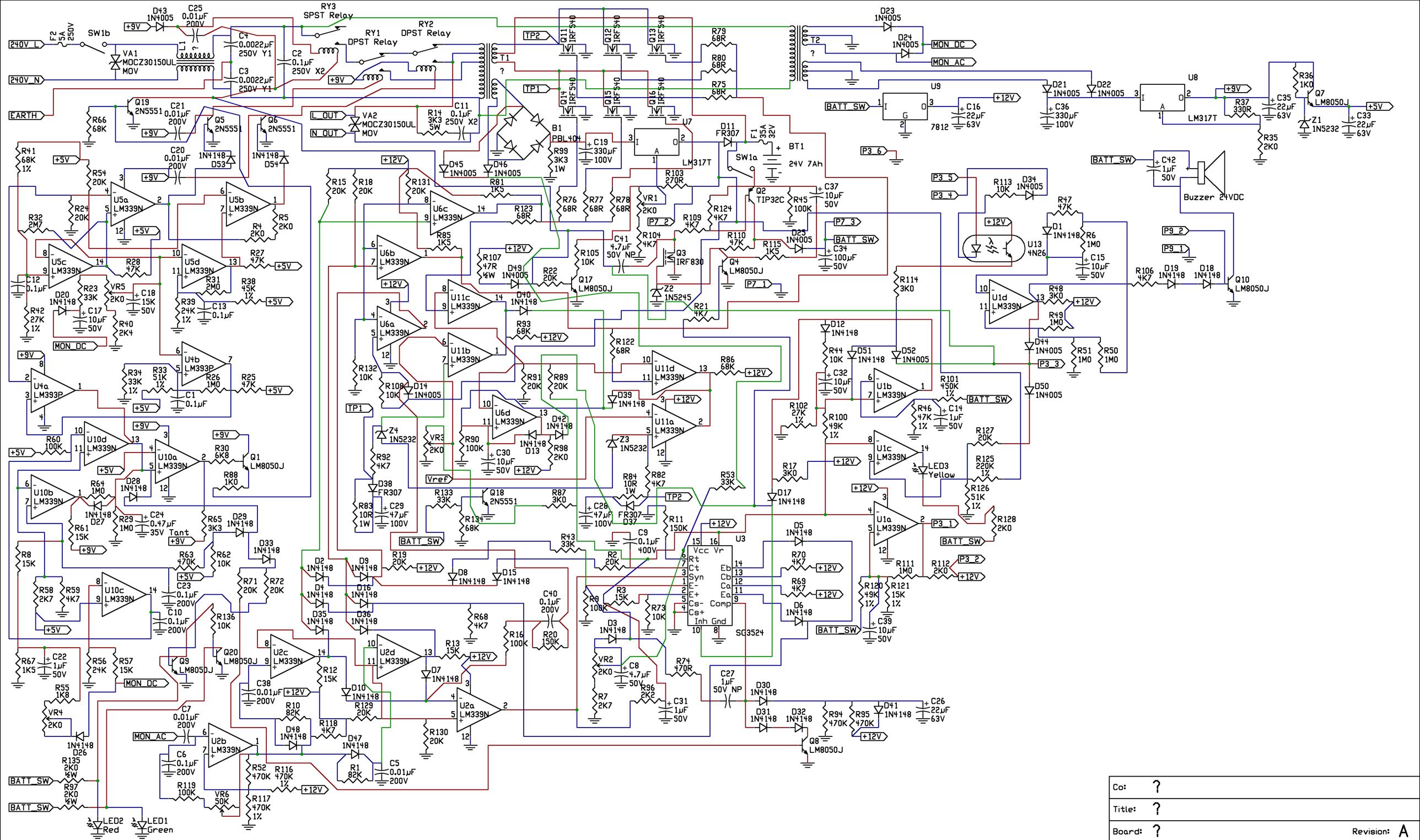
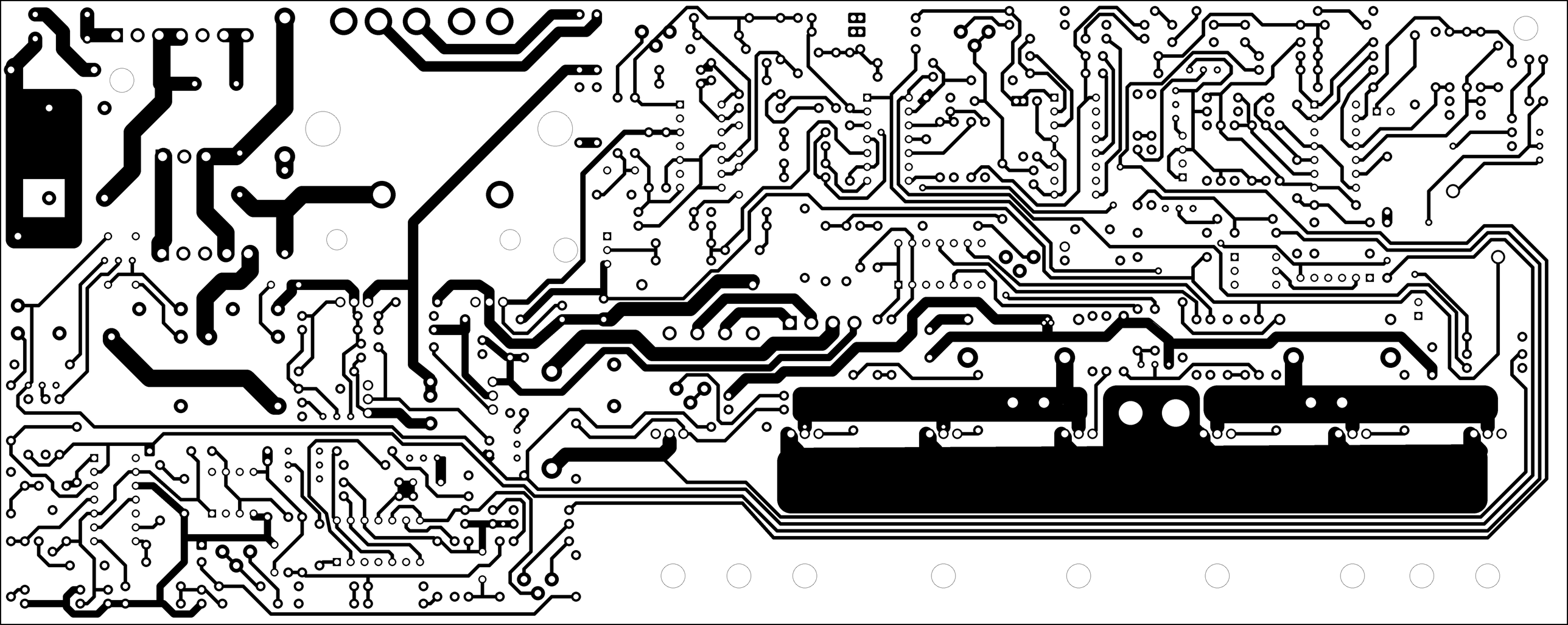
WWW.ESQUEMASELETRICOS.COM.BR

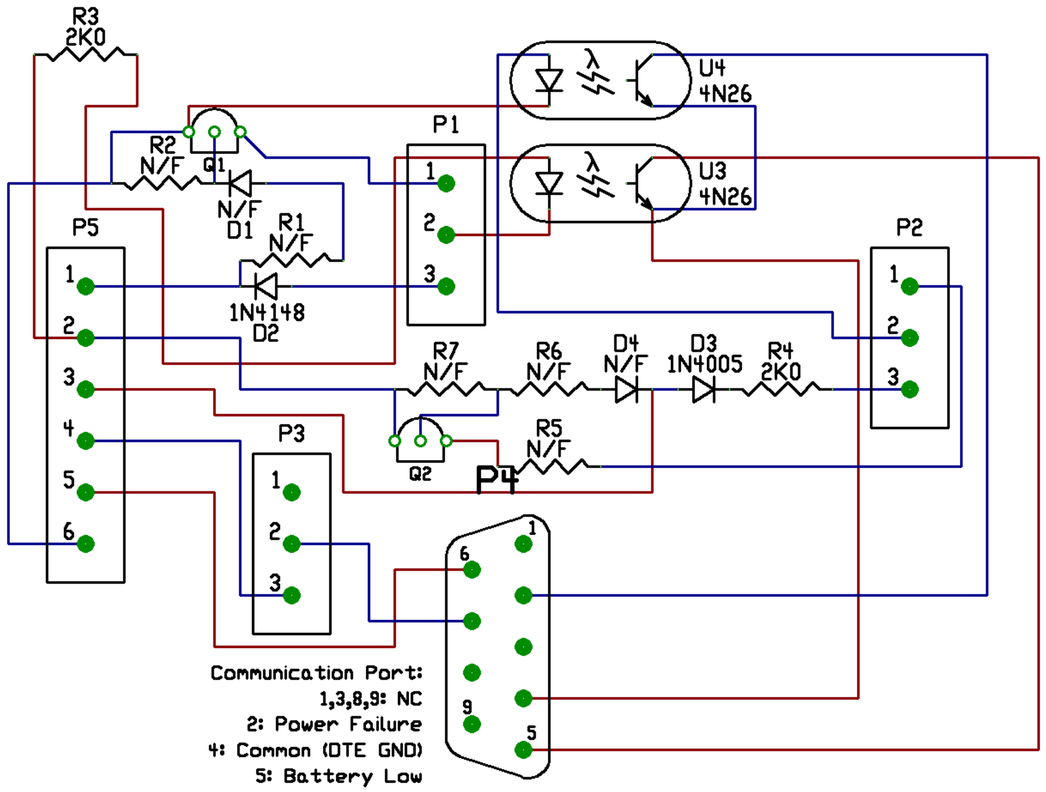
AGENDA ELETRONICA; CALCULADORA; ARCADE; ÁUDIO (DOMESTICO/AUTOMOTIVO); BINA; CHAVEADOR DE VIDEO; CAIXA REGISTRADORA E IMPRESSORA; CIRCUITO FECHADO; DVD; ELETRODOMÉSTICOS; FAX; FERRAMENTAS; FILMADORA; FONTES; FAIXA DO CIDADÃO (PX); GAMES; GMS; HANDY TERMINAL; IMPRESSORAS; LOCOMOTIVAS; LUZ DE EMERGENCIA; MAQ.FOTOGRAFICA DIGITAL; MICRO ONDAS; MOBILE COMMUNICATOR; MONITORES; MULTI-PROJETOR; MULTITESTES; NOBREAK´S; NOTEBOOK; OSCILOSCOPIO; PERSONAL COMPUTER/PALM; PROJETOR; RADIO RELOGIO; RECEPTOR DE SATELITE; SECRETARIA ELETRONICA; TECLADO / ORGÃO; TELEFONE; TRANSMISSOR; TV; VCR

CONTATO: MARCOS@ESQUEMASELETRICOS.COM.BR



Co: ?	
Title: ?	
Board: ?	Revision: A
Author: ?	Size: B
Date: ?	Sheet 1 of 1





Communication Port:
1,3,8,9: NC
2: Power Failure
4: Common (DTE GND)
5: Battery Low
6: Shutdown (+12V Active)
7: Shutdown Return (DTE GND)

P1:
1-2: Contacts OPEN on Power Failure
2-3: Contacts CLOSE on Power Failure#

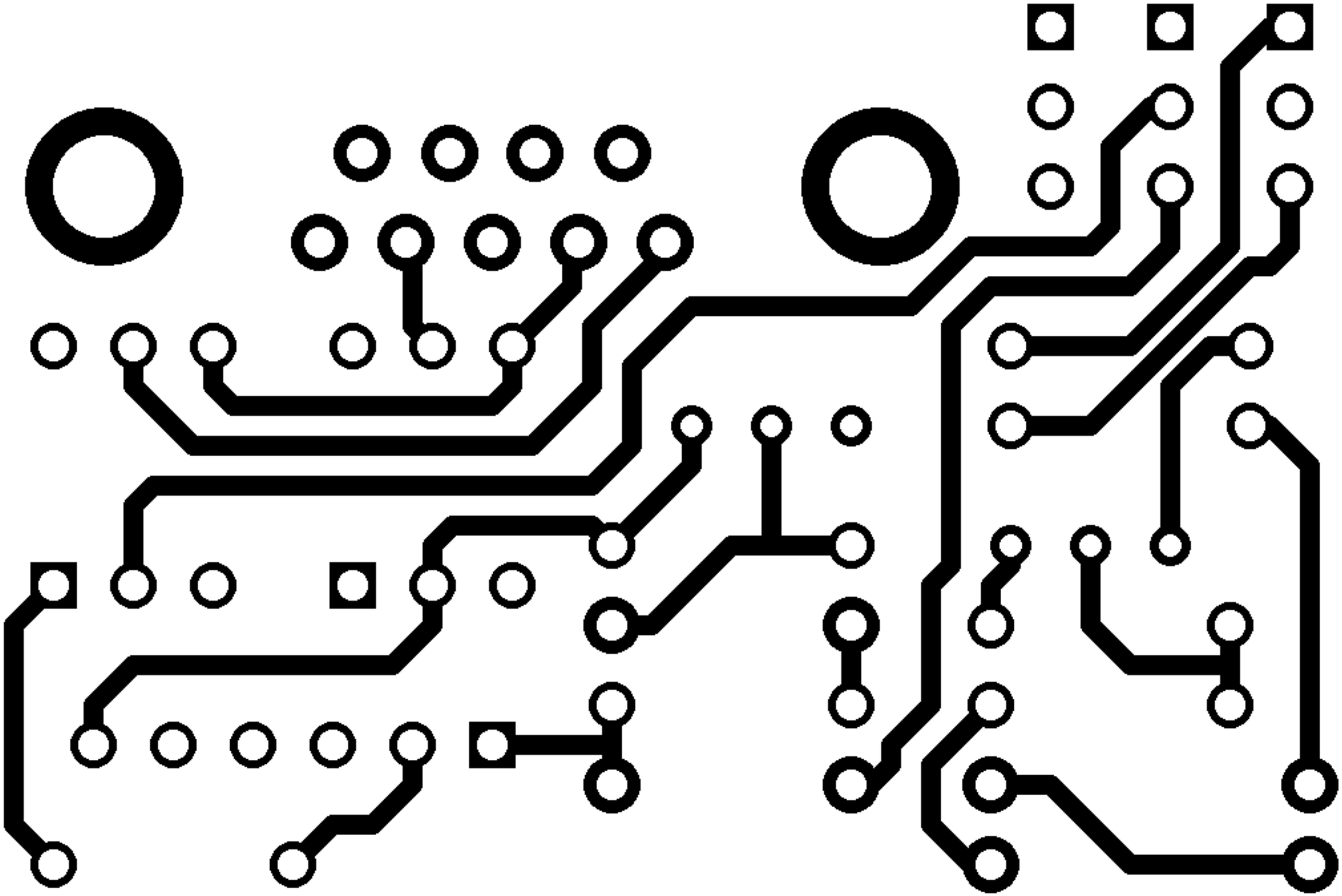
P2:
1-2: Contacts OPEN on Low Battery
2-3: Contacts CLOSE on Low Battery#

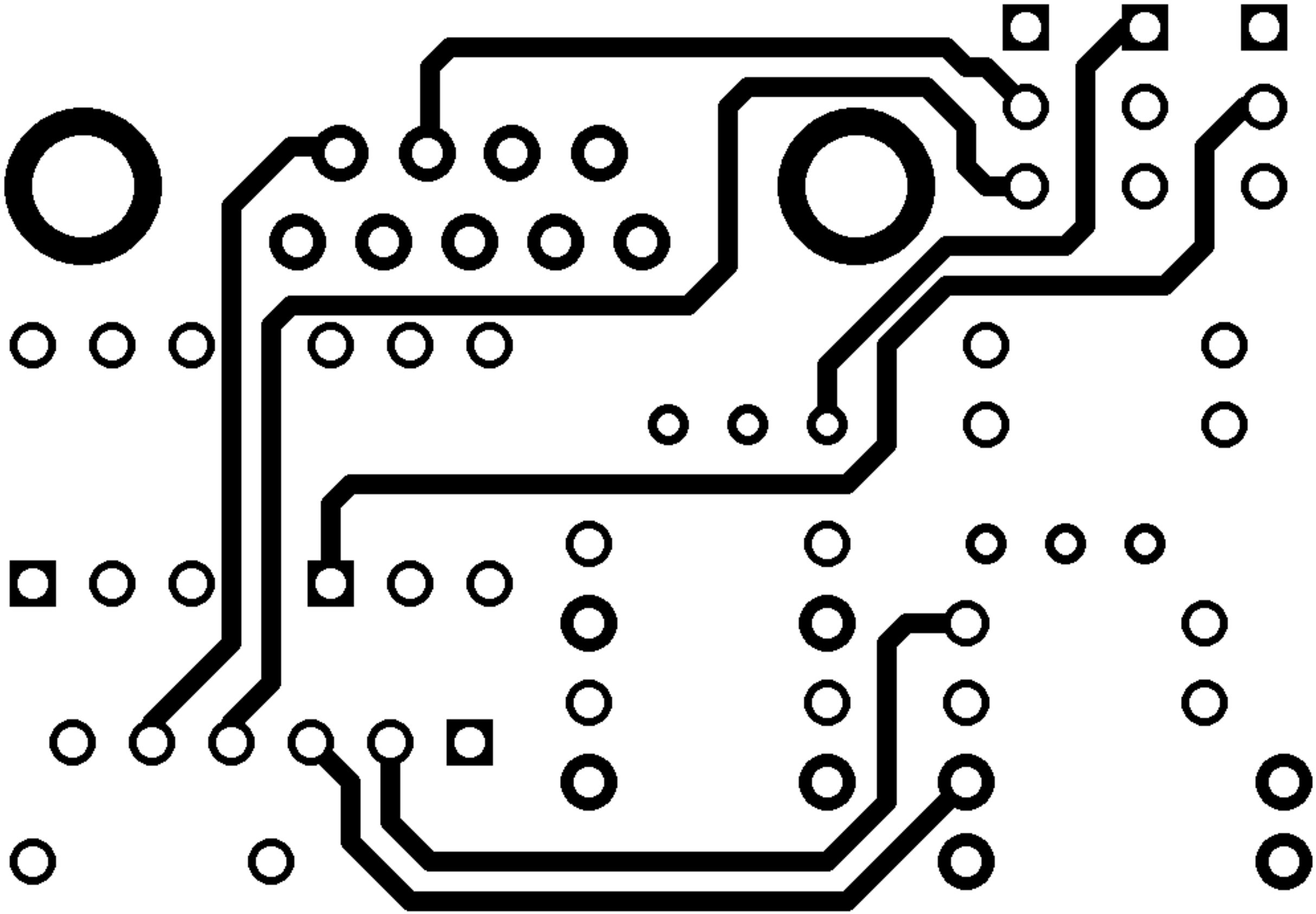
P3:
1-2: Disable Remote Shutdown
2-3: Enable Remote Shutdown#

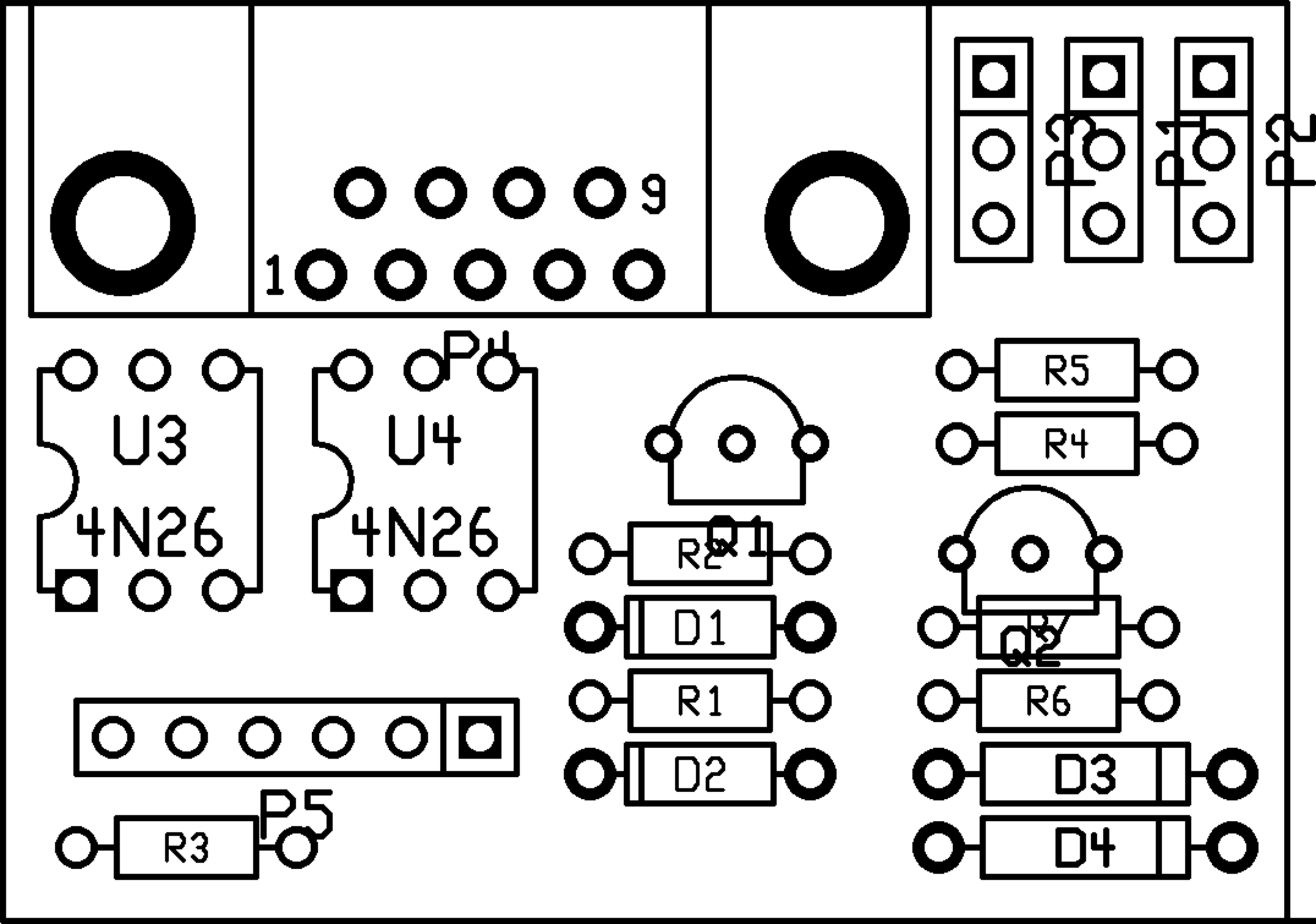
Default setting.

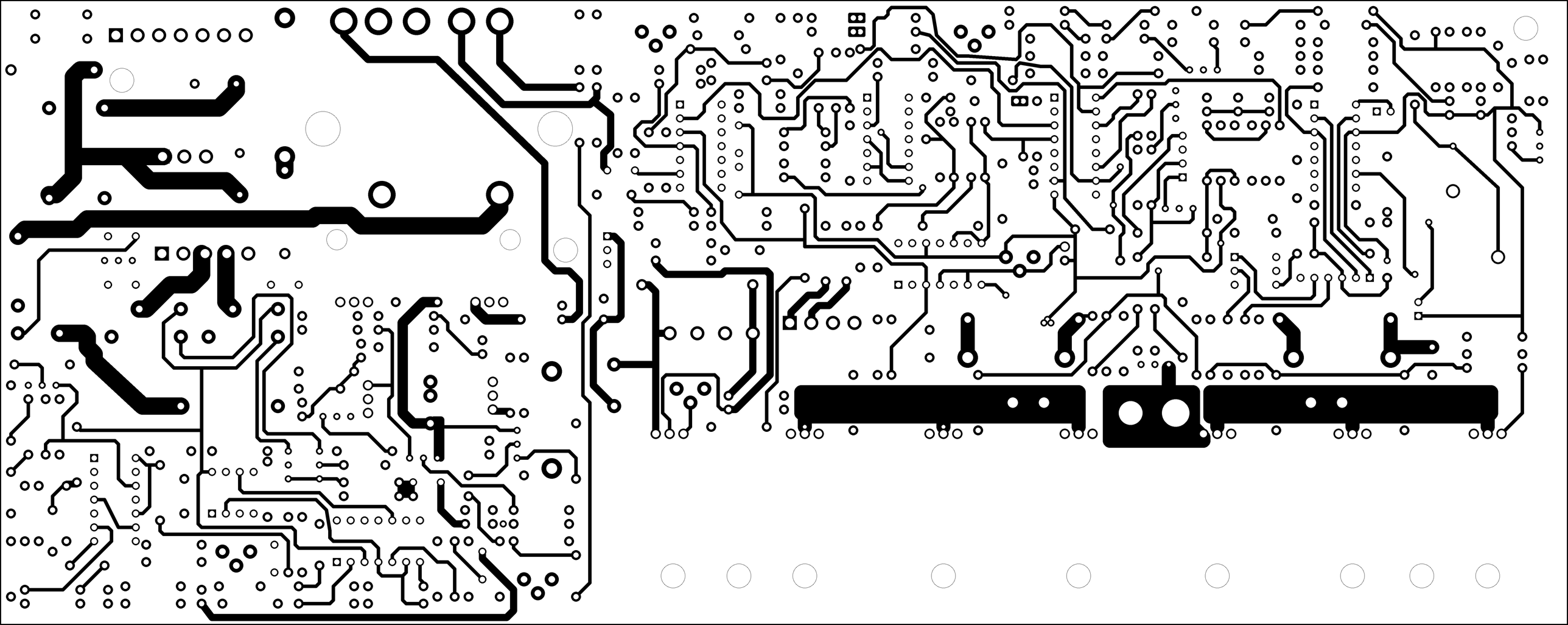
For positions 1-2 on P1 and P2 to function, components not fitted need to be fitted.

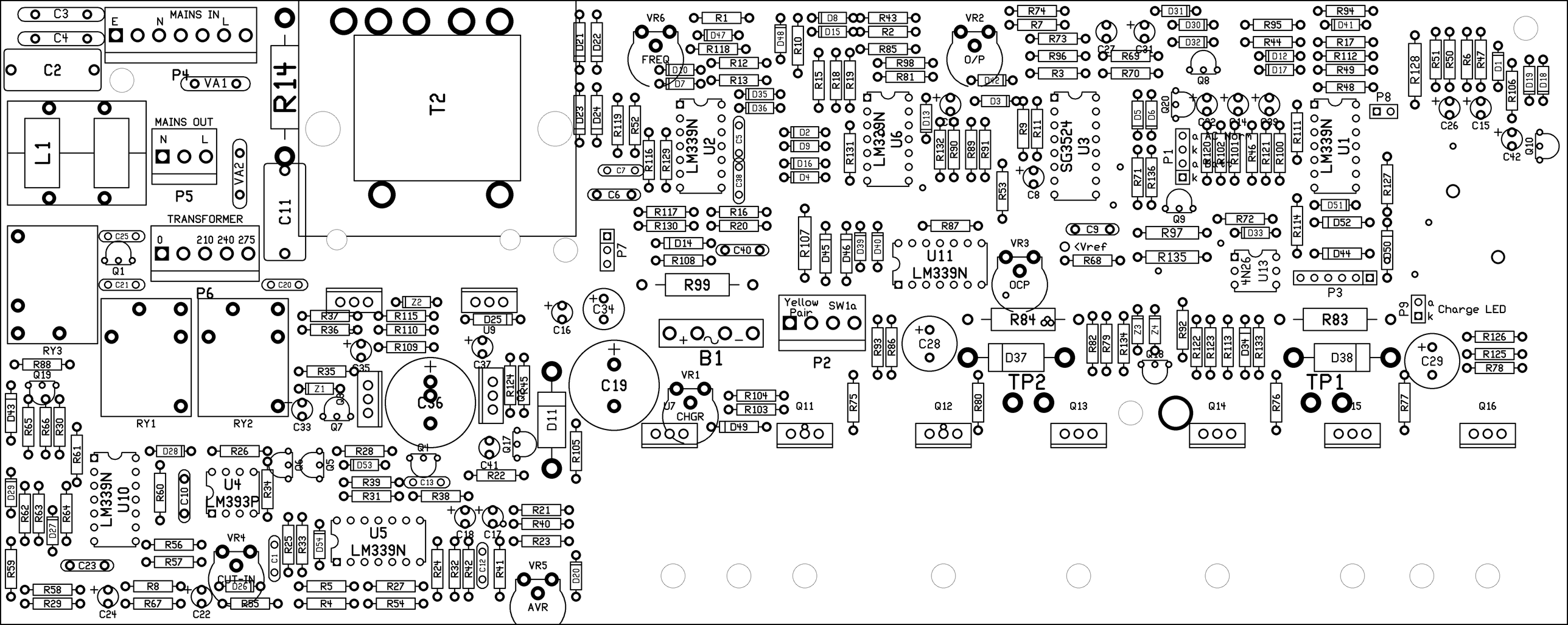
Co: ?	
Title: ?	
Board: ?	Revision: A
Author: ?	Size: A
Date: ?	Sheet 1 of 1






9
1
P2
U3
4N26
P4
U4
4N26
R5
R4
R2
Q1
D1
Q2
R1
R6
D2
D3
D4
P5
R3




MAINS IN
E
N
L
P4
VA1
C3
C4
C2
L1
MAINS OUT
N
L
P5
VA2
TRANSFORMER
0
210 240 275
P6
R14
C11
T2
VR6
FREQ
VR2
O/P
LM339N
U2
U6
U1
SG3524
U3
P1
P8
P7
R99
B1
Yellow Pair
SW1a
P2
U11
LM339N
VR3
OCP
<Vref
4N26
U13
P3
P9
Charge LED
R84
R83
D37
D38
TP2
TP1
C19
C36
C34
C16
C28
C29
VR1
CHGR
U7
RY1
RY2
RY3
U10
LM339N
U4
LM393P
U5
LM339N
VR4
CUT-IN
VR5
AVR

Component List for Bytepro UPS-800

Code for Component Locations:

Blue Not fitted.

Red Safety critical – MUST be replaced with same type and ratings.

Capacitors		C42	1uF 50V Electrolytic
C1	0.1uF Disc Ceramic	**Resistors**	
C2	**0.1uF 250V X2**	R1	82K 5% ¼W Carbon Film
C3	**0.0022uF 250V Y1**	R2	20K 5% ¼W Carbon Film
C4	**0.0022uF 250V Y1**	R3	15K 5% ¼W Carbon Film
C5	0.01uF 200V Polyester	R4	2K0 5% ¼W Carbon Film
C6	0.01uF 200V Polyester	R5	2K0 5% ¼W Carbon Film
C7	0.01uF 200V Polyester	R6	1M0 5% ¼W Carbon Film
C8	4.7uF 50V Electrolytic	R7	2K7 5% ¼W Carbon Film
C9	0.1uF 200V Polyester	R8	15K 5% ¼W Carbon Film
C10	0.1uF 200V Polyester	R9	100K 5% ¼W Carbon Film
C11	**0.1uF 250V X2**	R10	82K 5% ¼W Carbon Film
C12	0.1uF Disc Ceramic	R11	150K 5% ¼W Carbon Film
C13	0.1uF Disc Ceramic	R12	15K 5% ¼W Carbon Film
C14	1uF 50V Electrolytic	R13	15K 5% ¼W Carbon Film
C15	10uF 50V Electrolytic	R14	3K3 5% 5W Wirewound
C16	22uF 63V Electrolytic	R15	20K 5% ¼W Carbon Film
C17	10uF 50V Electrolytic	R16	100K 5% ¼W Carbon Film
C18	1uF 50V Electrolytic	R17	3K0 5% ¼W Carbon Film
C19	330uF 100V Electrolytic	R18	20K 5% ¼W Carbon Film
C20	0.01uF 200V Polyester	R19	20K 5% ¼W Carbon Film
C21	0.01uF 200V Polyester	R20	150K 5% ¼W Carbon Film
C22	1uF 50V Electrolytic	R21	4K7 5% ¼W Carbon Film
C23	0.1uF 200V Polyester	R22	20K 5% ¼W Carbon Film
C24	0.47uF 35V Tantalum	R23	33K 5% ¼W Carbon Film
C25	0.01uF 200V Polyester	R24	20K 5% ¼W Carbon Film
C26	22uF 63V Electrolytic	R25	47K 5% ¼W Carbon Film
C27	1uF 50V Bipolar Electrolytic	R26	1M0 5% ¼W Carbon Film
C28	47uF 100V Electrolytic	R27	47K 5% ¼W Carbon Film
C29	47uF 100V Electrolytic	R28	47K 5% ¼W Carbon Film
C30	10uF 50V Electrolytic	R29	2M0 5% ¼W Carbon Film
C31	1uF 50V Electrolytic	R30	6K8 5% ¼W Carbon Film

C32	10uF 50V Electrolytic	R31	2M0 5% ¼W Carbon Film
C33	22uF 63V Electrolytic	R32	2M7 5% ¼W Carbon Film
C34	100uF 50V Electrolytic	R33	51K 1% ¼W Metal Film
C35	22uF 63V Electrolytic	R34	33K 1% ¼W Metal Film
C36	330uF 100V Electrolytic	R35	2K0 5% ¼W Carbon Film
C37	10uF 50V Electrolytic	R36	1K0 5% ¼W Carbon Film
C38	0.01uF 200V Polyester	R37	330R 5% ¼W Carbon Film
C39	10uF 50V Electrolytic	R38	45K 1% ¼W Metal Film
C40	0.1uF 200V Polyester	R39	24K 1% ¼W Metal Film
C41	1uF 50V Bipolar Electrolytic	R40	2K4 5% ¼W Carbon Film
R41	68K 1% ¼W Metal Film	R89	20K 5% ¼W Carbon Film
R42	27K 1% ¼W Metal Film	R90	100K 5% ¼W Carbon Film
R43	33K 5% ¼W Carbon Film	R91	20K 5% ¼W Carbon Film
R44	10K 5% ¼W Carbon Film	R92	4K7 5% ¼W Carbon Film
R45	100K 5% ¼W Carbon Film	R93	68K 5% ¼W Carbon Film
R46	47K 1% ¼W Metal Film	R94	470K 5% ¼W Carbon Film
R47	47K 5% ¼W Carbon Film	R95	470K 5% ¼W Carbon Film
R48	3K0 5% ¼W Carbon Film	R96	2K2 5% ¼W Carbon Film
R49	1M0 5% ¼W Carbon Film	R97	2K0 5% ½W Carbon Film
R50	1M0 5% ¼W Carbon Film	R98	2K0 5% ¼W Carbon Film
R51	1M0 5% ¼W Carbon Film	R99	3K3 5% 1W Carbon Film
R52	470K 5% ¼W Carbon Film	R100	49K 1% ¼W Metal Film
R53	33K 5% ¼W Carbon Film	R101	450K 1% ¼W Metal Film
R54	20K 5% ¼W Carbon Film	R102	27K 1% ¼W Metal Film
R55	1K8 5% ¼W Carbon Film	R103	270R 5% ¼W Carbon Film
R56	24K 5% ¼W Carbon Film	R104	4K7 5% ¼W Carbon Film
R57	15K 5% ¼W Carbon Film	R105	10K 5% ¼W Carbon Film
R58	2K7 5% ¼W Carbon Film	R106	4K7 5% ¼W Carbon Film
R59	4K7 5% ¼W Carbon Film	R107	47R 5% ½W Carbon Film
R60	100K 5% ¼W Carbon Film	R108	10K 5% ¼W Carbon Film
R61	15K 5% ¼W Carbon Film	R109	4K7 5% ¼W Carbon Film
R62	10K 5% ¼W Carbon Film	R110	4K7 5% VW Carbon Film
R63	470K 5% ¼W Carbon Film	R111	1M0 5% ¼W Carbon Film
R64	1M0 5% ¼W Carbon Film	R112	2K0 5% ¼W Carbon Film
R65	3K3 5% ¼W Carbon Film	R113	1K0 5% ¼W Carbon Film
R66	68K 5% ¼W Carbon Film	R114	3K0 5% ¼W Carbon Film
R67	1K5 5% ¼W Carbon Film	R115	1K5 5% ¼W Carbon Film
R68	4K7 5% ¼W Carbon Film	R116	470K 1% ¼W Metal Film

R69	4K7 5% ¼W Carbon Film	R117	470K 1% ¼W Metal Film
R70	4K7 5% ¼W Carbon Film	R118	4K7 5% ¼W Carbon Film
R71	20K 5% ¼W Carbon Film	R119	100K 5% ¼W Carbon Film
R72	20K 5% ¼W Carbon Film	R120	49K 1% ¼W Metal Film
R73	10K 5% ¼W Carbon Film	R121	15K 1% ¼W Metal Film
R74	470R 5% ¼W Carbon Film	R122	68R 5% ¼W Carbon Film
R75	68R 5% ¼W Carbon Film	R123	68R 5% ¼W Carbon Film
R76	68R 5% ¼W Carbon Film	R124	4K7 5% ¼W Carbon Film
R77	68R 5% ¼W Carbon Film	R125	220K 1% ¼W Metal Film
R78	68R 5% ¼W Carbon Film	R126	51K 1% ¼W Metal Film
R79	68R 5% ¼W Carbon Film	R127	20K 5% ¼W Carbon Film
R80	68R 5% ¼W Carbon Film	R128	2K0 5% ½W Carbon Film
R81	1K5 5% ¼W Carbon Film	R129	20K 5% ¼W Carbon Film
R82	4K7 5% ¼W Carbon Film	R130	20K 5% ¼W Carbon Film
R83	10R 5% 1W Carbon Film	R131	20K 5% ¼W Carbon Film
R84	10R 5% 1W Carbon Film	R132	10K 5% ¼W Carbon Film
R85	1K5 5% ¼W Carbon Film	R133	33K 5% ¼W Carbon Film
R86	68K 5% ¼W Carbon Film	R134	68K 5% ¼W Carbon Film
R87	3K0 5% ¼W Carbon Film	R135	2K0 5% ½W Carbon Film
R88	1K0 5% ¼W Carbon Film	R136	10K 5% ¼W Carbon Film
		D26	1N4148
Transistors		D27	1N4148
Q1	NPN BIPOLAR LM8050J	D28	1N4148
Q2	PNP BIPOLAR TIP32C	D29	1N4148
Q3	N-CH MOSFET IRF830	D30	1N4148
Q4	NPN BIPOLAR LM8050J	D31	1N4148
Q5	NPN BIPOLAR 2N5551	D32	1N4148
Q6	NPN BIPOLAR 2N5551	D33	1N4148
Q7	NPN BIPOLAR LM8050J	D34	1N4005
Q8	NPN BIPOLAR LM8050J	D35	1N4148
Q9	NPN BIPOLAR LM8050J	D36	1N4148
Q10	NPN BIPOLAR LM8050J	D37	FR307
Q11	N-CH MOSFET IRF540	D38	FR307
Q12	N-CH MOSFET IRF540	D39	1N4148
Q13	N-CH MOSFET IRF540	D40	1N4148
Q14	N-CH MOSFET IRF540	D41	1N4148
Q15	N-CH MOSFET IRF540	D42	1N4148
Q16	N-CH MOSFET IRF540	D43	1N4005

Q17	NPN BIPOLAR LM8050J	D44	1N4005
Q18	NPN BIPOLAR 2N5551	D45	1N4005
Q19	NPN BIPOLAR 2N5551	D46	1N4005
Q20	NPN BIPOLAR LM8050J	D47	1N4148
Diodes		D48	1N4148
D1	1N4148	D49	1N4005
D2	1N4148	D50	1N4005
D3	1N4148	D51	1N4148
D4	1N4148	D52	1N4005
D5	1N4148	D53	1N4148
D6	1N4148	D54	1N4148
D7	1N4148	B1	Bridge Rectifier PBL404
D8	1N4148	Z1	1N5232
D9	1N4148	Z2	1N5245
D10	1N4148	Z3	1N5232
D11	FR307	Z4	1N5232
D12	1N4148	**Integrated Circuits**	
D13	1N4148	U1	LM339N Quad Op-Amp
D14	1N4005	U2	LM339N Quad Op-Amp
D15	1N4148	U3	SG3524 SMPS Controller
D16	1N4148	U4	LM393P Dual Op-Amp
D17	1N4148	U5	LM339N Quad Op-Amp
D18	1N4148	U6	LM339N Quad Op-Amp
D19	1N4148	U7	LM317T Voltage Regulator
D20	1N4148	U8	LM317T Voltage Regulator
D21	1N4005	U9	7812 Voltage Regulator
D22	1N4005	U10	LM339N Quad Op-Amp
D23	1N4005	U11	LM339N Quad Op-Amp
D24	1N4005	U12	Unknown
D25	1N4005	U13	**4N26 Optocoupler**
Transformers & Inductors		**NOTES:**	
T1	Power Output		
T2	Battery Charger	Transformer T1 (voltages are AC):	
L1	Common Mode Choke	32.8VAC 50Hz pure sinewave on 16 (Brown) and 16 (Black), no output load.	
Miscellaneous Components		16.3V either side of 16-0-16 winding, from centre tap (0, Red)	
BZ1	Buzzer 24VDC	29.5V at pair of Yellow wires	
F1	**35A 32V Fast**		
F2	**5A 250V Fast**		

SW1	**240VAC 12A SPDT Alternate**
RY1	**9V Coil 250VAC 10A DPST NO**
RY2	**9V Coil 250VAC 5A DPST NO**
RY3	**9V Coil 250VAC 5A SPST NO**
VA1	**MOCZ30150UL**
VA2	**MOCZ30150UL**
VR1	2K0 Trimpot
VR2	2K0 Trimpot
VR3	2K0 Trimpot
VR4	2K0 Trimpot
VR5	2K0 Trimpot
VR6	50K Trimpot
LED1	5mm Rectangular LED Green
LED2	5mm Rectangular LED Red
LED3	5mm Rectangular LED Yellow
COMMUNICATION PORT PCB	
U1	Unknown
U2	Unknown
U3	**4N26 Optocoupler**
U4	**4N26 Optocoupler**
Q1	Unknown
Q2	Unknown
D1	Unknown
D2	Unknown
D3	1N4005
D4	Unknown
R1	Unknown
R2	Unknown
R3	2K0 5% 1/8W Carbon Film
R4	2K0 5% 1/8W Carbon Film
R5	Unknown
R6	Unknown
R7	Unknown
P1	
P2	
P3	
P4	DB9F Right-angle Socket

Yellow-Orange-Green-Blue Winding:
205V at Yellow-Orange
243V at Yellow-Green
275V at Yellow-Blue
37.2V at Orange-Green
69.2V at Orange-Blue
31.6V at Green-Blue

Transformer T2 (voltages are AC):
15.6V at Pin 1-GND
15.6V at Pin 2-GND
21.0V at Pin 3-GND
21.0V at Pin 4-GND

GND is taken at the bare PCB area where a lone thick black wire is.