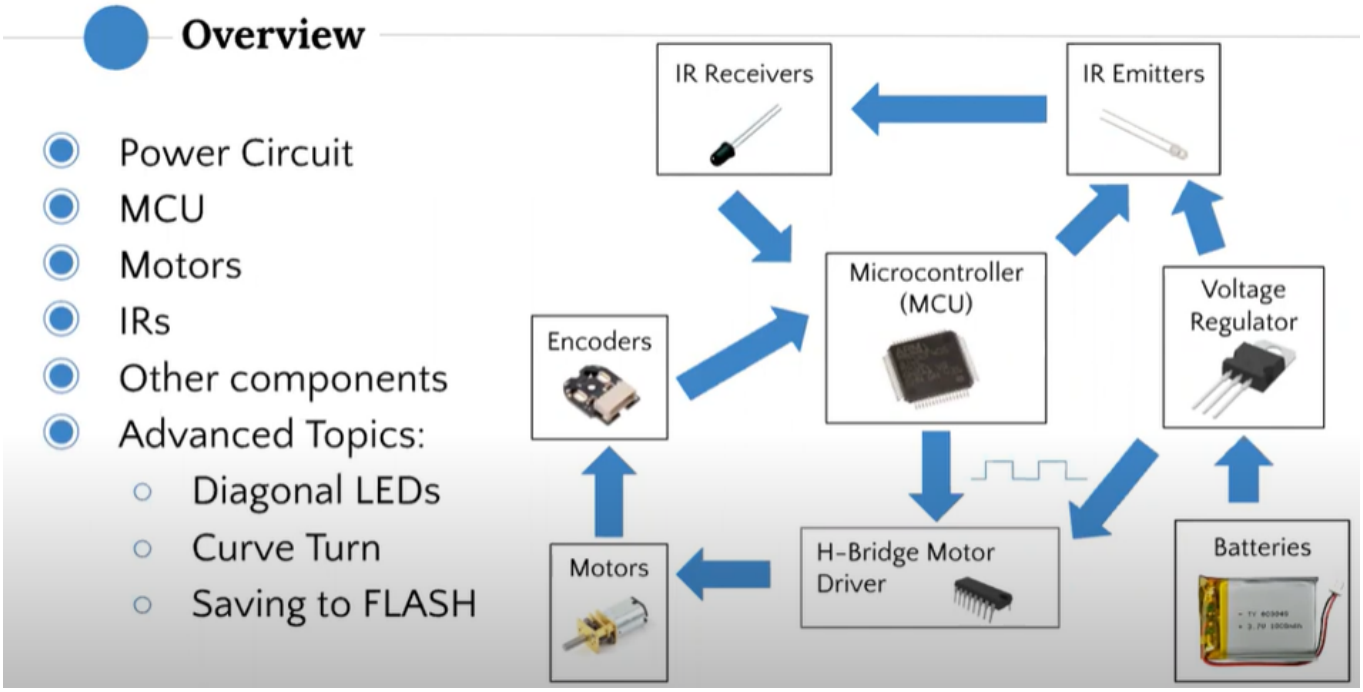
Anatomy of Micromouse



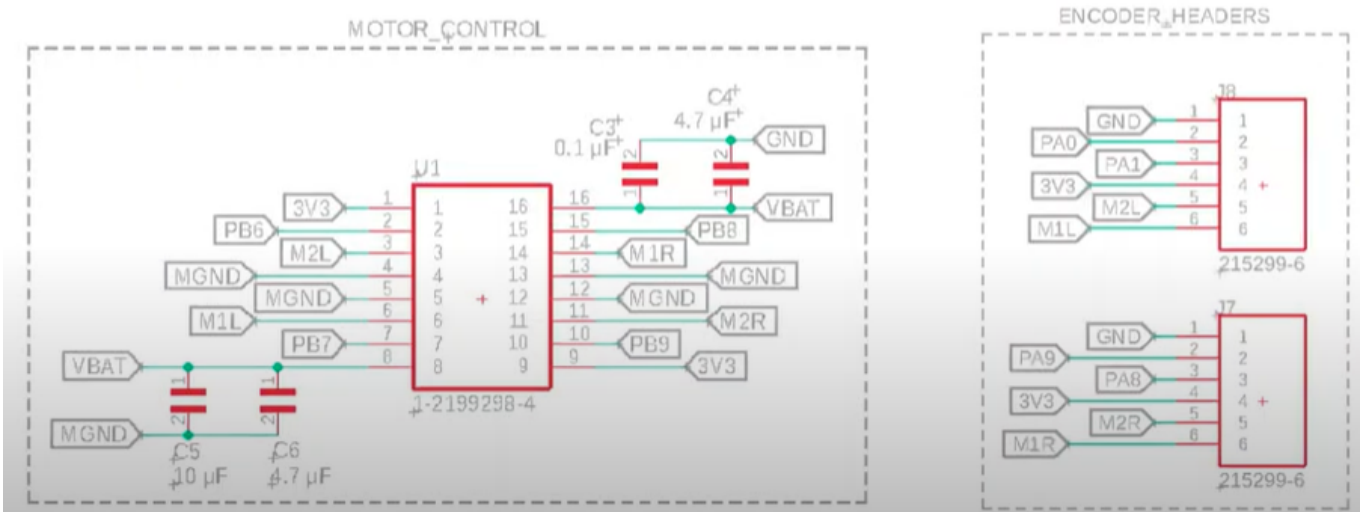
2. batteries and test points and switch
3. Voltage regulator
4. Motors- 30:1 gear ratio, 6V ideal operating voltage max current draw- 0.67 A

15:1 gear ratio- more speed but encoder counts half as precise
less precise encoder counts mean the angular rotation would be less precise but better speed during turns

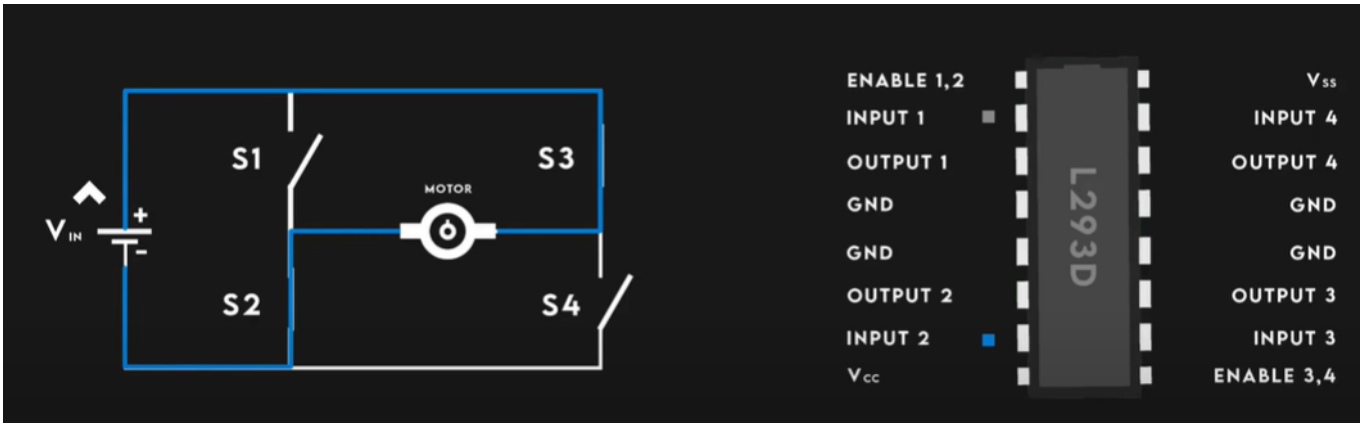
5. Encoder options- top entry, side entry
6. H-bride and encoder

For more info about H-Bridges and Encoders, click HERE

H-Bridge & Headers

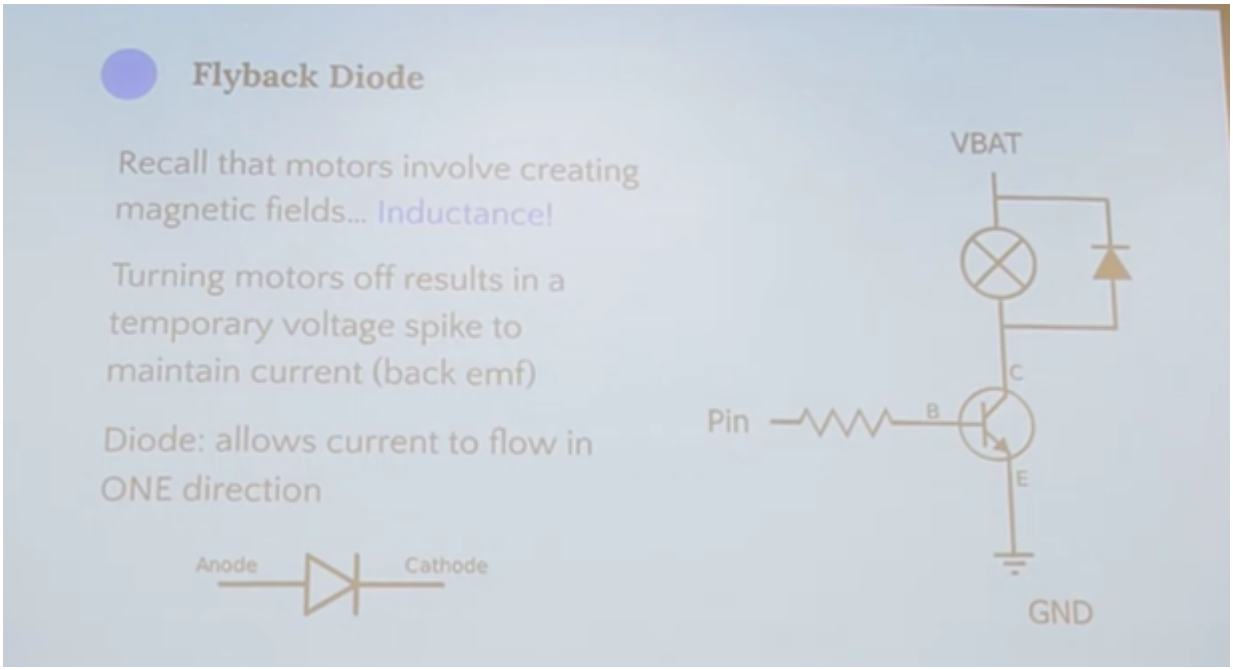


7. IR Emitter- a transistor is used to switch on or off the IR emitter,
8. Gyroscope

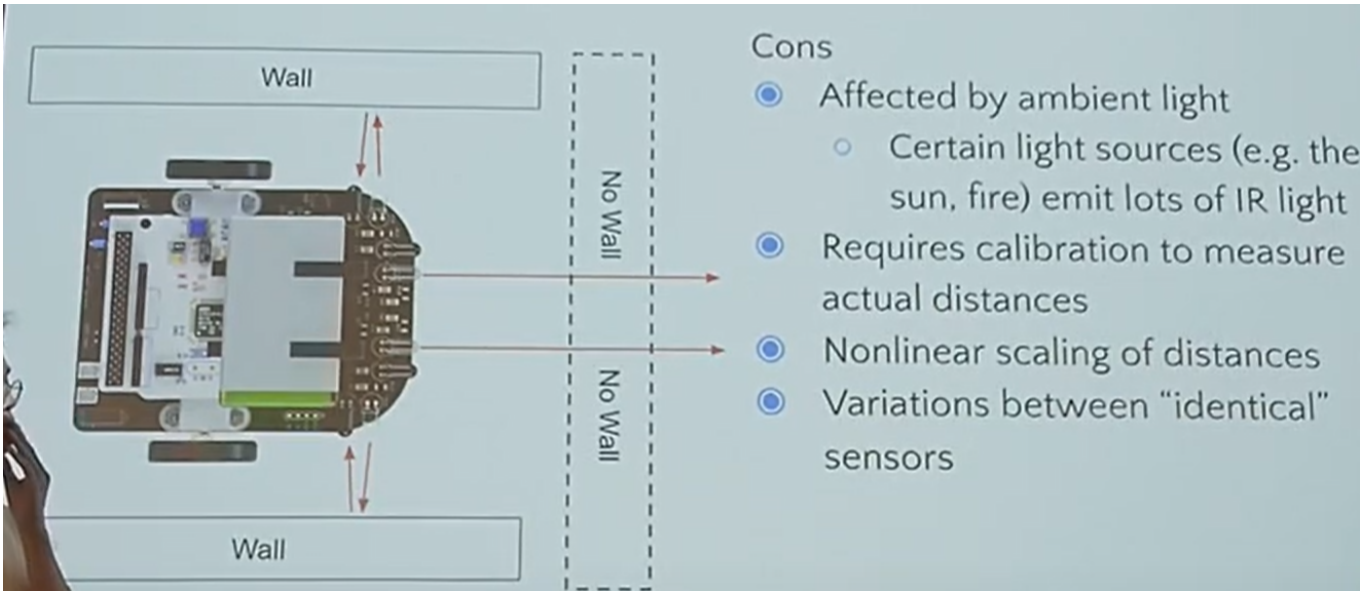


INPUT 1	INPUT 2	ENABLE 1,2	RESULT
0	0	1	STOP
0	1	1	ANTI-CLOCKWISE
1	0	1	CLOCKWISE
1	1	1	STOP

Is the H bridge capable of supplying current to all the motors
What is the maximum current required for each motor

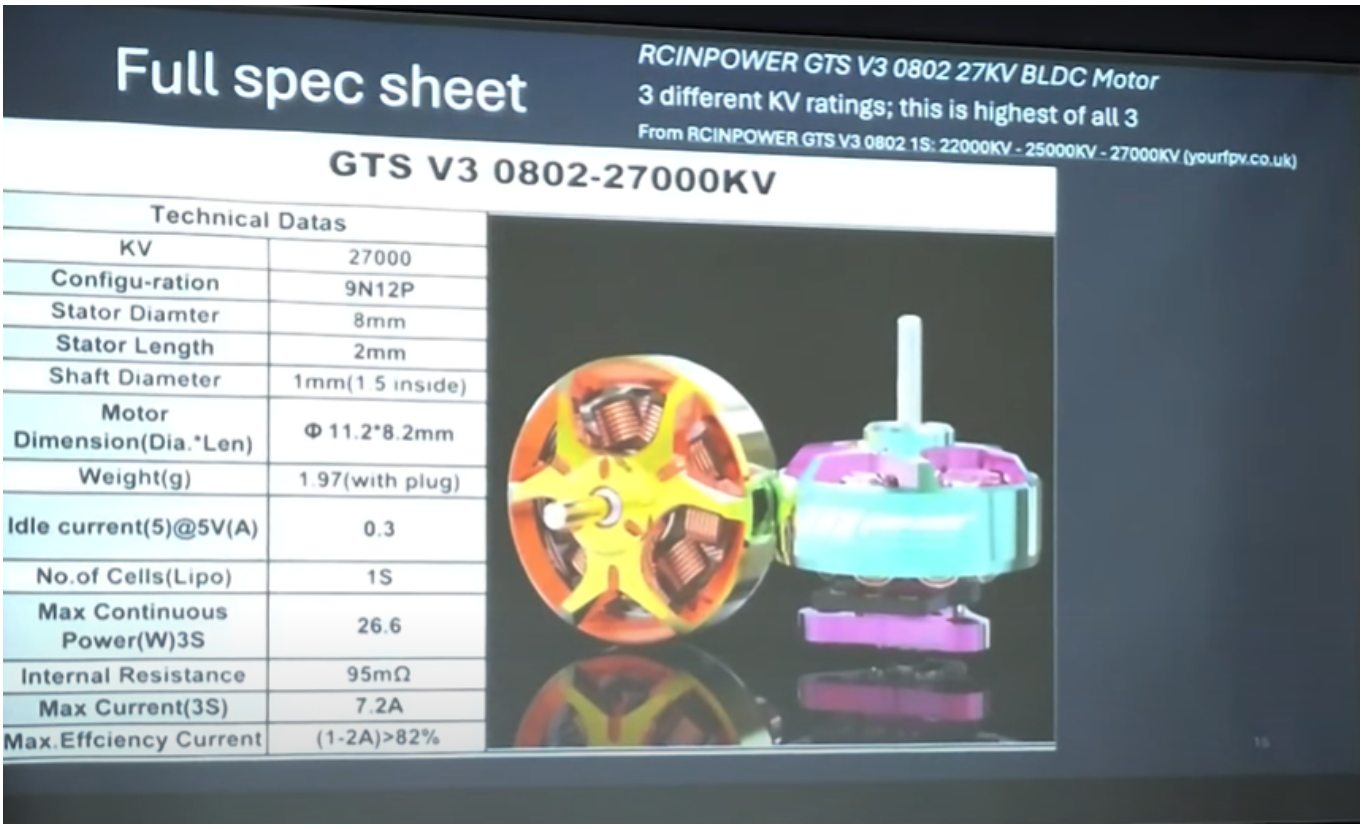


Why 3 IR sensors



because we are dealing with inverse square law to detect where the walls are we will be dealing with non linear scaling of distances which will become a little bit annoying if we are trying to figure out values
if battery are not of too much charge then the light emitted won't be of full intensity

Motor



This is an alternative motor that can be used instead of the normal DC brushed motor. The above motor is used for small drones that can fit in the palm of ones hand. it has high RPM an

How does center of mass affect deceleration

Deceleration needs to be limited to a lower value than acceleration because the mouse centre of mass is a it closer to the front wheels

Flash