



<https://github.com/TimGremalm/StripArray>  
WS2811 LED driver with external MOSFET's for RGB.

Sheet: /  
File: StripArray.sch

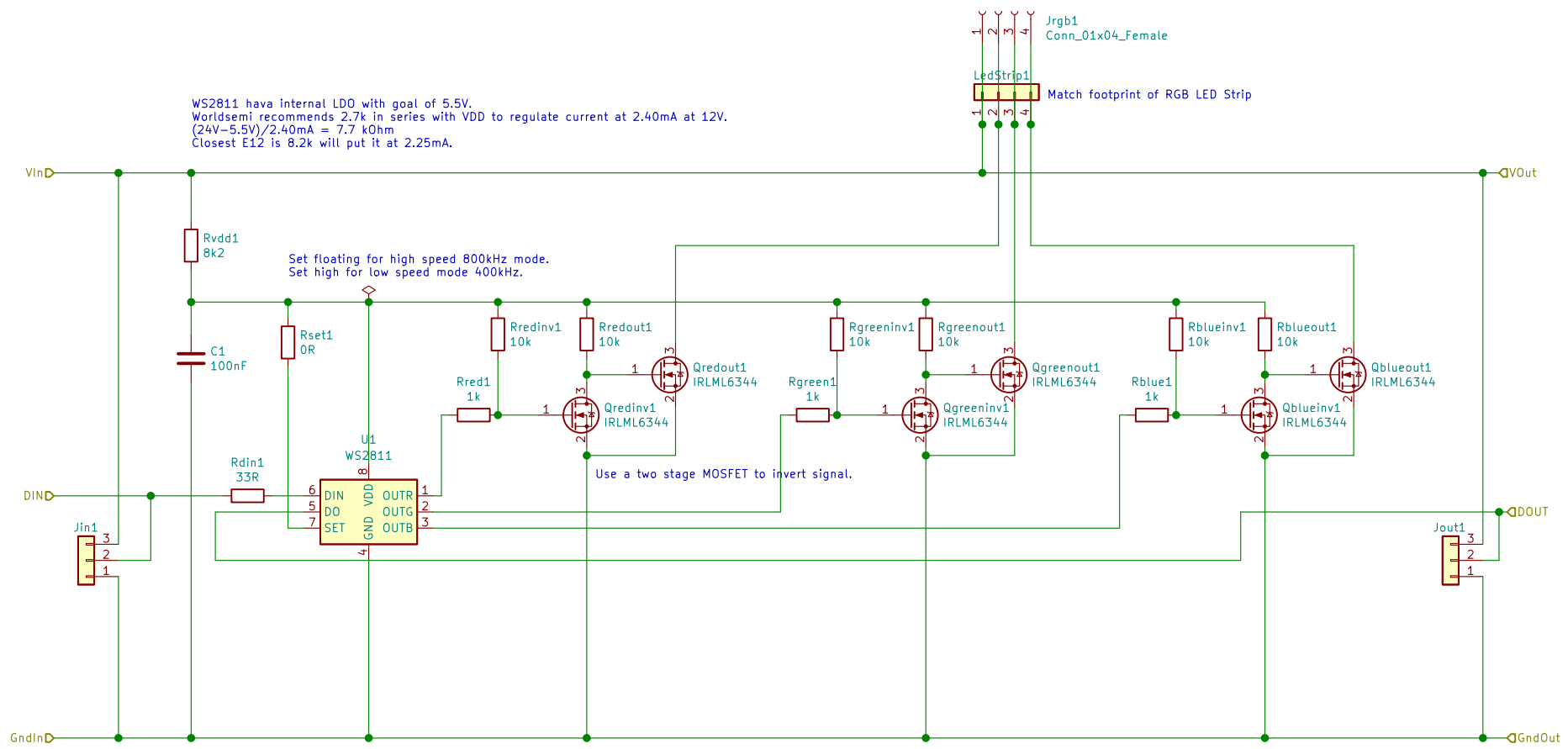
**Title: Strip Array**

Size: A4 Date: 2021-01-23

KiCad E.D.A. kicad (5.1.9)-1

**Rev: 2021-01-23**

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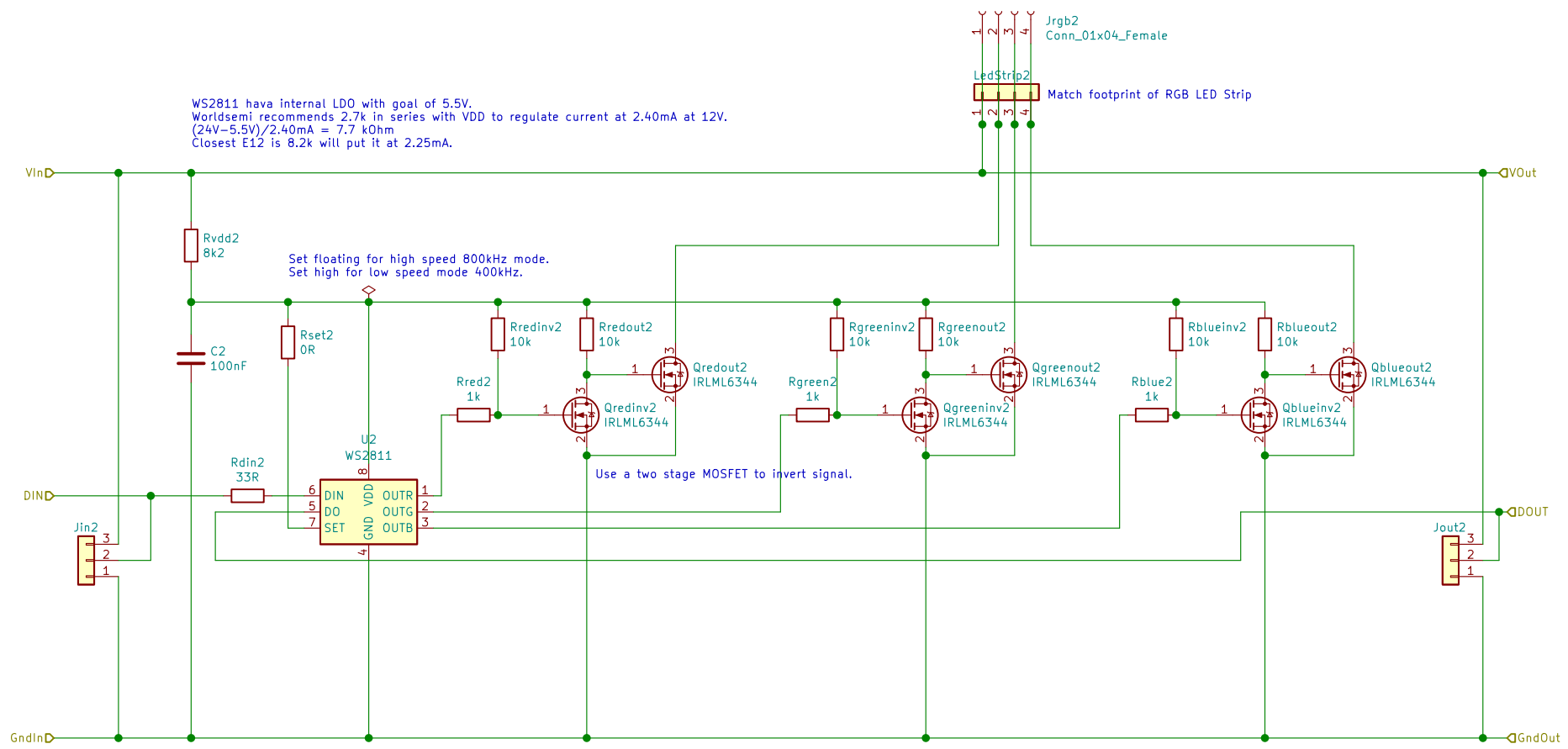
HbottomLeft1  
MountingHole

<https://github.com/TimGremalm/StripArray>  
 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver01/  
 File: AddressableLedDriver.sch

### Title: Strip Array – LED driver

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
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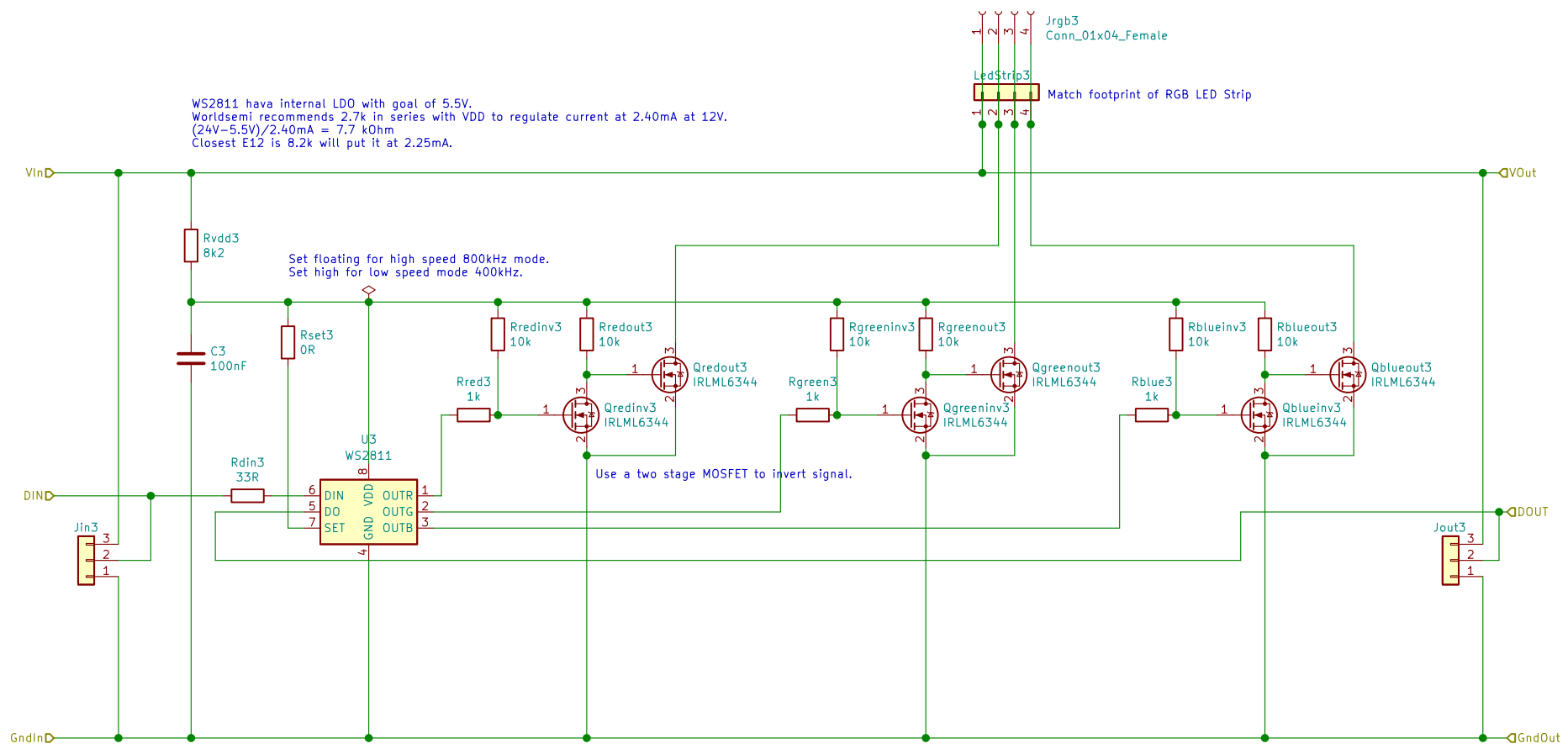


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WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver02/  
File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
KiCad E.D.A. kicad (5.1.9)-1		Id: 3/17

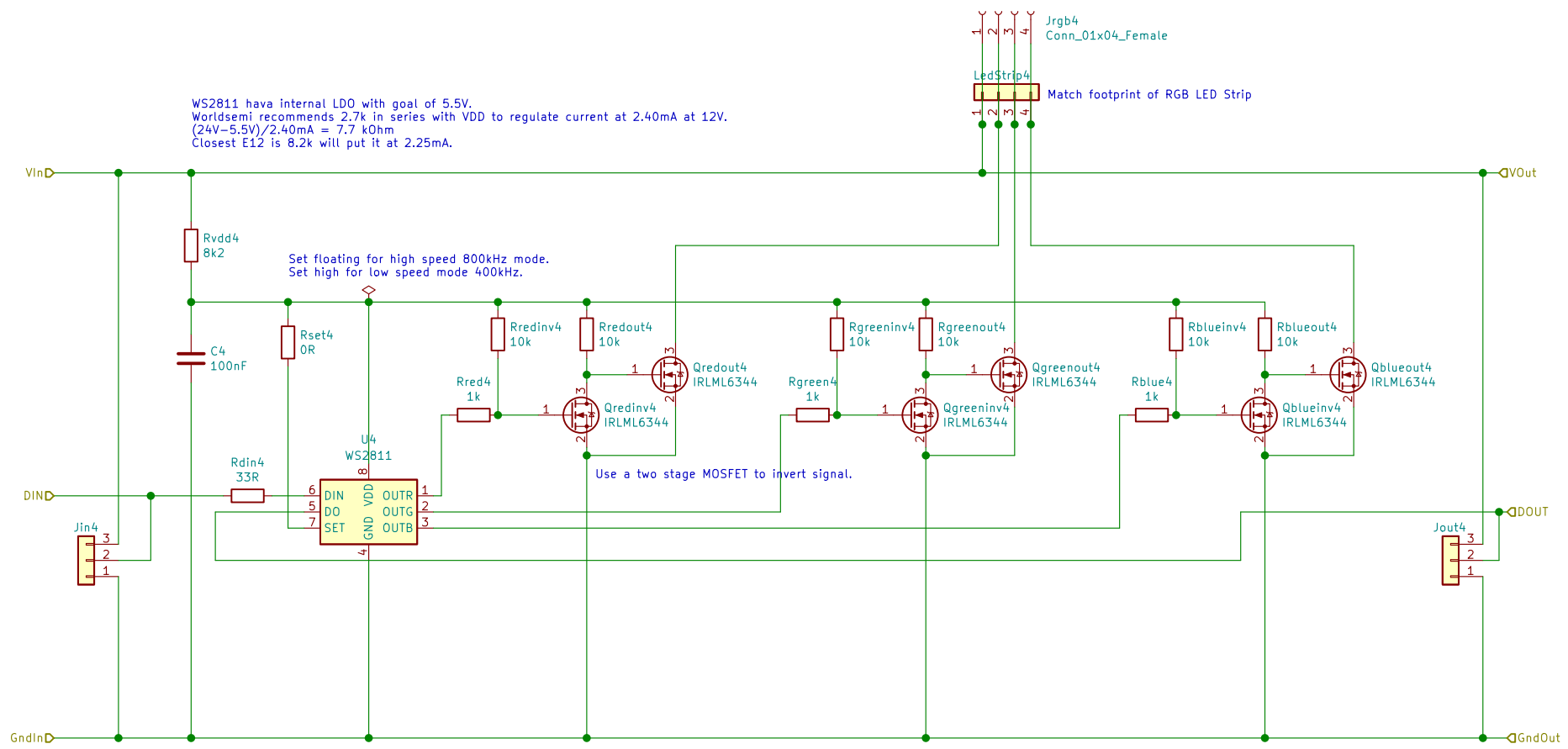


<https://github.com/TimGremalm/StripArray>  
 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver03/  
 File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
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HbottomLeft4  
MountingHole

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 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver04/  
 File: AddressableLedDriver.sch

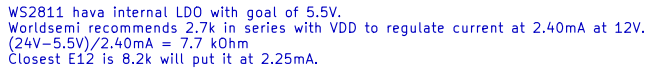
### Title: Strip Array – LED driver

Size: A4 Date: 2021-01-23

KiCad E.D.A. kicad (5.1.9)–1

Rev: 2021-01-23

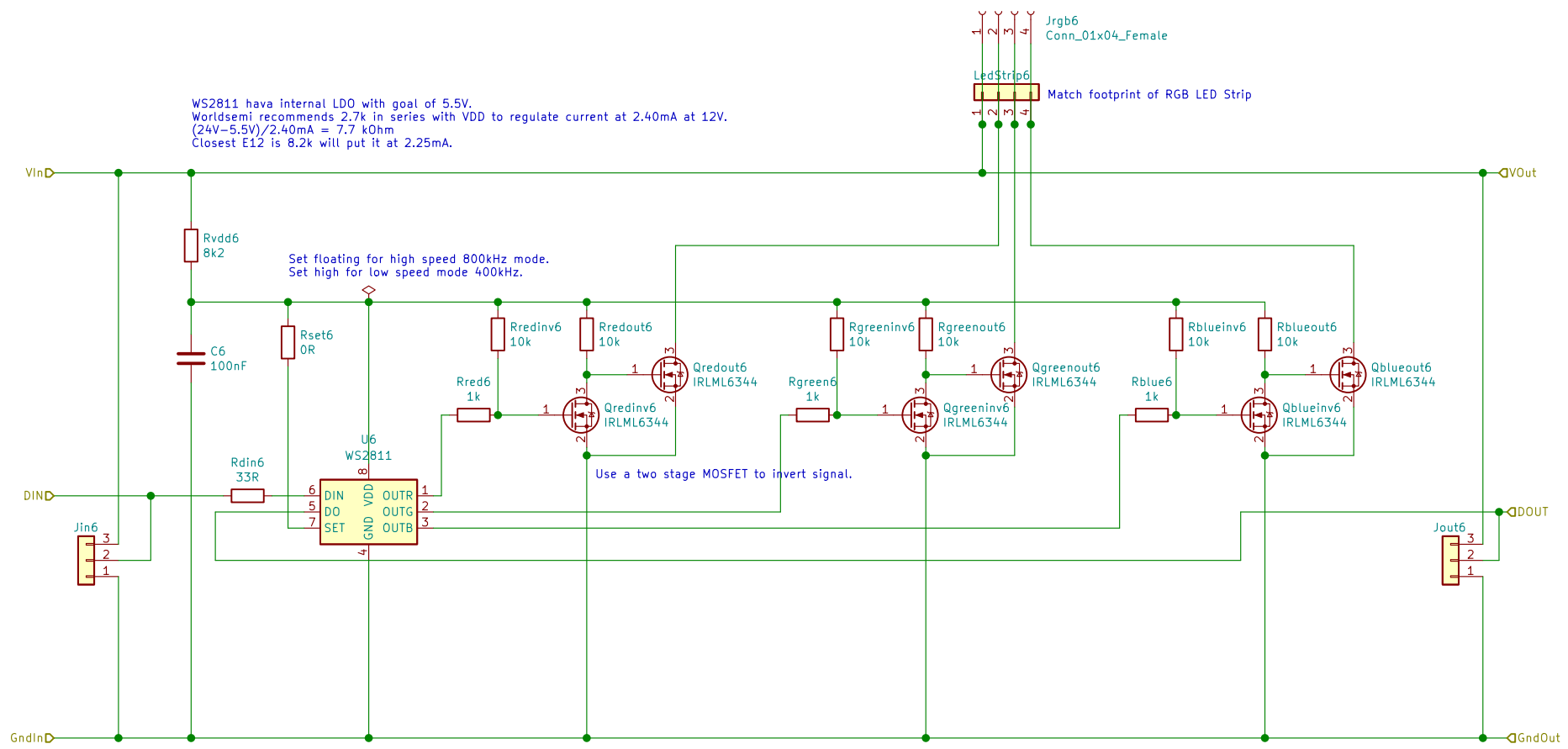
Id: 5/17



Set floating for high speed 800kHz mode.  
Set high for low speed mode 400kHz.

Use a two stage MOSFET to invert signal.

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WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver06/  
File: AddressableLedDriver.sch

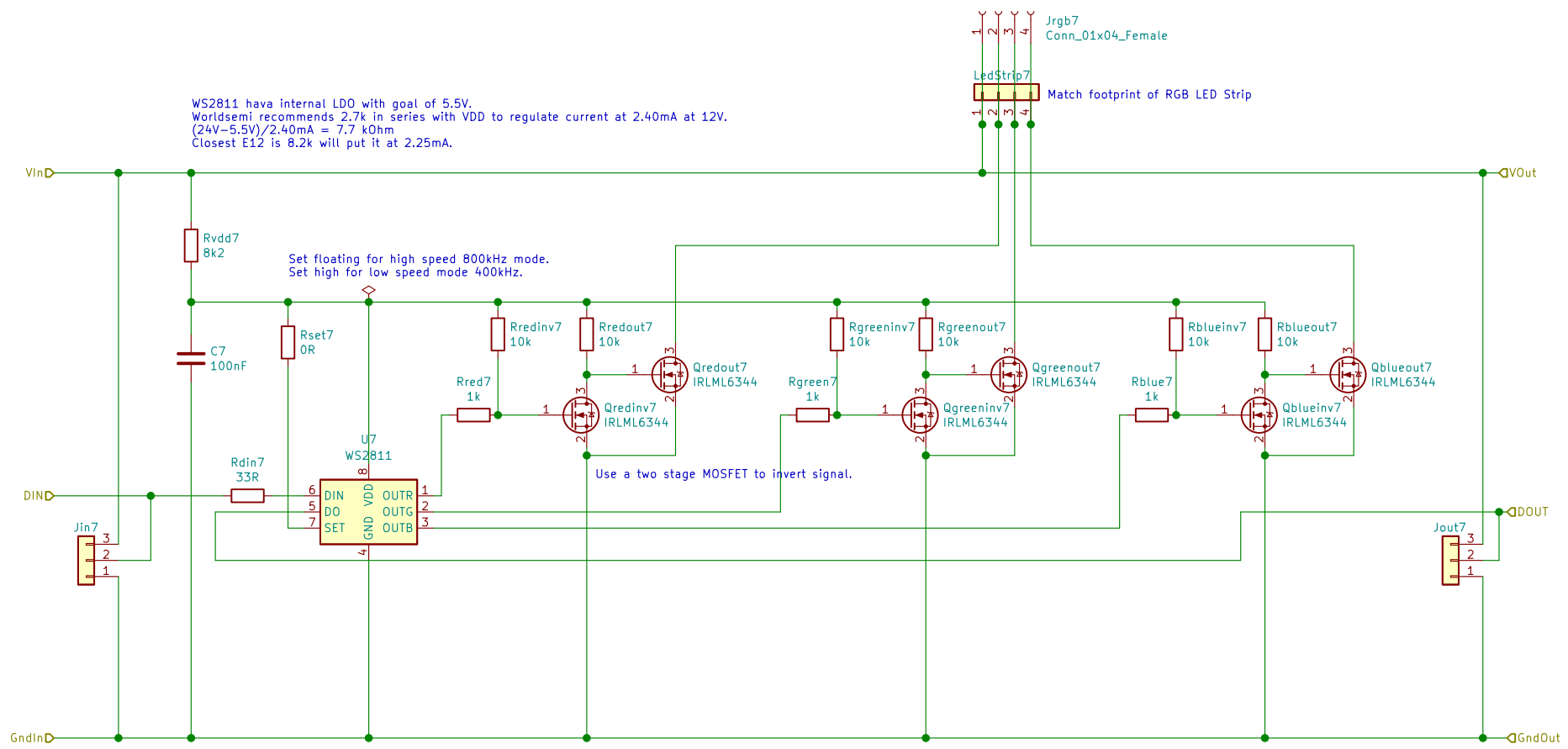
### Title: Strip Array – LED driver

Size: A4 Date: 2021-01-23

KiCad E.D.A. kicad (5.1.9)-1

Rev: 2021-01-23

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WS2811 have internal LDO with goal of 5.5V.  
Worldsemi recommends 2.7k in series with VDD to regulate current at 2.40mA at 12V.  
(24V-5.5V)/2.40mA = 7.7 kOhm  
Closest E12 is 8.2k will put it at 2.25mA.

Set floating for high speed 800kHz mode.  
Set high for low speed mode 400kHz.

Use a two stage MOSFET to invert signal.

Match footprint of RGB LED Strip



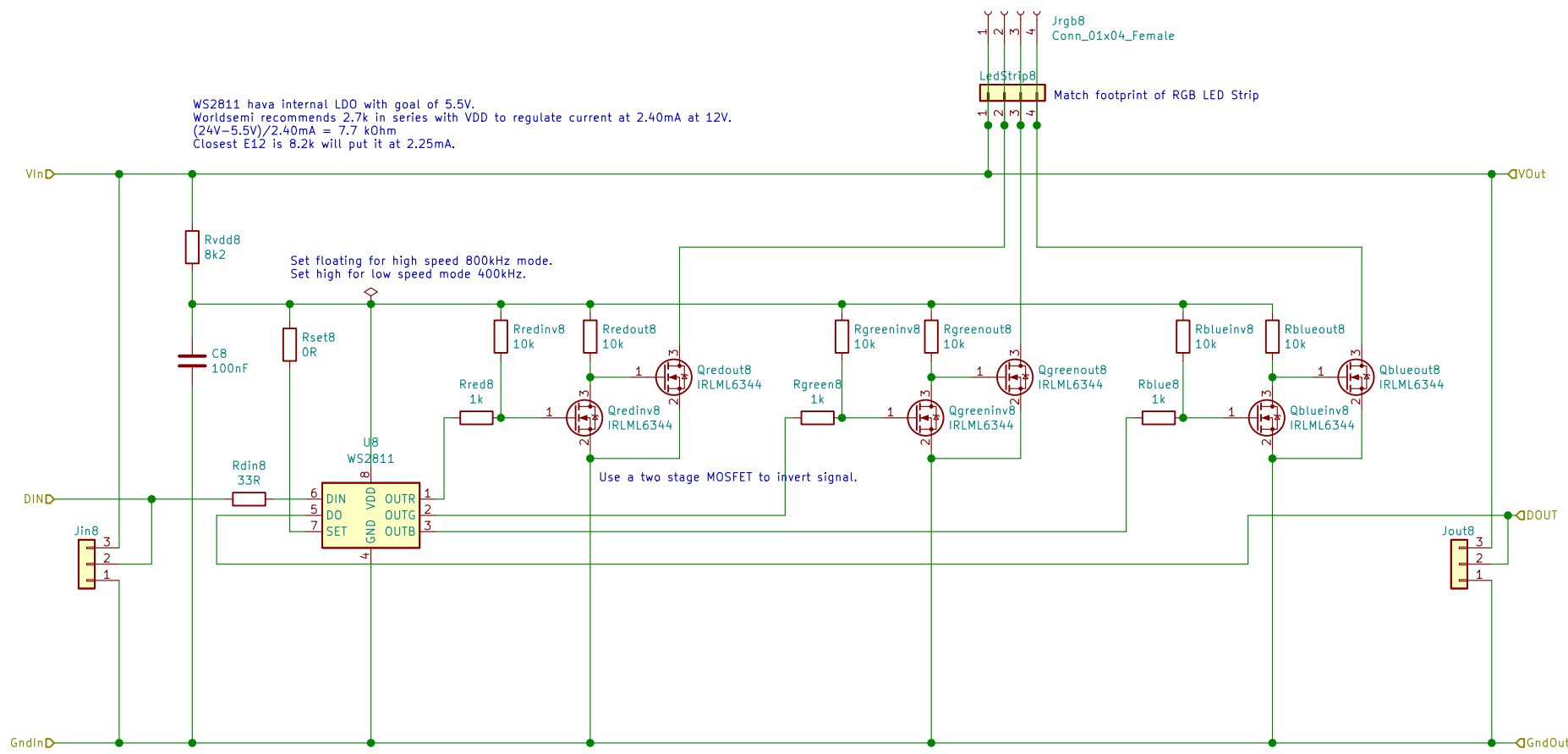
<https://github.com/TimGremalm/StripArray>  
WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver07/  
File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
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HbottomLeft8  
MountingHole

<https://github.com/TimGremalm/StripArray>  
 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver08/  
 File: AddressableLedDriver.sch

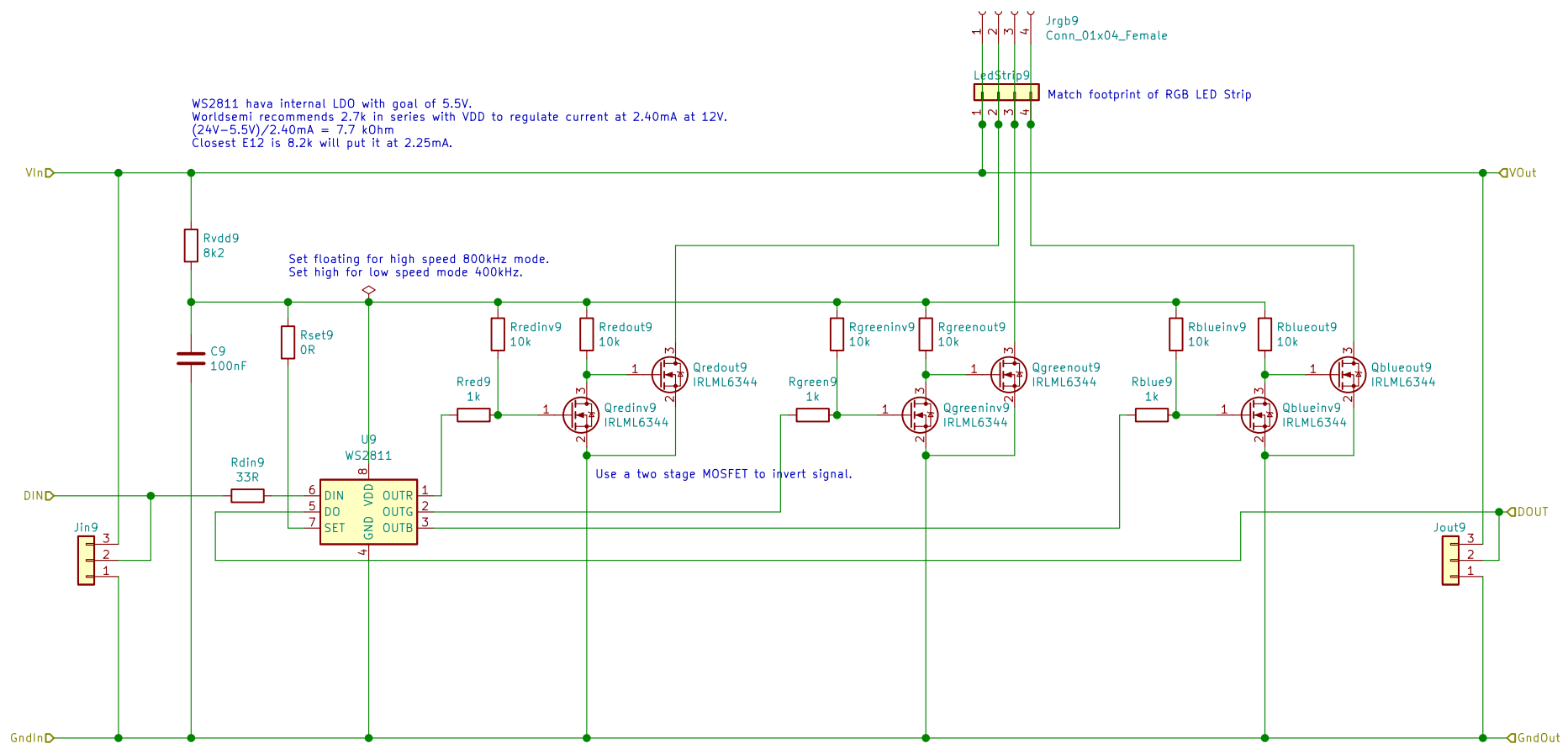
### Title: Strip Array – LED driver

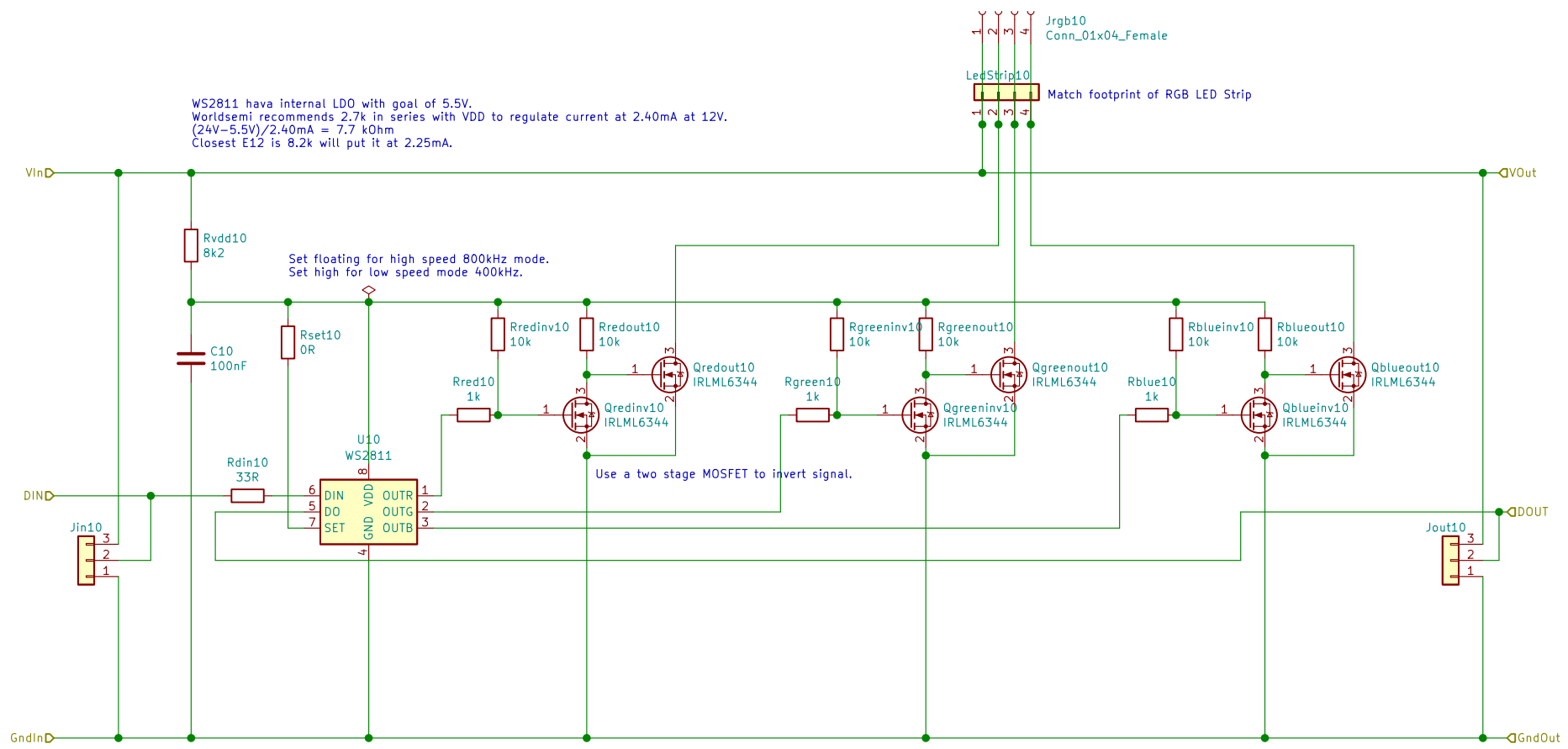
Size: A4 Date: 2021-01-23

KiCad E.D.A. kicad (5.1.9)-1

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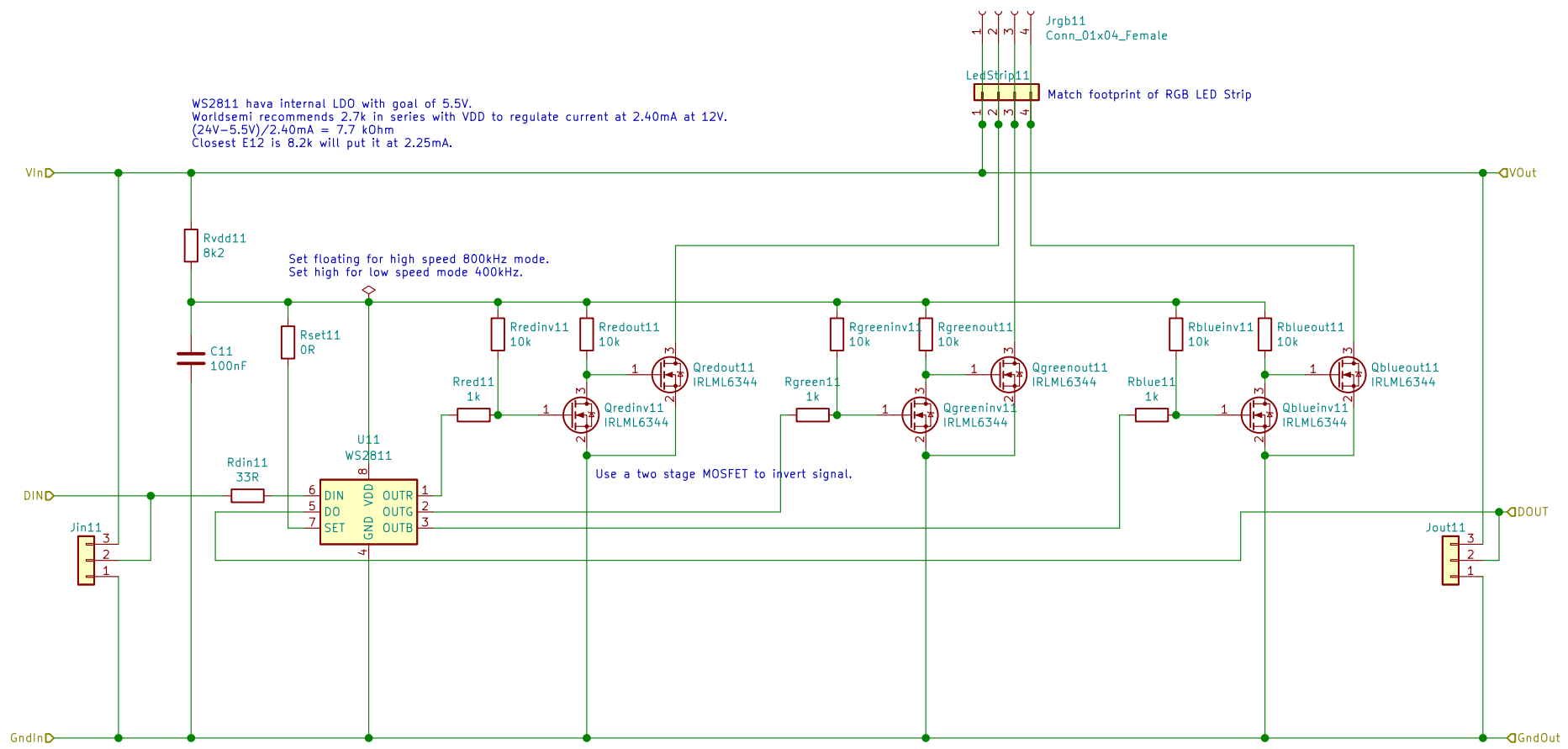
HbottomLeft10  
MountingHole

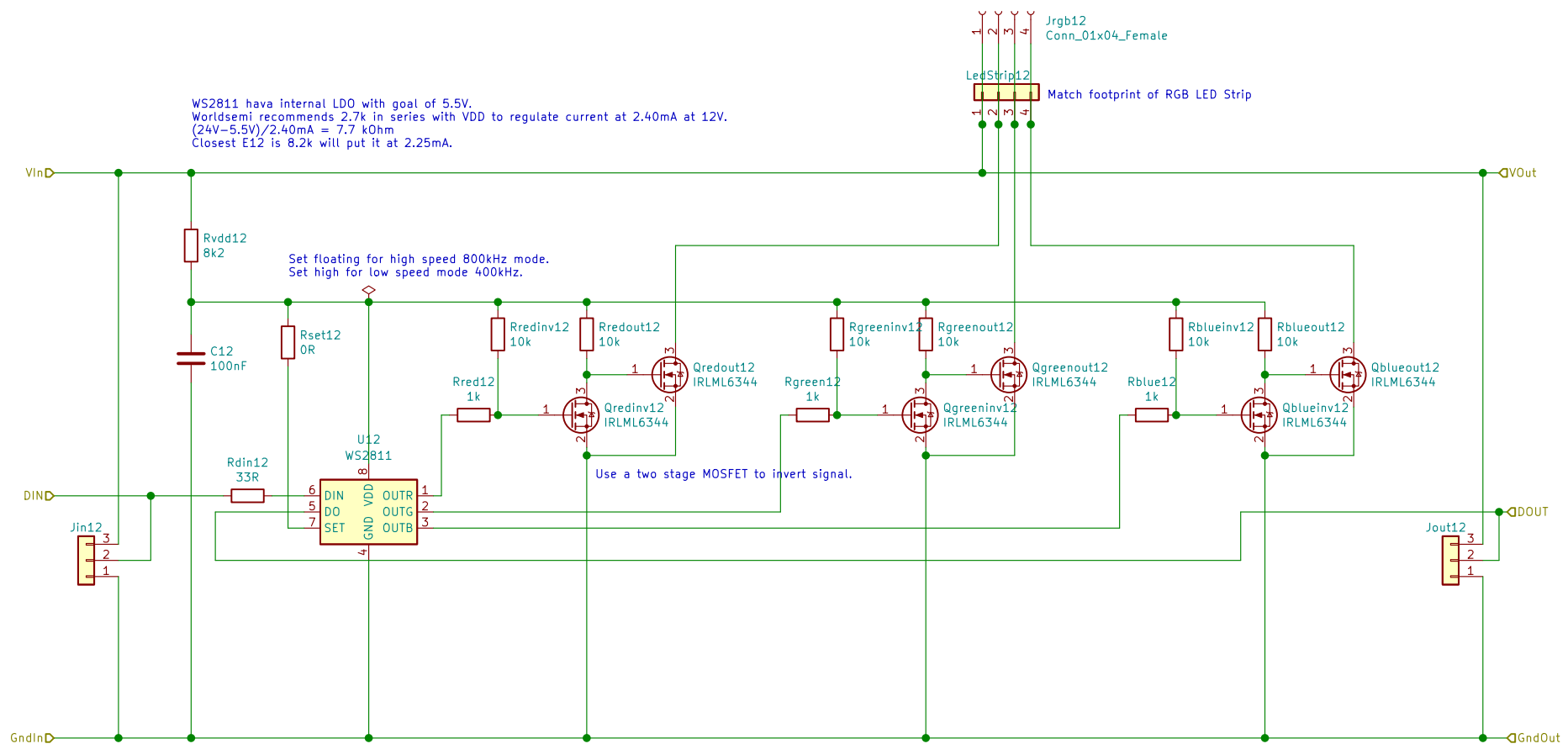
<https://github.com/TimGremalm/StripArray>  
WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver10/  
File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
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 WS2811 LED driver with external MOSFET's for RGB.

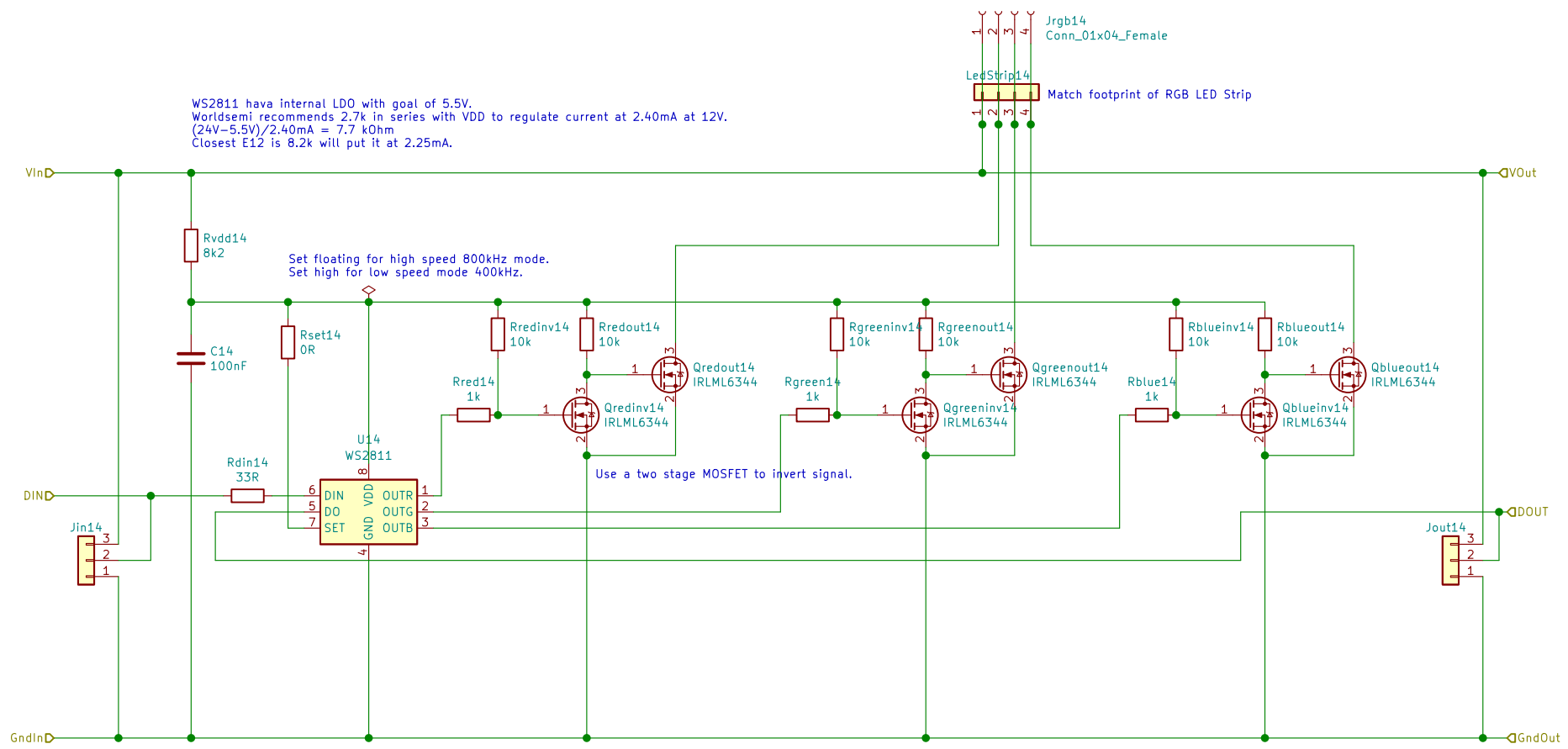
Sheet: /AddressableLedDriver12/  
 File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
KiCad E.D.A. kicad (5.1.9)-1		Id: 13/17



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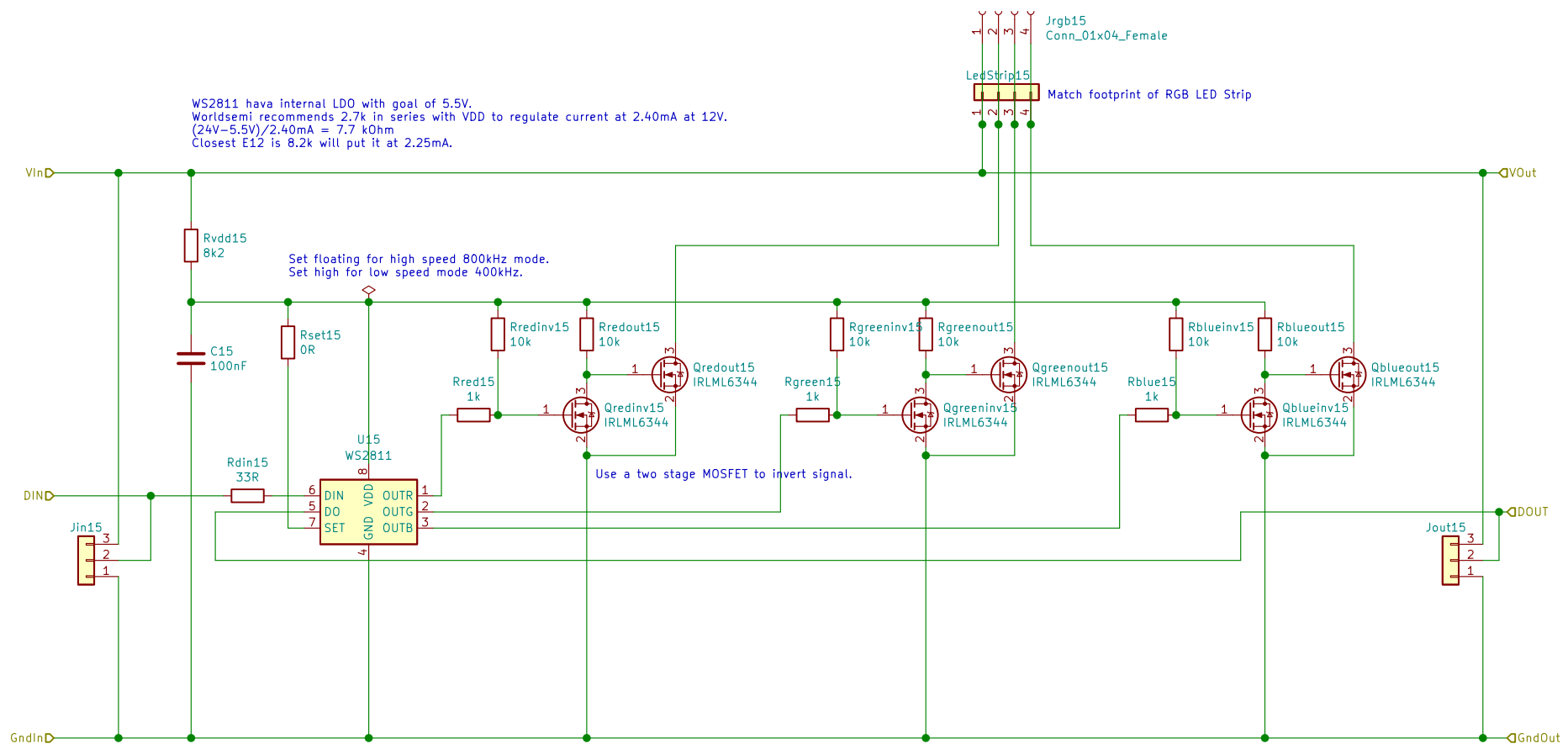
HbottomLeft14  
MountingHole

<https://github.com/TimGremalm/StripArray>  
 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver14/  
 File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
KiCad E.D.A. kicad (5.1.9)-1		Id: 15/17



WS2811 have internal LDO with goal of 5.5V.  
Worldsemi recommends 2.7k in series with VDD to regulate current at 2.40mA at 12V.  
(24V-5.5V)/2.40mA = 7.7 kOhm  
Closest E12 is 8.2k will put it at 2.25mA.

Set floating for high speed 800kHz mode.  
Set high for low speed mode 400kHz.

Use a two stage MOSFET to invert signal.

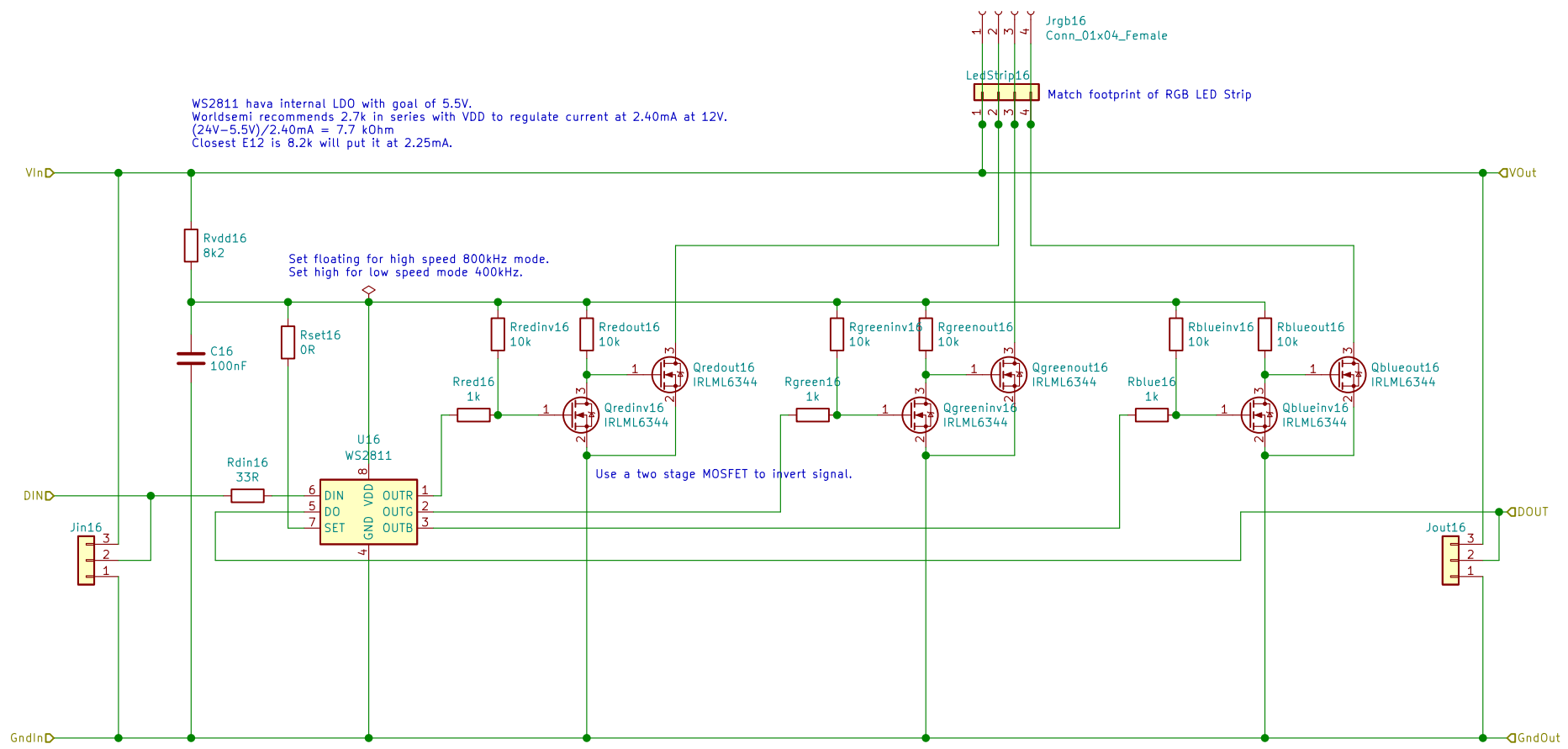
<https://github.com/TimGremalm/StripArray>  
WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver15/  
File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
KiCad E.D.A. kicad (5.1.9)-1		Id: 16/17





HbottomLeft16  
MountingHole

<https://github.com/TimGremalm/StripArray>  
 WS2811 LED driver with external MOSFET's for RGB.

Sheet: /AddressableLedDriver16/  
 File: AddressableLedDriver.sch

**Title: Strip Array – LED driver**

Size: A4	Date: 2021-01-23	Rev: 2021-01-23
KiCad E.D.A. kicad (5.1.9)-1		Id: 17/17