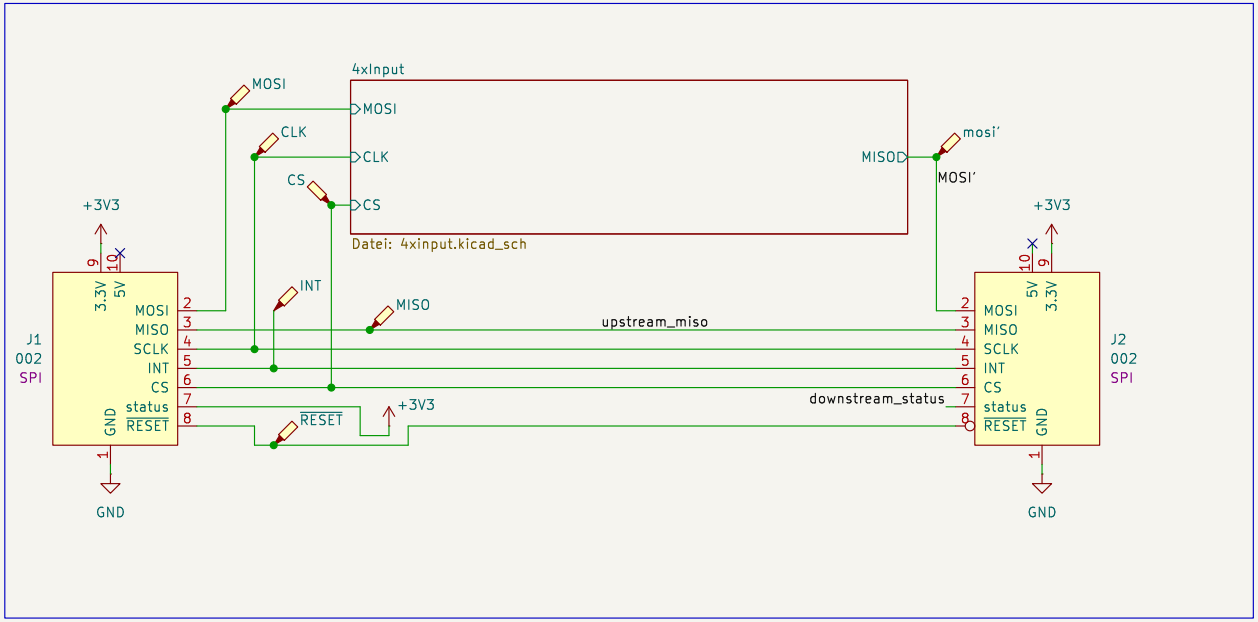
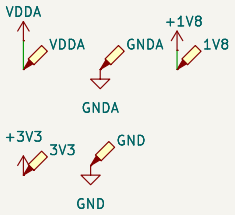
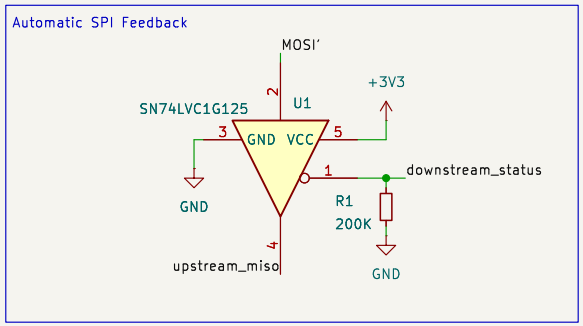
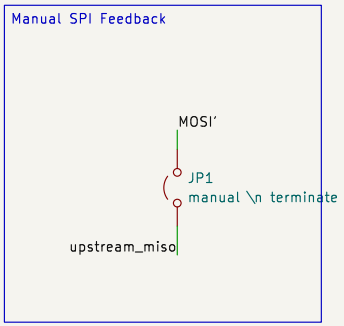




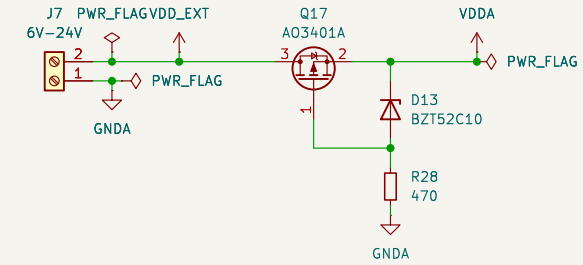




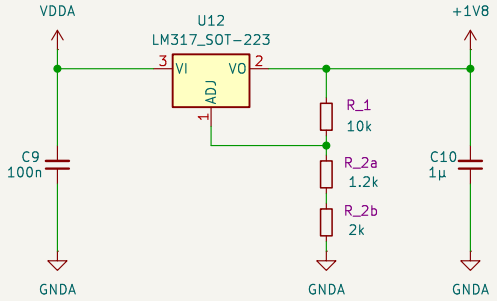
TODO

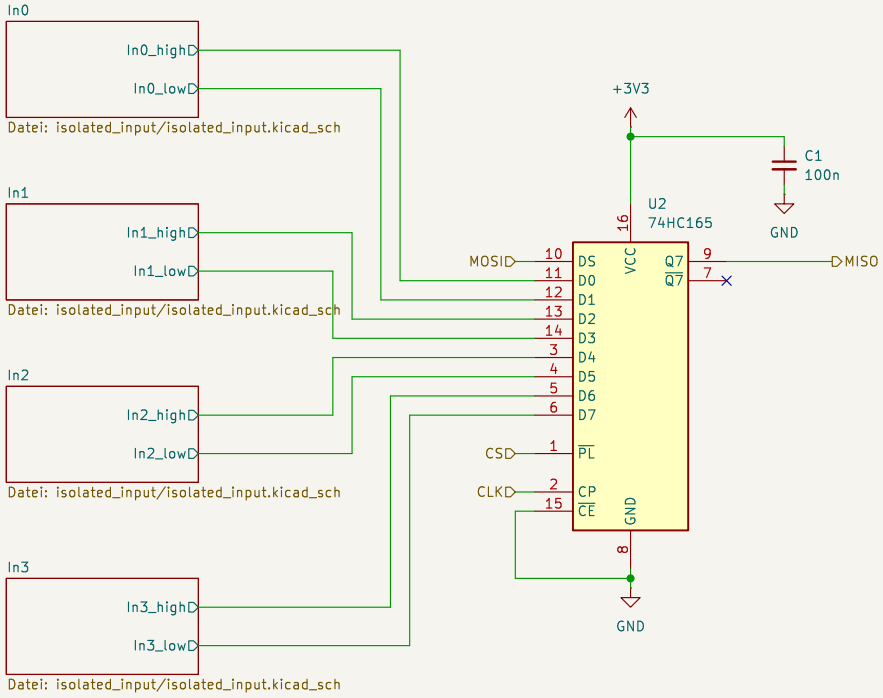
- [x] flip input level indicator
- [x] power optocoupler LEDs by +1V8
- [x] voltage regulator from 6–24V to +1V8
- [x] revrese polarity protection for external supply
- [x] fix shift register
- [x] decrease indicator led brightness

Sheet: /		
File: multi_input_edgy.kicad_sch		
Title: InputEdgy		
Size: A4	Date: 2024-11-11	**Rev: V1.2**
KiCad E.D.A. 9.0.2		Id: 1/6



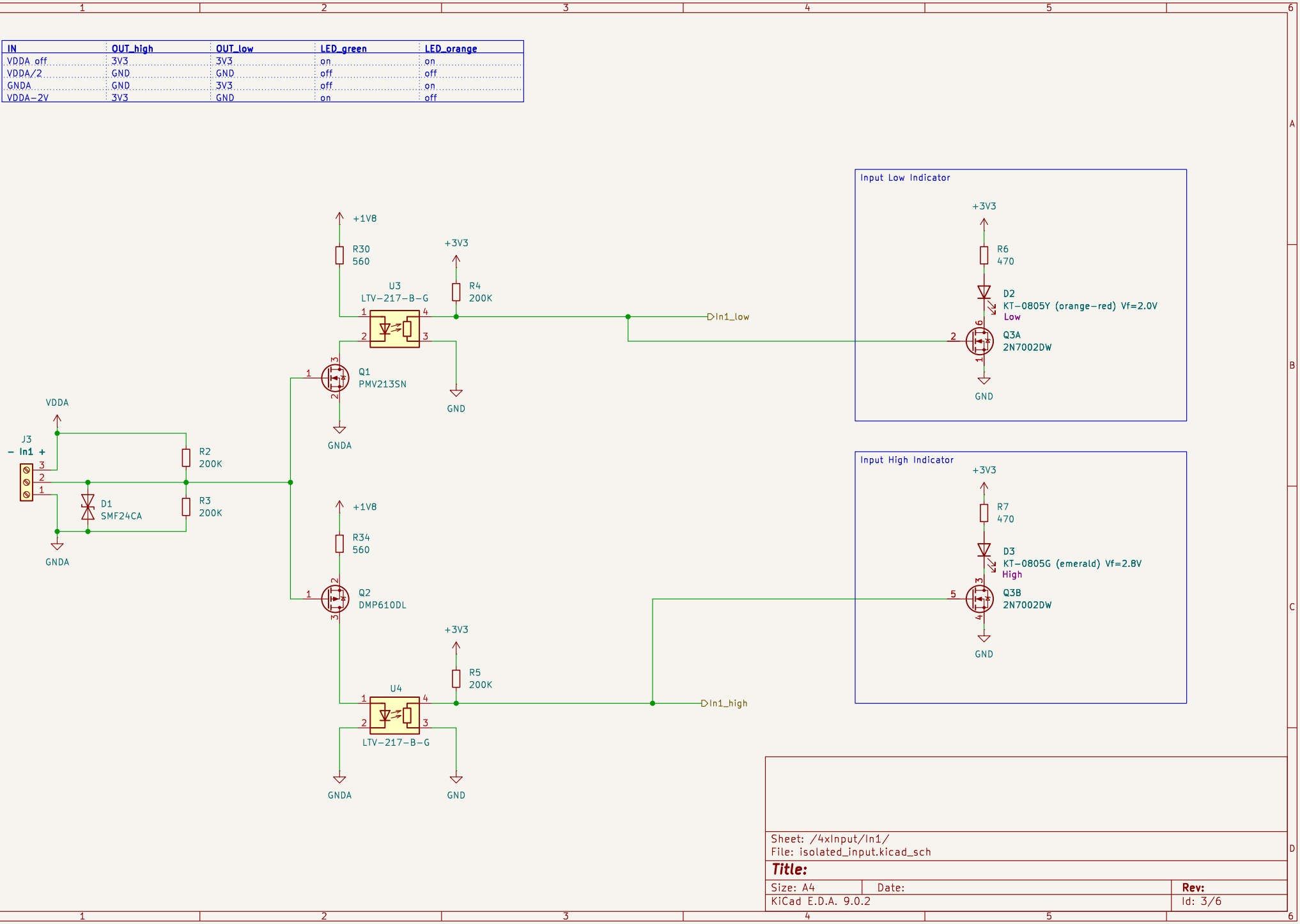

```
V_out = 1.25V * (1 + R_2 / R_1) + I_adj * R_2

I_adj = 50µA
V_out = 1.8V
R_1   = 10kΩ
R_2   = 3.2KΩ
```





Sheet: /4xInput/		
File: 4xinput.kicad_sch		
Title: InputEdgy		
Size: A4	Date: 2024-11-11	**Rev: ${Version}**
KiCad E.D.A. 9.0.2		Id: 2/6

IN	OUT_high	OUT_low	LED_green	LED_orange
VDDA off	3V3	3V3	on	on
VDDA/2	GND	GND	off	off
GNDA	GND	3V3	off	on
VDDA-2V	3V3	GND	on	off

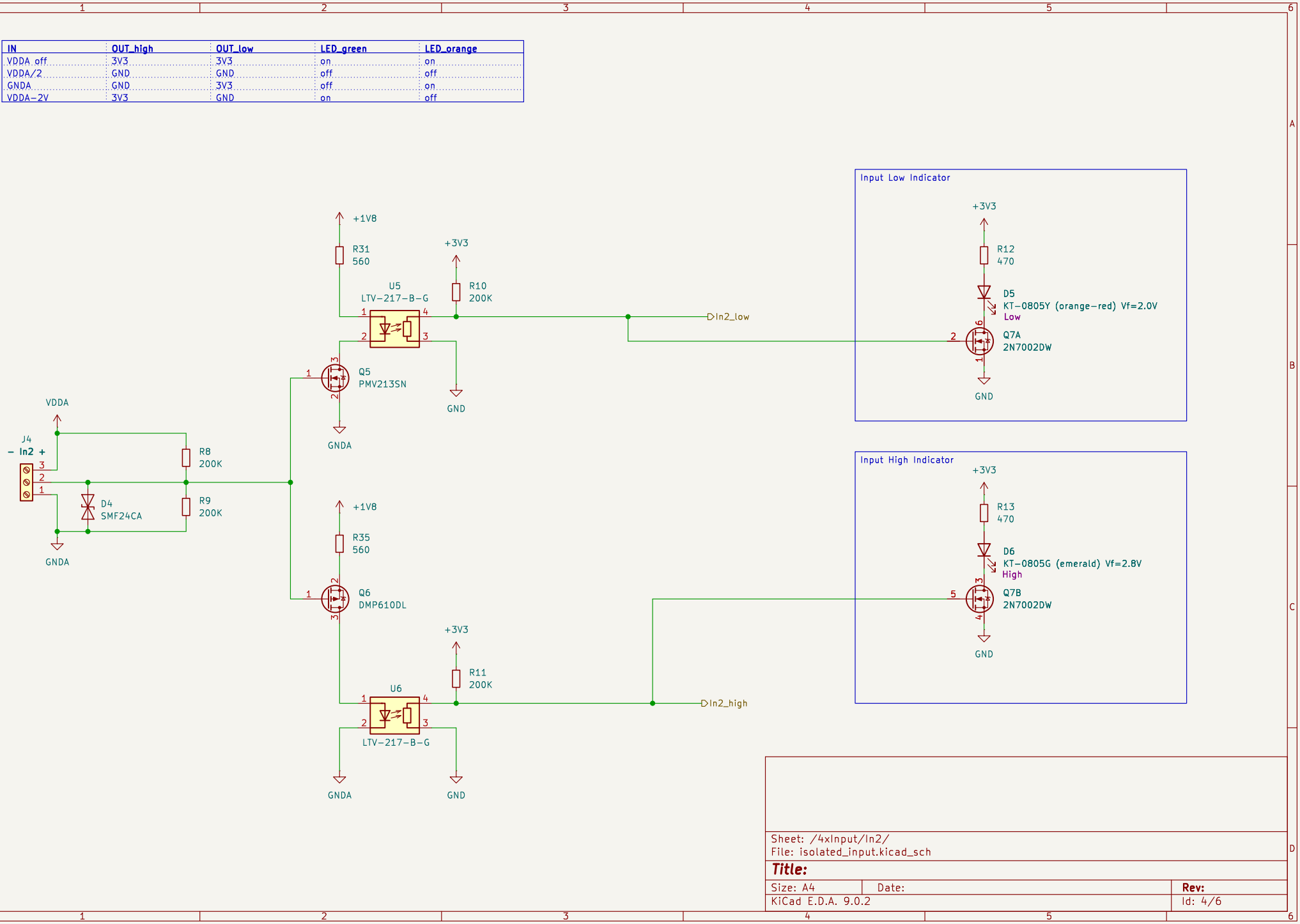


Sheet: /4xInput/In1/
File: isolated_input.kicad_sch

Title:

Size: A4 | Date: | **Rev:**
KiCad E.D.A. 9.0.2 | Id: 3/6

IN	OUT_high	OUT_low	LED_green	LED_orange
VDDA off	3V3	3V3	on	on
VDDA/2	GND	GND	off	off
GNDA	GND	3V3	off	on
VDDA-2V	3V3	GND	on	off

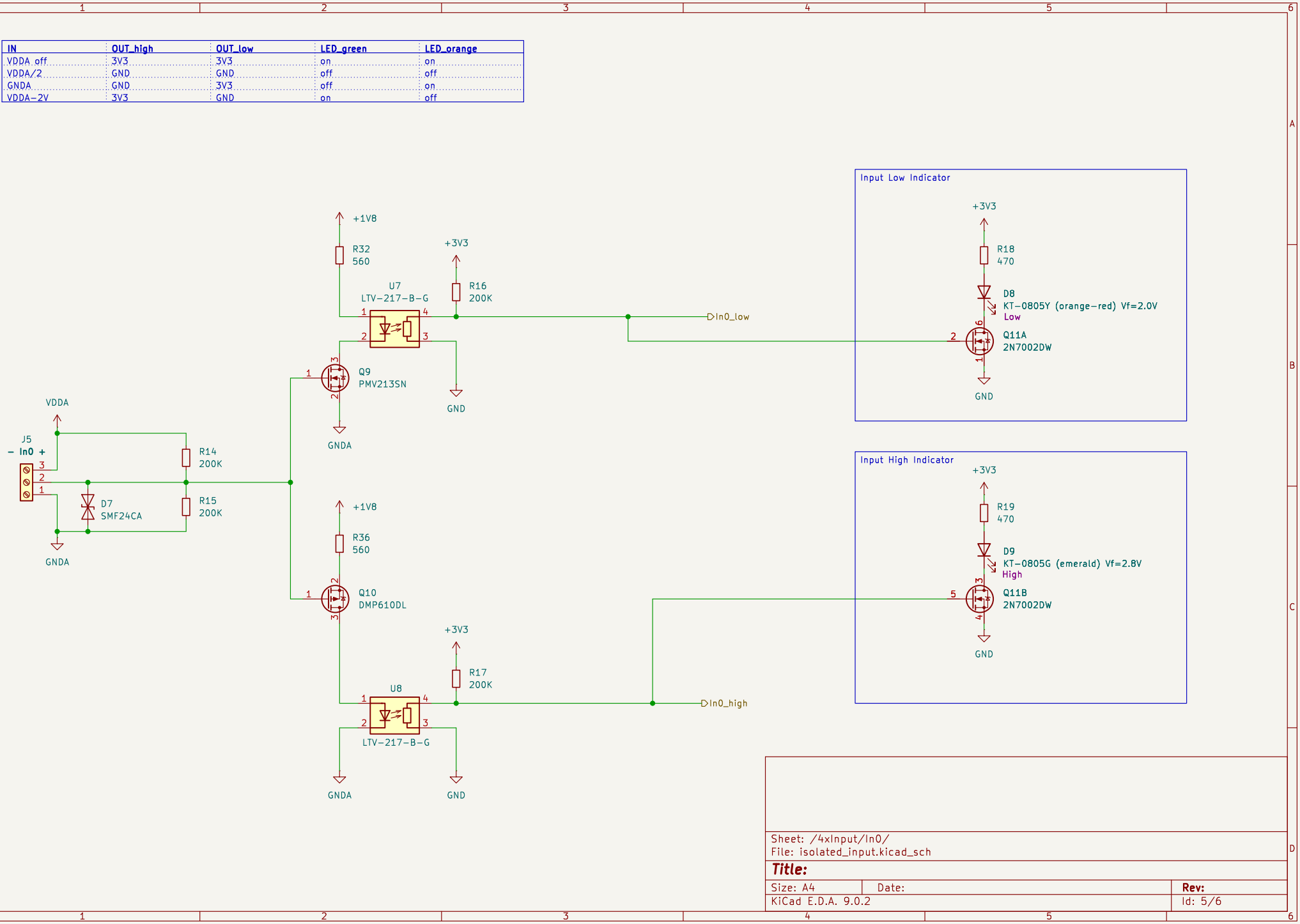


Sheet: /4xInput/In2/
File: isolated_input.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 4/6

IN	OUT_high	OUT_low	LED_green	LED_orange
VDDA off	3V3	3V3	on	on
VDDA/2	GND	GND	off	off
GNDA	GND	3V3	off	on
VDDA-2V	3V3	GND	on	off

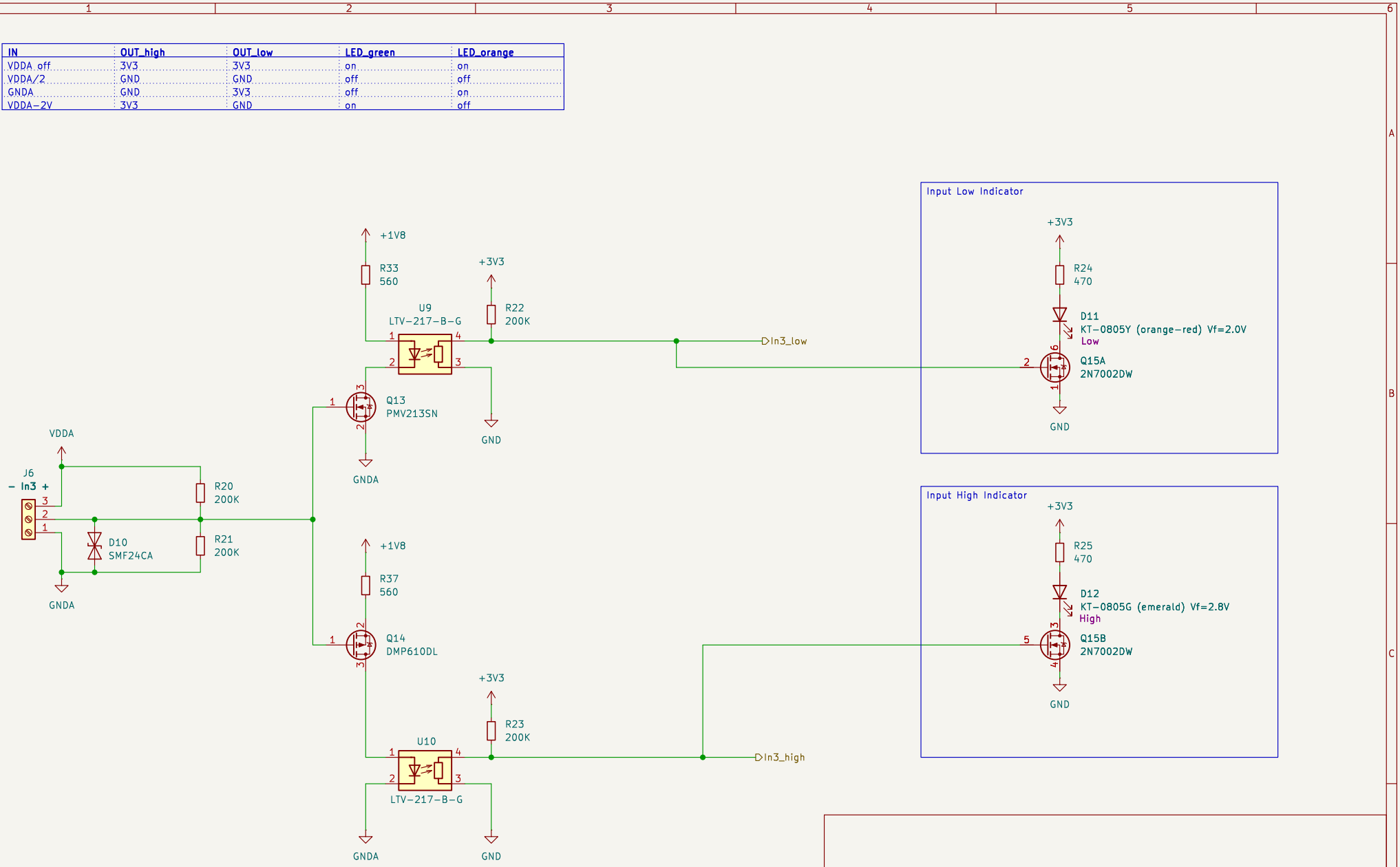


Sheet: /4xInput/In0/
File: isolated_input.kicad_sch

Title:

Size: A4 | Date: | **Rev:**
KiCad E.D.A. 9.0.2 | Id: 5/6

IN	OUT_high	OUT_low	LED_green	LED_orange
VDDA off	3V3	3V3	on	on
VDDA/2	GND	GND	off	off
GNDA	GND	3V3	off	on
VDDA-2V	3V3	GND	on	off



Sheet: /4xInput/In3/
File: isolated_input.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.2		Id: 6/6