

**TIDA-01530 REV E3 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCBI	1		TIDA-01530	Any	Printed Circuit Board	
2	C1, C2	2	0.1uF	C0402C104K4RACAUTO	Kemet	CAP, CERAM, 0.1 uF, 16 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
3	C3	1	4.7uF	C2012X7R1A475M125AC	TDK	CAP, CERAM, 4.7 uF, 10 V,+/- 20%, X7R, 0805	0805
4	C4	1	10uF	UMK325AB7106KMHT	Taiyo Yuden	CAP, CERAM, 10 uF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
5	C5, C6, C13, C14, C21, C22	6	10uF	CL31B106KBHNNNE	Samsung Electro-Mechanics	CAP, CERAM, 10 uF, 50 V,+/- 10%, X7R, 1206	1206
6	C7, C8, C15, C16, C23, C24, C29, C30	8	1uF	GRM188R70J105KA01D	MuRata	CAP, CERAM, 1 uF, 6.3 V,+/- 10%, X7R, 0603	0603
7	C9, C17, C25, C31	4	1uF	C1608X7R1C105K080AC	TDK	CAP, CERAM, 1 uF, 16 V,+/- 10%, X7R, 0603	0603
8	C10, C18, C26, C32	4	10uF	C3225X7S1H106K250AB	TDK	CAP, CERAM, 10 uF, 50 V,+/- 10%, X7S, 1210	1210
9	C11, C12, C19, C20, C27, C28, C33, C34	8	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERAM, 0.1 uF, 50 V,+/- 10%, X7R, 0603	0603
10	D1	1	90V	CD0603-S0180	Bourns	Diode, Switching, 90 V, 0.1 A, 0603 Diode	0603 Diode
11	D2	1	Orange	LTST-C191KFKT	Lite-On	LED, Orange, SMD	LED_0603
12	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
13	J1	1		0399100102	Molex	Terminal Block, 60A, 10.16mm Pitch, 2-Pos, TH	21.8x30x19 mm
14	J2	1		OSTT7032150	On-Shore Technology	Terminal Block, 3x1, 9.52mm, TH	Terminal Block, 3x1, 9.52mm, TH
15	J3	1		1725698	Phoenix Contact	Terminal Block, 6x1, 2.54mm, TH	Terminal Block, 6x1, 2.54mm, TH
16	J4, J5	2		CRD-081413-A-G	Major League Electronics	Receptacle, 2.54 mm, 10x2, Gold, TH	Receptacle, 2.54 mm, 10x2, TH
17	J6, J7, J9	3		OSTT7020150	On-Shore Technology	Terminal Block, 6.35mm, 2x1, TH	On-Shore OSTT7020150
18	J8	1		90120-0122	Molex	Header, 100mil, 2x1, Tin, TH	Header 2x1
19	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
20	Q1	1	60V	SQJA04EP-T1_GE3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 75 A, AEC-Q101, PowerPAK_SO-8L	PowerPAK_SO-8L
21	Q2	1	60 V	MMBTA05LT1G	ON Semiconductor	Transistor, NPN, 60 V, 0.5 A, AEC-Q101, SOT-23	SOT-23
22	Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15	13	60V	SQJA06EP-T1_GE3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 57 A, AEC-Q101, PowerPAK_SO-8L	PowerPAK_SO-8L
23	Q16	1	60V	DMN62D0U-7	Diodes Inc.	MOSFET, N-CH, 60 V, 0.38 A, AEC-Q101, SOT-23	SOT-23
24	R1	1	0.001	CRE2512-FZ-R001E-3	Bourns	RES, 0.001, 1%, 3 W, AEC-Q200 Grade 0, 2512	2512
25	R2, R3, R20, R30, R36, R40, R44, R54	8	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
26	R4, R6, R8, R10, R12, R16, R19, R22, R27, R35, R41, R42, R43, R52, R53	15	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
27	R5	1	2.55k	CRCW04022K55FKED	Vishay-Dale	RES, 2.55 k, 1%, 0.063 W, 0402	0402
28	R7	1	43k	CRCW040243K0JNED	Vishay-Dale	RES, 43 k, 5%, 0.063 W, 0402	0402
29	R9	1	200	CRCW0603200RJNEA	Vishay-Dale	RES, 200, 5%, 0.1 W, 0603	0603
30	R11, R15, R21	3	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, 0402	0402
31	R18	1	0.003	CRE2512-FZ-R003E-3	Bourns	RES, 0.003, 1%, 3 W, AEC-Q200 Grade 0, 2512	2512
32	R26, R32, R33, R38, R39, R46, R48, R51	8	200k	CRCW0402200KJNED	Vishay-Dale	RES, 200 k, 5%, 0.063 W, 0402	0402
33	R28, R34	2	0.005	MCS3264R005FER	Ohmite	RES, 0.005, 1%, 2 W, 2512	2512
34	R29, R50	2	68k	CRCW040268K0JNED	Vishay-Dale	RES, 68 k, 5%, 0.063 W, 0402	0402
35	R49, R55	2	11k	CRCW040211K0JNED	Vishay-Dale	RES, 11 k, 5%, 0.063 W, 0402	0402
36	S1, S2, S3	3		1825255-7	TE Connectivity	Switch, Slide, SP3T, 3 Pos, 0.3 A, 125 VAC, TH	Switch, 4-Leads, SP3T, Body 16x6.7mm, TH
37	TP1, TP2, TP3, TP4	4		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
38	TP5	1		5008	Keystone	Test Point, Compact, Orange, TH	Orange Compact Testpoint
39	U1	1		INA300AIDSQR	Texas Instruments	36-V Low-/High-Side, Overcurrent Protection Comparator, DSQ0010A (WSON-10)	DSQ0010A
40	U2	1		TMP302DQDRLRQ1	Texas Instruments	Automotive, Pin-Selectable Trip Point 1.4V-Capable Family of Temperature Switches, DRL0006A (SOT-OTHER-6)	DRL0006A
41	U3	1		TPS7B6933QDBVRQ1	Texas Instruments	High Voltage Ultra Low Iq - Low Drop Out Regulator, DBV0005A (SOT-23-5)	DBV0005A
42	U4, U6	2		DRV8702DQRHBRQ1	Texas Instruments	Automotive Brushed DC Motor Gate Driver, RHB0032E (VQFN-32)	RHB0032E
43	U5, U7	2		DRV8702QRHBRQ1	Texas Instruments	Automotive Brushed DC Motor Gate Driver, RHB0032E (VQFN-32)	RHB0032E
44	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
45	R13, R14, R17, R25	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
46	R23, R31, R37, R45	0	68k	CRCW040268K0JNED	Vishay-Dale	RES, 68 k, 5%, 0.063 W, 0402	0402
47	R24, R47	0	200k	CRCW0402200KJNED	Vishay-Dale	RES, 200 k, 5%, 0.063 W, 0402	0402

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