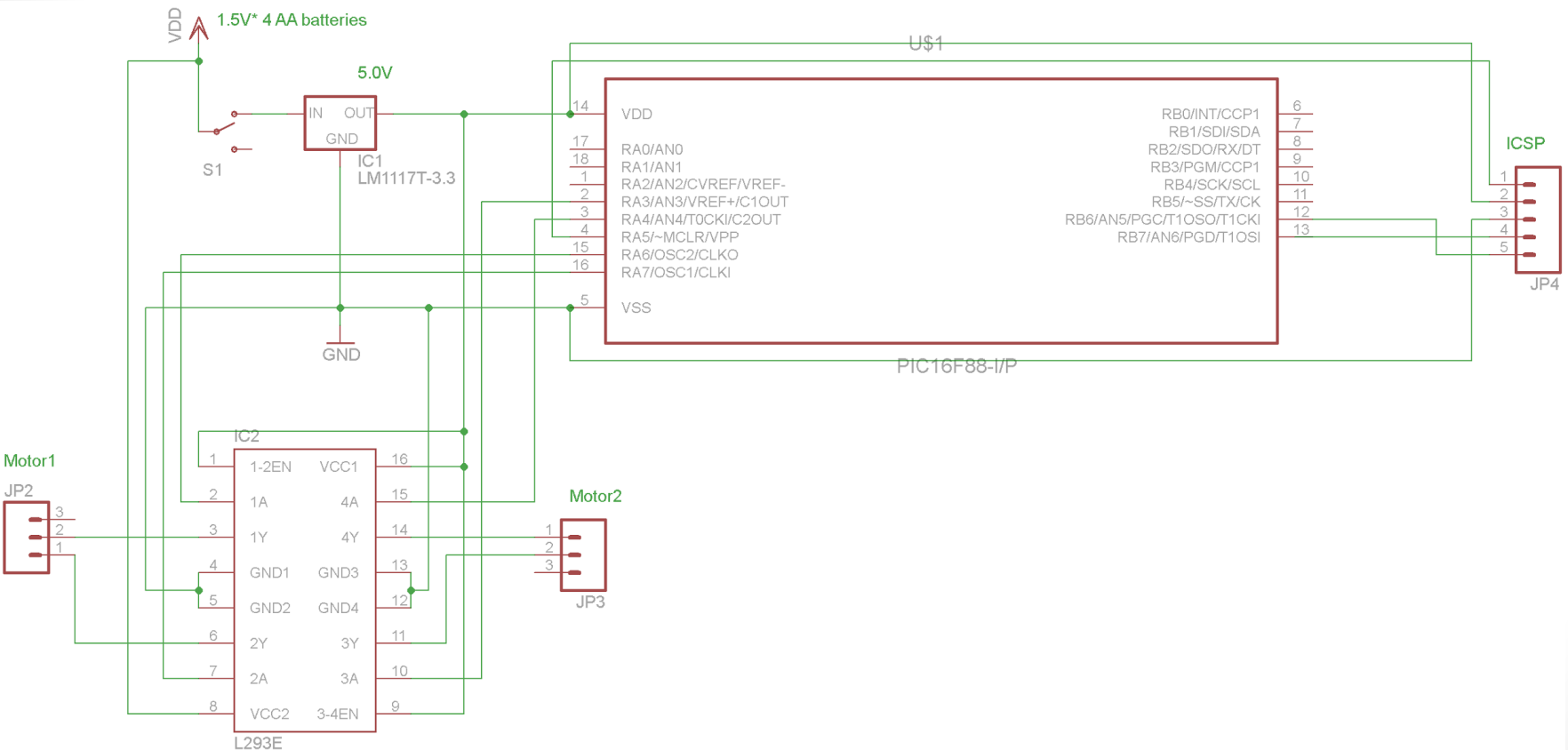


# Required Material

- Circuit
  - PIC16F88
  - PicKit3
  - L293d H-bridge
  - Motors
  - 4x AA battery holder
- Robot
  - Complete your chasis and put everything together



# Circuit to build



# Resources

- Datasheets

- L293d (H-bridge): <http://www.ti.com/lit/ds/symlink/l293d.pdf>
- PIC16F88: <http://ww1.microchip.com/downloads/en/DeviceDoc/30487D.pdf>
- Motors: [http://www.pololu.com/file/download/fa\\_130ra.pdf?file\\_id=0J11](http://www.pololu.com/file/download/fa_130ra.pdf?file_id=0J11)

- Further Reading

- Microchip application note about DC Motors: <http://ww1.microchip.com/downloads/en/appnotes/00905a.pdf>