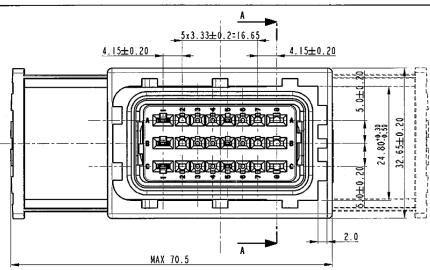
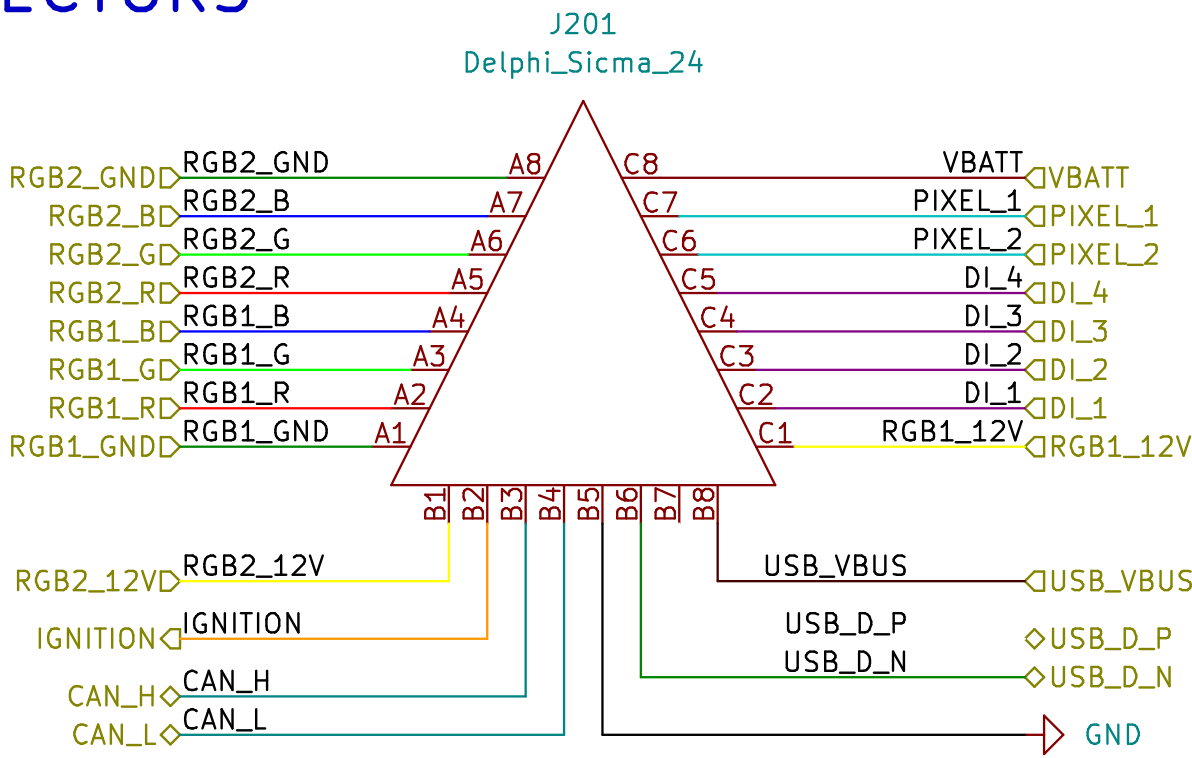
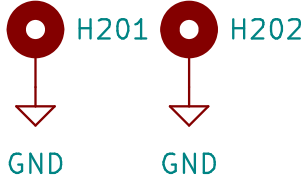
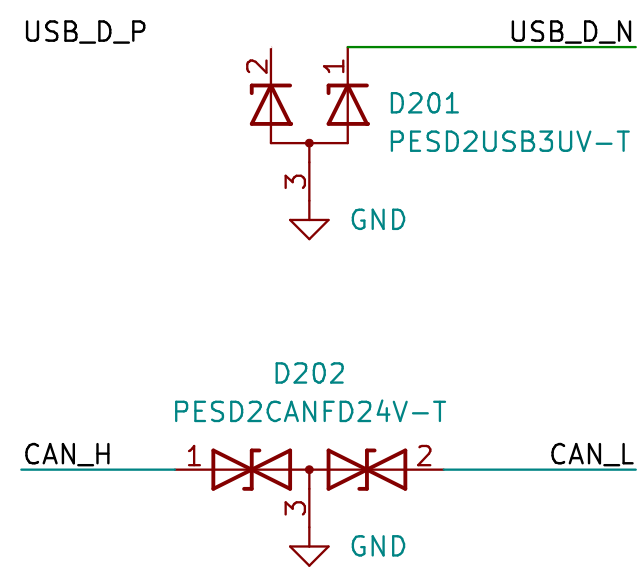




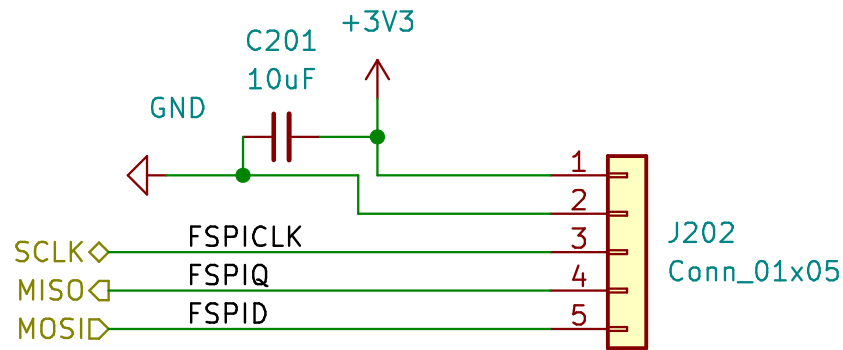
# CONNECTORS



# ESD



# DEBUG



<https://cone.codes>  
<https://github.com/miata-bot/can-link>  
**Connor Rigby**

Sheet: /Connectors/  
File: Connectors.kicad\_sch

## Title: RGB Controller V5

Size: A5	Date: 2022-06-24	Rev: B
KiCad E.D.A. kicad (6.0.2)		Id: 2/8

BUCK CONVERTER

U301  
BD33C0AWFP-CE2

CTRL  
VCC  
NC  
VO  
ADJ

IGNITION

GND

C301  
10uF

VBATT

USB\_VBUS

C302  
10uF

D301  
RB496EA

VCC

D302

GND

C303  
1uF

R301  
56.7k

R302  
10k

GND

+3V3

TP301  
3V3OUT

C304  
1uF

STATUS LED

R303  
240R

D303  
GRN

+3V3

BATTERY SENSE

VBATT

R304  
36k

TP302  
VSENSE

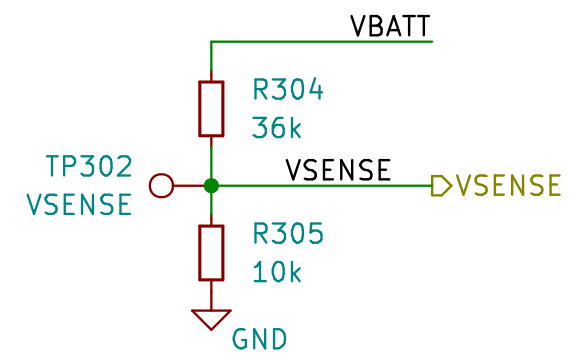
VSENSE

R305  
10k

GND

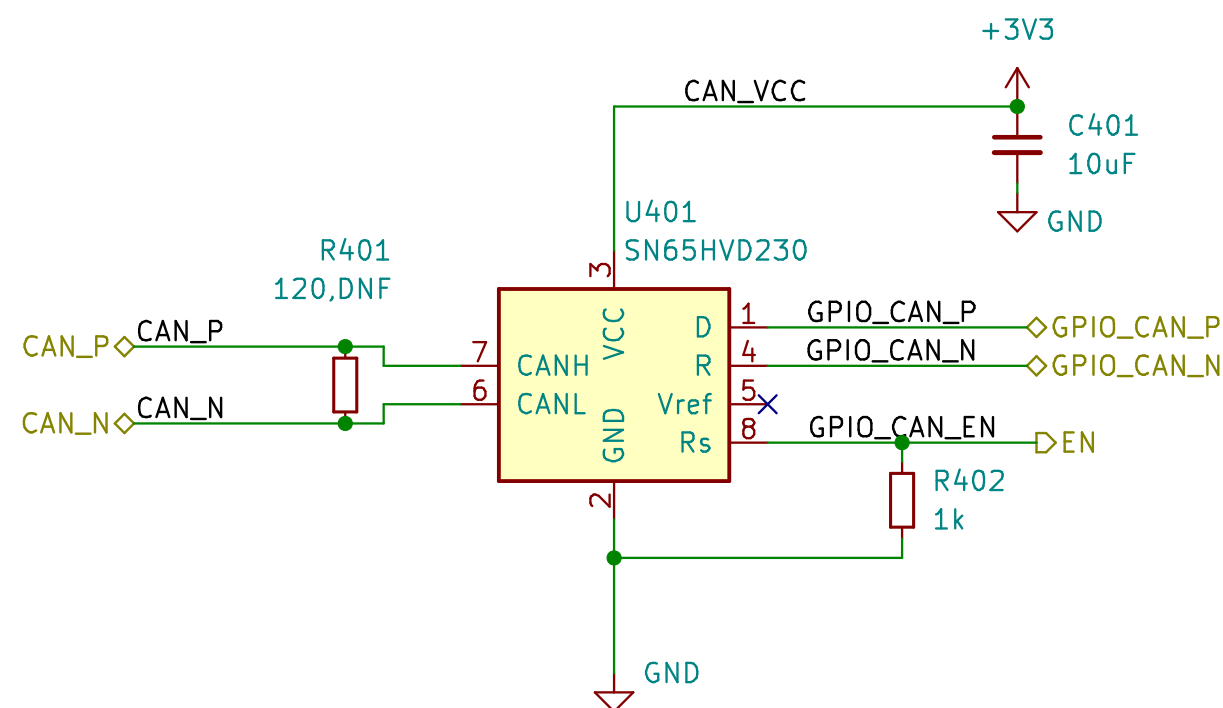
<https://cone.codes>  
<https://github.com/miata-bot/can-link>  
**Connor Rigby**  
Sheet: /Power/  
File: Power.kicad\_sch  
**Title: RGB Controller V5**  
Size: A5  
Date: 2022-06-24  
KiCad E.D.A. kicad (6.0.2)  
**Rev: B**  
Id: 3/8

## BATTERY SENSE



Id: 3/8

# CAN Transceiver



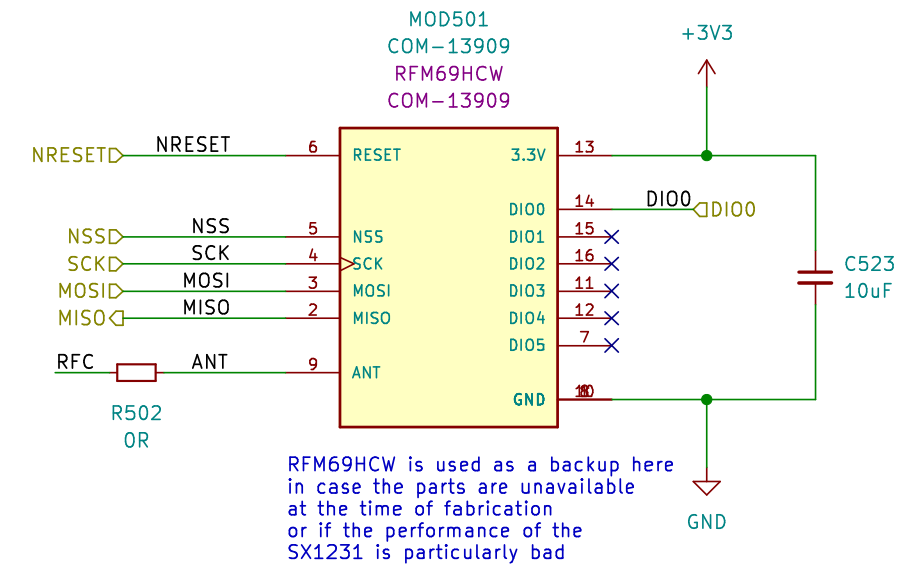
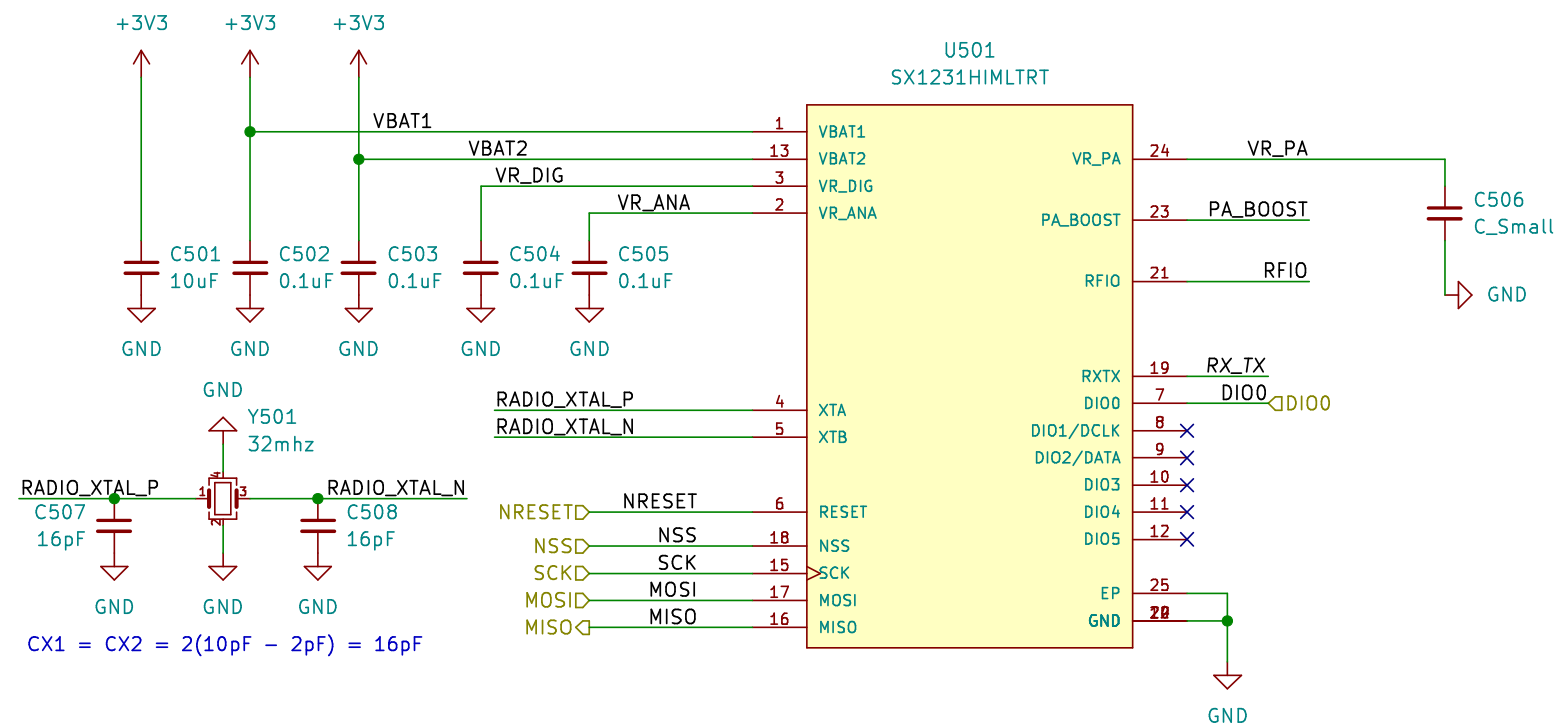
<https://cone.codes>  
<https://github.com/miata-bot/can-link>  
**Connor Rigby**

Sheet: /CAN-Bus/  
File: CAN-Bus.kicad\_sch

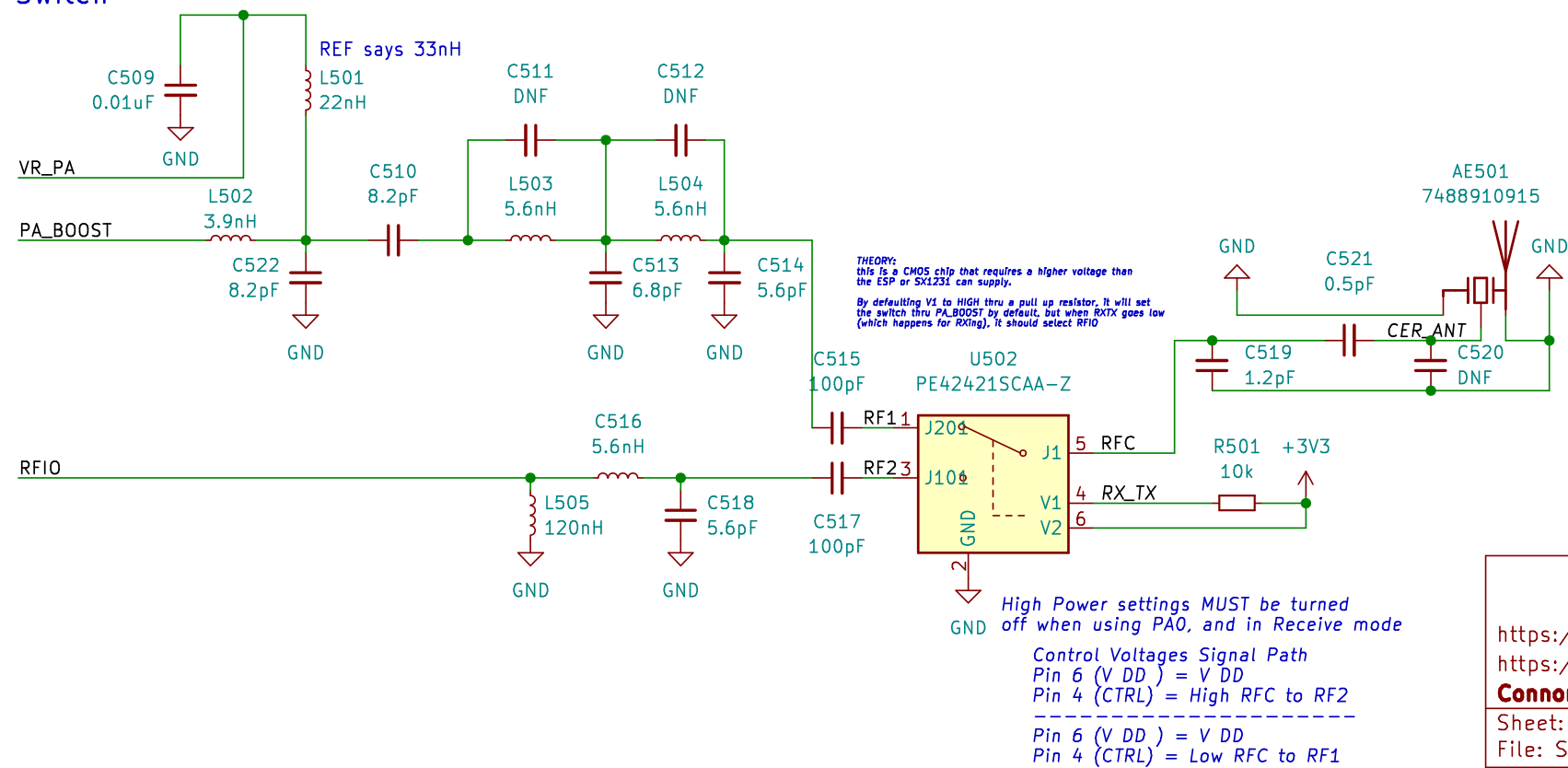
**Title: RGB Controller V5**

Size: A5	Date: 2022-06-24	<b>Rev: B</b>
KiCad E.D.A. kicad (6.0.2)		Id: 4/8

## Packet Radio



## Antenna Matching Network and RF Switch



<https://cone.codes>  
<https://github.com/miata-bot/can-link>  
**Connor Rigby**

Sheet: /SX1231/  
File: SX1231.kicad\_sch

**Title: RGB Controller V5**

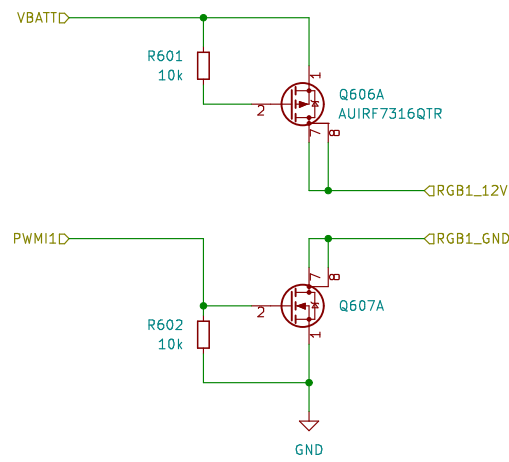
Size: A4	Date: 2022-06-24
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Size: 11	Date: 20
KiCad E.D.A.	kicad (6.0.2)

**Rev: B**

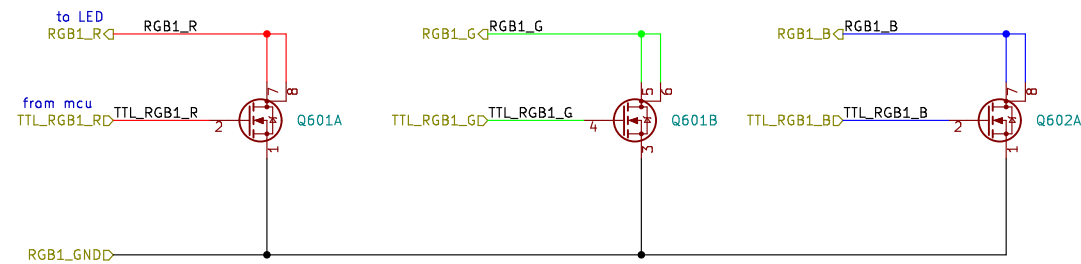
Id: 5/8

RGB PWM LED CONTROL

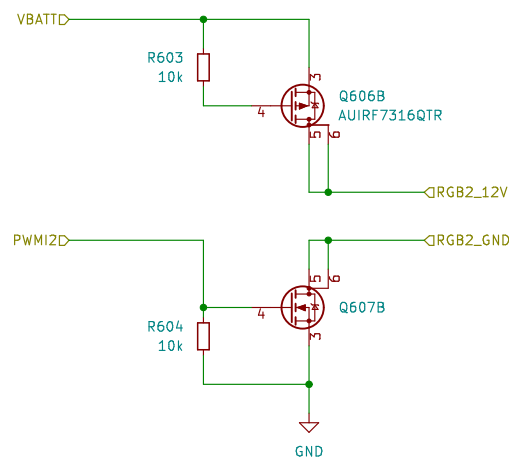


Channel #1 Voltage Output

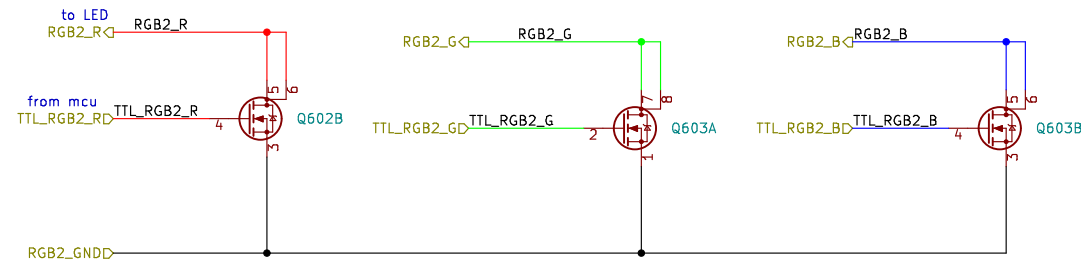
N-Channel low side Mosfets  
driven at TTL levels, drivers might be necessary



Channel #1 N-Channel Fet arrays

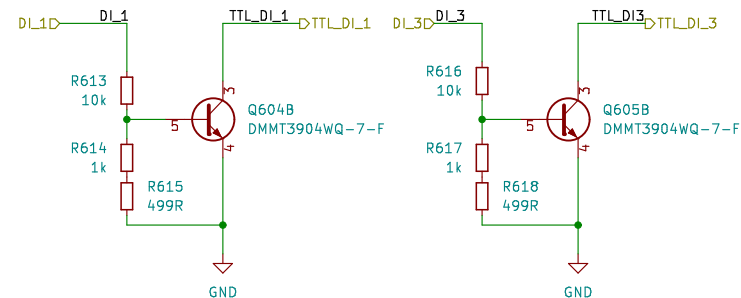
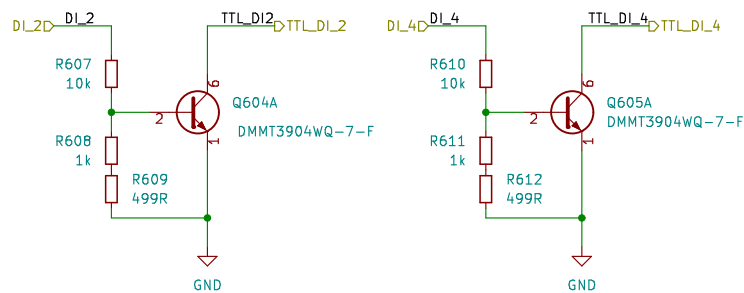


Channel #2 Voltage Output



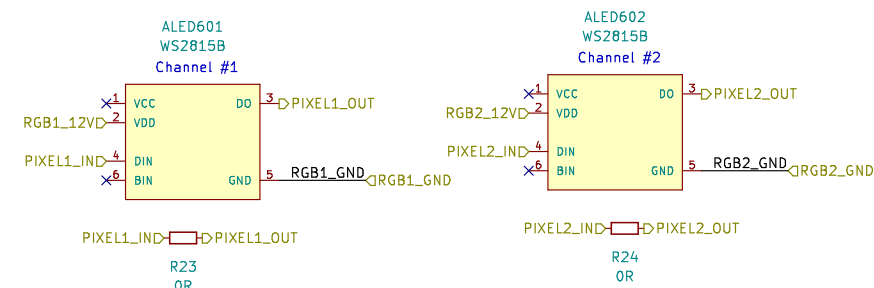
Channel #2 N-Channel Fet arrays

DIGITAL INPUT



INDIVIDUALLY ADDRESSABLE LED CONTROL

WS2815B Control  
These two LEDs are not actually fitted on  
the board, they are here to show how  
the LEDs are connected externally at the  
connector



<https://cone.codes>  
<https://github.com/miata-bot/can-link>  
**Connor Rigby**  
Sheet: /External-I0/  
File: External-I0.kicad\_sch

**Title: RGB Controller V5**

Size: A3 Date: 2022-06-24  
KiCad E.D.A. kicad (6.0.2)

Rev: B  
Id: 6/8

