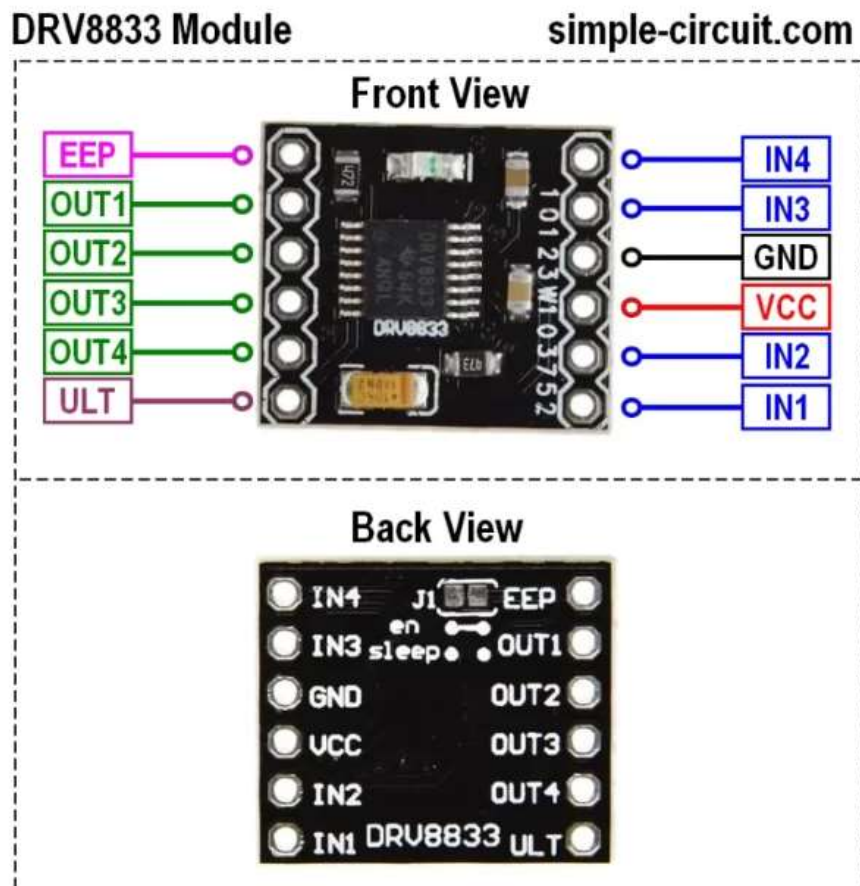


DRV8833 MODULE:

Today, most robotic projects are based on DC motors where speed and direction of rotation of this type of motors are controlled with the help of a driver circuit such as the DRV8833. The DRV8833 is a motor driver IC (integrated circuit) from Texas Instruments commonly used in robotic projects. It is designed to control the speed and direction of two DC motors and can handle a voltage range of 2.7V to 10.8V. The DRV8833 is a dual H-bridge driver, which means it can control two motors independently. The DRV8833 is capable of driving motors with a peak current of 2A and a continuous RMS current of 1.5A per H-Bridge (PWP and RTY Package Options). It also includes built-in protection features such as short-circuit protection, overcurrent protection, overtemperature protection, and undervoltage lockout. As an addition to DC motors, the DRV8833 can drive two DC brush motors, a bipolar stepper motor, solenoids, or other inductive loads. To use the DRV8833 in a robotic project, we need to connect it to a microcontroller such as an Arduino or a Raspberry Pi. The microcontroller will send commands to the DRV8833 to control the speed and direction of the motors. This tutorial shows how to control speed and direction of rotation of two robot car DC motors using Arduino board and DRV8833 module, a two potentiometers connected to the Arduino board are used to set speed and direction of the two motors. The DRV8833 board with pinout used in this project is shown below:



DRB8833 Module Circuit Schematic Diagram:

The DRV8833 module circuit schematic diagram is shown below:

