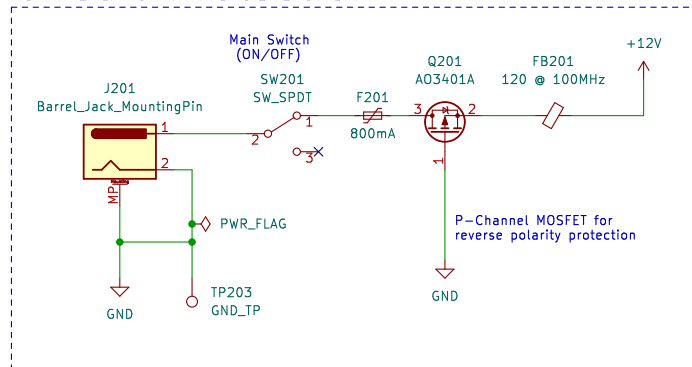
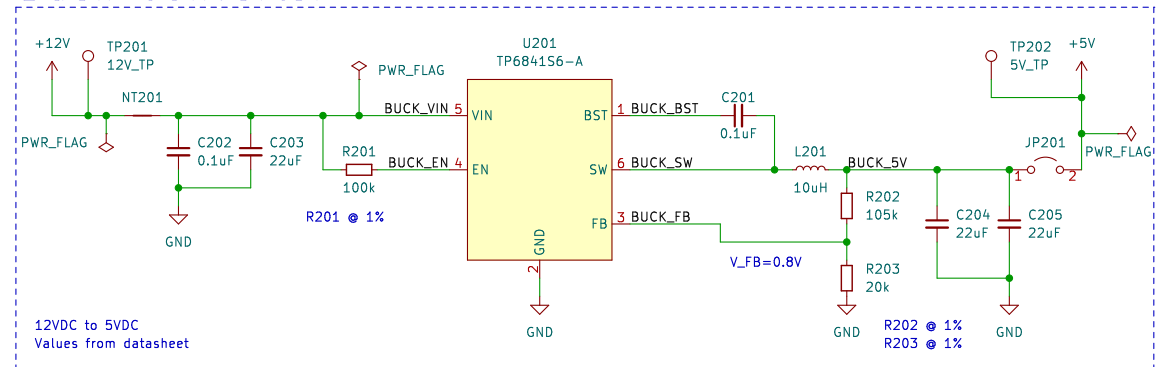


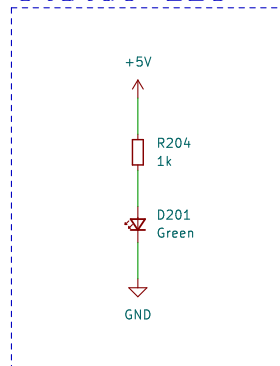
Circuit Protection



Buck Converter



Status LED



Designed by: Manuel Lagarto

Lizard Electronics

Sheet: /PowerSupply/

File: PowerSupply.kicad_sch

Title: Power Supply Circuit

Size: A4 Date: 2022-09-07

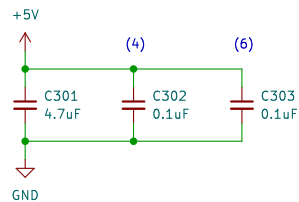
KiCad E.D.A. kicad (6.0.6)

Rev: v1.0.0

Id: 2/7

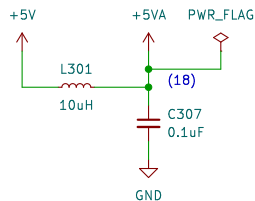
ATmega328P MCU

Digital Supply Filtering

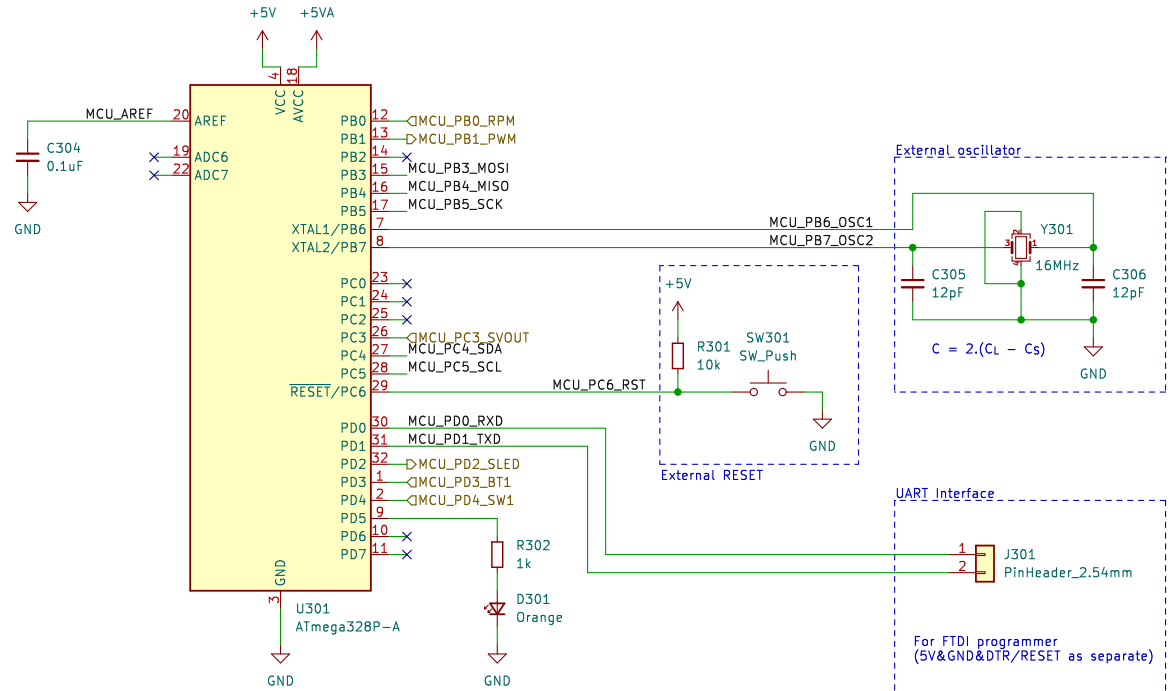


1x bulk capacitor + 0.1uF per VCC pin (place each near)

Analog Supply Filtering

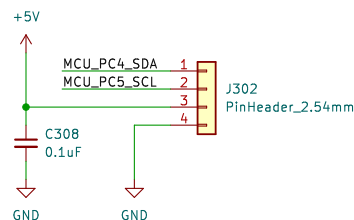


Keep this circuit near AVCC pin

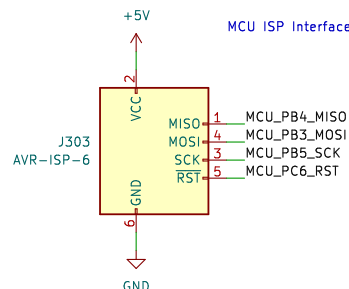


Connectors

OLED Display



MCU ISP Interface



Designed by: Manuel Lagarto

Lizard Electronics

Sheet: /MCU/

File: MCU.kicad_sch

Title: MCU Circuit & Board Interfaces

Size: A4

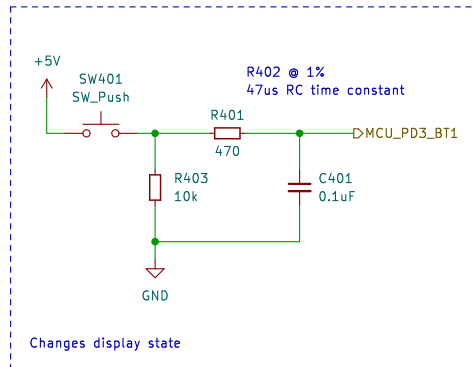
Date: 2022-09-13

Rev: v1.0.0

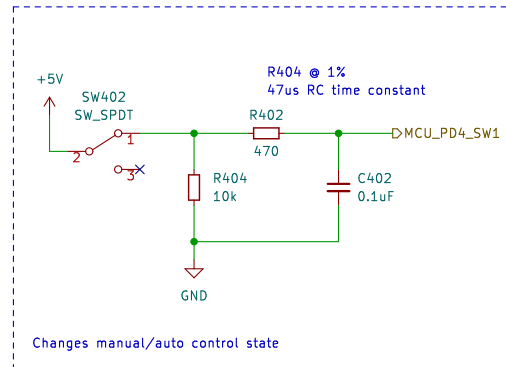
KiCad E.D.A. kicad (6.0.6)

Id: 3/7

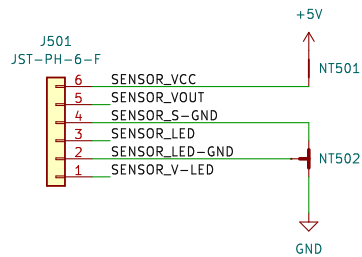
Push Button



Slide Switch

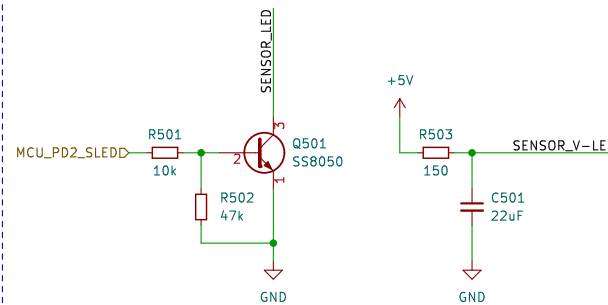


Sensor Connector

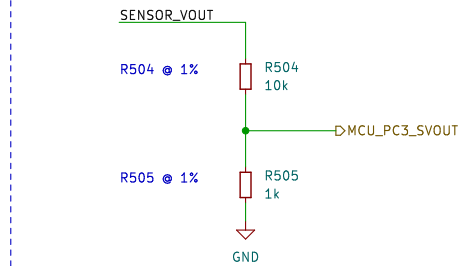


Sharp GP2Y1010AU0F dust sensor
JST S6B-PH-K-S female angled connector

LED Driver

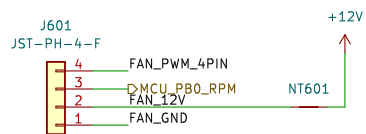


Output Signal



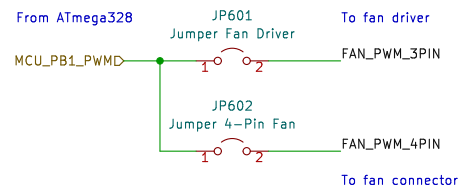
$AIN_S-OUT = (SENSOR_VOUT * R505) / (R504 + R505)$
Sensor Voltage = $AIN_S-OUT * (R504 + R505)$

Fan Connector



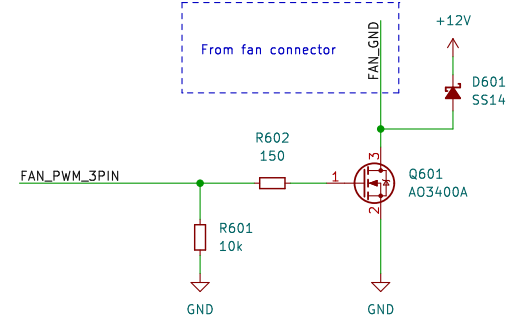
Connector for 3-pin & 4-pin fans
JST S4B-PH-K-S female angled connector

PWM Jumper



Jumper to select fan control type

Driver Circuit



PCB Mounting Holes

