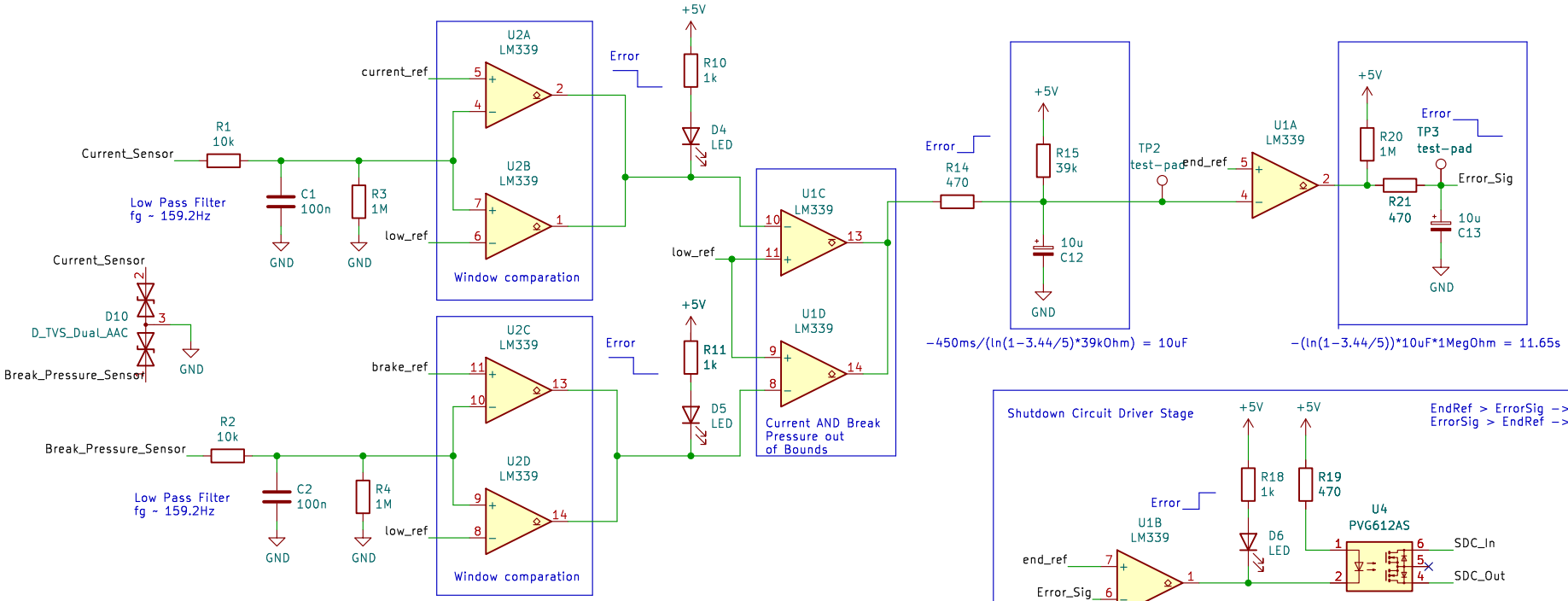
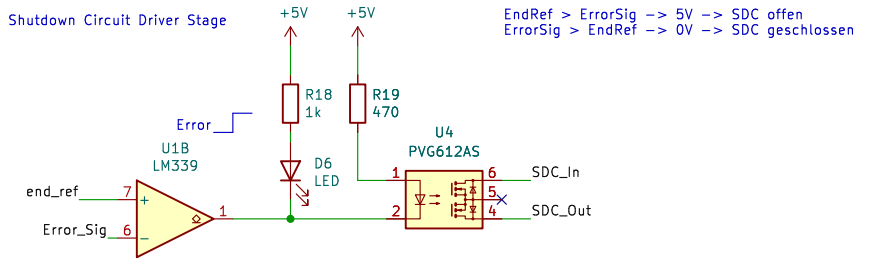
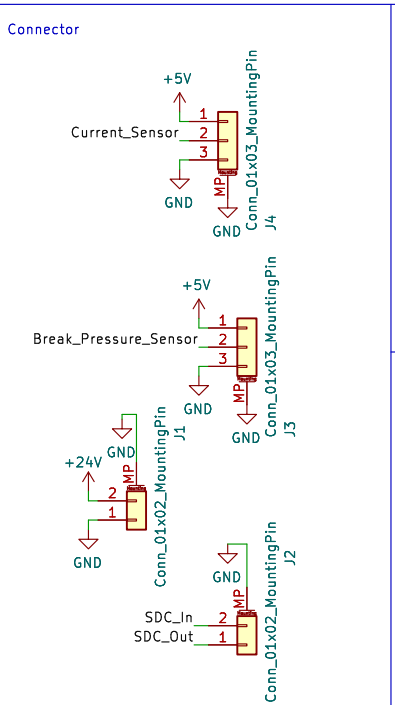
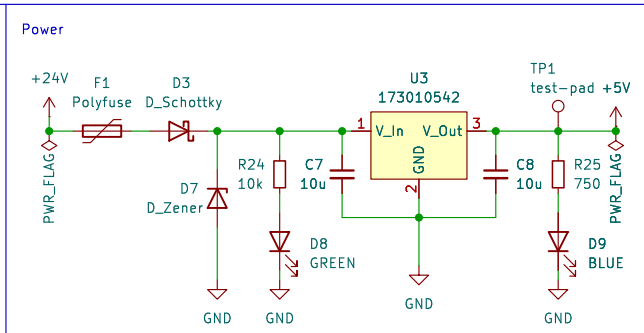
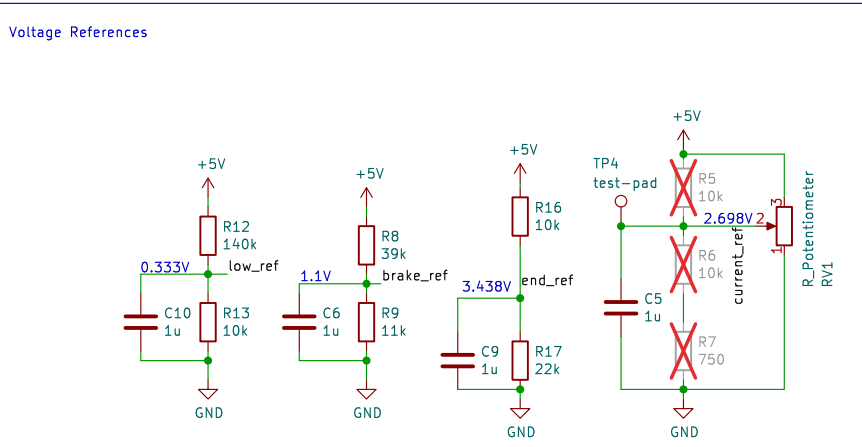










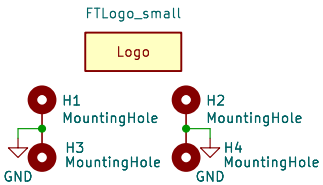
Power Limit = 5kW
TS Maximum Voltage = 403V
5kW/403.2V = 12.401A

Current Sensor Comparator Voltage (LEM HO 50-S):
Sensor Offset: 2.5V
Sensitivity = 0.016V/A (range: −125A-125A, output: 0.5V-4.5V)

=> 2.5V + 0.016V/A * 12.401A = 2.698V

ADZ SME 200bar pressure sensor
Ratiometic output from 0.5V−4.5V <=> 0..200bar
=> 0.020 V/bar

Break Pressure Sensor Voltage:
0.5V + 30bar * 0.020V/bar = 1.1V



Error Latching is realized with the RC Combination R21 and C13.
In case of an Error the open collector output of U1A is discharging C13 via a small resistor R21, causing U1B to open the Shutdown Circuit.
If the Error is removed, C13 is charged via R20 in series with R21, resulting in a time delay of ~11.65s

FASTTUBE

Title: BSPD	**Rev: V1**
	Date: 2025-03-20
Project: FT25_BSPD	Exp. Date: 2025-05-01
Author: Johnny Hsu	Size: A4 | Page: 1/1