

A

B

C

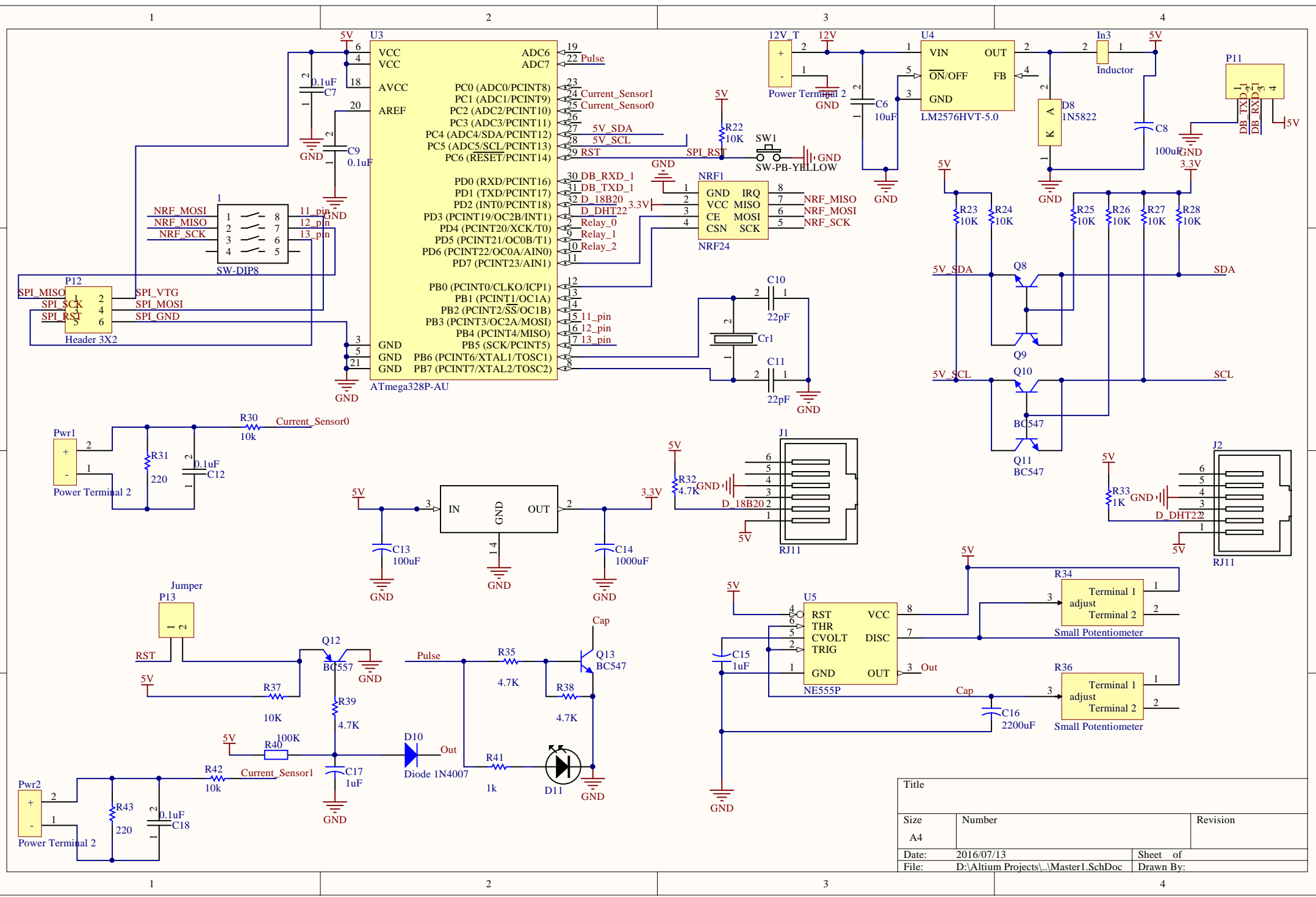
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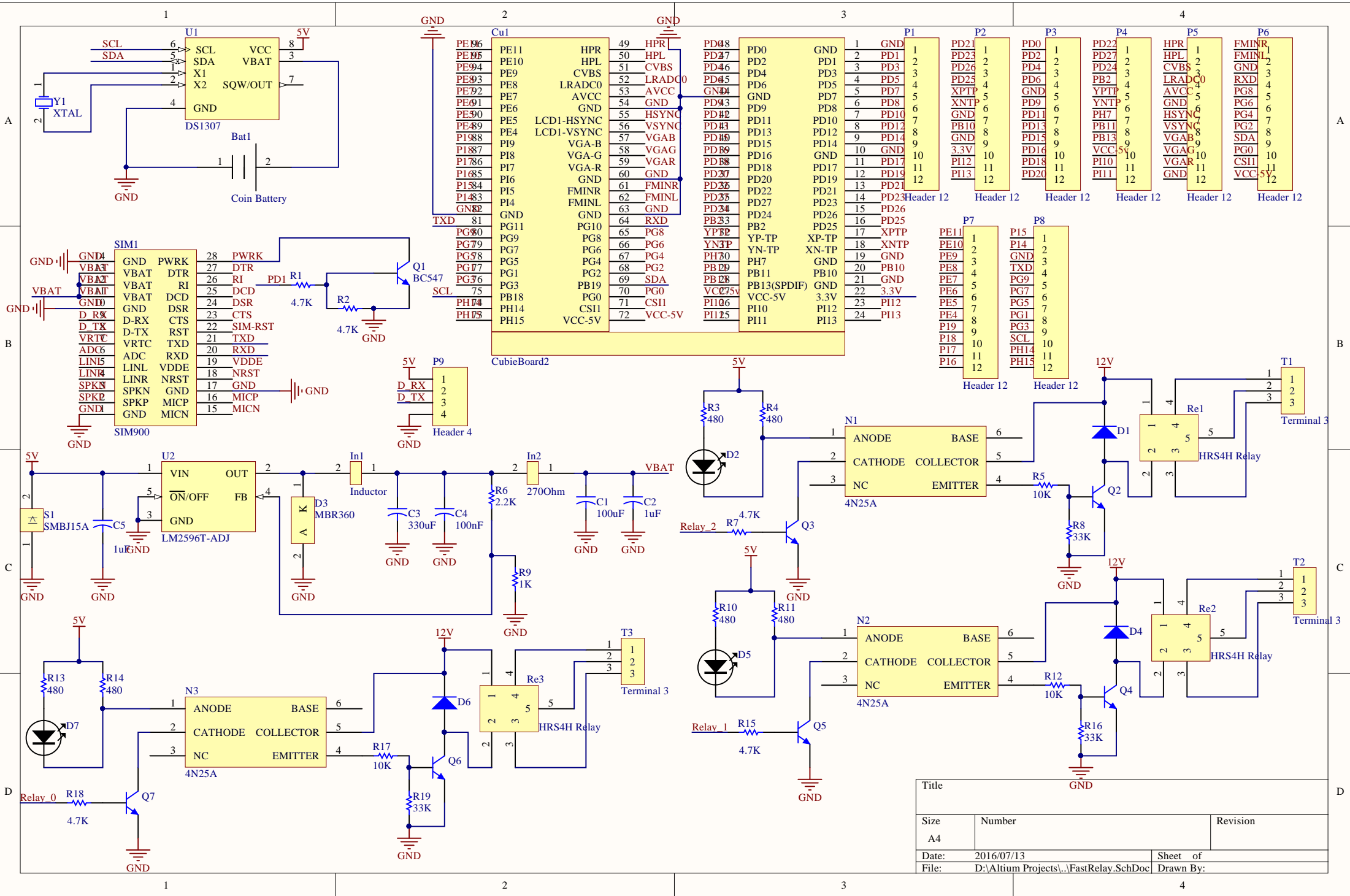
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C

D



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File:	D:\Altium Projects\...\Master1.SchDoc	Drawn By:



Title		
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1

2

3

4

A

A

B

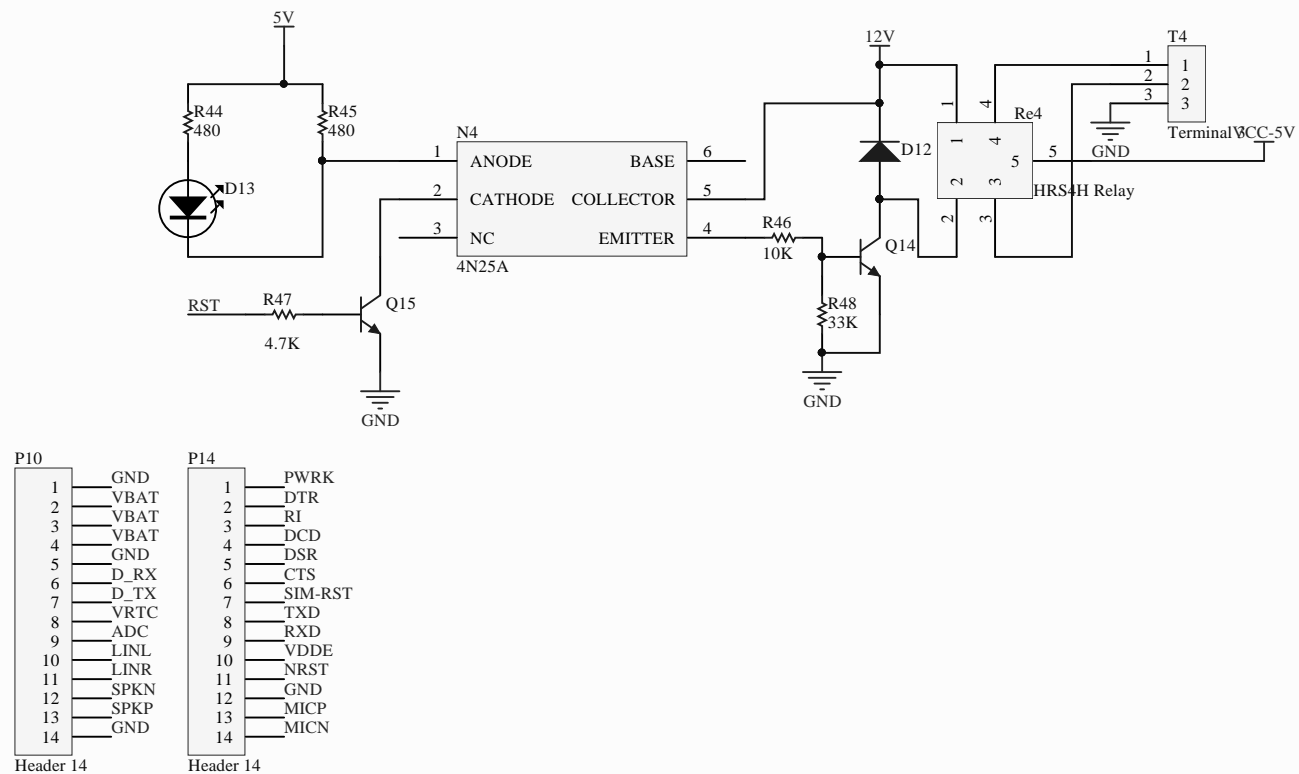
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C

C

D

D



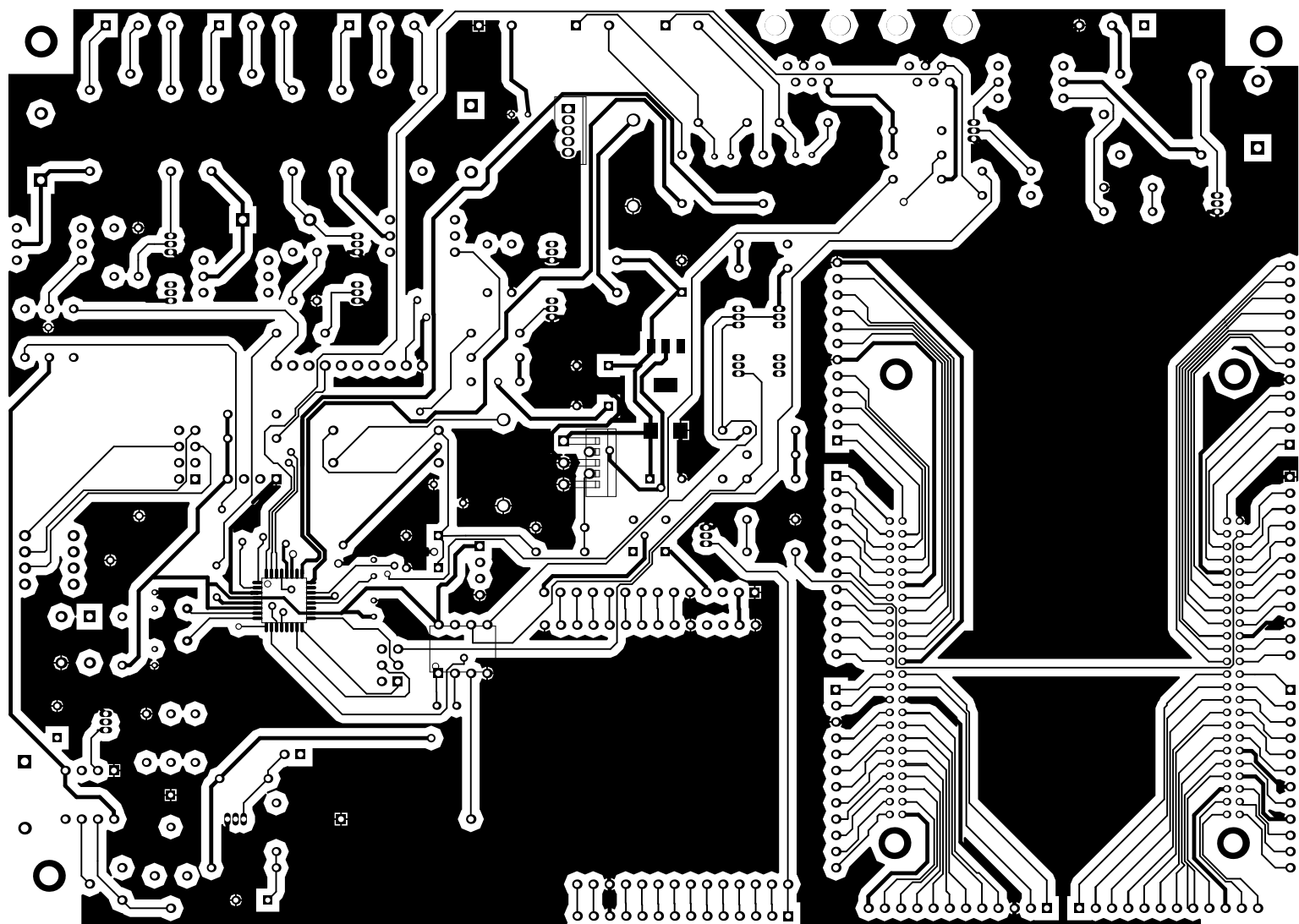
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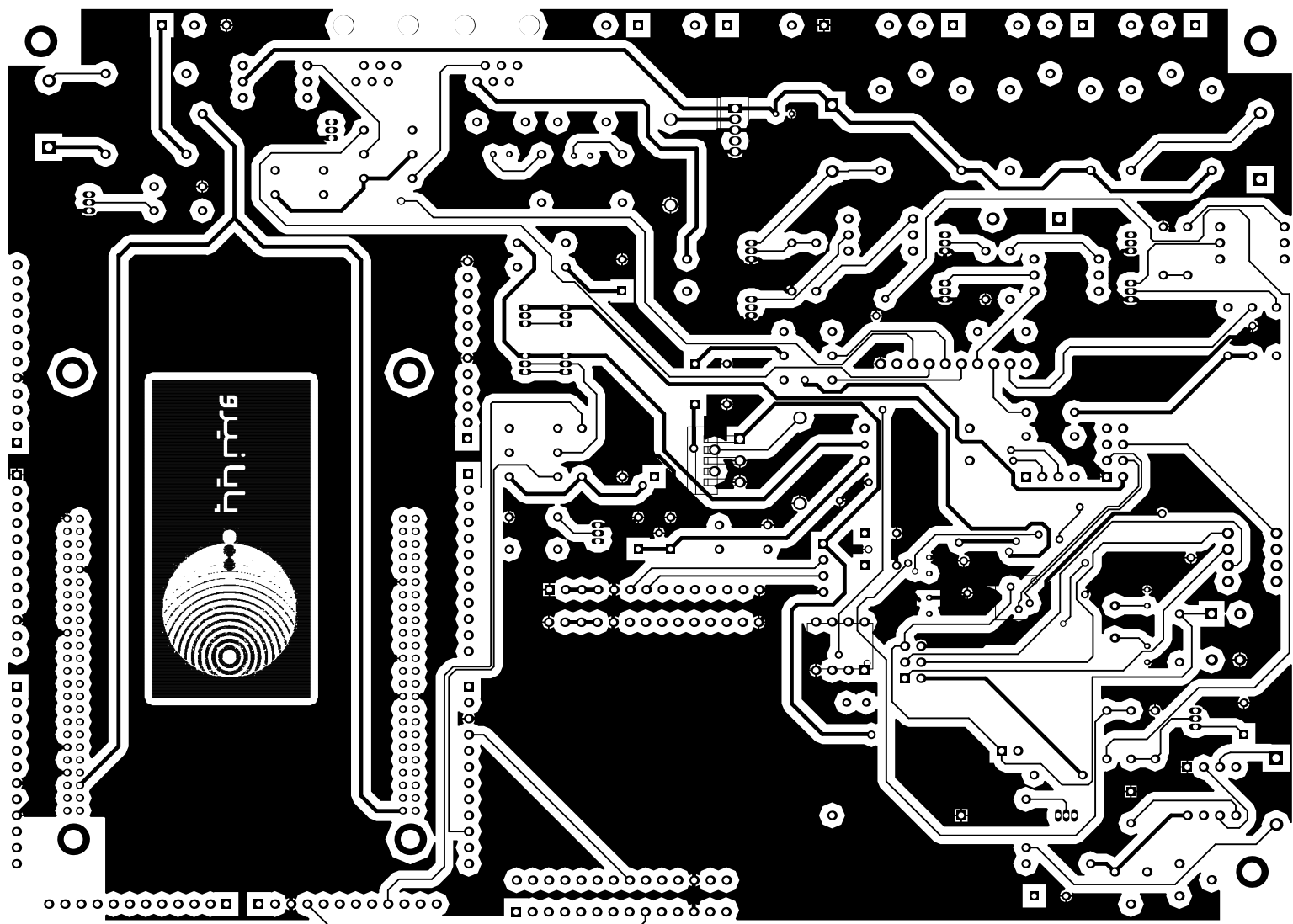
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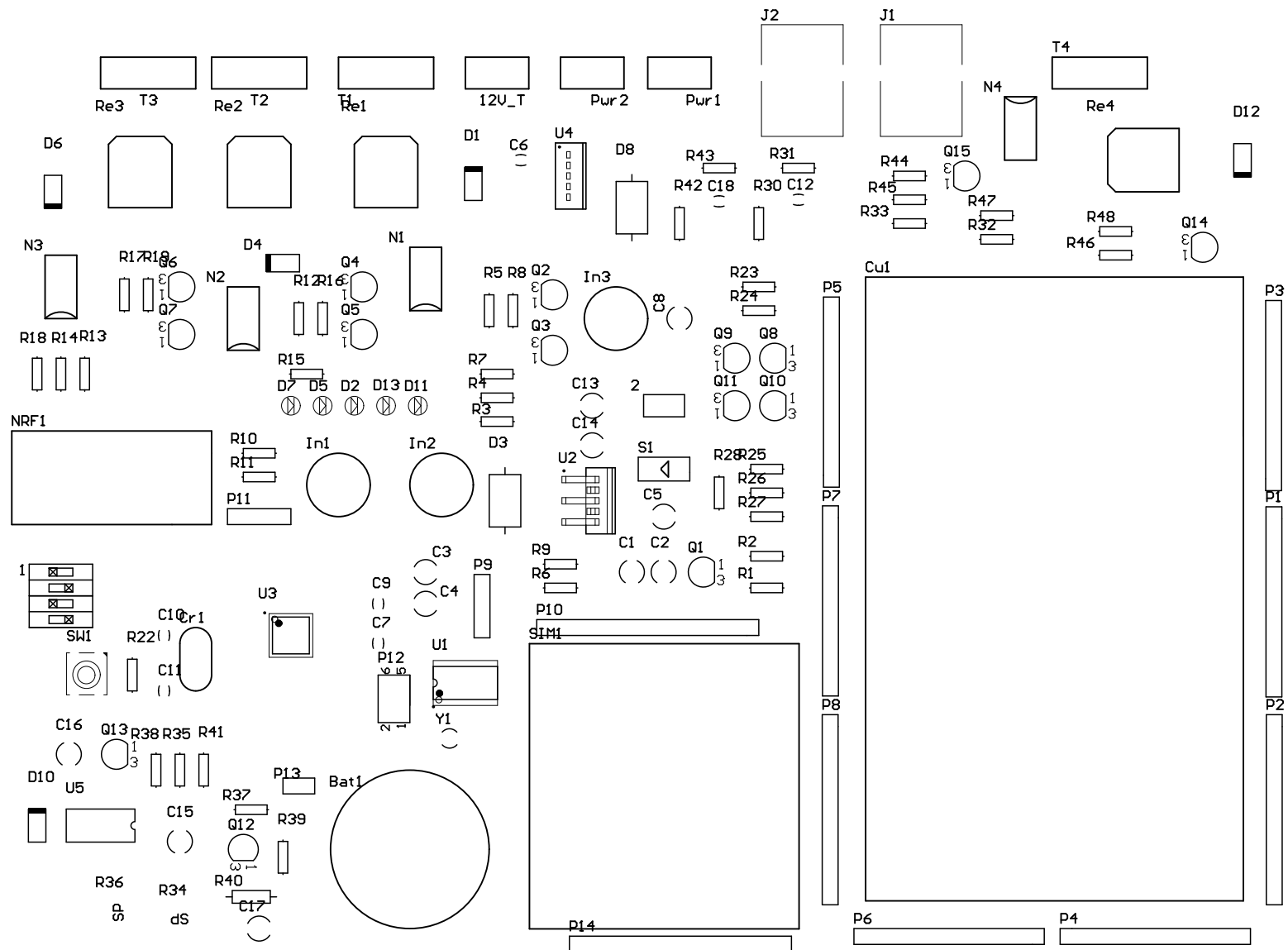
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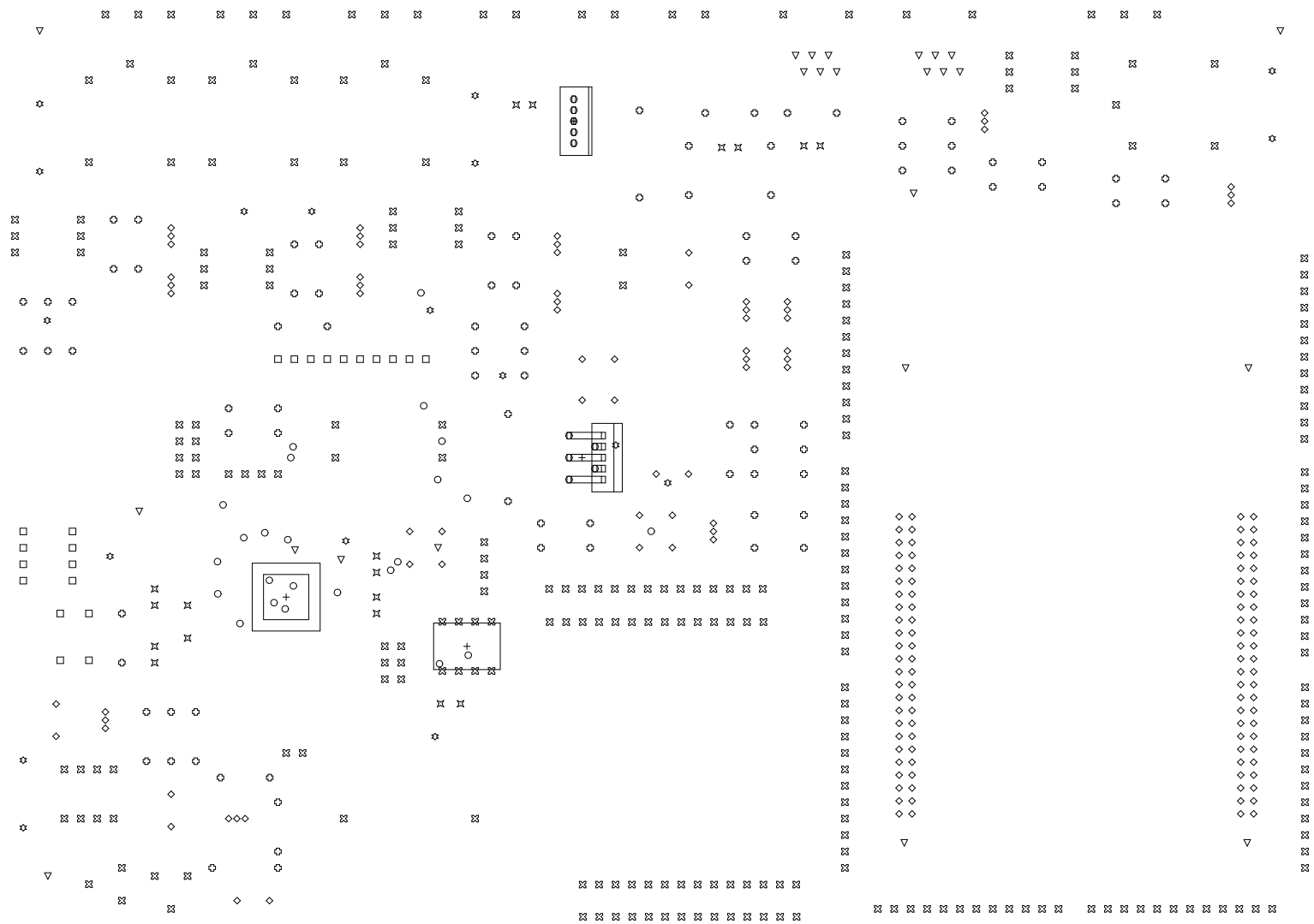
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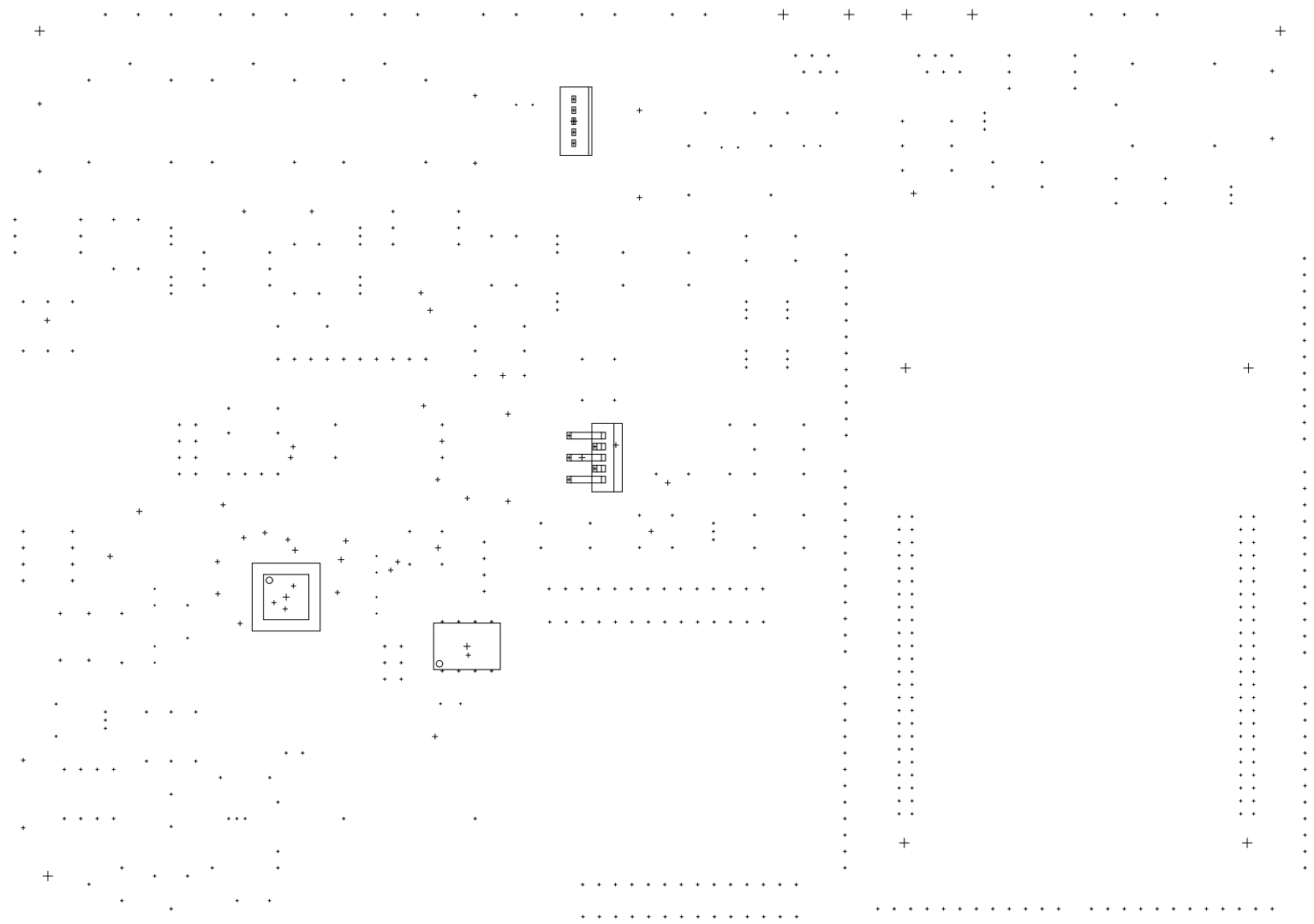
4











Comment	Description	Designator	LibRef	Quantity	Value
Res1	Resistor	R14	Res1	1	480
Res1	Resistor	R13	Res1	1	480
Res1	Resistor	R11	Res1	1	480
Res1	Resistor	R10	Res1	1	480
Res1	Resistor	R4	Res1	1	480
Res1	Resistor	R3	Res1	1	480
Cap2	Capacitor	C3	Cap2	1	330uF
Cap2	Capacitor	C1	Cap2	1	100uF
Cap2	Capacitor	C4	Cap2	1	100nF
Res1	Resistor	R19	Res1	1	33K
Res1	Resistor	R16	Res1	1	33K
Res1	Resistor	R8	Res1	1	33K
Res1	Resistor	R17	Res1	1	10K
Res1	Resistor	R12	Res1	1	10K
Res1	Resistor	R5	Res1	1	10K
Res1	Resistor	R18	Res1	1	4.7K
Res1	Resistor	R15	Res1	1	4.7K
Res1	Resistor	R7	Res1	1	4.7K
Res1	Resistor	R2	Res1	1	4.7K
Res1	Resistor	R1	Res1	1	4.7K
Res1	Resistor	R6	Res1	1	2.2K
Cap2	Capacitor	C5	Cap2	1	1uF
Cap2	Capacitor	C2	Cap2	1	1uF
Res1	Resistor	R9	Res1	1	1K
XTAL	Crystal Oscillator	Y1	XTAL	1	
LM2596T-ADJ	SIMPLE SWITCHER® Power Converter 150 KHz 3A Step-Down Voltage Regulator, 5-pin TO-220	U2	LM2596T-ADJ	1	
DS1307	64 X 8 Serial Real-Time Clock	U1	DS1307	1	
Terminal 3		T3	Terminal 3	1	
Terminal 3		T2	Terminal 3	1	
Terminal 3		T1	Terminal 3	1	
SIM900	SIM900	SIM1	SIM900	1	
SMBJ15A	SMBJ15A	S1	SMBJ15A	1	
HRS4H Relay	HRS4H Relay	Re3	HRS4H Relay	1	
HRS4H Relay	HRS4H Relay	Re2	HRS4H Relay	1	
HRS4H Relay	HRS4H Relay	Re1	HRS4H Relay	1	
BC547	NPN General-purpose Transistor	Q7	BC547	1	
BC547	NPN General-purpose Transistor	Q6	BC547	1	
BC547	NPN General-purpose Transistor	Q5	BC547	1	
BC547	NPN General-purpose Transistor	Q4	BC547	1	
BC547	NPN General-purpose Transistor	Q3	BC547	1	
BC547	NPN General-purpose Transistor	Q2	BC547	1	
BC547	NPN General-purpose Transistor	Q1	BC547	1	
Header 4	Header, 4-Pin	P9	Header 4	1	
Header 12	Header, 12-Pin	P8	Header 12	1	
Header 12	Header, 12-Pin	P7	Header 12	1	
Header 12	Header, 12-Pin	P6	Header 12	1	
Header 12	Header, 12-Pin	P5	Header 12	1	
Header 12	Header, 12-Pin	P4	Header 12	1	
Header 12	Header, 12-Pin	P3	Header 12	1	
Header 12	Header, 12-Pin	P2	Header 12	1	
Header 12	Header, 12-Pin	P1	Header 12	1	
4N25A	4N25A	N3	4N25A	1	
4N25A	4N25A	N2	4N25A	1	
4N25A	4N25A	N1	4N25A	1	
270Ohm	Inductor	In2	Inductor	1	
Inductor	100uF	In1	Inductor	1	
LED-GREEN-3MM	LED-GREEN-3MM	D7	LED-GREEN-3MM	1	
Diode 1N4007	1 Amp General Purpose Rectifier	D6	Diode 1N4007	1	
LED-GREEN-3MM	LED-GREEN-3MM	D5	LED-GREEN-3MM	1	
Diode 1N4007	1 Amp General Purpose Rectifier	D4	Diode 1N4007	1	
MBR360	Rectifier, 2-Pin Axial_Lead, Bulk Bag	D3	MBR360	1	
LED-GREEN-3MM	LED-GREEN-3MM	D2	LED-GREEN-3MM	1	
Diode 1N4007	1 Amp General Purpose Rectifier	D1	Diode 1N4007	1	
CubieBoard2	CubieBoard2	Cu1	CubieBoard2	1	
Coin Battery	Coin Battery	Bat1	Coin Battery	1	

Comment	Description	Designator	LibRef	Quantity	Value
Cap2	Capacitor	C16	Cap2	1	2200uF
Cap2	Capacitor	C14	Cap2	1	1000uF
Res1	Resistor	R43	Res1	1	220
Res1	Resistor	R31	Res1	1	220
Cap2	Capacitor	C13	Cap2	1	100uF
Cap2	Capacitor	C8	Cap2	1	100uF
Res2	Resistor	R40	Res2	1	100K
Ceramic Capacitor	Ceramic Capacitor	C11	Ceramic Capacitor	1	22pF
Ceramic Capacitor	Ceramic Capacitor	C10	Ceramic Capacitor	1	22pF
Ceramic Capacitor	Ceramic Capacitor	C6	Ceramic Capacitor	1	10uF
Res1	Resistor	R42	Res1	1	10k
Res1	Resistor	R30	Res1	1	10k
Res1	Resistor	R37	Res1	1	10K
Res1	Resistor	R28	Res1	1	10K
Res1	Resistor	R27	Res1	1	10K
Res1	Resistor	R26	Res1	1	10K
Res1	Resistor	R25	Res1	1	10K
Res1	Resistor	R24	Res1	1	10K
Res1	Resistor	R23	Res1	1	10K
Res1	Resistor	R22	Res1	1	10K
Res1	Resistor	R39	Res1	1	4.7K
Res1	Resistor	R38	Res1	1	4.7K
Res1	Resistor	R35	Res1	1	4.7K
Res1	Resistor	R32	Res1	1	4.7K
Cap2	Capacitor	C17	Cap2	1	1uF
Cap2	Capacitor	C15	Cap2	1	1uF
Res1	Resistor	R41	Res1	1	1k
Res1	Resistor	R33	Res1	1	1K
Ceramic Capacitor	Ceramic Capacitor	C18	Ceramic Capacitor	1	0.1uF
Ceramic Capacitor	Ceramic Capacitor	C12	Ceramic Capacitor	1	0.1uF
Ceramic Capacitor	Ceramic Capacitor	C9	Ceramic Capacitor	1	0.1uF
Ceramic Capacitor	Ceramic Capacitor	C7	Ceramic Capacitor	1	0.1uF
NE555P	Precision Timer	U5	NE555P	1	
LM2576HVT-5.0	SIMPLE SWITCHER® 3A Step-Down Voltage Regulator, 5-pin TO-220	U4	LM2576HVT-5.0	1	
ATmega328P-AU	8-bit AVR Microcontroller, 32KB Flash, 1KB EEPROM, 2KB SRAM, 32-pin TQFP, Industrial Grade (-40°C to 85°C)	U3	ATmega328P-AU	1	
SW-PB-YELLOW	SW-D6-R / SW-DS-S / SW-14X14 / SW-7X7	SW1	SW-PB-YELLOW	1	
Small Potentiometer	Small Potentiometer	R36	Potentiometer	1	
Small Potentiometer	Small Potentiometer	R34	Potentiometer	1	
BC547	NPN General-purpose Transistor	Q13	BC547	1	
BC557	PNP General-purpose Transistor	Q12	BC557	1	
BC547	NPN General-purpose Transistor	Q11	BC547	1	
BC547	NPN General-purpose Transistor	Q10	BC547	1	
BC547	NPN General-purpose Transistor	Q9	BC547	1	
BC547	NPN General-purpose Transistor	Q8	BC547	1	
Power Terminal 2	Power Terminal 2	Pwr2	Power Terminal 2	1	
Power Terminal 2	Power Terminal 2	Pwr1	Power Terminal 2	1	
Jumper	Header, 2-Pin	P13	Header 2	1	
Header 3X2	Header, 3-Pin, Dual row	P12	Header 3X2	1	
Header 4	Header, 4-Pin	P11	Header 4	1	
NRF24	NRF24	NRF1	NRF24	1	
RJ11	GENERIC RJ11 6 PIN CONNECTOR	J2	RJ11	1	
RJ11	GENERIC RJ11 6 PIN CONNECTOR	J1	RJ11	1	
Inductor	Inductor	In3	Inductor	1	
LED-GREEN-3MM	LED-GREEN-3MM	D11	LED-GREEN-3MM	1	
Diode 1N4007	1 Amp General Purpose Rectifier	D10	Diode 1N4007	1	
1N5822	Rectifier, 2-Pin Axial, Lead, Bulk Bag	D8	1N5822	1	
Crystal	Crystal	Cr1	Crystal	1	
SW-DIP8	4 POLE DIP SWITCH	1	SW-DIP8	1	
AMS1117-3.3	AMS1117-3.3	2	AMS1117-3.3	1	
Power Terminal 2	Power Terminal 2	12V_T	Power Terminal 2	1	

Comment	Description	Designator	LibRef	Value
Res1	Resistor	R45	Res1	480
Res1	Resistor	R44	Res1	480
Res1	Resistor	R48	Res1	33K
Res1	Resistor	R46	Res1	10K
Res1	Resistor	R47	Res1	4.7K
Terminal 3		T4	Terminal 3	
HRS4H Relay	HRS4H Relay	Re4	HRS4H Relay	
BC547	NPN General-purpose Transistor	Q15	BC547	
BC547	NPN General-purpose Transistor	Q14	BC547	
Header 14	Header, 14-Pin	P14	Header 14	
Header 14	Header, 14-Pin	P10	Header 14	
4N25A	4N25A	N4	4N25A	
LED-GREEN-3MM	LED-GREEN-3MM	D13	LED-GREEN-3MM	
Diode 1N4007	1 Amp General Purp	D12	Diode 1N4007	