

The Art and Science of PCB Design

Sheet: /Boost\_Converter/

File: boost\_converter.kicad.sch

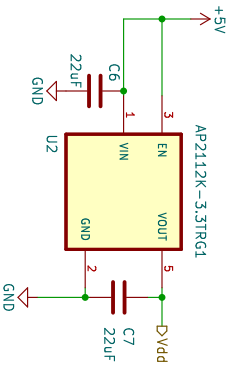
Title: RGB LED Driver Demo Board

Size: USLetter Date: 2024-01-02

KiCad E.D.A. kicad 7.0.7

Rev: A02

Id: 3/14



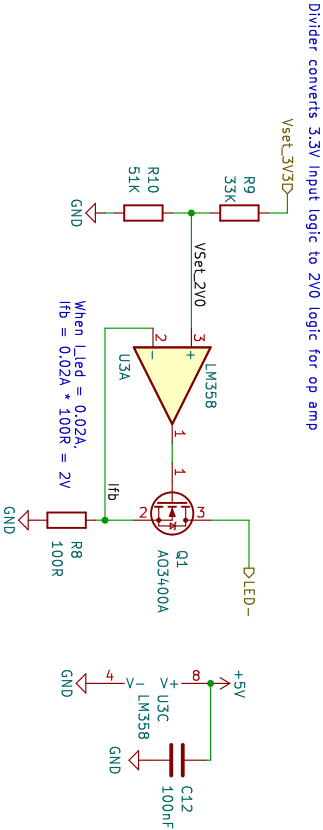
**The Art and Science of PCB Design**

Sheet: /3V3 Voltage Regulator/  
File: 3v3\_regulator.kicad\_sch

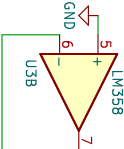
**Title: RGB LED Driver Demo Board**

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0.7

Rev: A02  
Id: 4/14



This op-amp isn't used,  
so it's wired as a buffer for 0V  
to not swing the output



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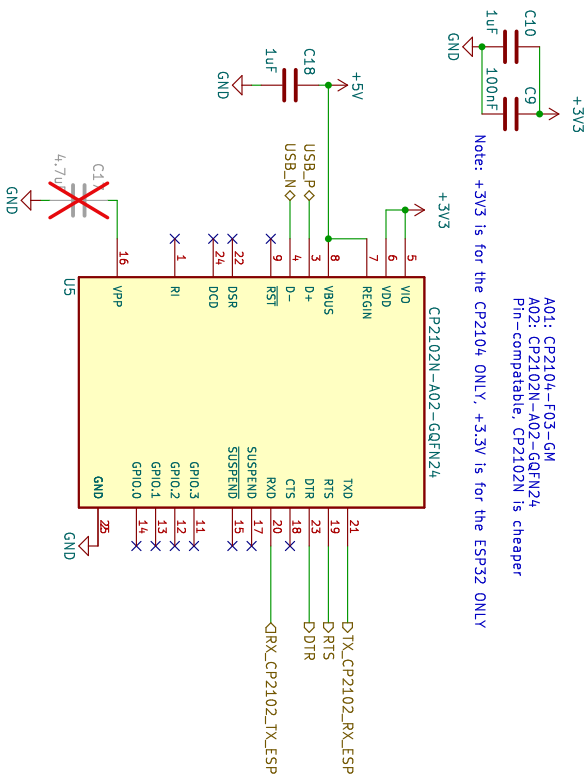
Sheet: /LED Driver G/  
File: led\_driver.kicad\_sch

Title: RGB LED Driver Demo Board

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0:7

Rev: A02  
Id: 5/14

Changelog:  
A01: Initial Design  
A02: Swapped CP2104 for CP2102N (U5)



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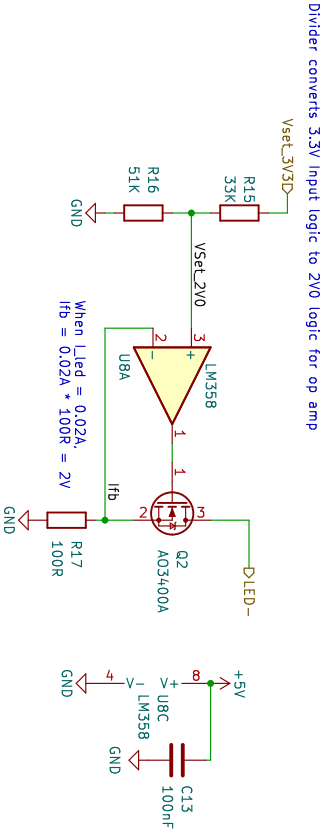
Sheet: /USB-Serial/  
File: usb-serial.kicad.sch

Title: RGB LED Driver Demo Board

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0.7

Rev: A02  
Id: 6/14





This op-amp isn't used,  
so it's wired as a buffer for 0V  
to not swing the output

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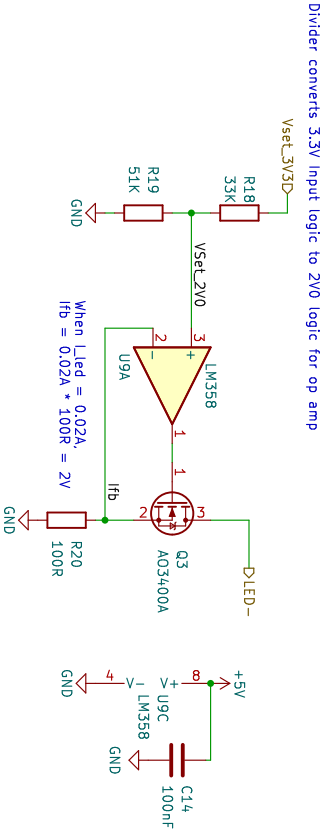
Sheet: /LED Driver R/  
File: led\_driver.kicad\_sch

Title: RGB LED Driver Demo Board

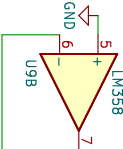
Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0:7

Rev: A02  
Id: 8/14





This op-amp isn't used,  
so it's wired as a buffer for 0V  
to not swing the output



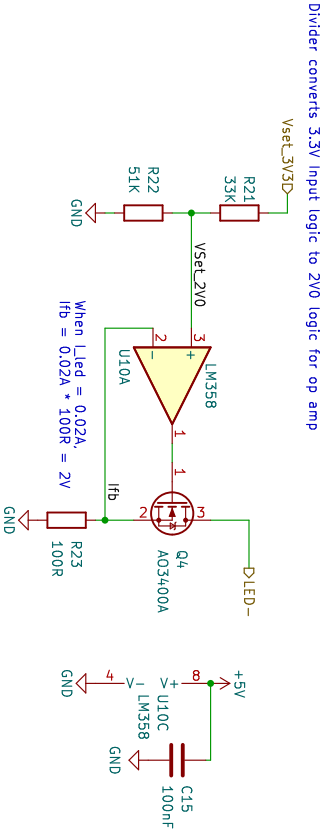
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Sheet: /LED Driver B/  
File: led\_driver.kicad\_sch

Title: RGB LED Driver Demo Board

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0:7

Rev: A02  
Id: 9/14



This op-amp isn't used,  
so it's wired as a buffer for 0V  
to not swing the output

U10B

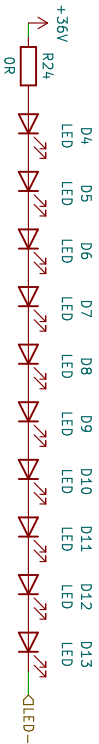
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Sheet: /LED Driver w/  
File: led\_driver.kicad\_sch

Title: RGB LED Driver Demo Board

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. kicad 7.0:7

Rev: A02  
Id: 10/14



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Sheet: /LED String R/

File: led\_string.kicad\_sch

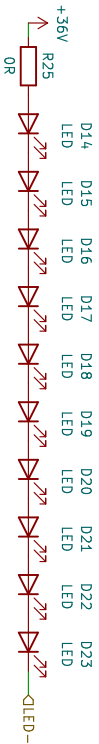
**Title: RGB LED Driver Demo Board**

Size: USLetter Date: 2024-01-02

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Rev: A02

Id: 11/14



**The Art and Science of PCB Design**

Sheet: /LED String G/

File: led\_string.kicad\_sch

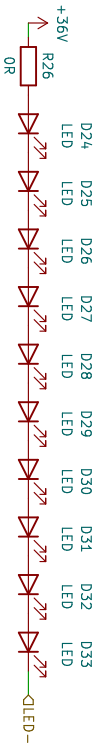
**Title: RGB LED Driver Demo Board**

Size: USLetter Date: 2024-01-02

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Rev: A02

Id: 12/14



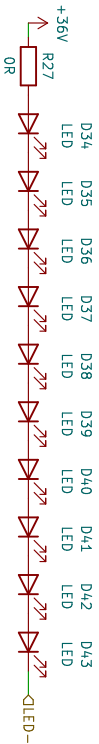
**The Art and Science of PCB Design**

Sheet: /LED String B/  
File: led\_string.kicad\_sch

**Title: RGB LED Driver Demo Board**

Size: USLetter Date: 2024-01-02  
Kicad E.D.A. Kicad 7.0.7

Rev: A02  
Id: 13/14



**The Art and Science of PCB Design**

Sheet: /LED String W/

File: led\_string.kicad\_sch

**Title: RGB LED Driver Demo Board**

Size: USLetter Date: 2024-01-02

KiCad E.D.A. kicad 7.0.7

Rev: A02

Id: 14/14