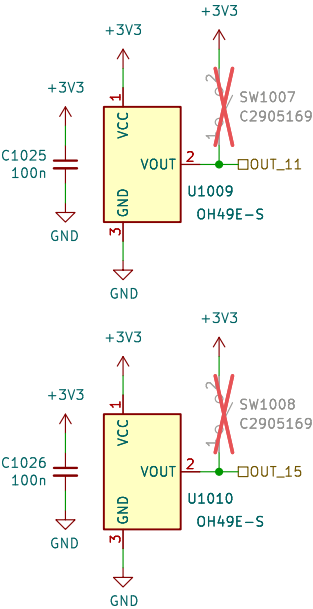
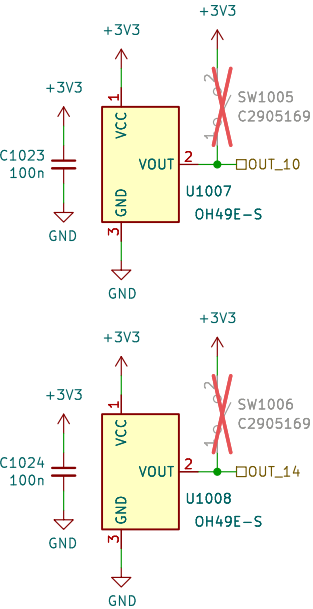
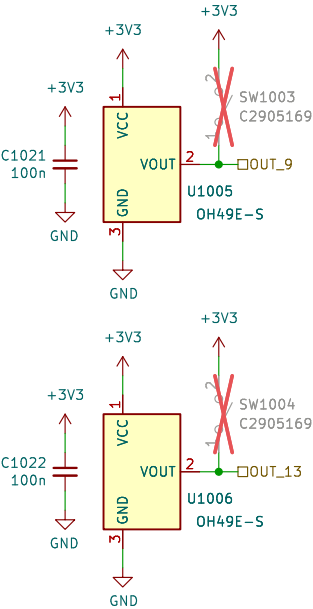
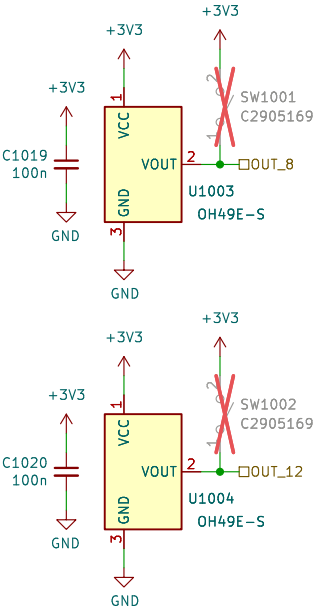
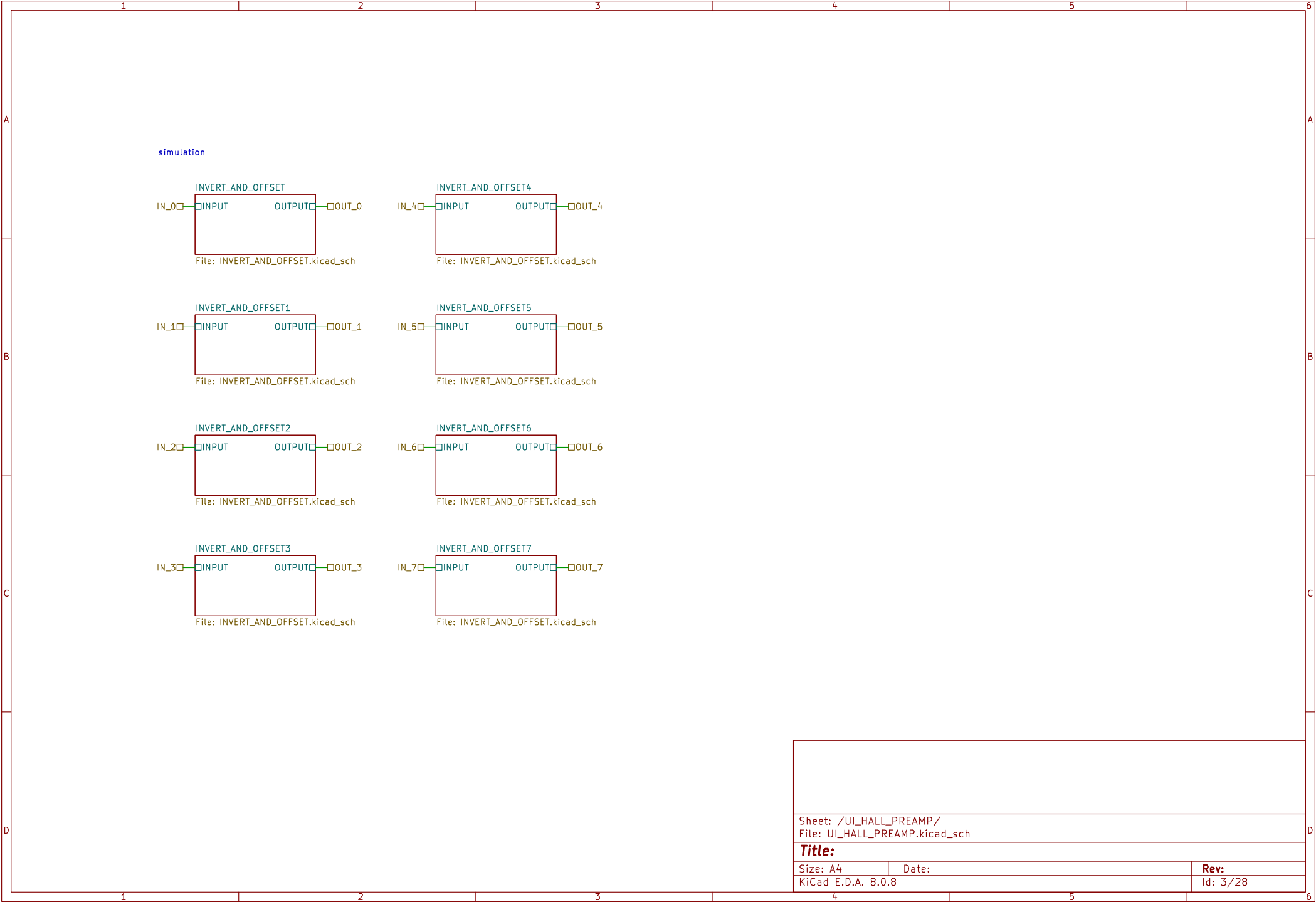


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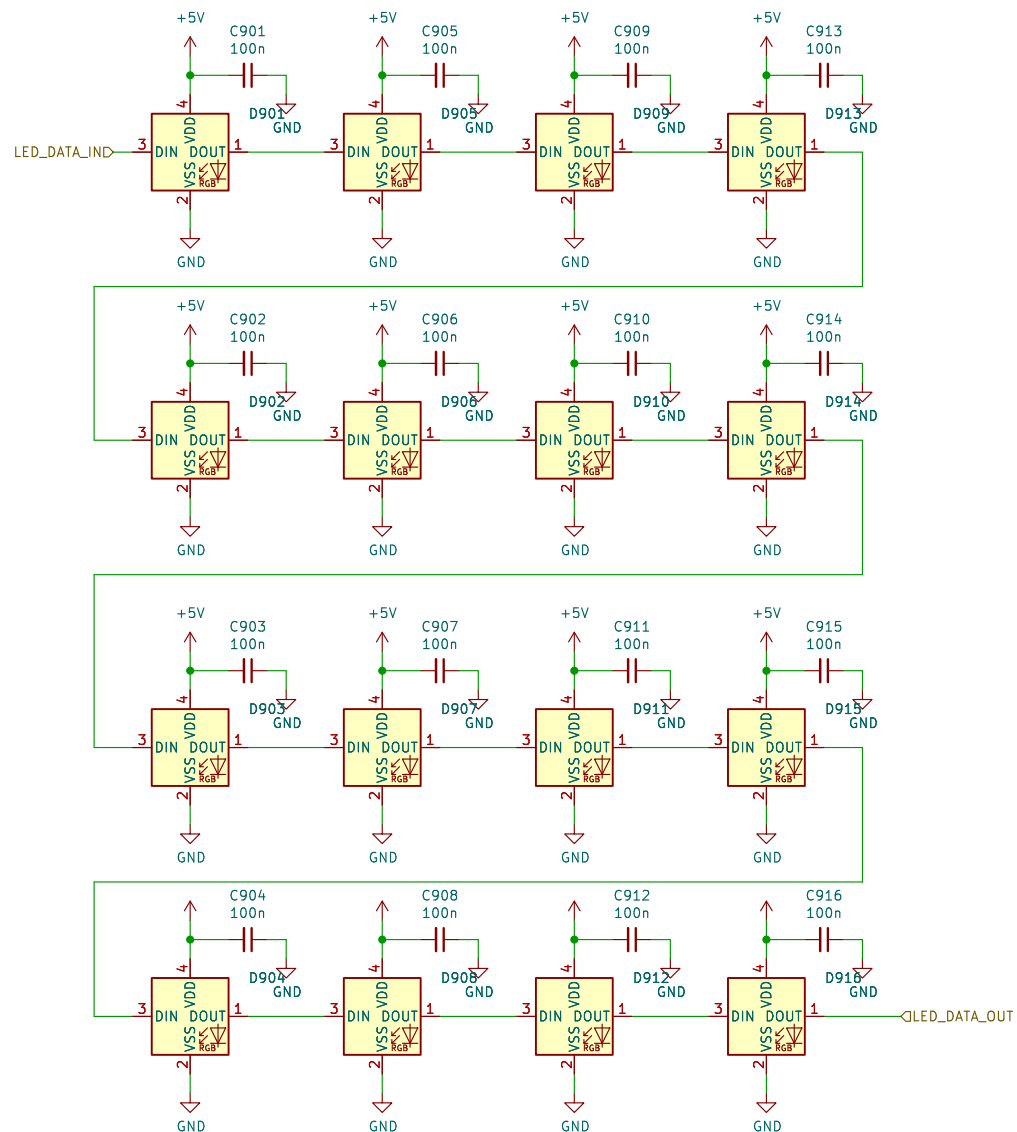
Simulation:  
<http://tinyurl.com/y229mty4>



|   |          |      |
|---|----------|------|
| Sheet: /UI_BUTTON/<br>File: UI_BUTTON.kicad_sch |          |      |
| Title:  |          |      |
| Size: A4  | Date:    | Rev: |
| KiCad E.D.A. 8.0.8                              | Id: 2/28 |      |



# 900



Sheet: /UI\_LED/  
File: UI\_LED.kicad\_sch

**Title:**

Size: A4  
KiCad E.D.A. 8.0.8

Date:

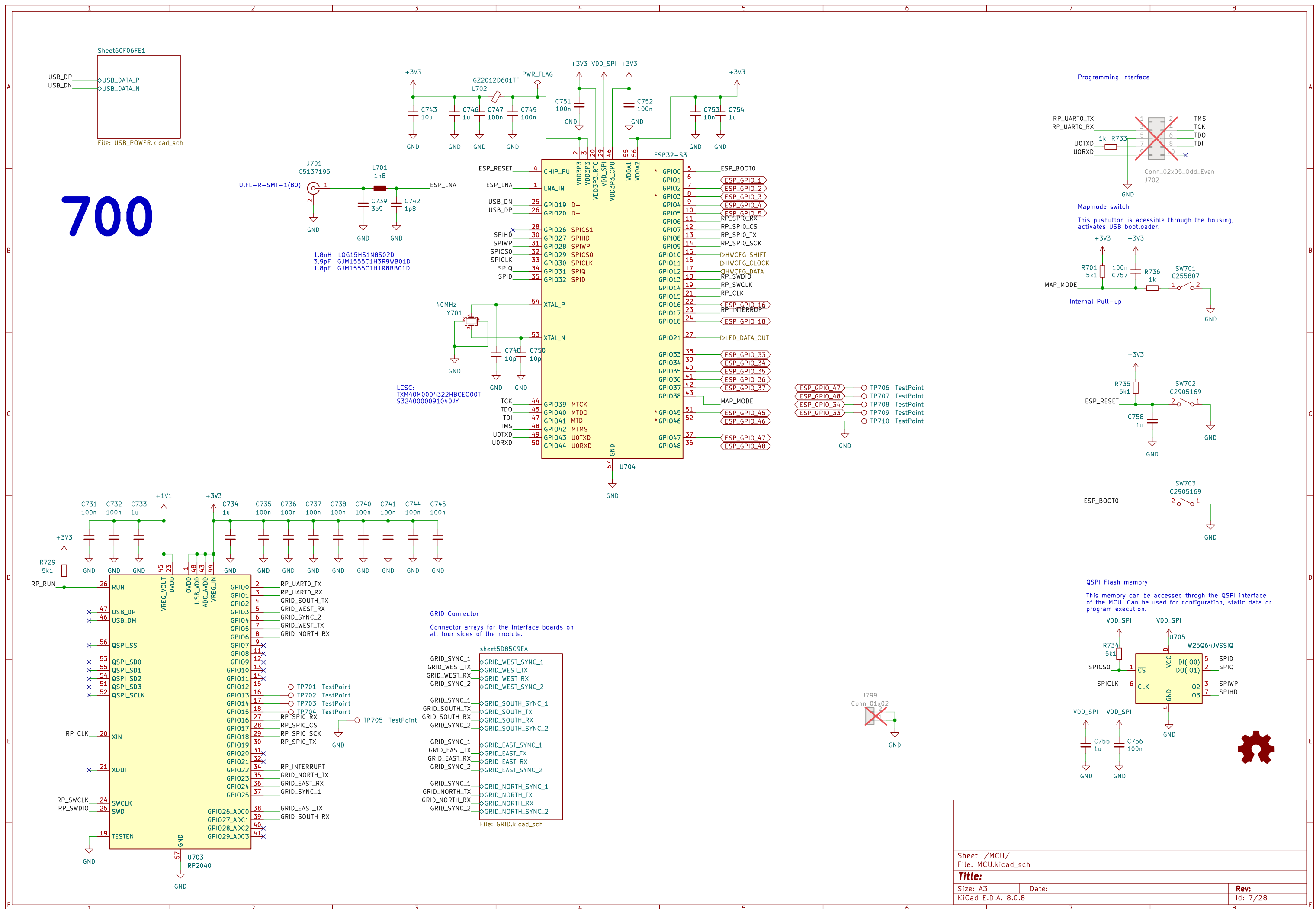
**Rev:**  
Id: 4/28

1000



1000





500

GRID Connector  
Bi-Directional Data  
2x SYNC

Board Mounting Pattern



|  |          |      |
|--|----------|------|
| Sheet: /MCU/sheet5D85C9EA/<br>File: GRID.kicad_sch |          |      |
| <b>Title:</b>                                      |          |      |
| Size: A4   | Date:    | Rev: |
| KiCad E.D.A. 8.0.8                                 | Id: 8/28 |      |



# 600

## ESD Diodes

ESD protection for all of the externally accessible nets.



## +3V3 LDO Regulators

Regulators for generating independent power rails for the microcontroller and the user interface.



Sheet: /MCU/Sheet60F06FE1/  
File: USB\_POWER.kicad\_sch

### Title:

Size: A4

Date:

KiCad E.D.A. 8.0.8

Rev:

Id: 9/28

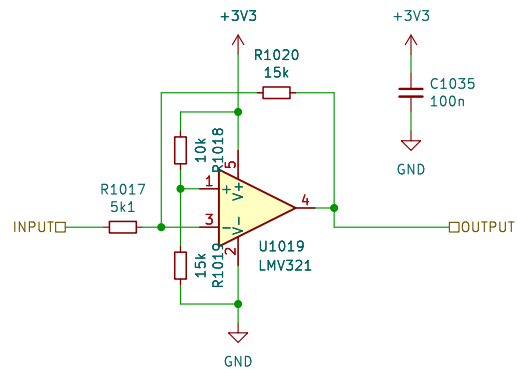
Grid firmware can identify the hardware and the board revision through a 3 wire serial interface using one or more shift register as read only memory. The content of the memory is defined by pulling the inputs high or low through pcb traces or solderable configuration jumpers.

D0: MODEL (LSB)  
D1: MODEL  
D2: MODEL  
D3: MODEL (MSB)  
D4: REVISION (LSB)  
D5: REVISION  
D6: REVISION  
D7: REVISION (MSB)

|      |      |
|------|------|
| Po16 | 0000 |
| Bo16 | 0001 |
| PBF4 | 0010 |
| EN16 | 0011 |
| ...  |      |

```
RevA 0000
RevB 0001
RevC 0010
RevD 0011
...
```

|                       |       |             |
|-----------------------|-------|-------------|
| Sheet: /HWCFG/        |       | D           |
| File: HWCFG.kicad_sch |       |             |
| <b>Title:</b>         |       |             |
| Size: A4              | Date: | <b>Rev:</b> |
| KiCad E.D.A. 8.0.8    |       | Id: 10/28   |



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET7/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

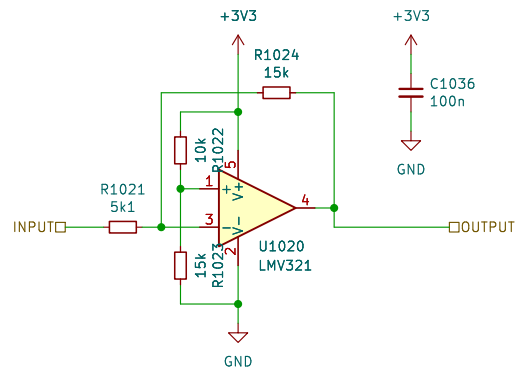
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 11/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET6/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

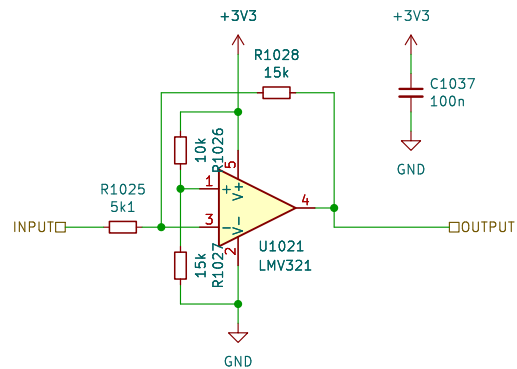
Size: A4

Date:

Rev:

KiCad E.D.A. 8.0.8

Id: 12/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET4/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

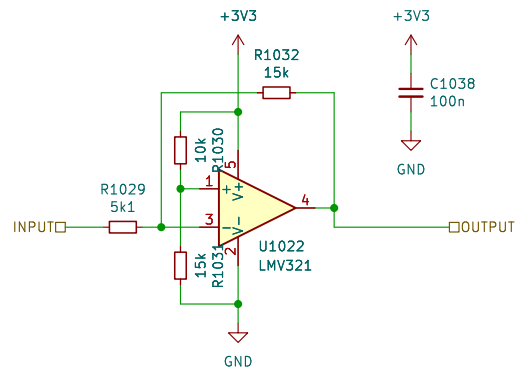
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 13/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET5/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

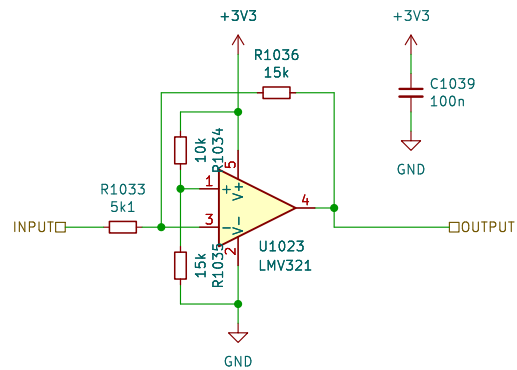
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 14/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

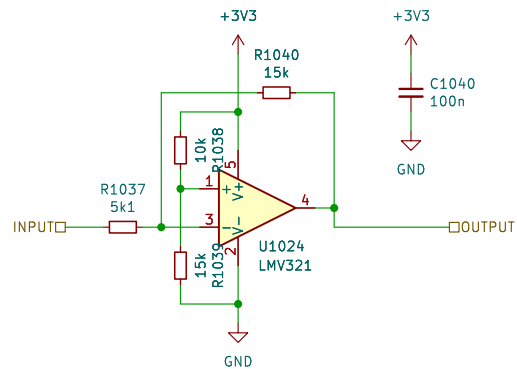
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 15/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET1/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

Size: A4

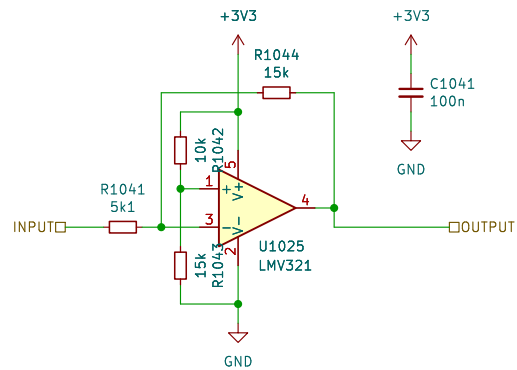
Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 16/28





Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET2/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

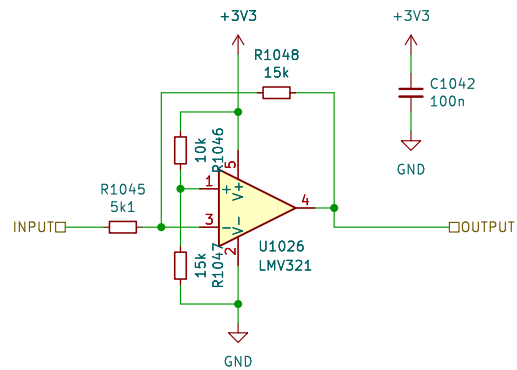
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 17/28



Sheet: /UI\_HALL\_PREAMP/INVERT\_AND\_OFFSET3/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

Size: A4

Date:

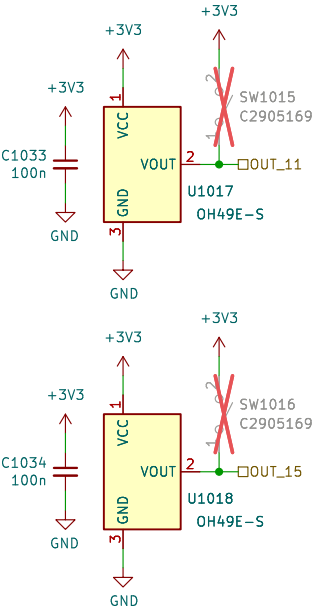
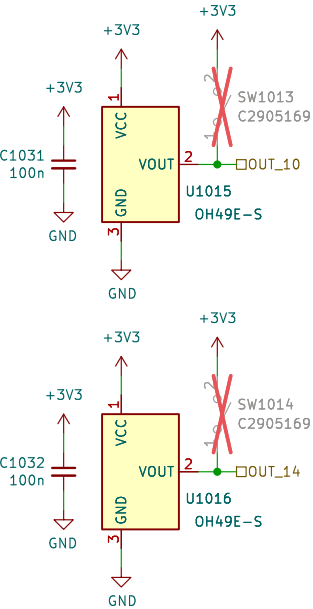
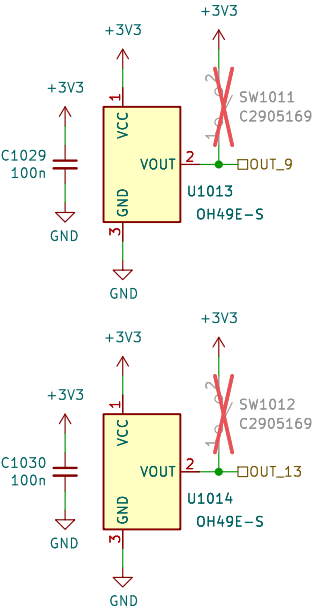
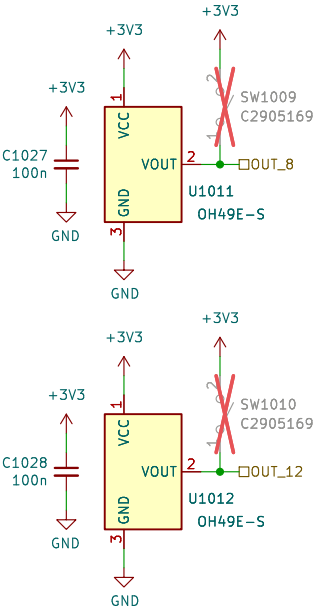
**Rev:**

KiCad E.D.A. 8.0.8

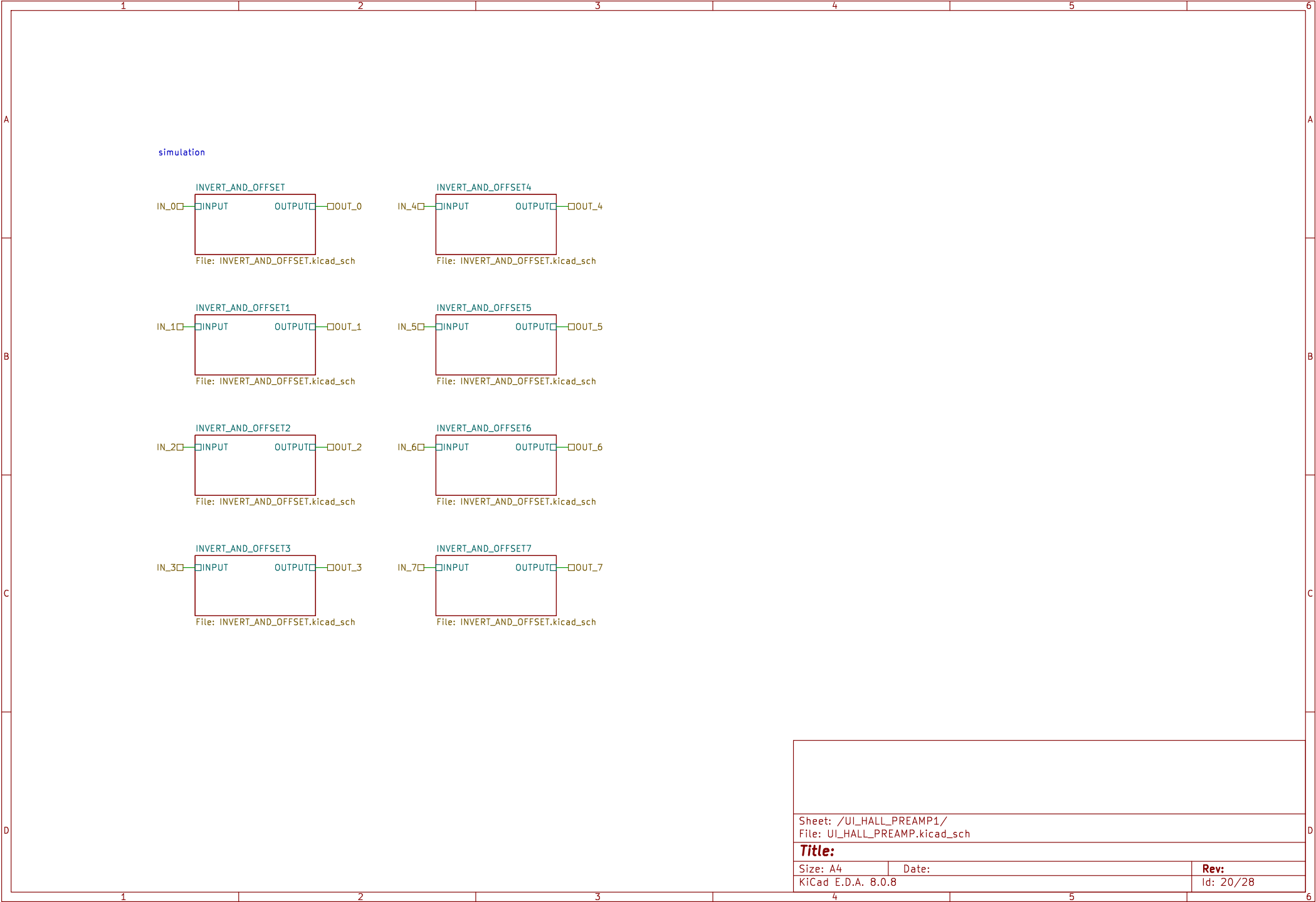
Id: 18/28

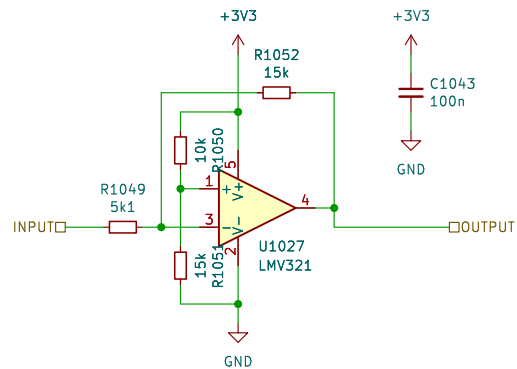
1000

Simulation:  
<http://tinyurl.com/y229mt4>



|  |           |      |
|--|-----------|------|
| Sheet: /UI_BUTTON1/<br>File: UI_BUTTON.kicad_sch |           |      |
| Title:   |           |      |
| Size: A4   | Date:     | Rev: |
| KiCad E.D.A. 8.0.8                               | Id: 19/28 |      |





Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET7/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

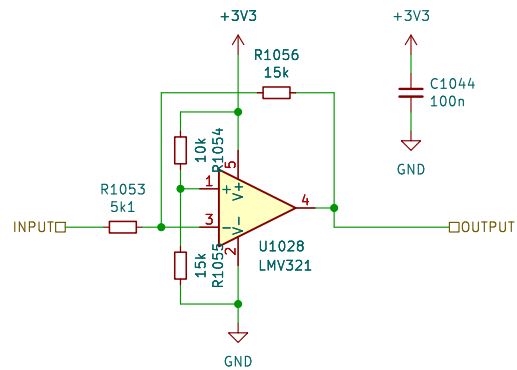
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 21/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET6/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

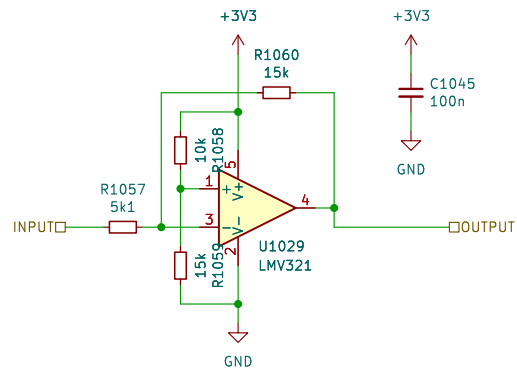
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 22/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET4/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

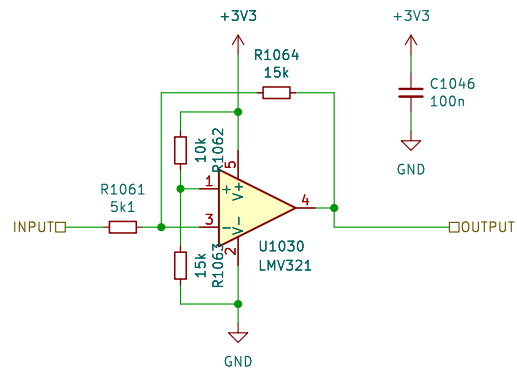
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 23/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET5/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

Size: A4

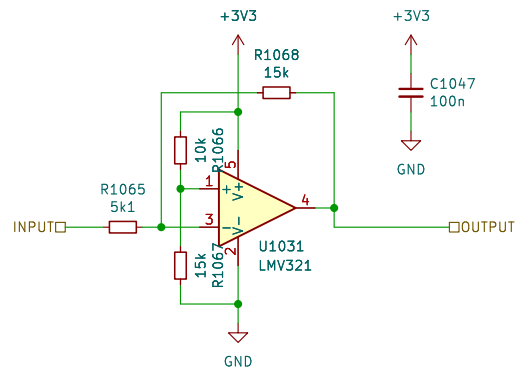
Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 24/28





Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

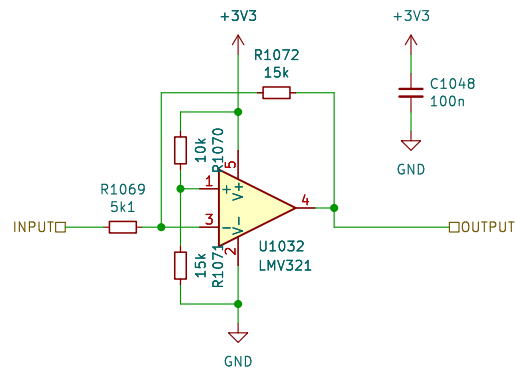
Size: A4

Date:

**Rev:**

KiCad E.D.A. 8.0.8

Id: 25/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET1/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

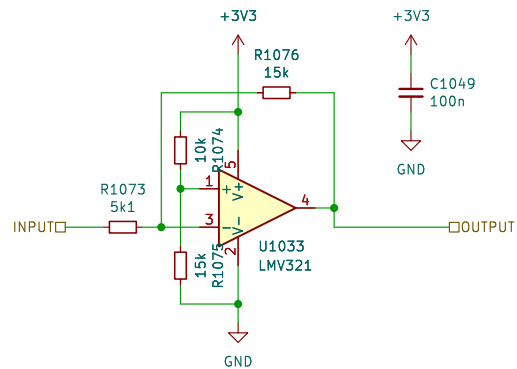
Size: A4

Date:

Rev:

KiCad E.D.A. 8.0.8

Id: 26/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET2/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

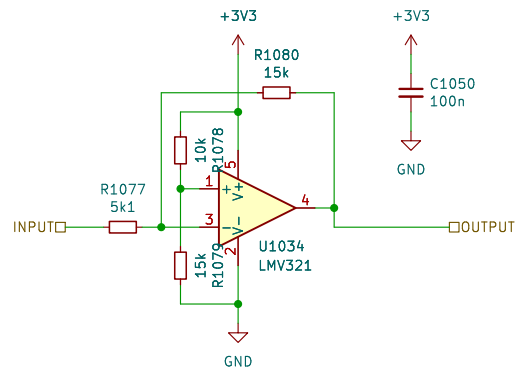
Size: A4

Date:

Rev:

KiCad E.D.A. 8.0.8

Id: 27/28



Sheet: /UI\_HALL\_PREAMP1/INVERT\_AND\_OFFSET3/  
File: INVERT\_AND\_OFFSET.kicad\_sch

**Title:**

Size: A4

Date:

Rev:

KiCad E.D.A. 8.0.8

Id: 28/28