

Lipo Charge and Boost Module

Senior Design

Rev: V1.0

10/31/2022



	Sour ced	Plac ed	References	Value	Footprint	link	Quant ity
1	<input type="checkbox"/>	<input type="checkbox"/>	C1, C2	4.7uF	C_0805_2012Metric	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL21A475KAQNNNG/3894439	2
2	<input type="checkbox"/>	<input type="checkbox"/>	C3	1uF	C_0805_2012Metric	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL21B105KAFNNNE/3886724	1
3	<input type="checkbox"/>	<input type="checkbox"/>	R1, R2	5.1k	R_0805_2012Metric	https://www.digikey.com/en/products/detail/yageo/RC0805JR-075K1L/728338	2
4	<input type="checkbox"/>	<input type="checkbox"/>	R4	2k	R_0805_2012Metric	https://www.digikey.com/en/products/detail/yageo/RC0805JR-072KL/728268	1
5	<input type="checkbox"/>	<input type="checkbox"/>	R5	470	R_0805_2012Metric	https://www.digikey.com/en/products/detail/yageo/RC0805JR-07470RL/728333	1
6	<input type="checkbox"/>	<input type="checkbox"/>	R6	3k	R_0805_2012Metric	https://www.digikey.com/en/products/detail/yageo/RC0805JR-073KL/728296	1
7	<input type="checkbox"/>	<input type="checkbox"/>	R7	1k	R_0805_2012Metric	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RNCP0805FTD1K00/2240229	1
8	<input type="checkbox"/>	<input type="checkbox"/>	L1	10uH	L_0805_2012Metric	https://www.digikey.com/en/products/detail/taiyo-yuden/LBR2012T100K/1788937	1
9	<input type="checkbox"/>	<input type="checkbox"/>	D1	LED	LED_0805_2012Metric	https://www.digikey.com/en/products/detail/stanley-electric-co/VCDB1112H-5AY3B-TR/6615630	1

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10	<input type="checkbox"/>	<input type="checkbox"/>	D2	1N5819	D_SOD-123F	https://www.digikey.com/en/products/detail/comchip-technology/CDBW140-G/3308555	1
11	<input type="checkbox"/>	<input type="checkbox"/>	U1	MCP73831-2-OT	SOT-23-5	https://www.digikey.com/en/products/detail/microchip-technology/MCP73831T-3ACI-OT/964307	1
12	<input type="checkbox"/>	<input type="checkbox"/>	U2	AP3012	SOT-23-5	https://www.digikey.com/en/products/detail/diodes-incorporated/AP3012KTR-G1/4470846	1
13	<input type="checkbox"/>	<input type="checkbox"/>	U3	Adafruit USB-C	Adafruit SMD Power Only	https://www.adafruit.com/product/4907	1
14	<input type="checkbox"/>	<input type="checkbox"/>	H1, H2, H3, H4	MountingHole	MountingHole_3.2mm_M3_ISO14580_Pad_TopOnly	N/A	4
15	<input type="checkbox"/>	<input type="checkbox"/>	TP1, TP2, TP3, TP4	TestPoint	TestPoint_Pad_D1.5mm	N/A	4
16	<input type="checkbox"/>	<input type="checkbox"/>	J1, J2	Conn_01x02_Male	JST_PH_S2B-PH-K_1x02_P2.00mm_Horizontal	https://www.digikey.com/en/products/detail/jst-sales-america-inc/S2B-PH-K-S-LF-SN/926626	2