

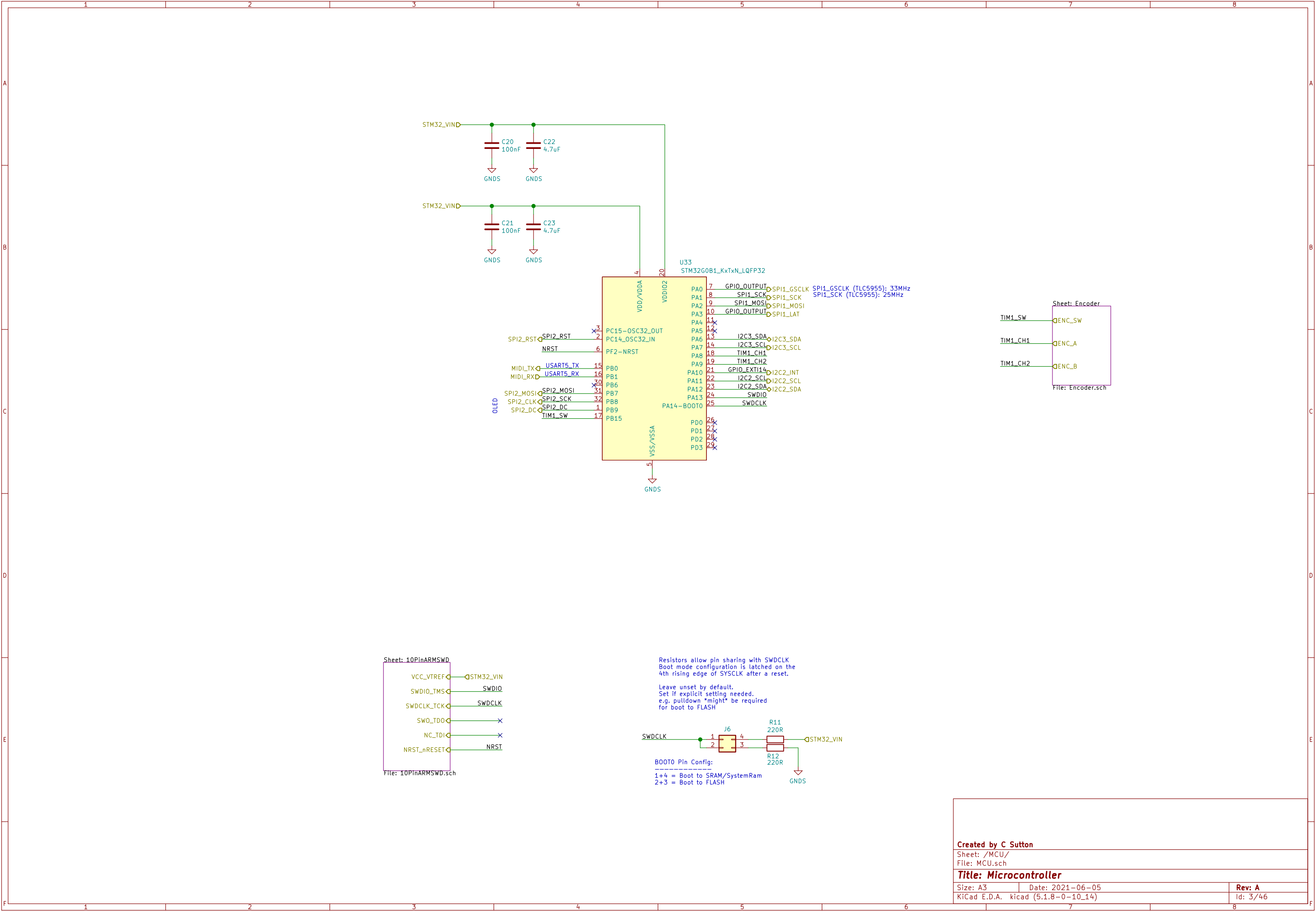
Created by C Sutton

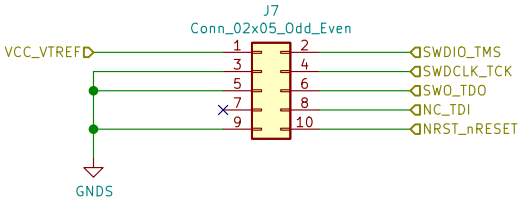
Sheet: /MIDI Interface/  
File: MIDI.sch

**Title: MIDI Interface**

Size: A4 Date: 2021-06-05  
KiCad E.D.A. kicad (5.1.8-0-10\_14)

Rev: A  
Id: 2/46





Created by C Sutton

Sheet: /MCU/10PinARMSWD/  
File: 10PinARMSWD.sch

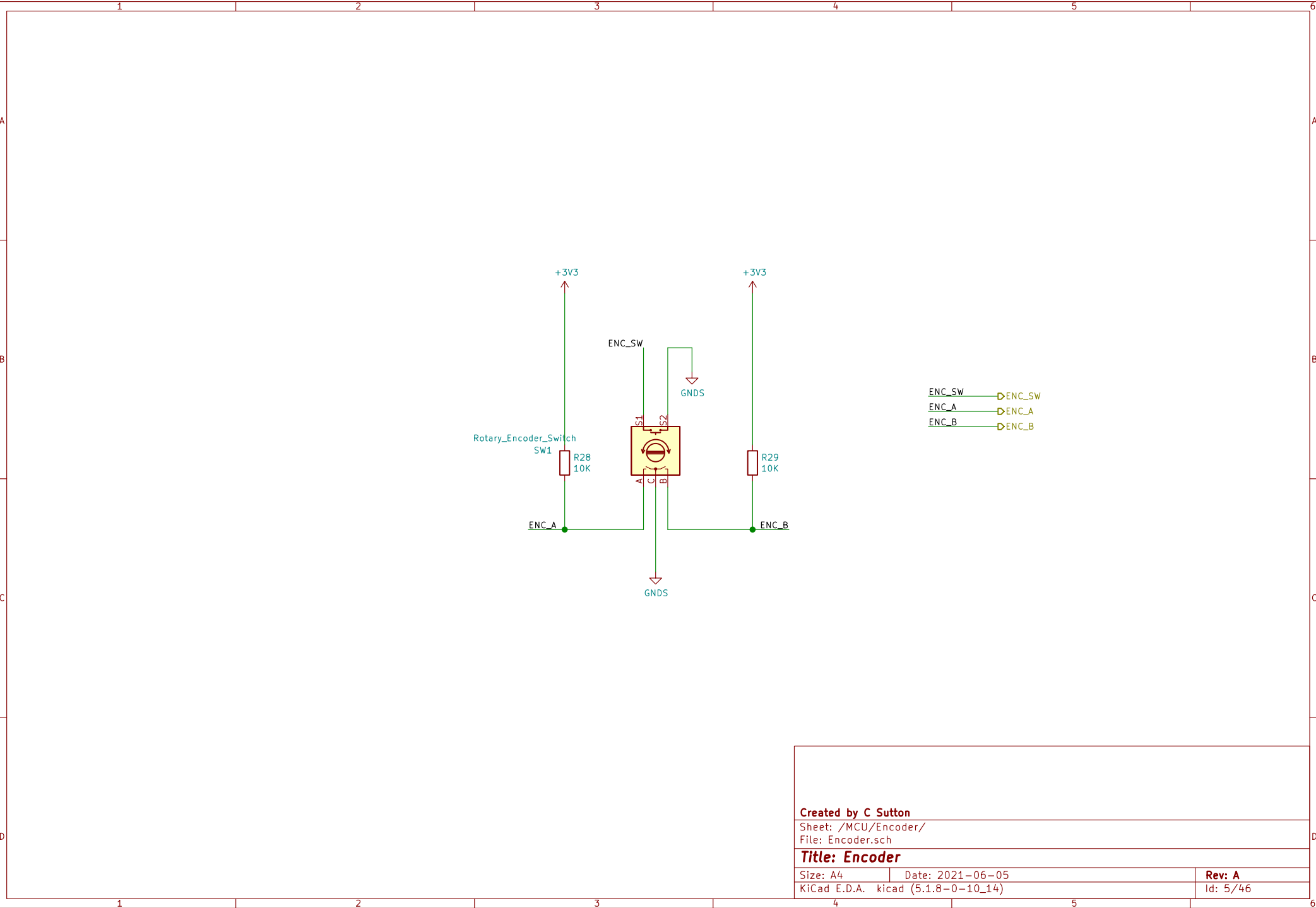
**Title: Debug Connector**

Size: A4 Date: 2021-06-05

KiCad E.D.A. kicad (5.1.8-0-10\_14)

Rev: A

Id: 4/46



Created by C Sutton

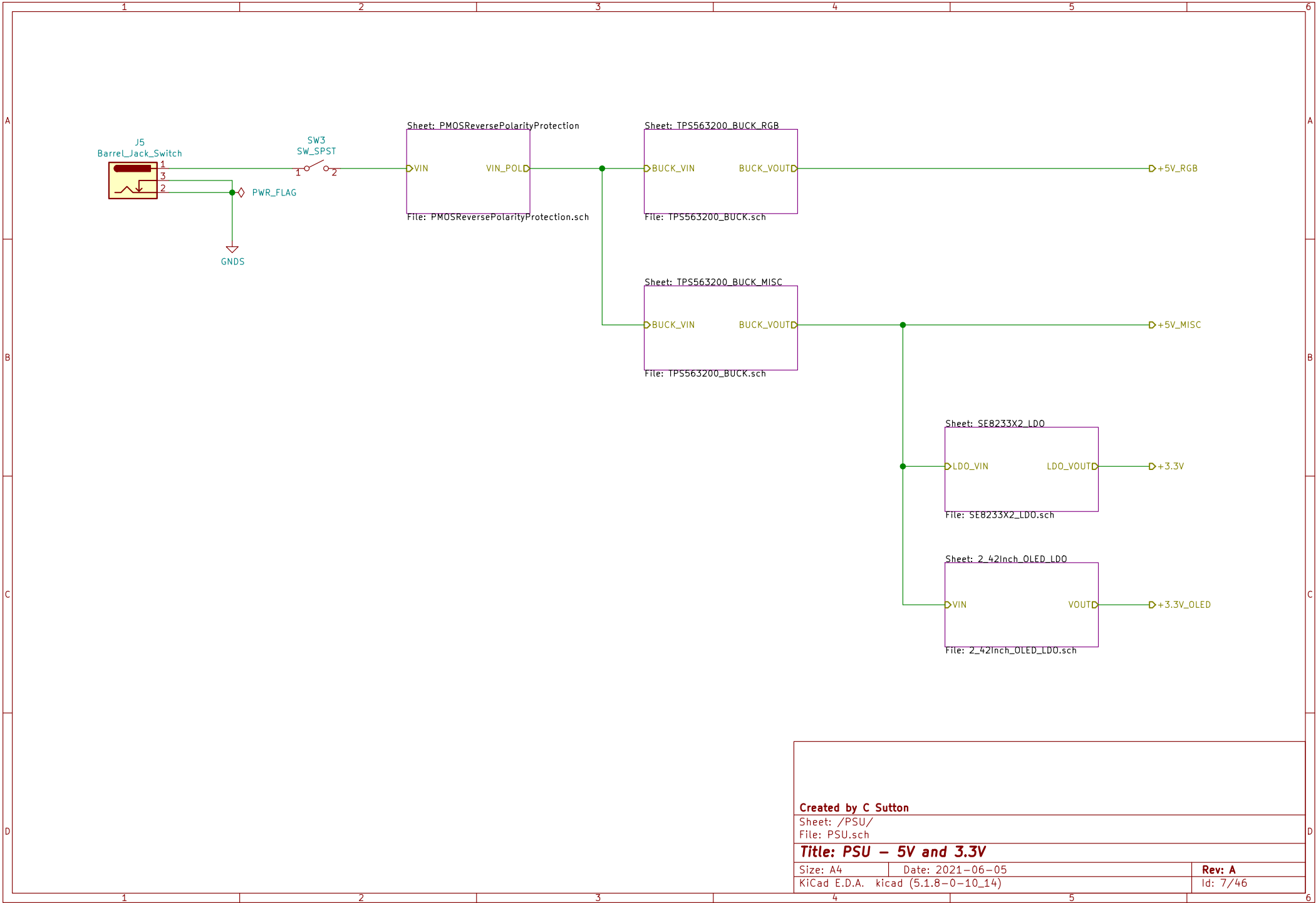
Sheet: /MCU/Encoder/  
File: Encoder.sch

**Title: Encoder**

Size: A4 Date: 2021-06-05  
KiCad E.D.A. kicad (5.1.8-0-10\_14)

Rev: A  
Id: 5/46



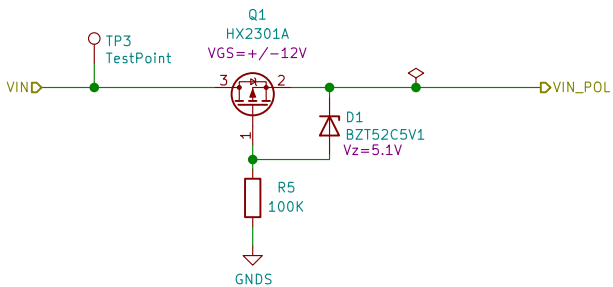


Created by C Sutton

Sheet: /PSU/  
File: PSU.sch

**Title: PSU – 5V and 3.3V**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 7/46



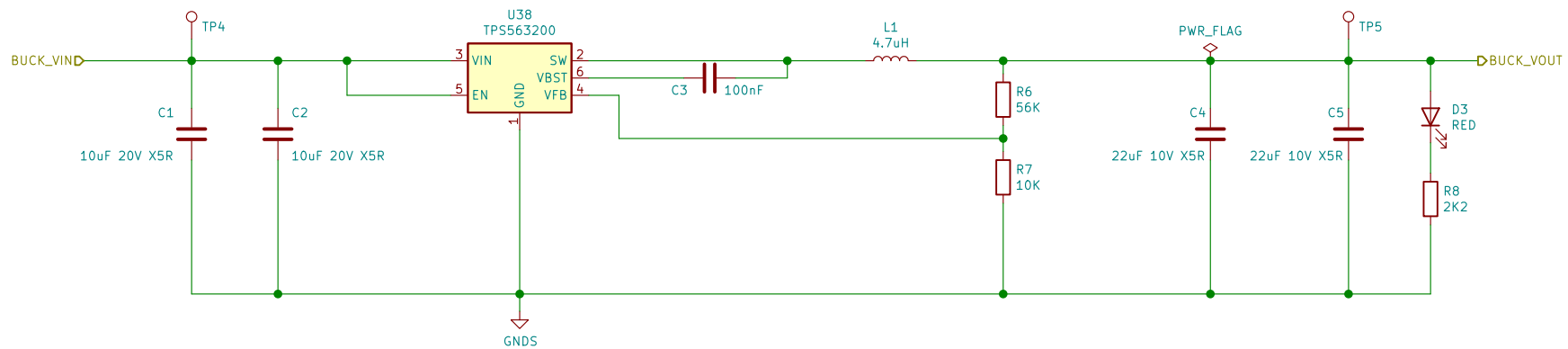
Created by C Sutton

Sheet: /PSU/PMOSReversePolarityProtection/  
File: PMOSReversePolarityProtection.sch

**Title: PSU – Polarity Protection**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 8/46





Created by C Sutton

Sheet: /PSU/TPS563200\_BUCK\_RGB/

File: TPS563200\_BUCK.sch

**Title: PSU – TPS563200 Buck Regulator**

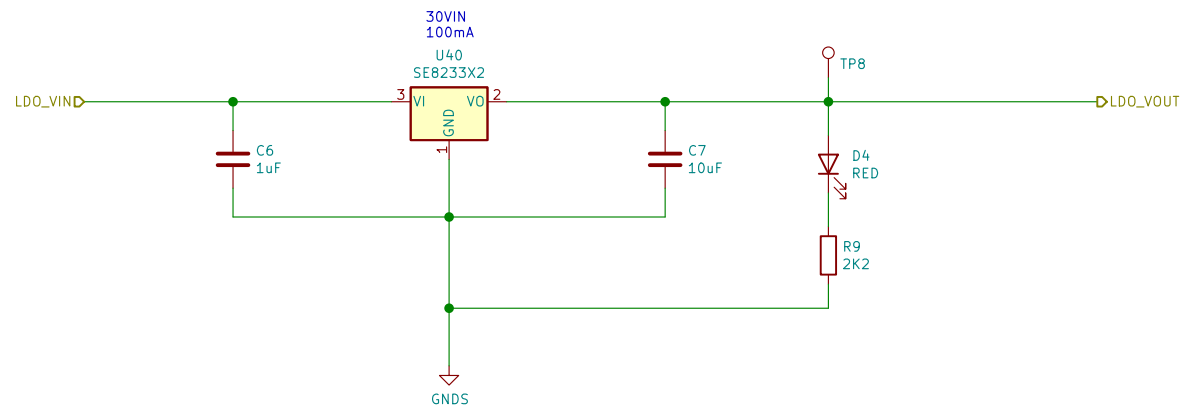
Size: A4

Date: 2021-06-05

Rev: A

KiCad E.D.A. kicad (5.1.8-0-10\_14)

Id: 9/46



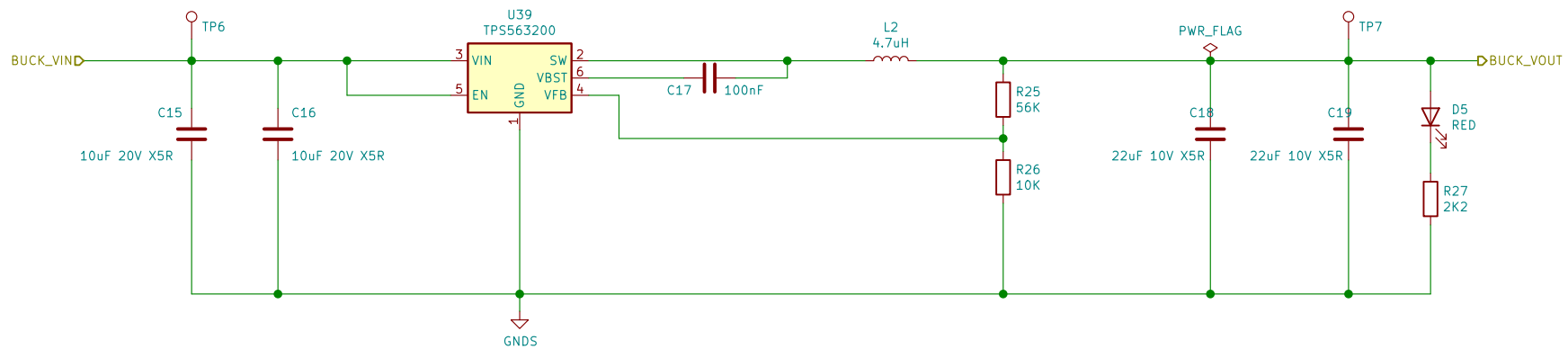
Created by C Sutton

Sheet: /PSU/SE8233X2\_LD0/  
File: SE8233X2\_LD0.sch

**Title: PSU – LDO 3.3V @ 100mA**

Size: A4 Date: 2021-06-05  
KiCad E.D.A. kicad (5.1.8-0-10\_14)

Rev: A  
Id: 10/46



Created by C Sutton

Sheet: /PSU/TPS563200\_BUCK\_MISC/

File: TPS563200\_BUCK.sch

**Title: PSU – TPS563200 Buck Regulator**

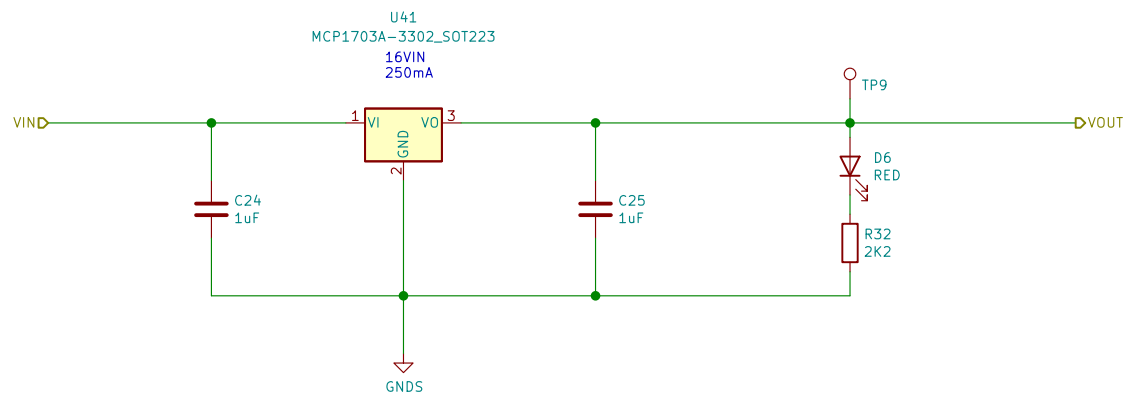
Size: A4

Date: 2021-06-05

Rev: A

KiCad E.D.A. kicad (5.1.8-0-10\_14)

Id: 11/46



Created by C Sutton

Sheet: /PSU/2\_42Inch\_OLED\_LDO/

File: 2\_42Inch\_OLED\_LDO.sch

**Title: PSU - LDO 3.3V @ 250mA**

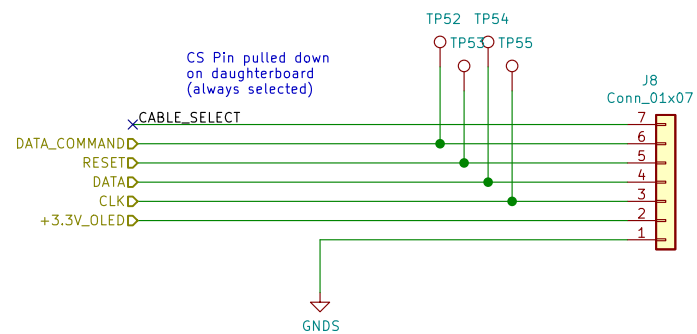
Size: A4

Date: 2021-06-05

Rev: A

KiCad E.D.A. kicad (5.1.8-0-10\_14)

Id: 12/46



Created by C Sutton

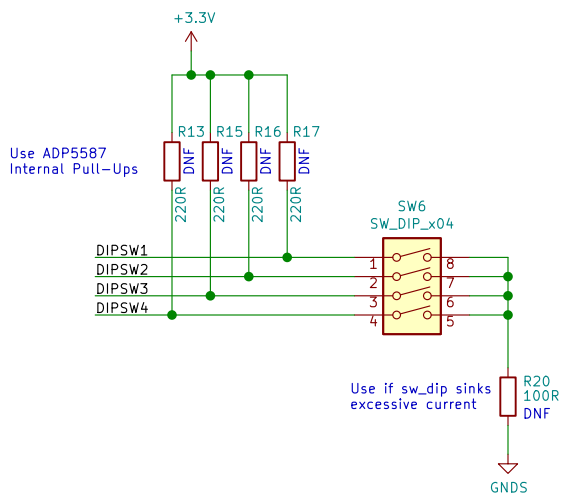
Sheet: /OLED\_Display/  
File: OLED\_Display.sch

**Title: 2.42" SSD1309 OLED Display Module**

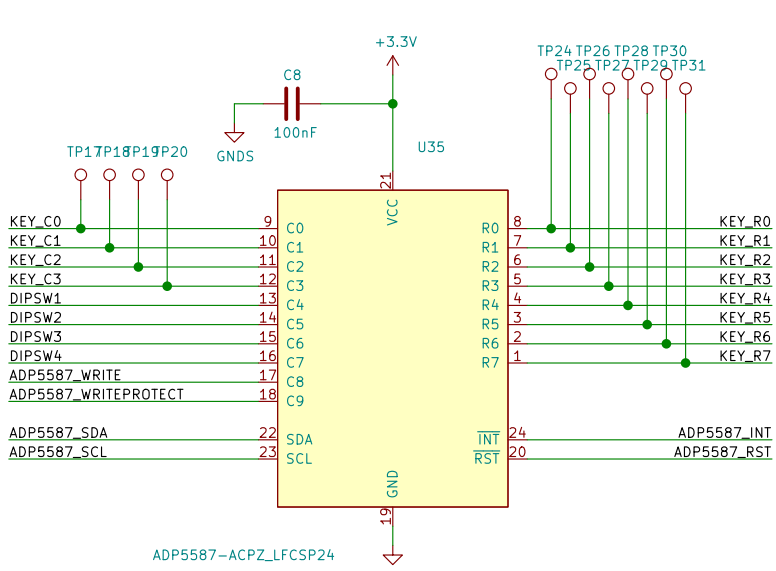
Size: A4 Date: 2021-06-05  
KiCad E.D.A. kicad (5.1.8-0-10\_14)

Rev: A  
Id: 13/46

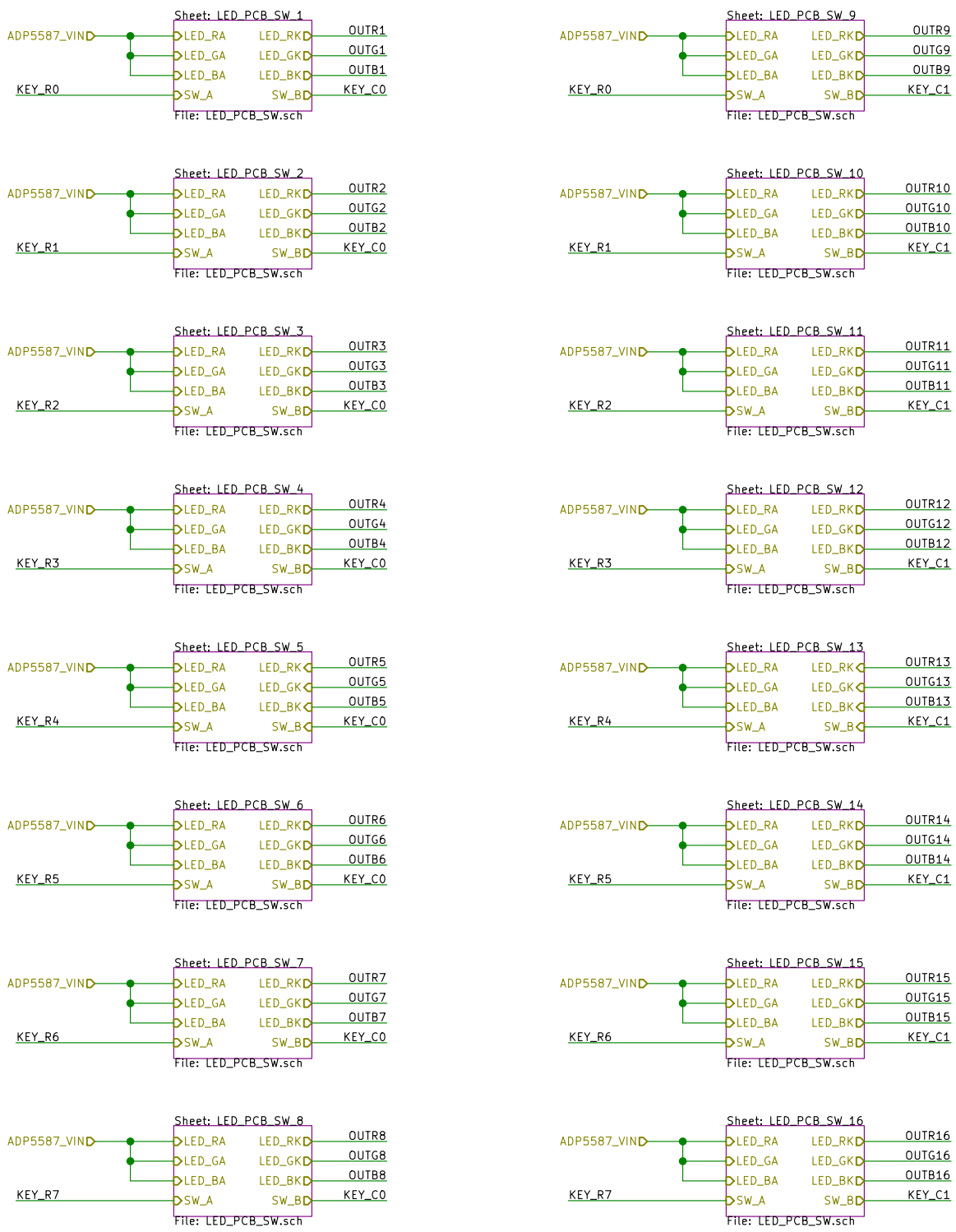
### MIDI CHANNEL SELECT I/O



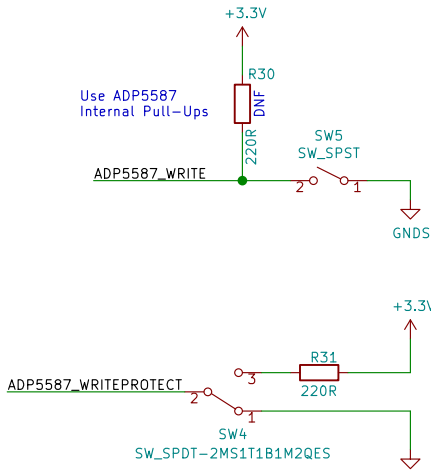
### KEYSCAN MUX IC



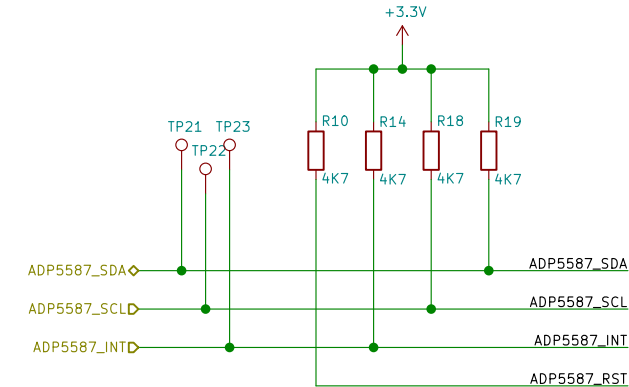
### INPUT KEYS AND RGB LED MATRIX – 1x16 – BOTTOM ROW



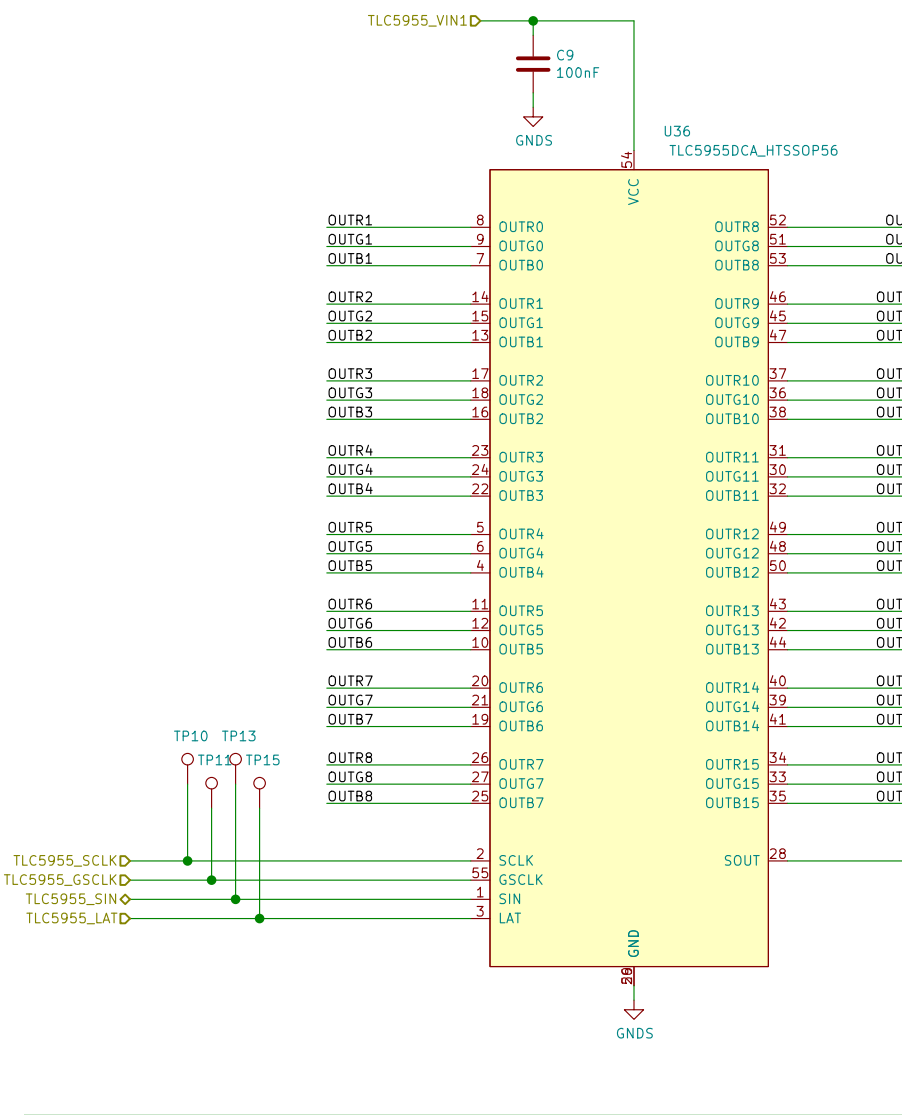
### PRESET WRITE I/O



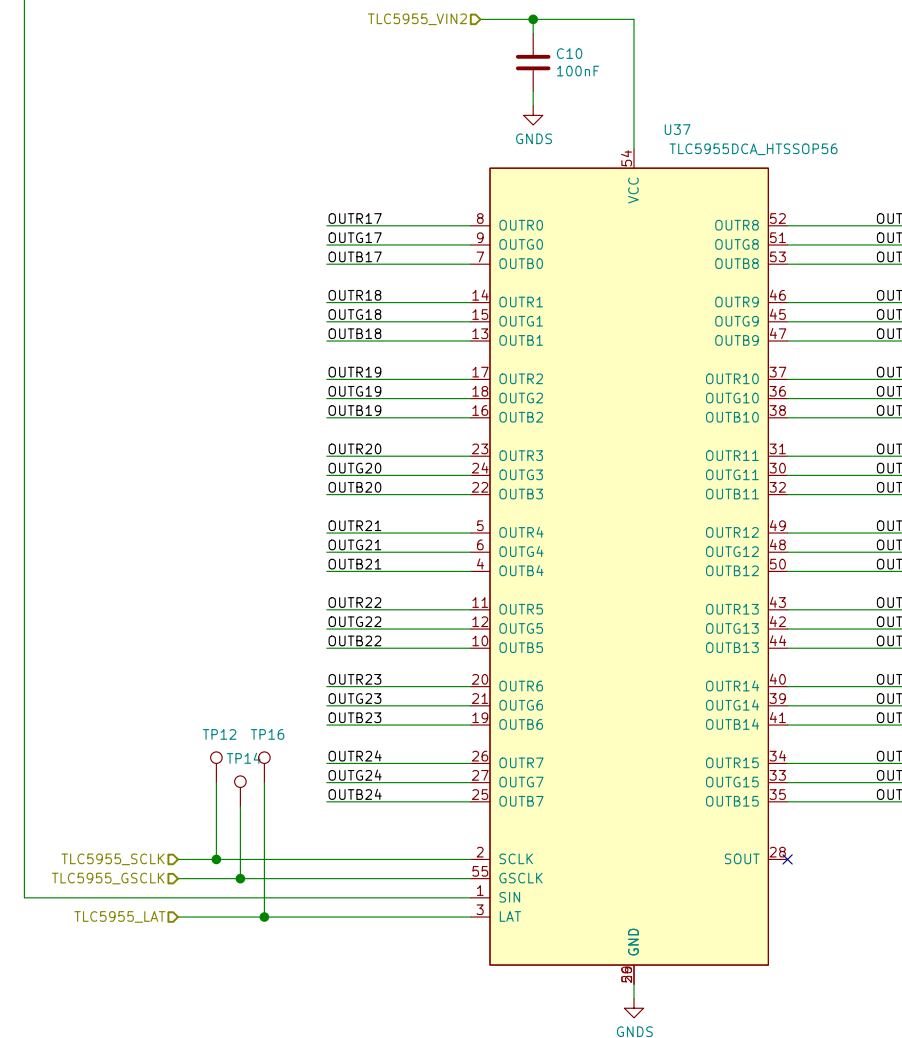
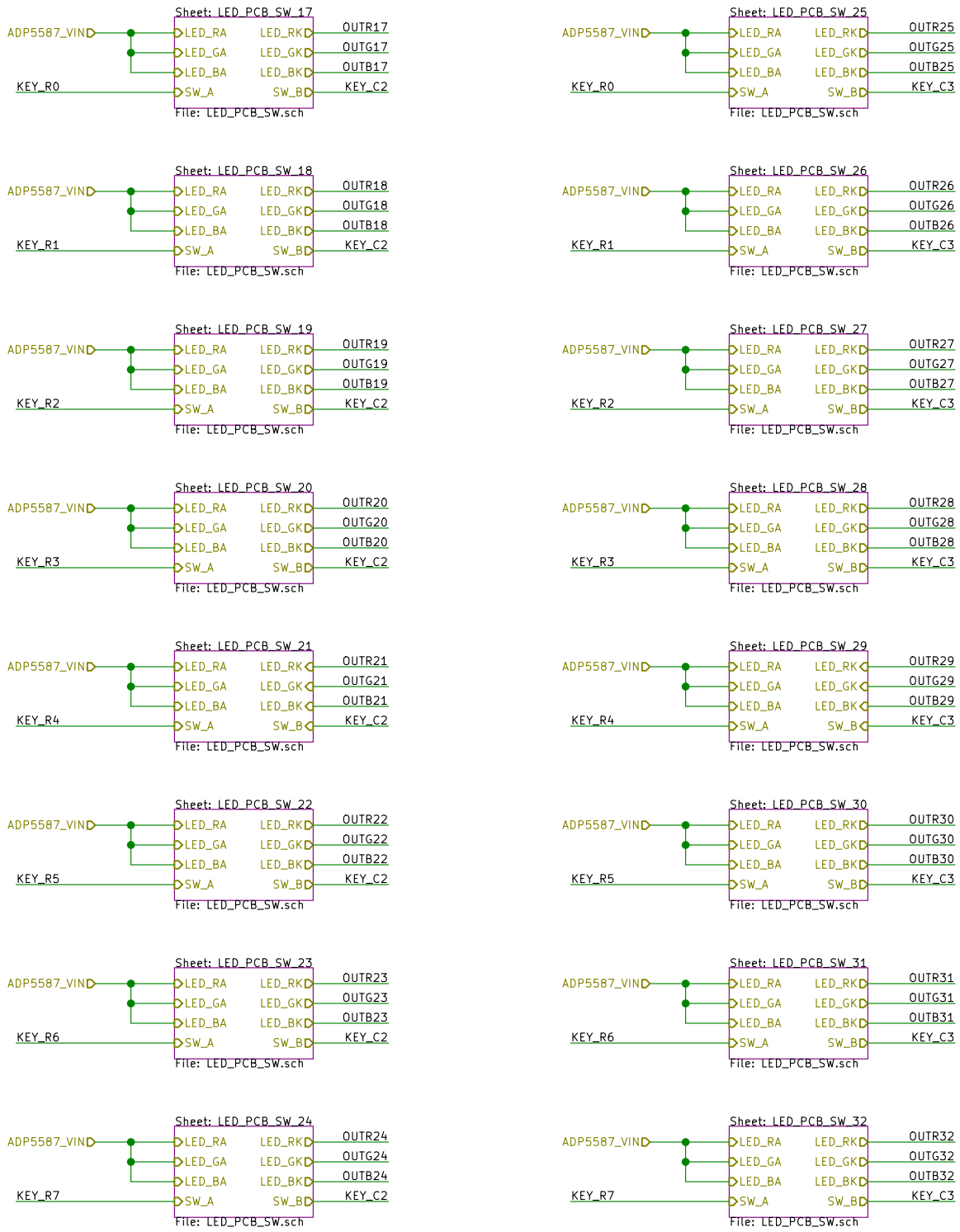
### KEYSCAN MUX I2C

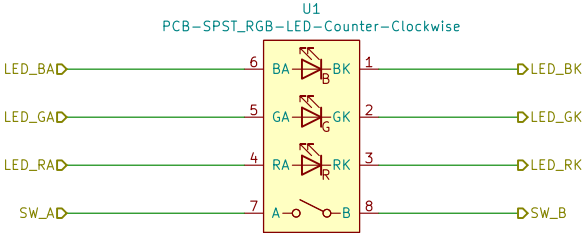


### RGB LED DRIVERS



### INPUT KEYS AND RGB LED MATRIX – 1x16 – TOP ROW



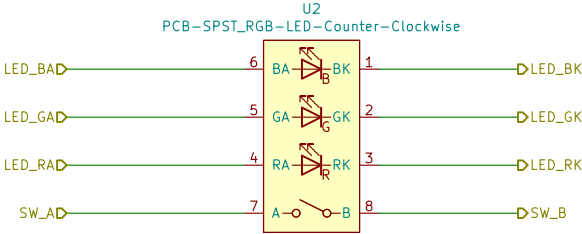


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_1/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 15/46



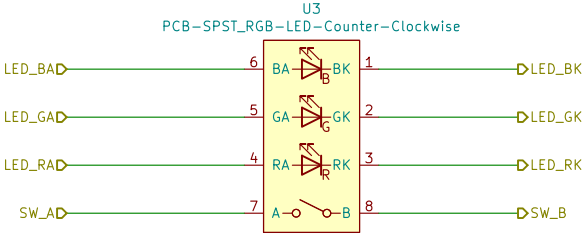
Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_2/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 16/46



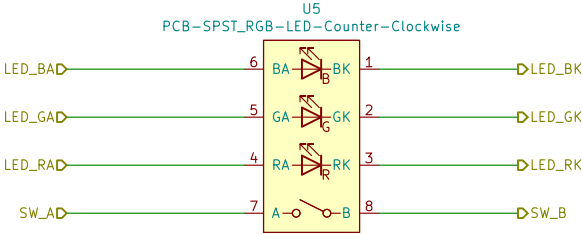


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_3/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 17/46

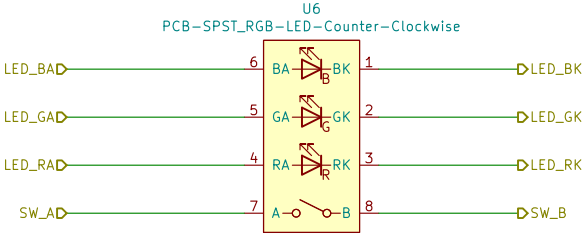


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_5/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 18/46

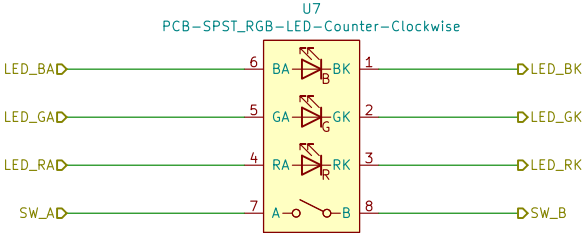


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_6/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 19/46

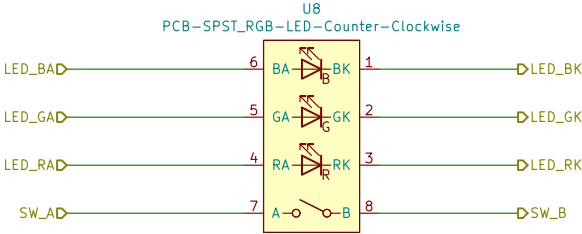


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_7/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 20/46

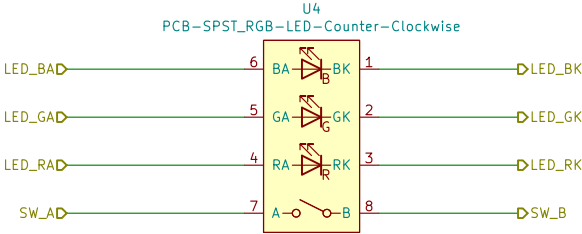


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_8/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 21/46

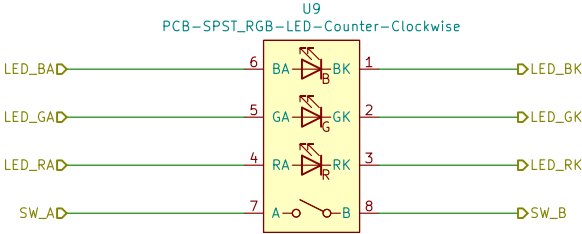


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_4/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 22/46

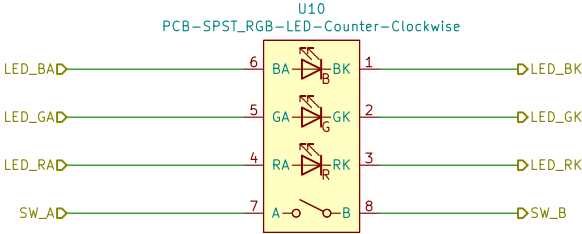


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_9/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 23/46



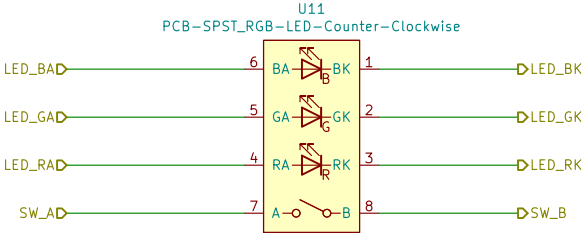
Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_10/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 24/46



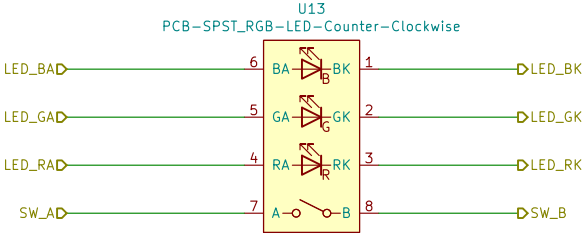


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_11/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 25/46

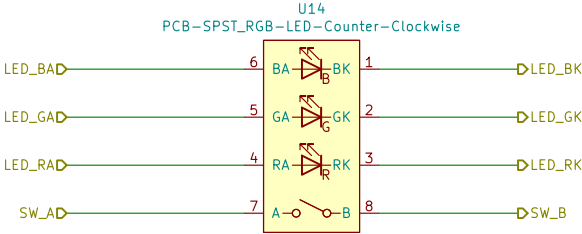


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_13/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 26/46

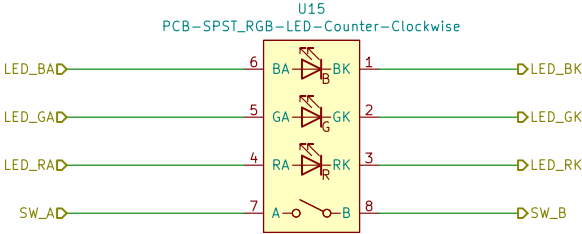


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_14/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 27/46

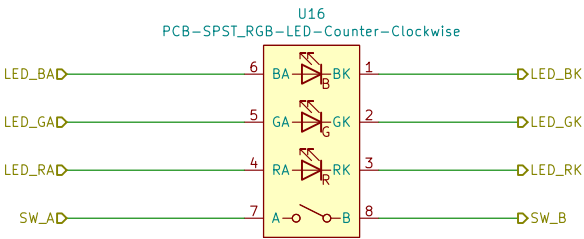


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_15/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 28/46

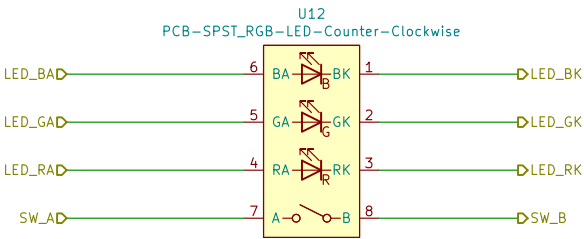


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_16/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 29/46

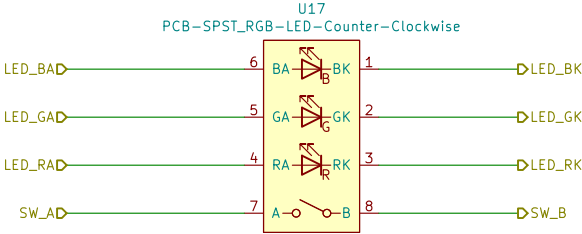


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_12/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 30/46

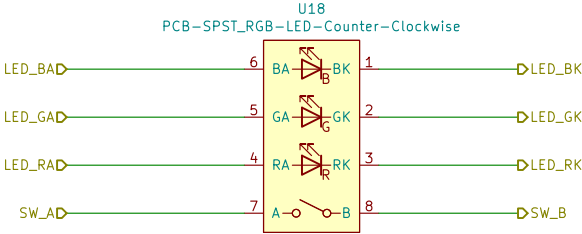


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_17/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 31/46



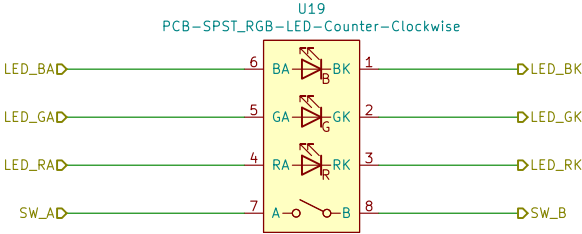
Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_18/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 32/46



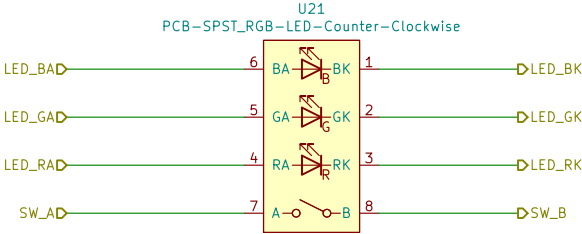


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_19/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 33/46

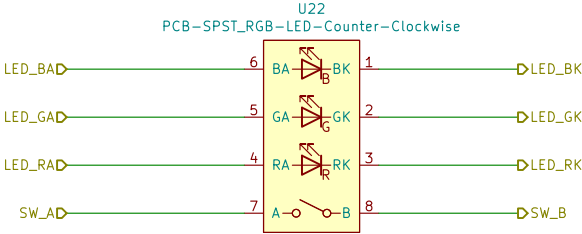


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_21/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 34/46

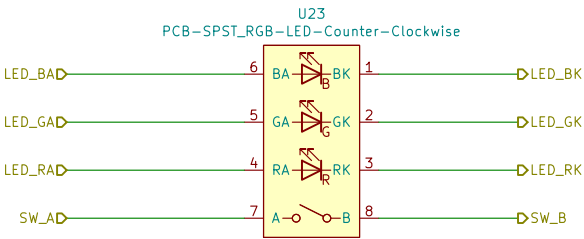


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_22/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 35/46

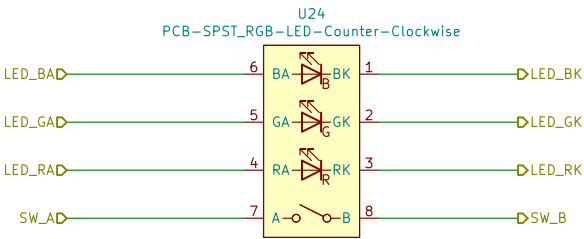


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_23/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 36/46

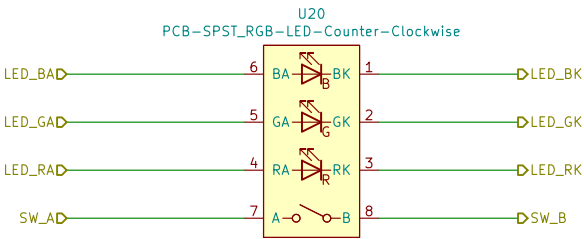


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_24/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 37/46

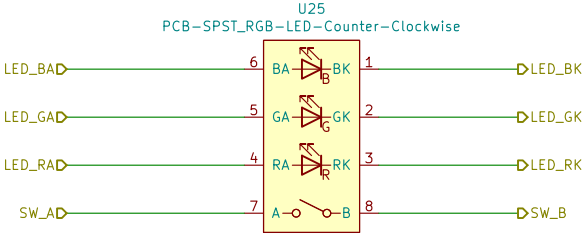


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_20/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 38/46

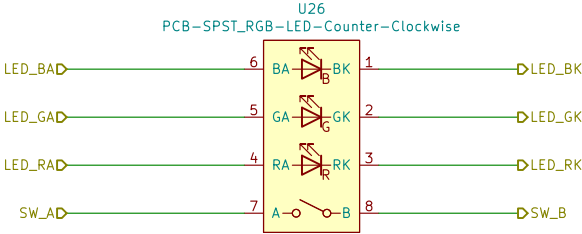


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_25/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 39/46



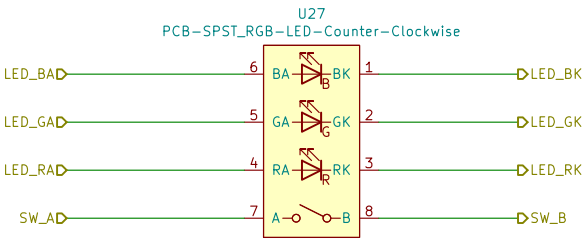
Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_26/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 40/46



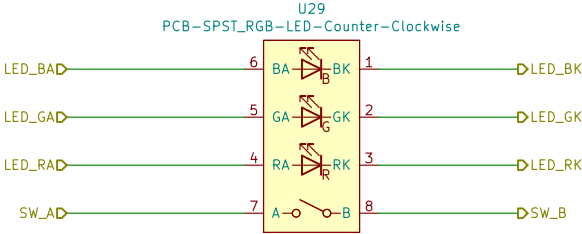


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_27/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 41/46

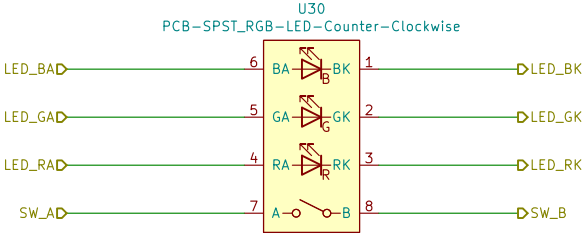


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_29/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 42/46

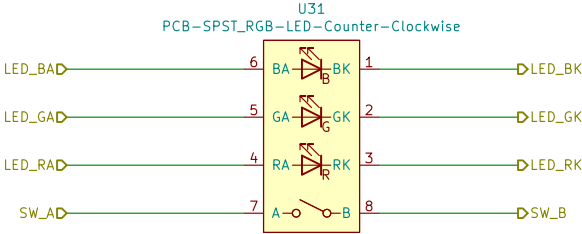


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_30/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 43/46

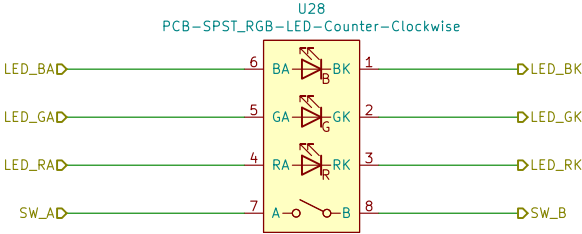


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_31/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 44/46

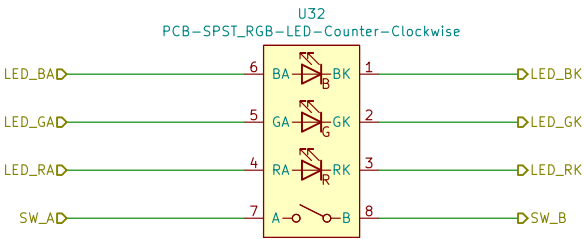


Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_28/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 45/46



Created by C Sutton

Sheet: /Input Keyscan and RGB LED Driver/LED\_PCB\_SW\_32/  
File: LED\_PCB\_SW.sch

**Title: Combined RGB LED and SPST**

Size: A4	Date: 2021-06-05	Rev: A
KiCad E.D.A. kicad (5.1.8-0-10_14)		Id: 46/46