

A

B

C

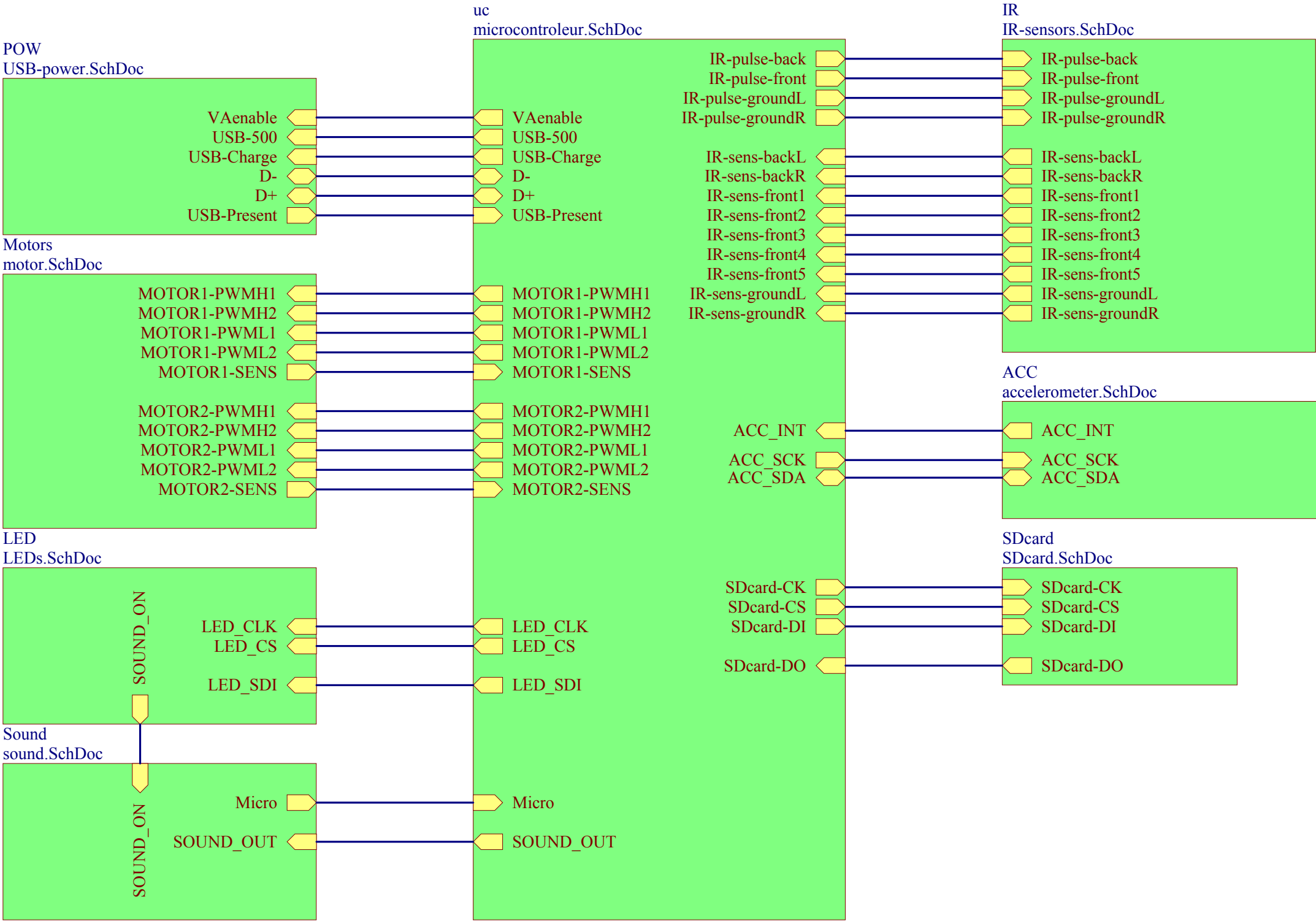
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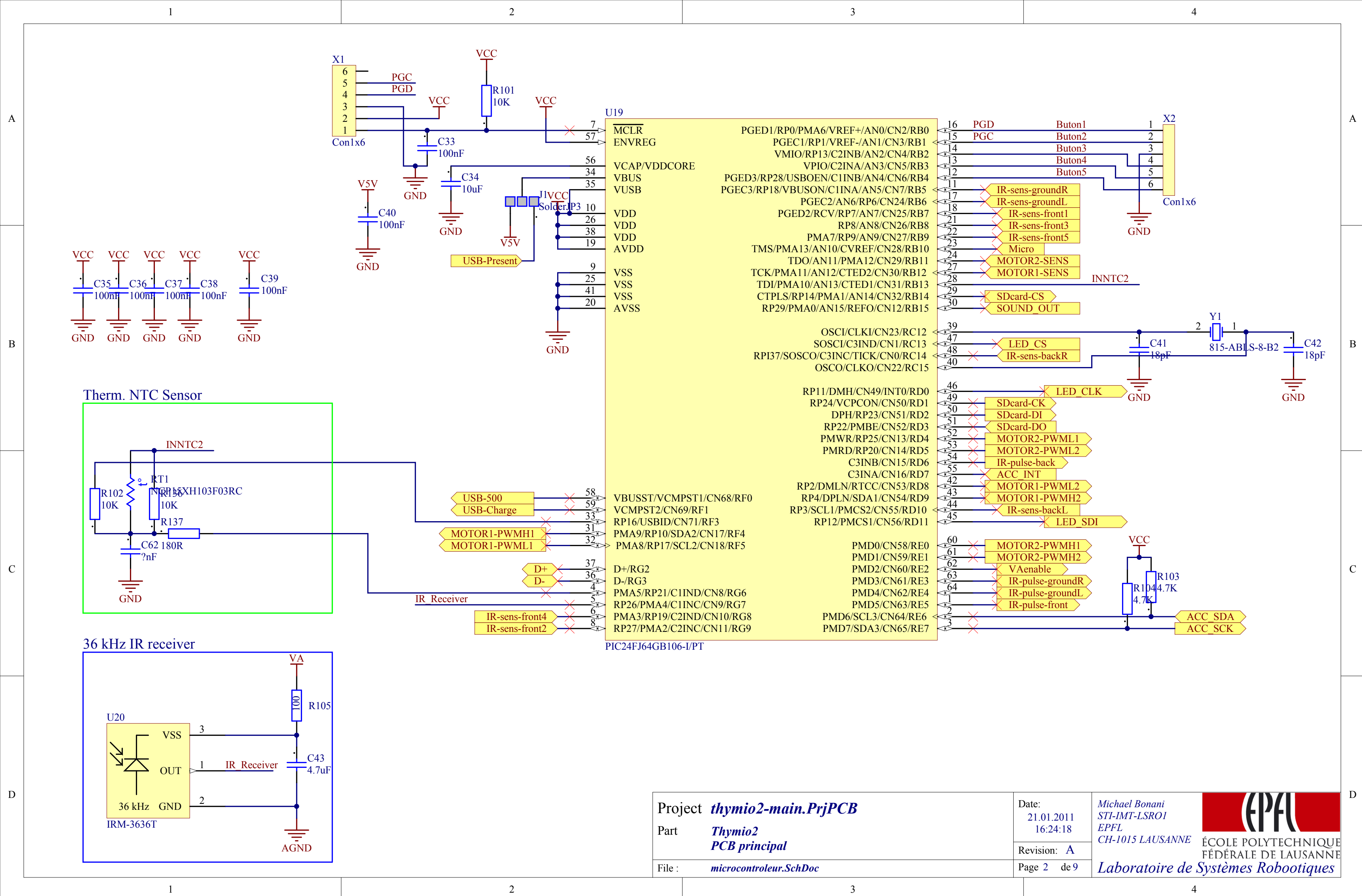
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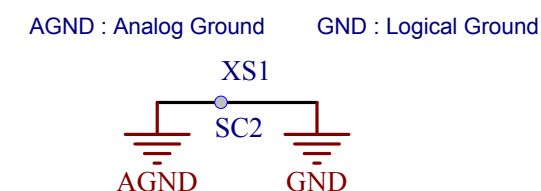
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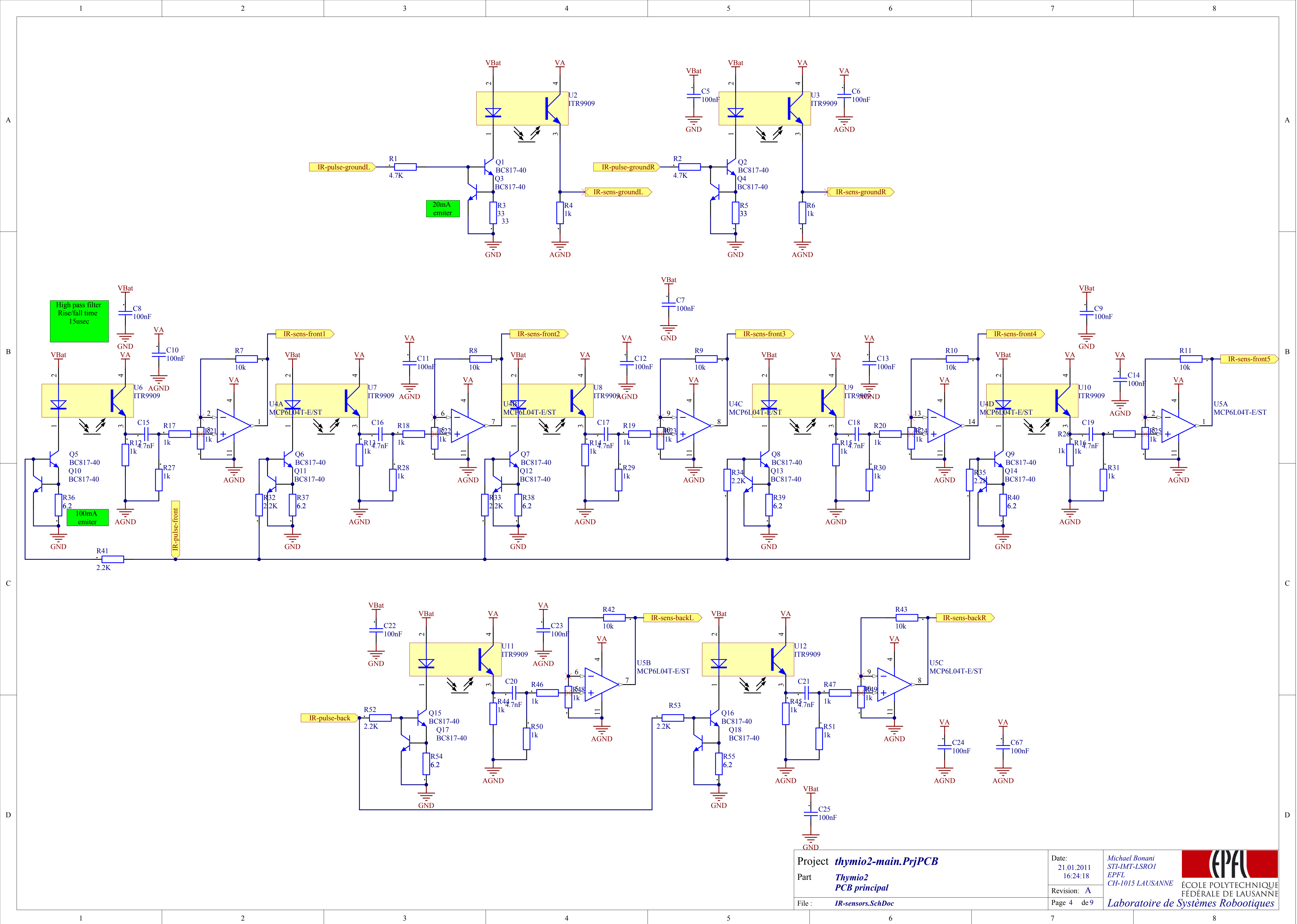
C

D









A

B

C

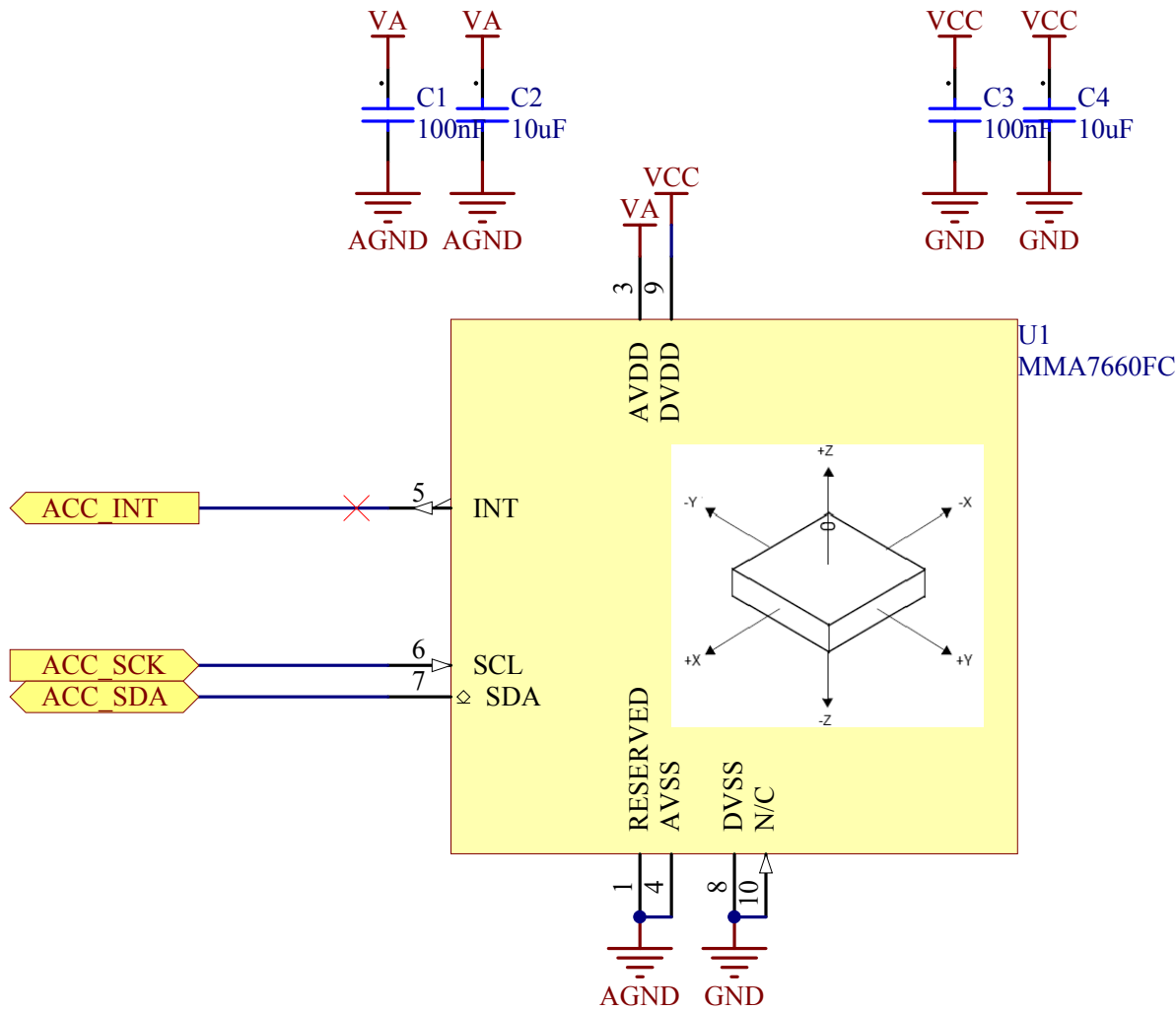
D

A

B

C

D



A

B

C

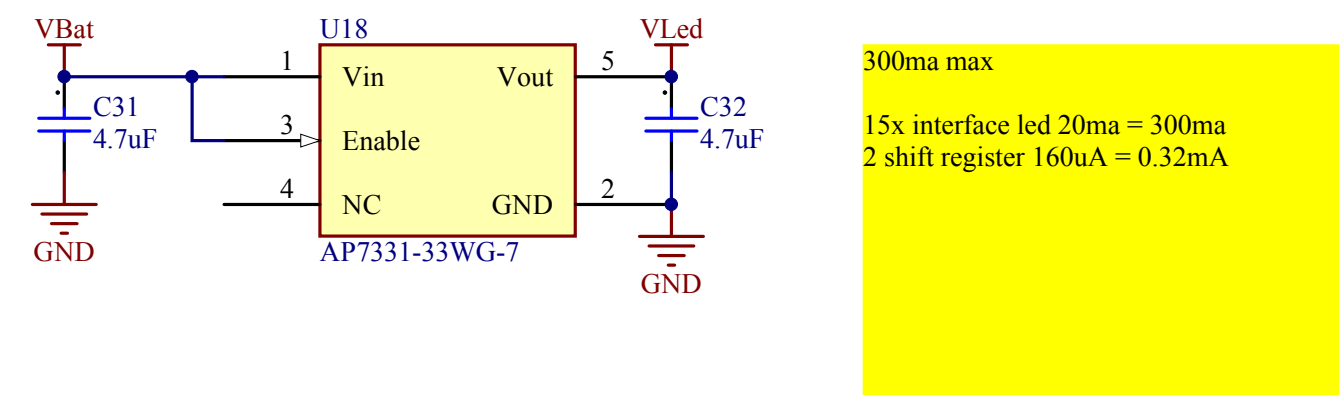
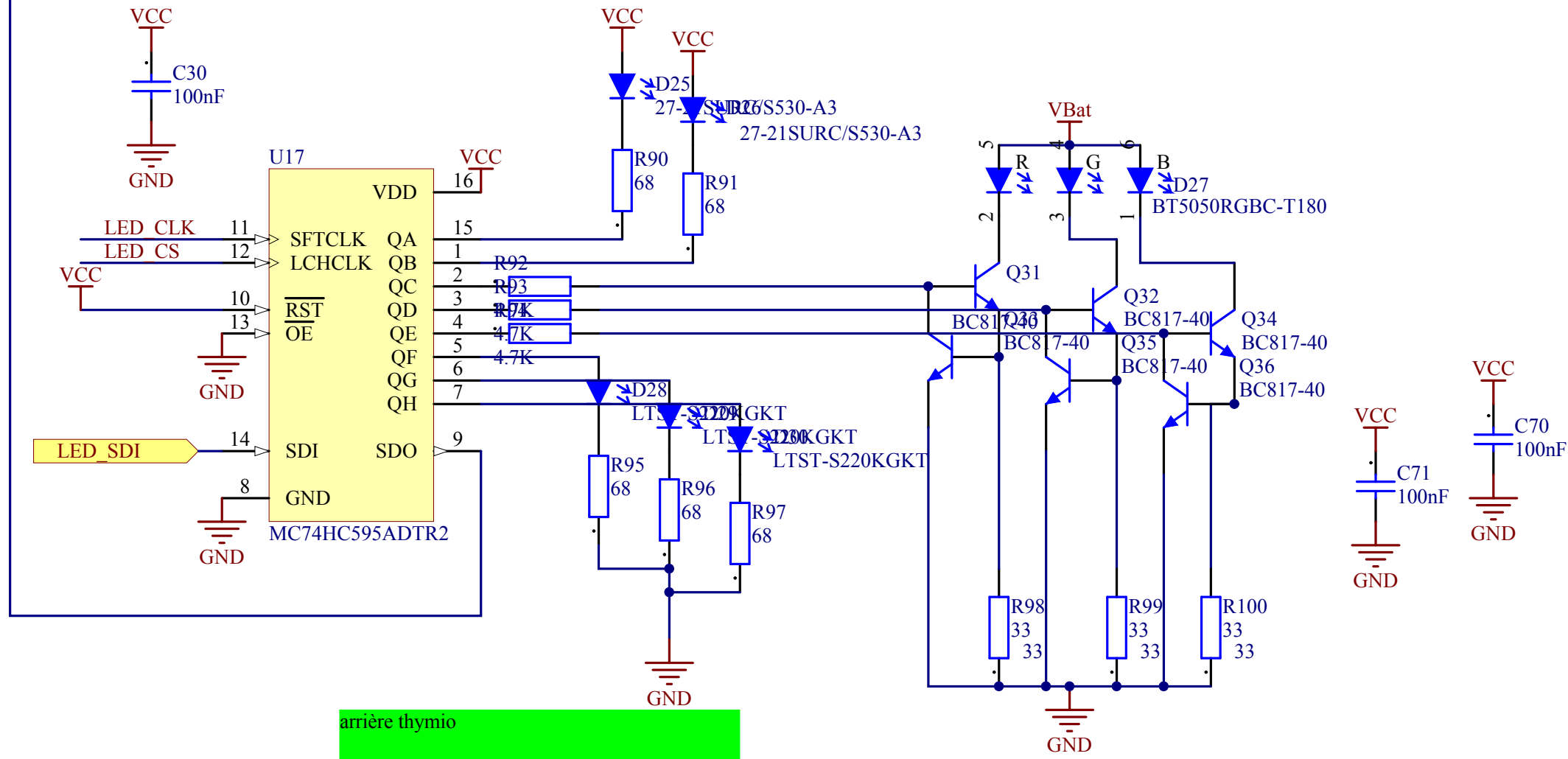
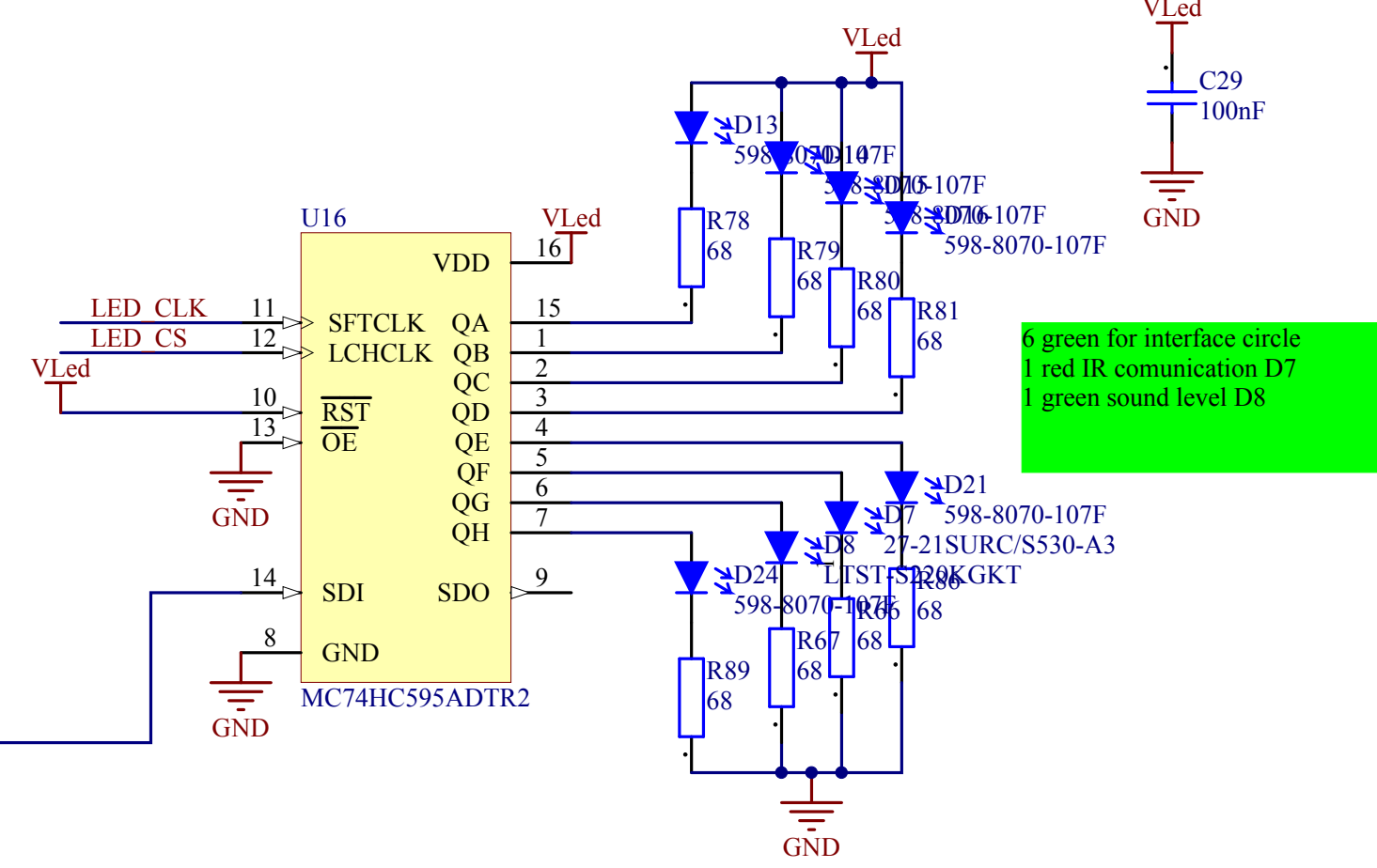
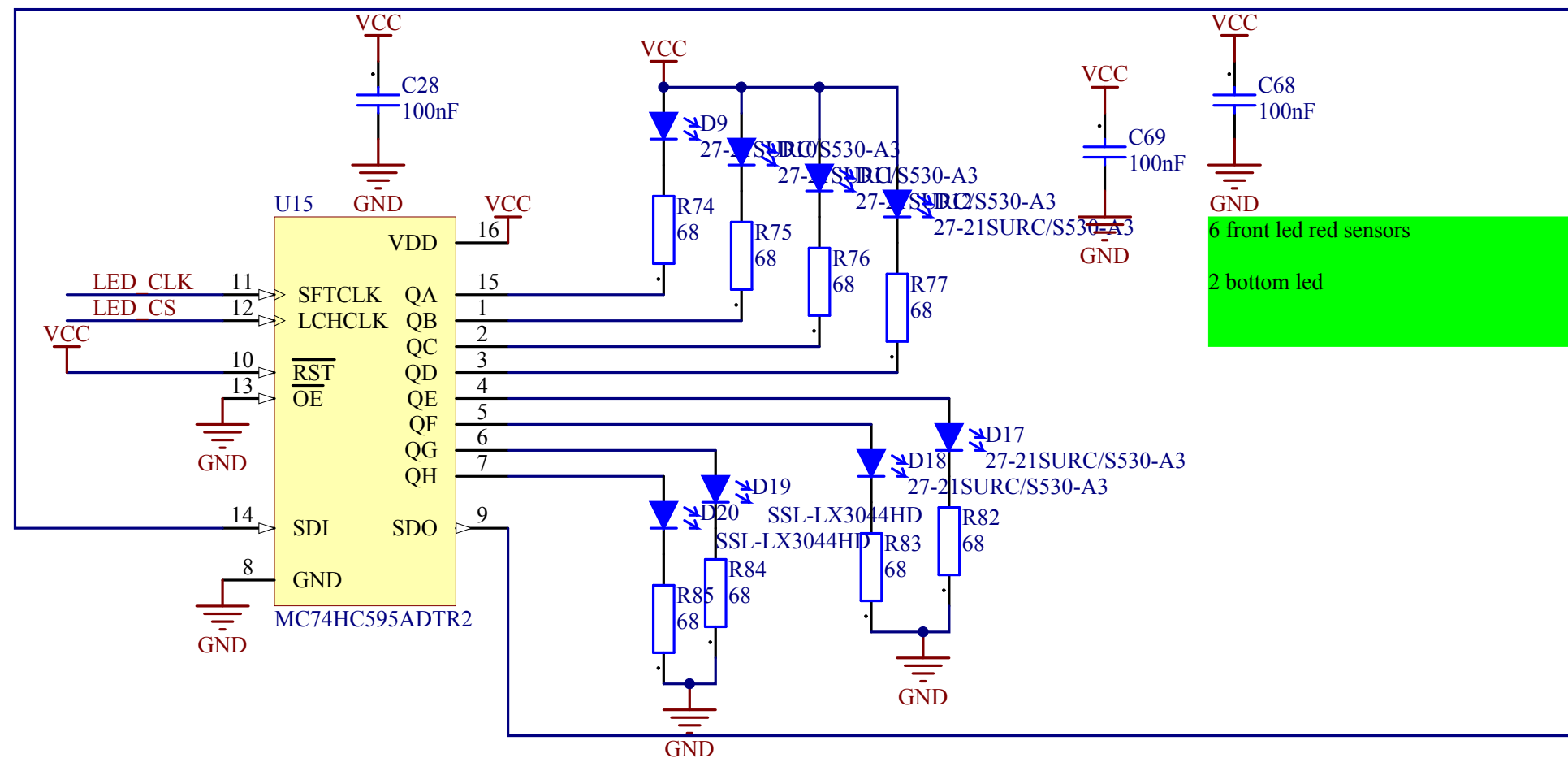
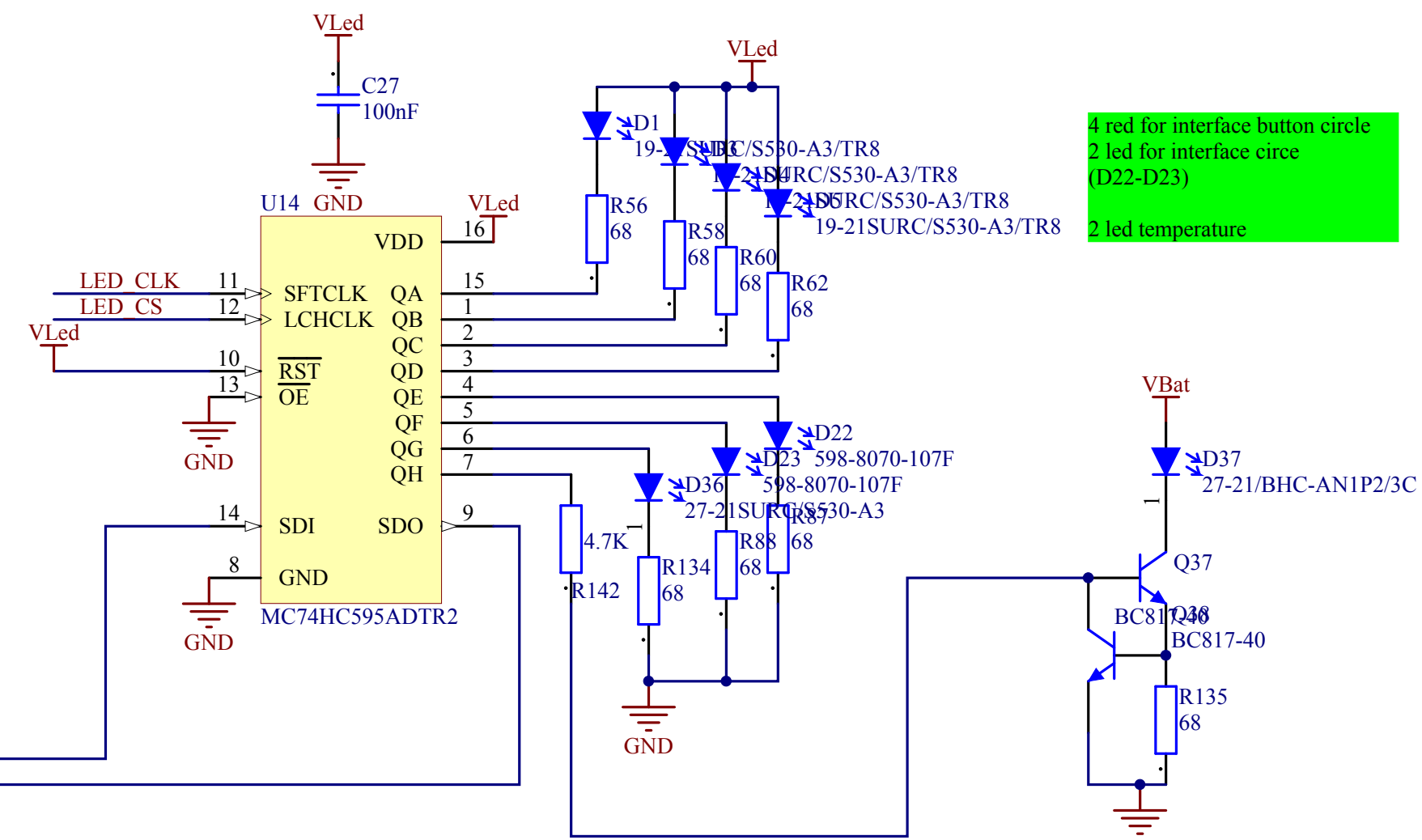
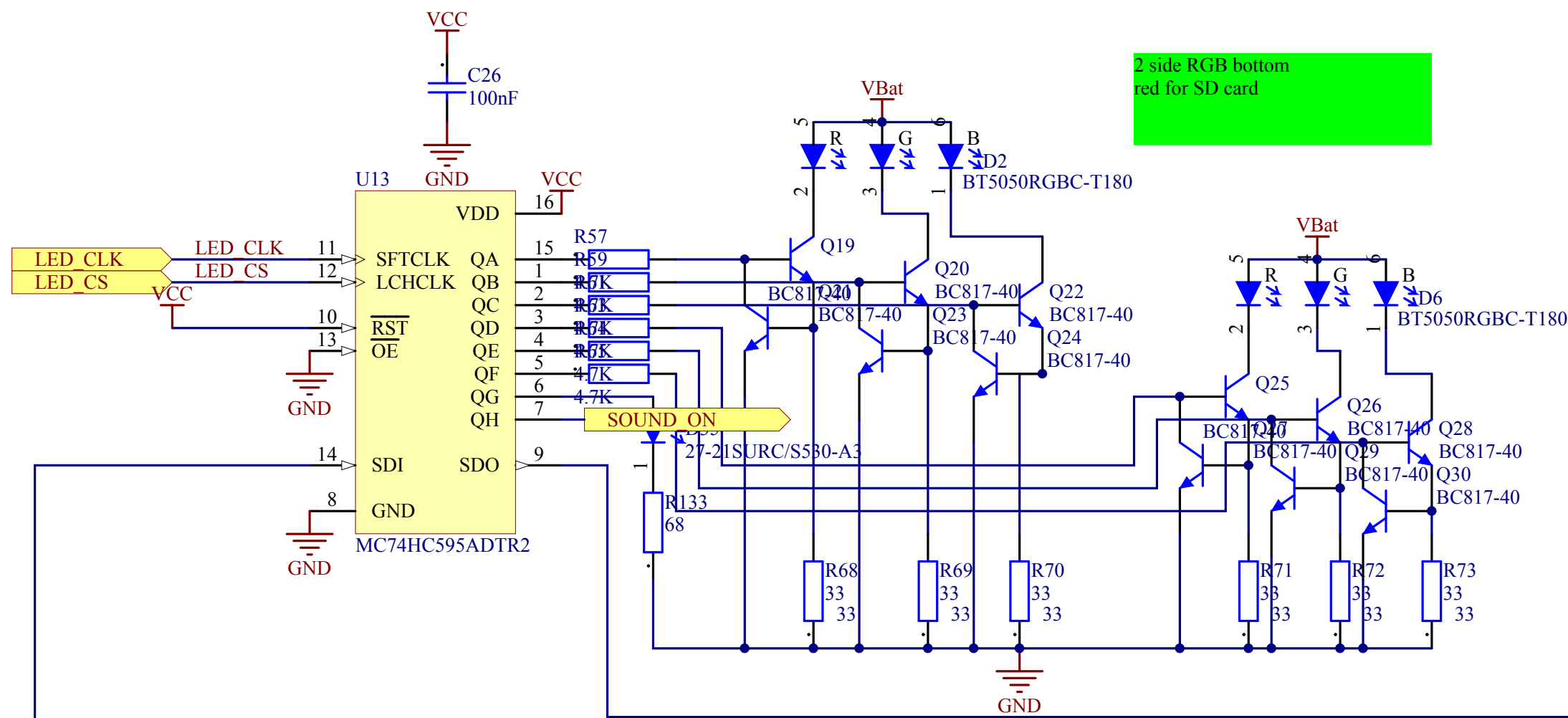
D

A

B

C

D

Project **thymio2-main.PrjPCB**Part **Thymio2
PCB principal**File : **LEDs.SchDoc**Date:
21.01.2011
16:24:19

Revision: *

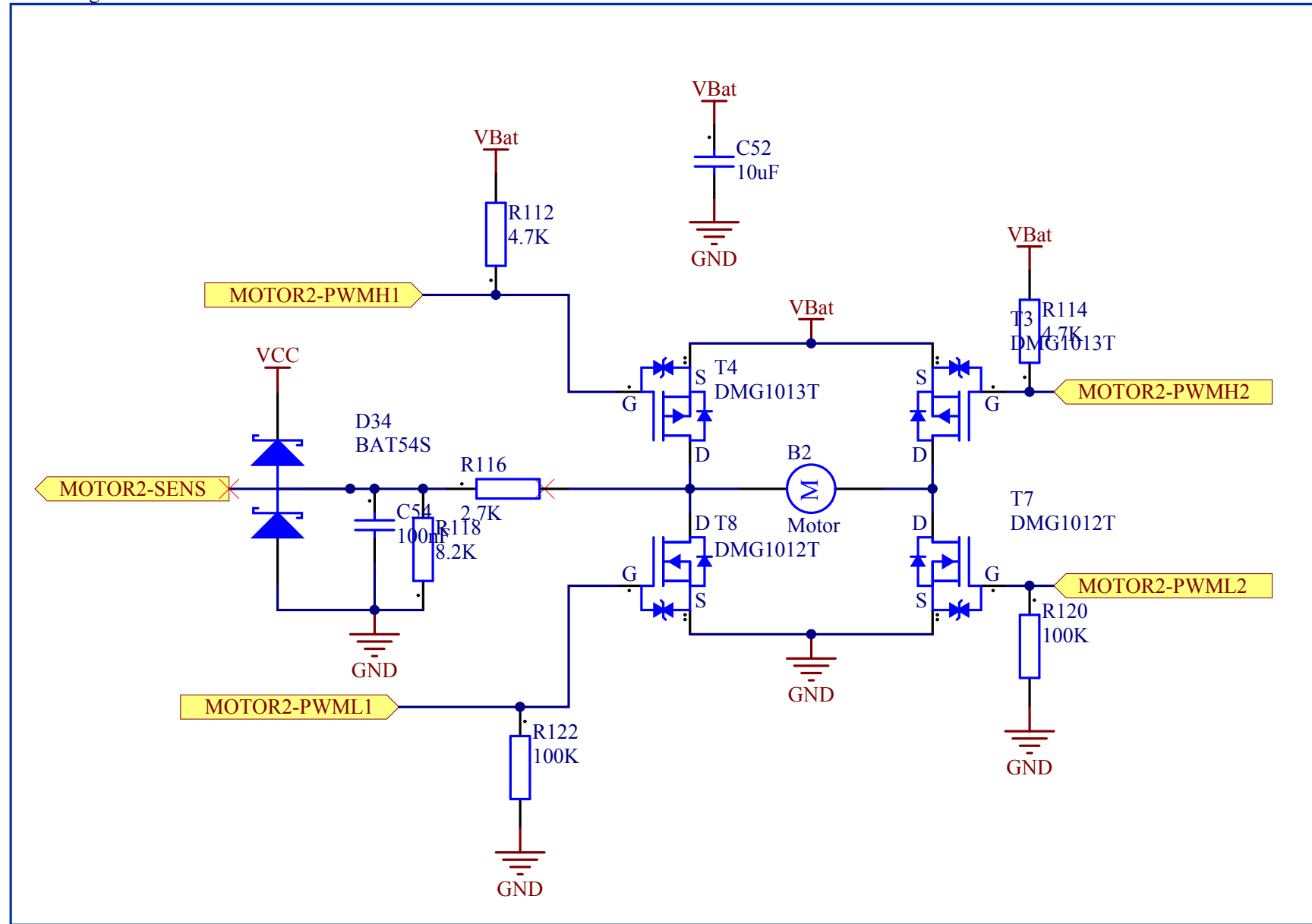
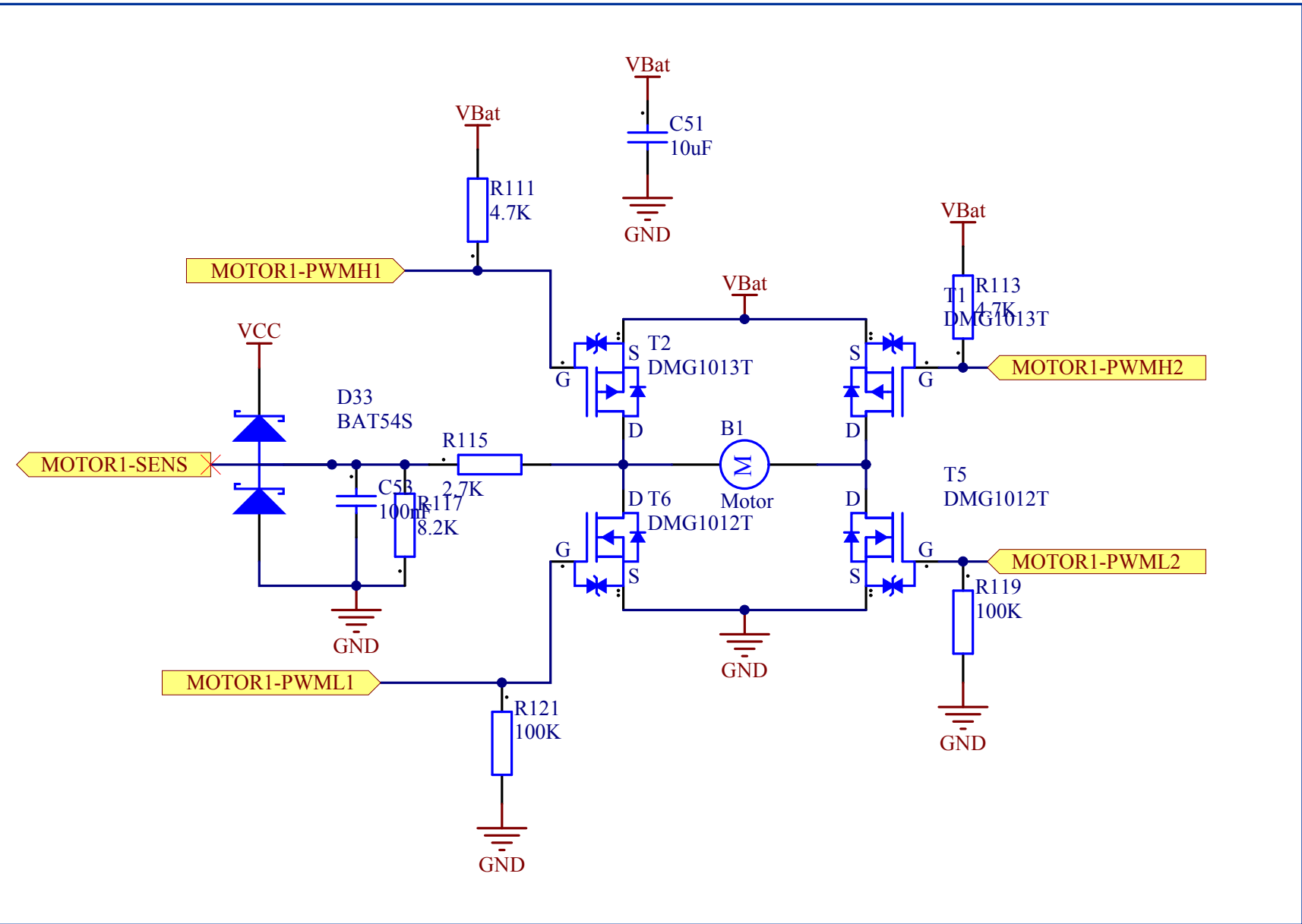
Page 6 de 9

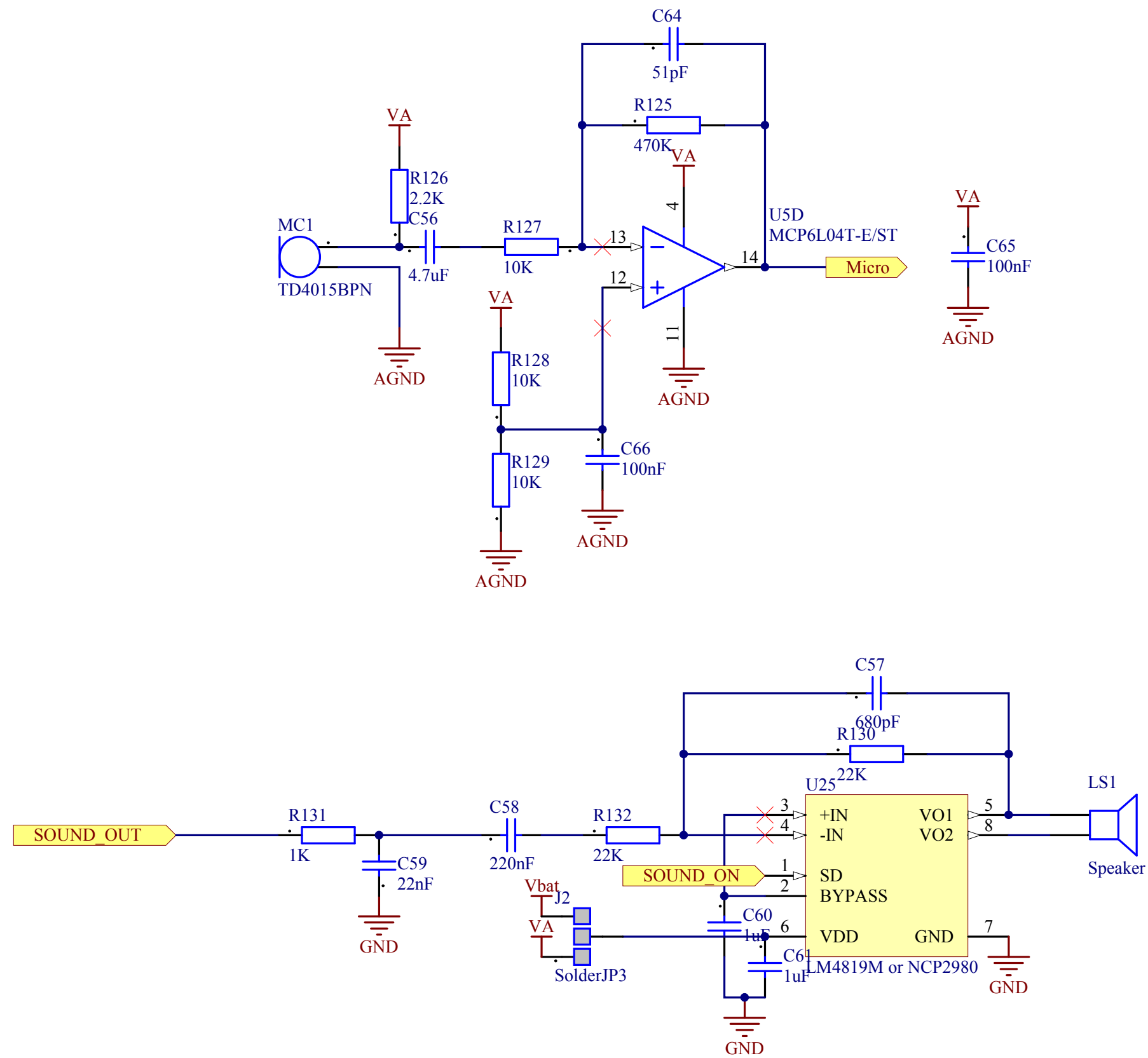
Michael Bonani
STI-IMT-LSRO1
EPFL

*

*

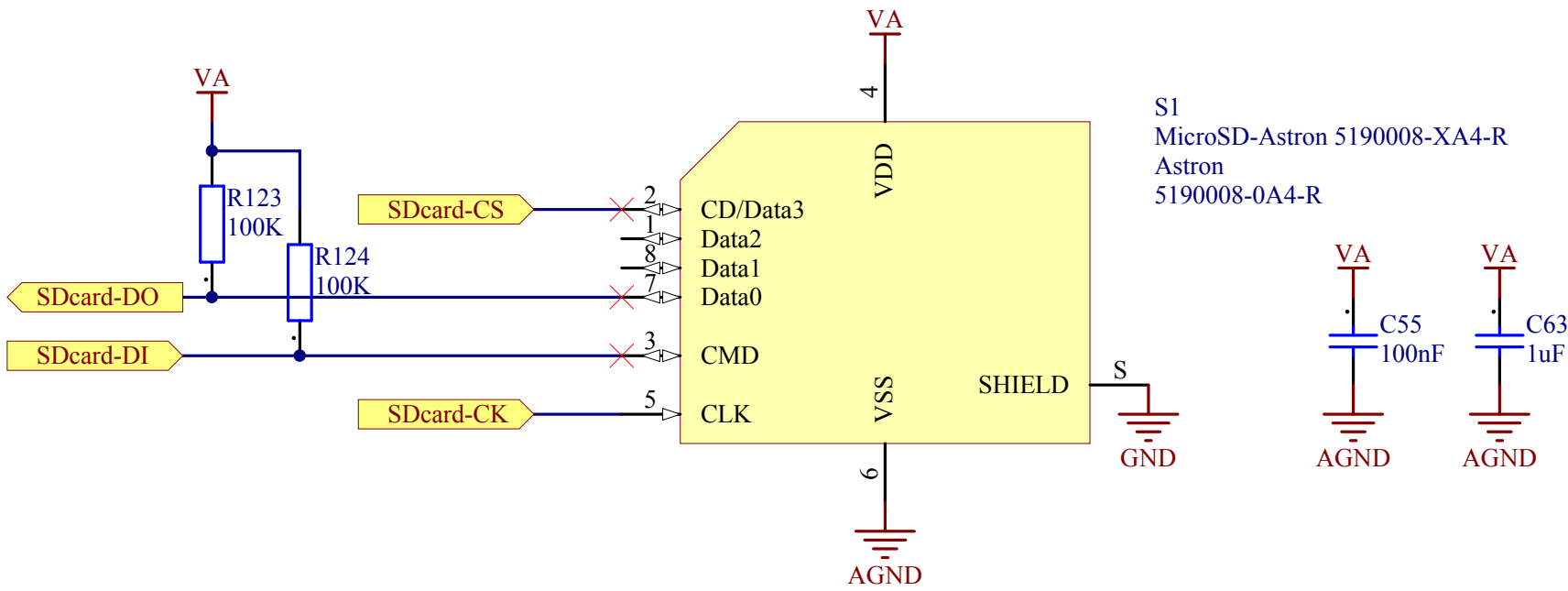




Project *thymio2-main.PrjPCB*Part *Line 1 of project part*
*Line 2 of project part*File : *sound.SchDoc*Date:
21.01.2011
16:24:19Revision: **A**

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CH-1015 LAUSANNEÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE*Laboratoire de Systèmes Robotiques*



S1
MicroSD-Astron 5190008-XA4-R
Astron
5190008-0A4-R

Project *thymio2-main.PrjPCB*

Part *Line 1 of project part*
Line 2 of project part

File : *SDcard.SchDoc*

Date:
21.01.2011
16:24:19

Revision: **A**

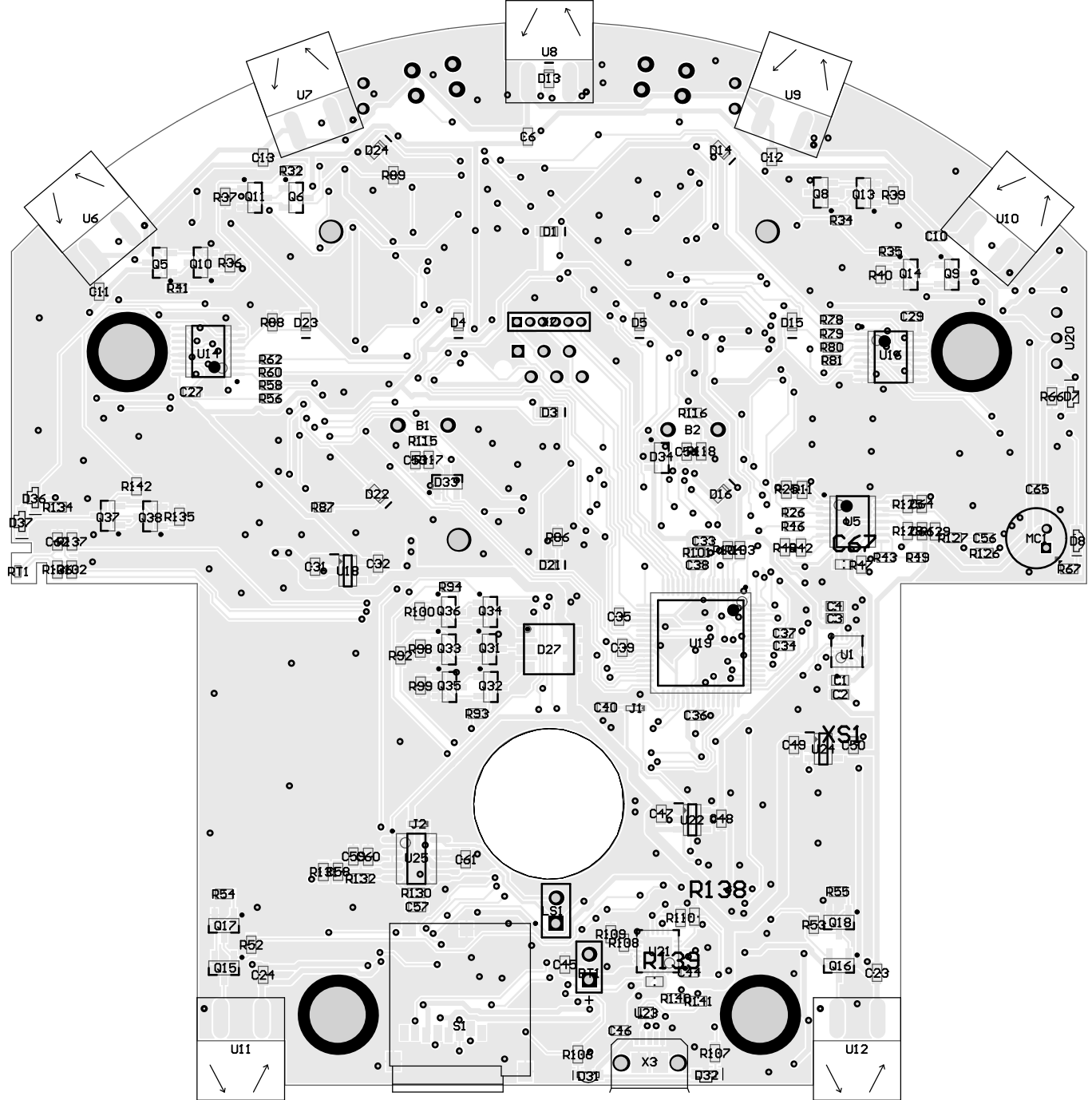
Page 9 de 9

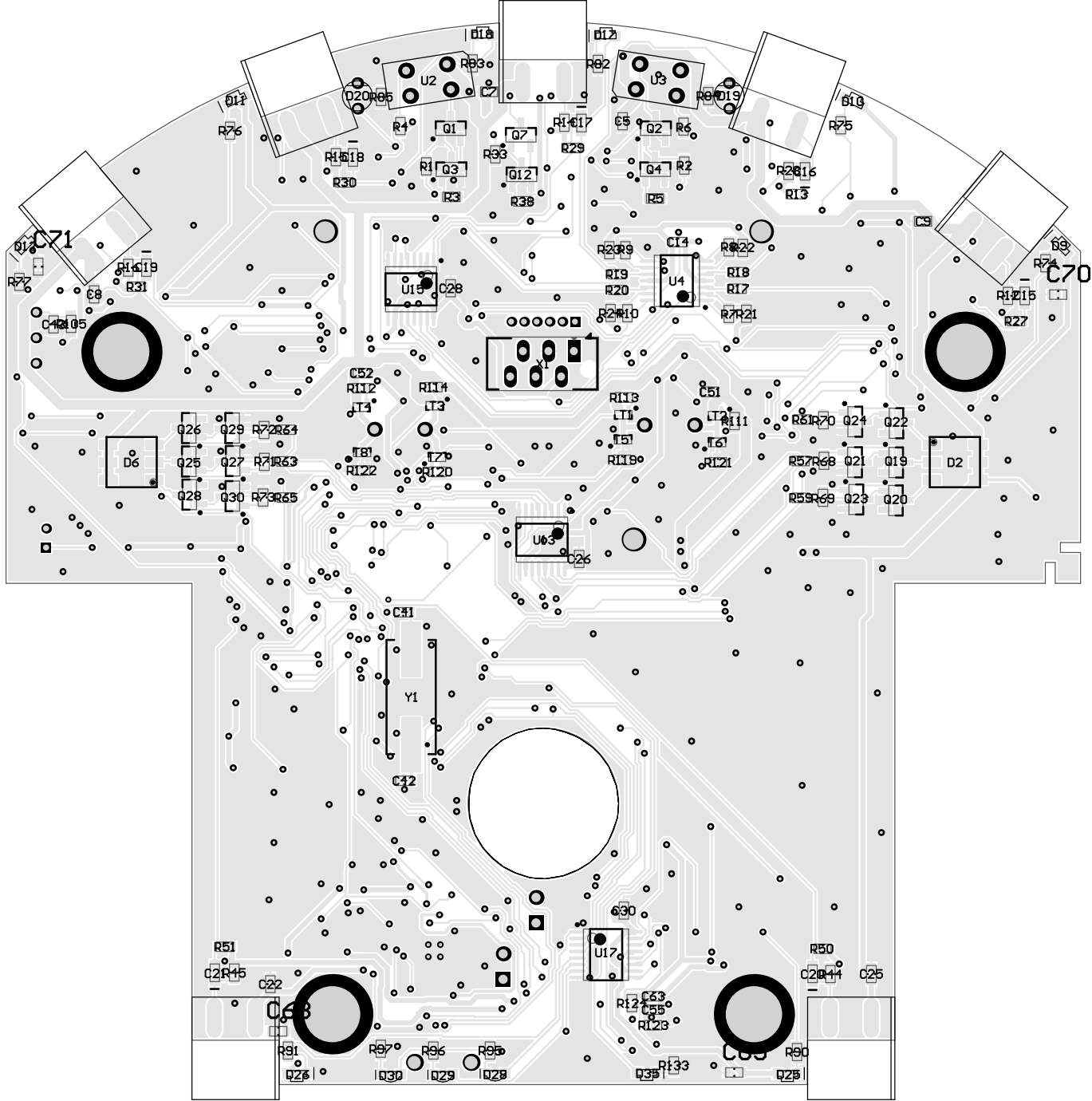
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ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Laboratoire de Systèmes Robotiques





Quantity	Comment	LibRef	Designator	Description	Footprint	Supplier	Supplier Nr
2	Motor	Motor	B1, B2	Motor, General Kind	RB5-10.5		
1	Battery	Battery	BT1	Multicell Battery	BAT-2		
		100nF[/\][J]0603 [\][J]	C1, C3, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C22, C23, C24, C25, C26, C27, C28, C29, C30, C33, C35, C36, C37, C38, C39, C40, C53, C54, C55, C56, C56, C57, C58, C59, C70, C71				
38	100nF	100F[/\][J]0603 [\][J]	C2, C4, C34, C46, C51, C52	Capacitor	RESC1608X06L	Farnell	1288255
6	10uF	100F[/\][J]0603 [\][J]	C15, C16, C17, C18, C19, C20, C21	Capacitor	RESC1608X06L	Farnell	1463375
7	4.7nF	470F[/\][J]0603 [\][J]	C31, C32, C43, C44, C45, C47, C48, C49, C50, C56	Capacitor	RESC1608X06L	Farnell	9227784
10	4.7uF	100F[/\][J]0603 [\][J]	C41, C42		RESC1608X06L	Farnell	8819815
2	18pF	100F[/\][J]0603 [\][J]	C57	Capacitor	RESC1608X06L	Farnell	9408182
1	680pF	470nF[/\][J]0603 [\][J]	C58	Capacitor	RESC1608X06L	Distrelec	823494
1	220nF	100F[/\][J]0603 [\][J]	C59	Capacitor	RESC1608X06L	Farnell	9408182
1	22nF	100F[/\][J]0603 [\][J]	C60, C61, C63	Capacitor	RESC1608X06L	Distrelec	823495
3	1uF	100F[/\][J]0603 [\][J]	C62	Capacitor	RESC1608X06L	Farnell	1288255
1	7nF	100F[/\][J]0603 [\][J]	C64	Capacitor	RESC1608X06L	Farnell	9408182
1	51pF	100F[/\][J]0603 [\][J]	D1, D3, D4, D5	SMD Red 0603 2V@20ma 56 mcd	DIOC1608X08N		
4	19-21SURC/S530-A3/ TR8	LED	D2, D6, D27	\$0.027/2000k	LEDSDMS		
3	BT5050RGBCT180	LED RGB SMD 2	D7, D9, D10, D11, D12, D17, D18, D25, D26, D32, D35, D36	SMD Red led right angle mount 2V@20ma 57mcd	Z7-21 Everlight		
12	27-21SURC/S530-A3	LED	D8, D28, D29, D30, D31	SMD Green led right angle mount 2V@20ma 35mcd	LITEON-sideview		
5	LTST-S220KGKT	LED	D13, D14, D15, D16, D21, D22, D23, D24	SMD Green 0603 2V@20ma 20mcd	DIOC1608X08N		
8	598-8070-107F	LED	D19, D20	Red led 2V@20ma 57mcd	Led_TH_3mm_20mm		
2	SSL-LX304HD	LED	D33, D34	Schottky Barrier Double Diode	SOT23_N		
2	BAT54S	LED	D37	SMD Blue led right angle mount 3.3V@20ma 28mcd	Z7-21 Everlight Blue		
1	27-21/BHC-AN1P2/3C	LED	LS1	Loudspeaker	PIN2		
1	Speaker	Speaker	MC1	Omnidirectional Back Electret Condenser Microphone	MICRO_PANASONIC_WM-64PN		
1	TD4015BPN	Micro1	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q32, Q33, Q34, Q35, Q36, Q37, Q38				
38	BC817-40	BC817-40	R1, R2, R57, R59, R61, R63, R64, R65, R62, R63, R64, R103, R104, R111, R112, R113, R114, R142	NPN General-purpose Transistor	SOT23_N		
18	4.7K	4.7K[/\][J]0603 [\][J]	R3, R5, R68, R69, R70, R71, R72, R73, R68, R69, R100	Resistor	RESC1608X06L	Distrelec	715604
11	33	RES	R4, R5, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R44, R45, R46, R47, R48, R49, R50, R51, R106, R151	120, Resistor	RESC1608X06L		
32	1k	1K[/\][J]0603[\][J] 22K[/\][J]0603[\][J] RES	R7, R8, R9, R10, R11, R42, R43, R101, R102, R109, R110, R127, R128, R129, R136	120, Resistor	RESC1608X06L	Distrelec	715588, 715620
15	10k	10K[/\][J]0603[\][J] RES	R32, R33, R34, R35, R41, R52, R53, R126	Resistor	RESC1608X06L	Distrelec	715596
8	2.2K	2.2K[/\][J]0603 [\][J]	R56, R58, R60, R62, R66, R67, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R95, R96, R97, R133, R134, R135	Resistor	RESC1608X06L	Distrelec	715632
7	6.2	RES	R105	Resistance	RESC1608X08N		
30	68	68K[/\][J]0603[\][J]	R106, R107, R137	Resistor	RESC1608X06L	Distrelec	715570
1	100	100K[/\][J]0603 [\][J]	R115, R116	Resistor	RESC1608X06L	Distrelec	715596
2	2.7K	2.2K[/\][J]0603 [\][J]	R117, R118	Resistor	RESC1608X06L	Farnell	9331565
9	100K	100K[/\][J]0603 [\][J]	R119, R120, R121, R122, R123, R124, R138, R139, R141	Resistor	RESC1608X06L	Distrelec	715612, 715636
1	470K	470K[/\][J]0603 [\][J]	R125	Resistor	RESC1608X06L	Distrelec	715652
2	22K	22K[/\][J]0603 [\][J]	R130, R132	Resistor	RESC1608X06L	Distrelec	715620
1	270K	270K[/\][J]0603 [\][J]	R140	Resistor	RESC1608X06L	Farnell	9330041
1	NCP15XH103F03RC	Res Thermal	RT1	Thermistors - NTC 10K OHM 1% 0402	RESC1005X04L		
	MicroSD-Astron 5190008-XA4-R	SD-Card-Micro-ASL-TRON 5190008-XA4-R	S1	MicroSD Card connector 5190008-XA4-R	Astron 5190008-XA4-R		
4	DMG1013T	DMG1013T	T1, T2, T3, T4	Transistor MOSFET 1 x P Pining : 1+G, 2+S, 3+D	SOT50P160X80-3N		
4	DMG1012T	DMG1012T	T5, T6, T7, T8	Transistor MOSFET 1 x N, Pining : 1+G, 2+S, 3+D	SOT50P160X80-3N		
1	MMA7660FC	MMA7660FC	U1	MMA7660FC: XYZ-AXIS ACCELEROMETER ±1.5 g	DFN50P300X300X100-12N		
2	ITR9909	ITR9909	U2, U3	Everlight Opto Interrupter	ITR9909_LONG		
	MCP6L04T-E/ST	MCP6L04T-E/ST	U4, U5	1 MTC: 85 (pA) Quiescent Power, 14-Pin TSSOP, Extended Temperature Range, Tape and Reel	TSSOP-ST14_N		
2	ITR9909	ITR9909	U6, U7, U8, U9, U10, U11, U12	Everlight Opto Interrupter	ITR9909_EDGE		
5	MC74HC595ADTR2	MC74HC595ADTR2	U13, U14, U15, U16, U17	8-Bit Serial Input/Serial or Parallel Output Shift Register with Latched 3-State Outputs	948F-01_N		
3	AP7331-33WG-7	AP7331	U18, U22, U24	300mA, Low Quiescent Current, Fast Transient LDO	SOT95P285X100-6N		
1	PIK24FJ64GB106-I/PT	PIK24FJ64GB106-I/PT	U19	General Purpose 16-Bit Flash Microcontroller with USB On-The-Go, 64KB Flash, 16KB SRAM, 64-Pin TQFP, Industrial Temperature	TQFP-PT64_N		
1	IRM-3636T	TSOP32236	U20	IR Receiver Module (68 kHz) for Remote Control Systems	IR-receiver		
1	MCP73871-2AAI/ML	MCP73871-2AAI/ML	U21	Stand-Alone System Load Sharing and Li-Ion/Li-Polymer Battery Charge Management Controller, 4.2V, 20-Pin QFN, Industrial Temperature	QFN-ML20_N		
1	FAN3988	FAN3988	U23	USB Charger and Over Voltage Detection Device	MLP 1.45x1mm		
1	LM4819M or NCP2980	LM4819M	U25	350mW Audio Power Amplifier with Shutdown Mode	MO8A_N		
1	Con1x6	Con1x6_1	X1	1 x 6 pins connector	TYCO_7-215079-6		
1	Con1x6	Con1x6	X2	1 x 6 pins connector	MHDR1X6		
1	Alatron R3190005-021-R	USB_MINIAB	X3	USB connector Micro B	Astron 3190005-x21-r		
1	815-ABLS-8-B2	HC49/4H_SMX	Y1	Surface Mount Quartz Crystal 8MHz	HC49/4H_SMX		