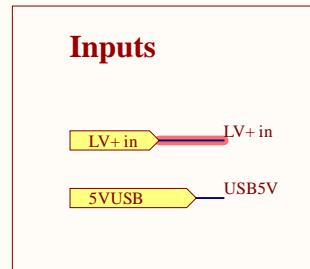


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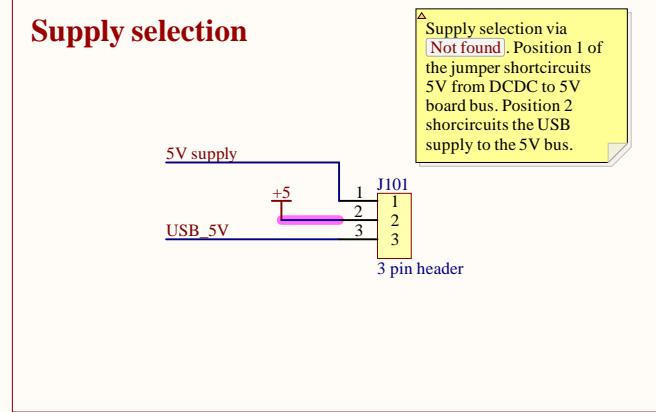
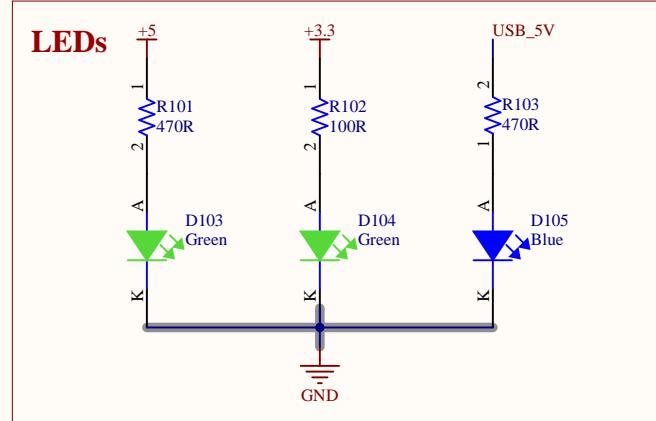
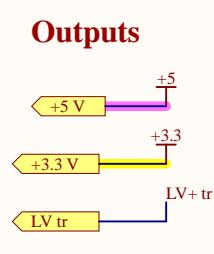
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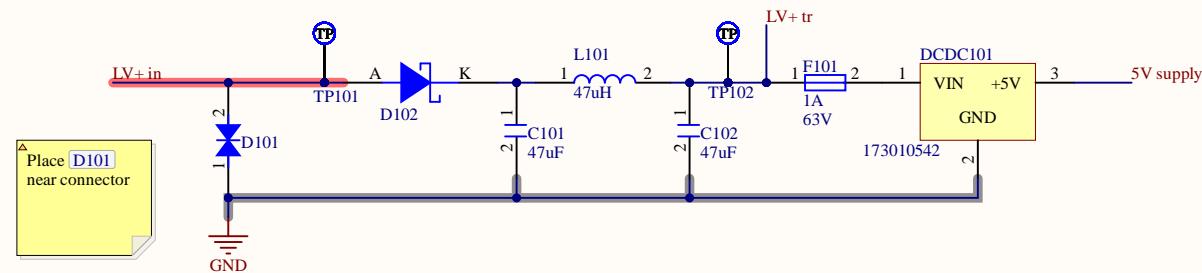
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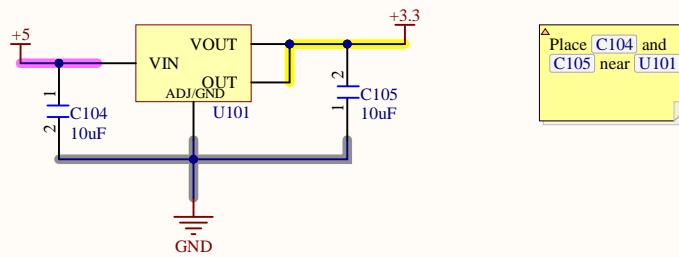
△ Pi filter composed with [Not found], [Not found] and L101 is calculated to be cutting all frequencies higher than 7340 Hz



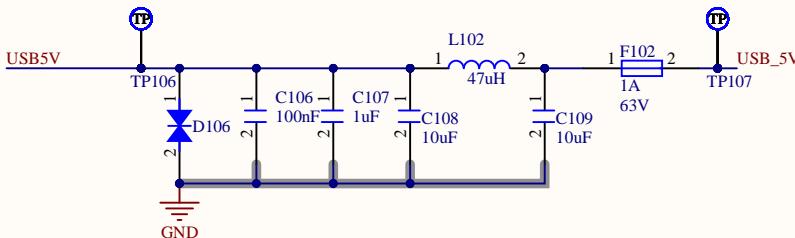
5 V Supply



3.3 V Supply



USB Supply



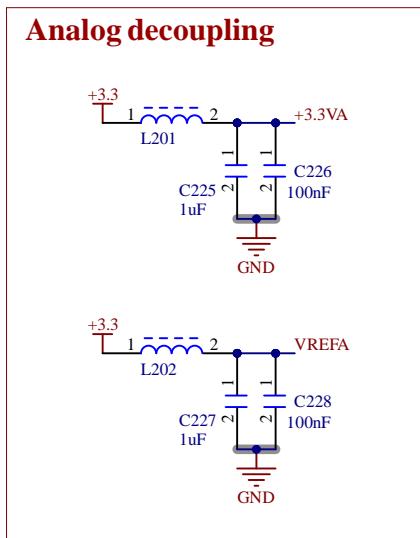
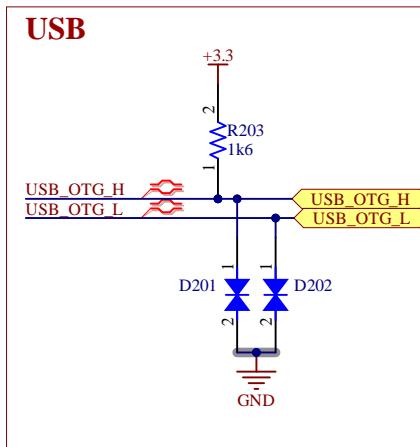
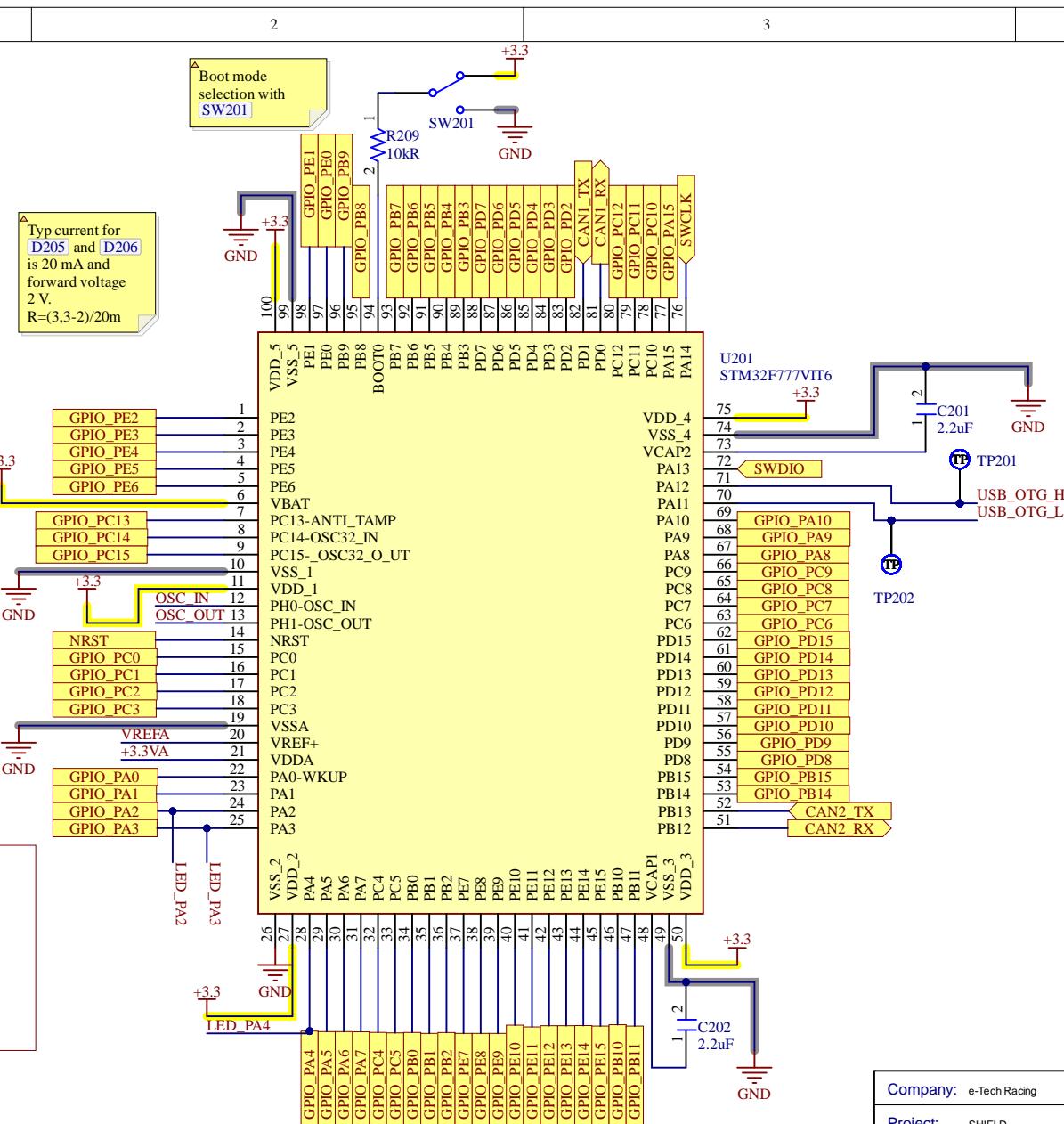
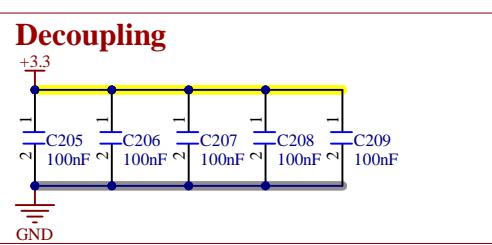
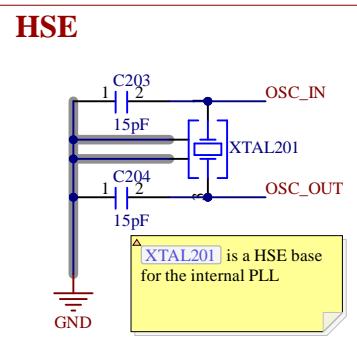
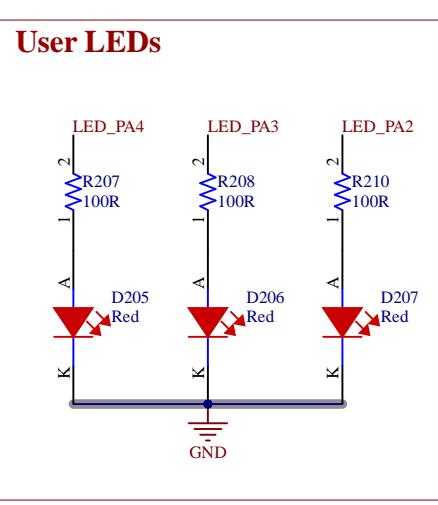
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Project:	SHIELD	Variant: [No Variations]	
Size:	Page Contents: [1]Supply.SchDoc	Version: 1.0	
Department:	Hardware		
Author:	Bernat Costa Cesari	bernat.costa.cesari@estudiantat.upc.edu	Sheet 2 of 4
Checked by:	Andreu Senis		Date: 07/04/2024

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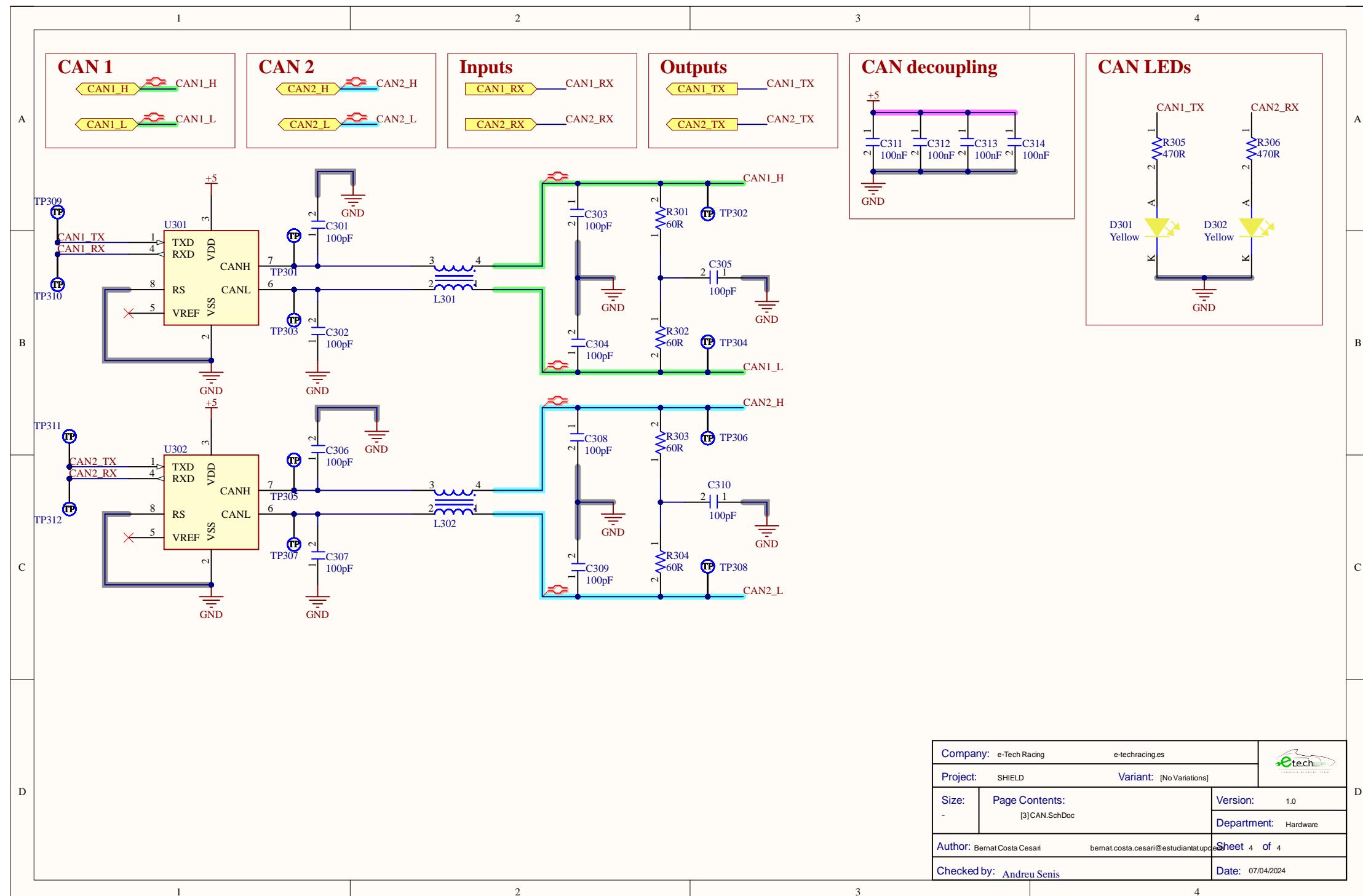
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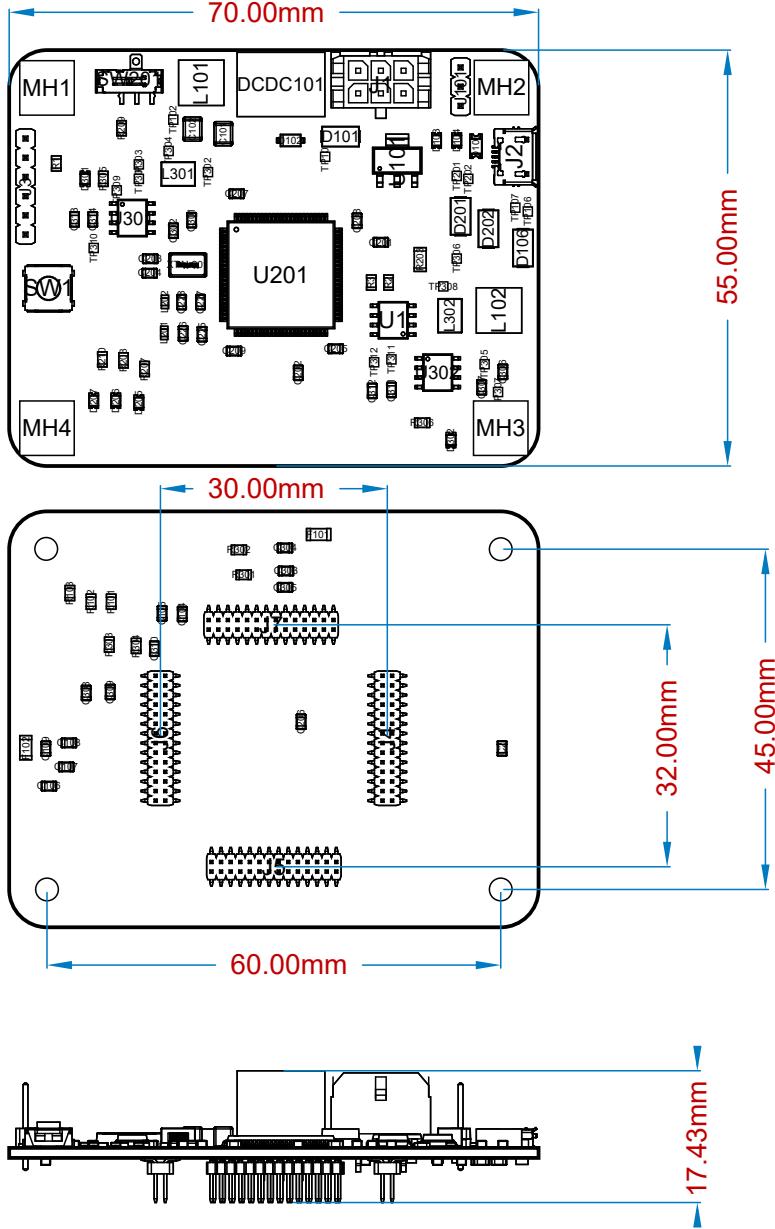
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4



Company:		e-Tech Racing	e-techracing.es	
Project:		SHIELD	Variant:	[No Variations]
Size: -	Page Contents:		Version:	1.0
	[2]MCU.SchDoc		Department:	Hardware
Author:		Bernat Costa Cesari	Sheet 3 of 4	
Checked by:		Andreu Senis	Date: 07/04/2024	





ETR_Shield

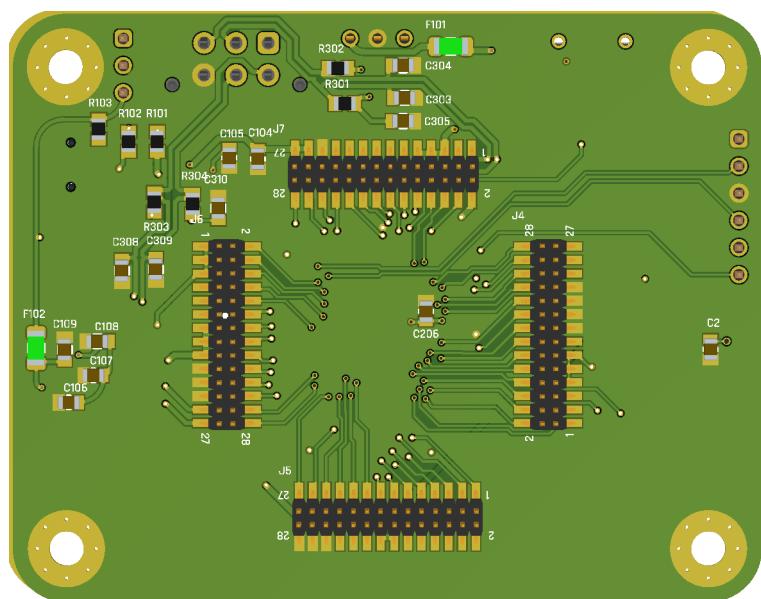
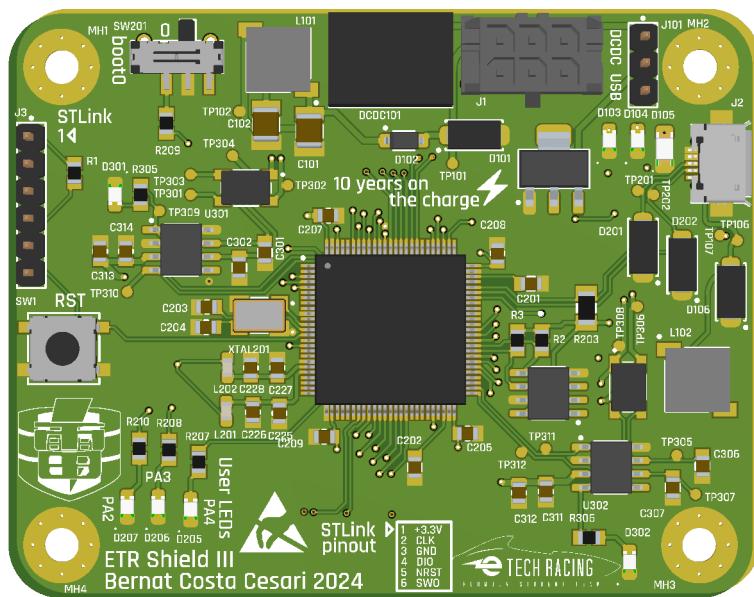
Line #	Designator	Name	Quantity
	C2, C106, C205, C206, C207, C208, C209, C226, C228, C311, C312, C313, C314	885012207098	13
	C101, C102	C1210C682KGRACAU TO	2
	C104, C105	885012107014	2
	C107, C225, C227	885012207103	3
	C108, C109	10uF	2
	C201, C202	2.2uF	2
	C203, C204	885012007052	2
	C301, C302, C303, C304, C305, C306, C307, C308, C309, C310	885012007057	10
	D101	824501261	1
	D102	MBR0530	1
	D103, D104	150080GS75000	2
	D105	150120BS75000	1
	D106	824501131	1
	D201, D202	824501600	2
	D205, D206, D207	150080RS75000	3
	D301, D302	150080YS75000	2
	DCDC101	173010542	1
	F101, F102	0437001.WRA	2
	J1	Molex Micro Fit 2x3	1
	J2	629105136821	1
	J3	ST Link	1
	J4, J5, J6, J7	62132821021	4
	J101	3 pin header	1
	L101, L102	47uH	2
	L201, L202	782853561	2
	L301, L302	CMC-51uH-DLW43SH510XK2L	2
	MH1, MH2, MH3, MH4	Mounting Hole_M3	4
	R1, R2, R3, R209	CR0805-JW-103ELF	4
	R101, R103, R305, R306	CR0805-FX-4700GLF	4
	R102, R207, R208, R210	CR0805-FX-1000ELF	4
	R203	CRCW12061K60FKEA	1
	R301, R302, R303, R304	R60-0805FTN	4
	SW1	430773034825	1
	SW201	450405020524	1
	U1	24AA024H-I/SN	1
	U101	LM1117IMP-3.3/NOPB	1
	U201	STM32F777VIT6	1
	U301, U302	MCP2551 I/SN	2
	XTAL201	20MHz	1

Bernat Costa Cesari 2024

		Material	Layer	Thickness	Dielectric Material	Type	Gerber
1			Top Overlay			Legend	GTO
2		Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
		Copper	Top Layer	0.04mm		Signal	GTL
		Prepreg		0.10mm	PP-006	Dielectric	
		CF-004	GND1	0.02mm		Signal	G1
				1.00mm	FR-4	Dielectric	
3		CF-004	PWR1	0.02mm		Signal	G2
		Prepreg		0.10mm	PP-006	Dielectric	
		Copper	Bottom Layer	0.04mm		Signal	GBL
		Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
			Bottom Overlay			Legend	GBO
		Total thickness: 1.33mm					

4

1



Notes

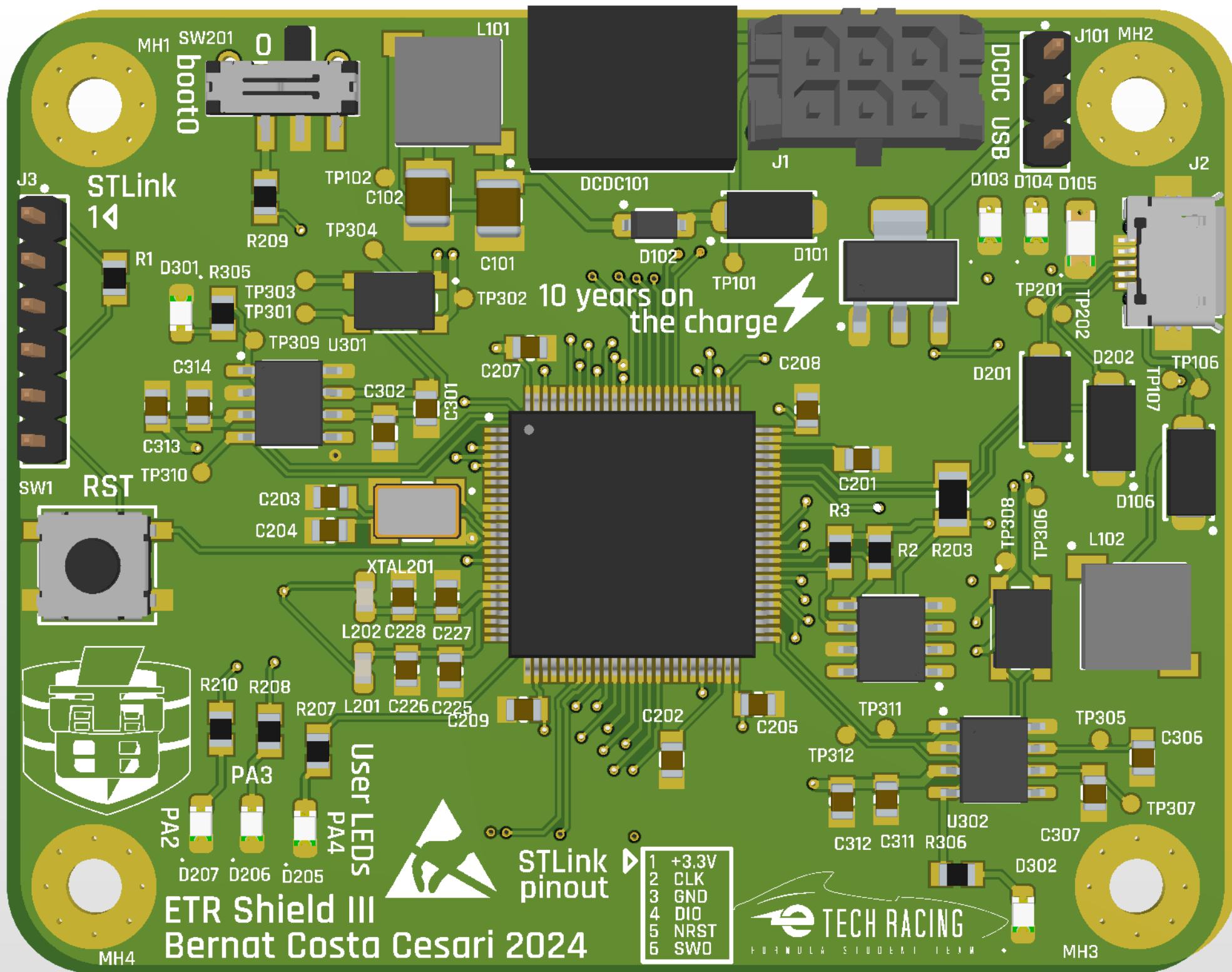
1

1

1

1

1



ETR Shield III
Bernat Costa Cesari 2024

STLink
pinout

1	+3.3V
2	CLK
3	GND
4	DIO
5	NRST
6	SWO

TECH RACING
FÓRMULA STUDENT TEAM

