

```
1  from machine import Pin, PWM
2
3  class DRV8833:
4
5      def __init__(self, pinA, pinB, frequency=10000):
6          '''Instantiate controller for one motor.
7          pinA: pin connected to AIN1 or BIN1
8          pinB: pin connected to AIN2 or BIN2
9          frequency: pwm frequency
10         '''
11         self.pin1 = PWM(Pin(pinA), freq=frequency, timer=2)
12         self.pin2 = PWM(Pin(pinB), freq=frequency, timer=3)
13
14     def set_speed(self, value):
15         if value > 100:
16             value = 100
17         elif value < -100:
18             value = -100
19         '''value: -100 ... 100 sets speed (duty cycle) and direction'''
20         if value > 0:
21             self.pin1.duty(100)
22             self.pin2.duty(100 - value)
23         elif value < 0:
24             self.pin1.duty(100 - (-1 * value))
25             self.pin2.duty(100)
26         else:
27             self.pin1.duty(value)
28             self.pin2.duty(value)
```