

EFUSE

Antwerp Space



WAT IS EEN EFUSE

- Voltage limit
- Under voltage dropout
- Current limit
- Reverse polarization protection
- Soft start
- ON/OFF switching
- Current monitoring



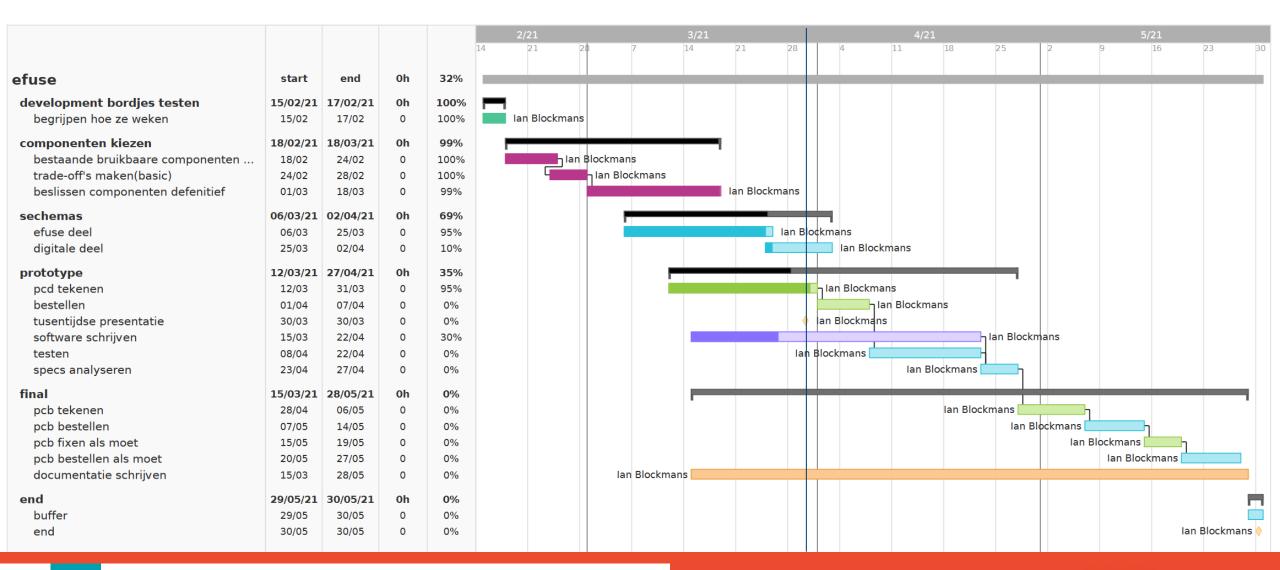
DOEL

- Extra laag veiligheid
- Gemaakt naar voedingen met LCL klasse 1,2 en 3.
- Mogelijkheid voor 5V, 12V en 22V tot 38V

		LCL class									
Characteristic		1	2	3		4	5	6	8	10	
Regulated Bus voltage [V]		28									
Unregulated Bus voltage [V]	22 to 38										
Class current [A]		1	2	3	\setminus	4	5	6	8	10	
Min limitation current [A]		1,1	2,2	3,3		4,4	5,5	6,6	8,8	11	
Max limitation current [A]		1,4	2,8	4,2		5,6	7	8,4	11,2	14	
Trip-off min [ms]	\setminus	10	10	6		6	4	2	2	1,5	
Trip-off max [ms]	\	20	20	12	/	12	8	4	4	3	



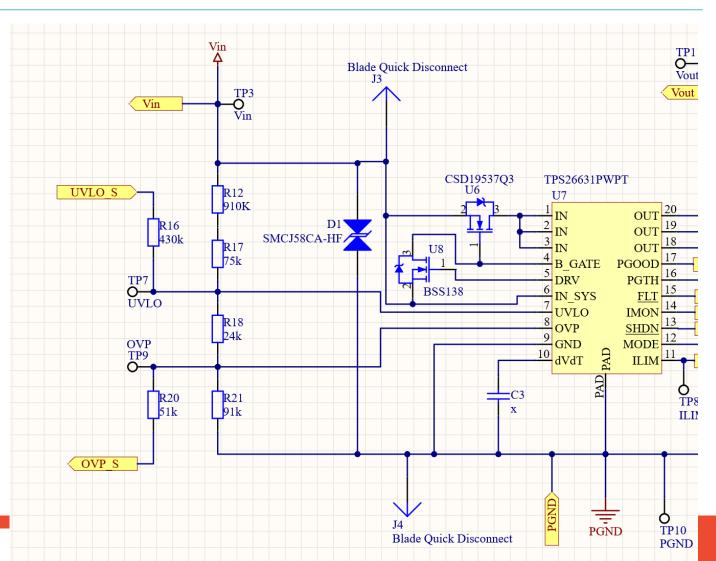
PLANNING





INPUT

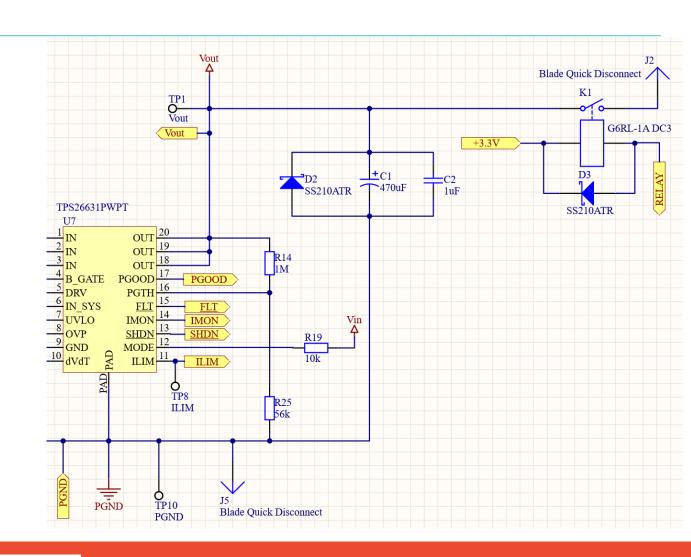
- Instellen van voltage limits.
- Transient voltage protection.
- Reverse polarity protection.
- Inrush current control.





OUTPUT

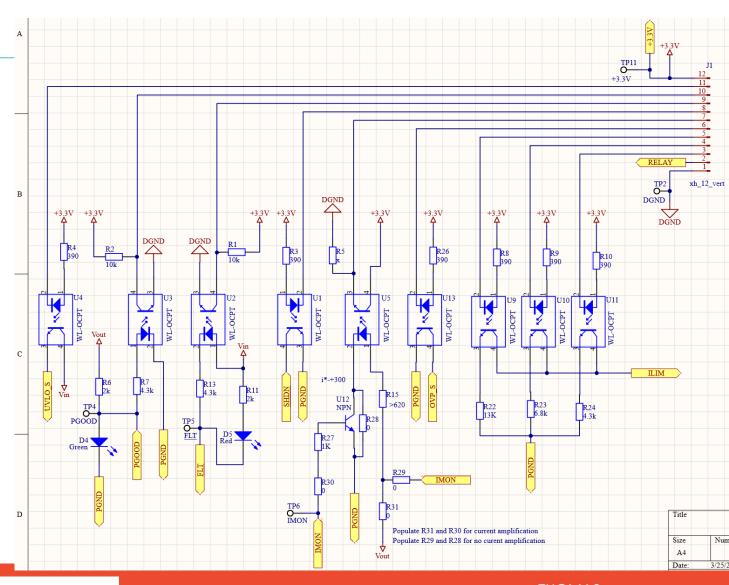
- Power Good instelling.
- ESD protection.
- Mode/auto retry
- Output relay





DIGITAL

- Galvanisch gescheiden.
- Indicatie leds.
- Stroom meting.
- Stroom limiet.





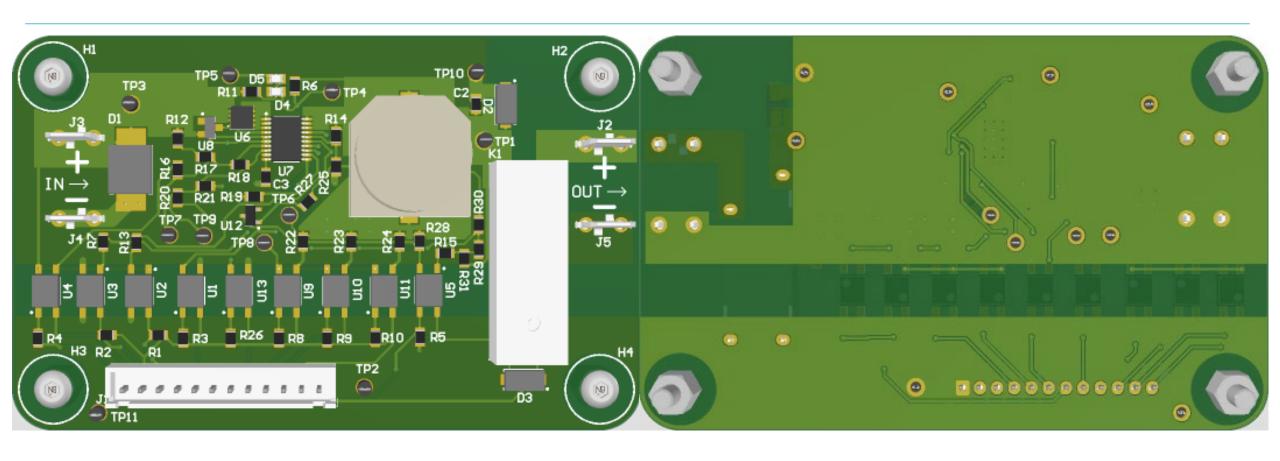
USER INPUT EN FEEDBACK

- Oled display
- joystick of rotary encoder
- USB Modbus -> LabView





PROTOTYPE PCB







VRAGEN?