
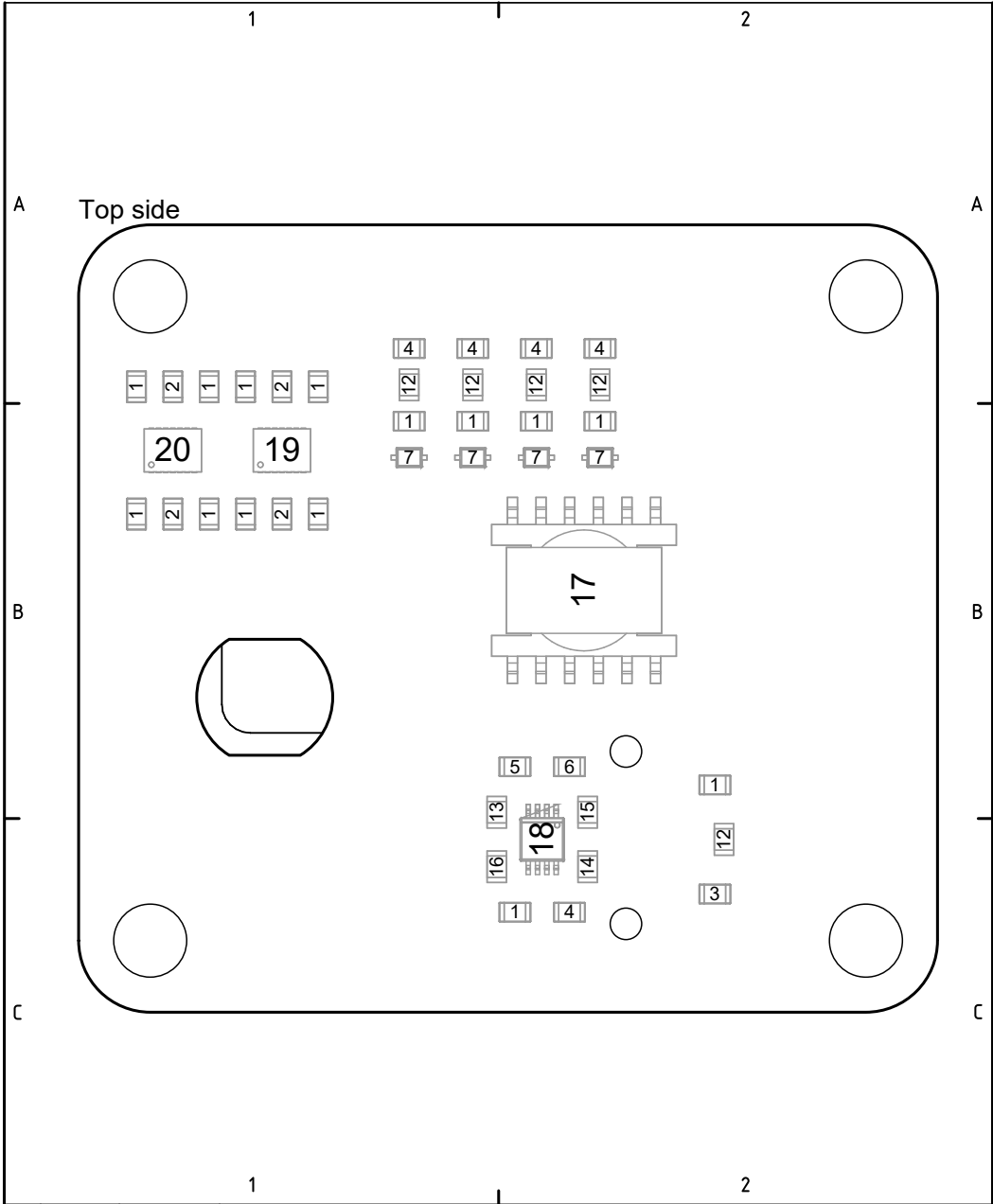


TEKPROBE USB power supply assembly details

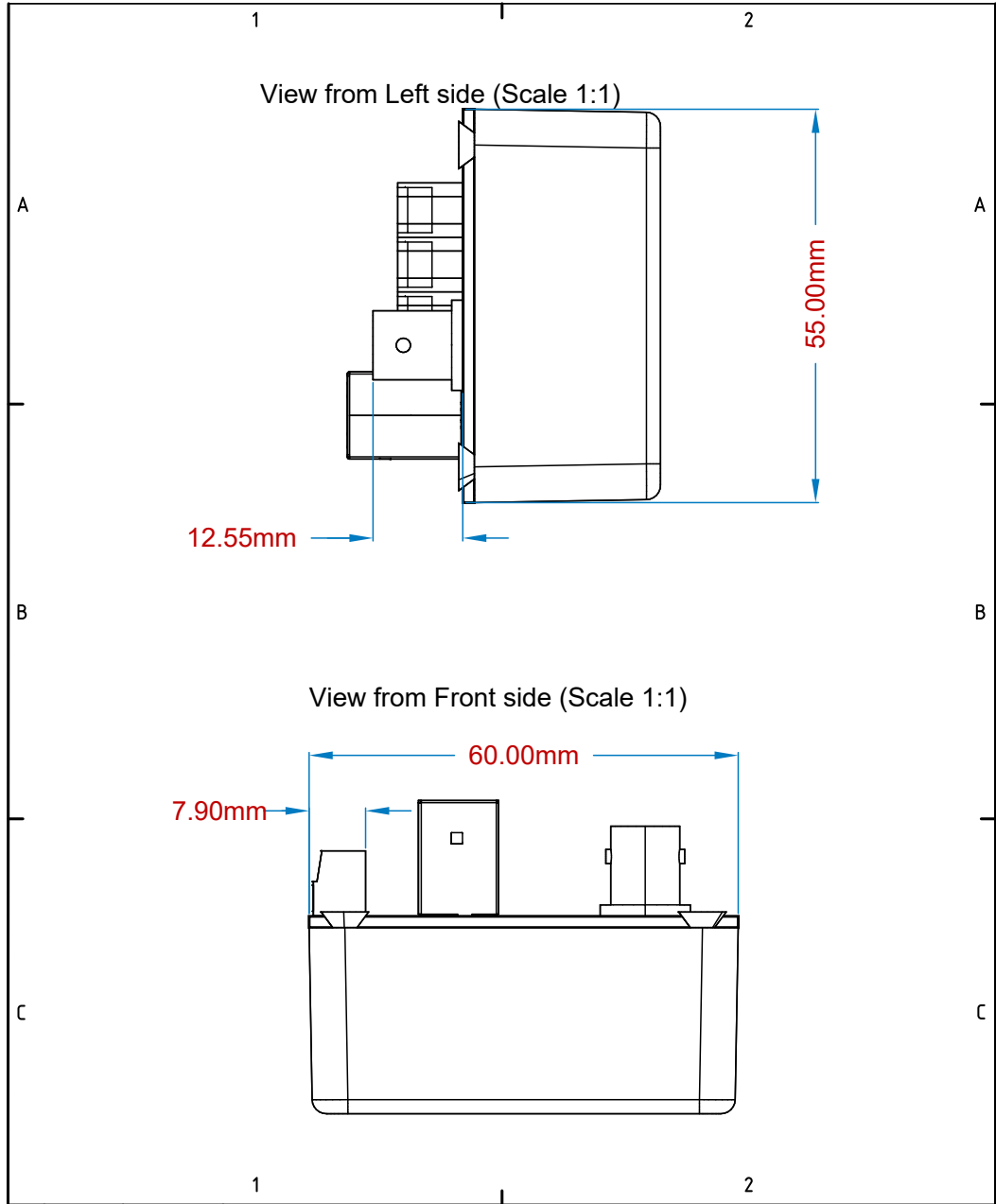
2	29.05.2021	G.M.	<div data-bbox="372 1366 490 1481" data-label="Image"> </div> <div data-bbox="321 1484 519 1551" data-label="Text"> <p>Grease Monkey btbm.ch</p> </div> <div data-bbox="584 1378 903 1415" data-label="Text"> <p>Tekprobe Power Supply</p> </div>	
1	02.05.2021	G.M.		
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#	Designator	Qty	Manufacturer	Comment	Manufacturer Part Number
1	C1, C3, C5, C6, C8, C9, C11, C14, C15, C16, C19, C20, C22, C24	14	Samsung	10uF	CL21A106KAYNNNG
2	C2, C7, C12, C23	4	KEMET	3300pF	C0805C332K5RACTU
3	C4	1	Samsung	1uF	CL21B105KAFNFNE
4	C10, C13, C17, C21, C25	5	Samsung	0.1uF	CL21B104MACNNNC
5	C18	1	Würth Electronics	470pF	885012207084
6	C26	1	Samsung	1nF	CL21B102KBANNNC
7	D1, D2, D3, D4	4	SMC	1N4148WSTR	1N4148WSTR
8	H1	1	Hammond Manufacturing	Aluminum Enclosure	1550Q
9	J1	1	Würth Elektronik	USB 2.0 Type B Receptacle	61400413321
10	J2	1	TE Connectivity	BNC JACK	5-1634523-1
11	J3	1	Würth Elektronik	3.81 MM TERMINAL BLOCK	691243310009
12	L1, L2, L3, L4, L5	5	Cooper Bussmann	Ferrite Bead	MFBW1V2012-801-R
13	R1	1	Stackpole Electronics	22R	RMCF0805FT22R0
14	R2	1	KOA Speer	180k	RK73H2ATTD1803F
15	R3	1	Stackpole Electronics	10k	RMCF0805FT10K0
16	R4	1	Stackpole Electronics	90k9	RMCF0805FT90K9
17	T1	1	Würth Electronics	Transformer	749196141
18	U1	1	Analog Devices / Linear Technology	LT3580EMS8E	LT3580EMS8E#PBF
19	U2	1	Analog Devices / Linear Technology	LT3032EDE-5#PBF	LT3032EDE-5#PBF
20	U3	1	Analog Devices / Linear Technology	LT3032IDE-15#PBF	LT3032IDE-15#PBF

			Bill of Materials		
				Tekprobe Power Supply	
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Component location			Tekprobe Power Supply	
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Mechanical dimensions



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Tekprobe Power Supply

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Revision History


Rev.	Date	Comment
1	02.05.2021	Original design
2	29.05.2021	1) Changes on BOM. 2) Corrected the cathode indicator on the 1N4148 diode footprint. 3) Separated power ground and signal ground.

A

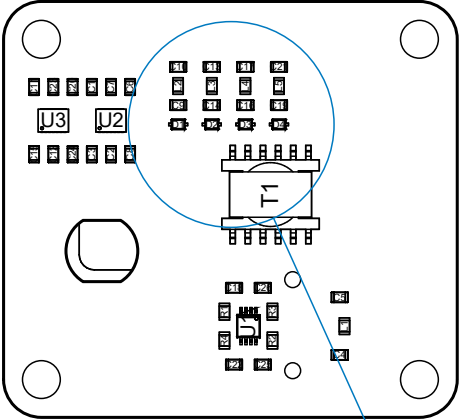
B

C

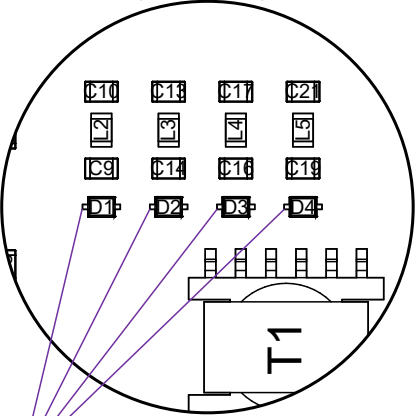
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1		2	
		Revision History	
		 Grease Monkey btbm.ch	Tekprobe Power Supply
2	29.05.2021	G.M.	
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View from Top side (Scale 1:1)



DETAIL A (Scale 2:1)



Cathodes

Notes:

1. On revision 1 of the PCB the marking for the diode cathode was too small to be printed by the PCB manufacturer. See detail A above.
2. The hole for the BNC jack has enough wiggle room to cause pin misalignment. To ensure that the tekprobe pins are in the middle of the pads mount a tekprobe connector when tightening the BNC jack.
3. Revision 2 of the PCB was not tested but should be OK.

Notes



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REV	Date	Reviser