

4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.

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**Roel Drost**

Sheet: /Mainboard/

File: Mainboard.sch

**Title: LedBar – MainBoard**

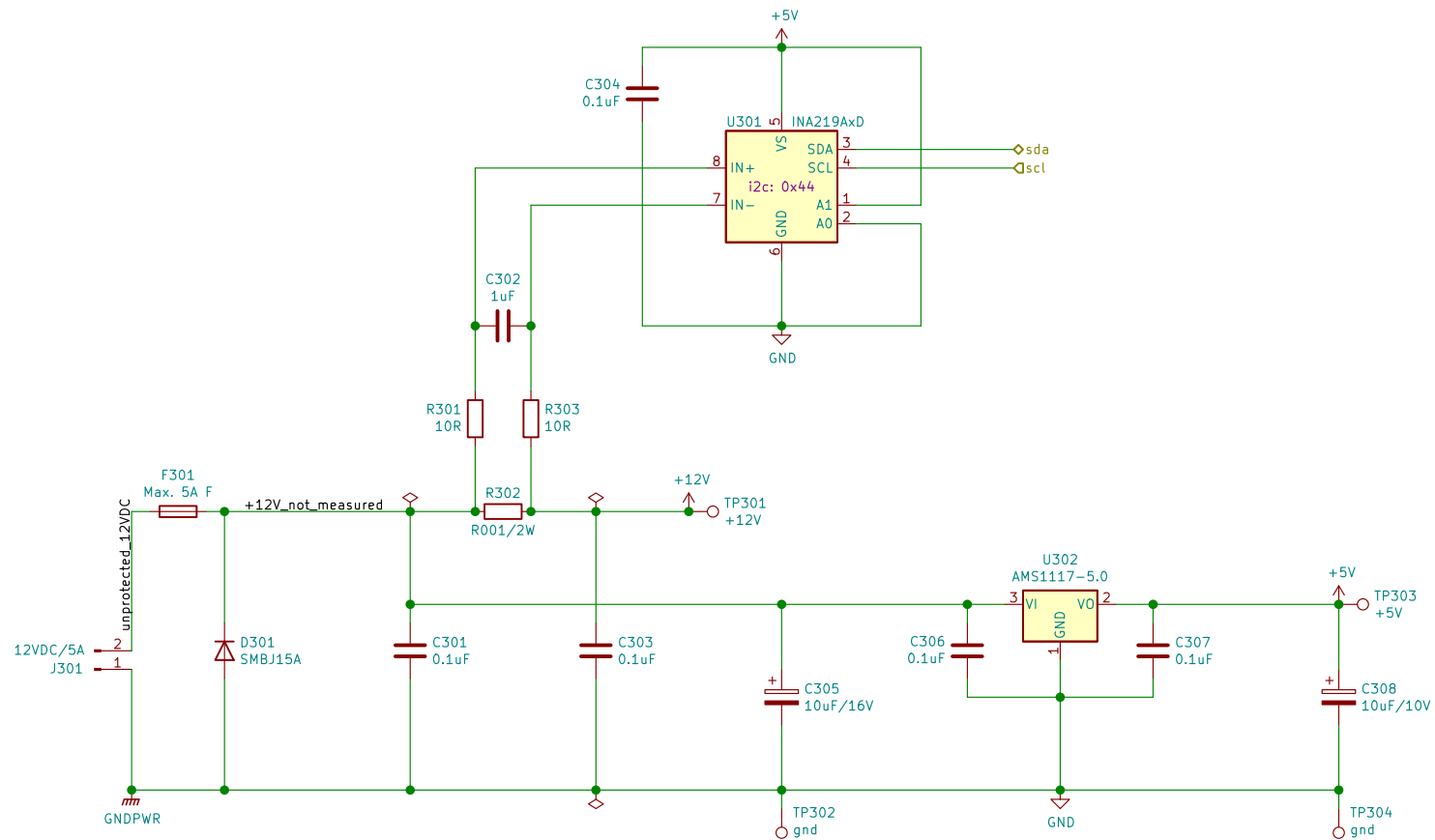
Size: A4

Date: 2022-06-26

**Rev: 1.0**

KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Id: 2/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.  
Power circuit with current and voltage sensing and overvoltage protection.

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**Roel Drost**

Sheet: /Mainboard/Power/

File: Power.sch

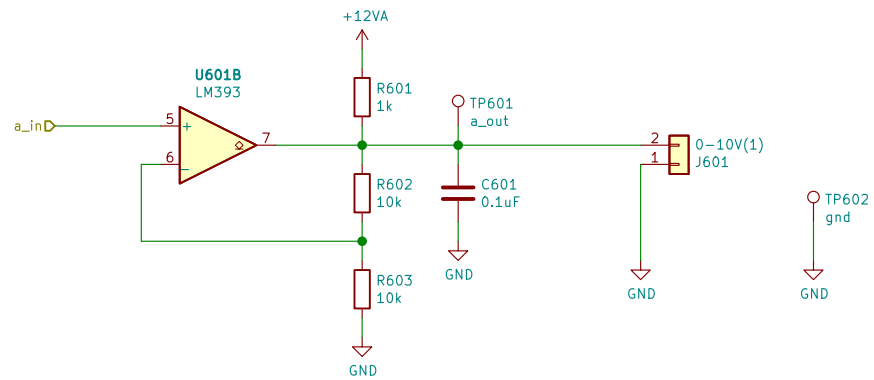
**Title: LedBar - MainBoard**

Size: A4  
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Date: 2022-06-26

**Rev: 1.0**

Id: 3/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.  
Converts PWM into 0-10V.

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**Roel Drost**

Sheet: /Mainboard/0-10V/

File: 0-10V.sch

**Title: LedBar - MainBoard**

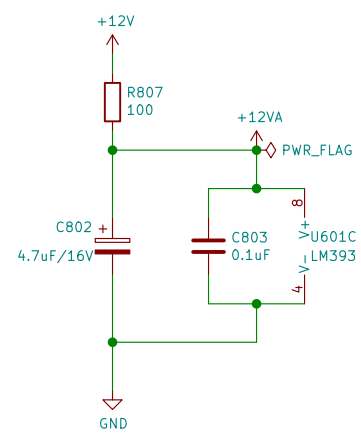
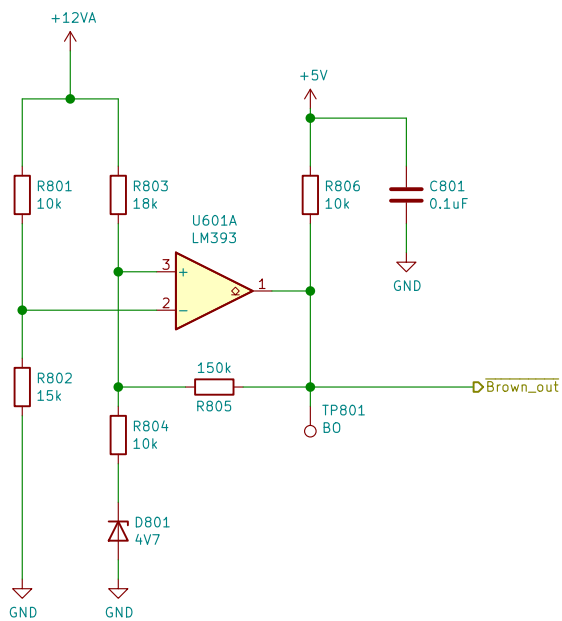
Size: A4

Date: 2022-06-26

**Rev: 1.0**

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Id: 4/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.  
Brown-out detection on the 12V bus.

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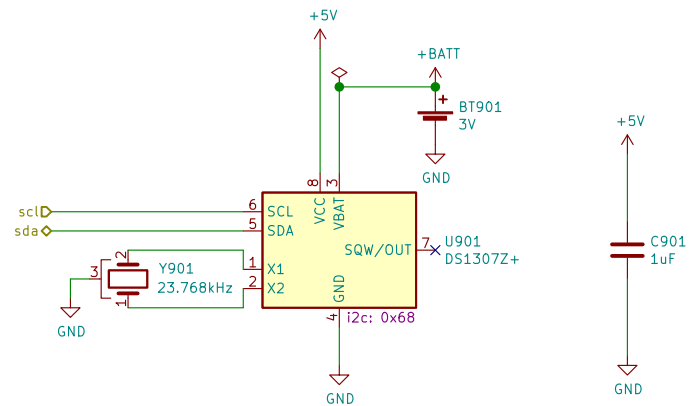
**Roel Drost**

Sheet: /Mainboard/Brown-out/

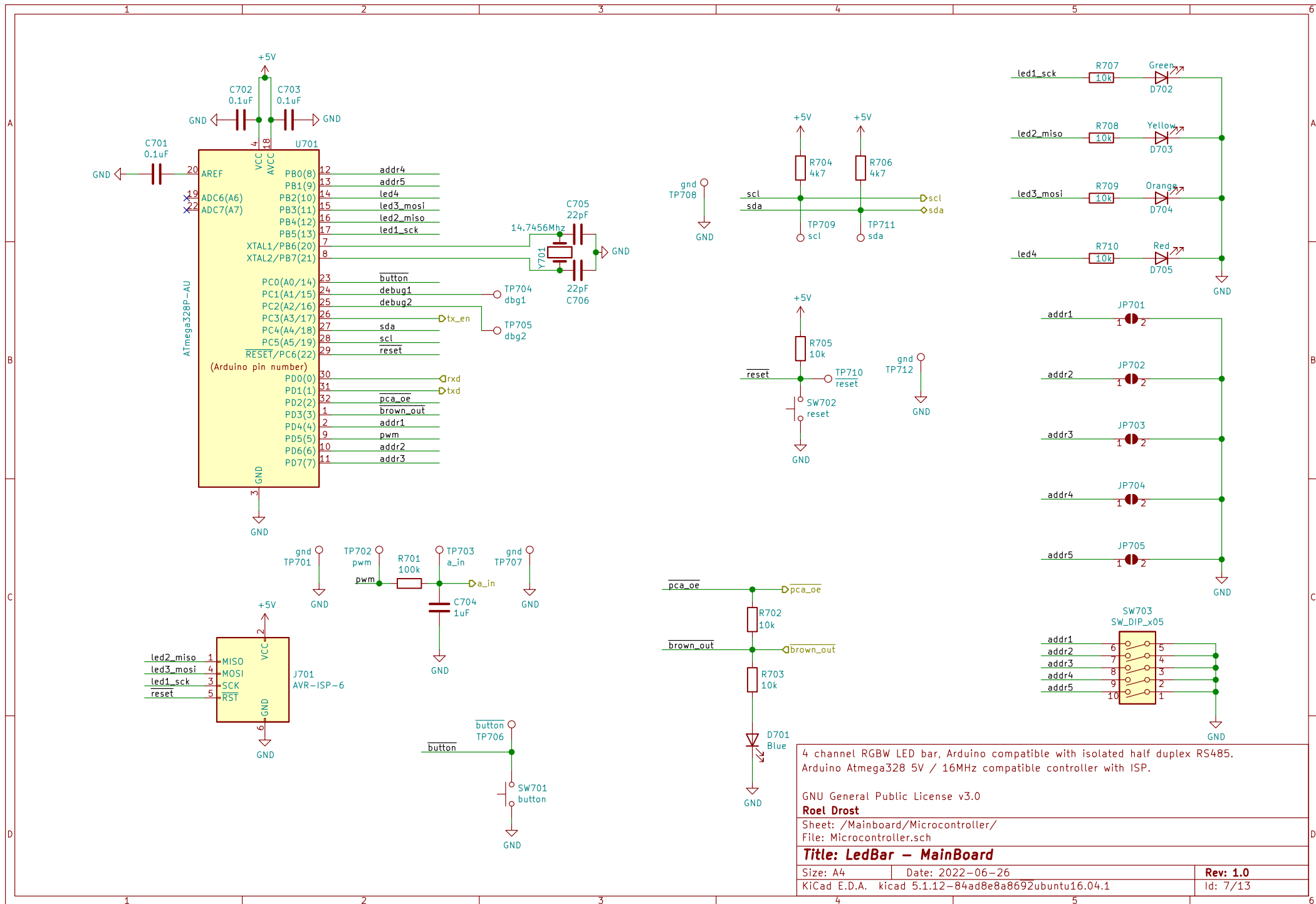
File: Brown-out.sch

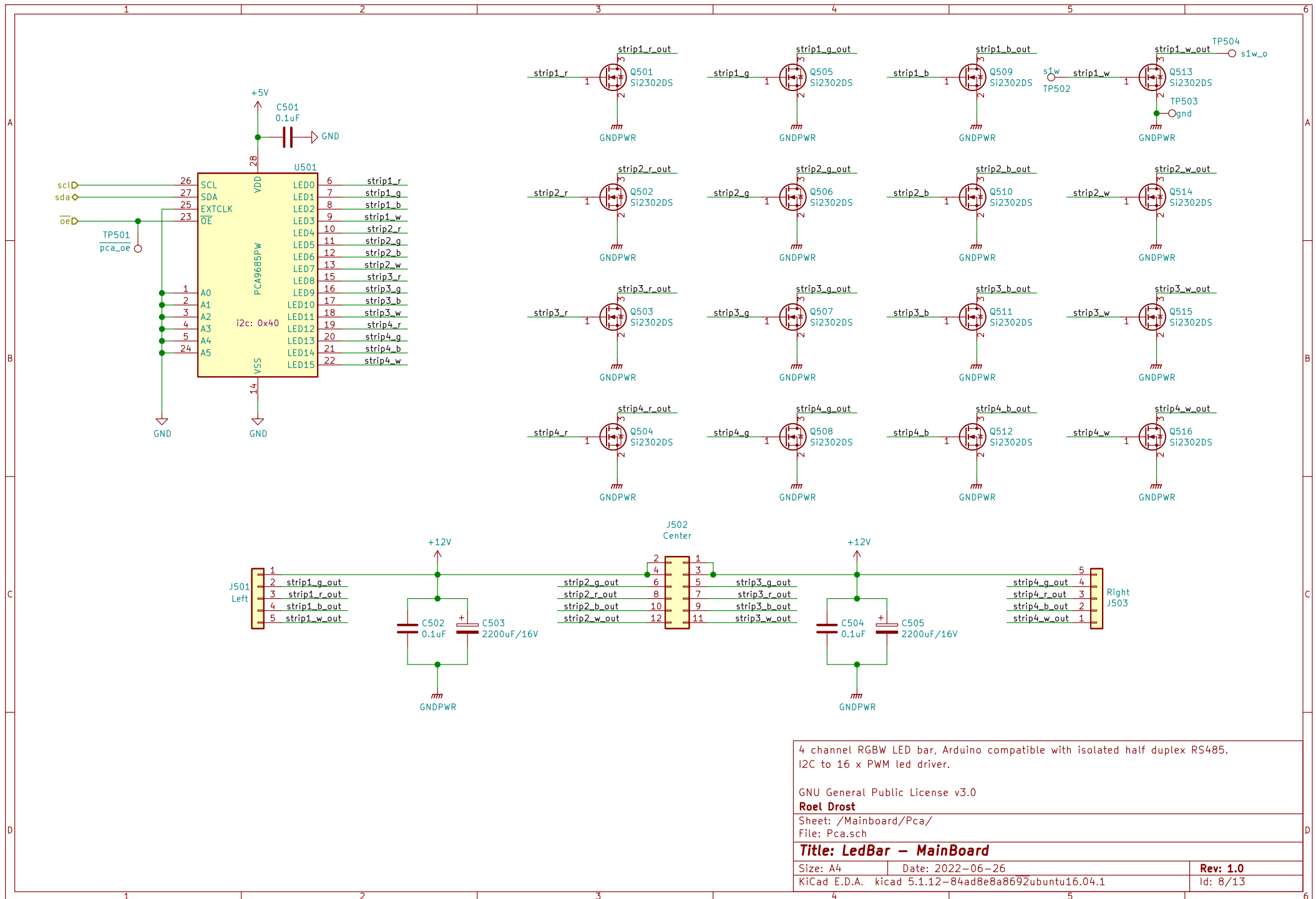
**Title: LedBar - MainBoard**

Size: A4	Date: 2022-06-26	Rev: 1.0
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1	Id: 5/13	

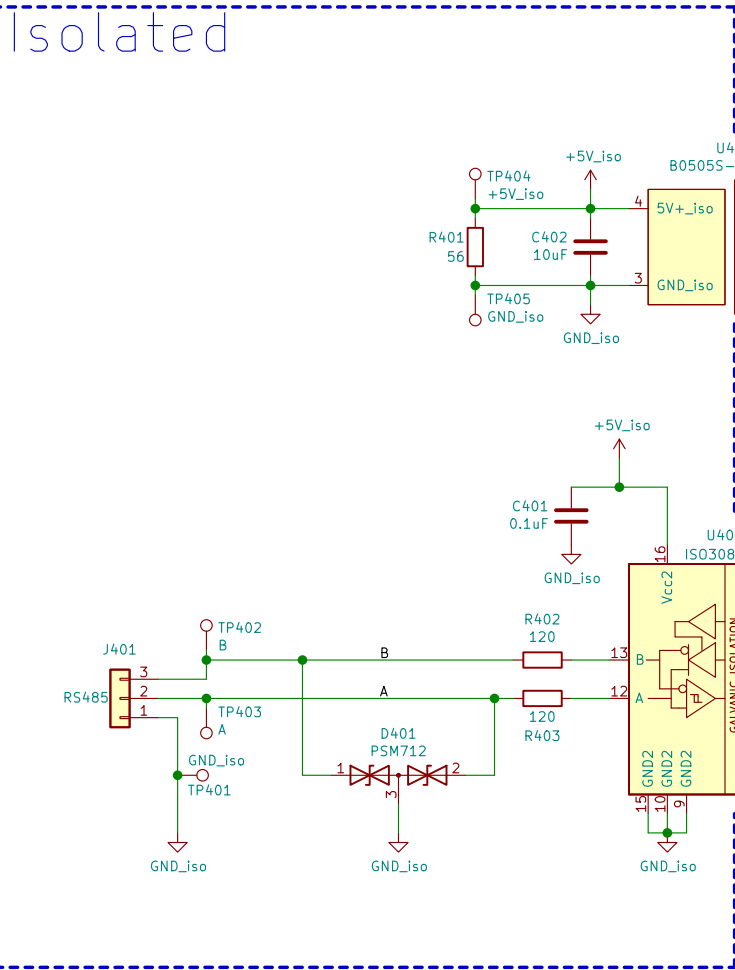


4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485. Battery backed up real time clock		
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Sheet: /Mainboard/Rtc/ File: Rtc.sch		
<b>Title:</b>		
Size: A4	Date: 2022-06-26	Rev: 1.0
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1		Id: 6/13









4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.  
Isolated halfduplex RS-485.

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**Roel Drost**

Sheet: /Mainboard/RS485/

File: RS485.sch

**Title: LedBar - MainBoard**

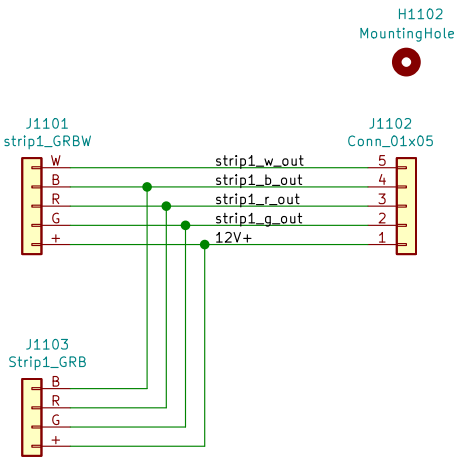
Size: A4

Date: 2022-06-26

**Rev: 1.0**

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Id: 9/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.

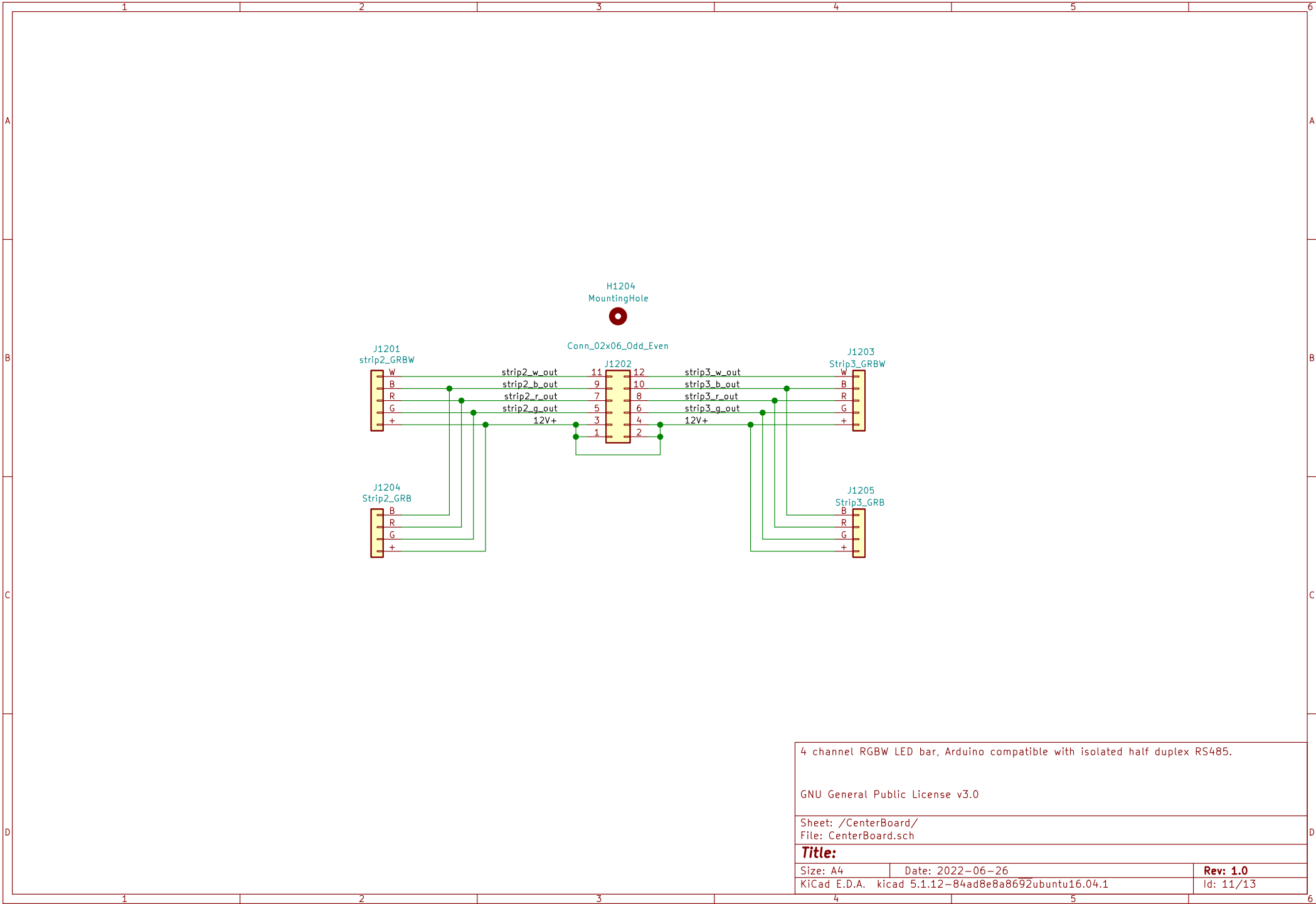
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Sheet: /LeftBoard/  
File: LeftBoard.sch

**Title:**

Size: A4 Date: 2022-06-26  
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Rev: 1.0  
Id: 10/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.

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Sheet: /CenterBoard/  
File: CenterBoard.sch

**Title:**

Size: A4  
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Date: 2022-06-26

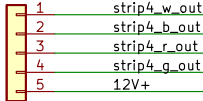
Rev: 1.0

Id: 11/13

H1301  
MountingHole



J1301  
Conn\_01x05



strip4\_w\_out  
strip4\_b\_out  
strip4\_r\_out  
strip4\_g\_out  
12V+

J1302  
Strip4\_GRBW



J1303  
Strip4\_GRB



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.

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Sheet: /RightBoard/  
File: RightBoard.sch

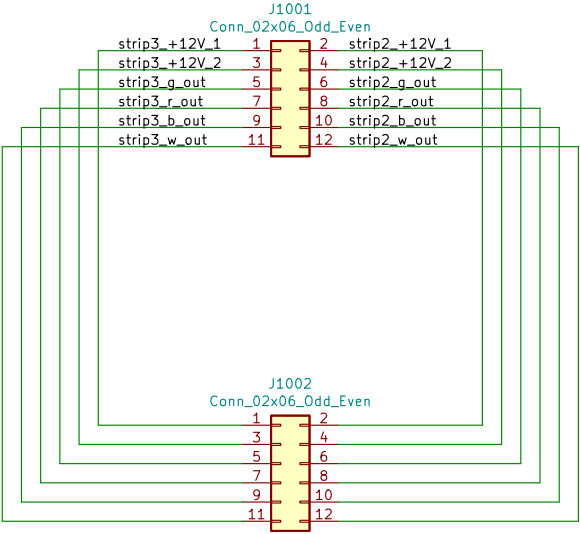
**Title:**

Size: A4  
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Date: 2022-06-26

Rev: 1.0

Id: 12/13



4 channel RGBW LED bar, Arduino compatible with isolated half duplex RS485.

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Sheet: /Perpendicular/  
File: Perpendicular.sch

**Title:**

Size: A4  
KiCad E.D.A. kicad 5.1.12-84ad8e8a8692ubuntu16.04.1

Date: 2022-06-26

Rev: 1.0

Id: 13/13