## Silicon Witchery S1 ECG Kit | Bill of Materials

Main BOM - 13 October 2021

Part Name	Part Number	Vendor	Designator	Footprint	Quantity	Primary Supplier	Assembly Notes
220nF 16V Ceramic Cap	GCM155R71C224KE02D	Murata	C1, C2	0402	2	Digikey: <u>490-10671-1-ND</u>	-
1uF 6.3V Ceramic Cap	GRM155R70J105KA12J	Murata	C3	0402	1	Digikey: <u>490-13339-1-ND</u>	-
1nF 50V Ceramic Cap	GRM1555C1H102JA01D	Murata	C4	0402	1	Digikey: <u>490-3244-1-ND</u>	-
100nF 16V Ceramic Cap	GCM155R71C104KA55D	Murata	C5	0402	1	Digikey: <u>490-4759-1-ND</u>	-
10uF 6.3V Ceramic Cap	GRM155R60J106ME15D	Murata	C6	0402	1	Digikey: 490-13238-1-ND	-
22nF 50V Ceramic Cap	GCM155R71H223KA55D	Murata	<b>C</b> 7	0402	1	Digikey: <u>490-4763-1-ND</u>	-
10nF 50V Ceramic Cap	GCM155R71H103KA55D	Murata	C8	0402	1	Digikey: <u>490-4762-1-ND</u>	-
0.1" 2-Pin Header	GREC002SBSN-M89RC	Sullins	J5	SMD	1	Digikey: <u>S1113EC-02-ND</u>	-
USB Type-C Connector	DX07S016JA1R1500 (Drawing)	JAE	J6	SMD	1	Mouser: 656-DX07S016JA1R1500	-
150mAh LiPo Battery	LP402025	PKCell	J7	20x26mm	1	Adafruit: <u>1317</u>	See <b>back silkscreen</b> for polarity
White LED	<u>IN-S63AT5UW</u>	Inolux	LED1-LED7	0603	7	Mouser: 743-IN-S63AT5UW	See <b>Front View</b> image for <b>Cathode</b> mark
S1 Module	S1-MOD	Silicon Witchery	MOD1	SMD	1	Silicon Witchery	See Front View image for Pin 1 location
182k Film Resistor	RC0201FR-07182KL	Yageo	R2, R4	0201	2	Digikey: <u>YAG2451CT-ND</u>	-
10M Film Resistor	RC0201JR-0710ML	Yageo	R1, R3, R5-R8	0201	6	Digikey: YAG2861CT-ND	-
499k Film Resistor	RC0201FR-07499KL	Yageo	R9	0201	1	Digikey: YAG2699CT-ND	-
200k Film Resistor	RC0201FR-07200KL	Yageo	R10	0201	1	Digikey: <u>YAG2275CT-ND</u>	-
100k Film Resistor	RC0201JR-07100KL	Yageo	R12, R13	0201	2	Digikey: <u>311-100KNCT-ND</u>	
1M Film Resistor	RC0201FR-071ML	Yageo	R11, R14	0201	2	Digikey: <u>311-1MMCT-ND</u>	-
5.1k Film Resistor	RC0201FR-075K1L	Yageo	R15, R16	0201	2	Digikey: <u>YAG2741CT-ND</u>	-
655R Film Resistor	RC0201FR-07649RL	Yageo	R17-R23	0201	7	Digikey: <u>YAG2761CT-ND</u>	-
ECG Amplifier IC	AD8233ACBZ-R7	Analog Devices	U1	WLCSP-20	1	Digikey: <u>AD8233ACBZ-R7CT-ND</u>	See Front View image for Pin 1 location
0.1" Jumper	QPC02SXGN-RC	Sullins	-	-	1	Digikey: <u>S9337-ND</u>	Goes on <b>J5</b>
PCB	-	-	-	-	1	-	-
Total Unique Parte					20		
Total Unique Parts	-	-	-	-	22	<del>-</del>	-

## Silicon Witchery S1 ECG Kit | Bill of Materials Main BOM - 13 October 2021 Front View with Pin 1 highlighted Reference image **Primary Supplier** Part Number Designator Footprint Quantity **Assembly Notes** This design is released under the <u>Creative</u> <u>Commons Attribution 4.0 International</u> Licence. S1 module batt The design is provided as a demonstration, and Debug has not been or approved for life sustaining or other applications where failure may cause harm to human life, health or damage to property and Left equipment. Additionally, it has not been designed arm according to any standards in order to guarantee performance or accuracy. No responsibility is assumed by Silicon Witchery for its use, nor for ECG any infringements of patents or other rights of frontend third parties that may result from its use. These Charging specifications are subject to change without