Bill of Materials

TI DESIGNS

TIDA-00553

Item #	Quantity	Designator	Value	Description	Manufacturer	PartNumber	PackageReference
1	18	C1, C2, C3, C4, C6, C8, C9, C10, C11, C14, C16, C17, C19, C21, C22, C23, C25, C26	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H104KA93D	0603
2	3	C5, C20, C29	2.2uF	CAP, CERM, 2.2uF, 25V, +/-10%, X7R, 0805	MuRata	GRM21BR71E225KA73L	0805
3	2	C7, C35	10uF	CAP, CERM, 10 µF, 35 V, +/- 10%, X7R, 1206	Taiyo Yuden	GMK316AB7106KL	1206
4	2	C12, C13	10uF	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206_190	TDK	CGA5L3X5R1H106K160AB	1206_190
5	1	C15	22pF	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0603	AVX	06035A220JAT2A	0603
6	1	C18	1uF	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	MuRata	GRM188R61E105KA12D	0603
7	6	C24, C28, C31, C32, C33, C34	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	MuRata	GRM21BR71H105KA12L	0805
8	1	C27	1.5uF	CAP, CERM, 1.5uF, 25V, +/-10%, X7R, 0805	MuRata	GRM21BR71E155KA88L	0805
9	2	C30, C36	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C101J5GAC	0603
10	2	D1, D3	30V	Diode, Schottky, 30V, 0.2A, SOD-323	ON Semiconductor	BAT54HT1G	SOD-323
11	3	D2, D4, D5	5.6V	Diode, Zener, 5.6V, 200mW, SOD-323	Diodes Inc.	MMSZ5232BS-7-F	SOD-323
12	4	D6, D7, D8, D9	Green	LED, Green, SMD	Lite-On	LTST-C190GKT	1.6x0.8x0.8mm
13	DNP	F1		Fuse, 12A, 36V, SMD	Dexerials Corporation	SFH-1412B	5.4x1.35x3.2mm
14	3	FID1, FID2, FID3		Fiducial mark. There is nothing to buy or mount.	N/A	N/A	Fiducial
15	4	H1, H2, H3, H4		Bumpon, Cylindrical, 0.312 X 0.200, Black	3M	SJ61A1	Black Bumpon
16	1	H5		Cable	Any	CBL002	Used in PnP output
17	1	J1		Terminal Block, 6A, 3.5mm Pitch, 4-Pos, TH	On-Shore Technology	ED555/4DS	14x8.2x6.5mm
18	1	J2		Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S	3x1 Header
19	1	J3		Terminal Block, 6A, 3.5mm Pitch, 5-Pos, TH	On-Shore Technology	ED555/5DS	17.5x8.2x6.5mm
20	1	J4		Header, TH, 100mil, 3x2, Gold plated, 230 mil above insulator	Samtec	TSW-103-07-G-D	3x2 Header
21	1	J5		Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology	ED555/2DS	7.0x8.2x6.5mm
22	1	J6		Header, 100mil, 4x1, R/A, TH	Molex	22-05-3041	4x1 R/A Header
23	1	J7		Header, 100mil, 2x1, Gold, TH	Samtec	TSW-102-07-G-S	2x1 Header
24	1	L1	2.2uH	Inductor, Shielded Drum Core, Powdered Iron, 2.2 µH, 5 A, 0.0377 ohm, SMD	Vishay-Dale	IHLP2020BZER2R2M11	5.49x2x5.18mm
25	1	LBL1		Thermal Transfer Printable Labels, 1.250" W x 0.250" H - 10,000 per roll	Brady	THT-13-457-10	PCB Label 1.25"H x 0.250"W
26	1	Q1	-30V	MOSFET, P-CH, -30V, -1.5A, SSOT-3	Fairchild Semiconductor	FDN358P	SSOT-3
27	5	Q2, Q3, Q5, Q8, Q9	30V	MOSFET, N-CH, 30V, 47A, SON 3.3x3.3mm	Texas Instruments	CSD17308Q3	SON 3.3x3.3mm
28	1	Q4	60V	MOSFET, N-CH, 60V, 0.31A, SOT-323	Fairchild Semiconductor	2N7002KW	SOT-323
29	6	Q6, Q7, Q10, Q11, Q12, Q13	50V	MOSFET, N-CH, 50V, 0.22A, SOT-23	Fairchild Semiconductor	BSS138	SOT-23
30	1	R1	20	RES, 20 ohm, 5%, 0.5W, 1210	Panasonic	ERJ-14YJ200U	1210
31	3	R2, R3, R8	10Meg	RES, 10Meg ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310M0JNEA	0603

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32	11	R4, R30, R32, R33, R35, R36, R37, R39, R40, R41, R42	100	RES, 100 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603100RJNEA	0603
33	6	R5, R10, R11, R15, R22, R55	5.1k	RES, 5.1k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06035K10JNEA	0603
34	1	R6	100k	RES, 100k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603100KJNEA	0603
35	1	R7	2.0	RES, 2.0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06032R00JNEA	0603
36	1	R9	1.00Meg	RES, 1.00Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031M00FKEA	0603
37	9	R12, R13, R16, R19, R34, R50, R51, R52, R53	1.0k	RES, 1.0k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031K00JNEA	0603
38	1	R14	10k	RES, 10k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310K0JNEA	0603
39	1	R17	499k	RES, 499k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603499KFKEA	0603
40	1	R18	20k	RES, 20k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060320K0JNEA	0603
41	1	R20	0.01	RES, 0.01 ohm, 1%, 1W, 2512	Panasonic	ERJ-M1WSF10MU	2512
42	2	R21, R54	332k	RES, 332k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603332KFKEA	0603
43	5	R23, R24, R38, R44, R48	0	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	0603
44	1	R25	10	RES, 10 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310R0JNEA	0603
45	1	R26	26.1k	RES, 26.1k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060326K1FKEA	0603
46	1	R27	9.53k	RES, 9.53k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06039K53FKEA	0603
47	1	R28	20.5k	RES, 20.5k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K5FKEA	0603
48	1	R29	78.7k	RES, 78.7k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060378K7FKEA	0603
49	1	R31	10.0	RES, 10.0, 1%, 0.25 W, 1206	Panasonic	ERJ-8ENF10R0V	1206
50	1	R43	0.005	RES, 0.005 ohm, 1%, 1W, 1210	Rohm	PMR25HZPFU5L00	1210
51	4	R45, R46, R47, R49	330k	RES, 330k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603330KJNEA	0603
52	4	RT1, RT2, RT3, RT4	10.0k ohm	Thermistor NTC, 10.0k ohm, 1%, Disc, 5x8.4 mm	SEMITEC Corporation	103AT-2	Disc, 5x8.4 mm
53	2	S1, S2		Switch, Tactile, SPST-NO, SMT	C&K Components	KST221JLFS	Switch, 6.2X5X6.2 mm
54	3	SH-J1, SH-J2, SH-J3	1x2	Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA	Shunt
55	3	TP1, TP2, TP3	White	Test Point, Miniature, White, TH	Keystone	5002	White Miniature Testpoint
56	1	U1		Overvoltage Protection for 2-Series to 4-Series Cell Li-Ion Batteries with External Delay Capacitor, DSG0008A	Texas Instruments	BQ294700DSG	DSG0008A
57	1	U2		Programmable Battery Pack Manager, RHB0032E	Texas Instruments	bq40z60RHB	RHB0032E
58	1	U3		Fixed Regulator with 1 to 30 V Input and 1.2 to 30 V Output, -40 to 125 degC, 8-Pin SOIC (D), Green (RoHS & no Sb/Br)	Texas Instruments	LP2951-33DRG4	D0008A

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