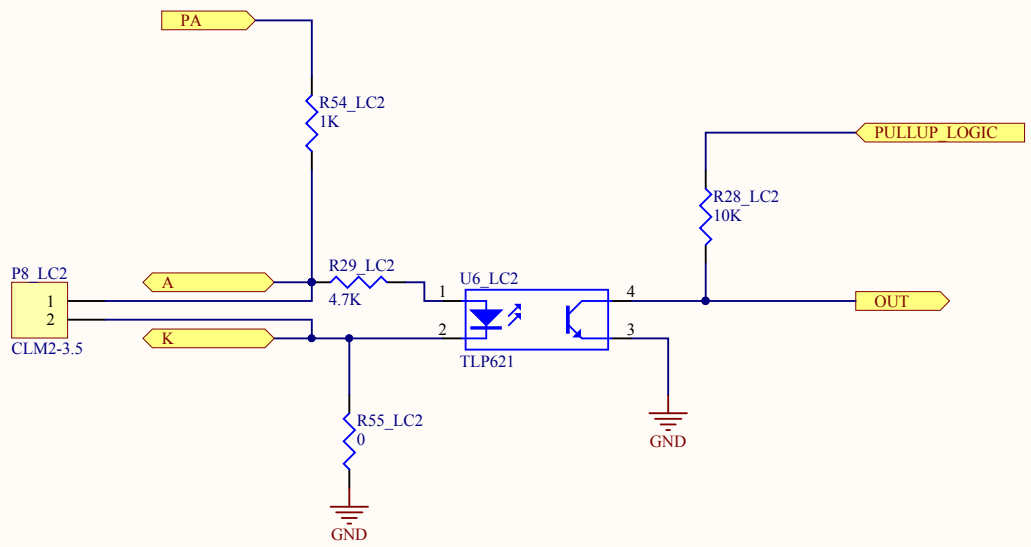
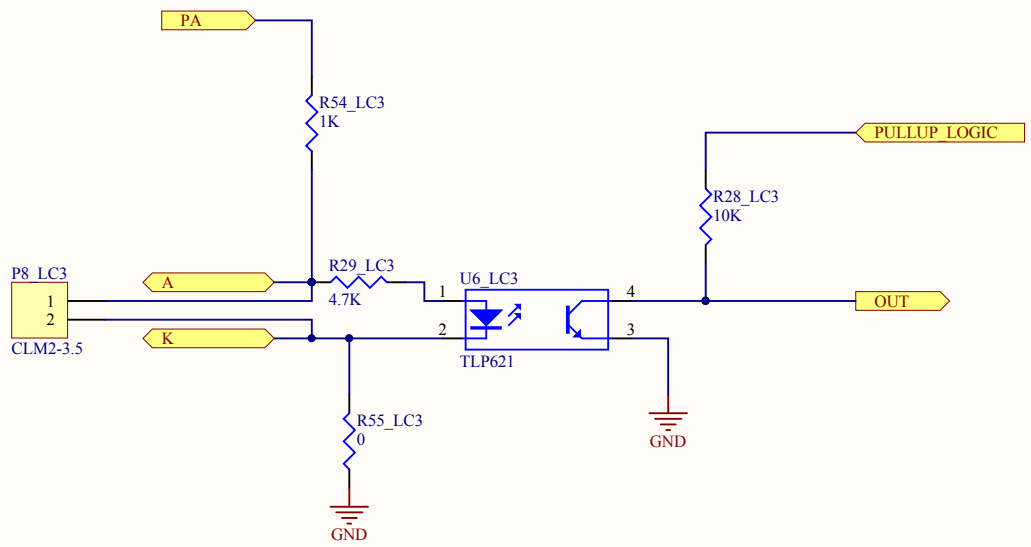


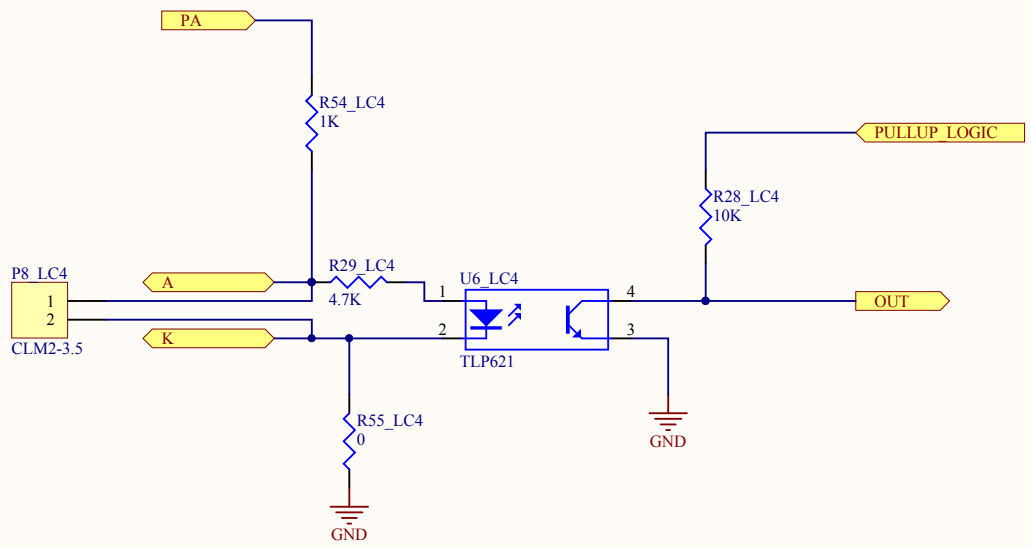
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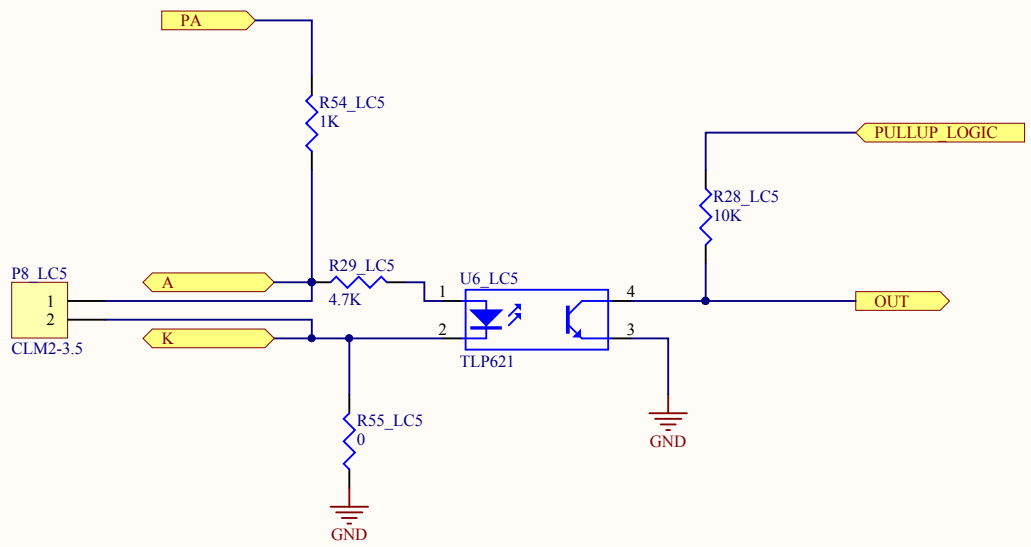
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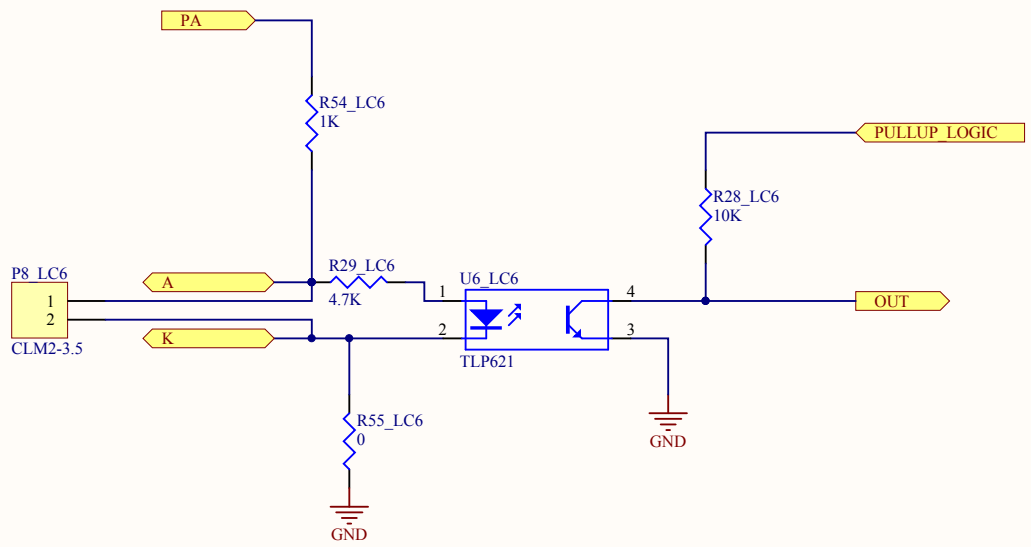
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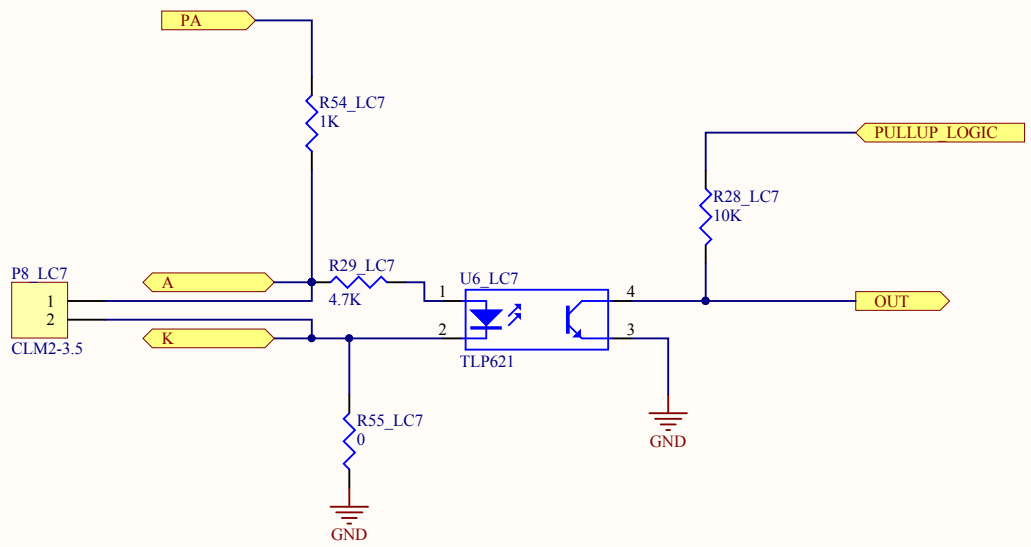
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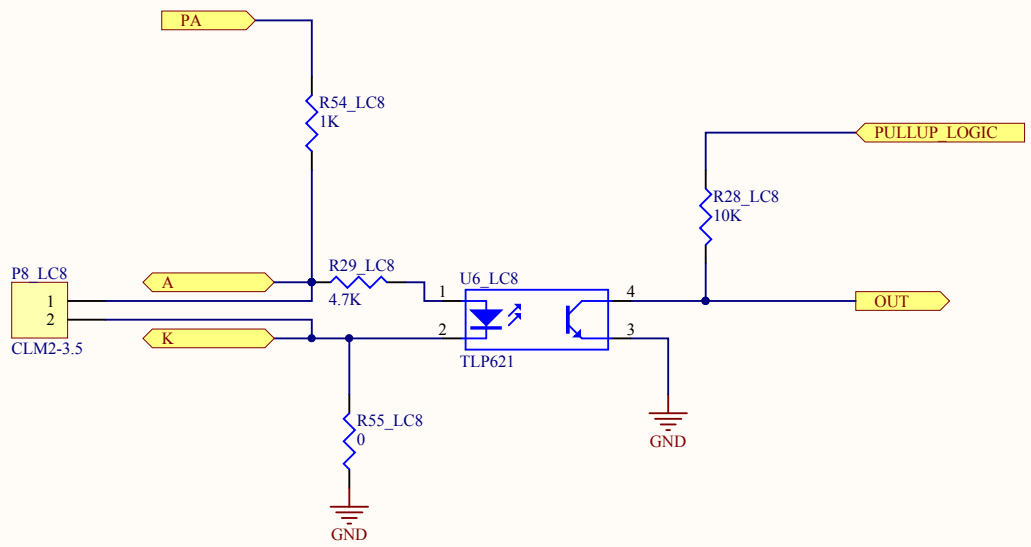
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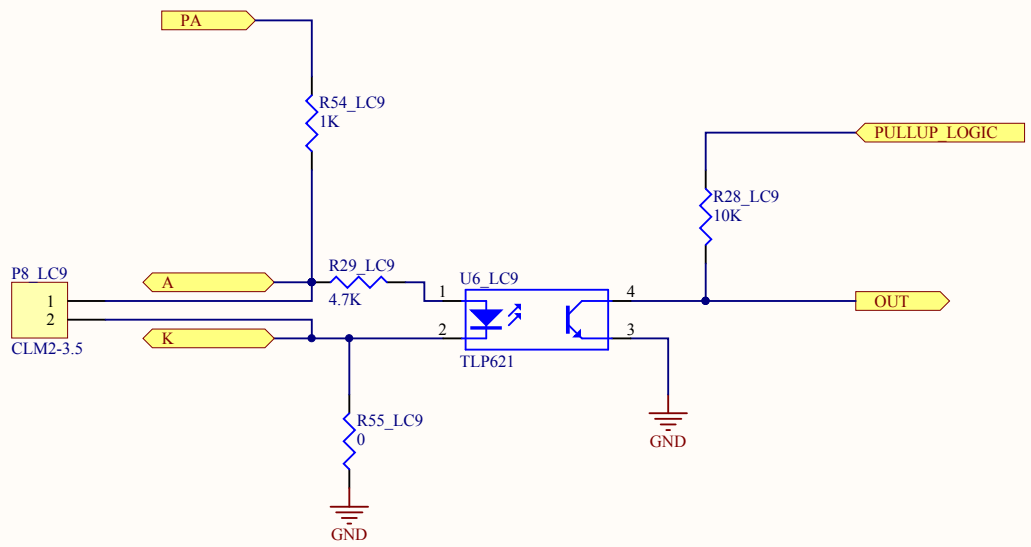


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2
CLM2-3.5

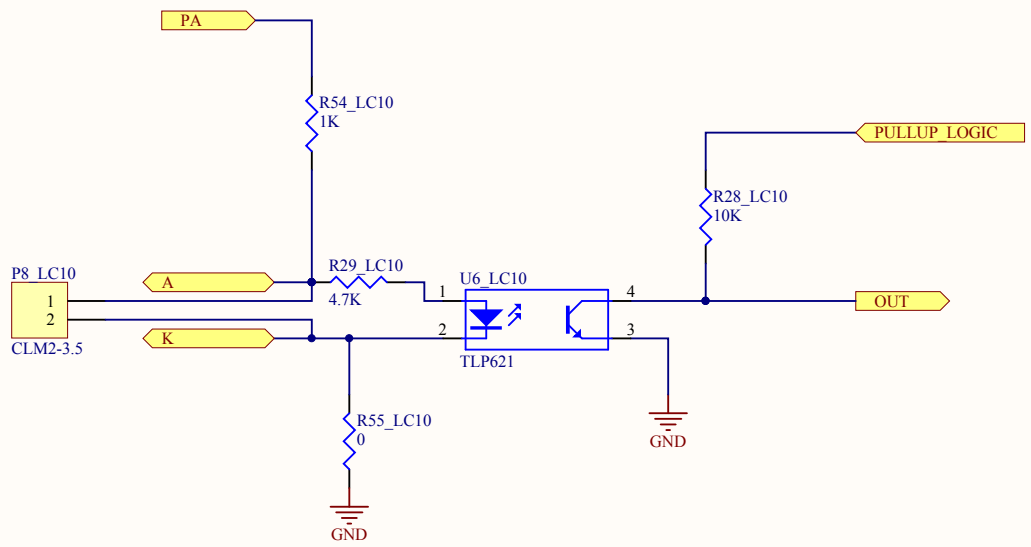
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GND

GND

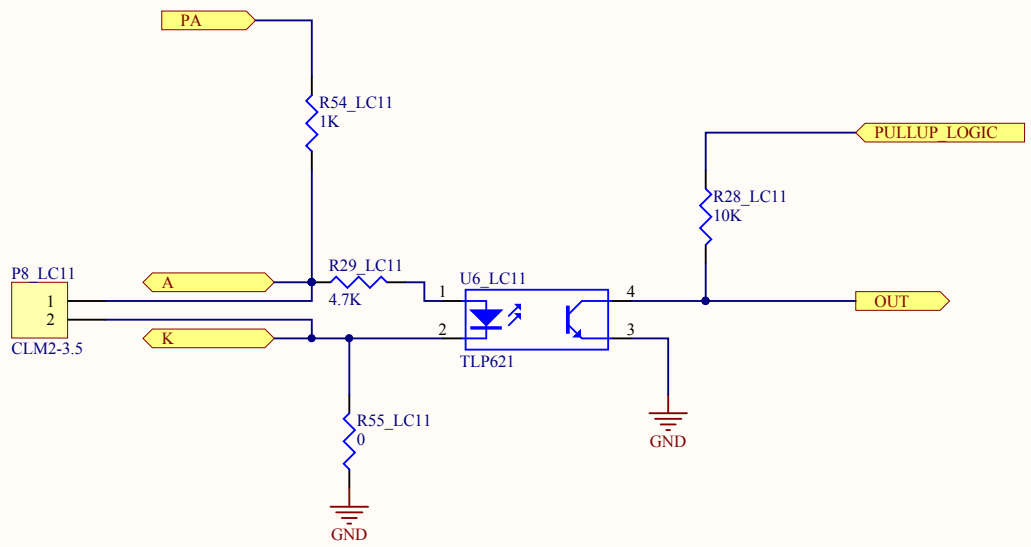
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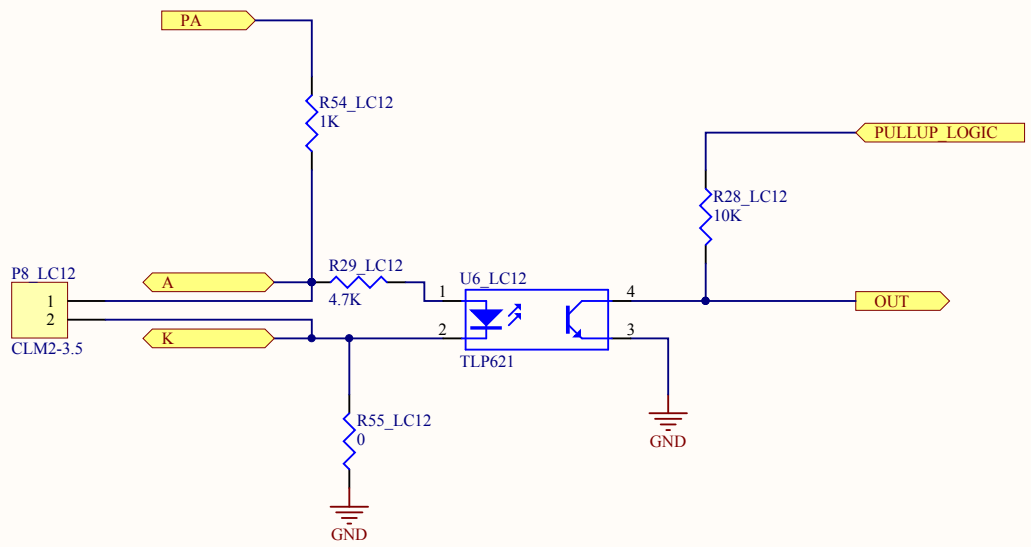
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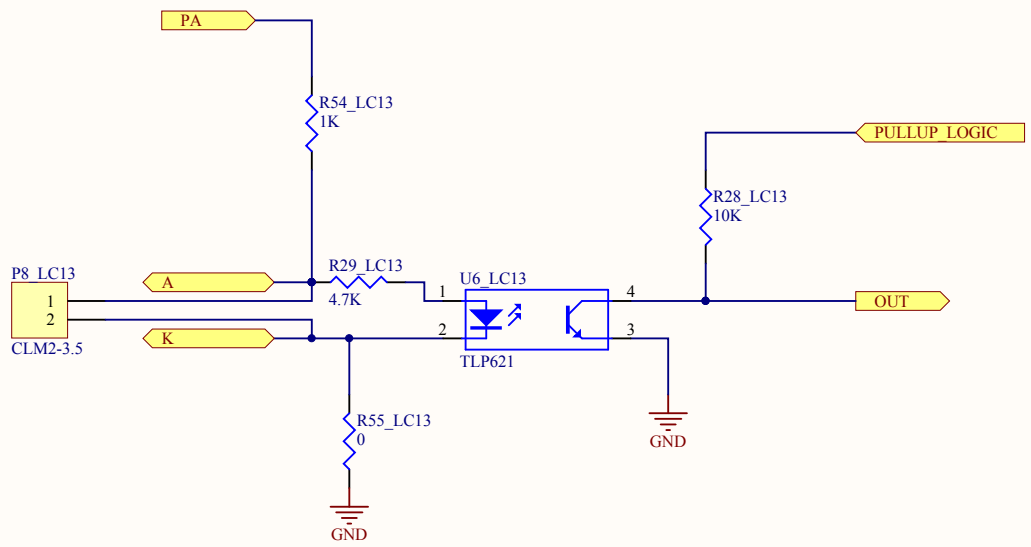
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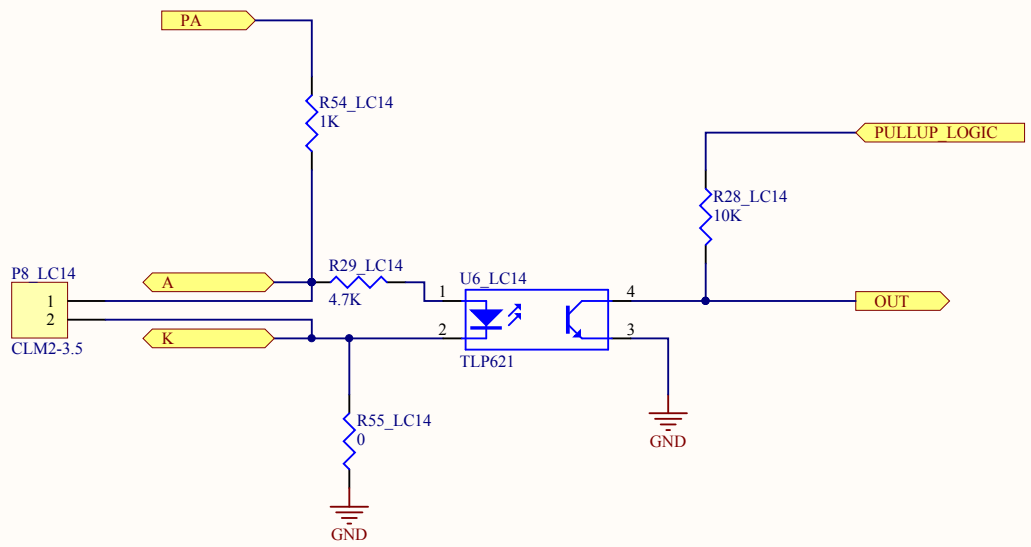
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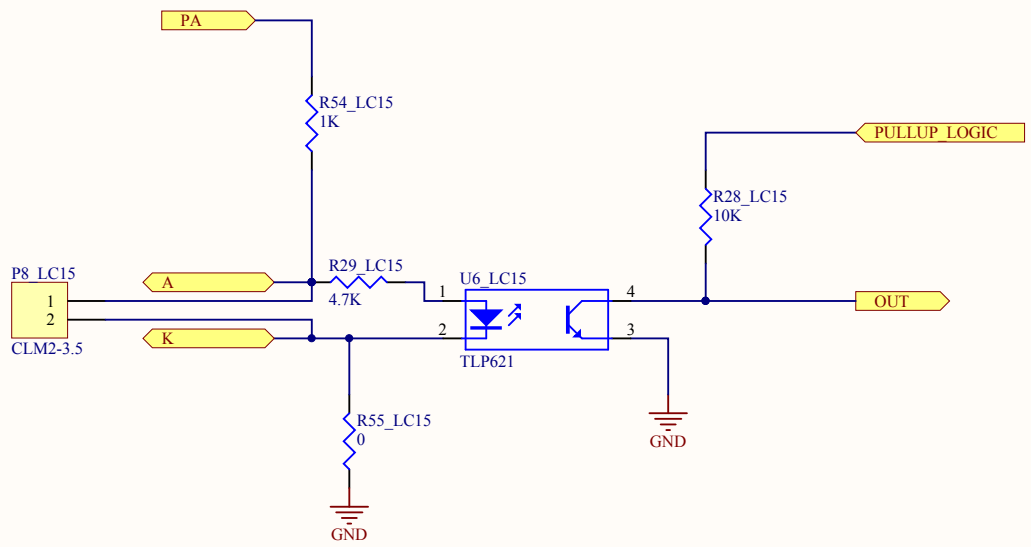
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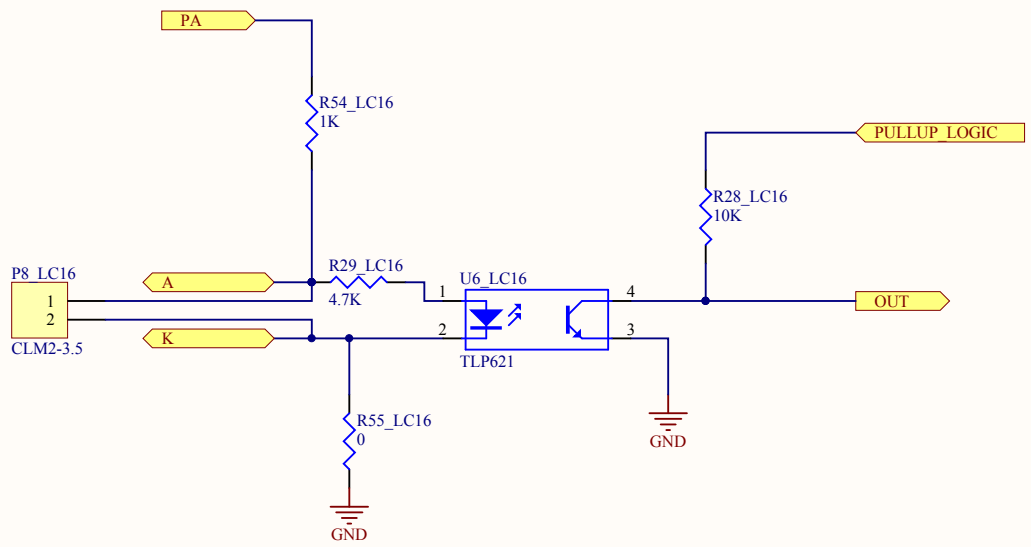
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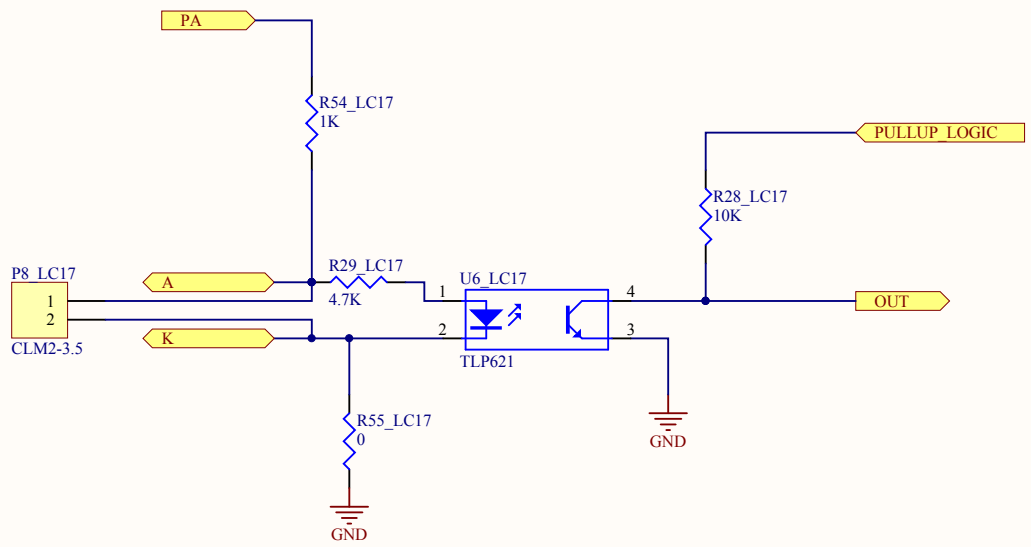
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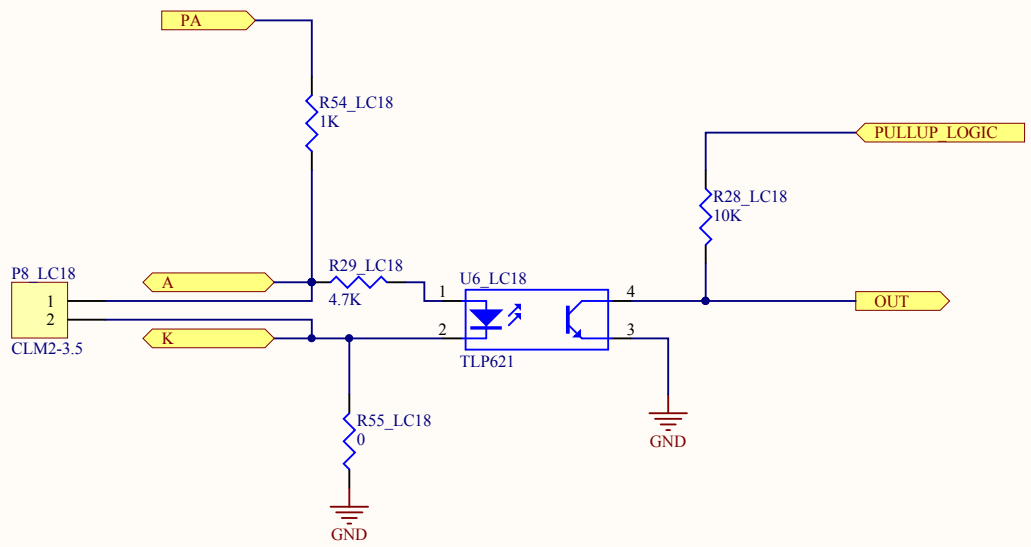
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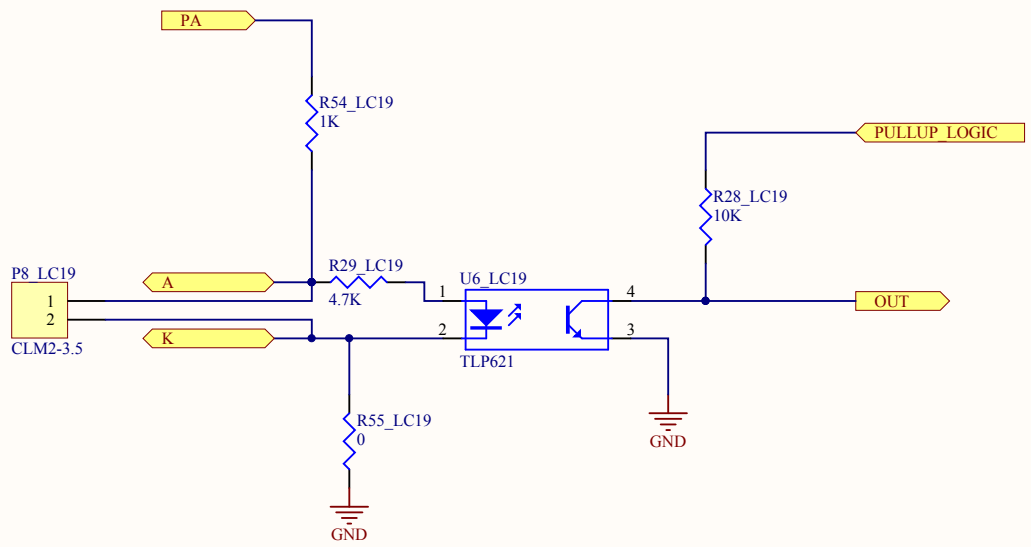
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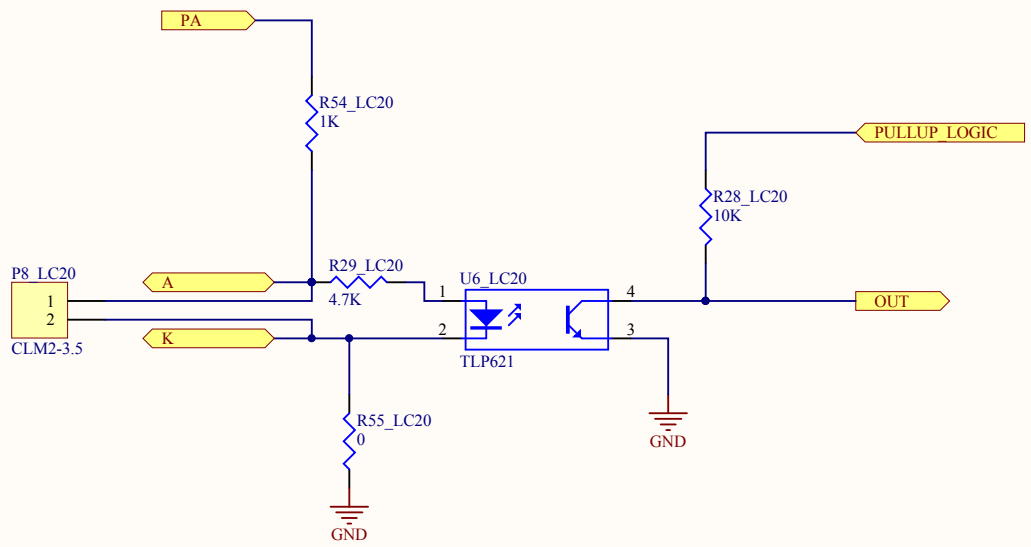
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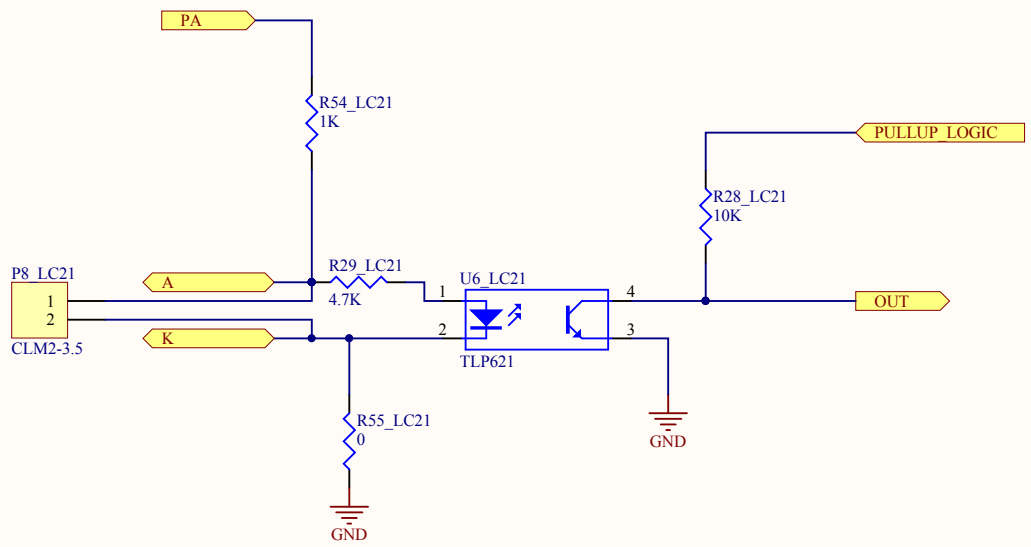
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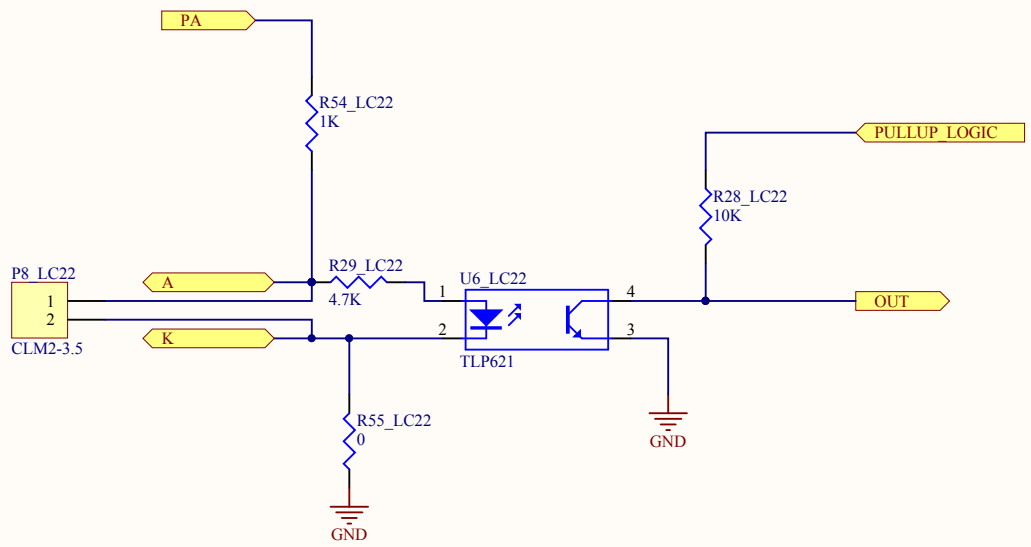
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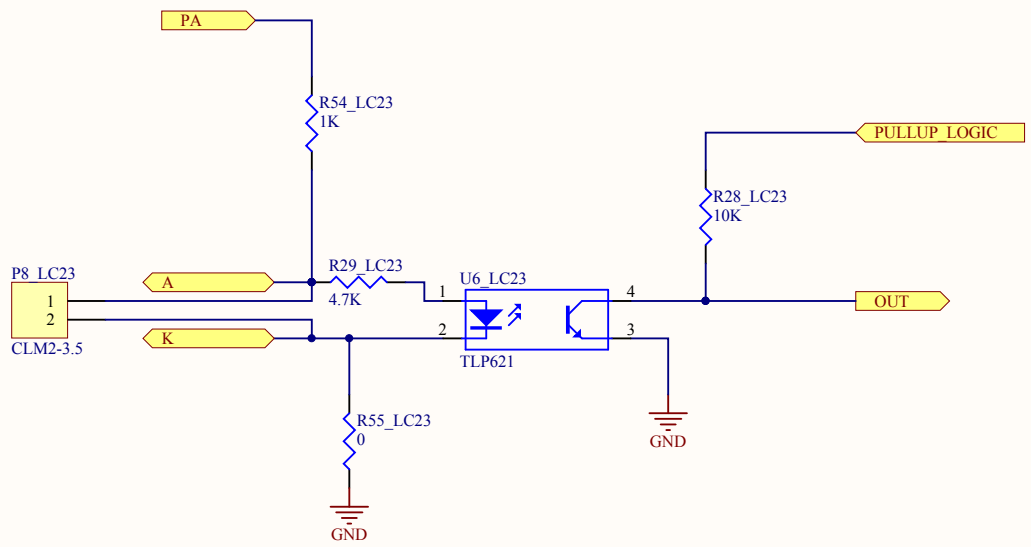
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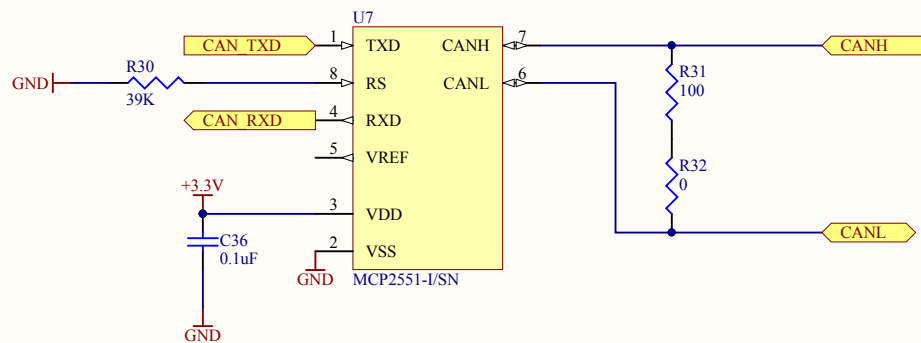
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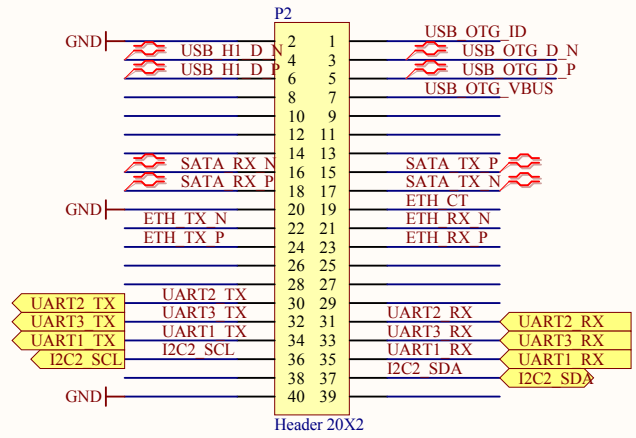
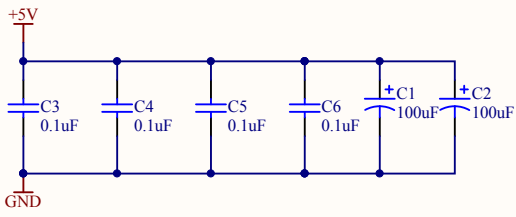
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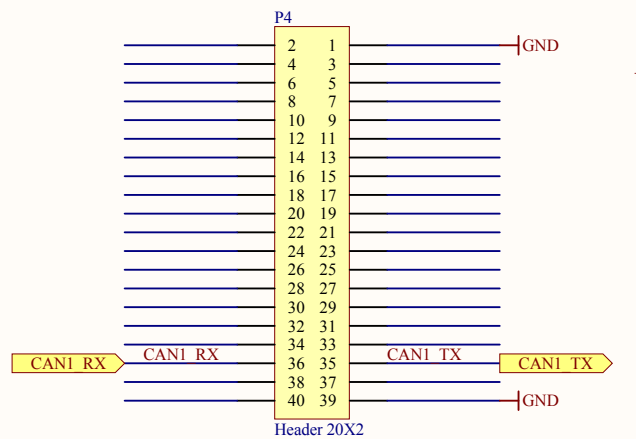
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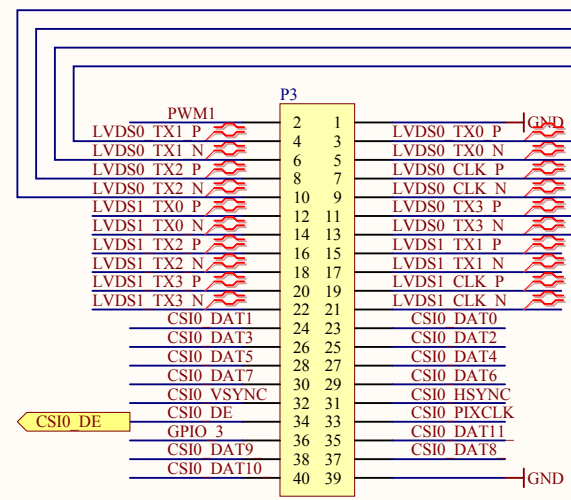
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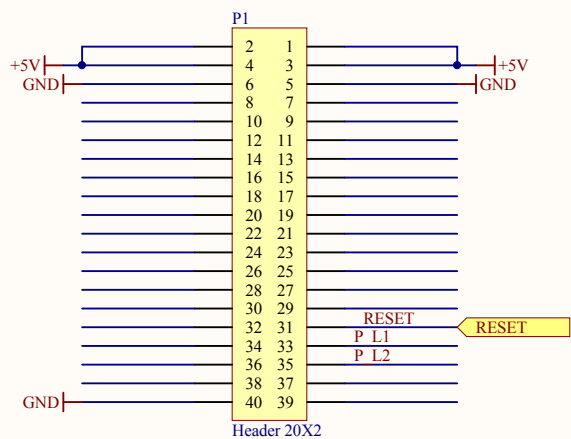
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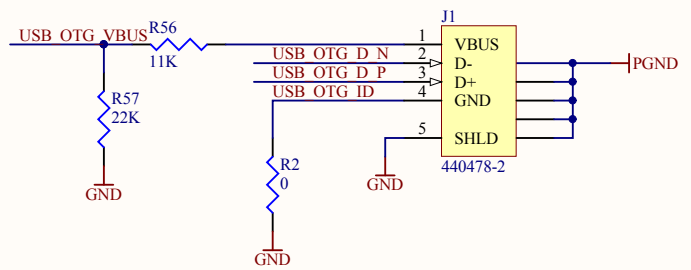
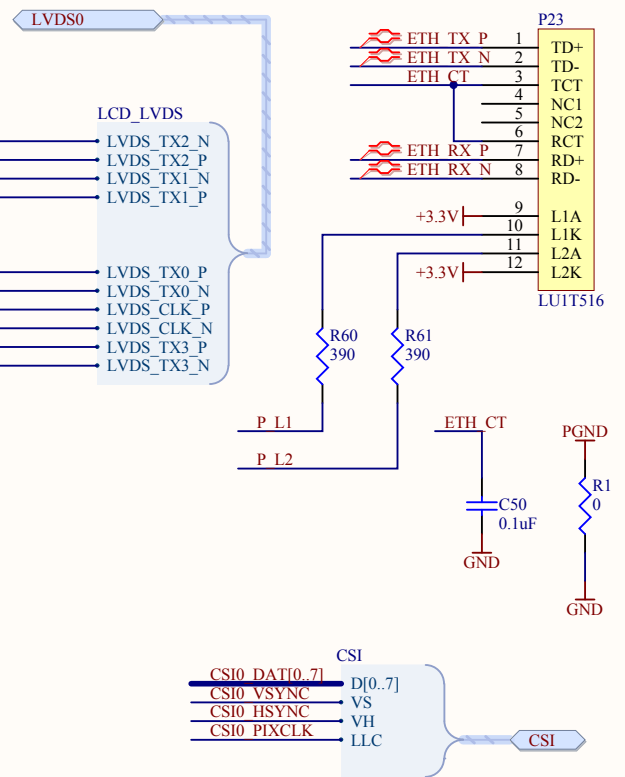
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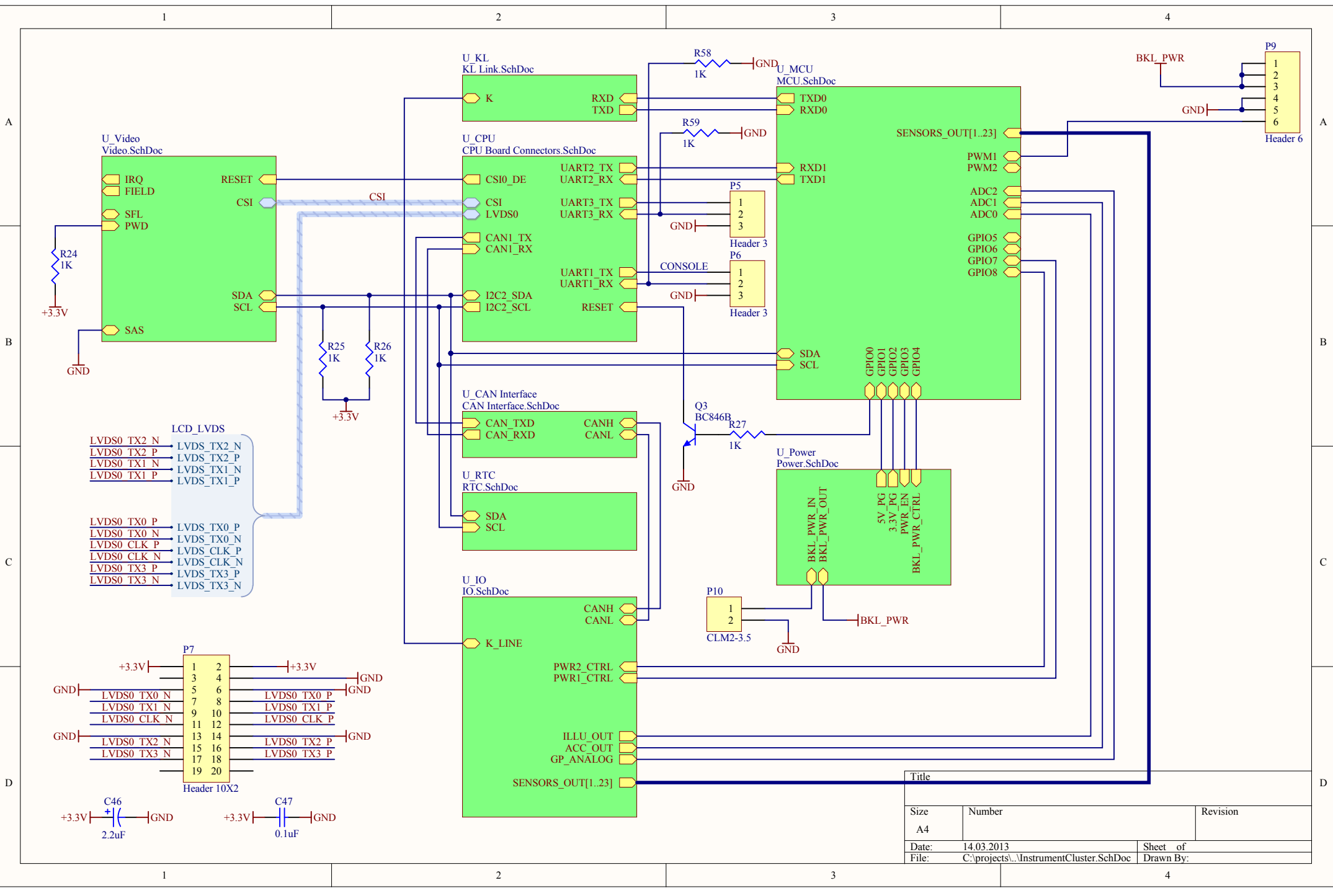
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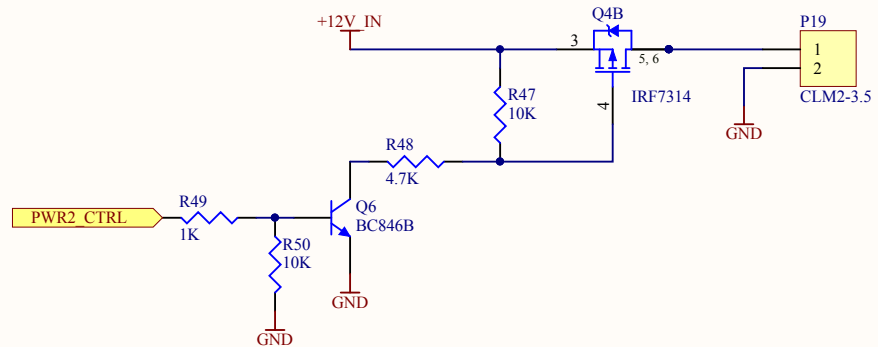
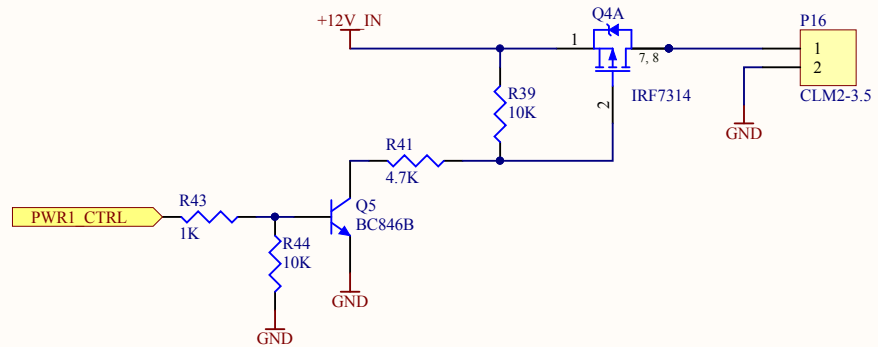
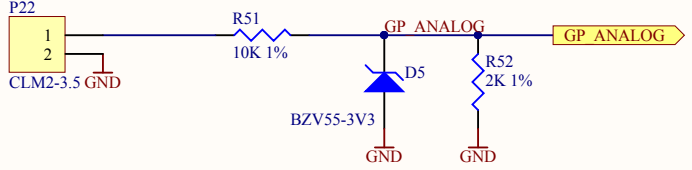
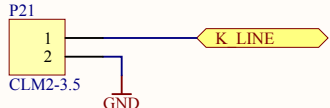
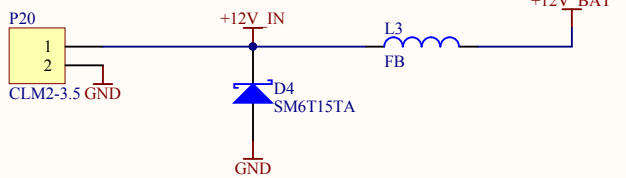
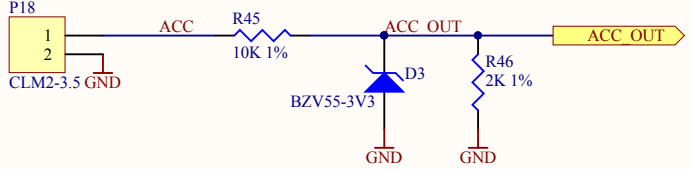
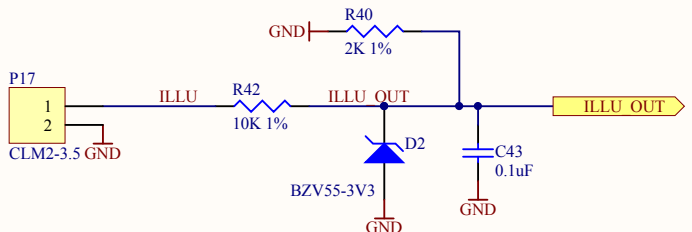
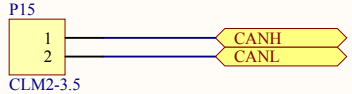
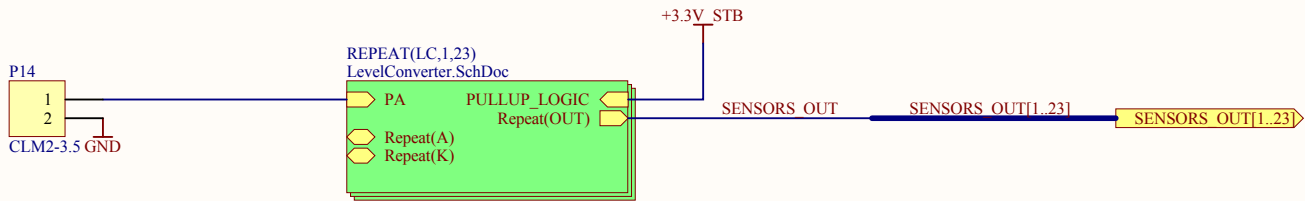
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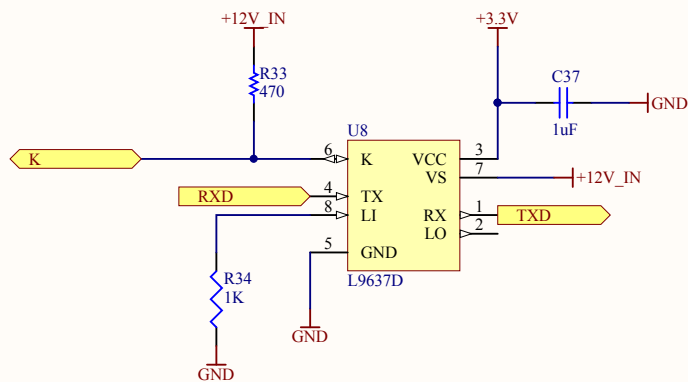
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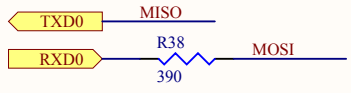
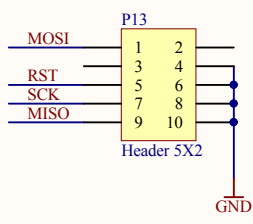
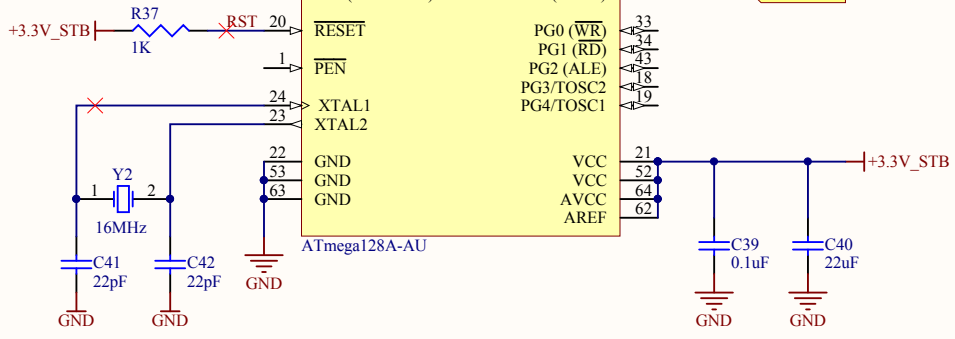
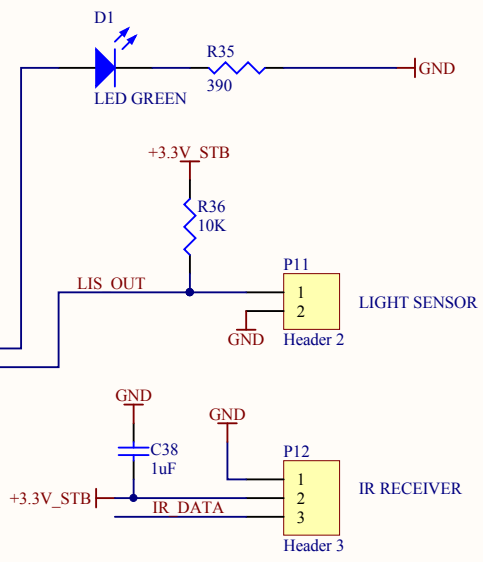
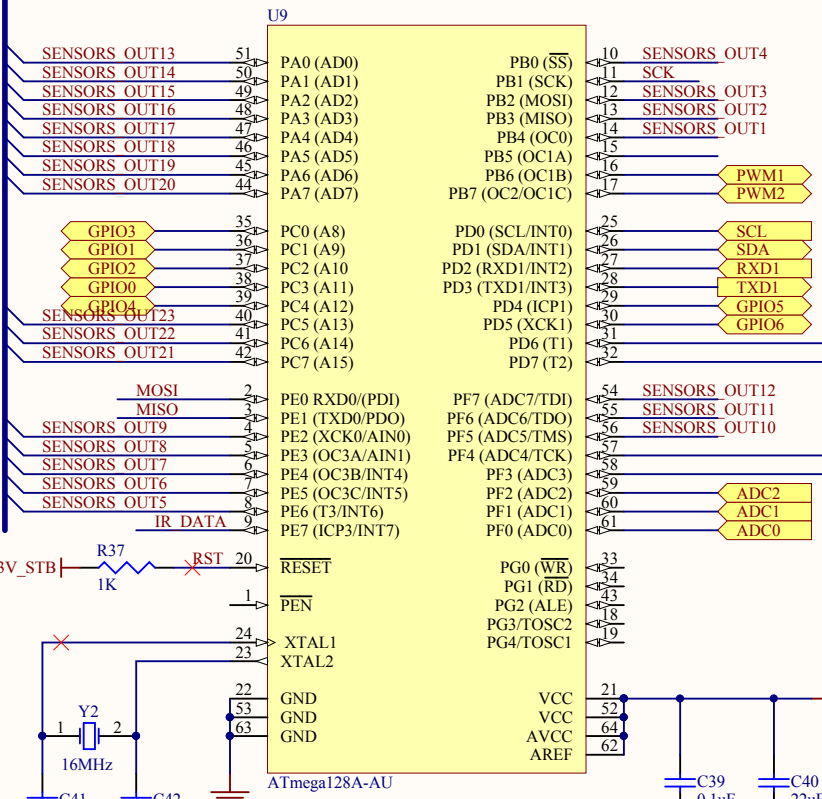


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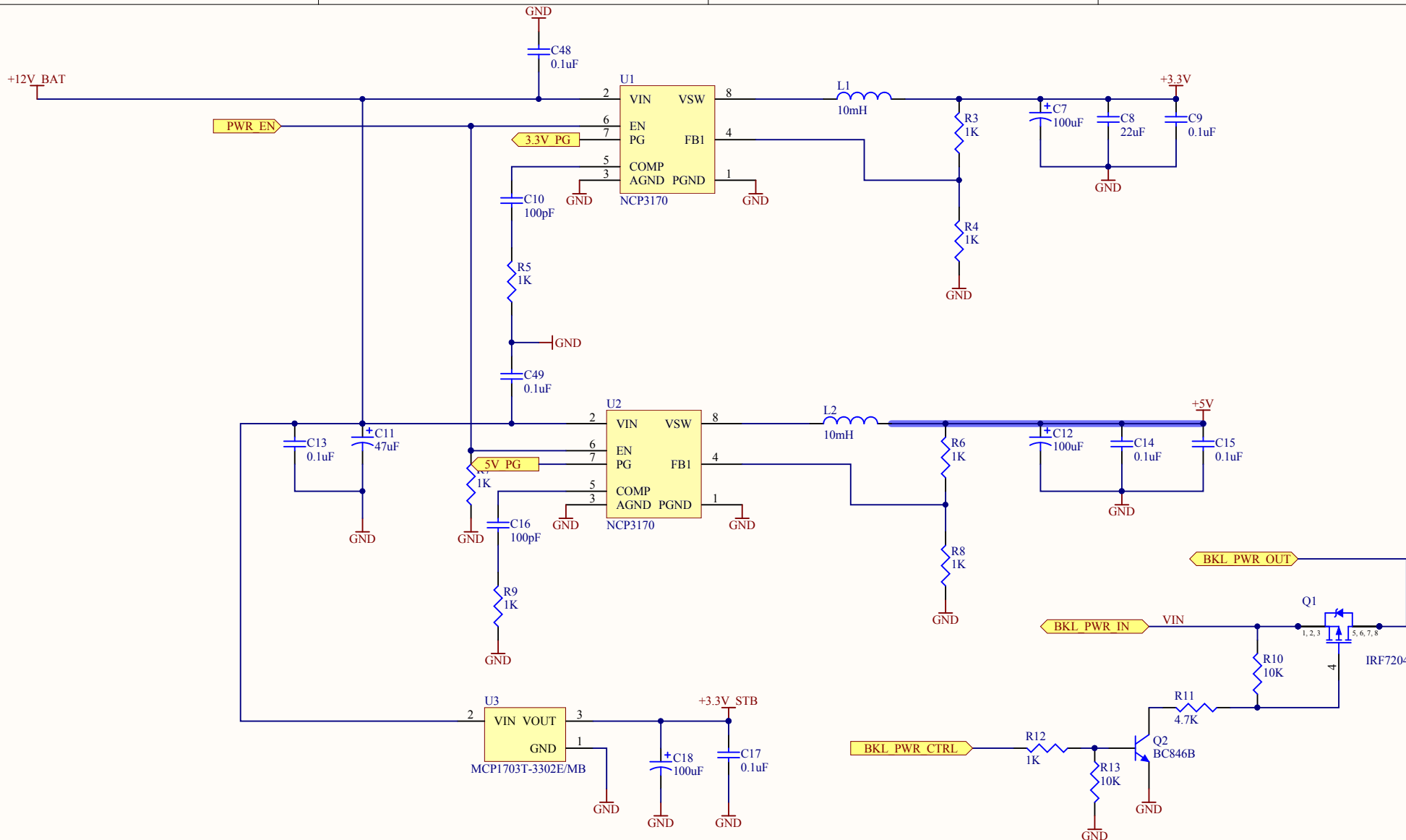


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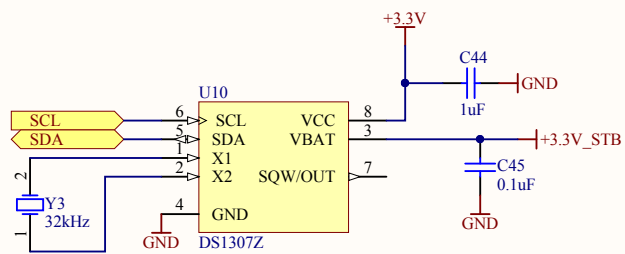
SENSORS_OUT[1..23] SENSORS_OUT[1..23]



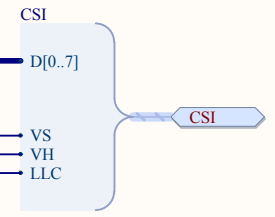
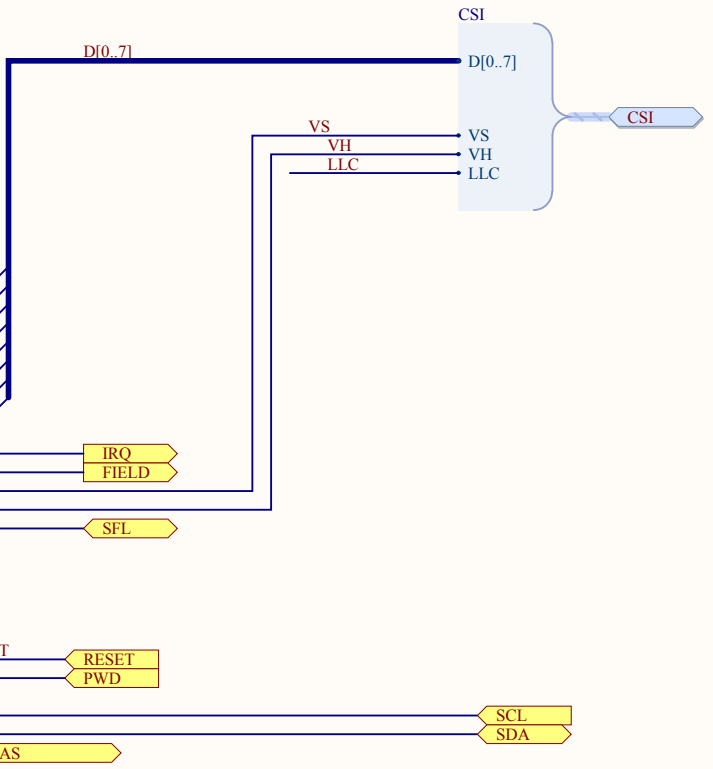
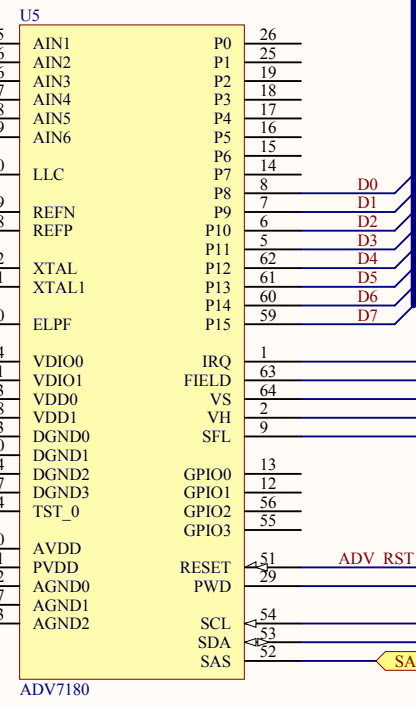
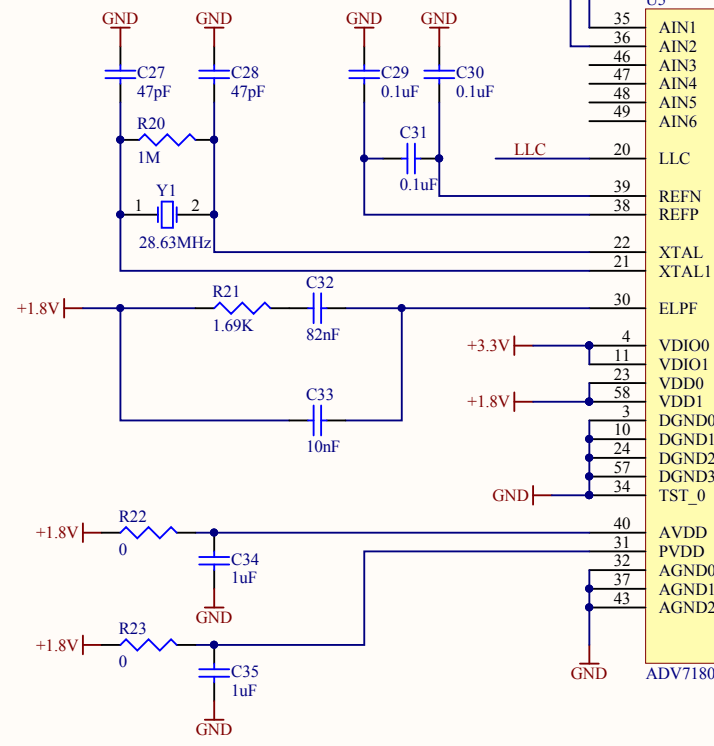
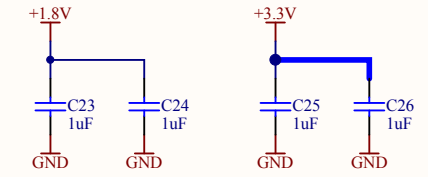
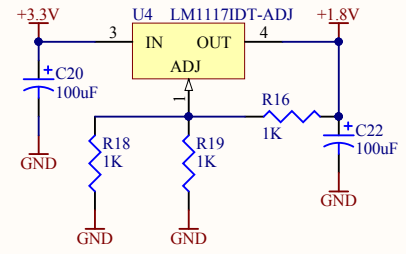
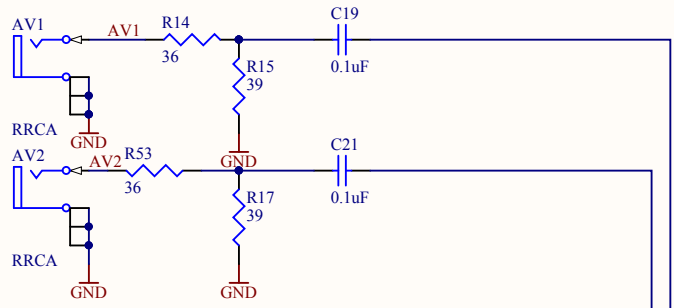
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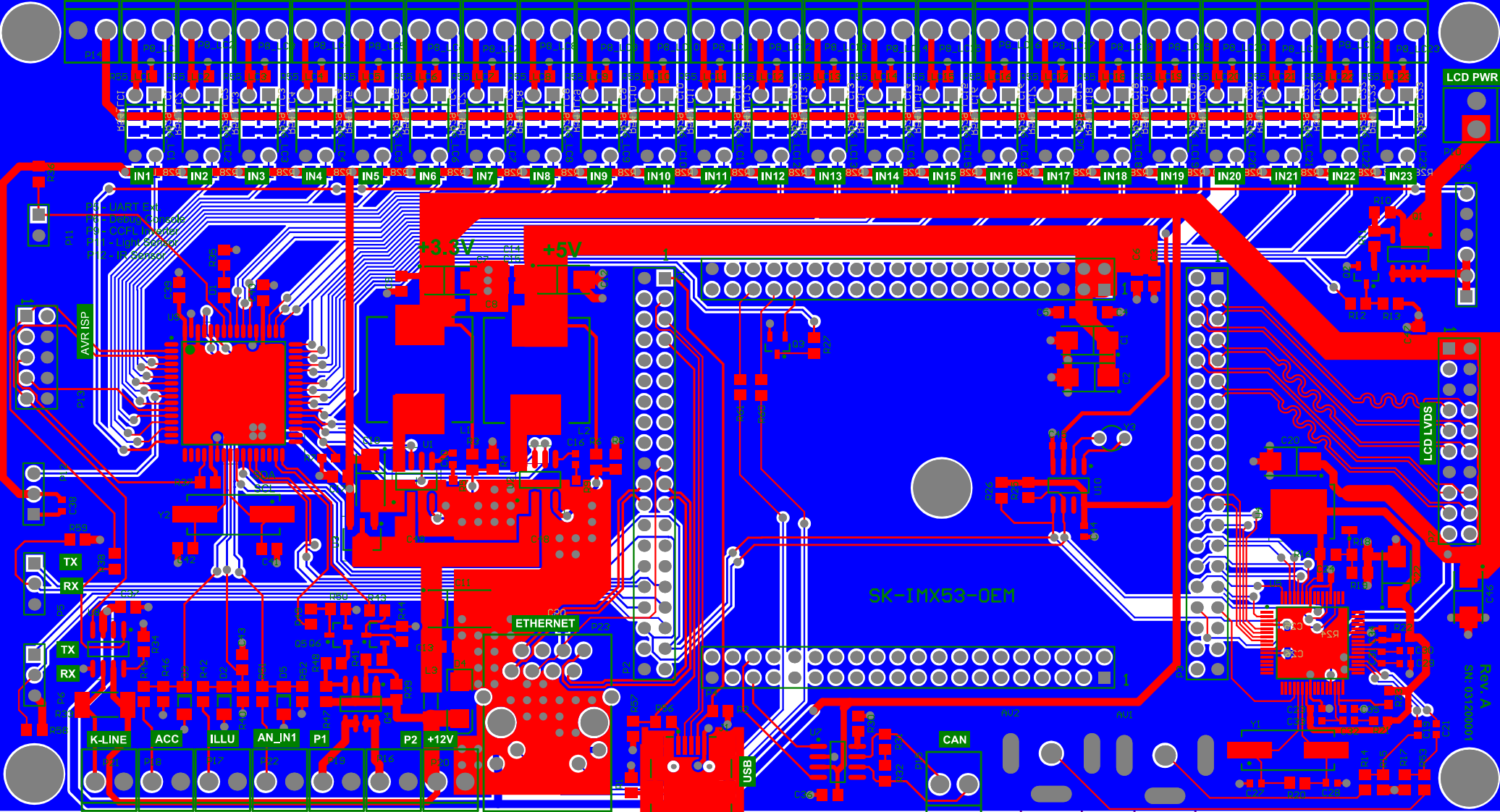
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Date: 14.03.2013	Sheet of	
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Title		
Size	Number	Revision
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Date:	14.03.2013	Sheet of
File:	C:\projects\...\Video.SchDoc	Drawn By:



SK-1HX53-0EM

LCD PWR

LCD LVDS

ROW A

ETHERNET

CAN

USB

+12V

+3.3V

+5V

AVIR ISP

TX

RX

TX

RX

K-LINE

ACC

ILLU

AN_IN1

P1

P2

Bill of Materials

<Parameter Title not found>

Source Data From: TFTestInstrumentCluster.PyPCB
 Project: TFTestInstrumentCluster.PyPCB
 Variant: None

Creation Date: 14.03.2013 17:43:04
 Print Date: 4/13/7 4/13/7 7:33:33

Footprint	Comment	LibPart	Designator	Description	Quantity
RCA-R	RRCA	RCA	AV1, AV2	RCA Right Angle, Through hole, PCB mount	2
6032	100uF	8902225X0025 C2	C1, C2, C7, C12, C16, C20, C22	Tantamount Bulk-In Fuse Miniature, Molded Case Solid Tantalum Chip Capacitor: 2.2uF, 20%, Tolerance, 25 WVDC @ +85°C, Surge = 30V	7
2012[0805]	0.1uF	C0805	C3, C4, C5, C6, C9, C13, C14, C15, C17, C36, C39, C43, C47, C48, C49, C50	Ceramic Chip Capacitor - Standard	16
2012[0805]	22uF	C0805	C3, C40	Ceramic Chip Capacitor - Standard	2
1608[0603]	100uF	C0903	C10, C18	Ceramic Chip Capacitor - Standard	2
7343	47uF	8903156X0025 D2		Tantamount Bulk-In Fuse Miniature, Molded Case Solid Tantalum Chip Capacitor: 15uF, 20%, Tolerance, 25 WVDC @ +85°C, Surge = 30V	1
1608[0603]	0.1uF	C0903	C39, C31, C39, C39, C31, C48	Ceramic Chip Capacitor - Standard	8
1608[0603]	1uF	C0903	C23, C24, C25, C26, C34, C35, C38, C44	Ceramic Chip Capacitor - Standard	8
1608[0603]	47uF	C0903	C27, C28	Ceramic Chip Capacitor - Standard	2
1608[0603]	82uF	C0903	C42	Ceramic Chip Capacitor - Standard	1
1608[0603]	15uF	C0903	C32	Ceramic Chip Capacitor - Standard	1
2012[0805]	1uF	C0805	C37	Ceramic Chip Capacitor - Standard	1
2012[0805]	22uF	C0805	C41, C42	Ceramic Chip Capacitor - Standard	2
6032	2.2uF	8902225X0025 C2	C48	Tantamount Bulk-In Fuse Miniature, Molded Case Solid Tantalum Chip Capacitor: 2.2uF, 20%, Tolerance, 25 WVDC @ +85°C, Surge = 30V	1
2012[0805]	LED GREEN	LEDO	D1	Typical INFRARED GaAs LED	1
SO8	BZV55-3V3	D Zener	D2, D3, D5	Zener Diode	3
80MLL34	SMB	SM6T15TA	D6	SM6T15TA	1
440478	440478-2	D Schottky	D7	LED 2.0, Right Angle, SMT, A Type, Rectepiece, 5 Position, Black	1
CJ9R127	10mH	Inductor	L1, L2	Inductor	2
INDC4056AN	FB	Inductor	L3	INDMFP0050NHL	1
HRFX20_F	Header 20X2	Header 20X2	P1, P2, P3, P4	Header, 20 Pin, Dual row	4
HRFX13	Header 3	Header 3	P5, P6, P12	Header, 3 Pin	3
HRFX10	Header 10X2	Header 10X2	P7	Header, 10 Pin, Dual row	1
CLM2-3.5	CLM2-3.5	CLM2-3.5	P8_LC1, P8_LC2, P8_LC3, P8_LC4, P8_LC5, P8_LC6, P8_LC7, P8_LC8, P8_LC9, P8_LC10, P8_LC11, P8_LC12, P8_LC13, P8_LC14, P8_LC15, P8_LC16, P8_LC17, P8_LC18, P8_LC19, P8_LC20, P8_LC21, P8_LC22, P8_LC23, P10, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23	Header, 6-Pin	1
HRFX6	Header 6	Header 6	P24	Header, 6-Pin	1
HRFX2	Header 2	Header 2	P25	Header, 2-Pin	1
HRFX5	Header 5X2	Header 5X2	P26	Header, 5-Pin, Dual row	1
LUT1516	LUT1516	LUT1516	P23	LUT1516	1
SO-8_N	HF7204	HF7204	Q1	HEXFET Power MOSFET	1
SO12_N	8C3468	8C3468	Q2, Q3, Q5, Q6	NPN General-purpose Transistor	4
SO-8_N	HF7314	HF7314	Q4	HEXFET Power MOSFET	1
R2012[0805]	0	R0805	R1, R2, R3, R55, L01, R55, L02, R55, L03, R55, L04, R55, L05, R55, L06, R55, L07, R55, L08, R55, L09, R55, L10, R55, L11, R55, L12, R55, L13, R55, L14, R55, L15, R55, L16, R55, L17, R55, L18, R55, L19, R55, L20, R55, L21, R55, L22, R55, L23	R0805	26
R2012[0805]	1K	R0805	R4, R4, R4, R8, R12, R16, R18, R18, R24, R28, R36, R27, R34, R37, R43, R45, R44, L01, R54, L02, R54, L03, R54, L04, R54, L05, R54, L06, R54, L07, R54, L08, R54, L09, R54, L10, R54, L11, R54, L12, R54, L13, R54, L14, R54, L15, R54, L16, R54, L17, R54, L18, R54, L19	R0805	41
R1608[0603]	1K	R0603	R5, R9	R0603	3
R2012[0805]	10K	R0805	R10, R13, R28, L01, R28, L02, R28, L03, R28, L04, R28, L05, R28, L06, R28, L07, R28, L08, R28, L09, R28, L10, R28, L11, R28, L12, R28, L13, R28, L14, R28, L15, R28, L16, R28, L17, R28, L18, R28, L19, R28, L20, R28, L21, R28, L22, R28, L23, R29, R30, R34, R37, R43, R45	R0805	30
R2012[0805]	4.7K	R0805	R11, R20, L01, R20, L02, R20, L03, R20, L04, R20, L05, R20, L06, R20, L07, R20, L08, R20, L09, R20, L10, R20, L11, R20, L12, R20, L13, R20, L14, R20, L15, R20, L16, R20, L17, R20, L18, R20, L19, R20, L20, R20, L21, R20, L22, R20, L23, R41, R48	R0805	26
R2012[0805]	36	R0805	CL1, CL3	R0805	2
R2012[0805]	39	R0805	CL5, R17	R0805	2
2012[0805]	1M	R0805	CL2	Resistor	1
R1608[0603]	1.69K	R0603	CL1	R0603	1
R1608[0603]	0	R0603	CL2, R23	R0603	2
R2012[0805]	39K	R0805	CL4	R0805	1
R2012[0805]	100	R0805	CL11	R0805	1
6032[2510]	470	R0805	CL3	Resistor	4
R2012[0805]	390	R0805	C36, C38, R20, R21	R0805	4
R2012[0805]	2K 1%	R0805	R40, R40, R52	R0805	3
R2012[0805]	1K 1%	R0805	R22, R53, R51	R0805	3
R2012[0805]	11K	R0805	R26	R0805	1
R2012[0805]	22K	R0805	R27	R0805	1
SO12[27190]	MCP3170	MCP3170	U1, U2		2
0-8MM	MCP1703T	MCP1703T	U3	250 mA, 16V, Low Quiescent Current LDO Regulator, 3-Pin SOT-89, Extended Temperature, Tape and Reel	1
ME3_N	3302EMB	3302EMB			1
TD03B_N	LM1117DT-ADJ	LM1117DT-ADJ	U4	400mA Low-Dropout Linear Regulator, 3-pin TO-252	1
S23P10X10-84	ADV7180	ADV7180	U5		1
DIP4	TLP621	TLP621	U6_LC1, U6_LC2, U6_LC3, U6_LC4, U6_LC5, U6_LC6, U6_LC7, U6_LC8, U6_LC9, U6_LC10, U6_LC11, U6_LC12, U6_LC13, U6_LC14, U6_LC15, U6_LC16, U6_LC17, U6_LC18, U6_LC19, U6_LC20, U6_LC21, U6_LC22, U6_LC23		23
SOIC-SM8_N	MCP2551-DSN	MCP2551-DSN	U7	High-Speed CAN Transceiver, 8-Pin SOIC, Industrial Temperature	1
SO8_N	L9637D	L9637D	U8	ISO P141 Interface	1
6AA_N	ATmega128A-AU	ATmega128A-AU	U9	8-bit AVR Microcontroller: 128KB Flash, 4KB EEPROM, 4KB SRAM, 64-pin TQFP, Industrial Grade (-40°C to 85°C)	1
SOIC8N_N	DS1307Z	DS1307Z	U10	44 x 8 Serial Real-Time Clock	1
HC494H_SM	28.6384xt	XTAL	Y1	Crystal Oscillator	1
HC494H_SM	16M8zt	XTAL	Y2	Crystal Oscillator	1
X					1
X					1
SO8	28Mzt	XTAL	Y3	Crystal Oscillator	1
Approved	Notes				29