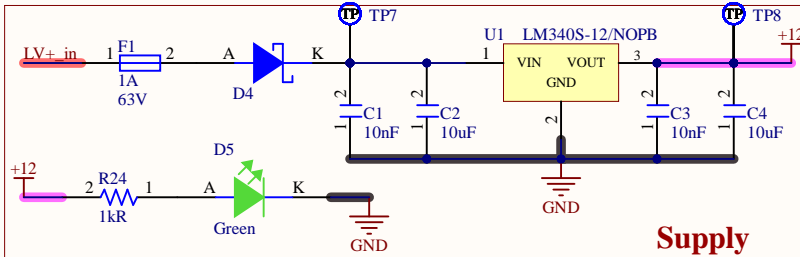


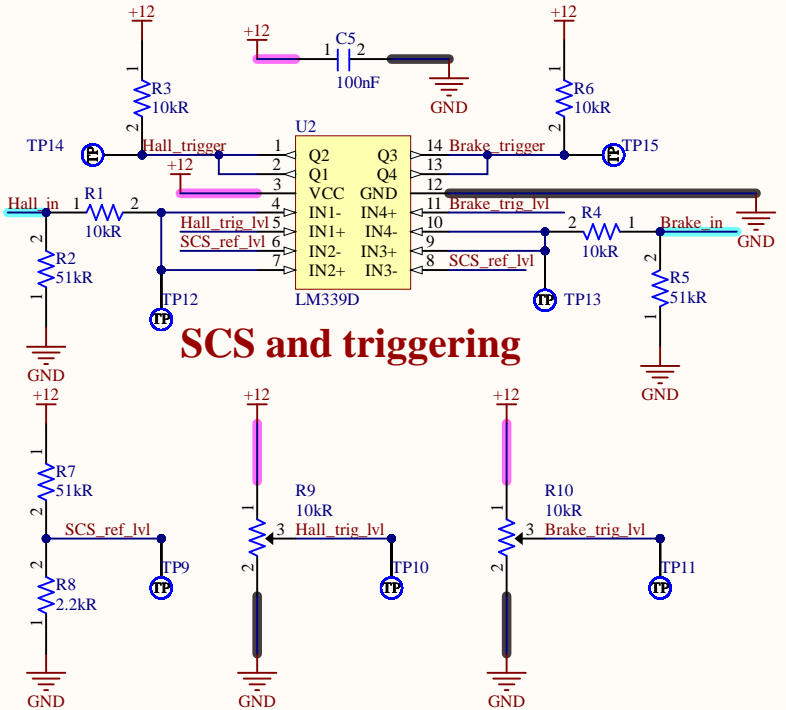
Connector and mounting holes



Supply

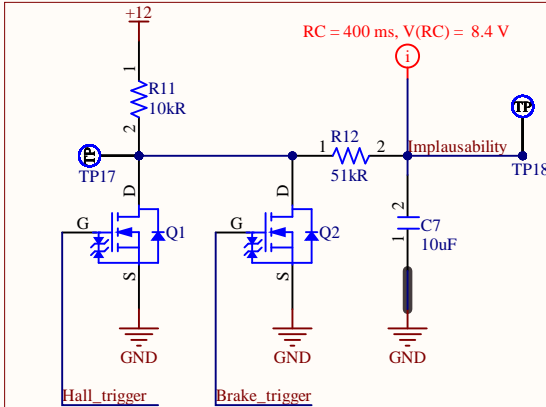
Red: Untreated supply  
Cyan: External signal  
Pink: Treated supply  
Purple: Shutdown chain

▲ Voltage at **TP22** is set so in approximately 14 seconds, triggers the signal **SC\_close** to 0 V.



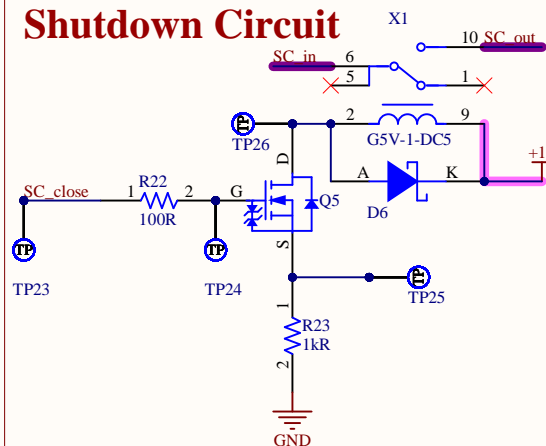
SCS and triggering

▲ The BSPD can handle 0-5V inputs. If one of the sensors' signals is 0V, it will cause the Shutdown Circuit to be open because they both are SCS. the trigger level for each signal is configured with **R9** and **R10**.

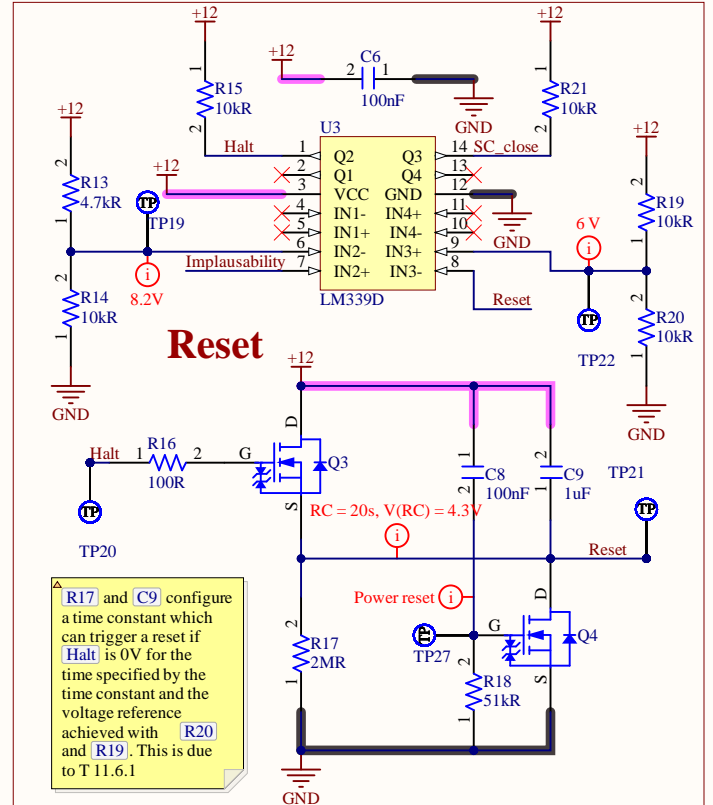


Delayed NAND

▲ T 11.6.2 - Max. 500ms implausibility until opening the shutdown circuit



Shutdown Circuit

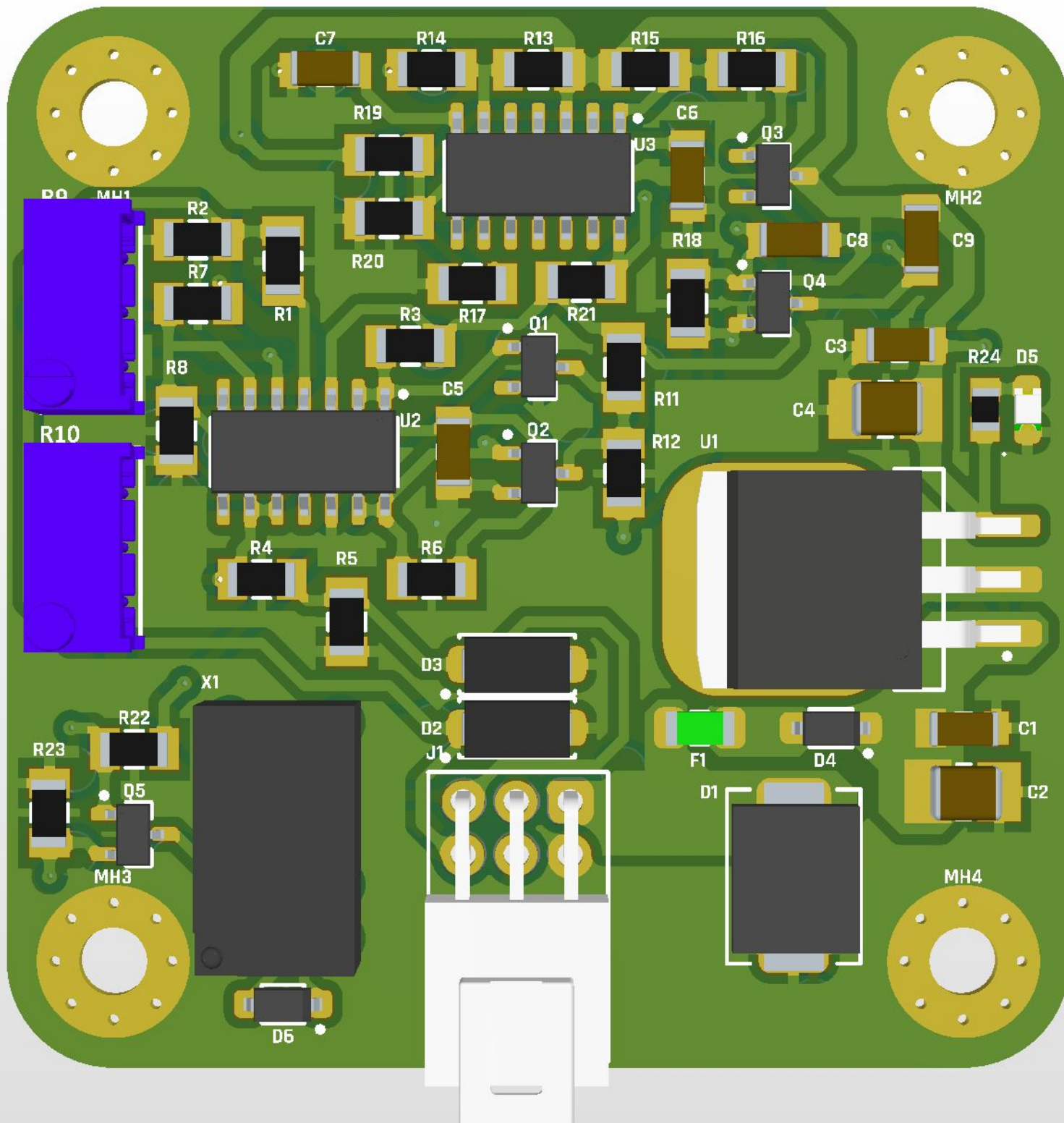


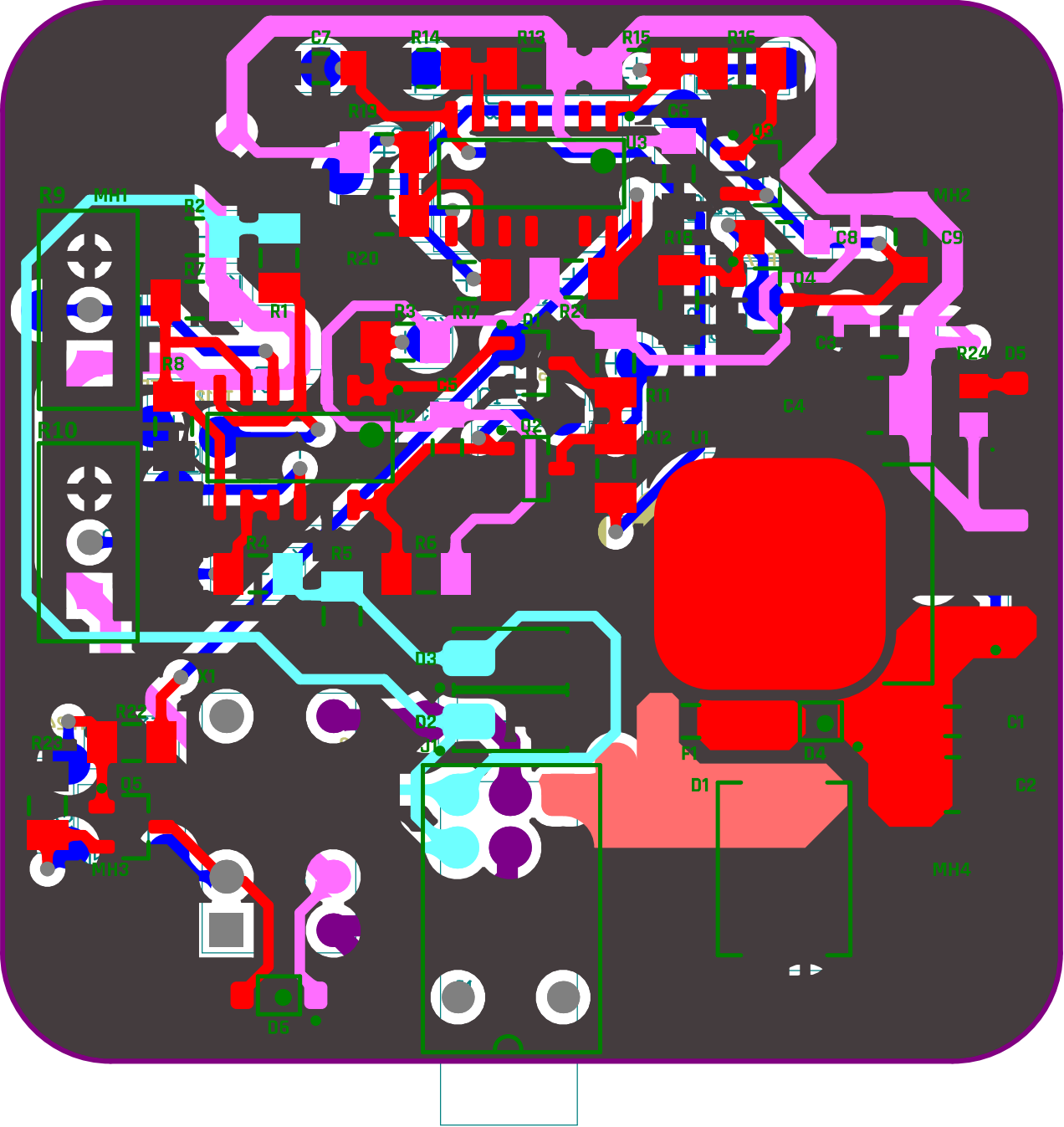
Reset

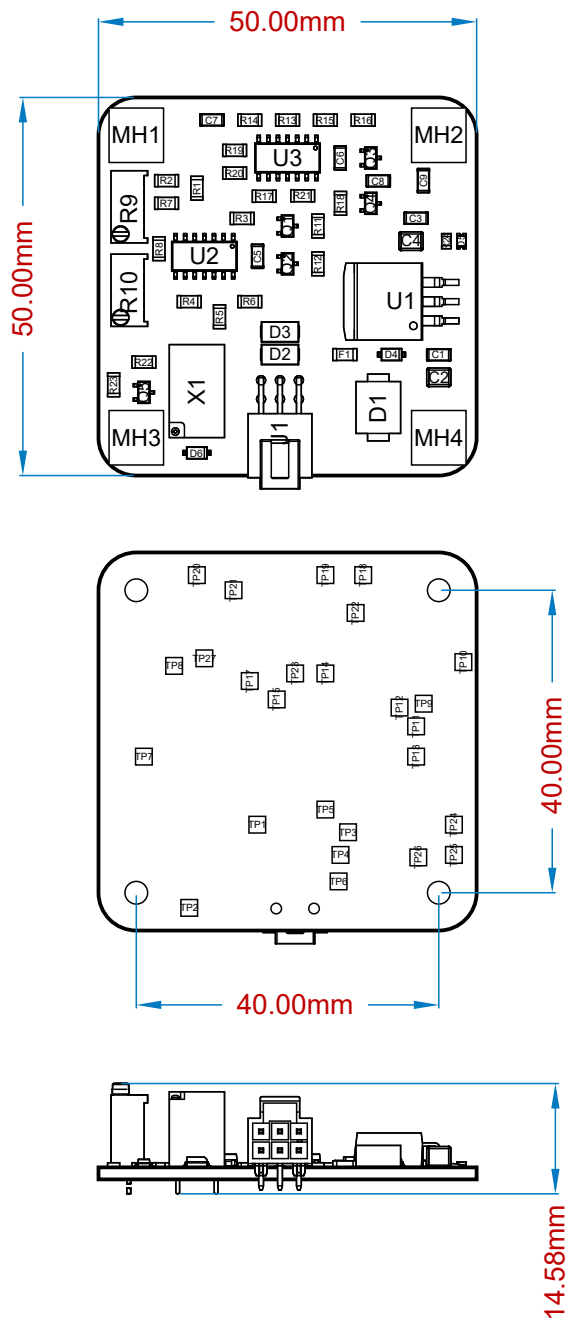
▲ **R17** and **C9** configure a time constant which can trigger a reset if **Halt** is 0V for the time specified by the time constant and the voltage reference achieved with **R20** and **R19**. This is due to T 11.6.1

Company: e-Tech Racing		e-techracing.es	
Project: BSPD		Variant: [No Variations]	
Size: -	Page Contents: BSPD.SchDoc		Version: 3.0
Author: Guillem Ropero		guillemropero@gmail.com	
Checked by: David Redondo		Sheet 1 of 1	
		Date: 13/10/2023	

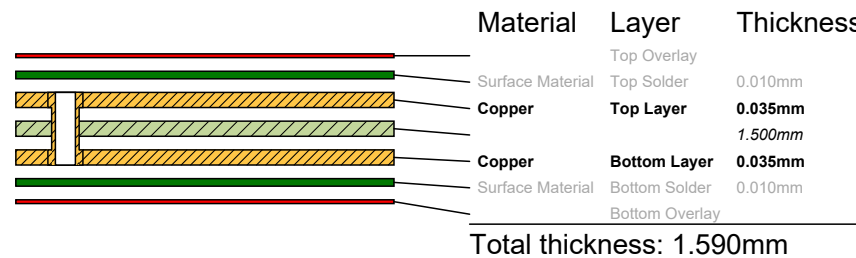








Designator	Name	Quantity
C1, C3	885012008055	2
C2, C4	GRJ32ER71H106KE11L	2
C5, C6, C8	885012208058	3
C7	885012208018	1
C9	885012208036	1
D1	824551301	1
D2, D3	824501600	2
D4, D6	MBR0530	2
D5	150080VS75000	1
F1	0437001.WRA	1
J1	J_NanoFit_2x3	1
MH1, MH2, MH3, MH4	Mounting_Hole_M3	4
Q1, Q2, Q3, Q4, Q5	CPH3455-TL-H	5
R1, R3, R4, R6, R11, R14, R15, R19, R20, R21	CRCW120610K0FKEA	10
R2, R5, R7, R12, R18	CRCW120610K0FKEA	5
R8	CR1206-FX-2201ELF	1
R9, R10	3296W-1-103LF	2
R13	CRS1206-FX-4701ELF	1
R16, R22	CRG1206F100R	2
R17	HVC1206-2M0FT3	1
R23	ERJT08J102V	1
R24	CR0805-JW-102ELF	1
U1	LM340S-12/NOPB	1
U2, U3	LM339D	2
X1	G5V-1-DC5	1



BSPD