

Bill of Materials

TI DESIGNS

TIDA-00883

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	16	C8, C9, C10, C11, C12, C14, C15, C16, C17, C18	0.1uF	Capacitor, Ceramic Chip, 50V, X7R, ±20%	Kemet	C0603C104M5RACTU		603	
2	1	C13	2.2uF	X7R ±20%	TDK	C2012X7R1E225M085AB		805	
3	0	C19, C20, C21	DNP	Capacitor, Ceramic Chip, 50V, X7R, ±20%	Kemet	C0603C104M5RACTU		603	
4	1	C7	0.47uF	CAP, CERM, 0.47 µF, 10 V, +/-10%, X5R, 0603	Kemet	C0603C474K8PACTU		0603	
5	1	D1	BAT54HT1G	Diode, Schottky, 200-mA, 30-V	On Semi	BAT54HT1G		SOD323	
6	3	D2, D3, D4	MM3Z5V6C	Diode, Zener, 5.6V, 200mw	Fairchild	MM3Z5V6C		SOD323	
7	5	D5, D6, D7, D8, D9	SML-LX23GC	WTR CLR SMD	Lumex	SML-LX23GC		1206	
8	0	F1	DNP	Fuse, Slo-Blo Ceramic, xxA, yyyV	Sony	SFDxxx		SFDxxx	
9	2	J1, J4	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	OST	ED555/2DS		0.27 x 0.25 inch	
10	1	J2	22-05-3041	Header, Friction Lock Ass'y, 4-pin Right Angle,	Molex	22-05-3041		0.400 x 0.500 inch	
11	2	J3, J5	ED555/3DS	Terminal Block, 3-pin, 6-A, 3.5mm	OST	ED555/3DS		0.41 x 0.25 inch	
12	0	J6		above insulator	Sullins	PEC02SAAN		2x1 Header	
13	1	Q1	FDN358P	MOSFET, Pch, -30V, -1.5A, 125 milliohm	Fairchild	FDN358P		SOT23	
14	2	Q2, Q3	Si7114DN	MOSFET, Nch, 30V, 11.7A, 7.5milliohm	Vishay	Si7114DN-T1-E3		PWRPAK 1212	
15	1	Q4	2N7002K	MOSFET, Nch, 60V, 300 mA, 2-Ohms	Vishay	2N7002K-T1-E3		SOT23	
16	1	Q5	Si1414DH	MOSFET, Nch, 30V, 4A, 46 milliohms	Vishay	Si1414DH-T1-GE3		SC-70	
17	1	R1	300	Resistor, Chip 1W, 5%	Vishay-Dale	CRCW2512300RJNEG		2512	
18	5	R13, R14, R15, R18, R29	1K	Resistor, Chip, 1/10W, 5%	Vishay-Dale	CRCW06031K00JNEA		603	
19	1	R19	0.001	Resistor, Chip 1 watt, ±1%, 50 ppm	Reidon	CSR1206-0R001F1		1206	
20	3	R2, R3, R5	10M	Resistor, Chip, 1/10W, 5%	Vishay-Dale	CRCW060310M0JNEA		603	
21	3	R24, R26, R28	200	Resistor, Chip, 1/16W, 5%	Vishay-Dale	CRCW0603200RJNEA		603	
22	1	R33	5.1	RES, 5.1, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04025R10JNED		0402	
23	3	R4, R12, R32	10K	Resistor, Chip, 1/10W, 5%	Vishay-Dale	CRCW060310K0JNEA		603	
24	1	R6	51K	Resistor, Chip, 1/16W, 5%	Vishay-Dale	CRCW060351K0JNEA		603	
25	5	R7, R8, R10, R16, R17	5.1K	Resistor, Chip, 1/10W, 5%	Vishay-Dale	CRCW06035K10JNEA		603	
26	10	R9, R11, R20, R21, R22, R23, R25, R27, R30, R31	100	Resistor, Chip, 1/10W, 5%	Vishay-Dale	CRCW0603100RJNEAHP		603	
27	1	RT1	10K	Thermistor, NTC, 5 Ohms, 1-A	Vishay	CRCW120610K0JNEA		1206	

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28	4	RT2, RT3, RT4, RT5	10K	Thermistor, NTC, 3-A	Semitec	103AT-2		0.095 X 0.150 inch	
29	3	S1, S2, S3	EVQ-PLHA15	Switch, 1P1T, 50-mA, 12-V, 160g	Panasonic	EVQ-PLHA15		0.200 x 0.200 inch	
30	1	TP3	5001	Test Point, Black, Thru Hole Color Keyed	Keystone	5001		0.100 x 0.100 inch	
31	1	U1	BQ40z50RSMR(T)-R1	IC, 2 to 4-Series Li-Ion Battery Pack Manager	TI	BQ40z50RSMR(T)-R1		QFN	
32	1	U2	BQ296103DSGT	Overvoltage Protection for 2- Series, 3-Series, and 4-Series Cell Li-Ion Batteries with Regulated Output Supply, DSG0008A	Texas Instruments	BQ296103DSGT		DSG0008A	

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