

TIDA-050002 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		TIDA-050002	Any	Printed Circuit Board	
2	C1	1	0.047uF	C3216X7R2A473K115AA	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, 1206	1206
3	C2, C3, C5, C6, C10, C11, C27, C30, C32, C33, C34	11	4.7uF	C3225X7S2A475K200AE	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
4	C4	1	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
5	C7, C31	2	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 1206	1206
6	C8, C13	2	2.2uF	CGA3E1X7S1C225M080AC	TDK	CAP, CERM, 2.2 uF, 16 V, +/- 20%, X7S, AEC-Q200 Grade 1, 0603	0603
7	C9	1	0.47uF	CGA5L2X7R2A474K160AA	TDK	CAP, CERM, 0.47 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
8	C12, C16	2	0.1uF	CGA3E2X8R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
9	C14, C15, C23	3	1000pF	C1608C0G2A102J080AA	TDK	CAP, CERM, 1000 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
10	C17	1	0.27uF	C0603C274K4RACTU	Kemet	CAP, CERM, 0.27 uF, 16 V, +/- 10%, X7R, 0603	0603
11	C18	1	0.22uF	CL10B224K08V PNC	Samsung	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	C19	1	0.033uF	CGA3E3X7S2A333K080AB	TDK	CAP, CERM, 0.033 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0603	0603
13	C20, C22	2	0.01uF	C1608X8R2A103K	TDK	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X8R, 0603	0603
14	C21	1	4700pF	CGA3E2X7R2A472K080AA	TDK	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
15	C24	1	10pF	CGA3E2C0G1H100D080AA	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
16	C25	1	0.1uF	GRM319R72A104KA01D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 1206	1206
17	C26	1	0.022uF	CGA3E2X7R2A223K080AA	TDK	CAP, CERM, 0.022 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
18	C28	1	0.01uF	C1608NP01H103J080AA	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 5%, C0G/NP0, 0603	0603
19	C29	1	1uF	C0805C105K4RACTU	Kemet	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0805	0805
20	C35	1	0.22uF	CGA3E3X8R1E224K080AB	TDK	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0603	0603
21	D1	1	100V	PDS3100Q-13	Diodes Inc.	Diode, Schottky, 100 V, 3 A, AEC-Q101, PowerDI5	PowerDI5
22	D2	1	8.2V	MMSZ5237BS-7-F	Diodes Inc.	Diode, Zener, 8.2 V, 200 mW, SOD-323	SOD-323
23	D3	1	100V	FSV8100V	Fairchild Semiconductor	Diode, Schottky, 100 V, 8 A, AEC-Q101, TO-277A	TO-277A
24	D4	1	15V	MMSZ5245BS-7-F	Diodes Inc.	Diode, Zener, 15 V, 200 mW, SOD-323	SOD-323
25	GND, TP1, TP2, TP3, VIN	5		1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
26	H13	1		518-95AB	Wakefield Solutions	HEATSINK DC/DC HALF BRICK VERT	DC/DC Half Brick Vertical Heat Sink
27	J1, J2	2		1727023	Phoenix Contact	Terminal Block Receptacle, 3x1, 3.81mm, R/A, TH	Term Block, 3 pos
28	L1	1	3.3uH	XAL7070-332MEB	Coilcraft	Inductor, Shielded, Composite, 3.3 uH, 15.1 A, 0.01 ohm, SMD	7.2x7x7.5mm
29	L2	1	22uH	XAL1510-223MEB	Coilcraft	Inductor, Shielded, Composite, 22 uH, 14 A, 0.0145 ohm, SMD	15.4 x 11 x 16.4mm
30	L3	1		ACM4520-421-2P-T000	TDK	Coupled inductor, 2.8 A, 0.055 ohm, SMD	4.7x4.5mm
31	L4, L6	2	220 ohm	782853221	Würth Elektronik	Ferrite Bead, 220 ohm @ 100 MHz, 2 A, 0805	0805
32	L5	1		ACM1211-701-2PL-TL01	TDK	Coupled inductor, 8 A, 0.006 ohm, SMD	SMD, 12x11mm
33	Q1	1	-100V	ZXMP10A16KTC	Diodes Inc.	MOSFET, P-CH, -100 V, -4.6 A, DPAK	DPAK
34	Q3A	1	80V	BUK763R8-80E,118	NXP Semiconductor	MOSFET, N-CH, 80 V, 120 A, AEC-Q101, DDPAK	DDPAK
35	Q4	1	100V	DMN10H120SFG-13	Diodes Inc.	MOSFET, N-CH, 100 V, 3.8 A, 8-PowerVDFN	8-PowerVDFN
36	Q5, Q6, Q7	3	100V	AO3442	AOS	MOSFET, N-CH, 100 V, 1 A, SOT-23	SOT-23
37	Q8	1	-60V	SI7415DN-T1-GE3	Vishay-Siliconix	MOSFET, P-CH, -60 V, -3.6 A, PowerPAK 1212	PowerPAK 1212
38	Q9	1	60V	NVMFS5C604NLT1G	ON Semiconductor	MOSFET, N-CH, 60 V, 287 A, AEC-Q101, DFN5 5x6mm	DFN5 5x6mm
39	R1	1	2.00k	CRCW06032K00FKFA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R2	1	0.1	ERJ-L14KF10CU	Panasonic	RES, 0.1, 1%, 0.33 W, AEC-Q200 Grade 1, 1210	1210
41	R3	1	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
42	R4	1	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
43	R5	1	10.0	CRCW120610R0FKFA	Vishay-Dale	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
44	R6	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
45	R7, R10, R16, R18	4	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
46	R8	1	10.0k	CRCW060310K0FKFA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
47	R9	1	3.01k	CRCW06033K01FKFA	Vishay-Dale	RES, 3.01 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
48	R11	1	750k	CRCW0603750KFKEA	Vishay-Dale	RES, 750 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
49	R12	1	28.7k	CRCW060328K7FKFA	Vishay-Dale	RES, 28.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
50	R13	1	1.00k	CRCW06031K00FKFA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
51	R14	1	1.43k	CRCW06031K43FKFA	Vishay-Dale	RES, 1.43 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
52	R15	1	49.9k	CRCW060349K9FKFA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
53	R17	1	27.4k	CRCW060327K4FKFA	Vishay-Dale	RES, 27.4 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
54	R19	1	1.00k	CRCW12061K00FKFA	Vishay-Dale	RES, 1.00 k, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
55	R20	1	20.0k	CRCW060320K0FKFA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
56	R23, R24	2	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
57	U1	1		TPS92692QPWPRQ1	Texas Instruments	LED Controller With Spread Spectrum Frequency Modulation and Internal PWM Generator, PWP0020D (TSSOP-20)	PWP0020D
58	U2	1		LM74700QDBVTQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	DBV0006A

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