NAME MSD-5

COURSE ENGR 4020

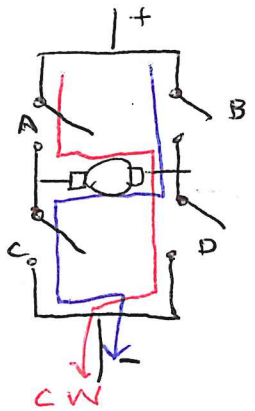
DATE

LESSON H-Bridge

PAGE 1 of 1

Motor control

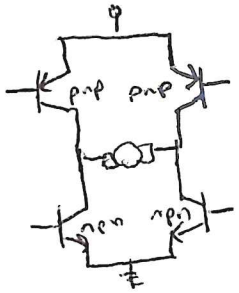
- One shortcoming of last lecture is that we can only drive the motors 1 direction
- for a robot we need that motor to go both directions
- solution: H bridge!



A, D on = CW

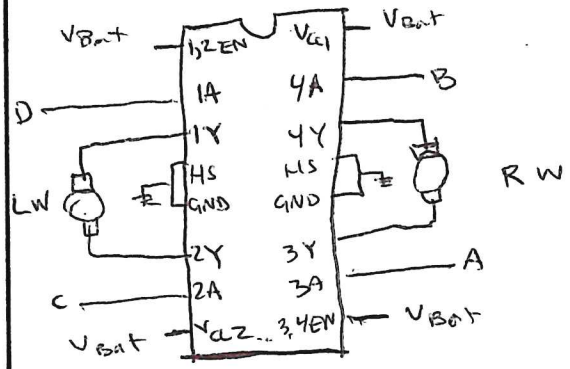
B, C on = CCW

- How is this implemented? We just saw last time that transistors can be used as switches
  - single H-bridge circuit



- In lab, we will build one

- on your robot, you have an integrated circuit chip with two H-bridges
  - L293 Datasheet



- pins A, B, C, D are connected to the micro controllers digital pins
- works according to following logic

A High	B low	↑ RW
A low	B High	↓ RW
C High	D low	↑ LW
C low	D high	↓ LW

Ex: write code and wire things up to get motors spinning