

TIDA-00792 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-00792	Any	Printed Circuit Board	
2	C1, C5	2	0.01uF	08051C103KAY2A	AVX	CAP. CERM. 0.01uF, 100V, +/-10%, X7R, U805	0805
3	C2	1	1.5uF	GRM218R71E155K888L	MuRata	CAP. CERM. 1.5 uF, 25 V, +/-10%, X7R, 0805	0805
4	C3, C4, C6, C7	4	0.1uF	GRM188R72A104KA35D	MuRata	CAP. CERM. 0.1uF, 100V, +/-10%, X7R, 0603	0603
5	C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C43	19	0.22uF	885012206048	Würth Elektronik	CAP. CERM. 0.22 uF, 16 V, +/- 10%, X7R, 0603	0603
6	C26, C36	2	470pF	885012206081	Würth Elektronik	CAP. CERM. 470 pF, 50 V, +/- 10%, X7R, 0603	0603
7	C27, C28, C29, C46, C47	5	0.1uF	C1608X7R1H104K080AA	TDK	CAP. CERM. 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C30, C31, C32	3	4700pF	885012206087	Würth Elektronik	CAP. CERM. 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
9	C33, C34, C38	3	1uF	885012206092	Würth Elektronik	CAP. CERM. 1 uF, 16 V, +/- 10%, X7R, 0603	0603
10	C37, C38, C39	3	10uF	GRM32ER7YA106KA12L	MuRata	CAP. CERM. 10 uF, 35 V, +/- 10%, X7R, 1210	1210
11	C40	1	4.7uF	885012207025	Würth Elektronik	CAP. CERM. 4.7 uF, 10 V, +/- 10%, X7R, 0805	0805
12	C41, C42	2	1uF	GRM218R71H105KA12L	MuRata	CAP. CERM. 1 uF, 50 V, +/- 10%, X7R, 0805	0805
13	C44, C45	2	3300pF	GRM188R71E33ZKA01D	MuRata	CAP. CERM. 3300pF, 25V, +/-10%, X7R, 0603	0603
14	D1, D5	2	80V	SMCJ80A	Fairchild Semiconductor	Diode, TVS, Uni. 80 V, 1500W, SMC	SMC
15	D2, D3	2	16V	MMS25248BS-7-F	Diodes Inc.	Diode, Zener, 16 V, 200 mW, SOD-323	SOD-323
16	D4, D28, D30	3	18V	MMS25248BS-7-F	Diodes Inc.	Diode, Zener, 18 V, 200 mW, SOD-323	SOD-323
17	D6	1	200V	ES3D-E357T	Vishay-Semiconductor	Diode, Ultrafast, 200V, 3A, SMC	SMC
18	D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21	15	5.6V	MMS25232BS-7-F	Diodes Inc.	Diode, Zener, 5.6V, 200mW, SOD-323	SOD-323
19	D22, D23, D24, D25, D27	5	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123
20	D26	1	3.9V	MMS25228BS-7-F	Diodes Inc.	Diode, Zener, 3.9 V, 200 mW, SOD-323	SOD-323
21	D31, D32, D33, D34, D35	5	Green	LTS1-C190GKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm
22	H1, H2, H3, H4	4		573300D00010G	Aavid	Heatsink, DDPAK/TO-263, SMT	Heatsink, DDPak
23	H5, H7, H9, H11	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
24	H6, H8, H10, H12	4		NY PMS 400 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
25	J5	1		395021006	Molex	Header (through-hole), 3.5mm, 6p, R/A, TH	19.03x7.03x9.33 mm
26	J6	1		395021011	Molex	Terminal block, 3.5mm, 11x1, R/A, TH	39.90x7.03x9.33 mm
27	J7, J8	2		22-06-3041	Molex	Header (friction lock), 100mil, 4x1, R/A, TH	4x1 R/A Header
28	L1, L2, L3, L4	4	220 ohm	BLM18SG221T1N1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2.5 A, 0603	0603
29	LBL1	1		TH1-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650" x 0.200" W
30	Q1, Q2, Q4, Q5	4	100V	CSD1953KTT	Texas Instruments	MOSFET, N-CH, 100 V, 200 A, KTT0002A	KTT0002A
31	Q3, Q23, Q26	3	-100V	ZMP10A13FTA	Diodes Inc.	MOSFET, P-CH, -100V, -0.6A, SOT-23	SOT-23
32	Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20	15	12V	CSD13381F4	Texas Instruments	MOSFET, N-P-CH, 12 V, 2.1 A, 1.0x0.35x0.6mm	1.0x0.35x0.6mm
33	Q21	1	100V	BST82-215	NXP Semiconductor	MOSFET, N-CH, 100 V, 0.19 A, SOT-23	SOT-23
34	Q22, Q25, Q27	3	100V	BSS123	Fairchild Semiconductor	MOSFET, N-CH, 100V, 0.17A, SOT-23	SOT-23
35	Q24	1	100 V	ZXTN19100CZTA	Diodes Inc.	Transistor, NPN, 100 V, 5.25 A, SOT-89	SOT-89
36	R3, R18	2	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.1W, 0603	0603
37	R4	1	0.001	CSNL2010FTL00	Stackpole Electronics Inc	RES, 0.001, 1%, 1.5 W, 2010	2010
38	R6, R11, R16	3	10.0Meg	CRCW060310M0FKEA	Vishay-Dale	RES, 10.0Meg ohm, 1%, 0.1W, 0603	0603
39	R7, R8, R9, R10	4	1.2k	CRCW25121K20JNEG	Vishay-Dale	RES, 1.2 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
40	R12, R13, R14	3	620	CRCW0603620RJNEA	Vishay-Dale	RES, 620, 5%, 0.1 W, 0603	0603
41	R15, R97, R98	3	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
42	R17, R96	2	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
43	R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33	15	28.7	CRCW2010287RFKEF	Vishay-Dale	RES, 28.7, 1%, 0.75 W, 2010	2010
44	R34, R35, R37, R39, R41, R43, R46, R46, R47, R49, R51, R53, R55, R57, R58, R59, R61, R63, R65, R67, R69, R91	22	1.0k	CRCW06031000JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
45	R36, R38, R40, R42, R44, R48, R50, R52, R54, R56, R60, R62, R64, R66, R68, R78, R82	17	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
46	R73	1	499k	CRCW0603499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.1 W, 0603	0603
47	R74, R75	2	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.125W, 0605	0605
48	R76, R77, R85	3	100k	CRCW0603100RFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.125W, 0605	0605
49	R79, R84	2	10.0Meg	CRCW060310M0FKEA	Vishay-Dale	RES, 10.0 M, 1%, 0.1 W, 0603	0603
50	R80	1	51k	CRCW060351K0JNEA	Vishay-Dale	RES, 51 k, 5%, 0.1 W, 0603	0603
51	R81	1	1.0k	CRCW20101000JNEF	Vishay-Dale	RES, 1.0 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
52	R87	1	1.0Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.1 W, 0603	0603
53	R88	1	750	CRCW2010750RJNEF	Vishay-Dale	RES, 750, 5%, 0.75 W, 2010	2010
54	R89, R92, R100, R101	4	300k	RG1608P-304B-T5	Susumu Co Ltd	RES, 300k ohm, 0.1%, 0.1W, 0603	0603
55	R94, R103	2	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
56	R98, R102	2	10.0k	RG1608P-103B-T5	Susumu Co Ltd	RES, 10.0 k, 0.1%, 0.1 W, 0603	0603
57	R104, R108	2	220k	CRCW0603220KJNEA	Vishay-Dale	RES, 220 k, 5%, 0.1 W, 0603	0603
58	R105, R106	2	510k	CRCW0603510KJNEA	Vishay-Dale	RES, 510 k, 5%, 0.1 W, 0603	0603
59	R107	1	113k	CRCW0603113KFKEA	Vishay-Dale	RES, 113 k, 1%, 0.1 W, 0603	0603
60	R11, R12, R13	3	10.0k ohm	103AT2	SEMTEC Corporation	Thermistor NTC, 10.0k ohm, 1%, Disc, 5x8.4 mm	Disc, 5x8.4 mm
61	S1	1		4-1437565-1	TE Connectivity	Switch, Tactile, SPST-FNO, 0.05A, 12V, SMT	SW, SPST 6x6 mm
62	TP19, TP20, TP21, TP30	4		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
63	U1	1		BO76200PWR	Texas Instruments	bq76200 Low-Power, High-Side N-channel FET Driver with Pack Voltage Monitor, Pw0016A	PW0016A
64	U2	1		BO7694000DBTR	Texas Instruments	Battery Monitor for Lithium-Ion and Phosphate Battery Packs, DBT0044A	DBT0044A
65	U3, U4, U5	3		TPD1E10B06DPYT	Texas Instruments	ESD Protection in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DFY)	DFY0002A
66	U7	1		BO78350DBTR-R1	Texas Instruments	CEVD Li-Ion Gas Gauge and Battery Management Controller Companion to the bq786x0 Battery Monitoring AFE, DBT0030A	DBT0030A
67	D29	0	3.9V	MMS25228BS-7-F	Diodes Inc.	Diode, Zener, 3.9 V, 200 mW, SOD-323	SOD-323
68	FD1, FD2, FD3	0	N/A	N/A		Fiducial mark. There is nothing to buy or mount.	Fiducial
69	J1, J2, J3, J4	0	L/S	L/S	Thomas & Betts	Connector, L Type Copper Single Conductor, TH	Connector, L Type Copper Single Conductor, TH
70	R1, R2, R70, R71, R72, R93	0	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
71	R5	0	0.001	CSNL2010FTL00	Stackpole Electronics Inc	RES, 0.001, 1%, 1.5 W, 2010	2010
72	R83, R86, R90	0	1.0k	CRCW06031000JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
73	R95	0	1.0Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.1 W, 0603	0603
74	TP14, TP15	0		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 3 PIN, 100mil, Tin
75	TP16	0		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
76	U6	0		TPD1E10B06DPYT	Texas Instruments	ESD Protection in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DFY)	DFY0002A

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