

TIDA-01182 REV A Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-01182	Any	Printed Circuit Board	
2	B11	1		1043	Keystone	Battery Holder, Plastic, 18650, TH	Battery holder
3	C1	1	0.047uF	GRM155R71E473KA8BD	MuRata	CAP. CERM. 0.047 uF, 25 V, +/- 10%, X7R, 0402	0402
4	C2, C4, C8, C9, C11, C17, C19, C38, C40, C57, C59, C62, C64	13	10uF	885012208069	Wurth Elektronik	CAP. CERM. 10 uF, 25 V, +/- 10%, X7R, 1206	1206
5	C3, C5, C10, C12, C16, C20, C30, C31, C32, C33, C35, C36, C39, C42, C46, C56, C58, C63, C65, C68	20	0.1uF	885012206071	Wurth Elektronik	CAP. CERM. 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
6	C6, C7	2	100uF	EEE-FK1E101P	Panasonic	CAP. AL. 100 uF, 25 V, +/- 20%, 0.26 ohm, SMD	SMT Radial E
7	C13	1	4.7uF	885012207025	Wurth Elektronik	CAP. CERM. 4.7 uF, 10 V, +/- 10%, X7R, 0805	0805
8	C14, C15	2	88uF	EEE-FC1E80P	Panasonic	CAP. AL. 88 uF, 25 V, +/- 20%, 0.3 ohm, SMD	SMT Radial F
9	C16	1	33uF	C231633E133M160AC	TDK	CAP. CERM. 33 uF, 25 V, +/- 20%, XSR, 1206	1206
10	C21	1	0.047uF	C1006X7R1H473K050BB	TDK	CAP. CERM. 0.047 uF, 50 V, +/- 10%, X7R, 0402	0402
11	C22	1	2700pF	GRM155R71H272KA01D	MuRata	CAP. CERM. 2700 pF, 50 V, +/- 10%, X7R, 0402	0402
12	C23	1	0.47uF	GRM188R71C473KA8BD	MuRata	CAP. CERM. 0.47 uF, 16 V, +/- 10%, X7R, 0603	0603
13	C24	1	0.01uF	885012205031	Wurth Elektronik	CAP. CERM. 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
14	C25	1	1uF	GRM155R81A109KE15D	MuRata	CAP. CERM. 1 uF, 10 V, +/- 10%, XSR, 0402	0402
15	C26, C27	2	1uF	C0403C109K3RAC1U	Kemet	CAP. CERM. 1 uF, 25 V, +/- 10%, X7R, 0603	0603
16	C28	1	0.1uF	GRM155R71E109KA01D	MuRata	CAP. CERM. 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
17	C29, C34, C43	3	2.2uF	GRM155R61C229KE11D	MuRata	CAP. CERM. 2.2 uF, 16 V, +/- 10%, XSR, 0402	0402
18	C37	1	4700pF	GRM155R71H472KA01D	MuRata	CAP. CERM. 4700 pF, 50 V, +/- 10%, X7R, 0402	0402
19	C41, C44, C46, C47, C49, C50, C53	7	1uF	GRM188R71C109KA12D	MuRata	CAP. CERM. 1 uF, 16 V, +/- 10%, X7R, 0603	0603
20	C45	1	220pF	885012005063	Wurth Elektronik	CAP. CERM. 220 pF, 50 V, +/- 5%, COGN0, 0402	0402
21	C51, C52, C60, C61	4	0.01uF	C0603C103KRACTU	Kemet	CAP. CERM. 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
22	C54, C55, C56, C57	4	1000pF	C0603C102KRACTU	Kemet	CAP. CERM. 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
23	D1, D2, D3, D4, D5	5	Blue	WP710A10LVB/C/D	Kingbright	LED, Blue, TH	D3, 2mm
24	D6	1	30V	CM506	Toshiba	Diode, Schottky, 30 V, 2 A, M-FLAT	M-FLAT
25	D7, D8, D9, D10	4	30V	B130-13-F	Diodes Inc.	Diode, Schottky, 30 V, 1 A, SMA	SMA
26	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
27	H5	1		NHP-3	JST Manufacturing	CONN HOUSING 2.5MM XH 3POS	
28	H6	1		S-E-43502PM	CIU	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Chassis (Panel)
29	H7, H8, H9, H10	4		1802C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
30	H11, H12, H13, H16, H17, H19, H20, H21, H23, H25, H27, H29, H31, H33	14		SNH-0011-P0.6	JST Manufacturing	CONN TERM CRIMP XH 23-28AWG	
31	H14	1		P170S-FC15BR100K	TT Electronics/IRC	17mm Rotary Potentiometer, 100k Ohm, 0.1W, Solder Lugs, Panel Mount	
32	H15	1		NHP-5	JST Manufacturing	CONN HOUSING 2.5MM XH 5POS	
33	H18	1		OEJA-50-4-7	Kilo International	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Knob
34	H22	1		NHP-6	JST Manufacturing	CONN HOUSING 2.5MM XH 6POS	
35	H24, H26, H28, H30, H32	5		CR-104	Siver	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Panel mount clip LED holder
36	H34	1		Used in BOM report	Used in BOM report	Will add component to BOM. Useful for cables, nuts, etc. not in libraries	Used in PnP output and some BOM reports
37	J1	1		105017-0001	Molex	Connector, Receptacle, Micro-USB Type B, R/A, Bottom Mount SMT	Micro USB receptacle
38	J2	1		BSB-XH4LF(SN)	JST Manufacturing	Header(Shrouded), 2.5mm, 5x1, Tin, TH	Header(Shrouded), 2.5mm, 5x1, TH
39	J3	1		SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions	Header (Shrouded), 100 mil, 7x2, Gold, TH	7x2 Shrouded Header
40	J4	1		PBC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Gold, TH	PBC03SAAN
41	J5	1		BB6-XH4LF(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 6x1, Tin, TH	Header (Shrouded), 2.5mm, 6x1, TH
42	J6	1		B3B-XH4LF(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 3x1, Tin, TH	Header (Shrouded), 2.5mm, 3x1, TH
43	J7	1		B4B-XH4LF(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 4x1, Tin, TH	Header (Shrouded), 2.5mm, 4x1, TH
44	L1	1	1uH	PHLP2026ZBZRT1RM11	Viashay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 1 uH, 7 A, 0.0181 ohm, SMD	5.48x2x5.18mm
45	L2	1	4.7uH	SRRL1280-4R7Y	Bourns	Inductor, Drum Core, Ferrite, 4.7 uH, 8.2 A, 0.0155 ohm, SMD	12.5x7.5x12.5mm
46	L3, L4, L5, L6	4	70 ohm	Z512067007Y3	Fair-Rite Products	Ferrite Bead, 70 ohm @ 100 MHz, 3 A, 1206	1206
47	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 inch
48	Q1	1	25V	CSD1632Q03	Texas Instruments	MOSFET, N-CH, 25 V, 60 A, VSON-GLIP-8	DQSG006A
49	Q2, Q3	2	30V	CSD17578Q5A	Texas Instruments	MOSFET, N-CH, 30 V, 25 A, SON 5x6mm	SON 5x6mm
50	R1	1	198	CRCW0402198PFKED	Viashay-Dale	RES, 198, 1%, 0.063 W, 0402	0402
51	R2	1	41.2k	CRCW0402412PFKED	Viashay-Dale	RES, 41.2k, 1%, 0.063 W, 0402	0402
52	R3	1	45.3k	CRCW0402453PFKED	Viashay-Dale	RES, 45.3k, 1%, 0.063 W, 0402	0402
53	R4	1	5.23k	CRCW0402523PFKED	Viashay-Dale	RES, 5.23k, 1%, 0.063 W, 0402	0402
54	R5	1	6.49k	CRCW0402649PFKED	Viashay-Dale	RES, 6.49k, 1%, 0.063 W, 0402	0402
55	R6	1	2.87k	CRCW0402287PFKED	Viashay-Dale	RES, 2.87k, 1%, 0.063 W, 0402	0402
56	R7	1	61.9k	CRCW0402619PFKED	Viashay-Dale	RES, 61.9k, 1%, 0.063 W, 0402	0402
57	R8	1	100	CRCW0402100PFKED	Viashay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
58	R9, R10, R11, R17, R22	5	10.0k	CRCW0402100PFKED	Viashay-Dale	RES, 10.0k, 1%, 0.063 W, 0402	0402
59	R12	1	30.1k	CRCW0402301PFKED	Viashay-Dale	RES, 30.1k, 1%, 0.063 W, 0402	0402
60	R13	1	0.009	PRL1632-R009-F11	Susumu Co Ltd	RES, 0.009, 1%, 1 W, 0612	0612
61	R14	1	1.00k	CRCW04021000PFKED	Viashay-Dale	RES, 1.00k, 1%, 0.063 W, 0402	0402
62	R15	1	0.01	PRL1632-R010-F11	Susumu Co Ltd	RES, 0.01, 1%, 1 W, 0612	0612
63	R16	1	221	CRCW0402221PFKED	Viashay-Dale	RES, 221, 1%, 0.063 W, 0402	0402
64	R18	1	2.21k	CRCW0402221PFKED	Viashay-Dale	RES, 2.21k, 1%, 0.063 W, 0402	0402
65	R20, R21	2	2.20k	CRCW0402220PFKED	Viashay-Dale	RES, 2.20k, 1%, 0.063 W, 0402	0402
66	R23, R24	2	4.70k	ERJ-2RKF4701X	Panasonic	RES, 4.70k, 1%, 0.1 W, 0402	0402
67	R25	1	20k	CRCW040220KPFKED	Viashay-Dale	RES, 20k, 1%, 0.063 W, 0402	0402
68	R26, R27	2	0	ERJ3GEYR00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
69	R28, R29, R30, R31, R33	5	10.0	CRCW0402100PFKED	Viashay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
70	R32	1	47.5k	CRCW0402475PFKED	Viashay-Dale	RES, 47.5k, 1%, 0.063 W, 0402	0402
71	R34	1	3.01	CRCW0603301PFKEA	Viashay-Dale	RES, 3.01, 1%, 0.1 W, 0603	0603
72	R35	1	120	CRCW0402120PFKED	Viashay-Dale	RES, 120, 5%, 0.063 W, 0402	0402
73	R36	1	120k	CRCW0402120PFKED	Viashay-Dale	RES, 120k, 1%, 0.063 W, 0402	0402
74	R11, RT2	2	10.0k ohm	ERT-J1V6-103FA	Panasonic	Thermistor NTC, 10.0k ohm, 1%, 0603	0603
75	S1	1		4-143766-1	TE Connectivity	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	SW, SPST 6x6 mm
76	SH1	1	1x2	889102-000-DA	Wurth Elektronik	Header, 100mil, 2x5 pins, 0.5mm	Header, 100mil, 2x5 pins, 0.5mm
77	TP-P-5, TP-BAT+, TP-OND1, TP-GND2, TP-USB	6		6130011121	Wurth Elektronik	Header, 2.54 mm, 1x1, Gold, TH	Header, 2.54 mm, 1x1, TH
78	U1	1		BQ25856RTWR	Texas Instruments	IC: Controlled 5A Single Cell Charger with NVDC Power Path Management and MaxChargeTM High Voltage Adapter Support.	RTW0024H
79	U2	1		LM3481MM	Texas Instruments	High Efficiency Low-Side N-Channel Controller for Switching Regulators, 10-pin MSOP	MUB10A
80	U3	1		TPS78225QDRVRQ1	Texas Instruments	Single Channel Automotive LDO, 150 mA, Fixed 2.5 V Output, 2.2 to 5.5 V Input, with 1 uA Quiescent Current, 6-pin SON (DRV), -40 to 125 degC, Green (RoHS & no Sb/Bi)	DRV0006A
81	U4	1		BQ27426Y2PR	Texas Instruments	System-Side Impedance Track Fuel Gauge, Y2F0009-C01	Y2F0009-C01
82	U5	1		BQ2970DSER	Texas Instruments	Cost-Effective Voltage and Current Protection Integrated Circuit for Single-Cell Li-Ion and Li-Polymer Batteries , DSE0006A	DSE0006A
83	U6	1		MSP430F5735RHAR	Texas Instruments	24 MHz Mixed Signal Microcontroller, 1024 B SRAM and 33 GPIOs, -40 to 85 degC, -40-pin RHV, Green (RoHS & no Sb/Bi)	RHA0040D
84	U7	1		DAC081C085CIMM/NOPB	Texas Instruments	8-Bit Micro Power Digital-to-Analog Converter with an I2C-Compatible Interface and External Reference, 8-pin Mini SOIC, Pb-Free	MUA06A
85	U8	1		PCA3006DCCR	Texas Instruments	Dual Bi-Directional I2C-Bus and SMBus Voltage Level-Translator, 0 to 5.5 V, -40 to 85 degC, 8-pin USB (DCL), Green (RoHS & no Sb/Bi)	DCU0006A
86	U9	1		TPA3004D2PHPR	Texas Instruments	12-W STEREO CLASS-D AUDIO POWER AMPLIFIER WITH DC VOLUME CONTROL - PHP048D	PHP0048D
87	FID1, FID2, FID3	0	N/A	N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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