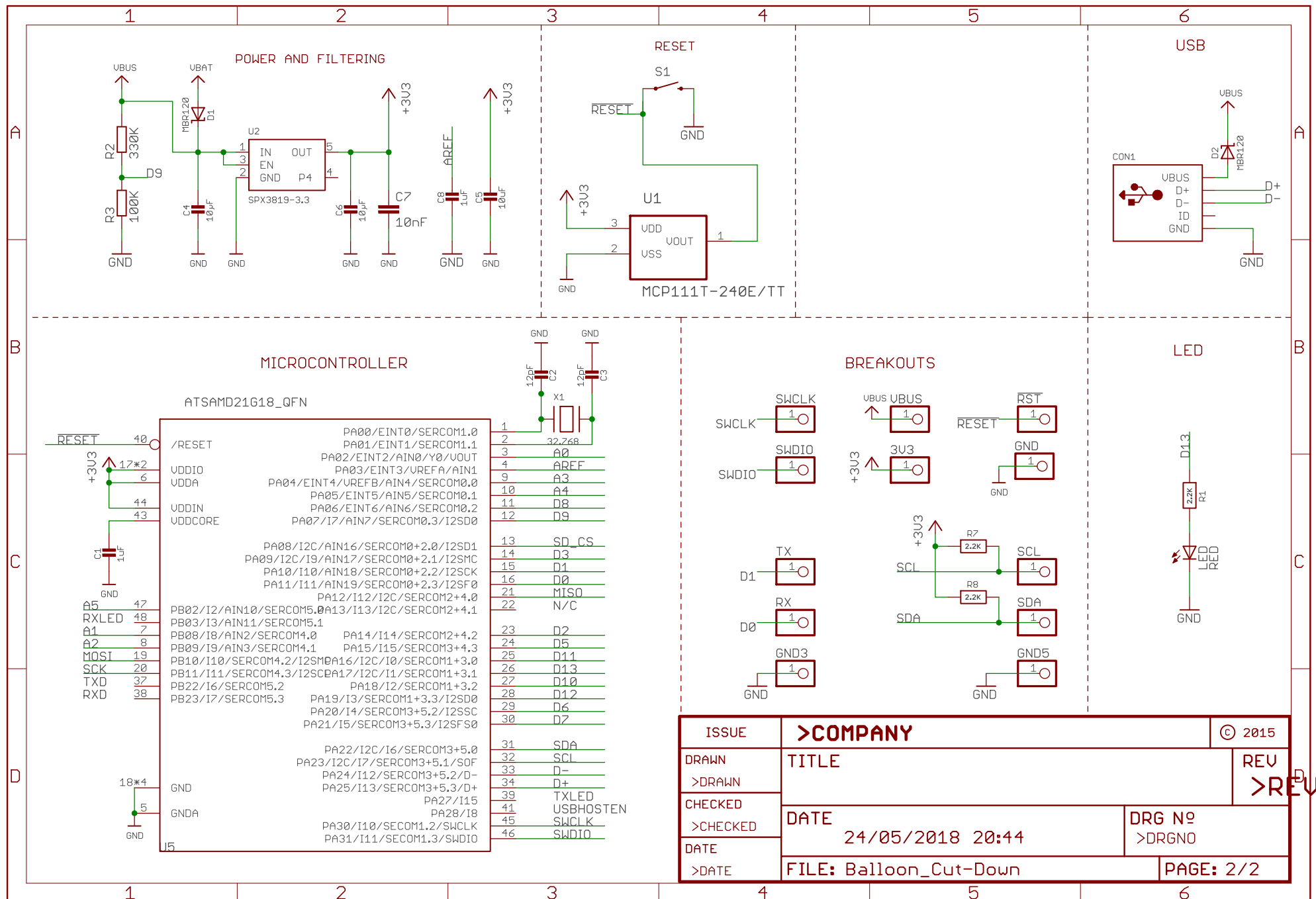
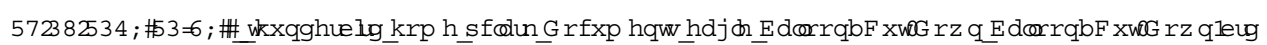


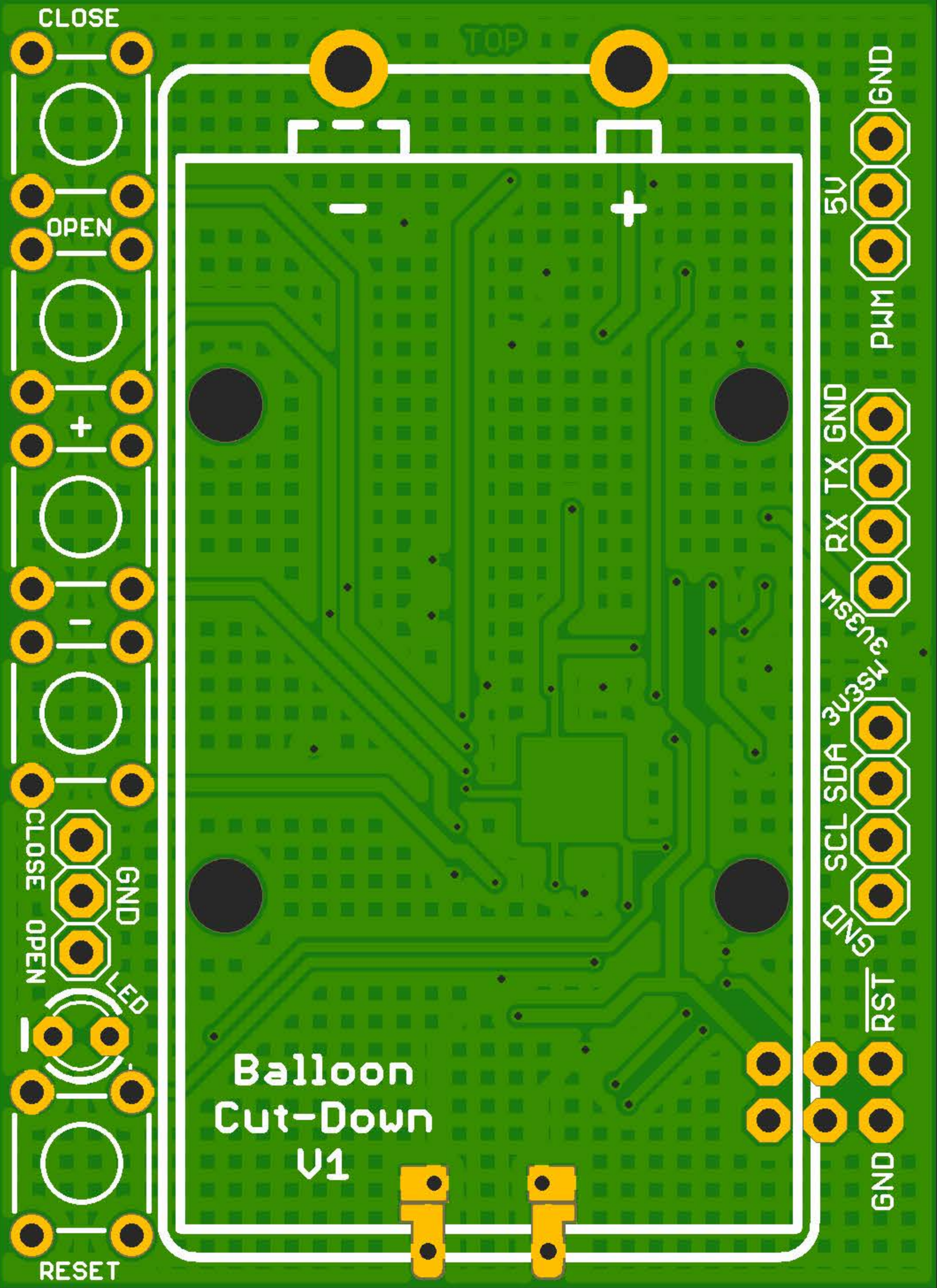
Balloon Cut-Down Device

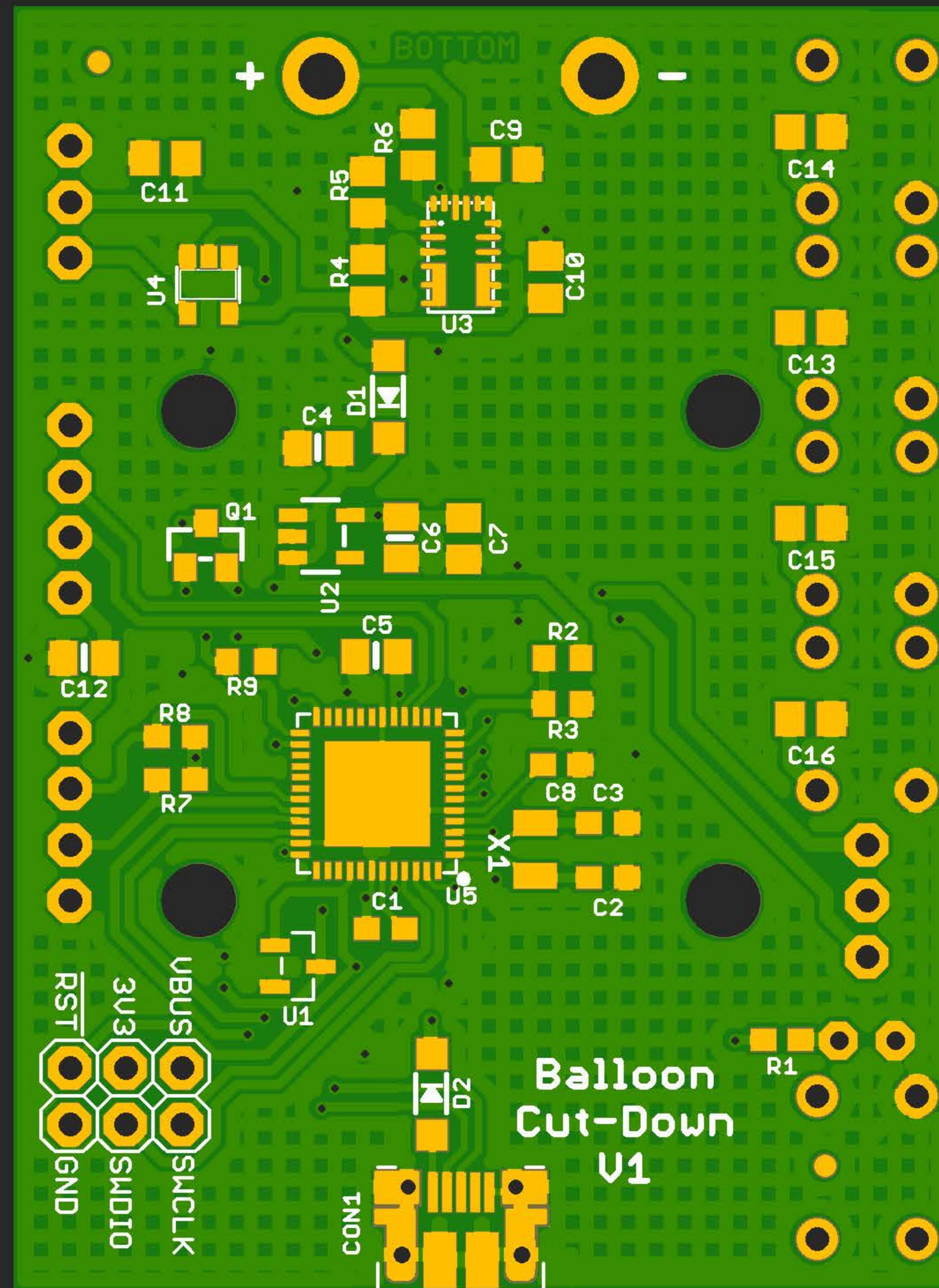
With grateful thanks to:
 Adafruit for the Feather M0 Adalogger
<https://www.adafruit.com/products/2796>
<https://github.com/adafruit/Adafruit-Feather-M0-Adalogger-PCB>
 Adafruit invests time and resources providing this open source design,
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 Designed by Adafruit Industries.

Balloon_Cut-Down	
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Part	X	Y	Angle	Package	Value	Manufacturer	Manufacturer Part No	Farnell Part No	Mouser Part No	Description
Dimensions	42.55	58.42								
Fiducials - for solder paste mask alignment:										
FD1	5.71	5.71								Fiducial 1mm
FD2	38.73	55.88								Fiducial 1mm
Surface Mount Components:										
C1	25.65	16.51	180	0603	1uF	Walsin	0603X105K100CT	2496916		MultiLayer Ceramic Capacitor; 1uF; 10V; 0603; X5R
C8	17.65	23.97	0	0603	1uF	Walsin	0603X105K100CT	2496916		MultiLayer Ceramic Capacitor; 1uF; 10V; 0603; X5R
C2	15.56	18.83	0	0603	12pF	Walsin	0603N120J500CT	2496884		MultiLayer Ceramic Capacitor; 12pF; 50V; 0603
C3	15.56	21.3	0	0603	12pF	Walsin	0603N120J500CT	2496884		MultiLayer Ceramic Capacitor; 12pF; 50V; 0603
C4	28.7	38.35	180	0805	10µF	Walsin	0805F106Z100CT	2496998		MultiLayer Ceramic Capacitor; 10uF; 10V; 0805
C5	26.07	28.89	180	0805	10µF	Walsin	0805F106Z100CT	2496998		MultiLayer Ceramic Capacitor; 10uF; 10V; 0805
C6	24.96	34.26	270	0805	10µF	Walsin	0805F106Z100CT	2496998		MultiLayer Ceramic Capacitor; 10uF; 10V; 0805
C9	20.16	51.24	0	0805	10µF	Walsin	0805F106Z100CT	2496998		MultiLayer Ceramic Capacitor; 10uF; 10V; 0805
C7	22.1	34.23	270	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C11	35.66	51.5	180	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C13	6.35	43.82	180	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C14	6.35	52.71	180	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C15	6.35	34.93	180	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C16	6.35	26.04	180	0805	10nF	Walsin	0805B103K500CT	2496939		MultiLayer Ceramic Capacitor; 10nF; 50V; 0805; X7R
C10	18.38	46.1	90	0805	22uF	Murata	GRM219R61A226MEA0D	2611931		MultiLayer Ceramic Capacitor; 22uF; 10V; X5R; 0805
C12	39.34	28.8	180	0805	0.1uF	Walsin	0805B104K500CT	2496944		MultiLayer Ceramic Capacitor; 0.1uF; 50V; 0805; X7R
CON1	22.23	2.99	0		Micro_USB	Amphenol_FCI	10103594	2293752		Amphenol FCI 10103594 Micro USB Type B
D1	25.53	40.67	90	SOD-123	MBR120	ON SEMICONDUCTOR	MBR120VLSFT1G	1431044		Schottky Rectifier; 20V; 1A; SOD-123
D2	23.56	8.99	270	SOD-123	MBR120	ON SEMICONDUCTOR	MBR120VLSFT1G	1431044		Schottky Rectifier; 20V; 1A; SOD-123
Q1	33.81	33.94	0	SOT23	DMG3415U-7	Diodes Inc.	DMG3415U-7	1843688		MOSFET; P Channel; SOT23-WIDE
R1	7.65	11.46	0	0603	2.2K	Panasonic	ERJ3GEYJ222V	2059610		Resistor, Thick Film, 2.2K, 75V, 100mW, 0603
R7	35.18	23.27	180	0603	2.2K	Panasonic	ERJ3GEYJ222V	2059610		Resistor, Thick Film, 2.2K, 75V, 100mW, 0603
R8	35.18	25.24	180	0603	2.2K	Panasonic	ERJ3GEYJ222V	2059610		Resistor, Thick Film, 2.2K, 75V, 100mW, 0603
R2	17.62	28.8	0	0603	330K	Multicomp	MCWR06X3303FTL	2447338		Resistor, Thick Film, 330K, 1%, 50V, 100mW, 0603
R3	17.62	26.73	180	0603	100K	Multicomp	MC01W08051100K	9332405		Chip Resistor; Thick Film; 100k; 150V; 0805; 100mW
R9	31.97	28.64	180	0603	100K	Multicomp	MC01W08051100K	9332405		Chip Resistor; Thick Film; 100k; 150V; 0805; 100mW
R4	26.48	45.97	270	0805	100K_1%	Panasonic	ERJ6ENF1003V	2303757		Resistor, Thick Film, 100K, 1% 0.125W, 0805
R5	26.48	49.97	270	0805	19K1_0.1%	Panasonic	ERA6ARB1912V	2094729		Resistor, Thin Film, 19K1, 0.1%, 0.125W, 0805
R6	24.19	52.13	270	0805	68k	Multicomp	MCWR08X6802FTL	2447706		Resistor, Thick Film, 68K, 1%, 0.125W
U1	29.62	14.8	270	SOT23-3	MCP111T-240E/TT	Microchip	MCP111T-240E/TT	1627192		Reset Supervisor; SOT23-3; 2.40V; Open Drain; Active Low
U2	28.58	34.32	270	SOT23-5	SPX3819-3.3	Exar	SPX3819M5-L-3-3/TR		701-SPX3819M5-L-33TR	LDO Voltage Regulator; 500mA; SOT-23-5
U3	22.23	47.16	0	QFN-20	MPM3610	MPS	MPM3610AGQV-P		946-MPM3610AGQV-P	Switching Voltage Regulator; 21V; 1.2A; DC/DC
U4	33.69	45.75	180	SOT23-5	74AHCT1G125	Texas Instruments	SN74AHCT1G125DBVR	1105927		Buffer / Line Driver; Single Gate
U5	26.04	22.64	90	TQFN48	ATSAMD21G18_QFN	Atmel	ATSAMD21G18A-MF	2460544		ATSAMD21G18A-MF; QFN48
X1	18.86	20.1	270	3.2x1.5	32.768	Epson	Q13FC13500004	1278036		Crystal; 32.768kHz; 12.5pF; 3.2 x 1.5mm
Non-surface mount components:										
BAT						Keystone	1294	1650674		PP3 (9V) Battery Holder Keystone 1294
LED						Multicomp	703-0090	2112100		LED, Red, 3mm, 20mA, 1.8V, 643nm
S1						Multicomp	MCDTS6-1N	9471685		Switch, SPST, 0.05A, 12VDC, 160gf
S2						Multicomp	MCDTS6-1N	9471685		Switch, SPST, 0.05A, 12VDC, 160gf
S3						Multicomp	MCDTS6-1N	9471685		Switch, SPST, 0.05A, 12VDC, 160gf
S4						Multicomp	MCDTS6-1N	9471685		Switch, SPST, 0.05A, 12VDC, 160gf
S5						Multicomp	MCDTS6-1N	9471685		Switch, SPST, 0.05A, 12VDC, 160gf