MOTOR DRIVERS FOR ARDUINO

SNEHANGSHU BHATTACHARYA
4TH YEAR, ELECTRONICS & COMMUNICATION ENGINEERING

AGENDA

What is a motor driver?

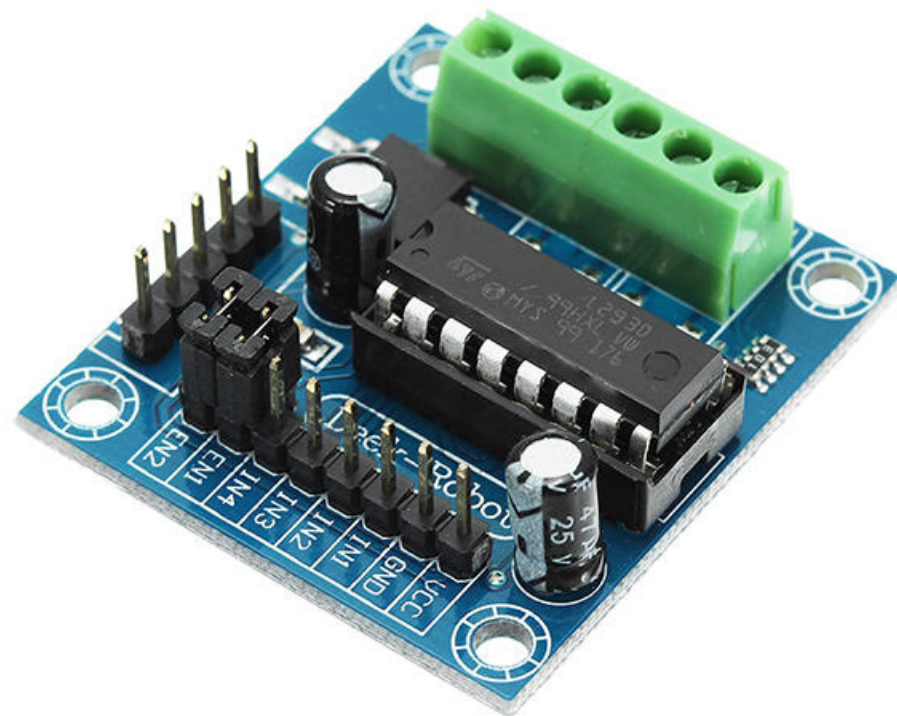Familiarization with some motor drivers

Interfacing with Arduino
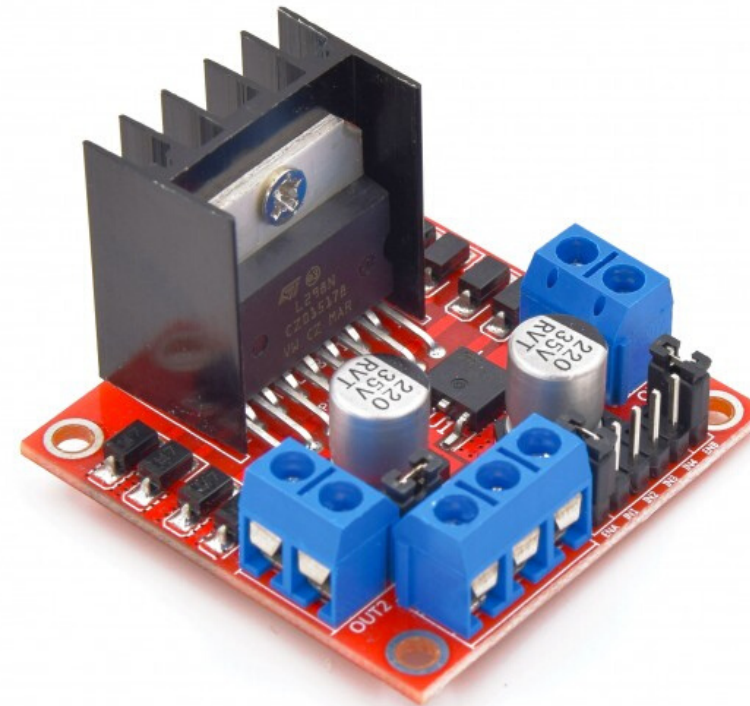
Demonstation of the circuit

WHAT IS A MOTOR DRIVER

"Motor drivers are current amplifiers which accepts low current signals from microcontrollers and converts it into a high current signals that helps to drive the motors."
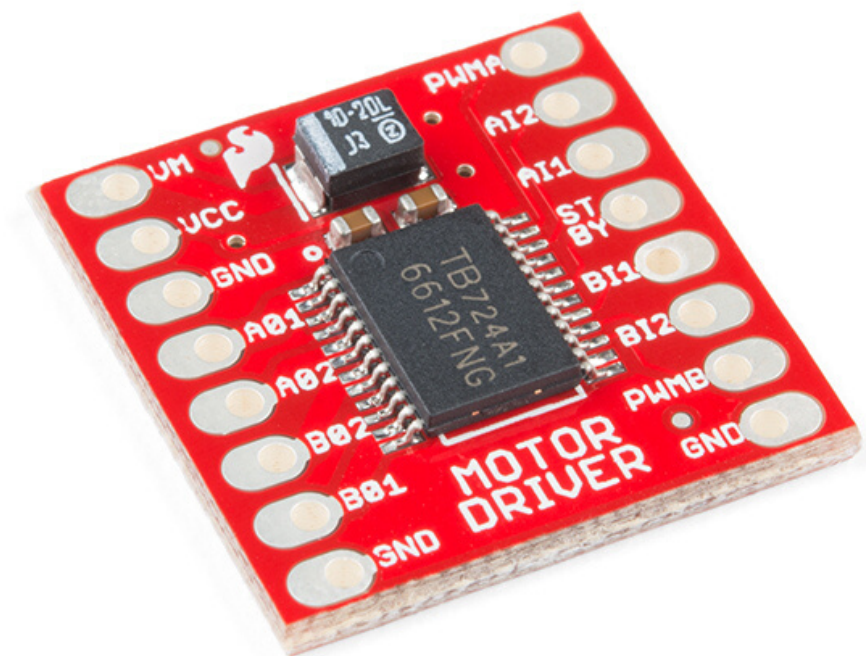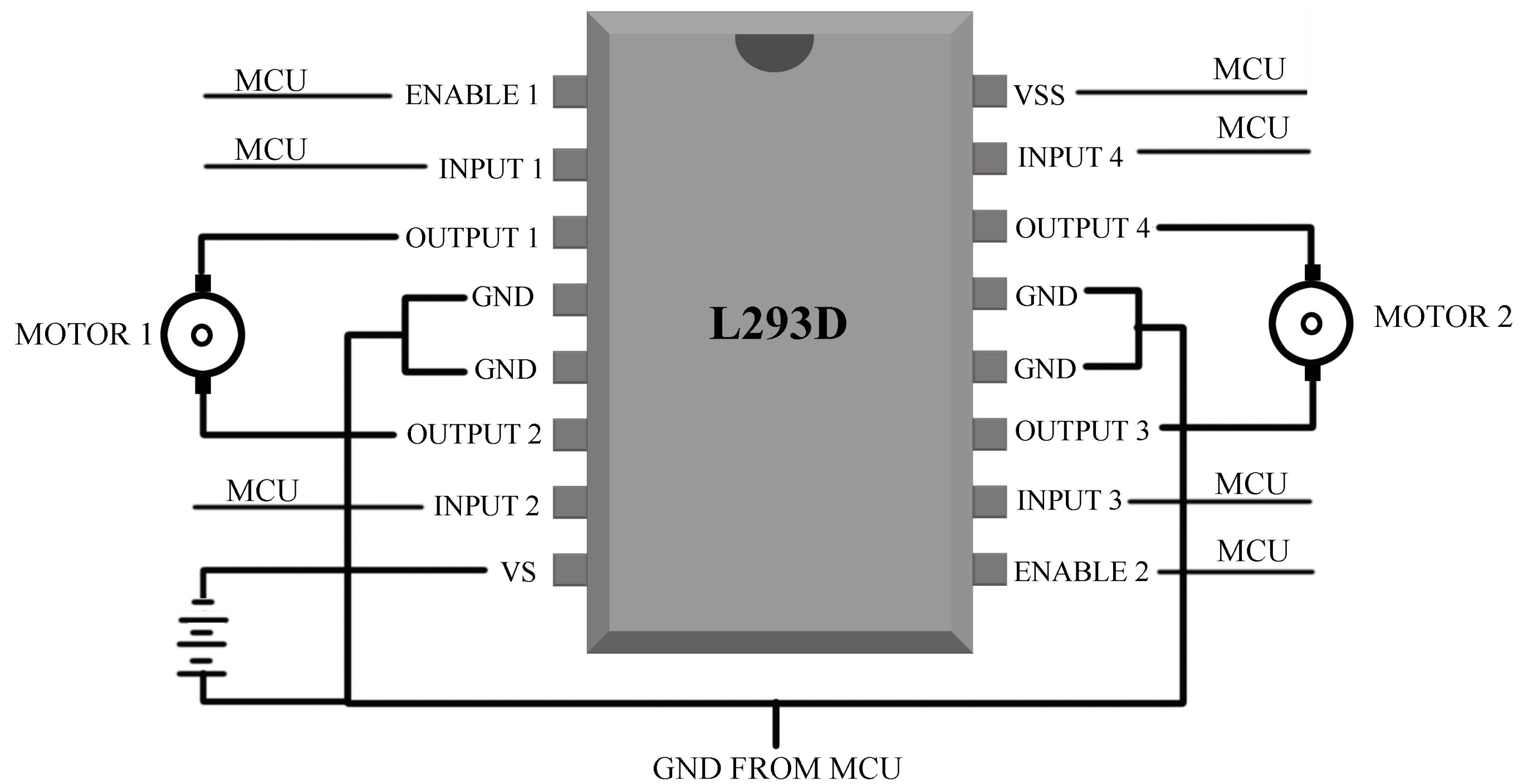
SOME WELL KNOWN MOTOR DRIVERS

L293D

L298N

TB66

L293D PINOUT

MCU — ENABLE 1

MCU — INPUT 1

OUTPUT 1

MOTOR 1

GND

GND

OUTPUT 2

MCU — INPUT 2

VS

VSS — MCU

INPUT 4 — MCU

OUTPUT 4

MOTOR 2

GND

GND

OUTPUT 3

INPUT 3 — MCU

ENABLE 2 — MCU

L293D

GND FROM MCU

MOTOR SPEED CHART

Enable 1	Motor1 Speed	Enable 2	Motor2 Speed
8-bit PWM (0)	Stop	8-bit PWM (0)	Stop
8-bit PWM (64)	25% Speed	8-bit PWM (64)	25% Speed
8-bit PWM (128)	50% Speed	8-bit PWM (128)	50% Speed
8-bit PWM (192)	75% Speed	8-bit PWM (192)	75% Speed
8-bit PWM (256)	100% Speed	8-bit PWM (256)	100% Speed

MOTOR DIRECTION CHART

Input 1	Input 2	Motor Direction
Low(0)	Low(0)	Brake
High(1)	Low(0)	Forward
Low(0)	High(1)	Backward
High(1)	High(1)	Brake

ARDUINO INTERFACING CIRCUIT WITH L293D
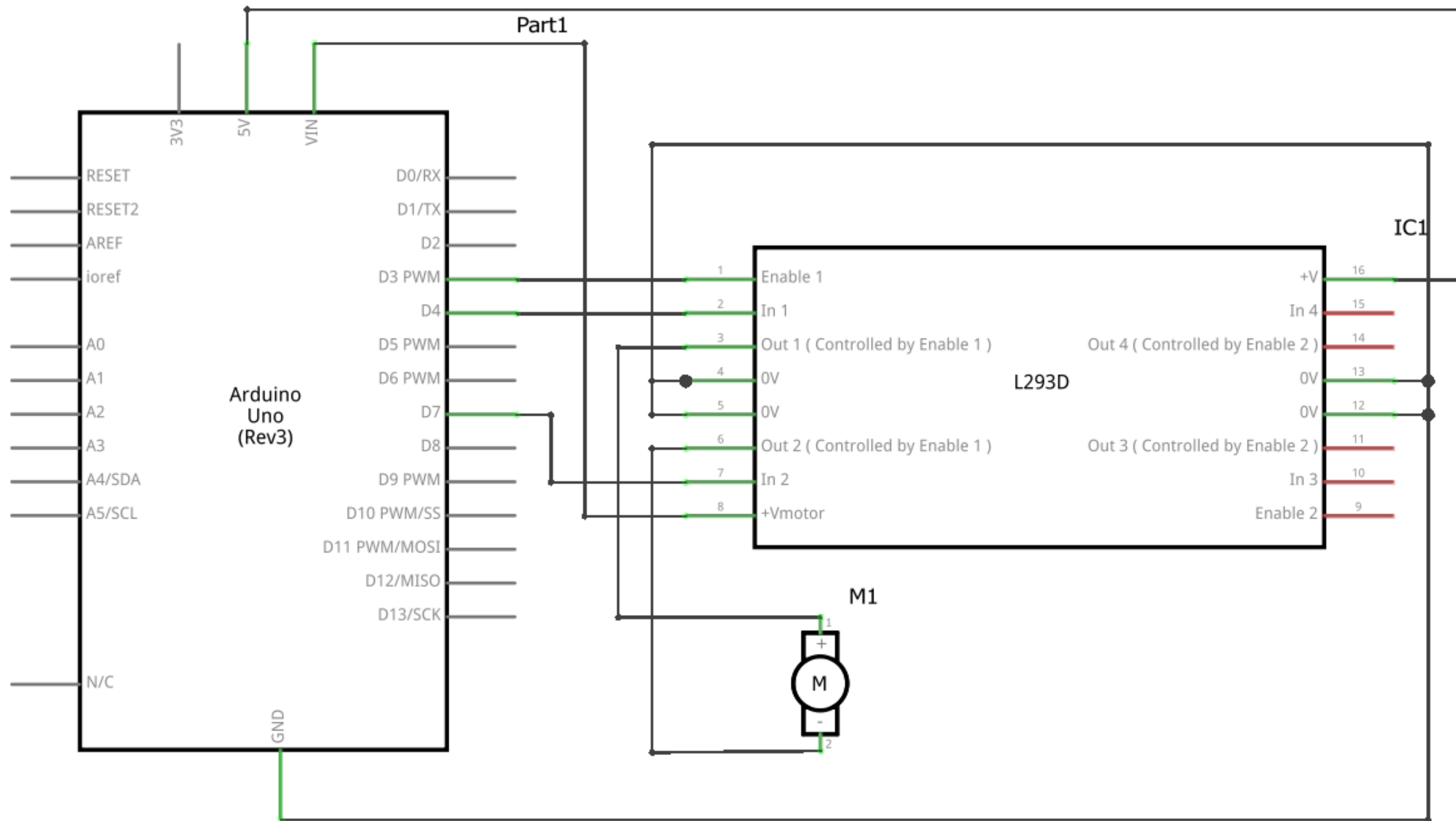
THANK YOU

CONNECTIONS
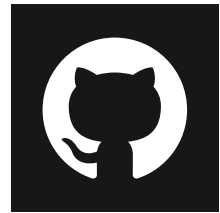
github.com/forkbomb-666

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Electron Devices Society