

A

A

B

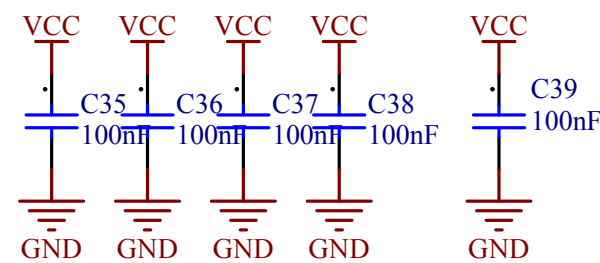
B

C

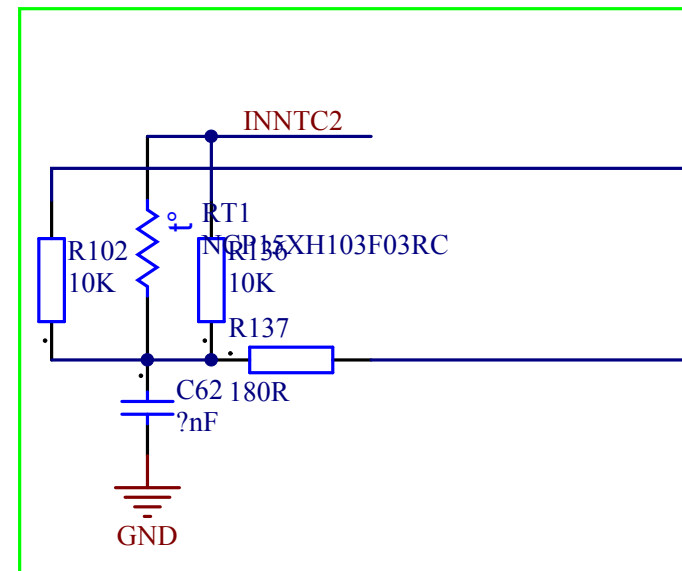
C

D

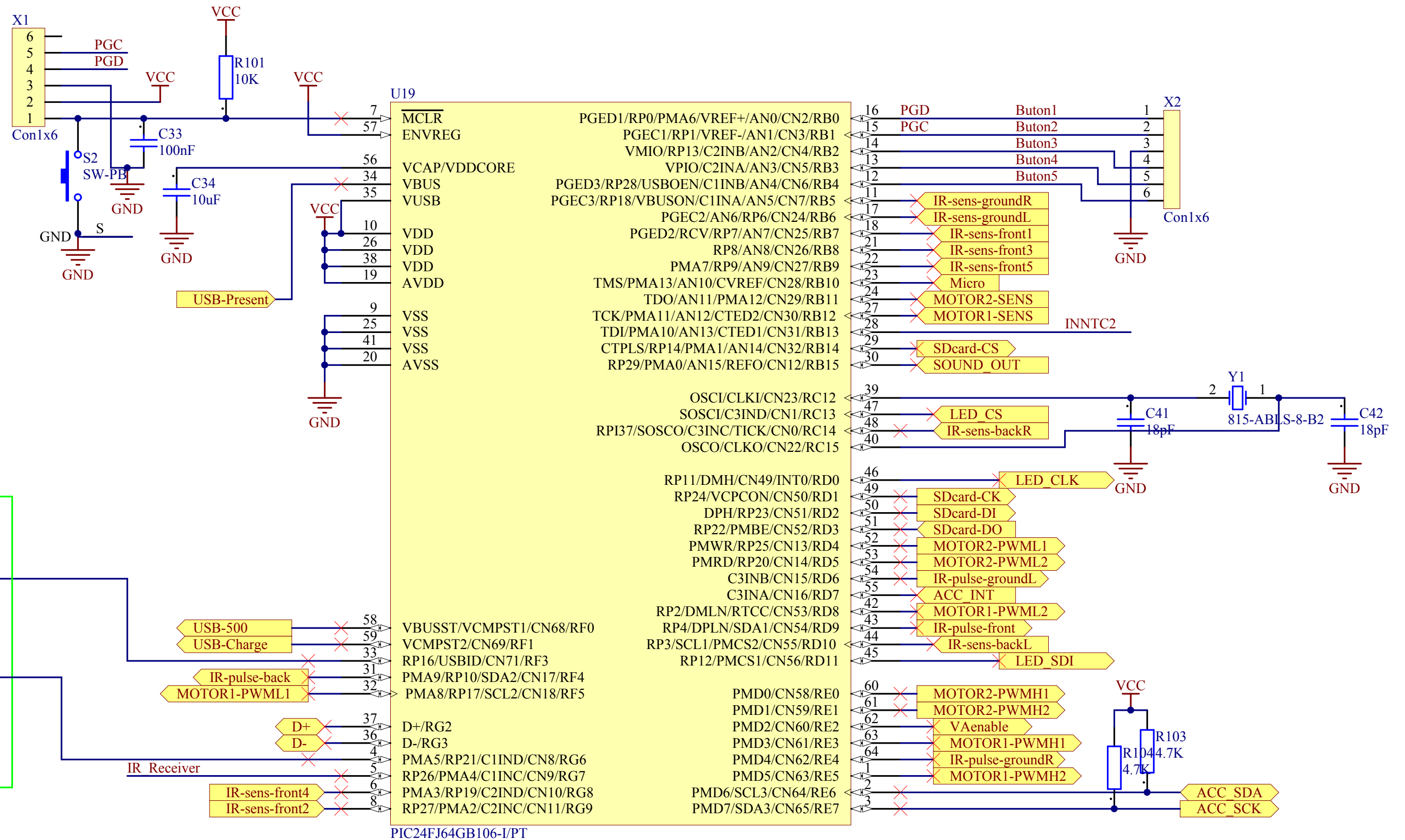
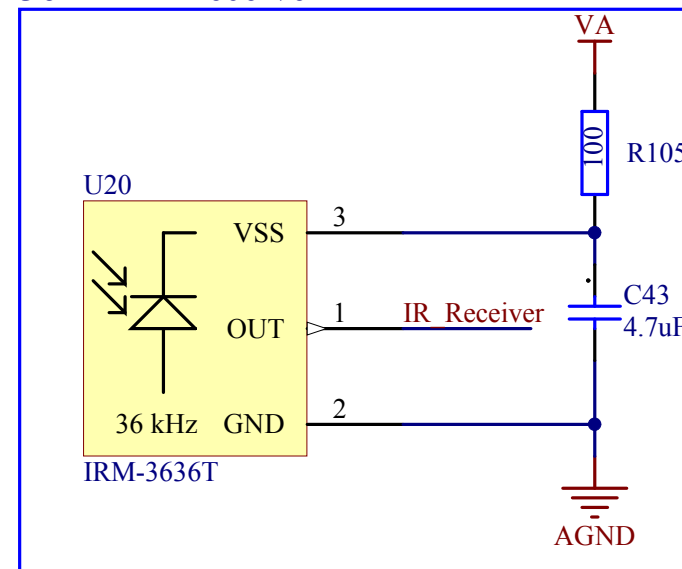
D



Therm. NTC Sensor



36 kHz IR receiver

Project **thymio2-main.PrjPCB**Part **Thymio2
PCB principal**File : **microcontroleur.SchDoc**Date:
14.02.2011
14:05:48Revision: **A**

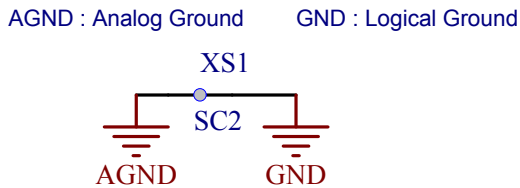
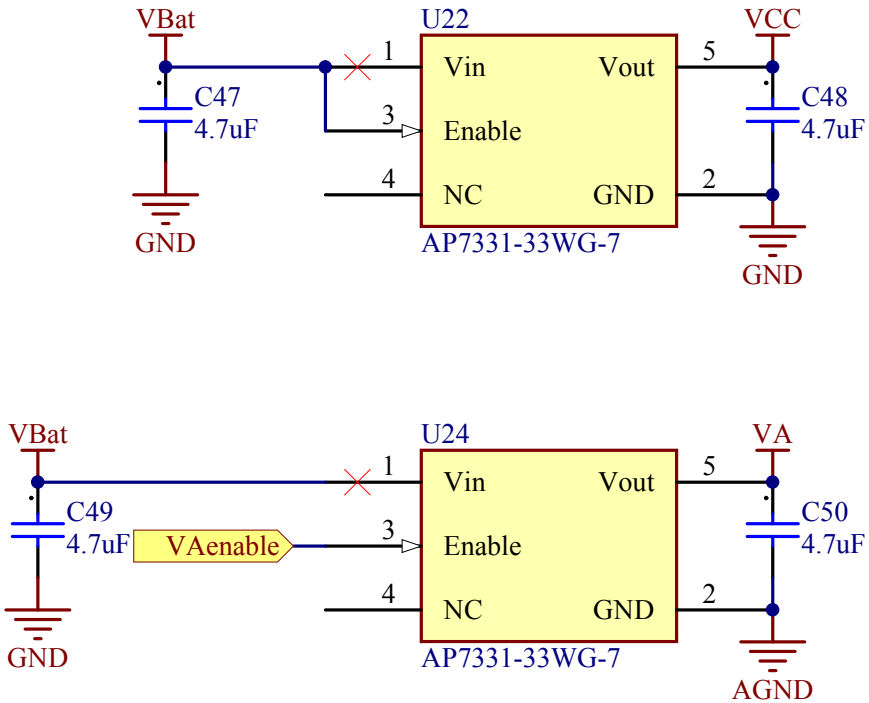
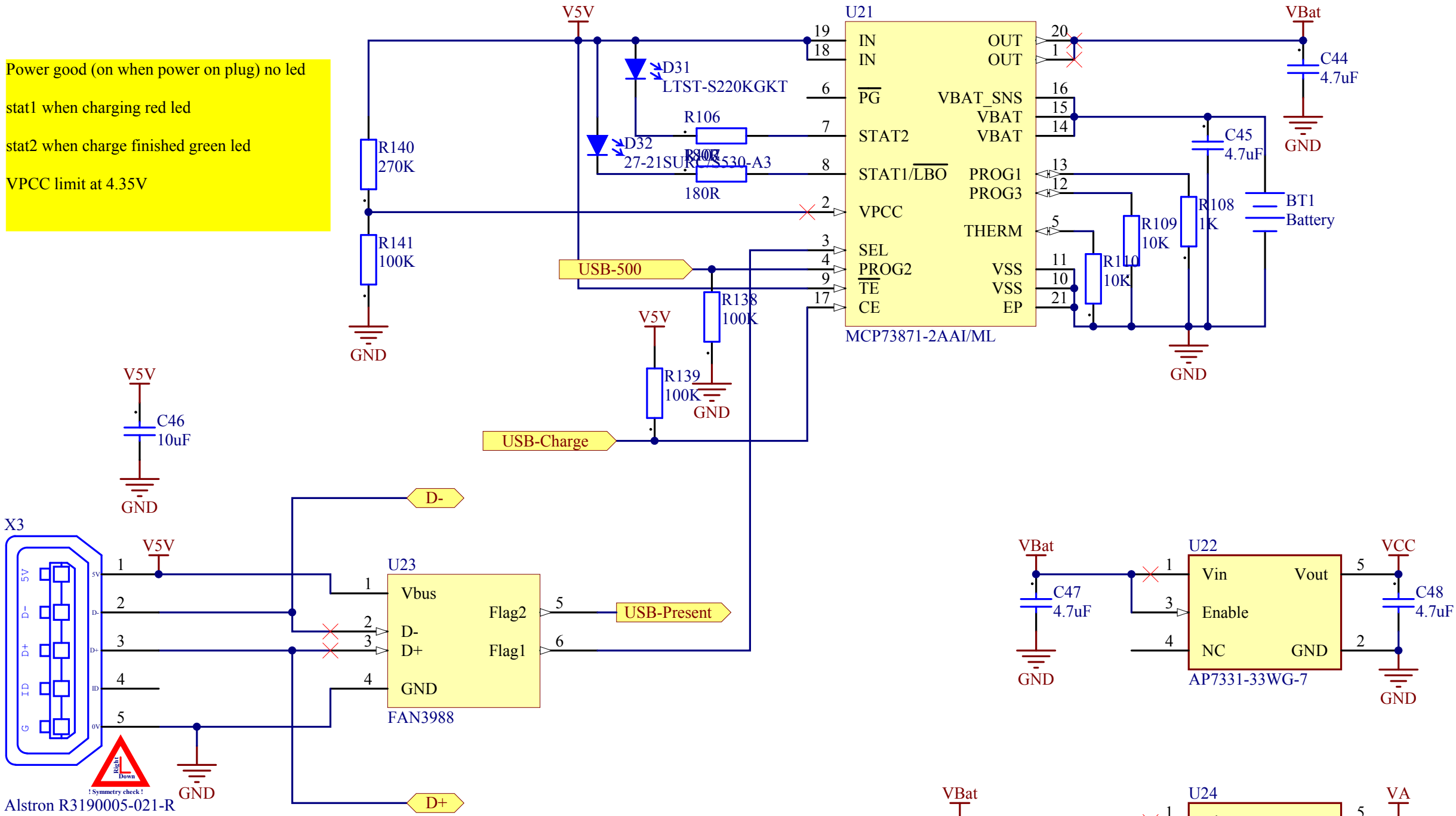
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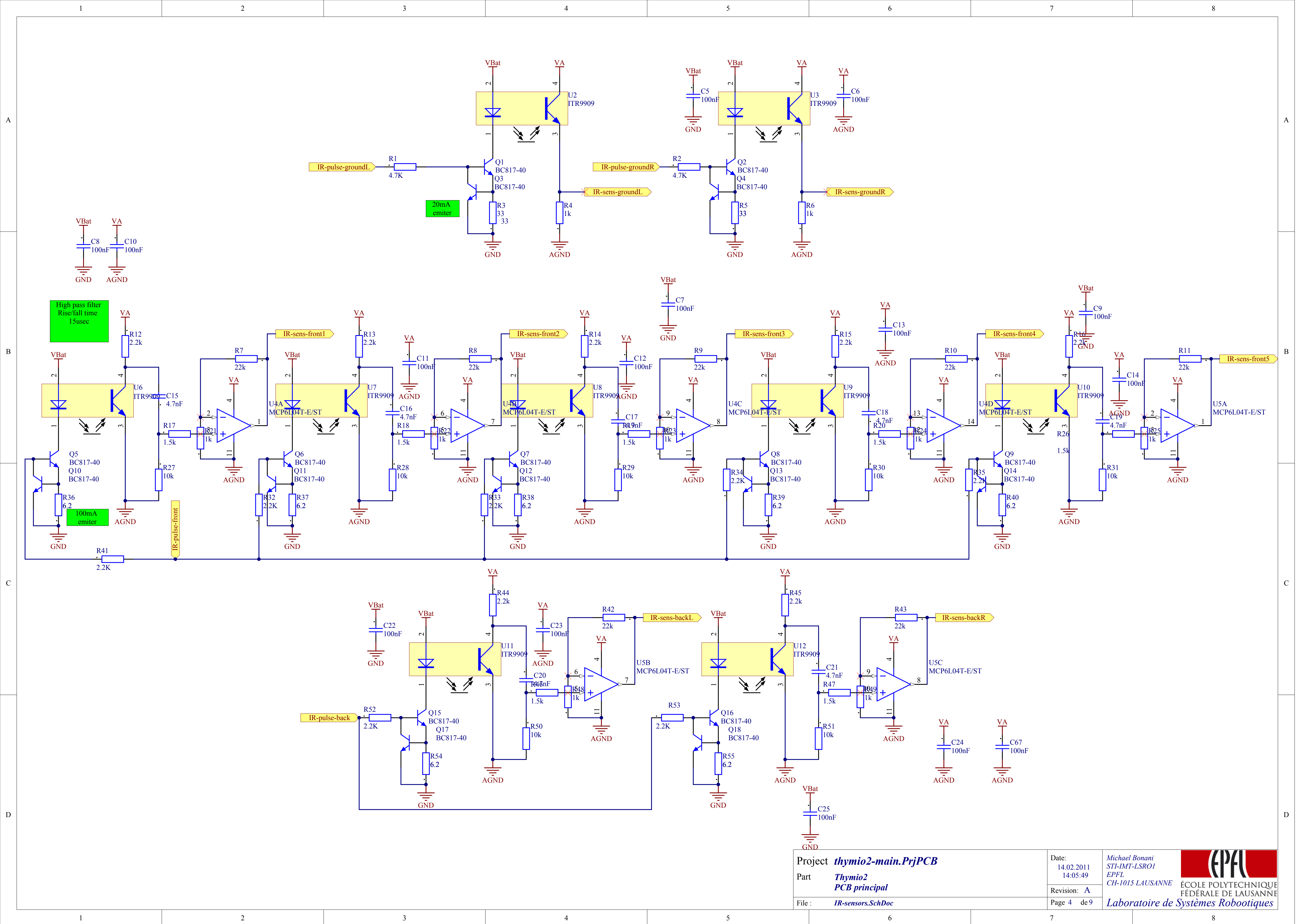
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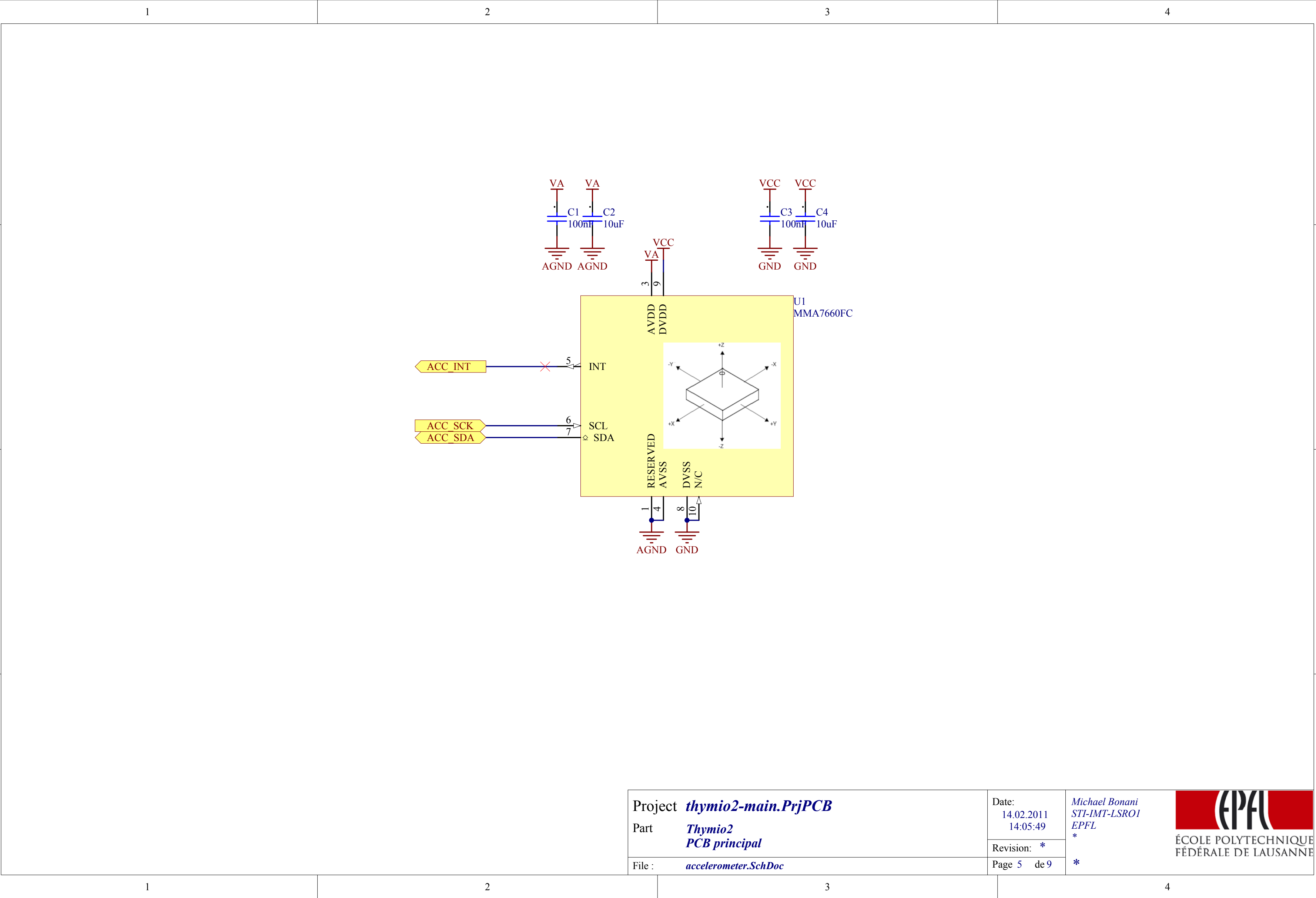
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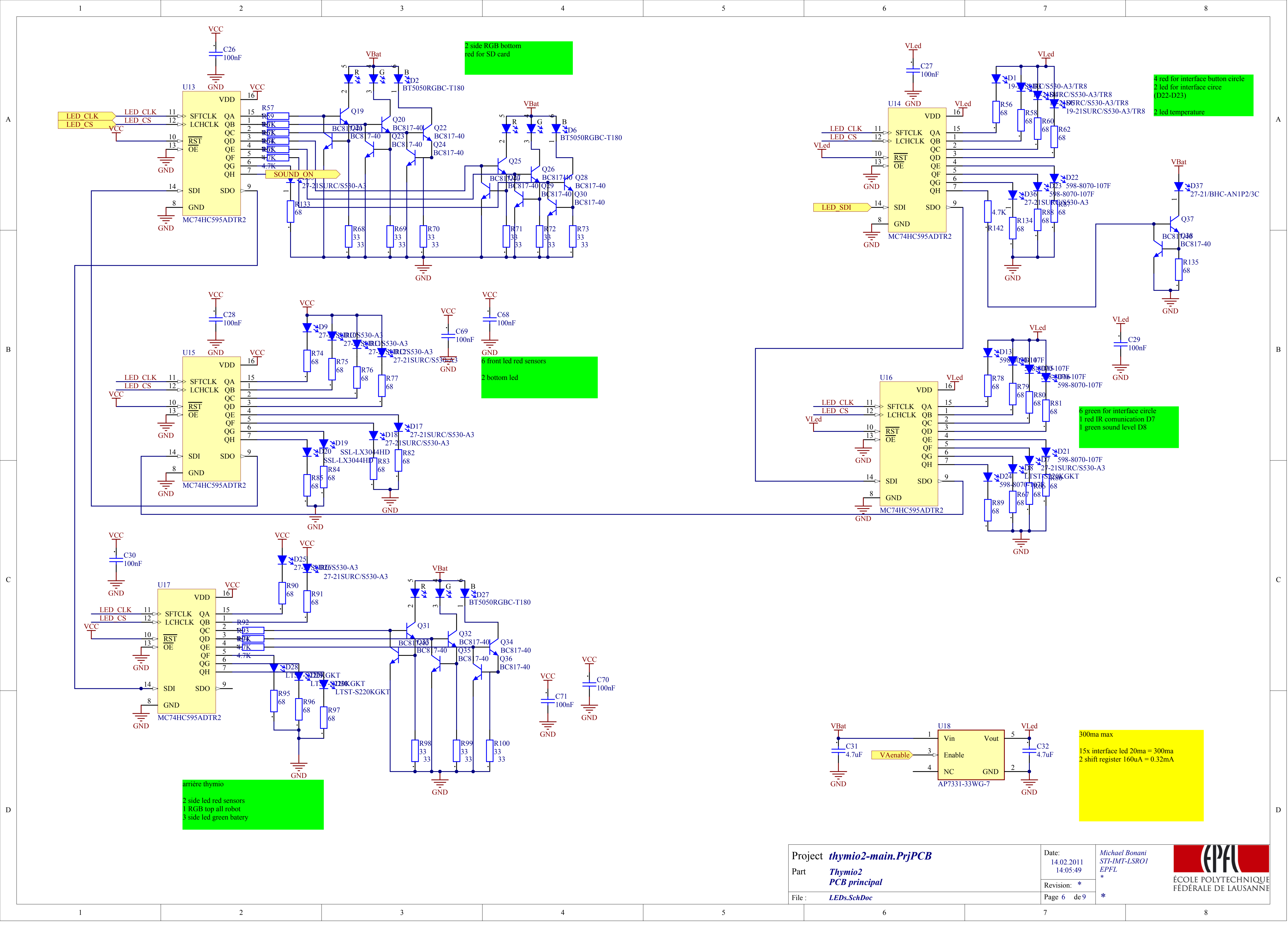
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Power good (on when power on plug) no led
stat1 when charging red led
stat2 when charge finished green led
VPCC limit at 4.35V

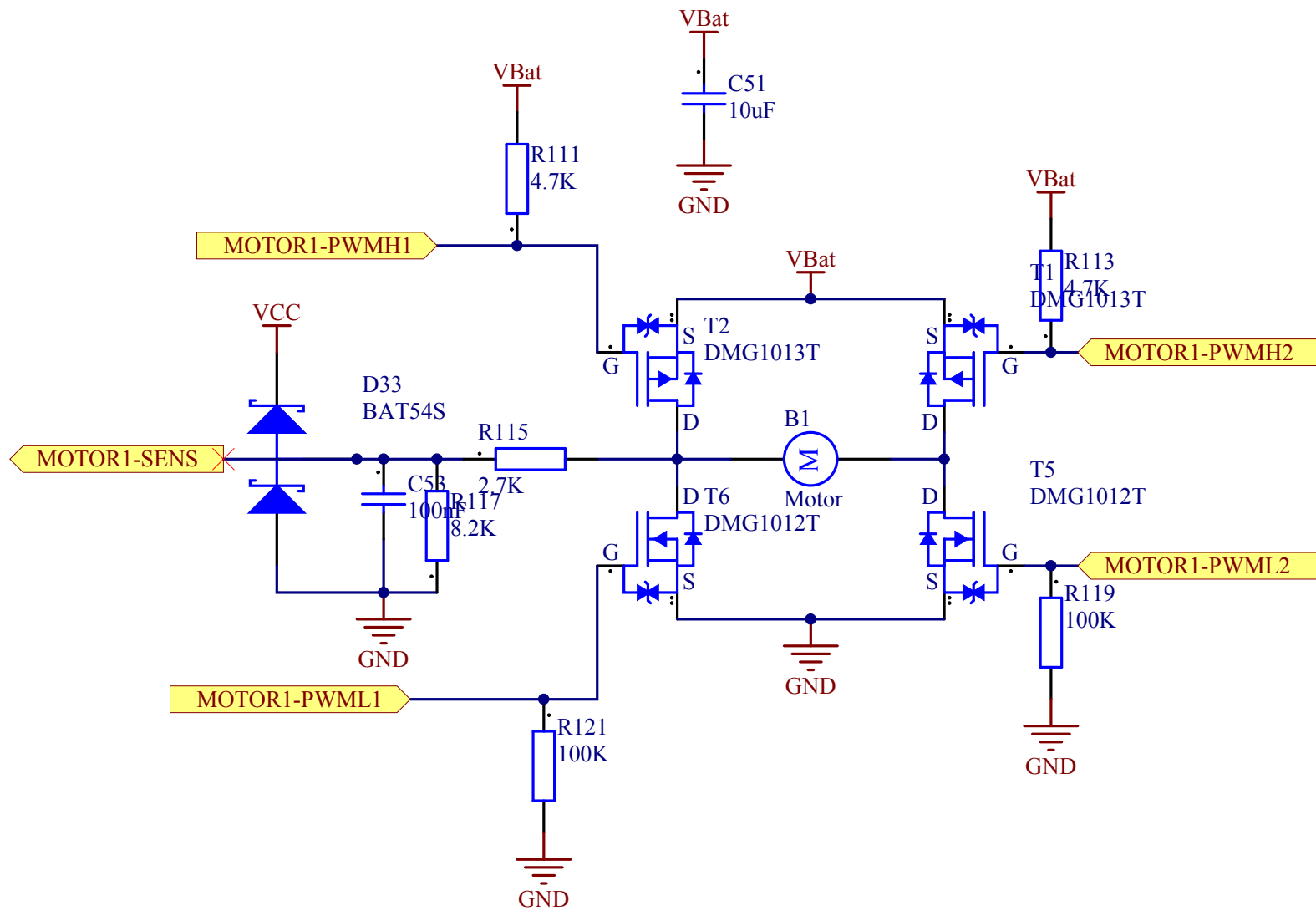




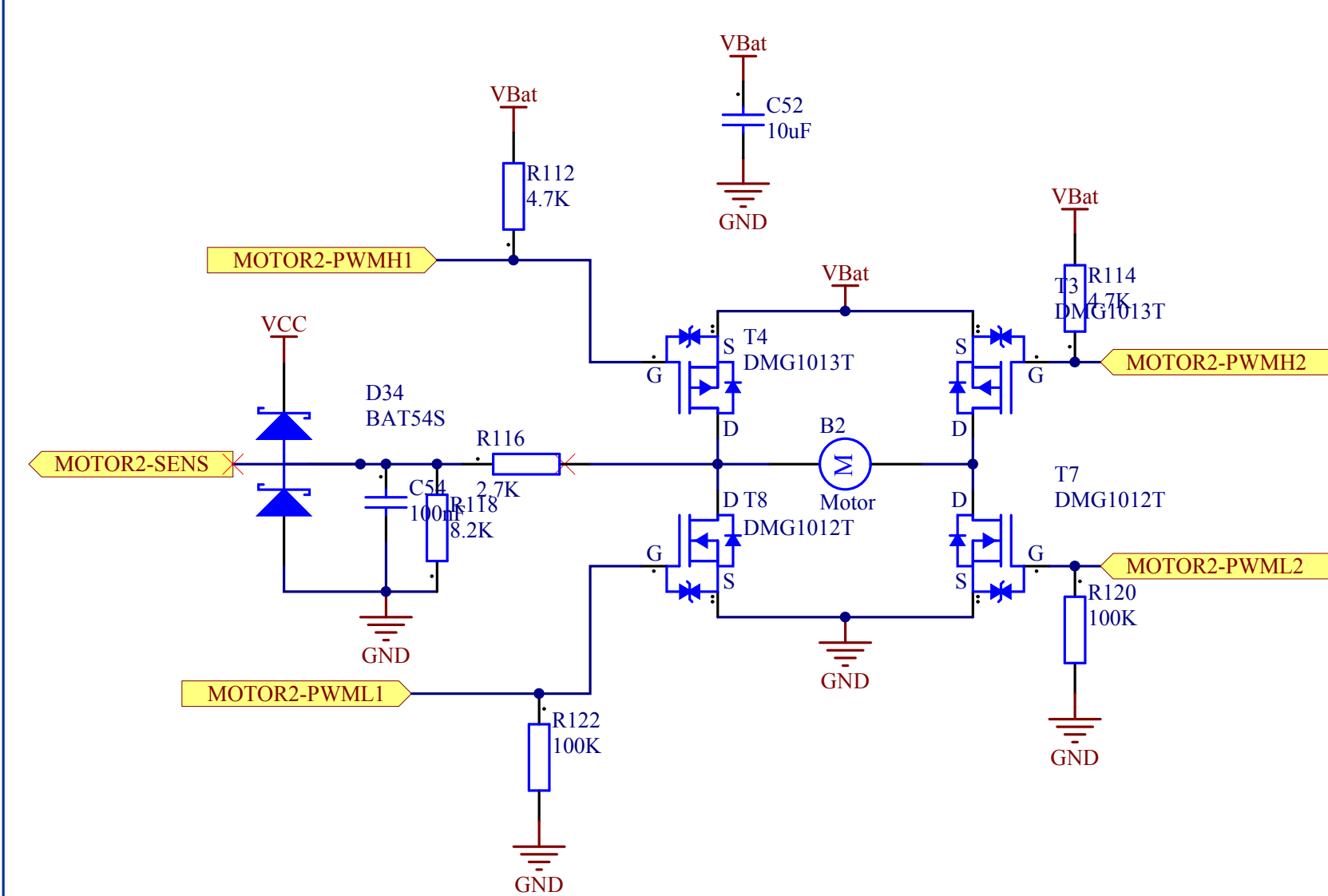




Motor Left



Motor Right



Project *thymio2-main.PrjPCB*

Part *Thymio2
PCB principal*

File : *motor.SchDoc*

Date:
14.02.2011
14:05:49

Revision: *A*

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A

A

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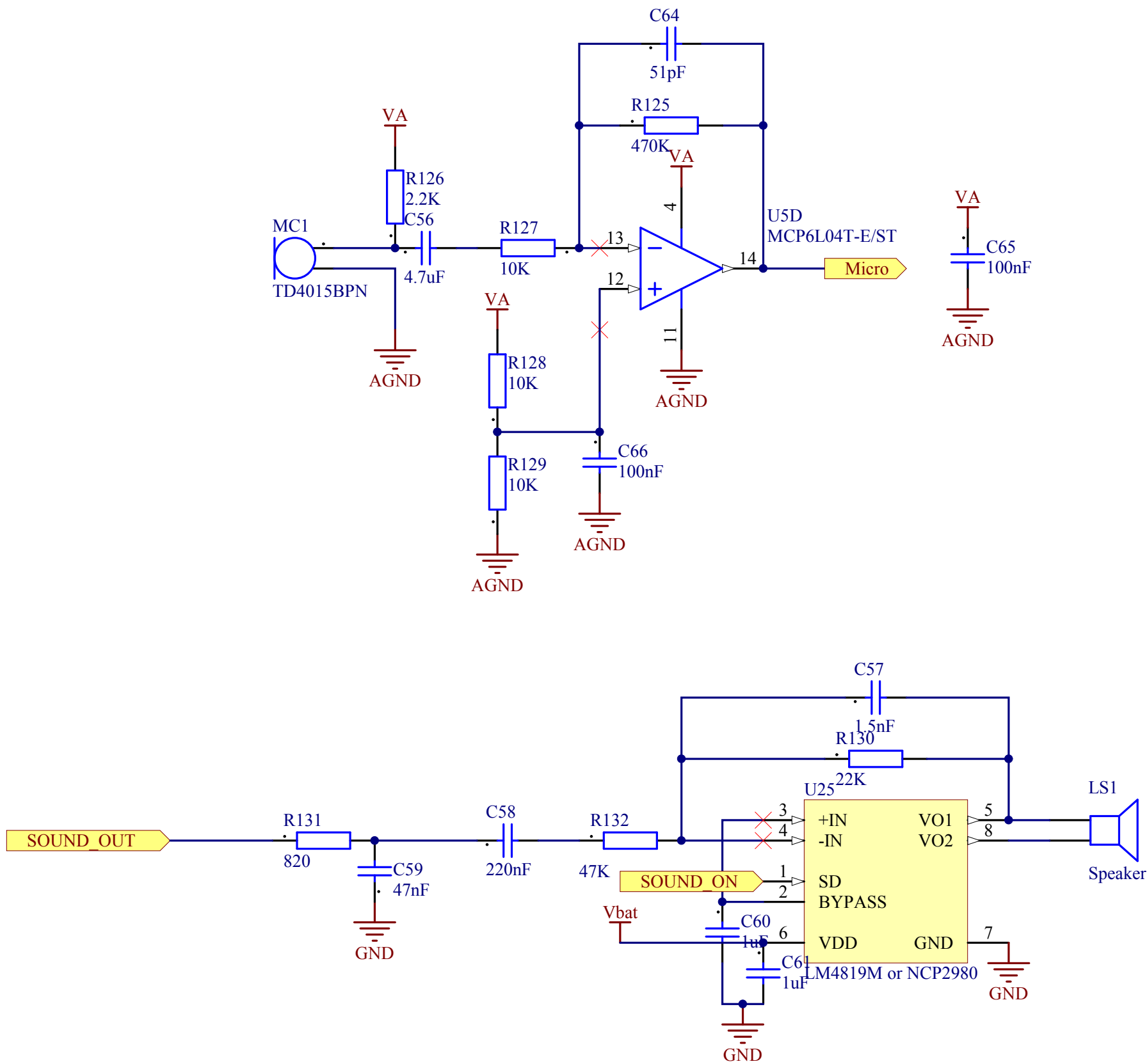
B

C

C

D

D



Project *thymio2-main.PrjPCB*

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

File : *sound.SchDoc*

Date:
14.02.2011
14:05:49

Revision: *A*

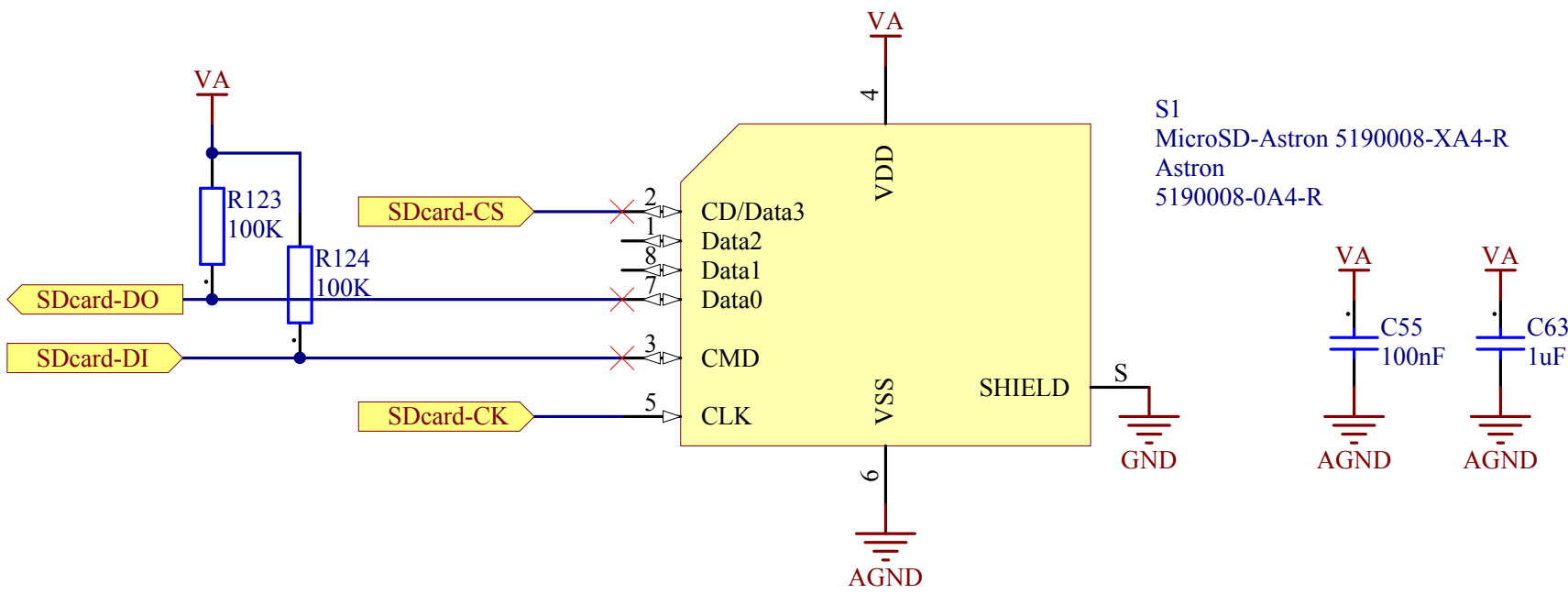
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Project *thymio2-main.PrjPCB*

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

File : *SDcard.SchDoc*

Date:
14.02.2011
14:05:49

Revision: *A*

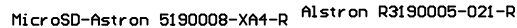
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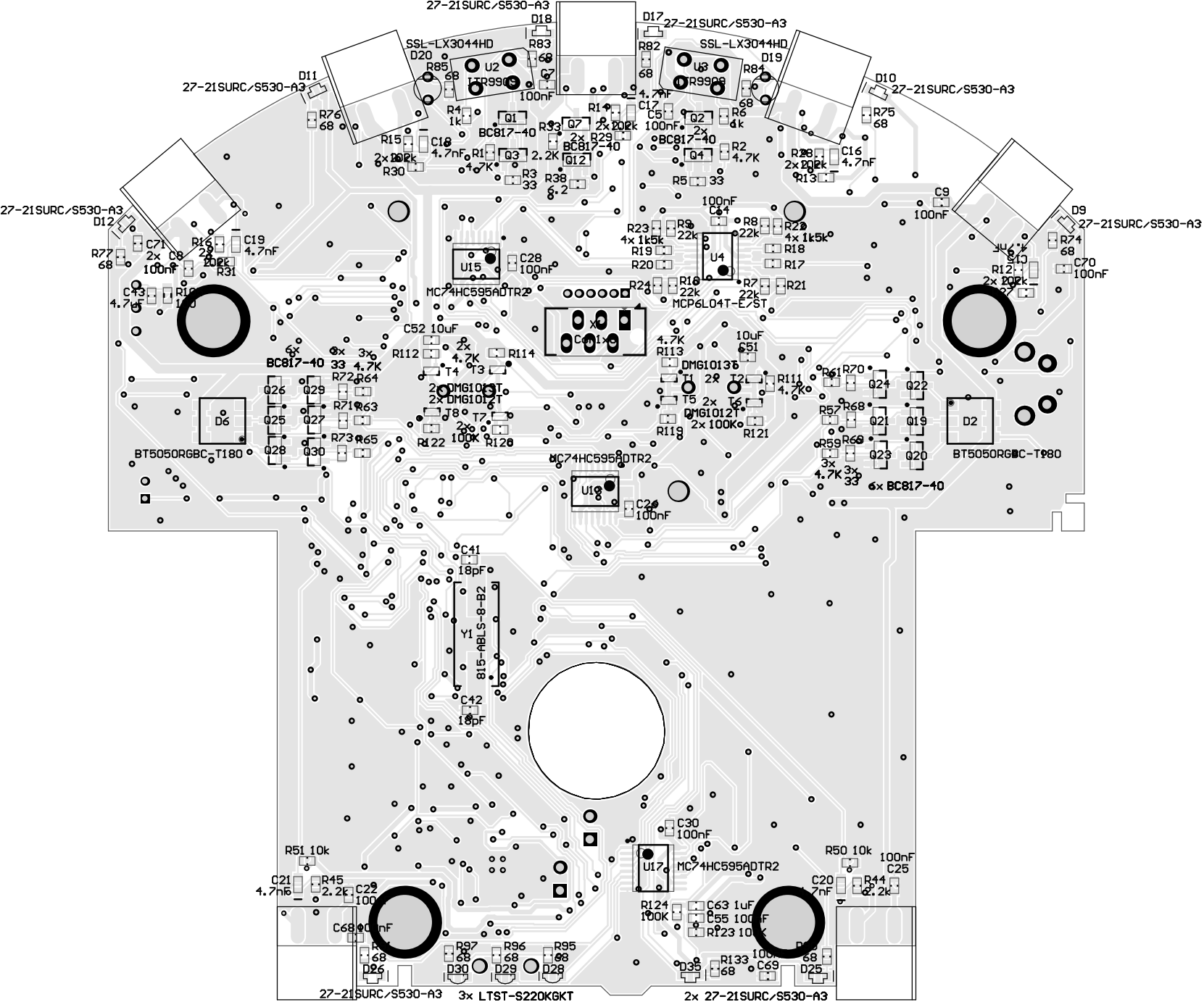
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Quantity	Comment	LibPart	Designator	Description	Footprint	SDR #	Supplier Nr	Layer
1 100		RES[R18] [R003] [1]	R105	Resistor	RESC1608X06L	Down		Bottom
1 1uF		CAP[R19] [R003] [1]	C83	Capacitor	RESC1608X06L	Panel	823495	Bottom
1 4.7uF		CAP[R20] [R1]	C43		RESC1608X06L	Panel	9227794	Bottom
1 0.2		RES[R21] [R08]	R38		RESC1608X06L			Bottom
1 015-ABL-S-8-82		IC[R22] [R1]	IC3004	50MHz Audio CDSP Crystal 8MHz	IC3004-4H_8MHz			Bottom
1 Conn16		1	X1	1 x 8 pins connector	TYCO_2410079-6			Bottom
1 MCPRL047-E07-47-635T-J48		MCPRL047-E07-47-635T-J48		1.5% 80 pA Quiescent Op Amp, 14-Pin TSSOP, Extended Temperature Range, Tape and Reel	TSSOP-8T14_N			Bottom
12 4.7K		RES[R23] [R003] [1]	R1, R2, R57, R59, R81, R83, R84, R85, R111, R112, R113, R114	Resistor	RESC1608X06L	Down	715604	Bottom
14 68		RES[R24] [R003] [1]	R74, R75, R76, R77, R82, R83, R84, R85, R86, R91, R95, R96, R97, R133	Resistor	RESC1608X06L	Down	715632	Bottom
15 100nF		CAP[R25] [R0635] [1]	C5, C7, C8, C9, C14, C22, C25, C26, C28, C30, C35, C36, C38, C39, C70, C71	Capacitor	RESC1608X06L	Panel	1288255	Bottom
15 0C017-40		IC[R26] [R003] [1]	C1, C2, C3, C4, C7, C12, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30	MPH Universal Purpose Transistor	BCOT23_N			Bottom
2 10uF		CAP[R27] [R003] [1]	C81, C82	Capacitor	RESC1608X06L	Panel	1463375	Bottom
2 18uF		CAP[R28] [R003] [1]	C41, C42		RESC1608X06L	Panel	8019815	Bottom
2 150509C0BC-2 150		LED[R29] [R08] [R02] [2]	C2, D6	80.0271 2000A LED38MDS	LED38MDS			Bottom
2 17R9909		IC[R30] [R003] [1]	U2, U3	17R9909_LC060 Interceptor	17R9909_LC060			Bottom
2 885-LX3044D		LED[R31] [R003] [1]	D19, D20	885-LX3044D-57mcd	48_175_200_200m			Bottom
3 135T-8220K0K1		LED[R32] [R003] [1]	D28, D29, D30	8220mcd Red Right angle mount 2V@20ma 57mcd	UTCON-45view			Bottom
3 102		IC[R33] [R003] [1]	MC74HC265AC2	MC74HC265AC2	MC74HC265AC2			Bottom
4 1.5k		RES[R34] [R003] [1]	U13, U15, U17	Input Buffer or Pullup Output Shift Register with Latched 3-State Outputs	94BF-01_N			Bottom
4 12k		RES[R35] [R003] [1]	R17, R18, R19, R20		120			Bottom
4 12k		RES[R36] [R003] [1]	R7, R8, R9, R10		120			Bottom
4 DMG1012T		DMG1012T	T5, T6, T7, T8	1W 550nm MOSFET 1 x 4-P Pinning - 1-4C, 2-5C, 3-6C	BCOT23P1608X06-3N			Bottom
4 DMG1013T		DMG1013T	T1, T2, T3, T4	1W 550nm MOSFET 1 x 4-P Pinning - 1-4C, 2-5C, 3-6C	BCOT23P1608X06-3N			Bottom
6 100K		RES[R37] [R003] [1]	R119, R120, R121, R122, R123, R124	Resistor	RESC1608X06L	Down	715636	Bottom
7 1k		RES[R38] [R003] [1]	R4, R6, R9, R21, R22, R23, R24	Resistor	RESC1608X06L			Bottom
7 10k		RES[R39] [R003] [1]	R27, R28, R29, R30, R31, R35, R36	Resistor	RESC1608X06L			Bottom
7 4.7uF		CAP[R40] [R003] [1]	C15, C16, C17, C18, C19, C20, C21	Capacitor	CAPC1608N			Bottom
8 2k		RES[R41] [R003] [1]	R12, R13, R14, R15, R16, R33, R44, R45	Resistor	RESC1608X06L	Down	715596	Bottom
9 33		RES[R42] [R003] [1]	R3, R5, R6, R88, R90, R101, R102, R103	Resistor	RESC1608X06L			Bottom
27 215URC/ 3530-0A3		LED[R43] [R003] [1]	D3, D10, D11, D12, D17, D18, D25, D26, D28	8220mcd Red Right angle mount 2V@20ma 57mcd	27.21 Ewelight			Bottom
1 1.5uF		CAP[R44] [R003] [1]	C57	Capacitor	RESC1608X06L	Panel	9406162	Top
1 220uF		CAP[R45] [R003] [1]	C58	Capacitor	RESC1608X06L			Top
27 21 BHC-1AH1P2-3C		LED[R46] [R003] [1]	C37	8220mcd Red Right angle mount 3.3V@20ma 57mcd	27.21 Ewelight Blue			Top
1 270K		RES[R47] [R003] [1]	R140	Resistor	RESC1608X06L	Panel	9330041	Bottom
1 470K		RES[R48] [R003] [1]	R125	Resistor	RESC1608X06L	Down	715652	Top
1 47K		RES[R49] [R003] [1]	R132	Resistor	RESC1608X06L	Down	715620	Top
1 47uF		CAP[R50] [R003] [1]	C59	Capacitor	RESC1608X06L	Panel	9406162	Top
1 51uF		CAP[R51] [R003] [1]	C64	Capacitor	RESC1608X06L	Panel	9406182	Top
1 620		RES[R52] [R003] [1]	R131	Resistor	RESC1608X06L	Down	715620	Top
1 7uF		CAP[R53] [R0635] [1]	C62	Capacitor	RESC1608X06L	Panel	1288255	Top
1 7uF		RES[R54] [R003] [1]	X3	USB connector Micro B	A809 3190005-021-R	Panel	1288255	Top
1 Battery		Battery [BT1]	BT1	Multicell Battery	BAT-2			Top
1 150509C0BC-2 150		LED[R55] [R08] [R02] [2]	D27	80.0271 2000A LED38MDS	LED38MDS			Top
1 Conn16		1	X2	1 x 8 pins connector	BAICR108			Top
1 FAN3088		FAN3088	U23	USB Charger and Over Voltage Detection Device	MLP 1.4x1mm			Top
1 HRM-3636T		TSSOP32	U20	HRM-3636T MOSFET 68 mV for Reverse Control Systems	HRM-3636T			Top
1 LM4819M or MCP2980		LM4819 M	U25	50Watt 14Pin Stereo Amplifier with Buckle Mode	LM4819_N			Top
1 MCPRL047-E07-47-635T-J5		MCPRL047-E07-47-635T-J5		1.5% 80 pA Quiescent Op Amp, 14-Pin TSSOP, Extended Temperature Range, Tape and Reel	TSSOP-8T14_N			Top
1 MCP73871-12AA/ML		MCP73871-12AA/ML	U21	Multi-Adaptive System Low Droop and Low Load Regulation and Low Lr Polymer Battery Charge Management Controller, 4.2V, 20-Pin QFN, Industrial Temperature	QFN-ML25_N			Top
		IC[R56] [R003] [1]	ASL1T02	MicroSD Card	MicroSD Card			Top
		MicroSD Adapter	ASL1T02	MicroSD Card	MicroSD Card			Top
		IC[R57] [R003] [1]	ASL1T02	MicroSD Card	MicroSD Card			Top
1 MMA7660FC		MMA7660FC	U1	MMA7660FC XYZ-1405 ACCELEROMETER 1.5-1.6	DPN50P000X000X1-05-12N			Top
1 MCP16X0103B-V		MCP16X0103B-V	Thermal	Thermal	Thermal			Top
1 50K		RES[R58] [R003] [1]	R171	Resistor	RESC1608X06L			Top
		IC[R59] [R003] [1]	U19	IC[R59] [R003] [1]	IC[R59] [R003] [1]			Top
		IC[R60] [R003] [1]	U19	IC[R60] [R003] [1]	IC[R60] [R003] [1]			Top
1 Speaker		Speaker [LB1]	LB1	Speaker	PN2			Top
1 SW-F8		SW-F8	S2	Switch	FSMRA2JH			Top
1 TD40150PN		Micro1	MC1	Micro1	Micro1			Top
16 68		RES[R61] [R003] [1]	R56, R58, R60, R62, R66, R67, R78, R79, R80, R81, R86, R87, R88, R89, R134, R135	Resistor	RESC1608X06L	Down	715632	Top
2 1uF		CAP[R62] [R003] [1]	C80, C81	Capacitor	RESC1608X06L	Down	823495	Top
2 2.2K		RES[R63] [R003] [1]	R115, R116	Resistor	RESC1608X06L	Down	715596	Top
2 6.2K		RES[R64] [R003] [1]	R117, R118	Resistor	RESC1608X06L	Panel	9331565	Top
2 BAT545		BAT545	D33, D34	8220mcd Red Right angle mount 2V@20ma 57mcd	UTCON-45view			Top
2 135T-8220K0K1		LED[R65] [R003] [1]	D8, D31	8220mcd Red Right angle mount 2V@20ma 57mcd	UTCON-45view			Top
		IC[R66] [R003] [1]	U14, U15	MC74HC265AC2	MC74HC265AC2			Top
2 94BF-01		94BF-01	U13	Input Buffer or Pullup Output Shift Register with Latched 3-State Outputs	94BF-01_N			Top
2 0C017-40		IC[R67] [R003] [1]	C1, C2	MPH Universal Purpose Transistor	BCOT23_N			Top
22 100nF		CAP[R68] [R003] [1]	C1, C3, C6, C10, C11, C12, C13, C24, C27, C29, C31, C35, C36, C37, C38, C39, C53, C54, C56, C58, C59	Capacitor	RESC1608X06L	Panel	1288255	Top
3 1.5k		RES[R69] [R003] [1]	R26, R46, R47	Resistor	120			Top
3 100K		RES[R70] [R003] [1]	R138, R139, R141	Resistor	RESC1608X06L	Down	715612, 715636	Top
3 180R		RES[R71] [R003] [1]	R106, R107, R137	Resistor	RESC1608X06L	Down	715570	Top
27 215URC/ 3530-0A3		LED[R72] [R003] [1]	D7, D32, D36	8220mcd Red Right angle mount 2V@20ma 57mcd	27.21 Ewelight			Top
1 0.3		RES[R73] [R003] [1]	R59, R60, R100	Resistor	RESC1608X06L			Top
1 MP7381-33W0-2		MP7381-33W0-2	U18, U22, U24	300mA, Low Quiescent Current, Fast Transient LDO	BCOT23P0005-100-0N			Top
4 10uF		CAP[R74] [R003] [1]	C2, C4, C38, C48	Capacitor	RESC1608X06L	Panel	1463375	Top
1 215URC/ 3530-0A3 T18		LED[R75] [R003] [1]	D1, D3, D4, D5	8220mcd Red Right angle mount 2V@20ma 57mcd	UTCON-45view			Top
4 1k		RES[R76] [R003] [1]	R25, R48, R49, R108	Resistor	RESC1608X06L	Down	715588	Top
4 12k		RES[R77] [R003] [1]	R11, R42, R43, R130	Resistor	RESC1608X06L	Down	715620	Top
4 4.7K		RES[R78] [R003] [1]	R60, R64, R103, R104, R142	Resistor	RESC1608X06L	Down	715604	Top
1 6.2		RES[R79] [R003] [1]	R36, R37, R38, R40, R54, R55	Resistor	RESC1608X06L			Top
7 2.2K		RES[R80] [R003] [1]	R32, R34, R35, R41, R52, R53, R126	Resistor	RESC1608X06L	Down	715596	Top
7 17R9909		IC[R81] [R003] [1]	U7, U8, U9, U10, U11, U12	17R9909_LC060 Interceptor	17R9909_LC060			Top
8 10K		RES[R82] [R003] [1]	R101, R102, R109, R110, R127, R128, R129, R136	Resistor	RESC1608X06L	Down	715612, 9333399	Top
8 666-8075-107F		LED[R83] [R003] [1]	D13, D14, D15, D16, D17, D21, D22, D33, D34	8220mcd Red Right angle mount 2V@20ma 57mcd	UTCON-45view			Top
1 4.7uF		CAP[R84] [R003] [1]	C31, C32, C44, C45, C47, C48, C50, C56	Capacitor	RESC1608X06L	Panel	9227794	Top