

TIDA-010000 REV E2 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		TIDA-010000	Any	Printed Circuit Board	
2	C1, C10	2	330pF	GRM31A5C2J331JW01D	MuRata	CAP, CERM, 330 pF, 630 V, +/- 5%, C0G/NP0, 1206	1206
3	C2	1	4700pF	GRM31BR73A472KW01L	MuRata	CAP, CERM, 4700 pF, 1000 V, +/- 10%, X7R, 1206	1206
4	C3	1	470uF	UBT1H471MHD1TO	Nichicon	CAP, AL, 470 uF, 50 V, +/- 20%, 0.055 ohm, AEC-Q200 Grade 1, TH	D12.5xL25mm
5	C4	1	330uF	UBT1V331MPD1TD	Nichicon	CAP, AL, 330 uF, 35 V, +/- 20%, AEC-Q200 Grade 1, TH	D10xL20mm
6	C5, C11, C12, C13, C23, C44	6	0.1uF	C0805C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0805	0805
7	C7	1	0.033uF	B32672L1333J000	TDK	CAP, Film, 0.033 uF, 1600 V,+/- 5%, TH	18x9mm
8	C8, C24, C30	3	1uF	GMK107AB7105KAHT	Taiyo Yuden	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 0, 0603	0603
9	C9, C14, C20	3	47uF	450BXW47MEFC12.5X35	Rubycon	CAP, AL, 47 uF, 450 V, +/- 20%, TH	D12.5xL35mm
10	C15, C16	2	470uF	UBT1E471MPD1TD	Nichicon	CAP, AL, 470 uF, 25 V, +/- 20%, 0.057 ohm, TH	D10xL20mm
11	C17	1	1uF	GRM219R71E105KA88D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
12	C18, C25, C26	3	10uF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X7R, 1206_190	1206_190
13	C19, C29	2	10uF	C3216X7R1V106K160AC	TDK	CAP, CERM, 10 uF, 35 V, +/- 10%, X7R, 1206	1206
14	C21	1	0.1uF	C1608X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
15	C22	1	150pF	GRM033R71E151KA01D	MuRata	CAP, CERM, 150 pF, 25 V, +/- 10%, X7R, 0201	0201
16	C28	1	22pF	GCM0335C1E220JD03D	MuRata	CAP, CERM, 22 pF, 25 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0201	0201
17	C33	1	1000pF	C1608X7R2A102K080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
18	C34, C35	2	0.047uF	08055C473JAT2A	AVX	CAP, CERM, 0.047 uF, 50 V, +/- 5%, X7R, 0805	0805
19	D1, D7	2	200V	MBR20200CTTU	Fairchild Semiconductor	Diode, Schottky, 200 V, 10 A, TH	TO-220AB
20	D2, D5	2	200V	1.5KE200A-E3/54	Vishay-Semiconductor	Diode, TVS, Uni, 200 V, 274 Vc, AEC-Q101, DO-201AA	DO-201AA
21	D3, D4	2	1600V	BYX10GP-E3/54	Vishay-Semiconductor	Diode, Standard Recovery Rectifier, 1600 V, 0.36 A, TH	DO-41
22	D6, D12, D13	3	200V	MURS320-E3/57T	Vishay-Semiconductor	Diode, Ultrafast, 200 V, 3 A, AEC-Q101, SMC	SMC
23	D8	1	200V	ES1D-E3/61T	Vishay-Semiconductor	Diode, Ultrafast, 200 V, 1 A, AEC-Q101, SMA	SMA
24	D20, D25, D26, D27	4	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
25	F1, F2	2		FC-102-22	Bel Fuse	FUSE CLIP CARTRIDGE 15A PCB	FUSE CLIP CARTRIDGE 15A PCB
26	FU1	1		0ADBC2500-BE	Bel Fuse	Fuse, 2.5 A, 1000VAC/VDC, Cartridge	
27	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
28	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
29	H9, H10	2		274-2AB	Wakefield-Vette	HEATSINK LOW HEIGHT BLK TO-220	HEATSINK LOW HEIGHT BLK TO-220
30	H11	1		V2109B	Assman WSW	Heat Sink TO-220 Aluminum Board Level	Heat Sink TO-220 Aluminum Board Level
31	J1	1		9993960000	Weidmuller	Terminal Block, 5.08mm, 8x1, Black, TH	Terminal Block, 5.08mm, 8x1, TH
32	J2	1		1902547	Phoenix Contact	Terminal Block, 9.52mm, 2x1, R/A, TH	Terminal Block, 2x1, Pitch 9.52mm
33	J3	1		1725656	Phoenix Contact	Terminal Block, 100mil, 2x1, 6A, 63V, TH	6.2x8.5x5.54 mm
34	L1	1	2.2uH	7447462022	Würth Elektronik	Inductor, Unshielded Drum Core, Ferrite, 2.2 uH, 4.3 A, 0.01 ohm, TH	D6 x 8.5mm
35	Q1	1	1500V	2SK1835-E	Renesas	MOSFET, N-CH, 1500 V, 4 A, TO-3P	TO-3P
36	Q2	1	60 V	DNBT8105-7	Diodes Inc.	Transistor, NPN, 60 V, 1 A, AEC-Q101, SOT-23	SOT-23
37	Q4	1	60 V	DPBT8105-7	Diodes Inc.	Transistor, PNP, 60 V, 1 A, AEC-Q101, SOT-23	SOT-23
38	R1, R7	2	220	CRCW2010220RJNEF	Vishay-Dale	RES, 220, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
39	R2, R5, R11, R52	4	10k	CRCW120610K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
40	R3, R8, R10, R12, R15, R16	6	470k	CRCW1206470KJNEA	Vishay-Dale	RES, 470 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
41	R4	1	200k	PR03000202003JAC00	Vishay-Bccomponents	RES, 200 k, 5%, 3 W, D5.20xL16.70mm	D5.20xL16.70mm
42	R6	1	10	ERJ-1TYJ100U	Panasonic	RES, 10, 5%, 1 W, 2512	2512
43	R9	1	4.02k	CRCW08054K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
44	R13	1	1.0k	CRCW08051K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
45	R14	1	5.11	CRCW25125R11FKEG	Vishay-Dale	RES, 5.11, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512
46	R17	1	1.0k	CRCW12061K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
47	R19	1	1.00	CRCW12101R00FKEAHP	Vishay-Dale	RES, 1.00, 1%, 0.75 W, AEC-Q200 Grade 0, 1210	1210
48	R21	1	560	CRCW0805560RJNEA	Vishay-Dale	RES, 560, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
49	R23	1	0.62	ERJ-1TRQFR62U	Panasonic	RES, 0.62, 1%, 1 W, 2512	2512
50	R24	1	5.10k	RT0805BRD075K1L	Yageo	RES, 5.10 k, 0.1%, 0.125 W, 0805	0805
51	R26	1	10	CRCW080510R0JNEA	Vishay-Dale	RES, 10, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
52	R27	1	100	CRCW0805100RFKEA	Vishay-Dale	RES, 100, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
53	R28	1	470	CRCW1206470RJNEA	Vishay-Dale	RES, 470, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
54	R29	1	44.2k	CRCW080544K2FKEA	Vishay-Dale	RES, 44.2 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
55	R31	1	44.2k	RT0805BRD0744K2L	Yageo America	RES, 44.2 k, 0.1%, 0.125 W, 0805	0805
56	R35, R43	2	2.00k	CRCW08052K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
57	R36	1	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
58	R37	1	17.8k	CRCW080517K8FKEA	Vishay-Dale	RES, 17.8 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
59	R39	1	22.1k	CRCW080522K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
60	R44	1	11k	CRCW080511K0JNEA	Vishay-Dale	RES, 11 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
61	R45	1	6.8k	CRCW08056K80JNEA	Vishay-Dale	RES, 6.8 k, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
62	R48	1	10.0	CRCW121010R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.5 W, AEC-Q200 Grade 0, 1210	1210
63	R50	1	4.87k	CRCW12064K87FKEA	Vishay-Dale	RES, 4.87 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
64	R53	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
65	T1	1	2.5mH	750343917	Würth Elektronik	Transformer, 2500 uH, TH	43.18x39.6mm
66	TP1, TP2, TP3, TP4, TP5, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15	14		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
67	U1	1		TLV1117-33IDCY	Texas Instruments	Single-Output LDO, 800mA, Fixed (3.3), Internal Current Limit, Thermal Overload Protection, DCY0004A (SOT-223-4)	DCY0004A
68	U2	1		UCC28740DR	Texas Instruments	Constant-Voltage, Constant-Current Flyback Controller Using Opto-Coupler Feedback, D0007A (SOIC-7)	D0007A
69	U3	1		LTV-817S	Lite-On	Optocoupler, 5 kV, 50-600% CTR, SMT	DIP-4 SMT
70	U4	1		TL431BIDBZT	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A

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