Internship

**TestReport**

**Microscope LED**

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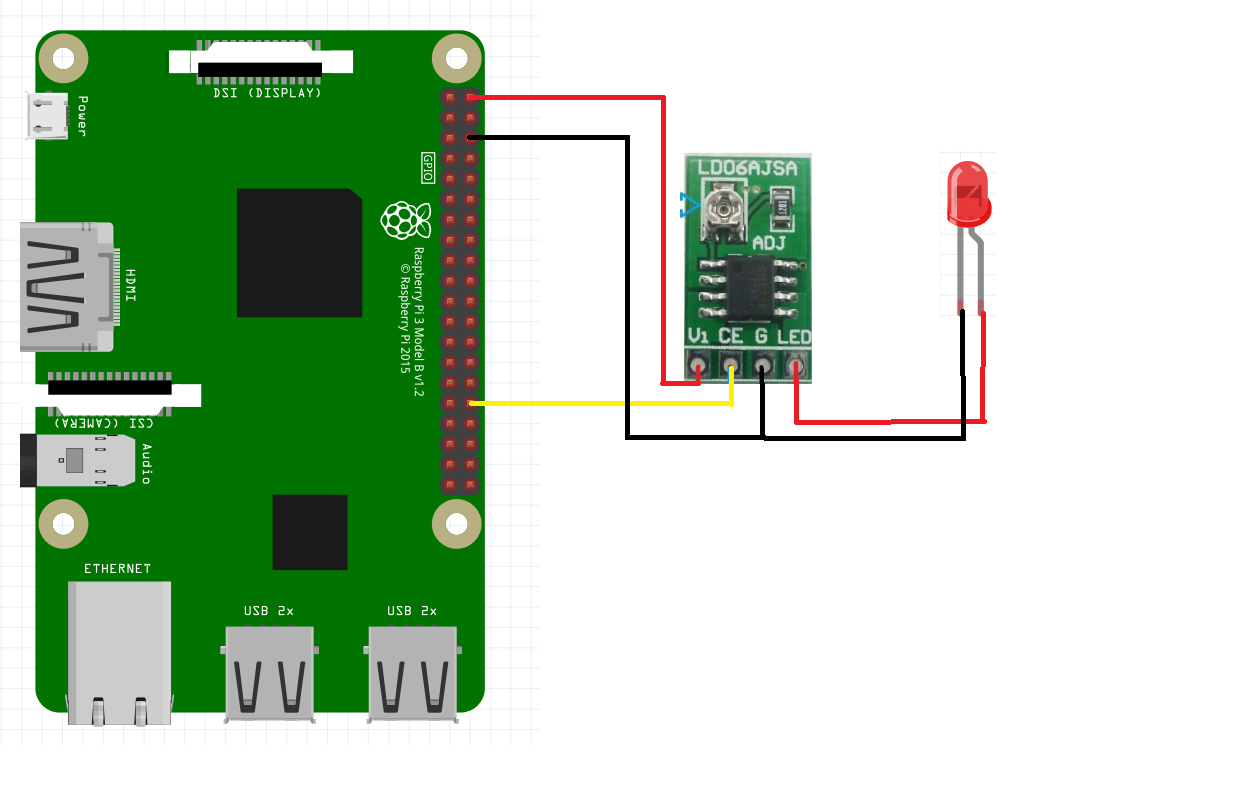
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# Objective

The component that will be tested in this test report will be the microscope LED. This component is responsible for creating sufficient light for the camera module.

# Test Setup

* Testing equipment:
  + Hardware:
    - LabNation Cross Platform Oscilloscope
  + Software:
    - VSC
    - SSH connection to RPI
    - Smartscope
* Setup hardware/software



# Test Results

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test | Test passed if: | Observations | Test passed | Test Failed | Pictures | Notes |
| T1.0 | Device turns on | Device turns on | X |  | Afbeelding met tekst  Automatisch gegenereerde beschrijving |  |
| T1.1 | Device turns off | Device turns off | X |  | Afbeelding met tekst  Automatisch gegenereerde beschrijving | Expected 0V flat line, not this pwm wave |
| T1.2 | PWM control works | LED dims and brightens | X |  | Afbeelding met tekst  Automatisch gegenereerde beschrijving |  |

# Conclusions

* The LED functions

# Further actions

* Since the LED seems to be turned off enough to not be visible for the human eye it may be enough to leave things as they are regarding this strange signal.

# Later discoveries

* We figured out that the reason for the signal not going to zero was because the value of 0, was not actually zero but around 35000hz by a constant. We changed the value to 0 and now it works fine.