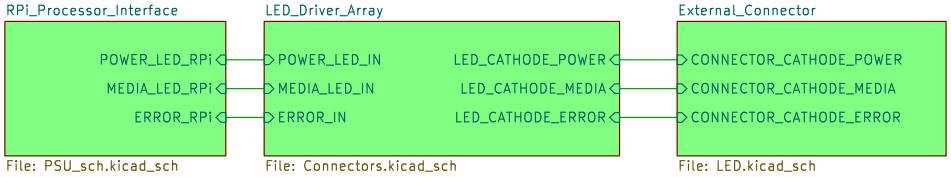


Additional pin functions:
https://pinout.xyz/

Sheet: /
File: S-PCBASSY-001-01.kicad_sch

Title:

Size: A4	Date: 15 nov 2012	**Rev:**
KiCad E.D.A. 9.0.7		Id: 1/4

Notes

EEPROM: Use the AT24C32 symbol. Connect SDA to ID_SD (Pin 27) and SCL to ID_SC (Pin 28).

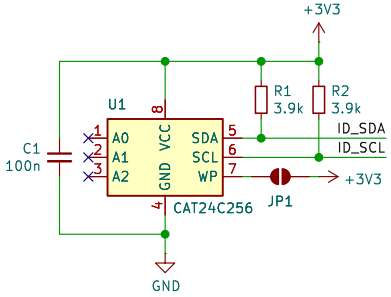
EEPROM

ID_SD and ID_SC PINS:
These pins are reserved for HAT ID EEPROM.

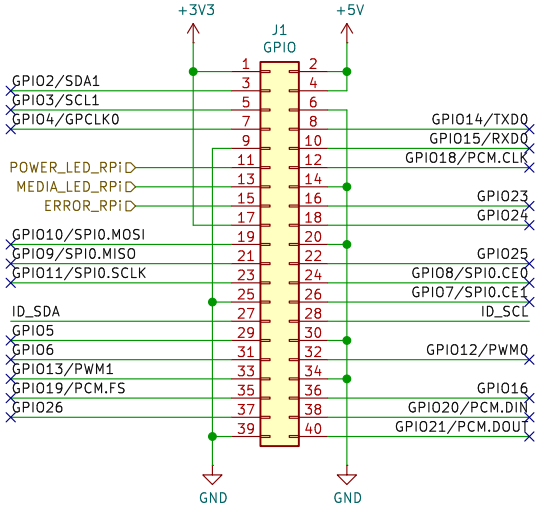
At boot time this I2C interface will be interrogated to look for an EEPROM that identifes the attached board and allows automagic setup of the GPIOs (and optionally, Linux drivers).

Bridging JP1 enables write protection.

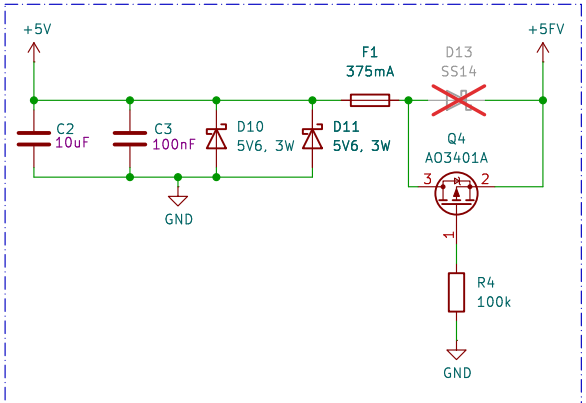
DO NOT USE these pins for anything other than attaching an I2C ID EEPROM. Leave unconnected if ID EEPROM not required.



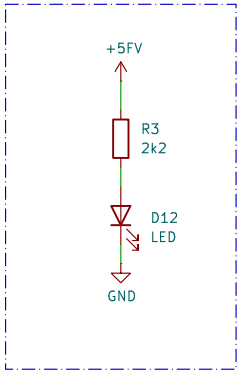
Rpi Interface



5V Filtering and Protection



5V Power indicator

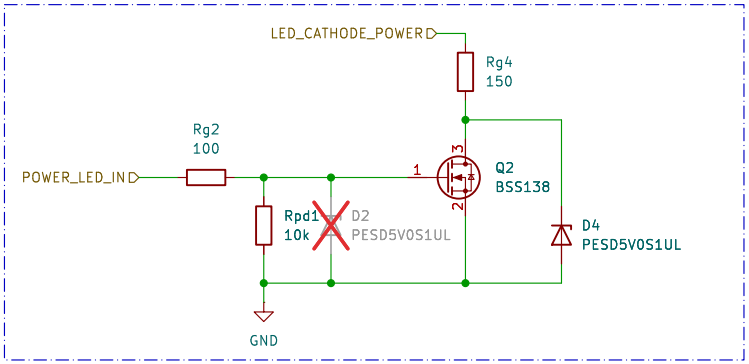


Sheet: /RPi_Processor_Interface/
File: PSU_sch.kicad_sch

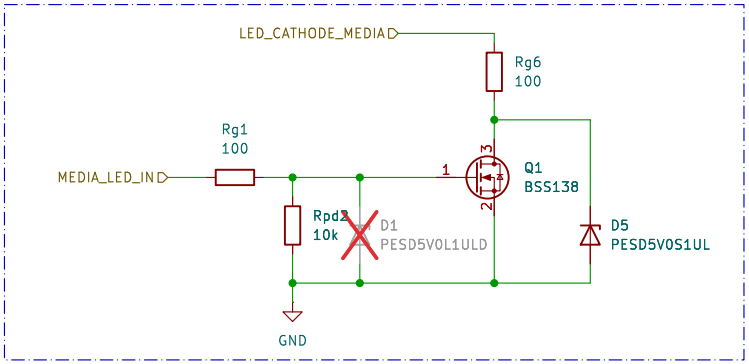
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.7		Id: 2/4

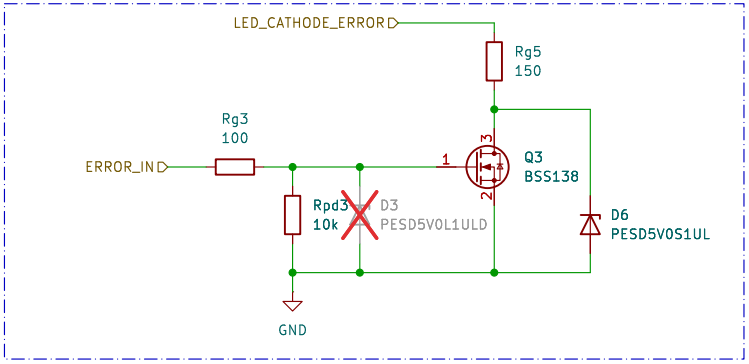
Blue LED Driver



Green LED Driver



RED LED Driver



Notes

Current Limiter (Rlimit): Calculated for 5V.
Formula: R=(Vcc−Vf)/If
For a standard Green LED (2.1Vf, 20mA): 150Ω

https://ams-osram.com/products/leds/multi-color-leds/osram-displix-p3333-krtblslps1-32

LED Color	Typical Vf	Calculation	Calculated R	Standard Resistor
RED (Error)	2.0V	(5−2.0)/0.02	150Ω	150Ω
GREEN (Media)	2.1V	(5−2.1)/0.02	145Ω	150Ω
BLUE (Power)	3.2V	(5−3.2)/0.02	90Ω	91Ω or 100Ω

Sheet: /LED_Driver_Array/
File: Connectors.kicad_sch

Title:

Size: A4 | Date: | **Rev:**
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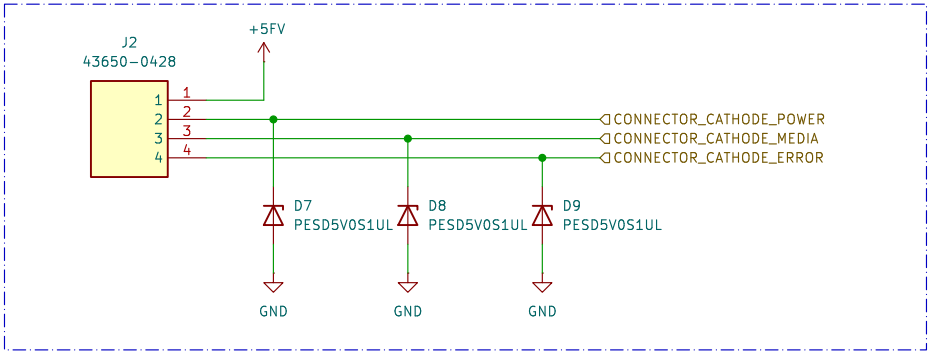
Notes

Micro-Fit 3.0 (4x1)

Aussming its Connected to a RGB LED other wise the connector should be replace with 1*6 or 2*3 connector

RGB Molex Connector



Sheet: /External_Connector/
File: LED.kicad_sch

Title:

Size: A4	Date:	**Rev:**
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