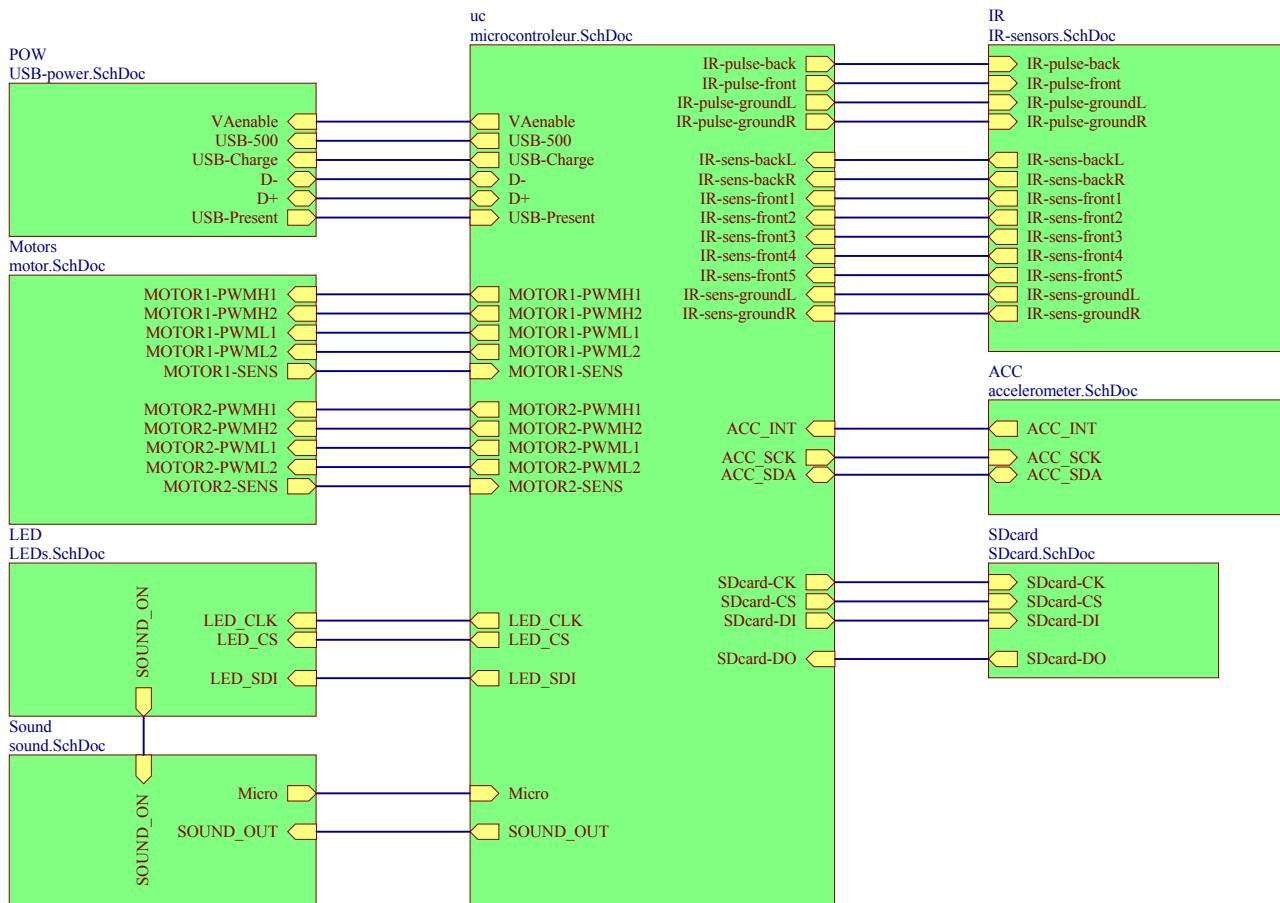


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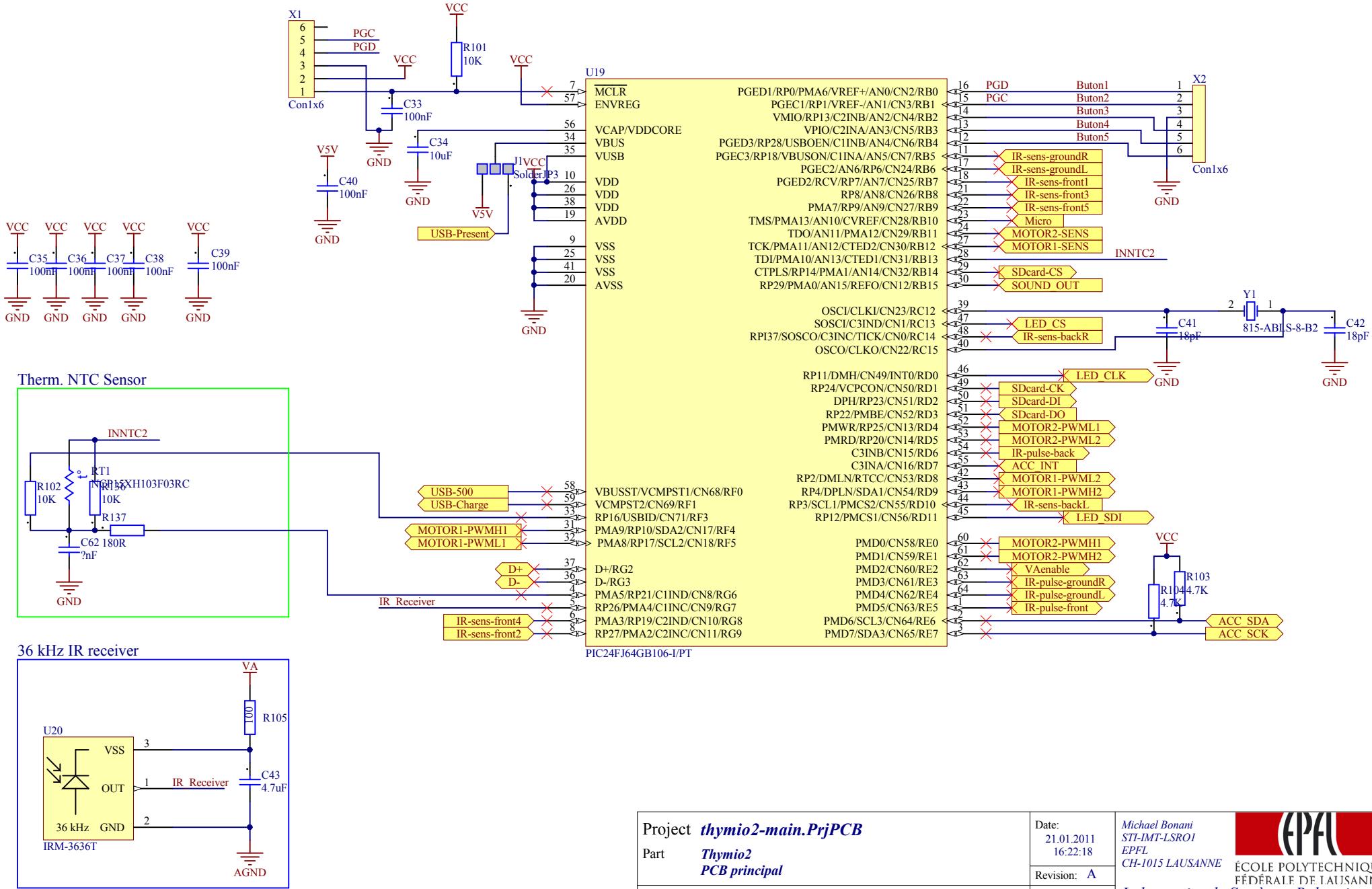
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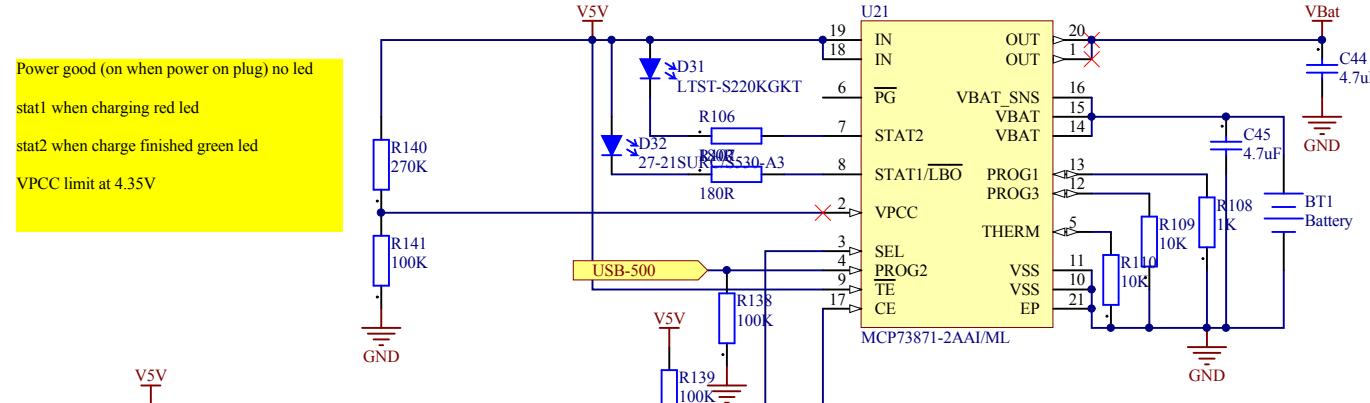
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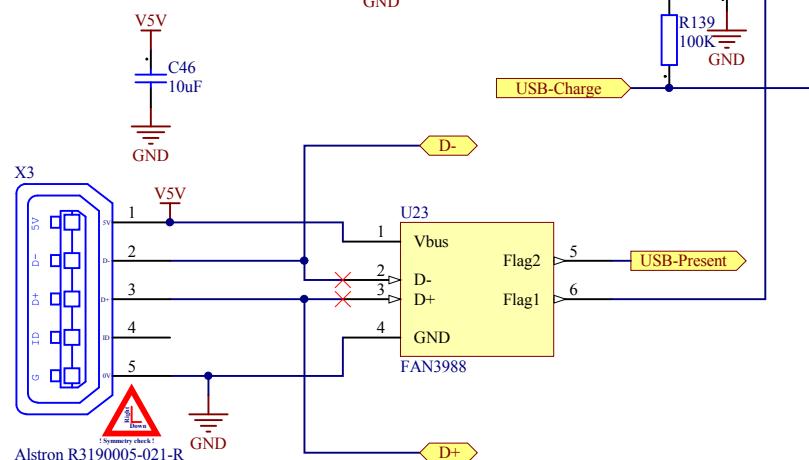
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21.01.2011
16:22:18Michael Bonani
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EPFL
CH-1015 LAUSANNEÉCOLE POLYTECHNIQUE
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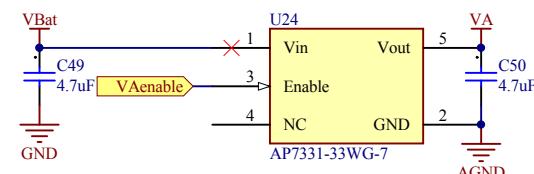
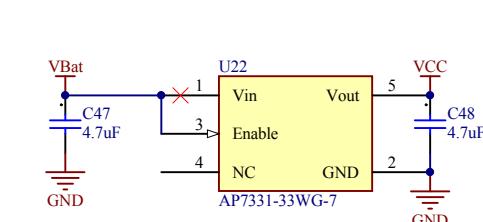
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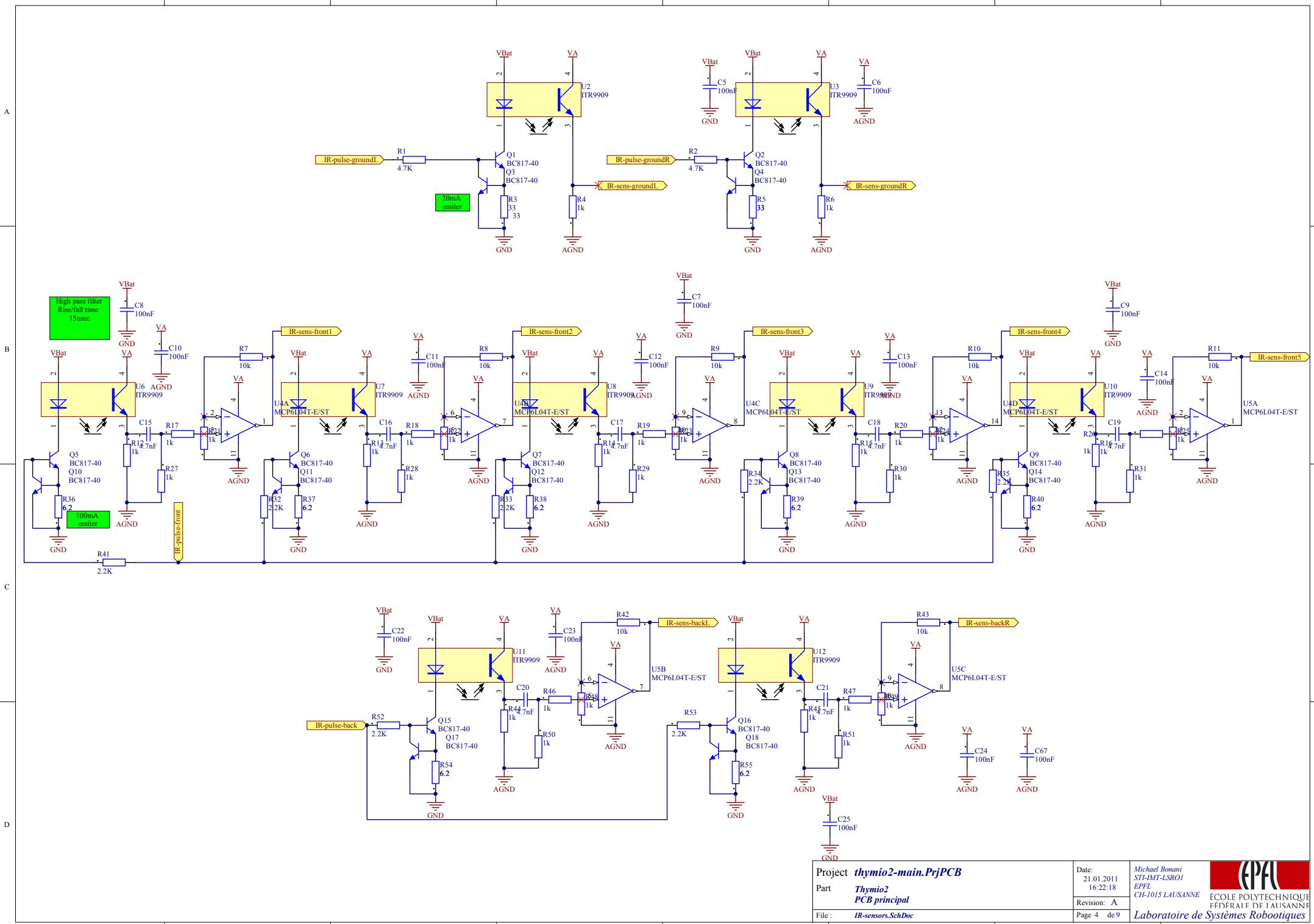
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AGND : Analog Ground GND : Logical Ground
 XS1
 SC2
 AGND GND

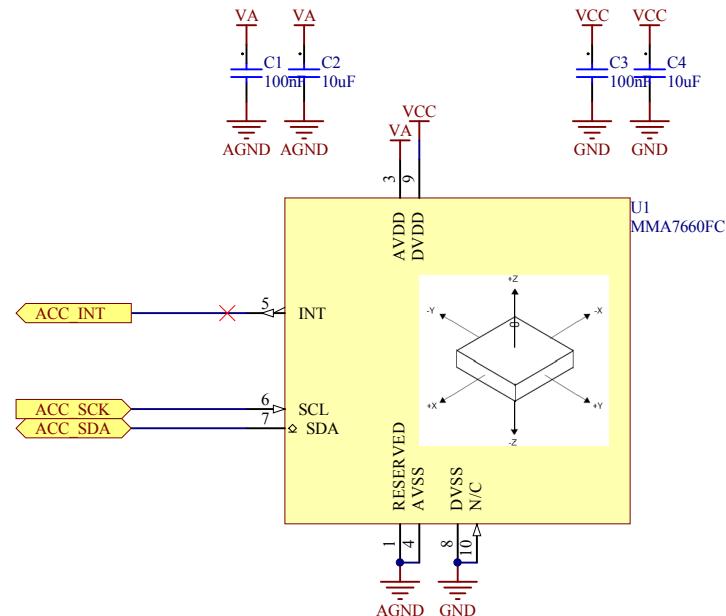
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21.01.2011
16:22:18Michael Bonani
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D

Project *thymio2-main.PrjPCB*

Part *Thymio2*
PCB principal

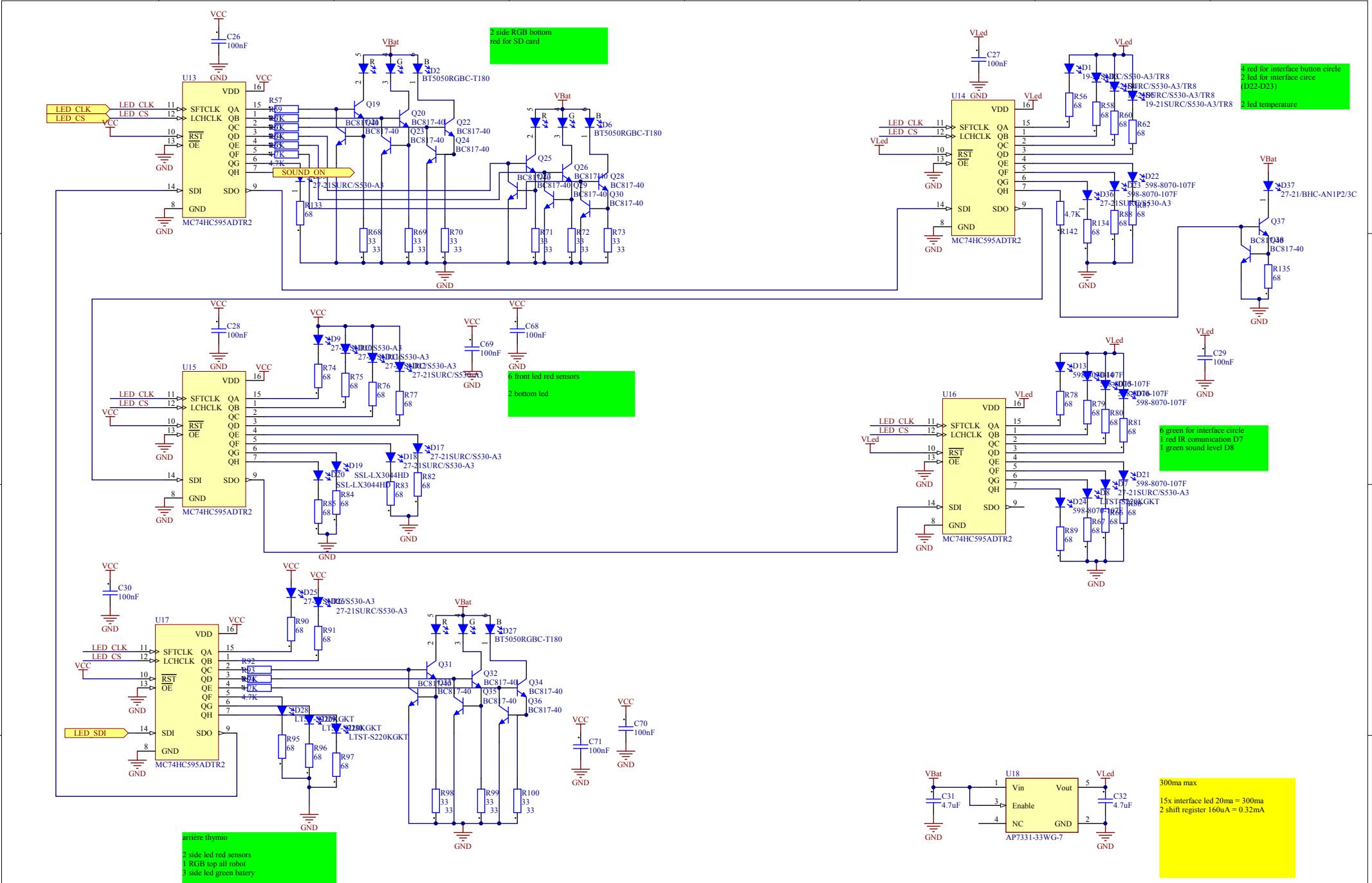
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Date:
21.01.2011
16:22:18

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Revision: *
Page 5 de 9





Project **thymio2-main.PjPCB**
Part **Thymio2**
PCB principal
File : **LEDs.SchDoc**

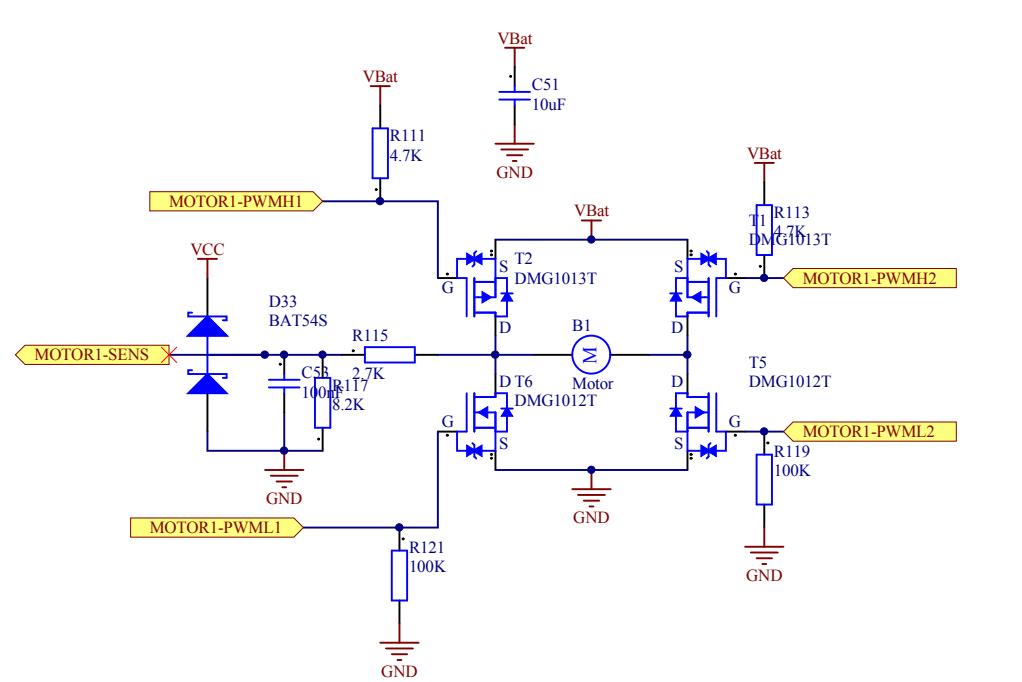
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Revision: *
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Michael Bonani
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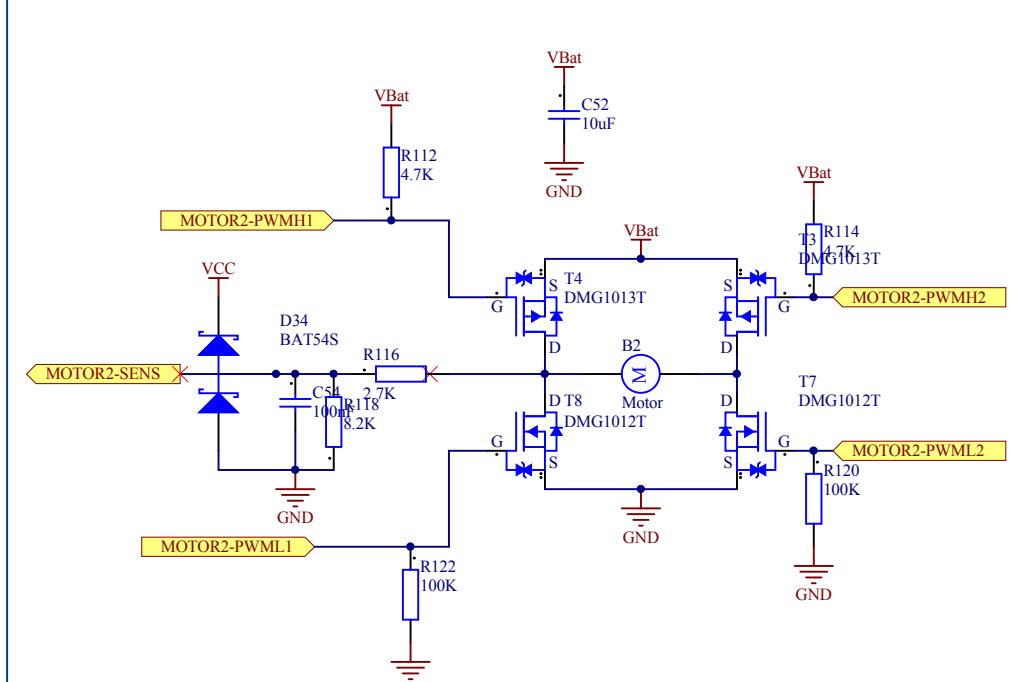
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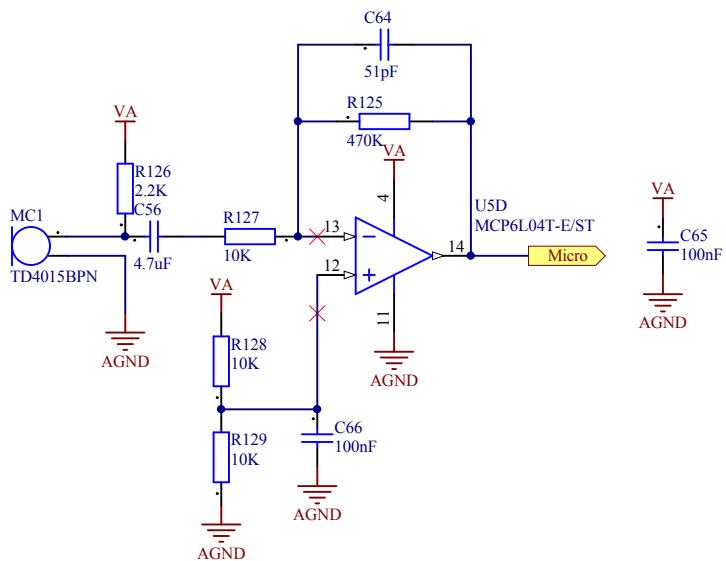
Motor Left



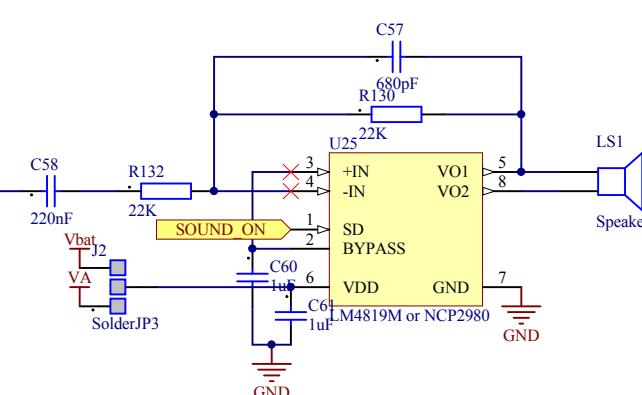
Motor Right



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B



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Project *thymio2-main.PjPCB*Part *Line 1 of project part*
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21.01.2011
16:22:19Daniel Burnier
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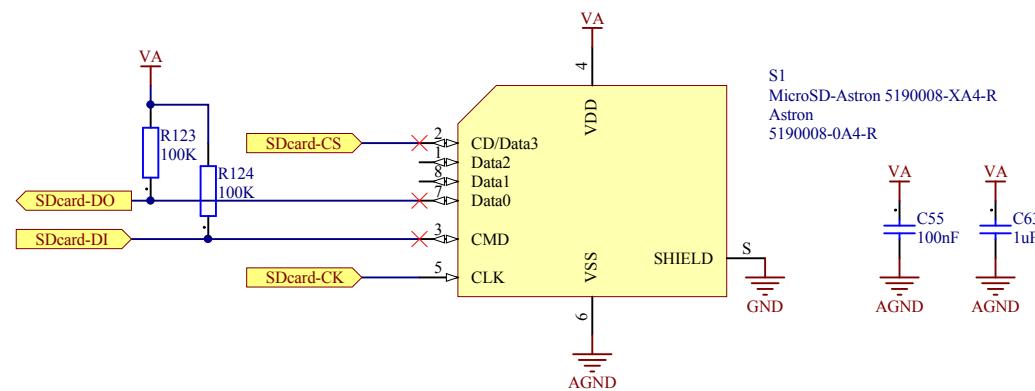
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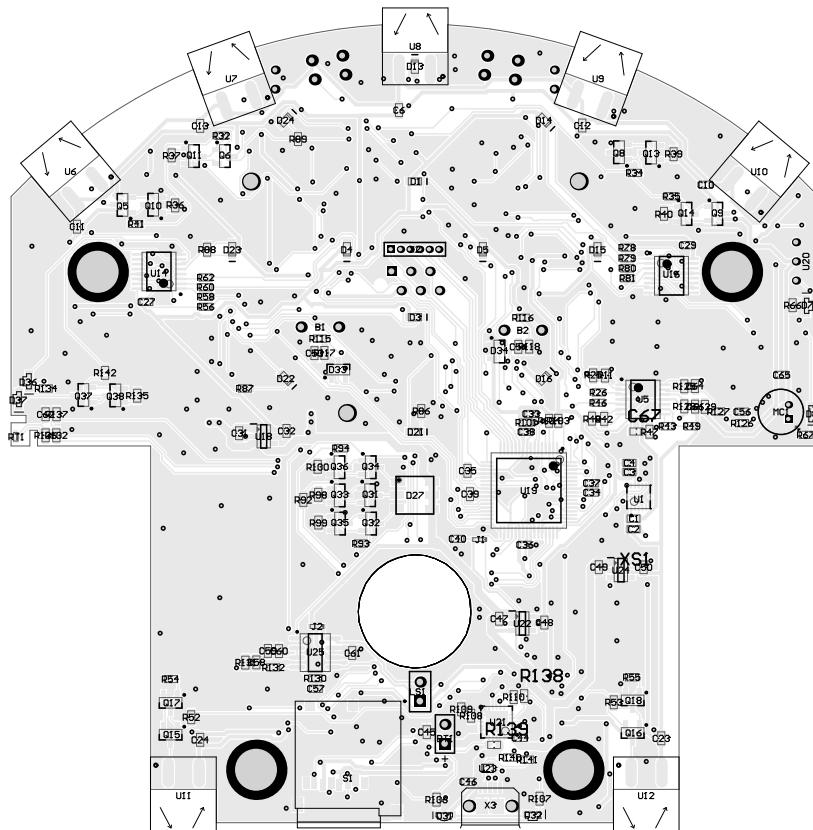
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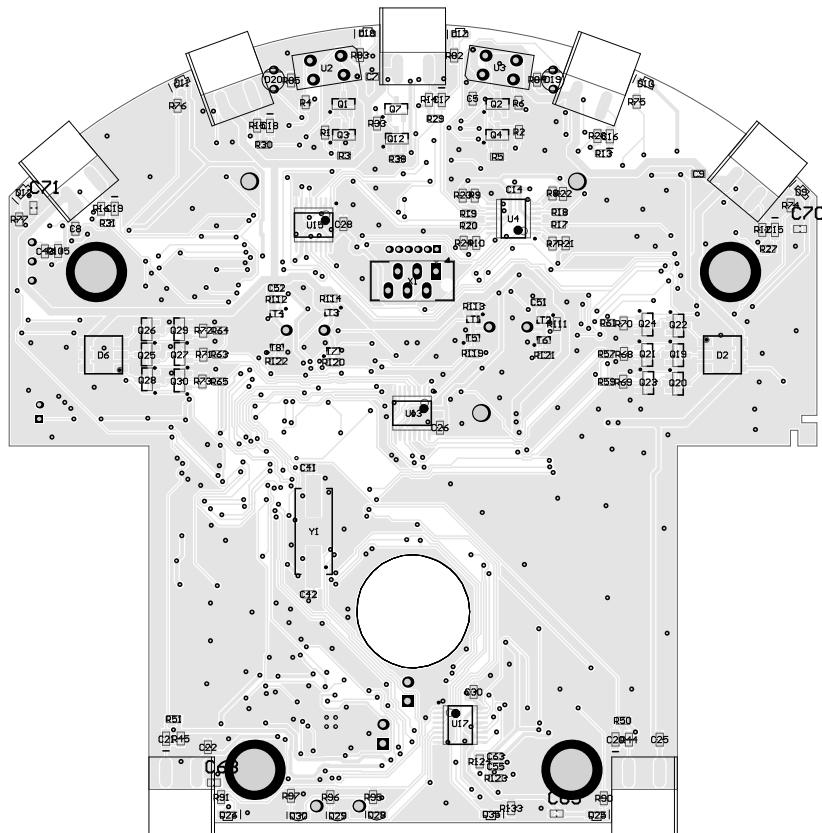
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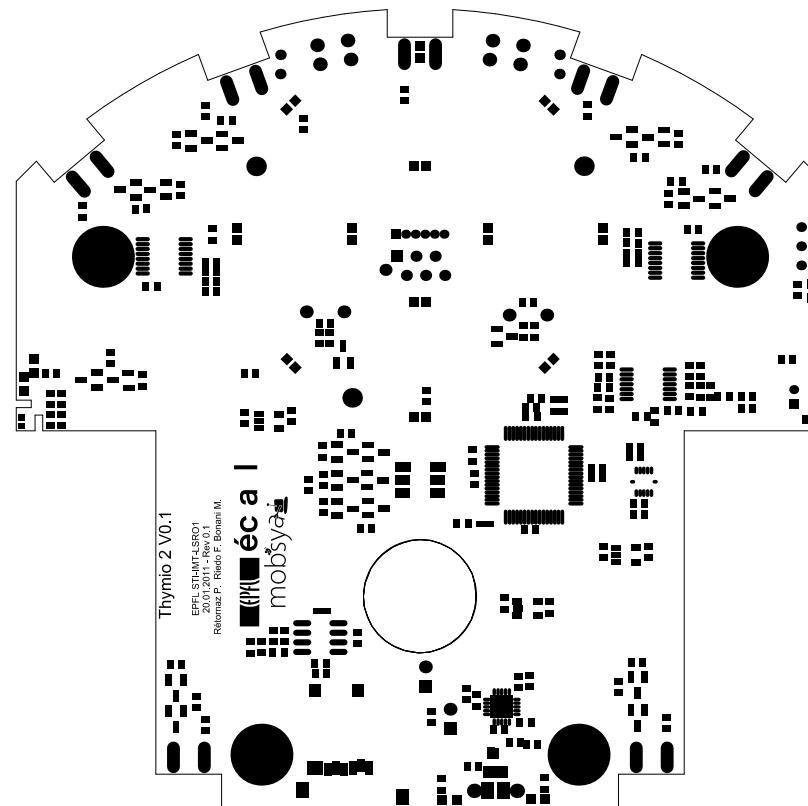
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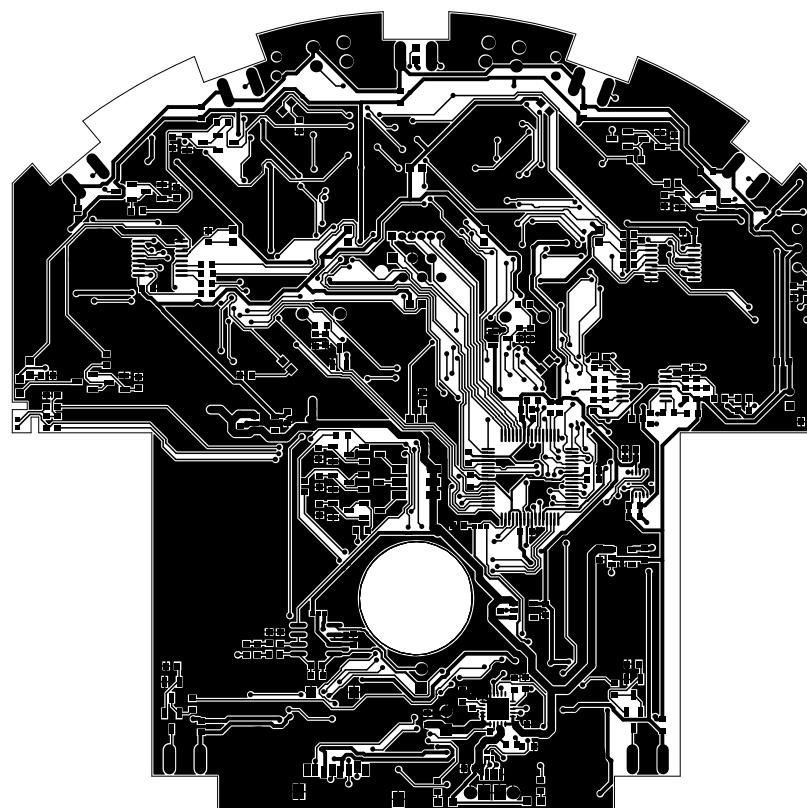
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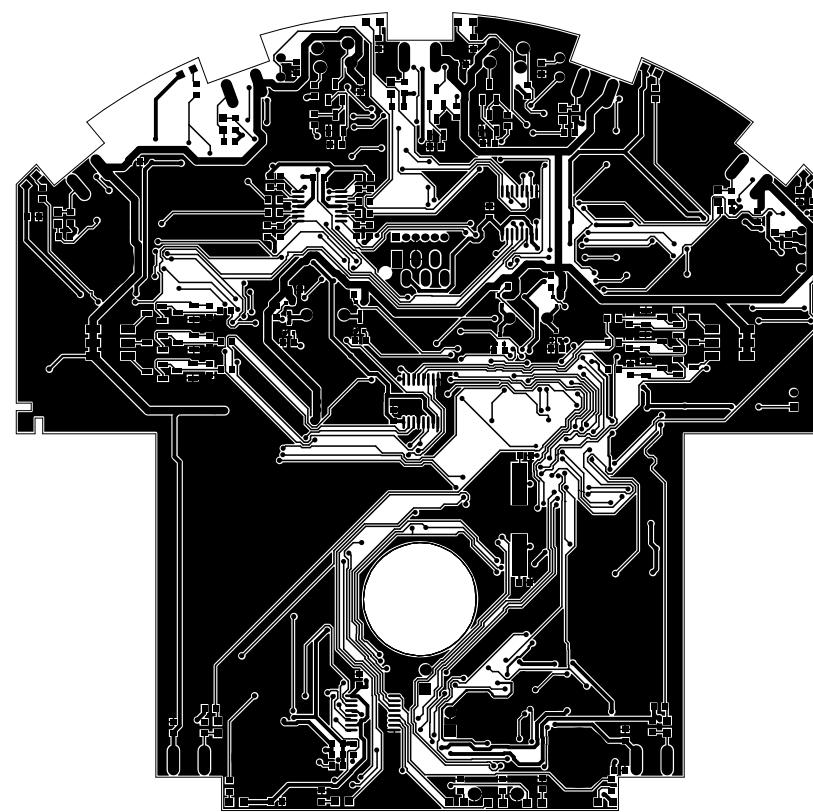
Quantity	Comment	LibRef	Designator	Description	Footprint	Supplier	Supplier Nr
2	Motor	B1, B2		Motor, General Kind	RB5-10.5		
1	Battery	BT1		Multicell Battery	BAT-2		
38	100nF	C1, C3, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C22, C23, C24, C25, C26, C27, C28, C29, C30, C35, C36, C37, C38, C39, C40, C53, C54, C55, C56, C57, C58, C59, C70, C71	Capacitor	RESC1608X06L	Famei	1288255	
6	10uF	10uF[1][1][0603]	C2, C4, C34, C46, C51, C52	Capacitor	RESC1608X06L	Famei	1463375
7	4.7nF	CAP-NP	C15, C16, C17, C18, C19, C20, C21	Capacitor	CAPC1608N		
10	4.7uF	4.7uF[1][1][0603]	C31, C32, C43, C44, C45, C47, C48, C50, C56	Capacitor	RESC1608X06L	Famei	9227784
2	18pF	18pF[1][1][0603]	C41, C42	Capacitor	RESC1608X06L	Famei	6819815
1	680pF	10uF[1][1][0603]	C57	Capacitor	RESC1608X06L	Famei	9406182
1	220nF	47nF[1][1][0603]	C58	Capacitor	RESC1608X06L	Distelec	823494
1	22nF	10uF[1][1][0603]	C59	Capacitor	RESC1608X06L	Famei	9406182
3	1uF	10uF[1][1][0603]	C60, C61, C63	Capacitor	RESC1608X06L	Distelec	823495
1	7nF	100nF[1][1][0603]	C62	Capacitor	RESC1608X06L	Famei	1288255
1	51pF	10uF[1][1][0603]	C64	Capacitor	RESC1608X06L	Famei	9406182
4	19-21-SURC/S530-A3/R8	LED	D1, D3, D4, D5	SMD Red 0603 2V@20ma 56 mcd	DI0C1608X08N		
3	BT5050RGBC-T180	LED RGB SMD 2	D2, D6, D27	SMD Red 0603 20ma	LEDSMD5		
12	27-21-SURC/S530-A3	LED	D7, D9, D10, D11, D12, D17, D18, D25, D26, D32, D35, D36	SMD Red led right angle mount 2V@20ma 57mcd	27-21 Everlight		
5	LTST-S220KGKT	LED	D8, D28, D29, D30, D31	SMD Green led right angle mount 2V@20ma 35mcd	LITEON-sideview		
8	598-8707-107F	LED	D13, D14, D15, D16, D21, D22, D23, D24	SMD Green 0603 2V@20ma 20mcd	DI0C1608X08N		
2	SSLXJ044HD	LED	D19, D20	Red led 2V@20ma 57mcd	Led_TH_3mm_20mm		
2	BAT54S	BAT54S	D33, D34	Schottky Barrier Diode	SOT23_N		
1	27-21/BHC-AN1P2/3C	LED	D37	SMD Blue led right angle mount 3.3V@20ma 28mcd	27-21 Everlight Blue		
1	Speaker	Speaker	LS1	Loudspeaker	PIN2		
1	TD4015BPN	Micro1	MC1	Omnidirectional Back Electret Condenser Microphone	MICRO_PANASONIC_WM-64PN		
38	BC817-40	BC817-40	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	NPN General-purpose Transistor	SOT23_N		
18	4.7K	4.7K[1][1][0603]	R1, R2, R5, R57, R59, R61, R83, R64, R85, R92, R93, R94, R103, R104, R111, R12, R13, R14, R142	Resistor	RESC1608X06L	Distelec	715604
11	33	RES	R3, R4, R5, R6, R7, R8, R9, R10, R70, R71, R72, R73, R80, R81, R100	120. Resistor	RESC1608X06L		
32	1k	10K[1][1][0603]	R4, R5, R6, 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, R108, R131, RES	120. Resistor	RESC1608X06L	Distelec	715588, 715620
15	10k	10K[1][1][0603]	R7, R8, R9, R10, R11, R42, R43, R101, R102, R109, R110, R127, R128, R129, R136	120. Resistor	RESC1608X06L	Distelec, Famei	715612, 9330399
8	2.2k	2.2K[1][1][0603]	R32, R33, R34, R35, R41, R52, R53, R126	Resistor	RESC1608X06L	Distelec	715596
7	6.2	RES	R36, R37, R38, R39, R40, R54, R55	120	RESC1608X06L		
30	68	68K[1][1][0603]	R55, R58, R60, R62, R65, 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	Distelec	715632
1	100	RES_ACORT	R105	Resistance	RESC1608X06N		
3	180R	180R[1][1][0603]	R106, R107, R137	Resistor	RESC1608X06L	Distelec	715570
2	2.7K	2.2K[1][1][0603]	R115, R116	Resistor	RESC1608X06L	Distelec	715596
2	8.2K	8.2K[1][1][0603]	R117, R118	Resistor	RESC1608X06L	Famei	9331565
9	100K	10K[1][1][0603]	R119, R120, R121, R122, R123, R124, R125, R139, R141	Resistor	RESC1608X06L	Distelec	715612, 715636
1	470K	470K[1][1][0603]	R125	Resistor	RESC1608X06L	Distelec	715652
2	22K	22K[1][1][0603]	R130, R132	Resistor	RESC1608X06L	Distelec	715620
1	270K	270K[1][1][0603]	R140	Resistor	RESC1608X06L	Famei	9330941
1	NCP15XH103F03RC	Res_Thermal	R11	Thermistors - NTC 10K OHM 1% 0402	RESC1005X04L		
1	MicroSD-Astron 519000B-XA4-R			SD-Card Micro-ASLSTRON 519000B-XA4-R	MicroSD Card connector 519000B-XA4-R	Astron 519000B-XA4-R	
1	R	1					
4	DMG1013T	DMG1013T	T1, T2, T3, T4	Transistor MOSFET 1 x P 1nA, 2x3, 3x0	SOT50P1608-3N		
4	DMG1012T	DMG1012T	T5, T6, T7, T8	Transistor MOSFET 1 x N, 1nA, 2x3, 3x0	SOT50P1608-3N		
1	MMA7660FC	MMA7660FC	U1	MMA7660FC_XY-Z-Axis ACCELEROMETER ±1.5 g	DFNSOP300X300X100-12N		
2	ITR9909	ITR9909	U2, U3	Everlight Opto Interupter	ITR9909_LONG		
2	MCP6L04T-E/ST	MCP6L04T-E/ST	U4, U5	1MHz, 85uA Quiescent Current, 14Pin, TSSOP, Extended Temperature Range, Tape and Reel	TSSOP-ST14_N		
7	ITR9909	ITR9909	U6, U7, U8, U9, U10, U11, U12	Everlight Opto Interupter	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	330mA, Low Quiescent Current, Fast Transient LDO	SD35P285X100-5N		
1	PIC24FJ64GB106-I/P	PIC24FJ64GB106-I/P	U19	General Purpose 16-Bit Flash Microcontroller with USB On-The-Go, 64KB Flash, 16KB SRAM, 64-Pin TQFP, Industrial Temperature	TO2FF-PT64_N		
1	IRM-363T	TSOP32236	U20	IR Receiver Module (36 kHz) for Remote Control Systems	IR-receiver		
1	MCP73871-2AAU/ML	MCP73871-2AAU/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	FAN398	FAN398	U23	DC/DC Buck Converter, Over Voltage Detection Device	MLP_1.45x1mm		
1	LM4819M or NCP2980	LM4819M	U25	350mW Audio Power Amplifier with Shutdown Mode	M08A_N		
1	Cont1x6	Cont1x6	X1	1 x 6 pins connector	TYC02_7-215079-6		
1	Cont1x6	Cont1x6	X2	1 x 6 pins connector	MHD1X6		
1	Altron R3190005-021-R	USBU_MINIAB	X3	USB connector Micro B	Astron 3190005-21-r		
1	815-ABL-S-62	HC494H-SMx	Y1	Surface Mount Quartz Crystal 8MHz	HC494H_SMX		

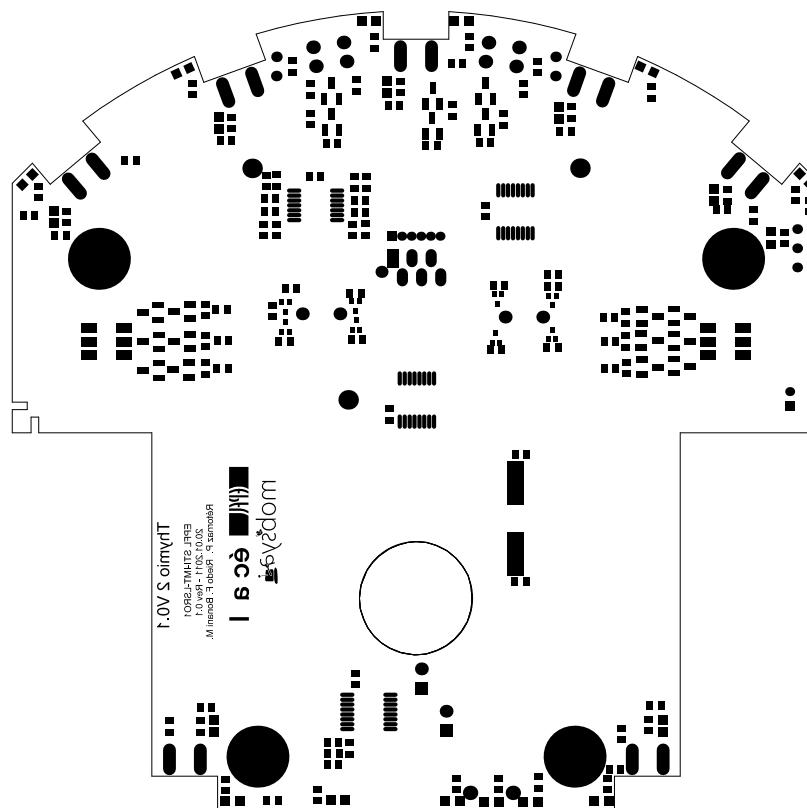












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