

TIDA-00173 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-00173	Any	Printed Circuit Board	
2	C1, C2, C3, C4, C12, C13	6	2200pF	CD902L2GA222MYNKA	TDK Corporation	CAP, X1Y1, 440VAC	Disc 0.453 inch
3	C5, C9	2	0.033uF	B32672L133J289	EPCOS Inc	CAP FILM 0.033UF 1.6KVDC RADIAL	Radial, Can
4	C6, C7, C8	3	47uF	EEU-ED2W470	Panasonic	CAP, AL, 47uF, 450V, +/-20%, 0.609529 ohm, TH	18x31.5
5	C10	1	10uF	LVR1V100MD1TA	Nichicon	CAP, AL, 10uF, 35V, +/-20%, TH	CAPPR2-6x11
6	C11, C15, C16, C18, C19	5	120uF	EKZ500ELL121MH15D	United Chemi-Con	CAP 120UF 50V RADIAL	Radial, Can
7	C14, C17	2	330uF	35L330MEFC10X16	Rubycon	CAP ALUM 330UF 35V 20% RADIAL	Radial, Can
8	C20, C21, C22, C23, C27, C39	6	0.1uF	C0805C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0805	0805
9	C24, C26	2	2.2uF	GRM32ER7A225KA35L	MuRata	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210
10	C25	1	1uF	GMK107AB7109KAHT	Taiyo Yuden	CAP, CERM, 1uF, 35V, +/-10%, X7R, 0603	0603
11	C28	1	330pF	C3216C0G2J331J060AA	TDK	CAP, CERM, 330pF, 630V, +/-5%, COG/NP0, 1206	1206
12	C29, C30, C31	3	0.1uF	GMK107B7109KAHT	Taiyo Yuden	CAP, CERM, 0.1uF, 35V, +/-10%, X7R, 0603	0603
13	C32	1	1uF	GMK212B7109KG-T	Taiyo Yuden	CAP, CERM, 1uF, 35V, +/-10%, X7R, 0805	0805
14	C33	1	4700pF	GRM31BR73A472KW01L	MuRata	CAP, CERM, 4700pF, 1000V, +/-10%, X7R, 1206	1206
15	C35	1	680pF	06031C681KAT2A	AVX	CAP, CERM, 680pF, 100V, +/-10%, X7R, 0603	0603
16	C37	1	1000pF	C0805C102K1RACTU	Kemet	CAP, CERM, 1000pF, 100V, +/-10%, X7R, 0805	0805
17	C38	1	100pF	C1608C0G1H101J	TDK	CAP, CERM, 100pF, 50V, +/-5%, COG/NP0, 0603	0603
18	C40, C41	2	100pF	C1206C101JCGACTU	KEMET	CAP, CERM, 100pF, 500V, +/-5%, COG/NP0, 1206	1206
19	C42	1	4700pF	C0805C472J5RACTU	Kemet	CAP, CERM, 4700pF, 50V, +/-5%, X7R, 0805	0805
20	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D14, D17	14	1000V	1N4007GP-E3-54	Vishay Semiconductor	Diode, P-N, 1000V, 1A, TH	DO-41
21	D13	1	495V	P4KE550-E3/54	Vishay Semiconductor	TVS DIODE 495VWM 798VC AXIAL	DO-204L, DO-41, Axial
22	D15, D16	2	342V	P6KE400A	Fairchild Semiconductor	TVS DIODE 342VWM 548VC DO15	DO-204AC, DO-15, Axial
23	D18, D24	2	600V	1N4937-E3	Vishay Semiconductor	Diode, Switching, 600V, 1A, TH	DO-41
24	D19, D21	2	1000V	UF4007	Fairchild Semiconductor	DIODE FAST REC 1KV 1A DO41	DO-204L, DO-41, Axial
25	D20, D22	2	274VC	1.5KE200A-E3/54	Vishay Semiconductor	TVS DIODE 171VWM 274VC AXIAL	DO-201AA, DO-27, Axial
26	D23	1	200V	MBR20200CTTU	ON Semiconductor	DIODE SCHOTTKY 200V 10A TO220AB	TO-220AB
27	D25, D26, D27, D28	4	200V	MURS320-E3/S7T	Vishay Semiconductor	DIODE SUPERFAST 200V 3A SMC	DO-214AB, SMC
28	D29	1	80V	1SS355TE-17	Rohm	DIODE SMALL SIGNAL 80V 0.1A 2UMD	SC-90, SOD-323F
29	D31	1	12V	1SMB5927B3TG	ON Semiconductor	DIODE ZENER 12V 3W SMB	SMB
30	D32	1	7.5V	MMSZ5236BS-7-F	Diodes Inc.	Diode, Zener, 7.5V, 200mW, SOD-323	SOD-323
31	FID1, FID2, FID3, FID4, FID5, FID6	6		NA	NA	Fiducial mark. There is nothing to buy or mount.	Fiducial
32	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
33	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5" L, #4-40 Nylon	Standoff
34	HS1, HS2	2		513201B02500G	Aavid	HEATSINK TO-218/TO-247 W/PINS 2"	12.70x50.80x34.92 mm
35	HS3	1	265-118ABH-22	265-118ABH-E-22	Wakefield Thermal Solutions	Heat Sinks TO-220 VERTICAL MNT	
36	J1	1		1714984	Phoenix Contact	Terminal Block, 3x1, 9.52MM, TH	Terminal Block, 3x1, 9.52mm, TH
37	J2	1		1714968	Phoenix Contact	Terminal Block, 3x1, 6.35 mm, TH	19x21.5x12.5mm
38	J3, J4, J5	3		1729018	Phoenix Contact	TERM BLOCK 2POS 5mm, TH	10x10x8.1 mm
39	J6	1		1729160	Phoenix Contact	Terminal Block, 6x1, 5.08mm, Th	Terminal Block, 6x1, 5.08mm, TH
40	L1, L2	2	1mH	768772102	Würth Elektronik eiSos	Inductor, Shielded Drum Core, Metal Composite, 1mH, 0.5A, 1.7 ohm, TH	DX 8x10mm
41	L3	1	2.2 uH	7447462022	Würth Elektronik eiSos	Inductor, Unshielded Drum Core, Ferrite, 2.2 uH, 4.3A, 0.01 ohm, TH	D6 x 8.5mm
42	L4	1	850 ohm	74279244	Würth Electronics Inc	Ferrite Bead, 800 ohm @ 100MHz, 8A, 1206	1806 (4516 Metric)
43	LBL1	1		THF-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
44	LD1, LD2, LD3, LD4, LD5	5	Green	LG L29K-G2J1-24-Z	OSRAM	LED SmartLED Green 570NM	0603
45	Q1, Q2	2	950V	STF2N8K5	STMicroelectronics	MOSFET N-CH 950V 2A TO220FP	TO-220FP
46	C5	1	80V	2N7002P 215	NXP Semiconductor	MOSFET, N-CH, 80V, 0.36A, SOT-23	SOT-23
47	R1, R2, R3	3		EMC2-10RK1	Welwyn	Resistor, Fusible, 2W, 5%	
48	R4	1	220K	GS-3-100-2203-F-LF	TT Electronics/IRC	RES 220K OHM 3W 1% AXIAL	0.224" Dia x 0.516" L (5.70mm x 13.10mm)
49	R5	1	1.00k	CRCW08051K00FKEA	Vishay-Dale	RES, 1.00k ohm, 1%, 0.125W, 0805	0805
50	R6, R7, R17	3	6.80k	RG2012P-682-B-T5	Susumu Co Ltd	RES, 6.80k ohm, 0.1%, 0.125W, 0805	0805
51	R8	1	10k	ERJ-17Y1103V	Panasonic	RES, 10k ohm, 5%, 0.125W, 0805	0805
52	R9	1	11k	CRCW080511K0JNEA	Vishay-Dale	RES, 11k ohm, 5%, 0.125W, 0805	0805
53	R10	1	100	RMCF0805J100R	Stackpole Electronics Inc	RES, 100 ohm, 0.1%, 0.125W, 0805	0805
54	R11, R14, R15, R16	4	10k	CRCW120610K0JNEA	Vishay-Dale	RES, 10k ohm, 5%, 0.25W, 1206	1206
55	R12	1	2.00k	ERJ-6ENF2001V	Panasonic	RES, 2.00k ohm, 1%, 0.125W, 0805	0805
56	R13	1	220	CRCW2010220RJNEF	Vishay-Dale	RES, 220 ohm, 5%, 0.75W, 2010	2010
57	R18	1	10	ERJ-17Y1100U	Panasonic	RES, 10 ohm, 5%, 0.125W, 0805	0805
58	R19, R30	2	0	CRCW0603000020EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
59	R20	1	0	CRCW0805000020EA	Vishay-Dale	RES, 0 ohm, 5%, 0.125W, 0805	0805
60	R21	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603
61	R22	1	0.91	CRM2010-FX-R910ELF	Bourns	RES, 0.91 ohm, 1%, 1W, 2010	2010
62	R23	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0k ohm, 5%, 0.1W, 0603	0603
63	R24	1	205	RG2012P-101-B-T5	Susumu Co Ltd	RES, 100 ohm, 0.1%, 0.125W, 0805	0805
64	R25	1	30k	RMCF0805J30K0	Stackpole Electronics Inc	RES, 30k ohm, 1% 0.125W, 0805	0805
65	R27	1	91k	RMCF0805J91K0	Stackpole Electronics Inc	RES, 91k ohm, 1% 0.125W, 0805	0805
66	R28	1	36.5k	CRCW060336K5FKEA	Vishay-Dale	RES, 36.5k ohm, 1%, 0.1W, 0603	0603
67	R29	1	511k	RC0603FR-07511KL	Yageo America	RES, 511k ohm, 1%, 0.1W, 0603	0603
68	R31	1	44.2k	RC0603FR-0744K2L	Yageo America	RES, 44.2k ohm, 1%, 0.1W, 0603	0603
69	R32, R34, R36, R37, R39, R40, R42, R43, R45, R47, R48, R49, R50, R51, R52, R53	16	470k	RC1206FR-07470KL	Yageo America	RES, 470k ohm, 1%, 0.25W, 1206	1206
70	R33, R35, R38, R41, R44, R46	6	2.00Meg	ERJ-6ENF2004V	Panasonic	RES, 2.00Meg ohm, 1%, 0.25W, 1206	1206
71	RV1, RV2, RV3	3		MOV-14D152K	Bourns Inc	VARIABLE RESISTOR 1350V 4.5KA DISC 14MM	Disc 14mm
72	T1	1		75034258	würth elektronik	Transformer, TH	
73	U1	1		UCC28711D	Texas Instruments	IC REG CTRLR FLYBK ISO 750IC	8-SOIC (0.154", 3.90mm Width) 7 leads
74	U2	1		LMS33460MG/NOPB	Texas Instruments	3V Under Voltage Detector, 5-pin SC-70, Pb-Free	MAA05A
75	C34	0	47pF	VJ1206A470JXGAT5Z	Vishay-Vitramon	CAP, CERM, 47pF, 1000V, +/-5%, COG/NP0, 1206	1206
76	C36	0	1uF	GMK212B7109KG-T	Taiyo Yuden	CAP, CERM, 1uF, 35V, +/-10%, X7R, 0805	0805
77	D30	0	80V	1SS355TE-17	Rohm	DIODE SMALL SIGNAL 80V 0.1A 2UMD	SC-90, SOD-323F
78	D33	0	0.2V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23
79	D34	0	0.25V	MMBT3906	Fairchild Semiconductor	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23
80	R25	0	10	ERJ-17Y1100U	Panasonic	RES, 10 ohm, 5%, 1W, 2512	2512

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