

Open Power - Prototype 1B

Bill of Material for				
Comment	Pattern	Quantity	Components	
4.7uF	0603 Capacitor	2	C1, C3	0603 Ceramic Capacitor
5.6uF (Substitute 4.7uF)	0805 Capacitor	1	C11	0805 Ceramic Capacitor, 25V Min
22uF	0805 Capacitor	2	C12, C13	0805 Ceramic Capacitor, 25V Min
1uF	0603 Capacitor	4	C2, C4, C5, C8	0603 Ceramic Capacitor
22uF	0603 Capacitor	2	C6, C7	0603 Ceramic Capacitor
2.2uF	0603 Capacitor	1	C9	0603 Ceramic Capacitor
B130LAW	SOD123	1	D1	Schottky Diode, 1A, 30V RRM, 0.42V FWD Voltage, (SXD1)
SS34	DO-214AC (SMA)	2	D2, D3	Schottky Diode, 3A, 40V RRM, 0.5 FWD Voltage, (SS34)
MF-PSMF050X-2	0805 Fuse - Gold	1	Fuse1	0805, 6V, 0.5A, (4)
22uH - CD32	CD32	1	L1	CD32-220, Power Inductor, 22uH, 0.5A
22uH - 06030, 22uH, 3A	06030 - 7x7x3mm	2	L2, L3	06030, 22uH, 3A
5V	LED - 0603 - Yellow	1	LED10	Yellow, 0603
6V	LED - 0603 - Yellow	1	LED9	Yellow, 0603
CHRG	LED - 0603 - Blue	1	LED1	Blue, 0603
2V	LED - 0603 - Blue	1	LED16	Blue, 0603
1.5V	LED - 0603 - Blue	1	LED17	Blue, 0603
1V	LED - 0603 - Blue	1	LED18	Blue, 0603
0.6V	LED - 0603 - Blue	1	LED19	Blue, 0603
4V	LED - 0603 - Green	1	LED12	Green, 0603
3.6V	LED - 0603 - Green	1	LED13	Green, 0603
3.3V	LED - 0603 - Green	1	LED14	Green, 0603
3V	LED - 0603 - Green	1	LED15	Green, 0603
8V	LED - 0603 - Orange	1	LED7	Orange, 0603
7V	LED - 0603 - Orange	1	LED8	Orange, 0603
PWR	LED - 0603 - Red	1	LED4	Red, 0603
10V	LED - 0603 - Red	1	LED5	Red, 0603
9V	LED - 0603 - Red	1	LED6	Red, 0603
12V	LED - 0603 - White	1	LED2	White, 0603
11V	LED - 0603 - White	1	LED3	White, 0603
5k (VCC Low) (DNP)	Potentiometer (3x3mm SMD)	1	POT1	5k, 3mm x 3mm, Single Turn
100k (FBHigh) (DNP)	Potentiometer (3x3mm SMD)	1	POT2	100k, 3mm x 3mm, Single Turn
3k (FBLow) (DNP)	Potentiometer (3x3mm SMD)	1	POT4	3k, 3mm x 3mm, Single Turn
3386P-104TLF	3386P-104TLF - Range	1	Pot3	100k, 3386P-104TLF, With Knob
12k	Resistor Array - 4D03 - 12k - 0603x4	1	R1	Resistor Array, 12k Ohm, 0603, 5%, (123)
10k	Resistor Array - YC164 - 10k - 0603x4	4	R2, R3, R6, R18	Resistor Array, 10k Ohm, 0603, 1%, (1002)
82k*	0603 Resistor	1	R20	1%, 0603
100	0603 Resistor	2	R21, R33	1%, 0603
2.2k*	0603 Resistor	1	R22	1%, 0603
3.9k	0603 Resistor	2	R24, R34	1%, 0603
1.2k	0603 Resistor	2	R36, R39	1%, 0603
1.8k	0603 Resistor	2	R37, R40	1%, 0603
100k	0603 Resistor	2	R4, R12	1%, 0603
3.3k*	0603 Resistor	1	R5	1%, 0603
1k	Resistor Array - CRA034R - 1k - 0603x4	5	R8, R11, R14, R16, R26	Resistor Array, 1k Ohm, 0603, 1%, (1001)
LM339	SOIC-14*	4	Q1, Q3, Q4, Q5	Operational Amplifier - LM358 - Quad (SOIC-14)
DMP1045U	Mosfet - Sot23 - Generic	1	Q2	P-Channel, SOT-23, 20V, 3.7A, 01AH
MCP73831T	SOT-23-OT5_N	1	U1	Li-Ion, Li-Polymer Charge Management Controller
XC6206P332MR-G	SOT-23-3	1	U2	3.3V (Torex) (SOT-23) (3 Pin)
MIC5225-5.0	SOT23-5	1	U3	5.0V (Microchip) (SOT23-5)
MT3608	SOT23-6	2	U4, U5	2-24V input, 28V output, 2A (Aerosemi) (SOT23-6)
C40951 (A332)	Micro USB - A322	1	USB1	Micro, SMD
Header 1x4	Male Pin Headers	2	P1, P2	Single Row, 4-Pin, Male
Header 2x5	Male Pin Headers	2	P3, P4	Dual Row, 5-Pin, Male
JST (50 mil)	JST - 1.25 - GH - 2 Pin - SMD - Right	1	BATT1	Lipo Connector
XKB5858-Z	Toggle Switch - THRU (6mm x 6mm x 10mm)	1	SW1	THRU (6mm x 6mm x 10mm)(Latching)
	Total Components	81		
	Different Type of Components	40		
	SMD Components	51		