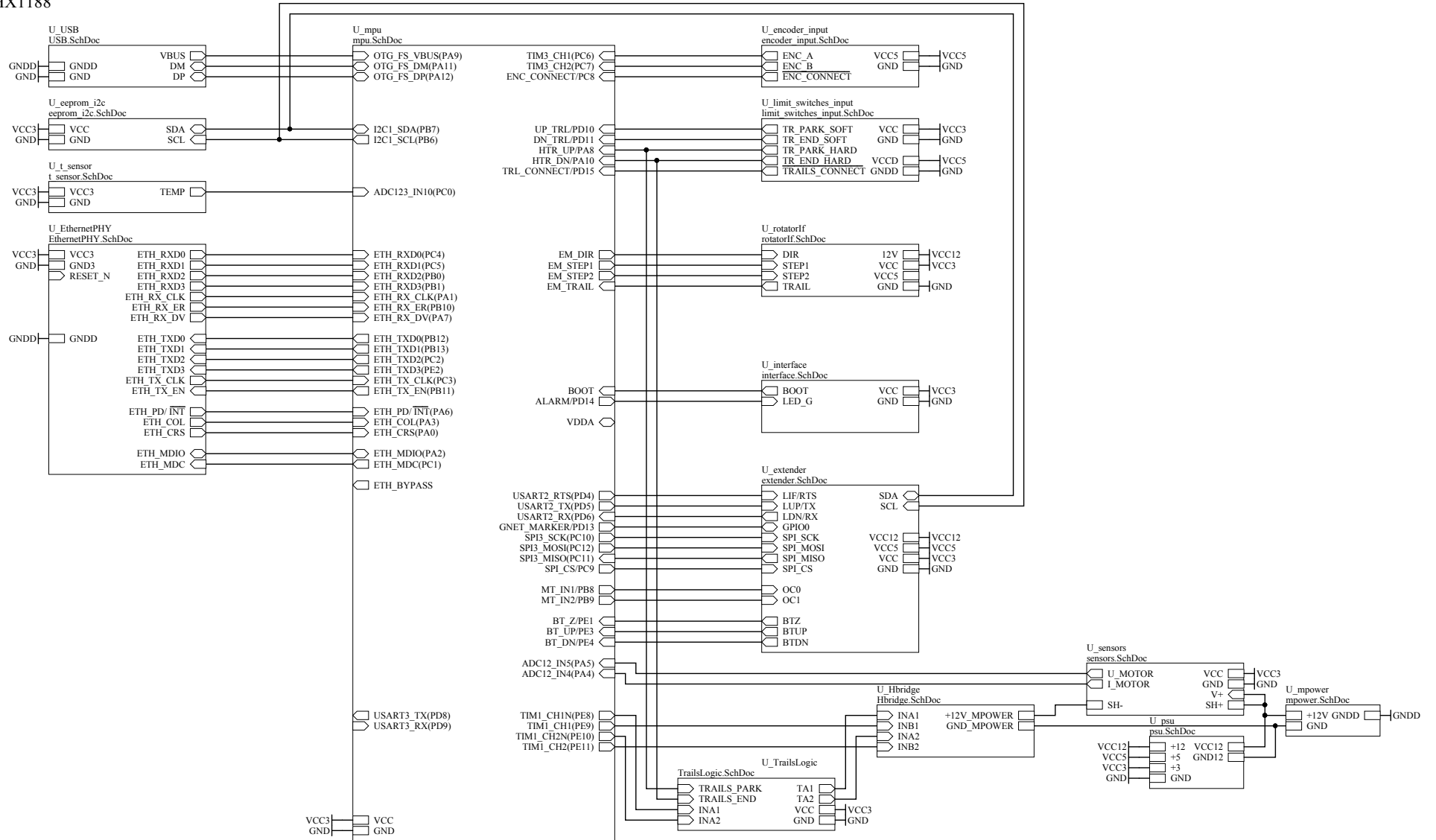
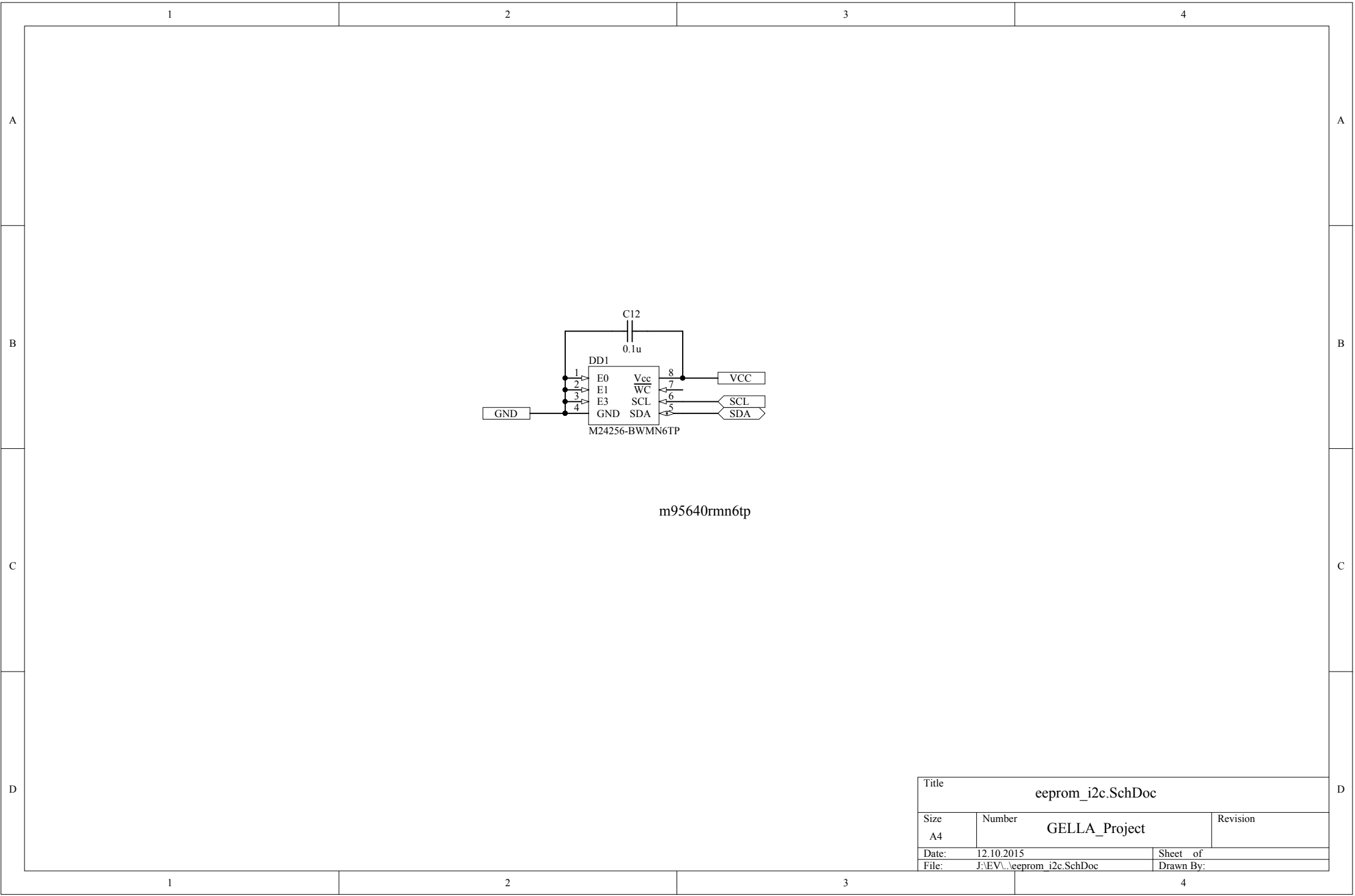
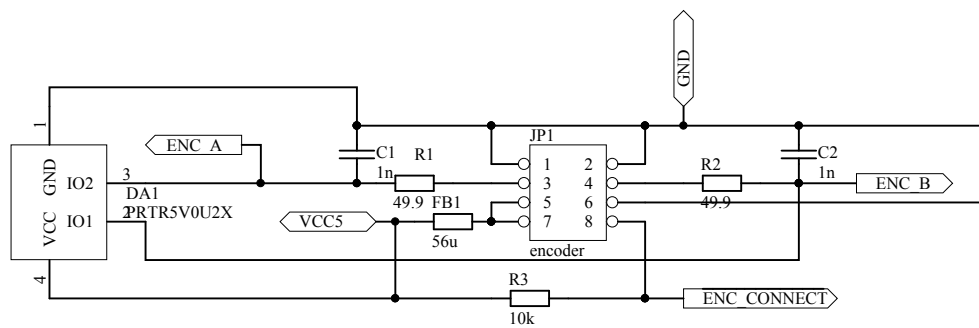


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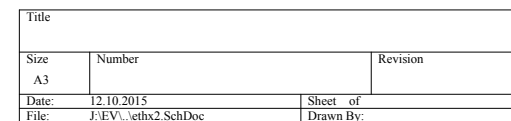


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Size	Number	Revision	
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Date:	12.10.2015	Sheet of	
File:	J:\EV\..encoder_input.SchDoc	Drawn By:	



A

B

C

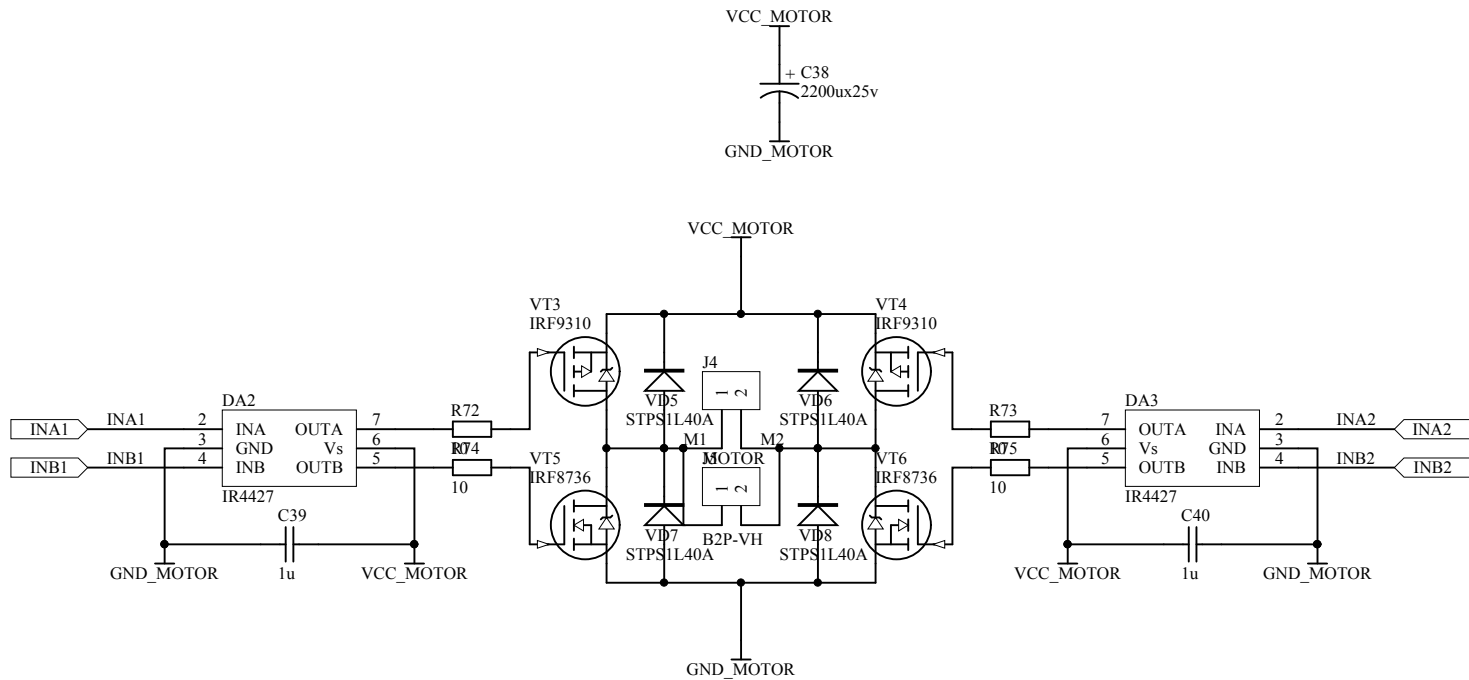
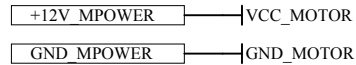
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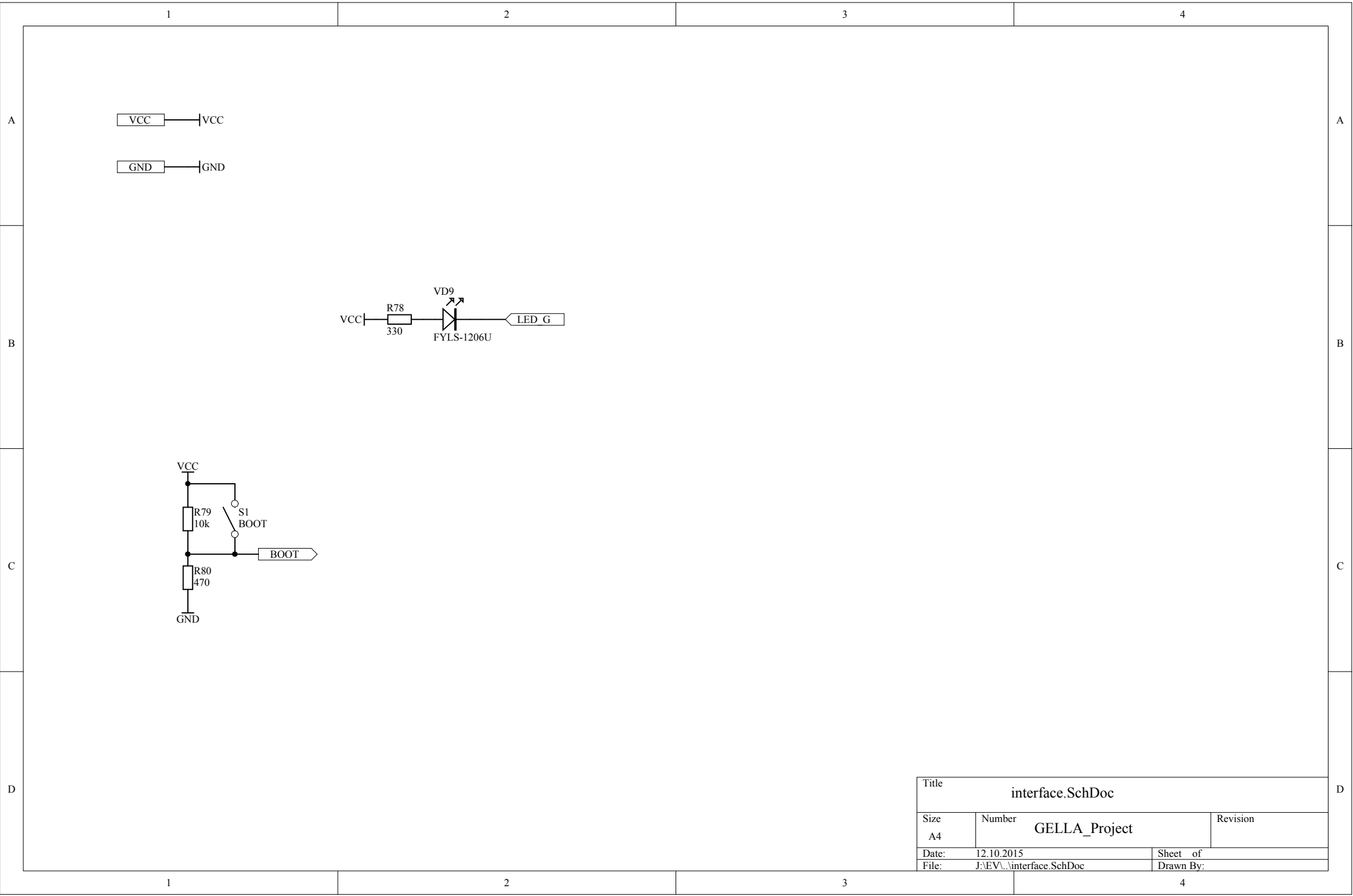
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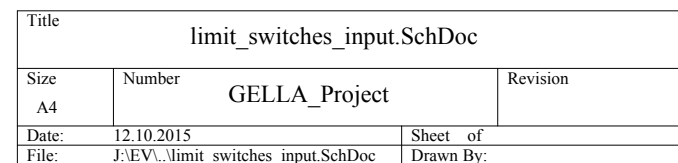
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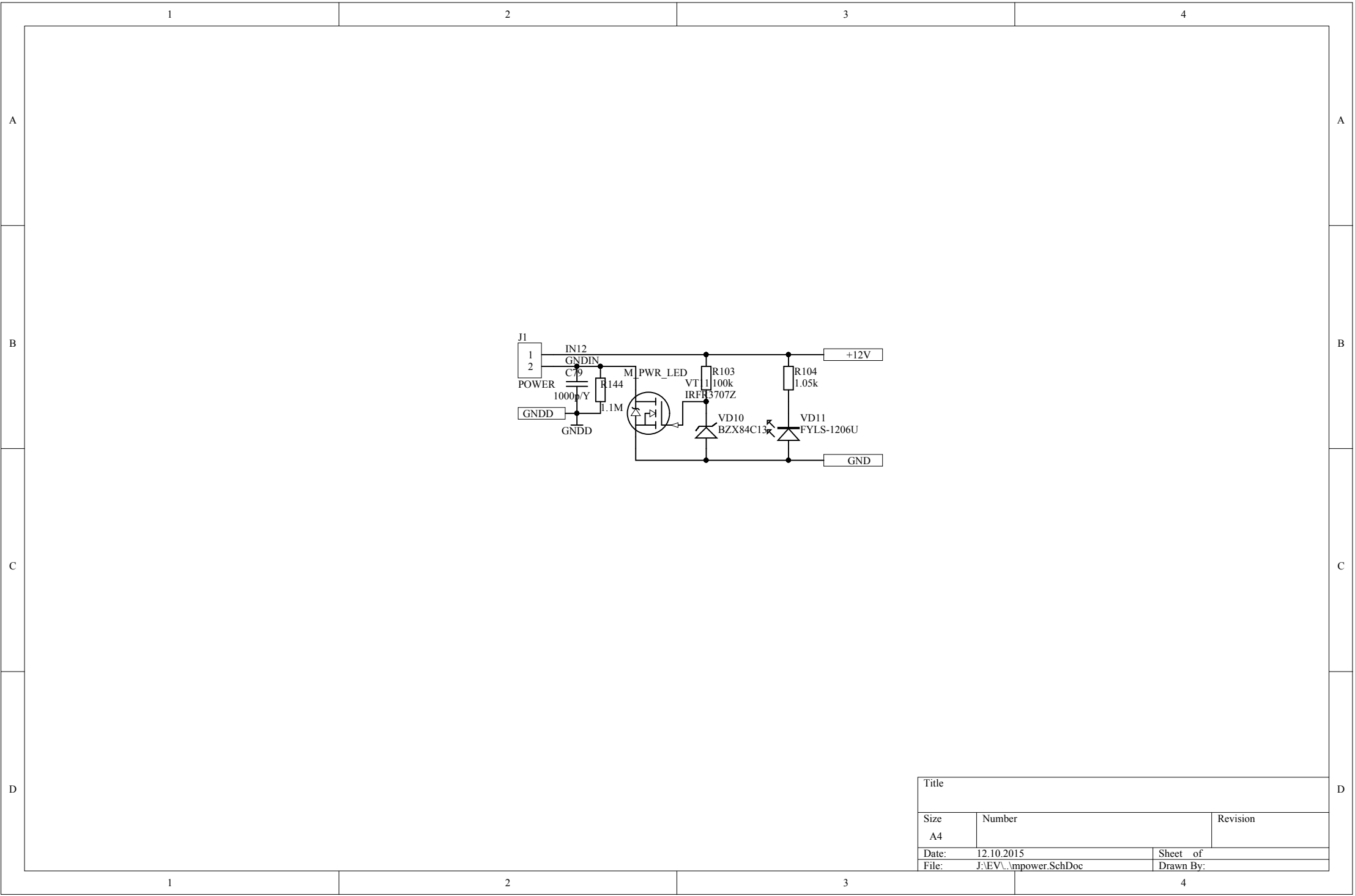
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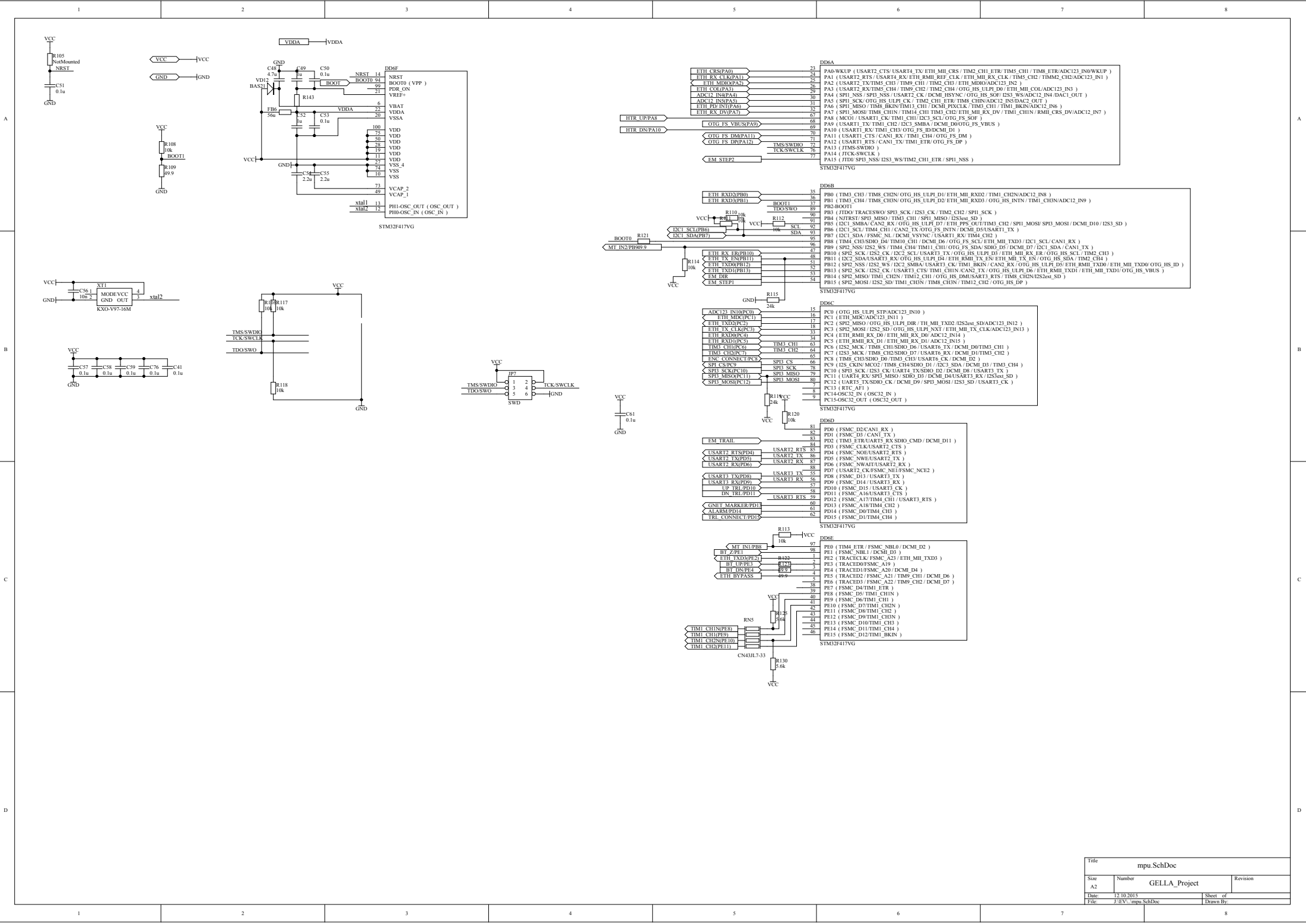
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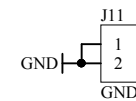
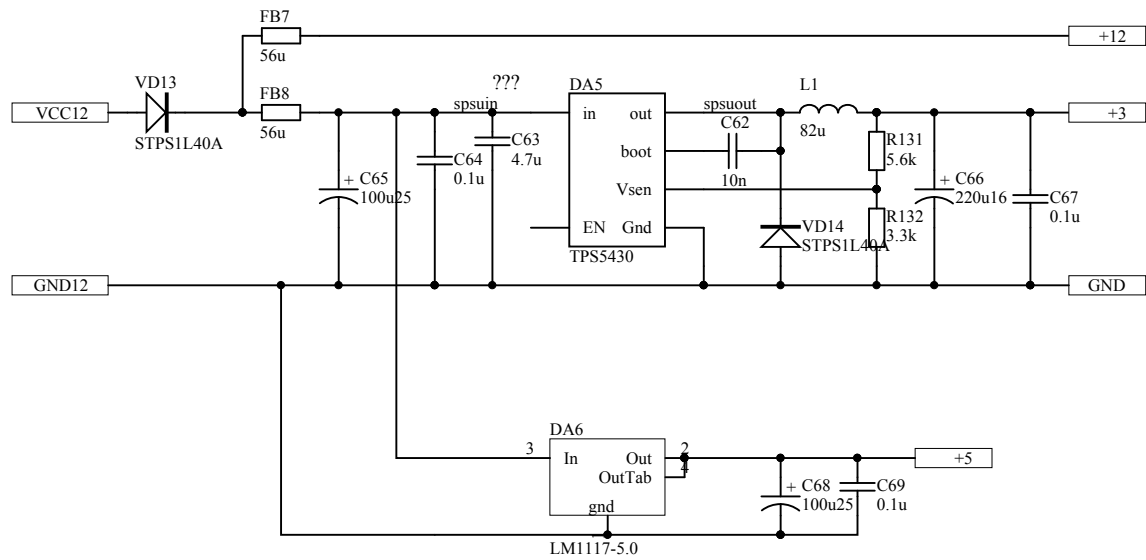




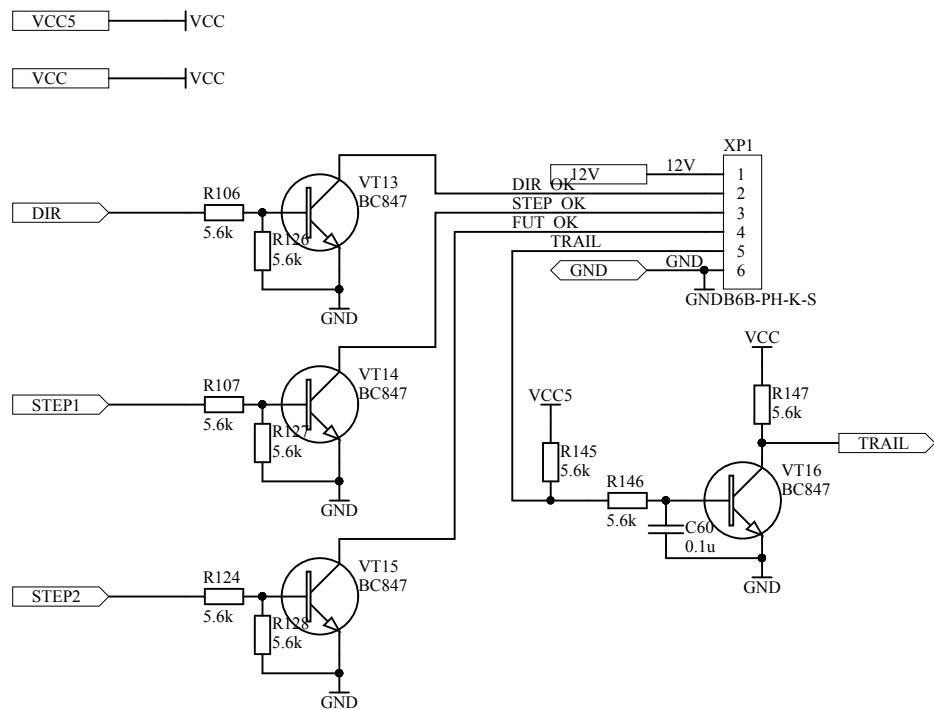


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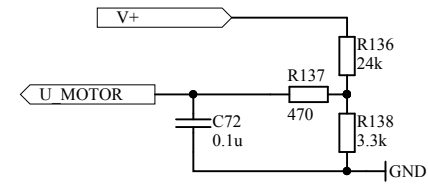
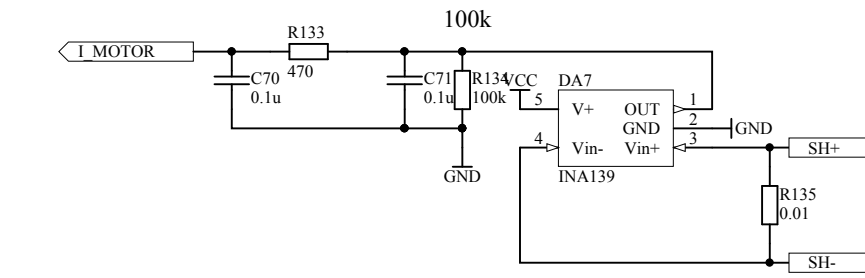
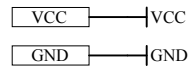




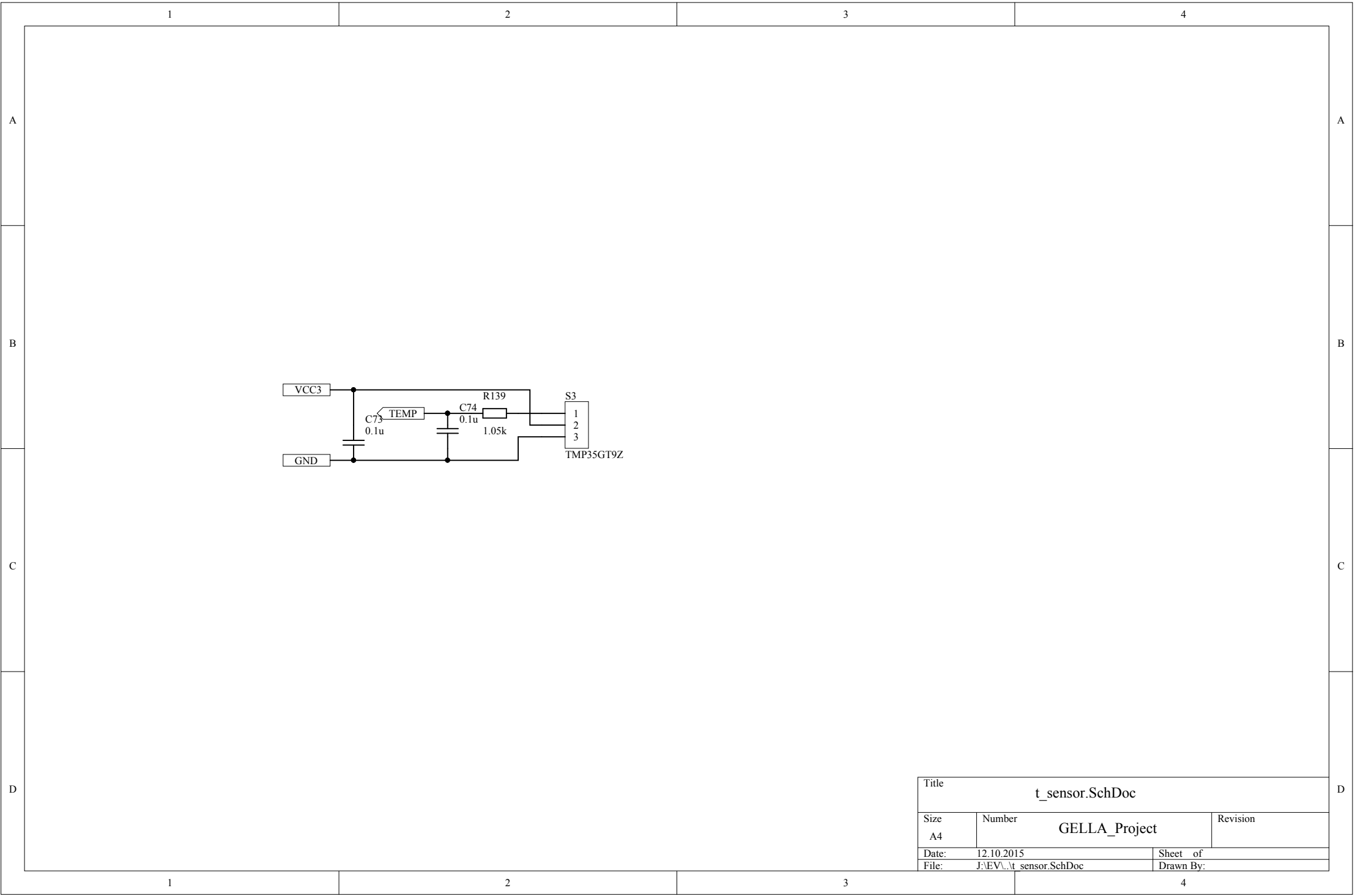
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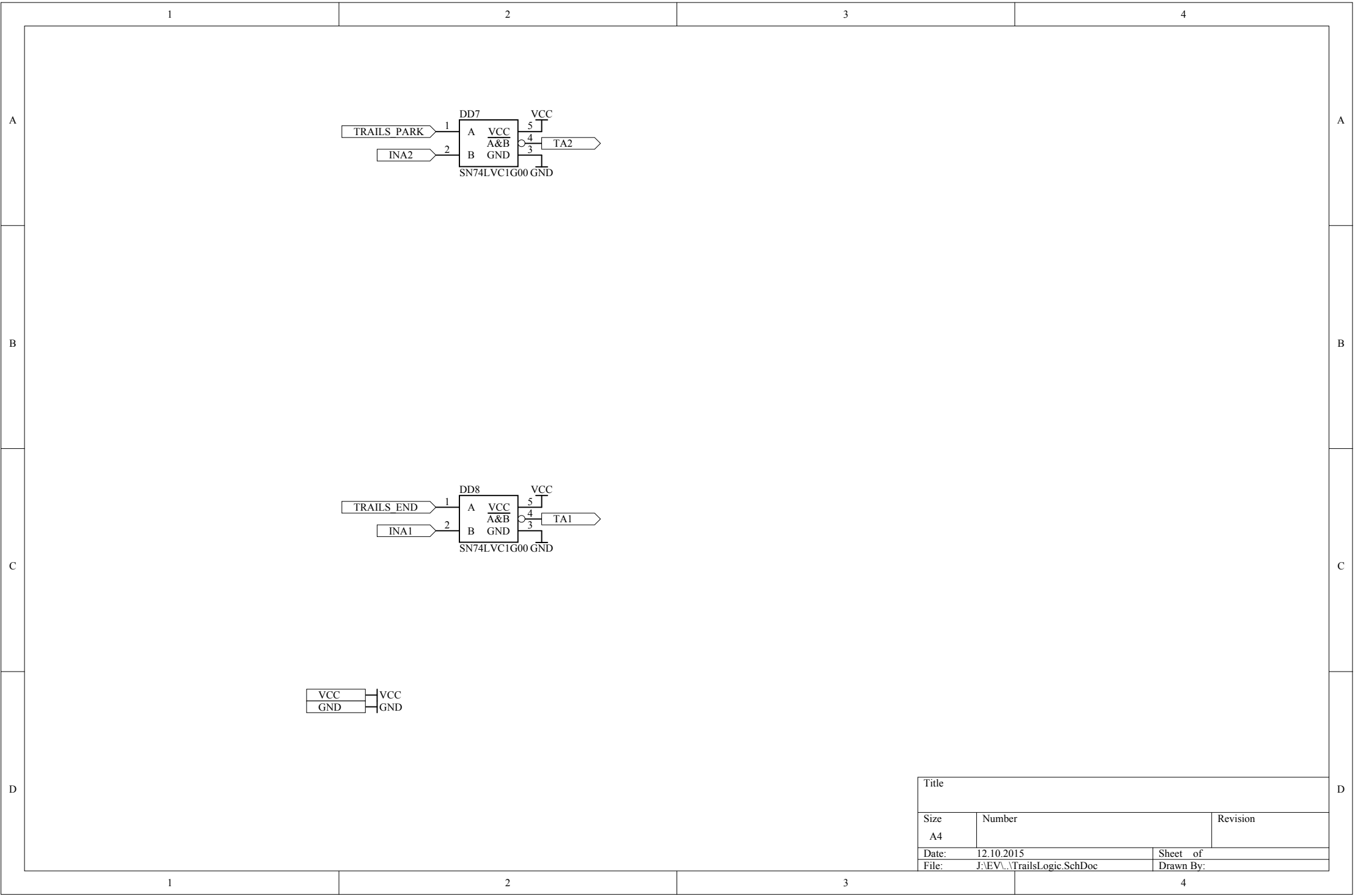
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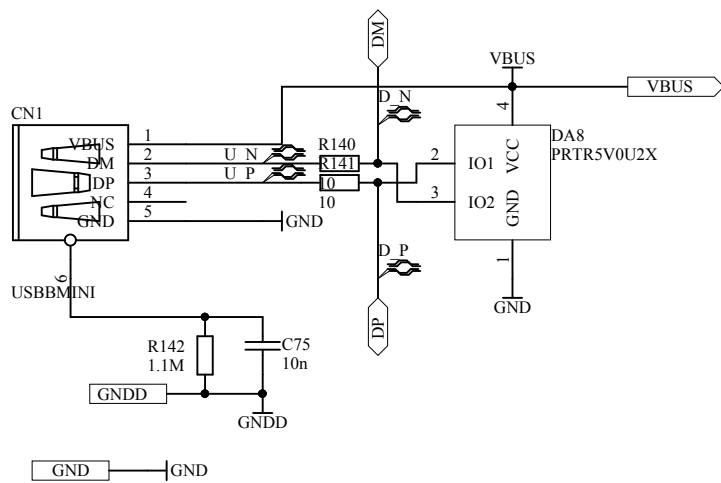


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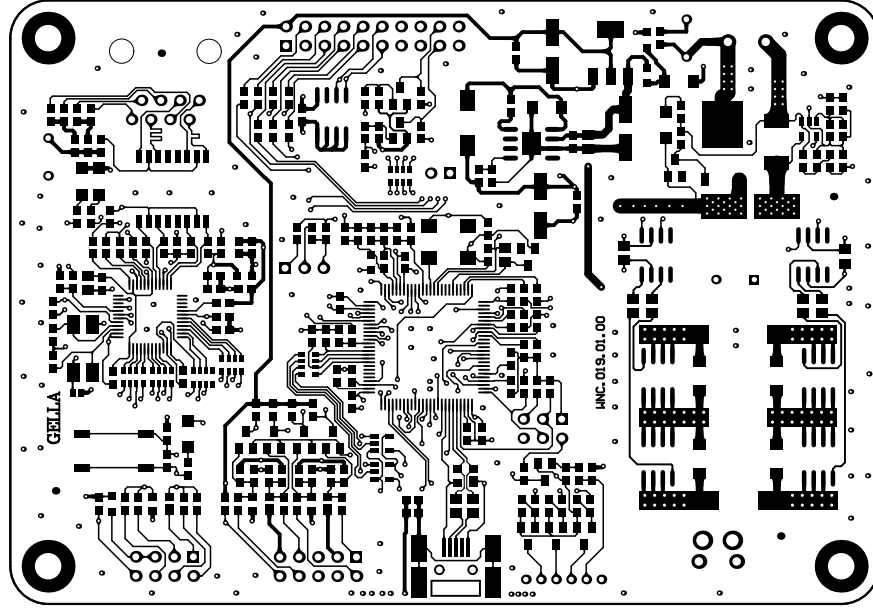


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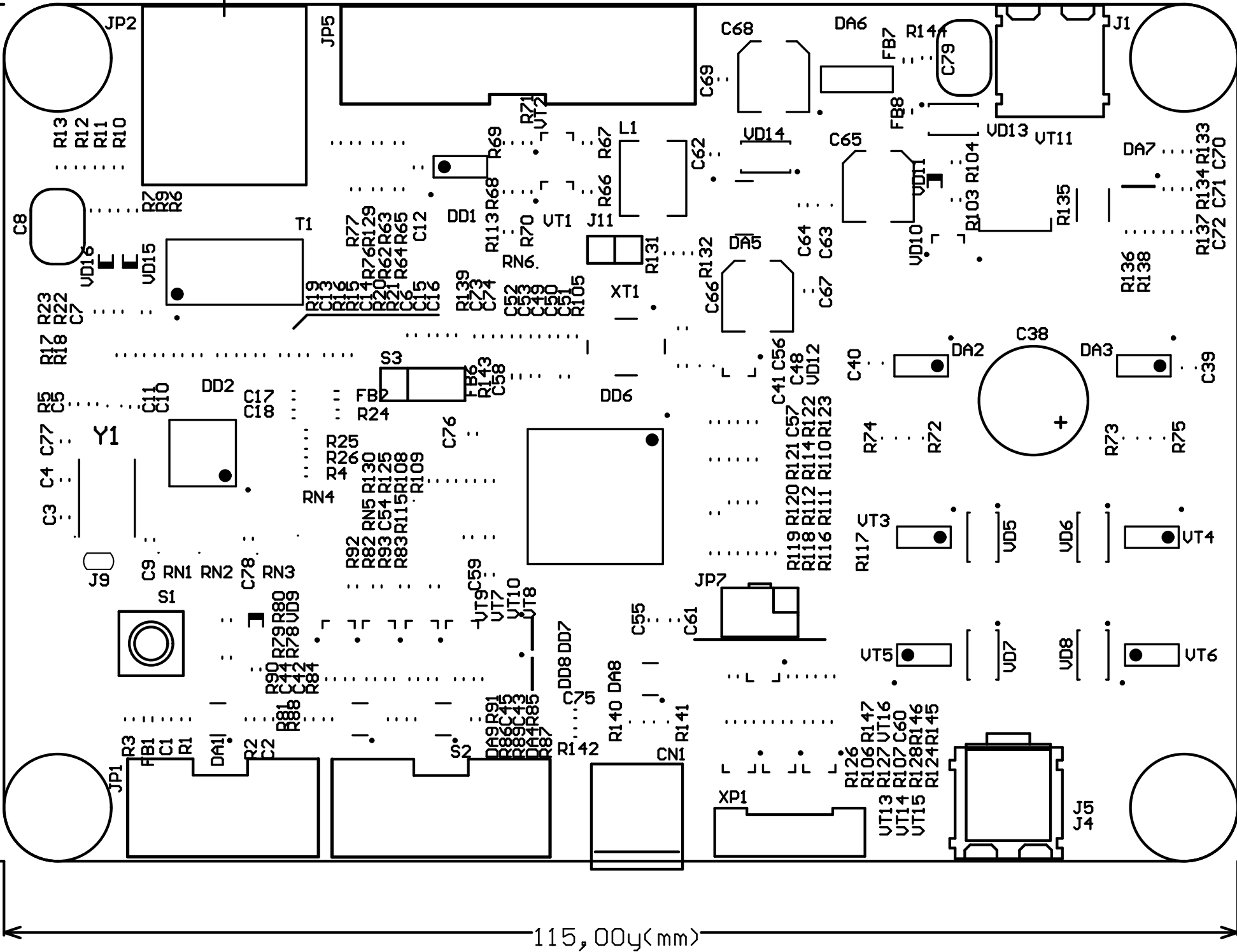




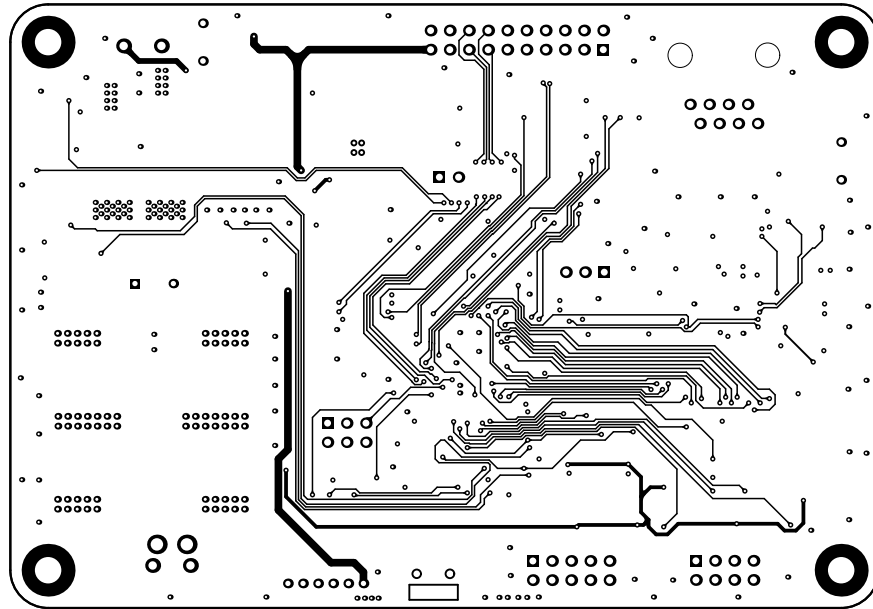
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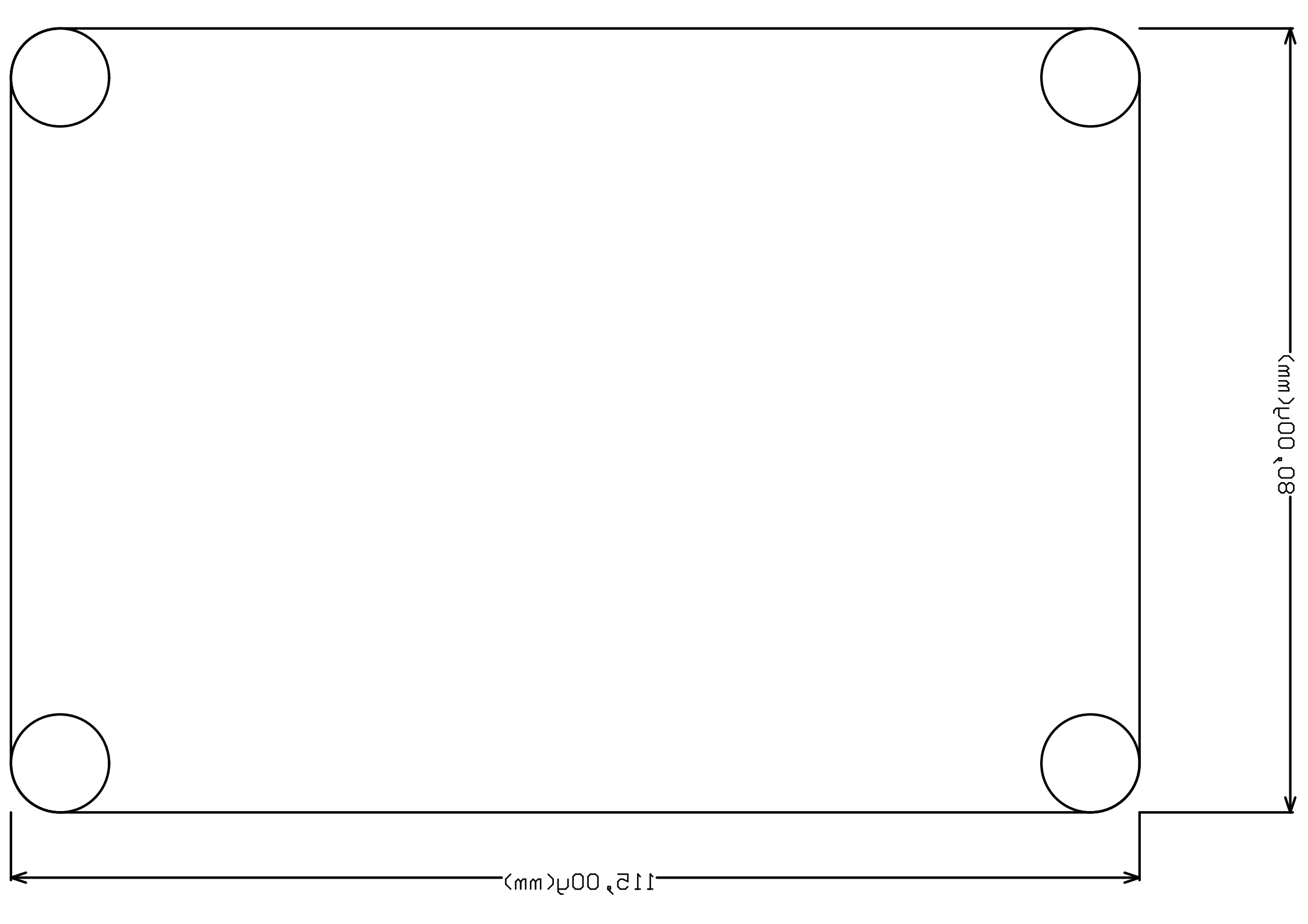


80,00y<mm>



115,00y<mm>





Comment	Description	Designator	Footprint	LibRef	Quantity
1n	Capasitor SMD	C1, C2, C42, C43, C44, C45	CAPC1608X09	CC0603JRNPO9BN102	6
33p	Capasitor SMD	C3, C4	CAPC1608X09	CC0603JRNPO9BN330	2
0.1u	Capasitor SMD	C5, C6, C7, C9, C10, C12, C13, C14, C15, C17, C41, C50, C51, C53, C57, C58, C59, C60, C61, C64, C67, C69, C70, C71, C72, C73, C74, C76, C77, C78	CAPC1608X09	CC0603KRX7R9BB104	30
1000p/Y	XY Capacitor	C8, C79	HS_YCAP5	DE2E3KY102MA2	2
10u	Capasitor SMD	C11	CAPC2012X11N	CC0805KKX7R7BB106	1
33n	Capasitor SMD	C16, C18	CAPC1608X09	CC0603KRX7R9BB333	2
2200ux25v	Cap pol	C38	ELCAP-5-10	CAP EL	1
1u	Capasitor SMD	C39, C40	CAPC2012X11N	CC0805KKX7R7BB105	2
4.7u	Capasitor SMD	C48, C63	CAPC2012X11N	GRM21BR71C475KA73L	2
1u	Capasitor SMD	C49, C52	CAPC1608X09	CC0603KRX7R7BB105	2
2.2u	Capasitor SMD	C54, C55	CAPC1608X09	CM105X7R225K06AT	2
10n	Capasitor SMD	C56, C62, C75	CAPC1608X09	CC0603KRX7R9BB103	3
100u25	Capasitor SMD Electrolytic	C65, C68	CAPE666X77M-D	CK1E101M-CRE77	2
220u16	Capasitor SMD Electrolytic	C66	CAPE666X77M-D	CB016M0220RSH	1
USBMINI	USB connector	CN1	USB8MINI	USB8MINI	1
PTR5V0U2X	NXP double ESD protection diodes	DA1, DA4, DA8, DA9	SOT190P230X110-4N	PTR5V0U2X	4
IR4427	DUAL LOW SIDE MOSFET DRIVER	DA2, DA3	SOIC127P600X175-8M	IR4427	2
TPS5430	Step-down converter	DA5	SOIC127P600X265_HS-8M	TPS5430	1
LM1117-5.0	LDO linear regulator	DA6	SOT230P700X180-4M	LM1117IMP-5.0	1
INA139	High-Side Measurement CURRENT SHUNT MONITOR	DA7	SOT95P245X110-5N	INA139NA	1
M24256-BWMN6TP	I2C EEPROM 32Kx8	DD1	SOIC127P600X175-8M	M24256-BWMN6TP	1
DP83848I	Ethernet Physical Layer Transceiver	DD2	TSQFP50P900X900X160-48N	DP83848I	1
STM32F417VG	STM32 ARM MPU	DD6	QFP127P600-8N	STM32F417VG	1
SN74LVC1G00	Single 2-input NAND logic	DD7, DD8	SOT95P245X110-5N	SN74LVC1G00DBVR	2
56u	SMD ferrite bead	FB1, FB2, FB6, FB7, FB8	INDC2009X12N	LL2012NR56KTX	9
POWER	Degson Header 5mm	J1	HS_DG128-5.0-02P	DG128-5.0-02P	1
MOTOR	2 pin Connector	J4	DG128-021	CON2	1
B2P-VH	Header 3.96mm	J5	HS_JST-B2P-VH	B2P-VH	1
JUMP	Jumper- sopli	J9	JUMP	JUMP	1
GND	Pin Header 2.54mm	J11	HS_PLS-2	PLS-2	1
encoder	2x4 pin connector	JP1	IDC-8	HEADER 4X2	1
RJ-45	RJ-45 pcb mount connector	JP2	RJ-45-3	RJ-45	1
extender		JP5	IDC-20	HEADER-10X2	1
SWD	PGM	JP7	DIL-6	HEADER 3X2	1
82u	SMD inductor	L1	INDP6659X50M	CDRH64BNP-820MC	1
49.9	SMD Resistor	R1, R2, R6, R7, R9, R10, R11, R12, R13, R15, R16, R20, R21, R62, R63, R64, R65, R76, R77, R86, R87, R88, R89, R109, R121, R122, R123, R129	RESC1608X06N	RC0603FR-0749R9L	28
10k	SMD Resistor	R3, R5, R25, R79, R81, R82, R83, R92, R93, R108, R110, R111, R112, R113, R114, R116, R117, R118, R120	RESC1608X06N	RC0603FR-0710KL	19
5.6k	SMD Resistor	R4, R26, R66, R67, R68, R69, R70, R71, R106, R107, R124, R125, R126, R127, R128, R130, R131, R145, R146, R147	RESC1608X06N	RC0603FR-075K6L	20
4.87k	SMD Resistor	R17	RESC1608X06N	RC0603FR-074K87L	1
3.3k	SMD Resistor	R18, R19, R84, R85, R90, R91, R132, R138	RESC1608X06N	RC0603FR-073K3L	8
330	SMD Resistor	R22, R23, R78	RESC1608X06N	RC0603FR-07330KL, RC0603FR-07330RL, RC0603FR-07300RL	3
0	SMD Resistor	R24, R143	RESC1608X06N	RC0603JR-0700RL	2
10	SMD Resistor	R72, R73, R74, R75, R140, R141	RESC2012X06N	RC0805FR-0710RL, RC0603FR-07470RL, RC0603FR-07470KL, RC0603FR-07470KL	6
470	SMD Resistor	R80, R133, R137	RESC1608X06N	RC0603FR-07470KL	3
100k	SMD Resistor	R103, R134	RESC1608X06N	RC0603FR-07100KL	2
1.05k	SMD Resistor	R104, R139	RESC1608X06N	RC0603FR-071K05L	2
NotMounted	SMD Resistor	R105	RESC1608X06N	RES0	1
24k	SMD Resistor	R115, R119, R136	RESC1608X06N	RC0603FR-0724KL	3
0.01	SMD Resistor	R135	RESC6332X08N	WSL2512R0100FEA	1
1.1M	SMD Resistor	R142, R144	RESC1608X06N	RC0603JR-071M1L	2
CN43JL7-33	Resistor pack 4st	RN6	CAC-80P319X159-8N	CN43JL7-33	6
BOOT	Tact bttn	S1	DTSL	BUTT	1
limit_switches	2x5 pin connector	S2	IDC-10	HEADER 5X2	1
TMP35GT9Z	3 pin Connector	S3	SIP-3-2	CON3	1
HX1188	Ethernet transformer	T1	SOP127P950X593-16M	HX1188	1
STPS1L40A	1N4148	VD5, VD6, VD7, VD8, VD9, VD14	DIOM4327X25N_SMA_V	STPS1L40A	6
FYLS-1206U	LED 1206	VD9, VD11, VD15, VD16	LED3216X11N	FYLS-1206U	4
BZX84C13	Zeners	VD10	SOT95P245X110-3N	BZX84C13	1
BAS21	General Purpose High Voltage Diode	VD12	SOT95P245X110-3N	BAS21	1
BC847	BCR112 sot-23	VT1, VT2, VT13, VT14, VT15, VT16	SOT95P245X110-3N	BCR112	6
IRF9310	P-Channel MOSFET	VT3, VT4	SOIC127P600X175-8M_TR312	IRF9310	2
IRF8736	N-Channel MOSFET	VT5, VT6	SOIC127P600X175-8M_TR312	IRF8736	2
BCR112	BCR112 sot-23	VT7, VT8, VT9, VT10	SOT95P245X110-3N	BCR112	4
IRFR3707Z	N-Channel MOSFET	VT11	TO228P986X238-3M_132	IRFR3707Z	1
B6B-PH-K-S	Pin Header 2mm	XP1	HS_JST-B6B-PH-K-S	B6B-PH-K-S	1
KXO-V97-16M	generator	XT1	KXO-97	KXO-V97-16.0	1
KX-13-25.0M	resonator	Y1	KX-13	KX-13-25.0	1

