

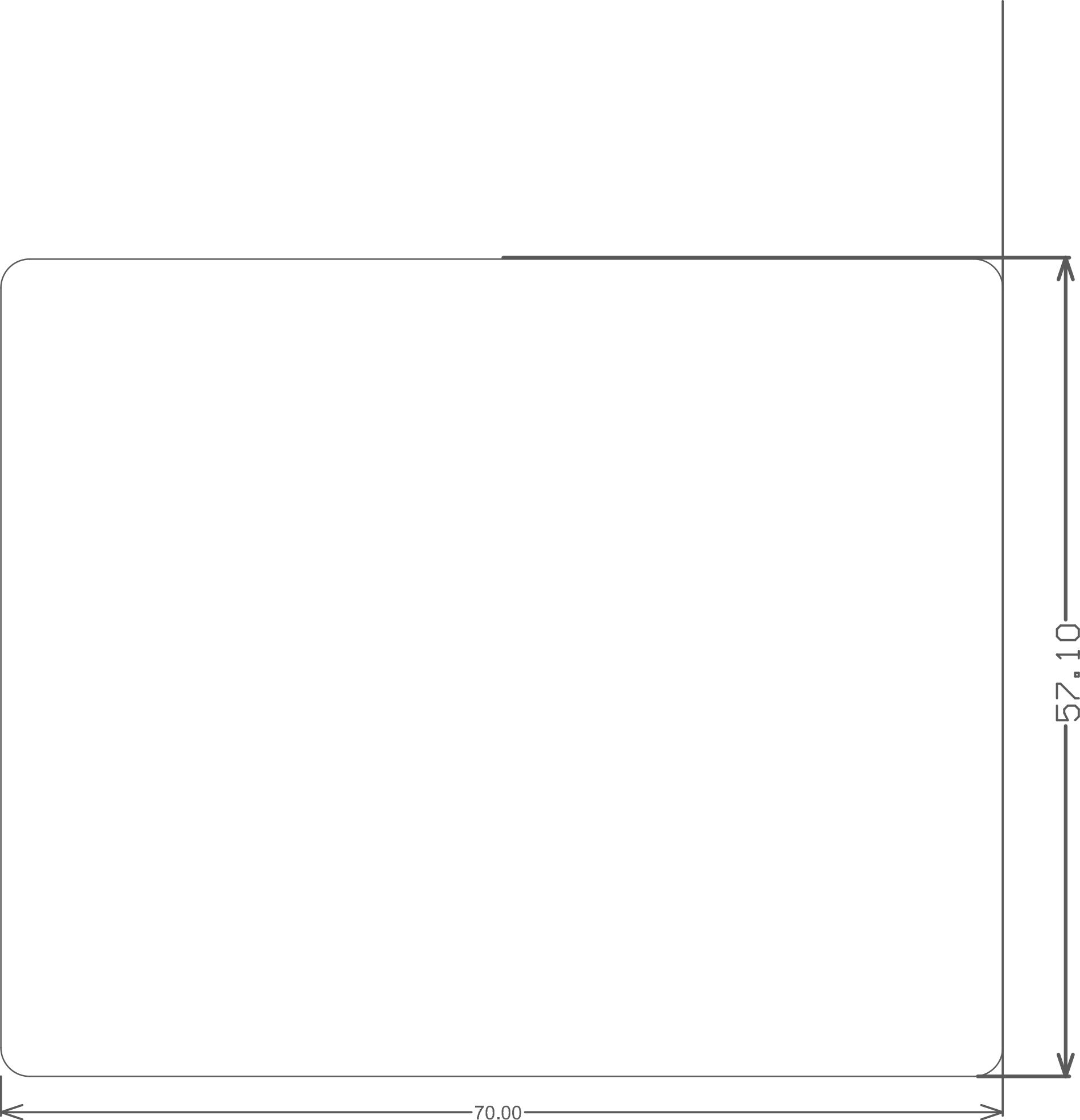
Assembly instructions

Production data information:

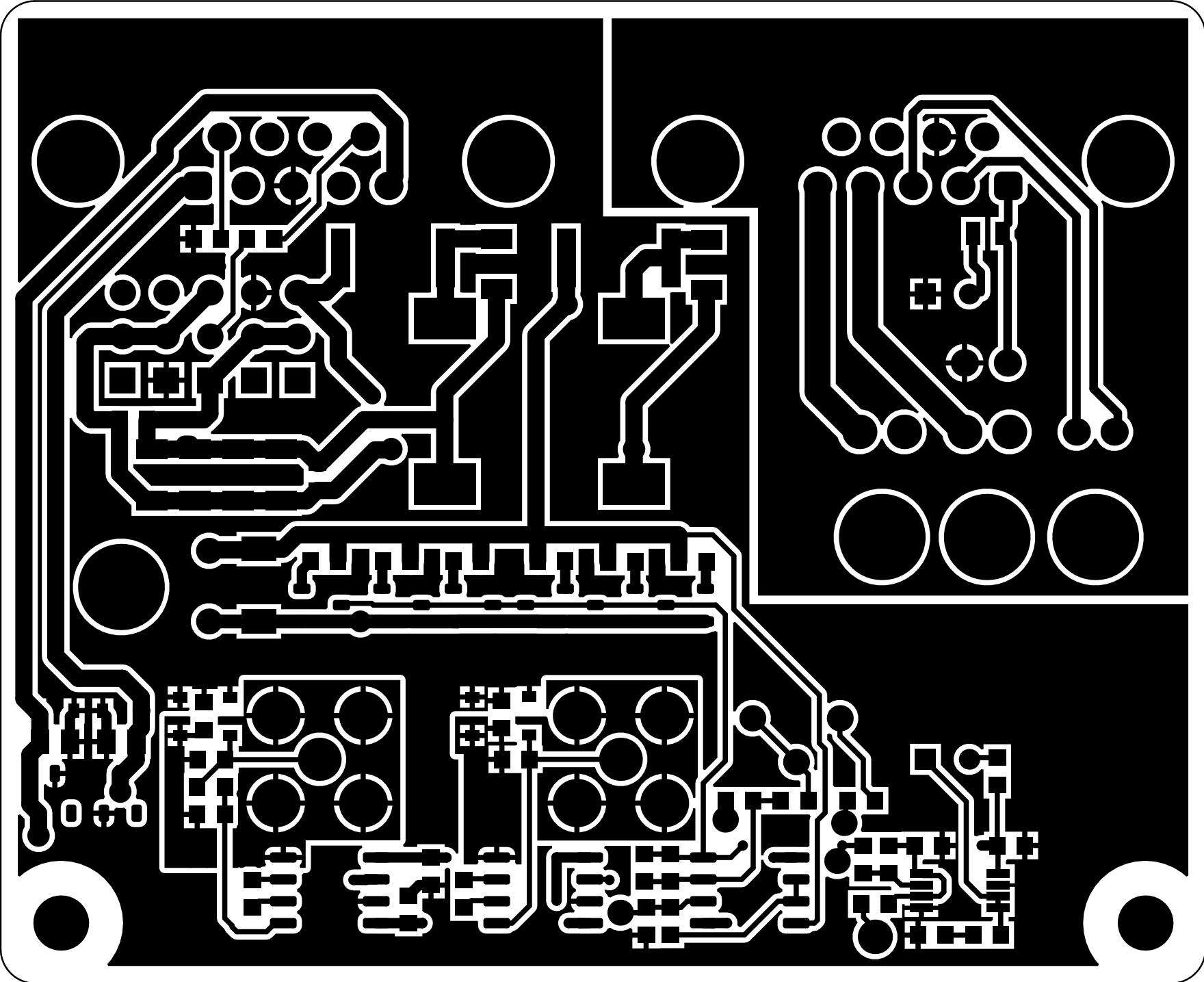
- Components with a generic name (i.e. Res_0603MD_11k_1%) can be chosen freely by the assembler within the stated specifications.
 - Markings on diodes and LEDs always indicate the Cathode.

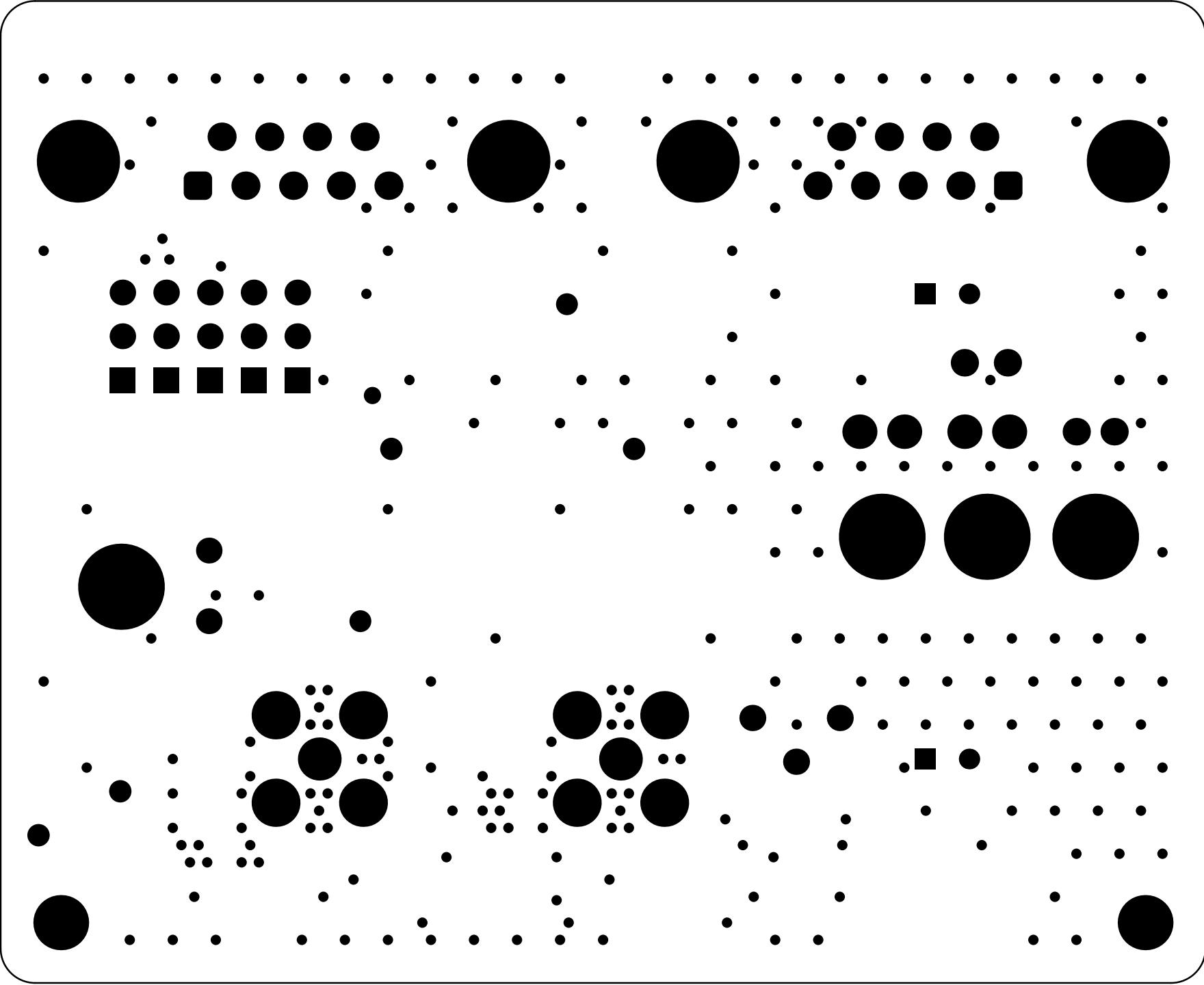
Layer Stackup:

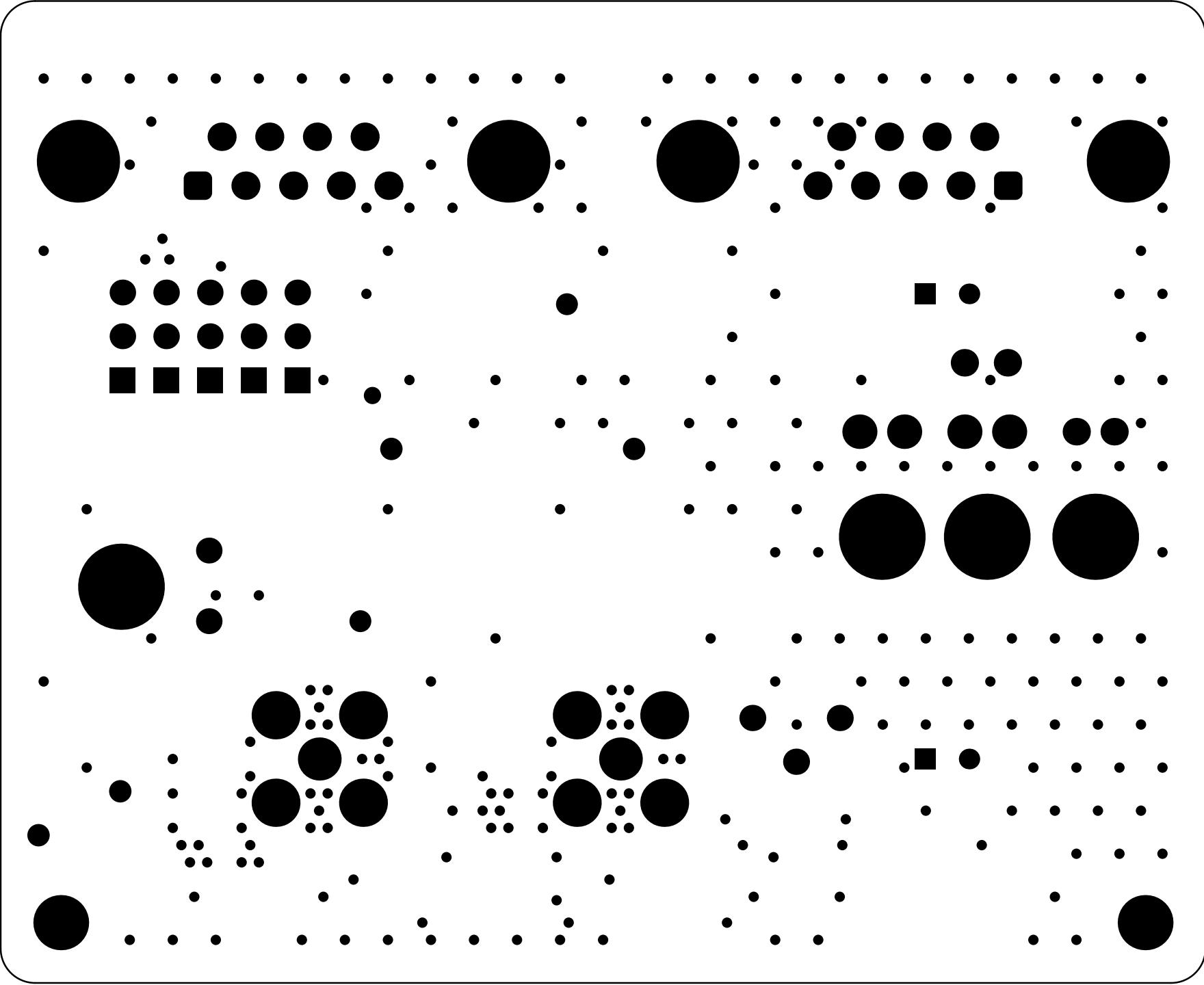
Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				/\
	Top Solder	Solder Resist	0.010mm	3.5	/\
1	Top Layer		0.018mm		/\
	Dielectric1	FR-4	0.360mm	4.8	/\
2	Signal Layer 1		0.036mm		/\
	Dielectric 3		0.710mm	4.2	/\
3	Signal Layer 2		0.036mm		/\
	Dielectric 2		0.360mm	4.8	/\
4	Bottom Layer		0.018mm		/\
	Bottom Solder	Solder Resist	0.010mm	3.5	/\
	Bottom Overlay				/\

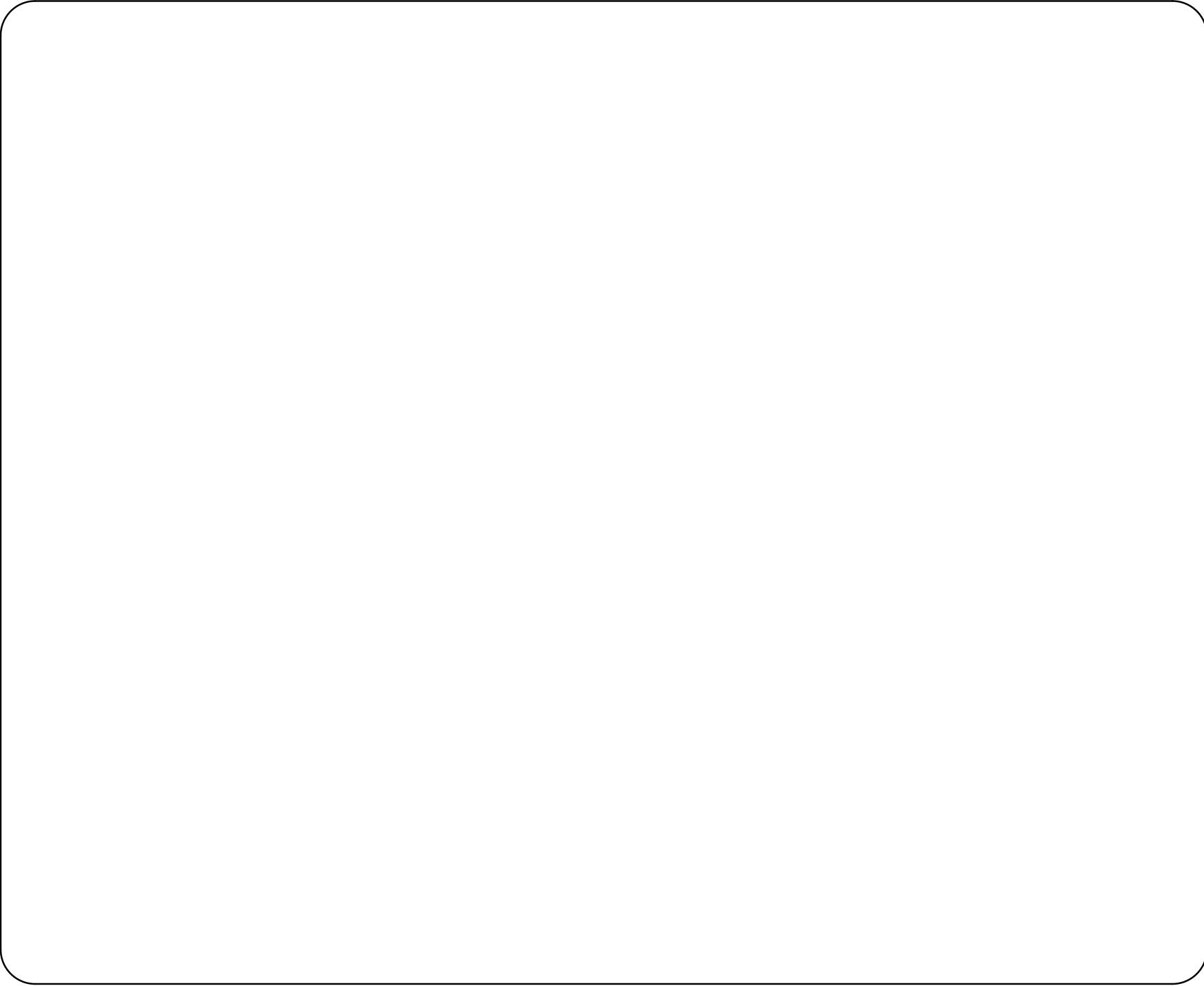


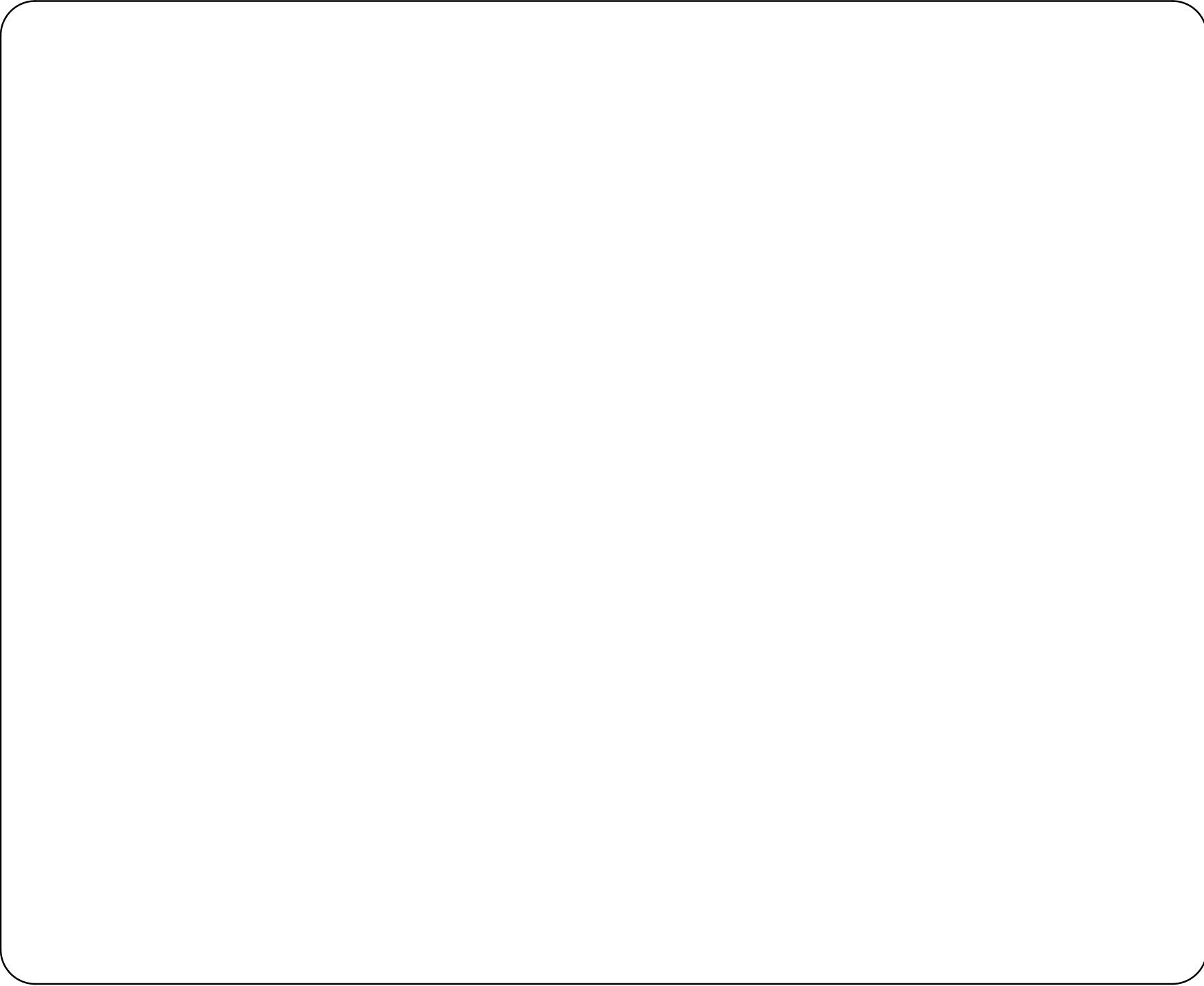
University of Amsterdam / Technology Centre	
E.W.Baaij	09-Nov-23
Laser Protection Board	V1.0
PCB Template: Eurocircuits 6C 4Layer	

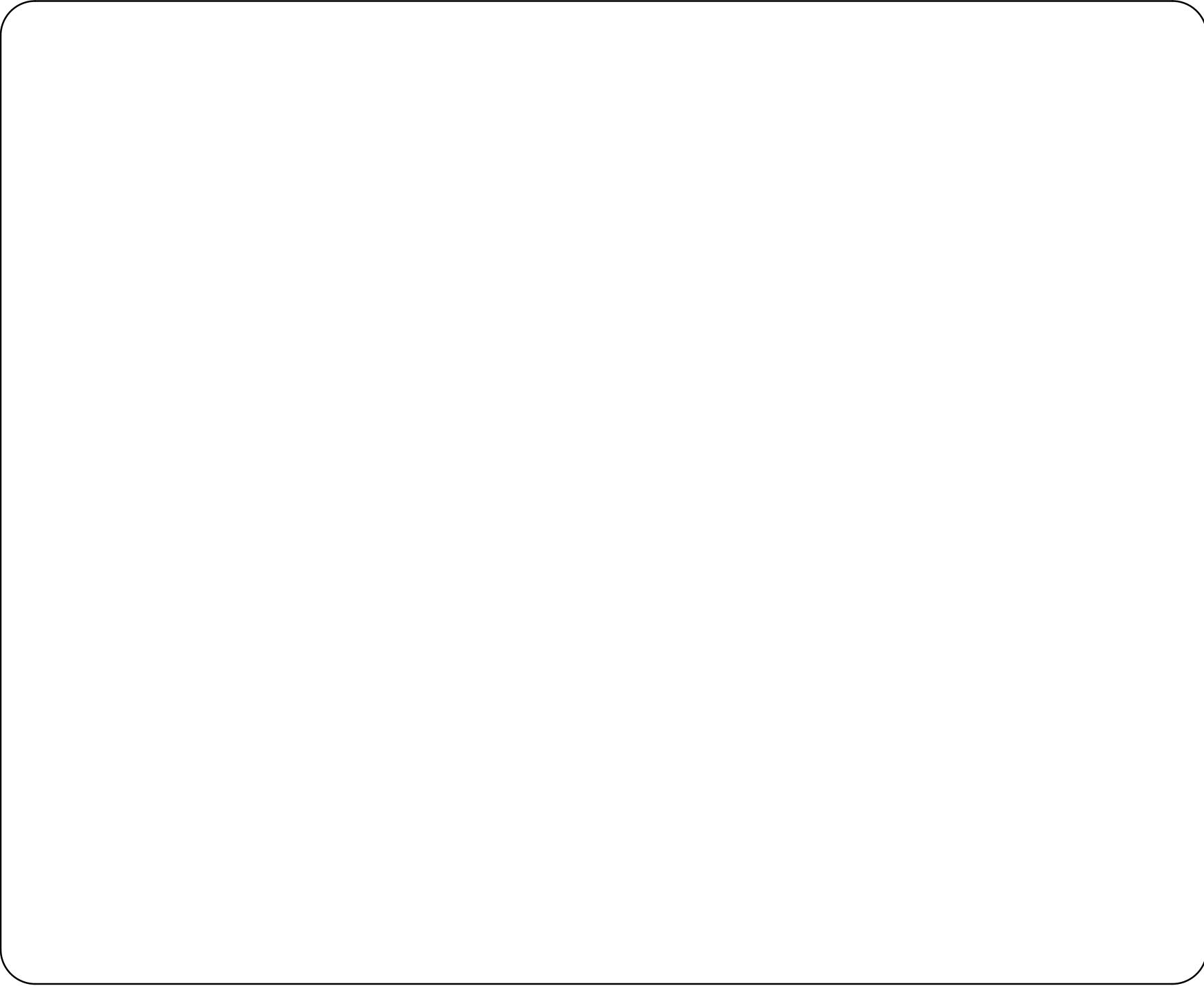


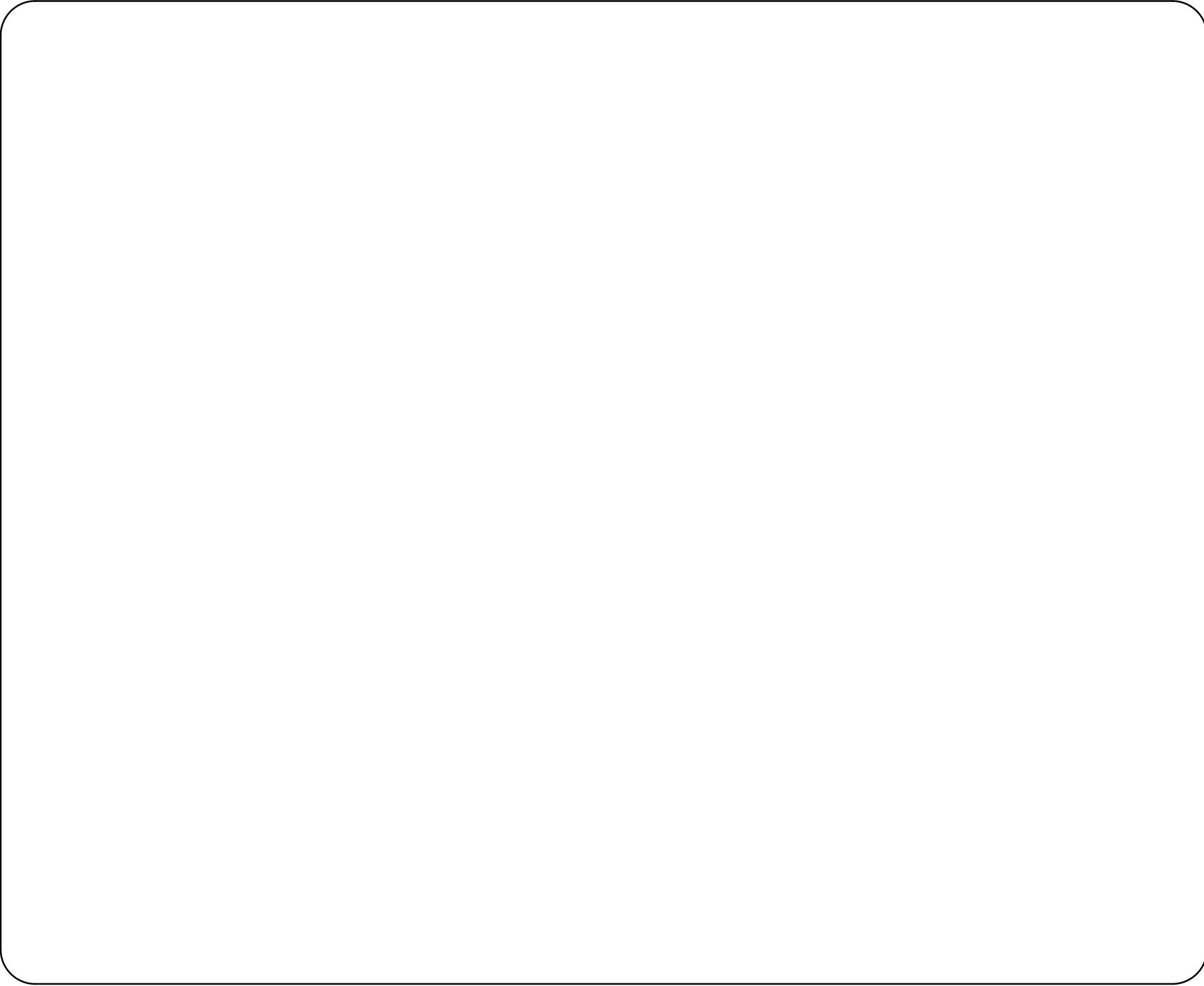


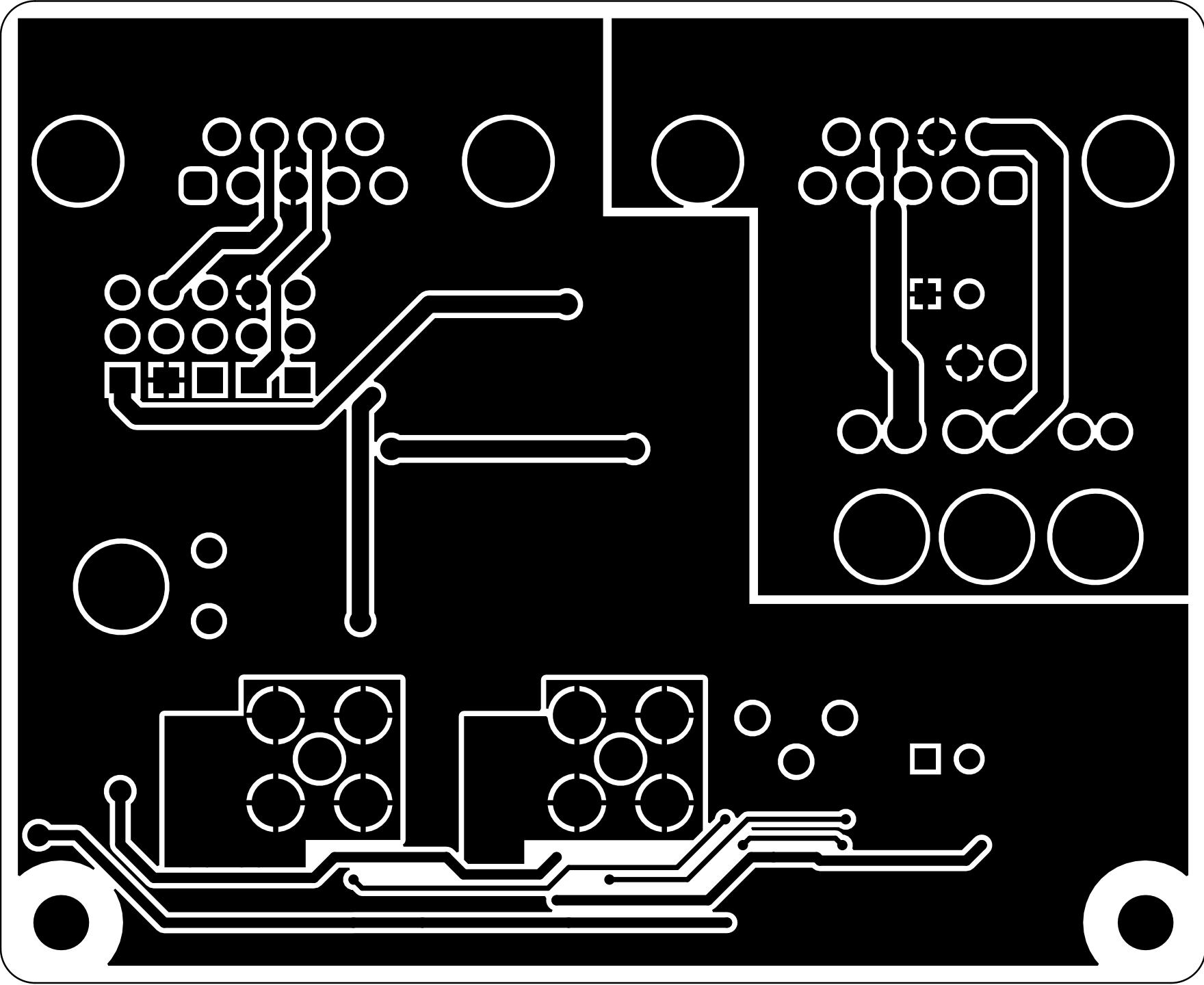


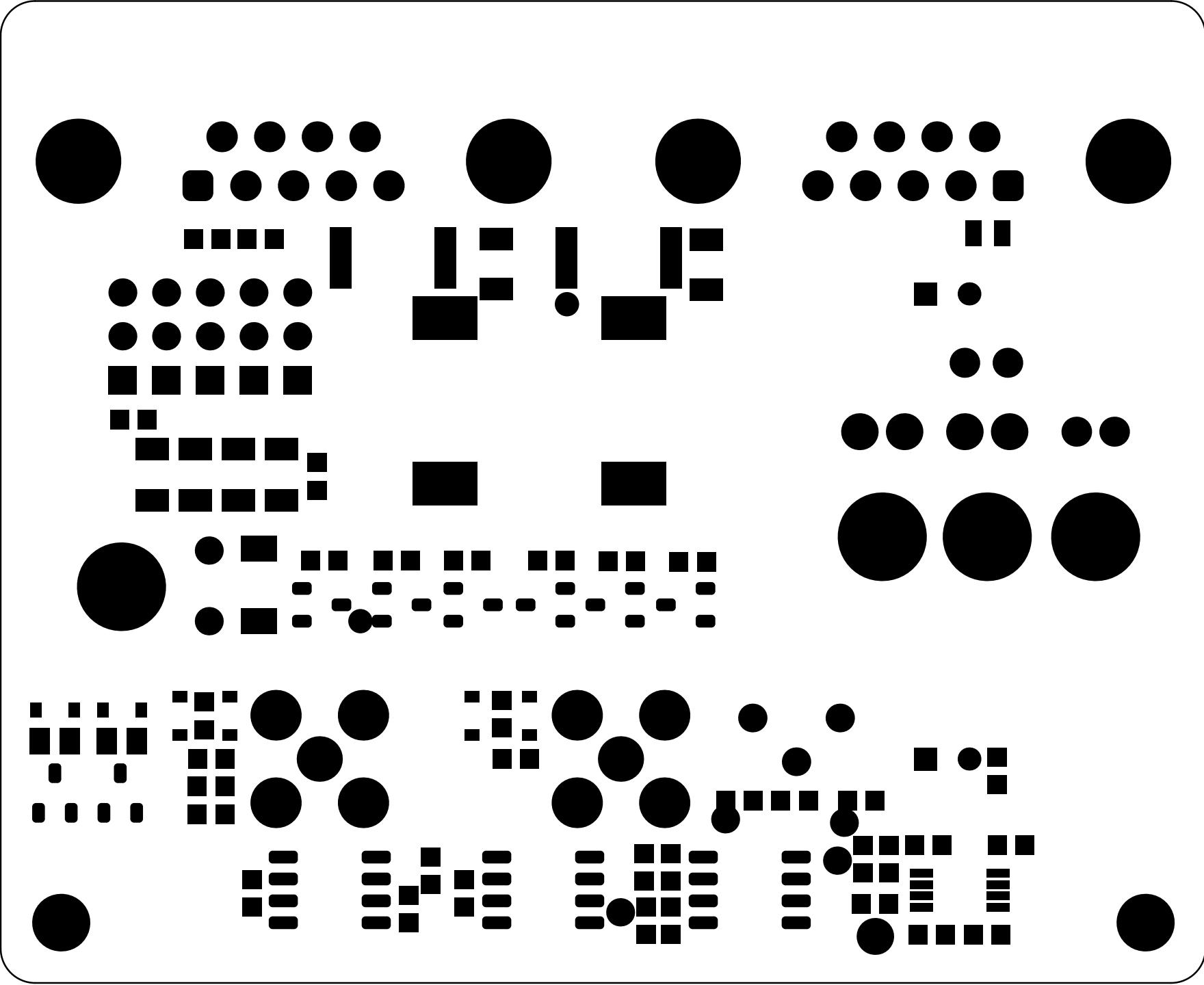


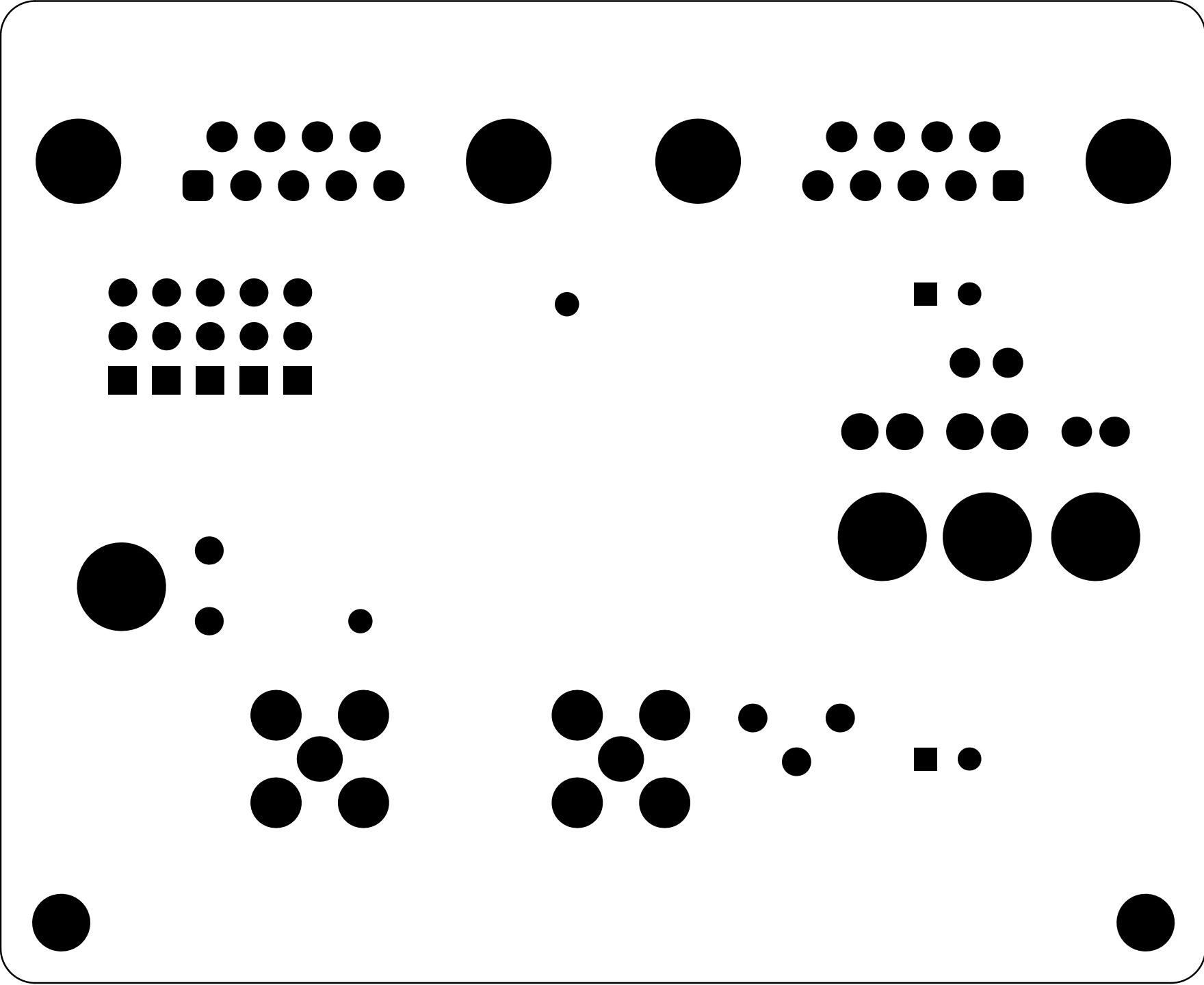


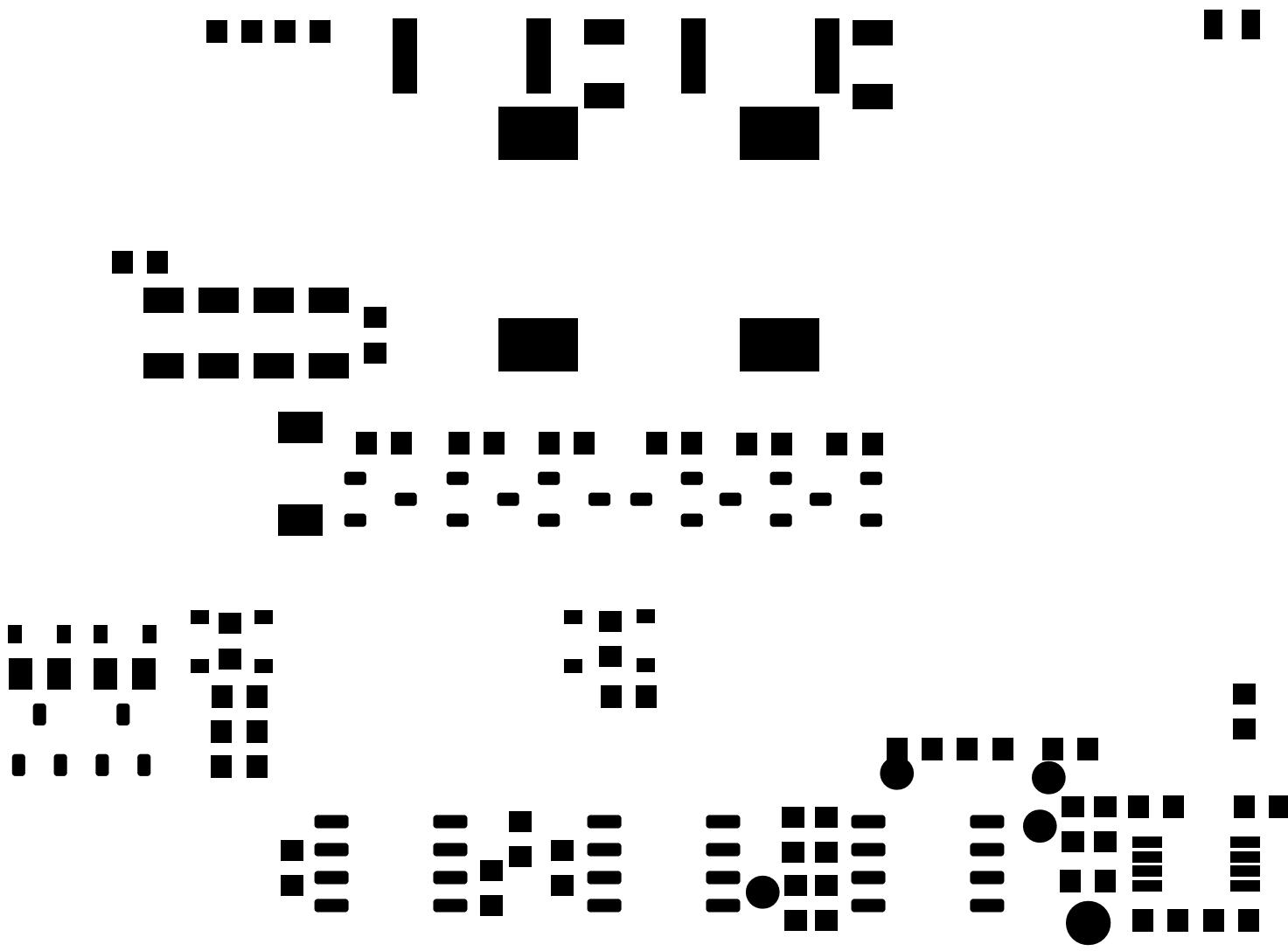


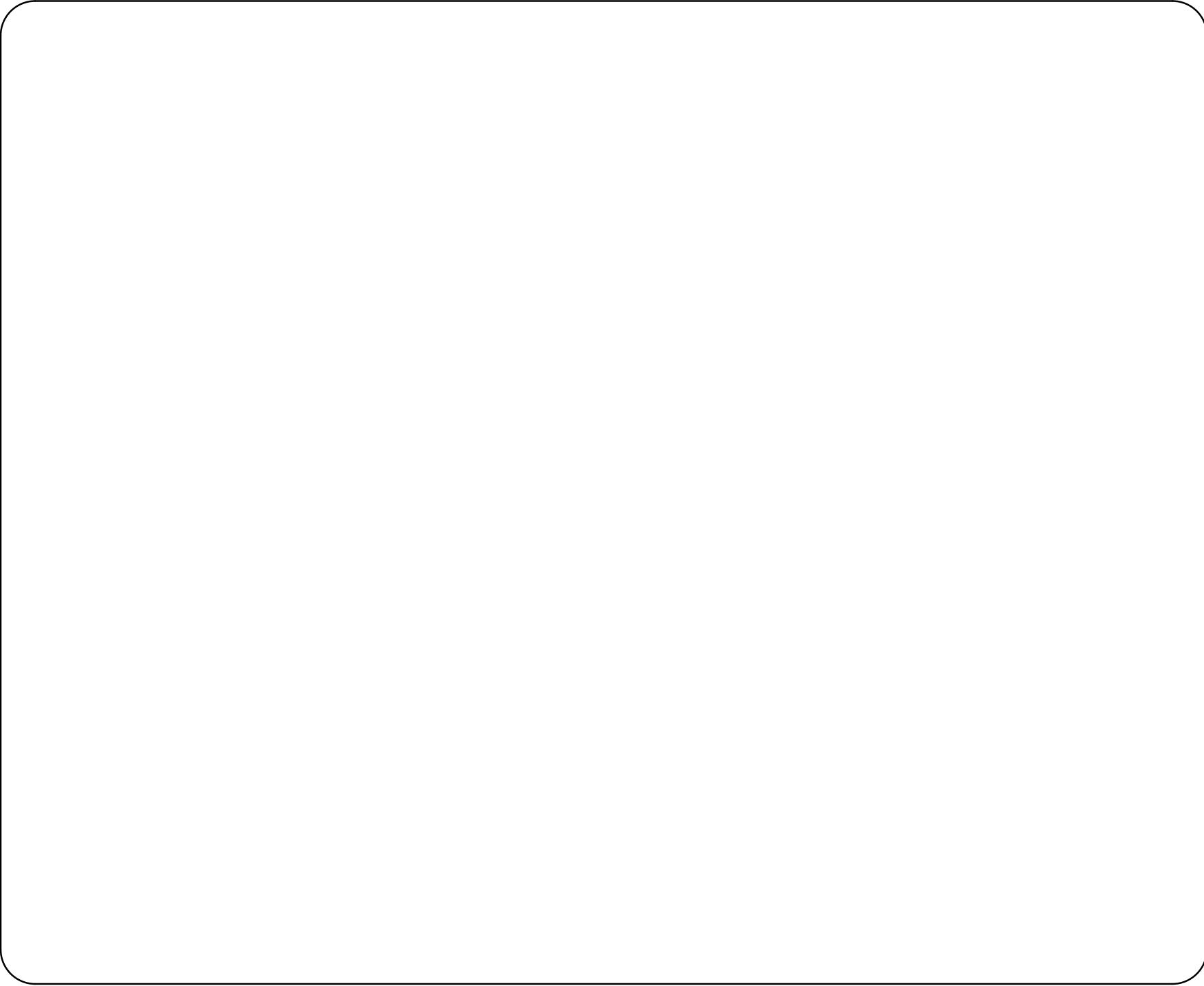


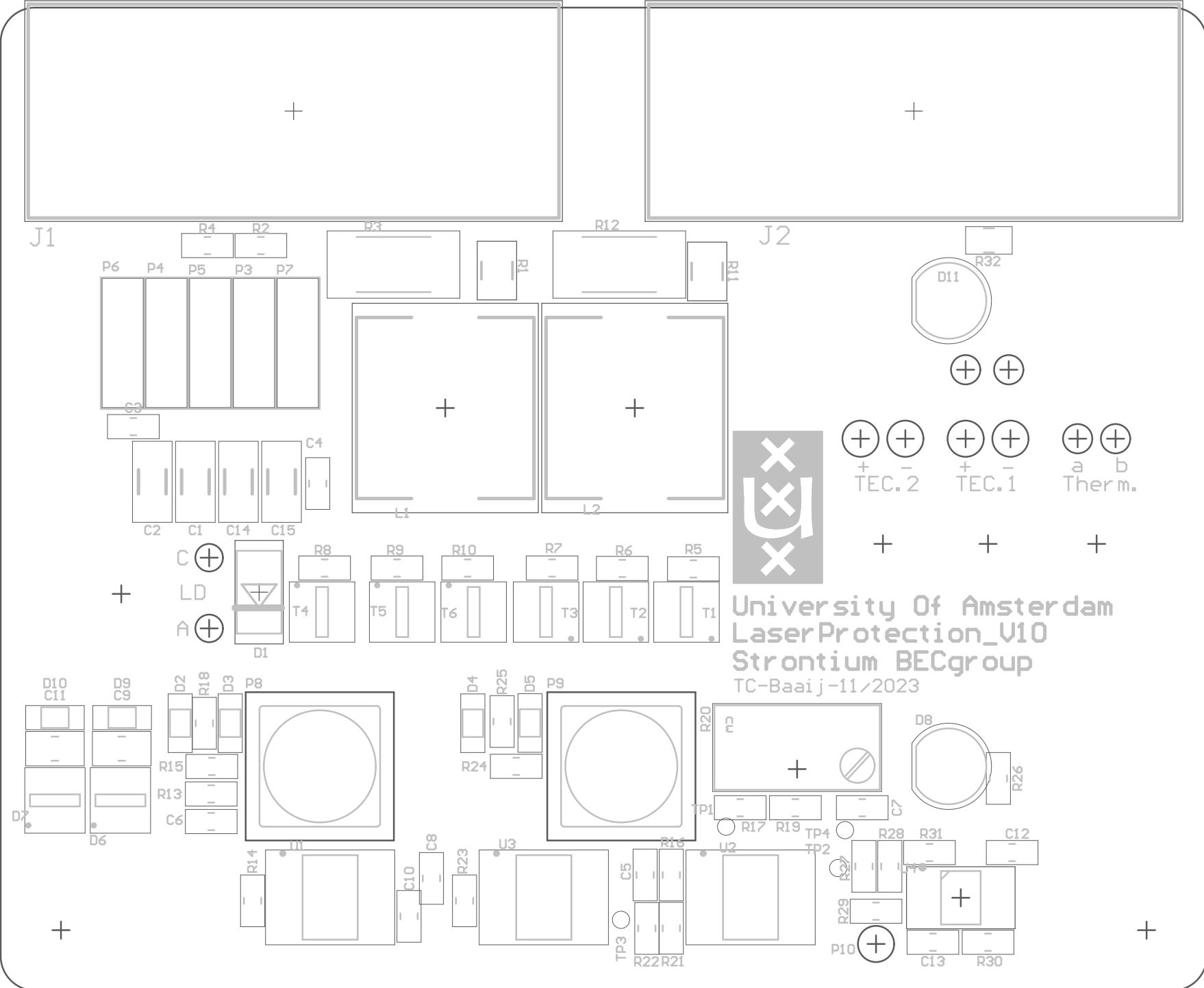






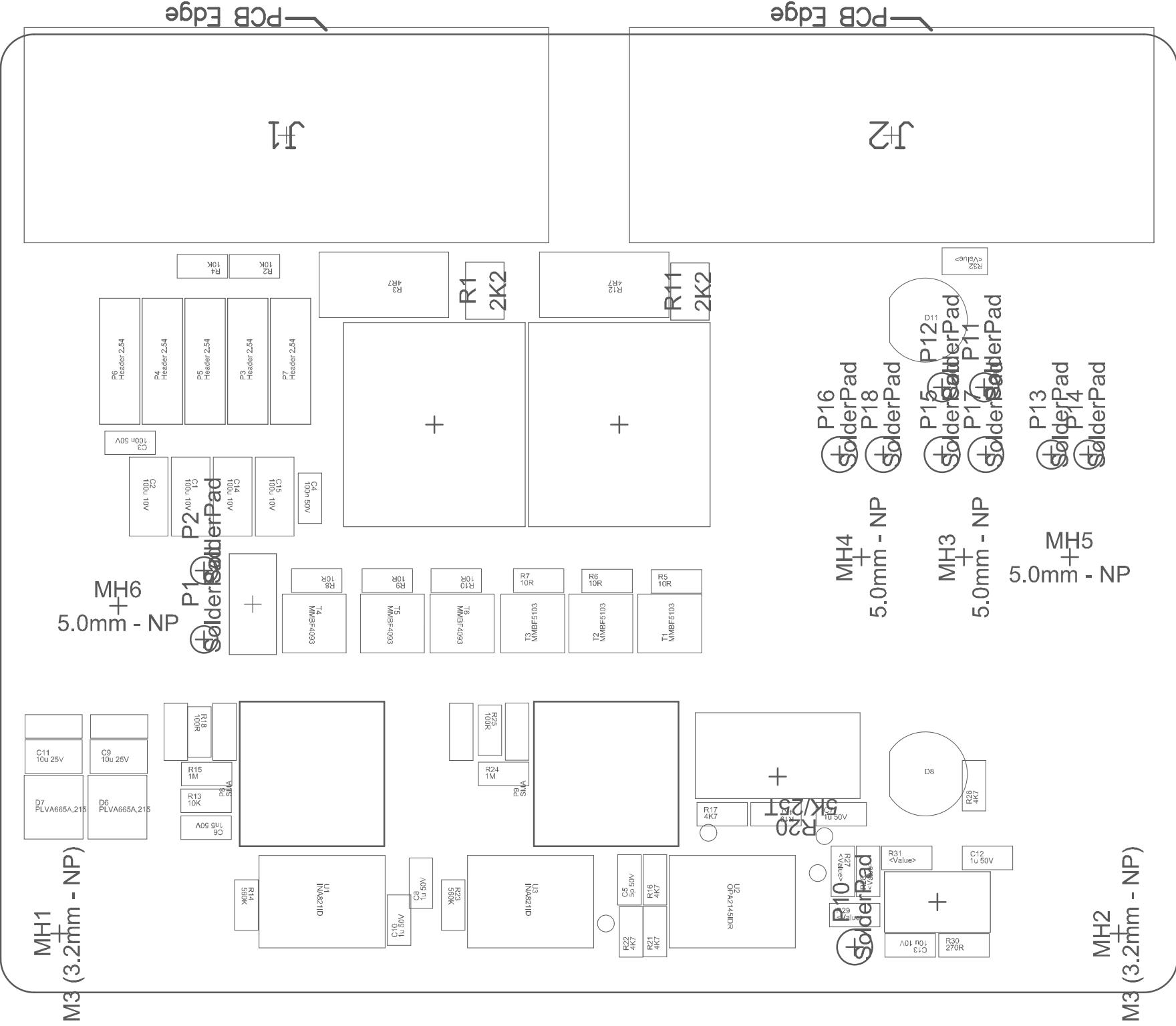






University of Amsterdam / Technology Centre	
E.W.Baaij	09-Nov-23
Laser Protection Board	V1.0
PCB Template: Eurocircuits 6C 4Layer	

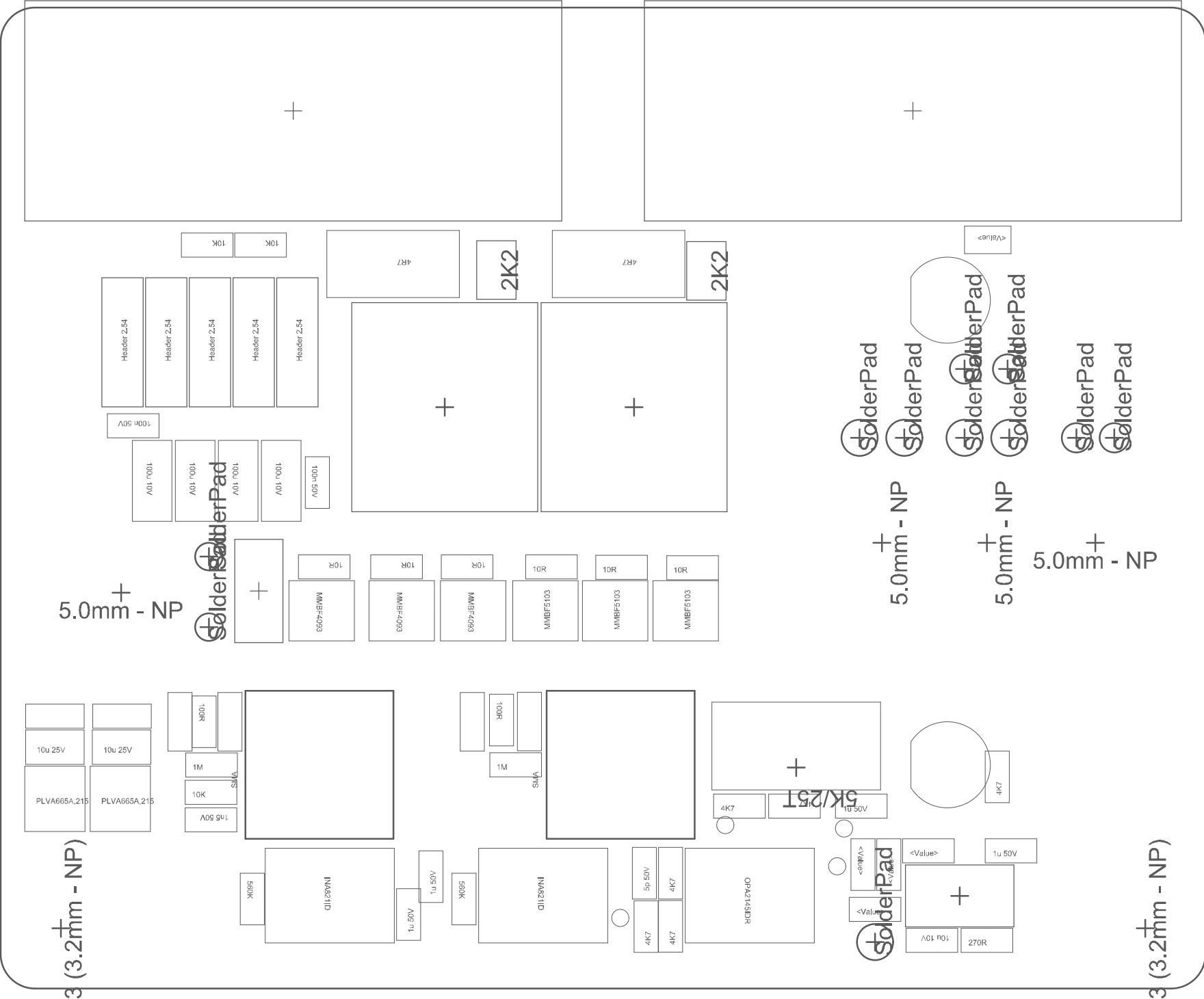
PCB Teamleader: Eurocircuits EC FLasher	V1.0	Laser Projection Board	E.W.Bassil	03-Nov-23	University of Amsterdam \ Technology Centre
---	------	------------------------	------------	-----------	---



University of Amsterdam / Technology Centre	
E.W.Baaij	09-Nov-23
Laser Protection Board	V1.0
PCB Template: Eurocircuits 6C 4Layer	

PCB Template: Eurocircuits EC FLAyer	V1.0	Laserc Projection Board	E.W.Bassi	06-Nov-23	Universit of Amsterdam \ Technology Centre
--------------------------------------	------	-------------------------	-----------	-----------	--

Supplier 1	Supplier Part Number	Quantity	Part Number	Designator	Description	Manufacturer	Value	Temperature Coefficient	Tolerance	Voltage - Rated	Footprint
Farnell	2211193	4		C1, C2, C14, C15	MLCC 100 μ F, 10V, 1206 [3216 Metric], \pm 20%, X5R	TDK				cap1206MD	
Farnell	2581046	2		C3, C4						cap0603MD	
Farnell	1759046	1		C5						cap0603MD	
Farnell	1	1		C6						cap0603MD	
Farnell	3013383	4		C7, C8, C10, C12						cap0603MD	
Farnell	1735530	2		C9, C11						cap0805MD	
Mouser	81-GRM188Z71A106KA3D	1		C13						cap0603MD	
Mouser	755-RSX058LAP2STR	1		D1	Schottky Diode, 3A, 200V, VF=0.84 (3A/35C), Ir=5-100nA	ROHM				SODF470X110-2N	
Farnell	8737363	6		D2, D3, D4, D5, D9, D10	TVS Diode, Bidirectional, 12V, SOD-323, 2Pins	Nexperia				SOD-323-2-NpPol	
Mouser	771-RLVA665A215	2		D6, D7	Zener 6V5, 250mW, 3%, SOT-23	Rohm				SOT95P230X110-3N	
Mouser	710-151031SS04000	2		D8, D11	Generic 3mm LED Footprint	Wurth				LED_3mm	
<no part>	1			Graph1	University of Amsterdam Logo					UVA_LOGO_SMALL_HOR	
Farnell	2294288	1		J1	NorComp, D-SUB, 9 pins, Female, right angled PCB	NorComp				182-009-213Ryy1	
Farnell	2294285	1		J2	NorComp, D-SUB, 9 pins, Male, right angled PCB	NorComp				182-009-113Ryy1	
Farnell	2288292	2		L1, L2	Power Inductor, SMD, 22 μ H, 3.58 A, Shielded, 2.36 A	Coilcraft				INDP102100X51N	
Farnell		2		MH1, MH2	MountingHole NP for M3, drill 3.2mm, keepout dia 6.5					MountHole M3 NP keepout 6.5mm	
Farnell		4		MH3, MH4, MH5, MH6	MountingHole 5mm No keepout					MountHole 5mm NP No keepout	
Farnell		2		P1, P2	SolderPad, PT_c1.5h0.7mm					Pad_PT_c1.5h0.7mm	
Farnell	1022248	5		P3, P4, P5, P6, P7	SolderPad, PT_c1.5h0.7mm					Header254_1x3	
Mouser	960-PCB.114SMAFSTJ.A	2		P8, P9	SMA Coaxial, 17.7mm, 50 Ohm, Straight Jack, Through Hole	Taoglas				PCB114SMAFSTJ	
Farnell		1		P10	SolderPad, SMD_c2.0mm					Pad_SMD_c20mm	
Farnell		4		P11, P12, P13, P14	SolderPad, PT_c1.6h0.8mm					Pad_PT_c1.6h0.8mm	
Farnell		4		P15, P16, P17, P18	SolderPad, PT_c2.0h1.0mm					Pad_PT_c20h10mm	
Farnell		2		P1, R11						res1206MD	
Farnell	2446547	3		R2, R4, R13						res0603MD	
Farnell	1376977	2		R3, R12	SMD Chip Resistor, 4.7 ohm, \pm 5%, 2 W, 2512	Yageo				RES2512MD	
Farnell	2447233	6		R5, R6, R7, R8, R9, R10						res0603MD	
Farnell	9331379	2		R14, R23						res0603MD	
Farnell	2447285	2		R15, R24						res0603MD	
Farnell	2447385	6		R16, R17, R19, R21, R22, R26						res0603MD	
Farnell	1576263	2		R18, R25						res0603MD	
Farnell	9353631	1		R20	5K, 25 Turn, Top adjust thruhole trimpot	Bourns				Bourns 3296Y	
Farnell		4		R27, R28, R29, R31	Bourns 100ppm					res0603MD	
Farnell	9330917	1		R30						res0603MD	
Farnell		1		R32						res0805HD	
Farnell	2454011	3		T1, T2, T3	JFET N Channel, VdgMax=40V, Idss=10 to 40mA, VgsOff=-1.2 to -2.7 V, SOT-23-3	OnSemi				SOT95P230X110-3N	
Farnell	2992317	3		T4, T5, T6	JFET N Channel, VdgMax=40V, Idss=8 to 7mA, VgsOff=-1 to -5V, SOT-23-3	OnSemi				SOT95P230X110-3N	
Mouser	595-INAB21IDR	2		U1, U3	InAmp, noise=7nV/V/Hz, Ofs=10 μ V, Bw=4.7MHz, \pm 2.3V to \pm 18V, 4.6V to 36V, \pm 40 input protection	Analog Devices				SOIC127P600X175-8N	
Mouser	595-OPA2145IDR	1		U2	Dual OpAmp, 5.5MHz, Noise=7nV, Ibias=2pA, \pm 3 to \pm 18V, UnityGain stable, Sot23-5	Analog Devices				SOIC127P600X175-8N	
farnell	2774746	1		U4	2-40V Window Comparator, internal ref (2.54/1.27V), open collector out	OnSemi				TSOP65P490X110-8N	



University of Amsterdam / Technology Centre	
E.W.Baaij	09-Nov-23
Laser Protection Board	V1.0
PCB Template: Eurocircuits 6C 4Layer	

PCB Teamleader: Eurocircuits EC FLasher	V1.0	Laser Projection Board	E.W.Bassil	03-Nov-23	University of Amsterdam \ Technology Centre
---	------	------------------------	------------	-----------	---



University of Amsterdam / Technology Centre	
E.W.Baaij	09-Nov-23
Laser Protection Board	V1.0
PCB Template: Eurocircuits 6C 4Layer	

PCB Template: Eurocircuits EC FLAyer	
Laser Protection Board	V1.0
E.W.Bassi	06-Nov-23
University of Amsterdam \ Technology Centre	