

# Laser\_Power\_Off\_Test

September 2, 2017

## 1 Laser Power Off Test

### 1.1 Object

- Figure out at what voltage the laser resets the MCU

## 2 Code:

```
In [1]: import GCode
import GRBL
cnc = GRBL.GRBL(port="/dev/cnc_3018")

print("Laser Mode: {}".format(cnc.laser_mode))
```

Laser Mode: None

### 2.1 Test Setup

Power Supply: - CiciuitSpecialists CSI3010SW  
Position the paper & other things.

```
In [2]: import numpy as np

In [3]: def laser_on(pwm):
    if int(pwm) != np.uint8(pwm):
        raise(Exception("UINT8! {}".format(pwm)))
    # Set minimal power setting to focus and position laser
    cnc.cmd("M3 S{:03d}".format(np.uint8(pwm)))
    cnc.cmd("G1 F10") # Laser On

    def laser_off():
        cnc.cmd("M5") # Laser off

In [4]: laser_on(255)
```

- ~18 volts.