

TIDA-010273 REV B Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-010273	Any	Printed Circuit Board	
2	3.3V, 15V, GND	3		5015	Keystone Electronics	Test Point, Miniature, SMT	Testpoint_Keystone_Minature
3	C1, C3, C4, C5, C6, C9, C12, C20, C21, C24, C26, C27, C28, C29, C31, C32	16	0.1uF	GRM155R71C104K88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/-10%, X7R, 0402	0402
4	C2, C7, C8, C13, C17, C18, C40, C41, C42, C88, C89	11	10uF	GRM155R61A106ME11	MuRata	CAP, CERM, 10 uF, 10 V, +/-20%, X6R, 0402	0402
5	C10, C28	2	2.2uF	GRM155R61A225ME95	MuRata	CAP, CERM, 2.2 uF, 10 V, +/-20%, X6R, 0402	0402
6	C11	1			Würth Elektronik	WCAP-AT05 Aluminum Electrolytic Capacitor, Radial, TH, D8 x H11.5mm, 470uF, 25V	
7	C14, C32, C43, C47, C84	5	0.1uF	GCM18BR71H101KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/-10%, X7R, 0603	0603
8	C15, C16, C22, C25, C26, C29, C35, C36, C37, C59, C60, C61, C63, C66, C71, C80, C87, C88	17	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/-5%, COG/NP0, 0402	0402
9	C15, C82	2	1000pF	8.85342E+11	Würth Electronics	0.1uF ±10% 630V Ceramic Capacitor X7R 1812 (4532 Metric)	1812
10	C23, C49, C54	4	1000pF	GRM155R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/-10%, X7R, 0402	0402
11	C30, C85	2	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/-5%, COG/NP0, 0402	0402
12	C31	1			Würth Elektronik	WCAP-AT05 Aluminum Electrolytic Capacitor, Radial, TH, D8 x H10.5mm, 1000uF, 10V	
13	C33, C34	2	2200pF	DE2E3KY222MA2B01F	MuRata	CAP, CERM, 2200 pF, X1 250 VAC/V2 250 VAC, +/-20%, E, 8x5mm	8x5mm
14	C38	1	1uF	GRM155R61A106KE11D	MuRata	CAP, CERM, 1 uF, 35 V, +/-10%, X6R, 0402	0402
15	C38, C48, C48, C50, C65	5	10uF	GRM022B87A106KE43L	MuRata	CAP, CERM, 10 uF, 35 V, +/-10%, X6R, 0805	0805
16	C39, C89	2	0.47uF	890334250C3KCS	Würth Elektronik	CAP, Film, 0.47 uF, 310 V, +/-10%, TH	18x8mm
17	C45, C51, C52, C53	4	0.047uF	GRM18BR71H473KA61D	MuRata	CAP, CERM, 0.047 uF, 50 V, +/-10%, X7R, 0603	0603
18	C67	1	220uF	450PH6220MEFC5N25X40	Rubycon	CAP, AL, 220 uF, 450 V, +/-20%, TH	025xL40mm
19	D1	2	None	LT1314CTK90K17GA	Linear	LED, Red, SMD	1.8x3.8mm
20	D3, D6	2	200V	ES1D-13-F	Diodes Inc.	Diode, Ultrafast, 200 V, 1 A, SMA	SMA
21	D4, D10, D11, D12	4	18V	MMS25248BS-7-F	Diodes Inc.	Diode, Zener, 18 V, 200 mW, SOD323	SOD-323
22	D5	1		YBSM0010	Yangzhou Yangjie Elec Tech	Bridge Rectifiers 1000V 6A	YBSS3
23	D6	1	150V	SMAJ150A	Littelfuse	Diode, TVS, Uni, 150 V, 243 Vc, 400 W, 1.6 A, SMA	SMA
24	D7	1	800V	S2T133F	Diodes Inc.	Diode, Ultrafast, 800 V, 1 A, SMA	SMA
25	D9	1	200V	5AS20H11G	ON Semiconductor	Diode, Switching, 200 V, 0.2 A, AEC-Q101, SOD-323	SOD-323
26	F1	1		32213150000	Littelfuse	Fuse, 3.15 A, 250VAC/VDC, TH	8x8.5x4mm
27	J1, J12	2		PBC07SAAN	Sullins Connector Solutions	Header, 2.54 mm, 7x1, Gold, TH	Header: 2.54 mm, 7x1, TH
28	J2, J3, J13, J19	4		MTRM-110-06-TS-118	Samtec	Variable Post Height Header Strips, 2.00 mm Pitch, 10pos	HDR10
29	J4, J50	2		MTRM-109-05-TS-118	Samtec	Header (Shrouded), 3.96mm, 3x1, TH	Header: 2.54mm, 2x1, TH
30	J5	1		B3P-VHLFJ5N	JST Manufacturing	Header (Shrouded), 3.96mm, 3x1, TH	Header: 2.54mm, 2x1, TH
31	J6	1		6130021121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header: 2.54mm, 2x1, TH
32	J8	1		6130041121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header: 2.54mm, 4x1, TH
33	J10	1		1744037-3	TE Connectivity	Conn Wire to Board HDR 3 POS 5.08mm Solder ST Top Entry Thru-Hole Bag	HDR3
34	J15	1		PPPC071LFBN-RC	Sullins Connector Solutions	Receptacle, 2.54mm, 7x1, Gold, TH	Receptacle, 2.54mm, 7x1, TH
35	J16, J17	2		SQT11001-F-S	Samtec	Connector Socket Strip SMT 10 POS 2mm Solder ST Thru-Hole Tube	CONN_RCPT10
36	J18	1		SQT10901-F-S	Samtec	Connector Socket Strip SMT 9 POS 2mm Solder ST Thru-Hole Tube	CONN_RCPT9
37	L1, L5	2	10 ohm	782423100	Würth Elektronik	Ferrite Bead, 10 ohm @ 100 MHz, 1.5 A, 0402	0402
38	L2	1		7448030417	Würth Elektronik	17mH @ 10kHz 2 Line Common Mode Choke Through Hole 4A DCR 50 mOhm	PTH_IND_22MMx13
39	O1	1	800V	A0D4S60	AOS	MOSFET, N-CH, 800 V, 4 A, DPAK	DPAK
40	O2, O4	2	80V	2N7002-F	Diodes Inc.	MOSFET, N-CH, 80 V, 0.17 A, SOT-23	SOT-23
41	O3	1	800V	BS31272-F	Diodes Inc.	MOSFET, N-CH, 800 V, 0.05 A, SOT-23	SOT-23
42	R2, R21, R57, R84, R93, R94	6	1.00k	RC0402FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.0625 W, 0402	0402
43	R3, R4, R5, R7, R9, R18, R22, R24, R28, R31, R32, R38, R48, R52, R76, R79, R80	17	20.0k	CRCV040220K0PKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, 0402	0402
44	R6, R6, R28, R72	4	0	RC0402JR-070RL	Yageo America	RES, 0.0%, 0.063 W, 0402	0402
45	R10, R11, R16, R17, R26, R27, R33, R34, R81, R87	10		RC0402FR-072KL	Yageo	RES SMD 2K 0HM 1% 1/16W 0402	0402 (1005 Metric)
46	R12, R19, R20, R25, R30, R36, R71, R73, R86, R89, R90, R91, R96, R100, R101, R102, R103	17	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
47	R11, R14, R15, R25, R38, R50, R51, R61, R65, R69, R70, R74, R78, R85, R92, R95, R98, R105	18	100	RC0402FR-07100RL	Yageo America	RES, 100, 1%, 0.063 W, 0402	0402
48	R3	1	20	RC0402FR-0720RL	Yageo	RES, 20.0, 1%, 0.1 W, 0603	0603
49	R37	1	100k	RC0402FR-07100KL	Yageo America	RES, 100 k, 1%, 0.0625 W, 0402	0402
50	R40, R77	2	3.00k	RC0402FR-0730KL	Yageo America	RES, 3.00 k, 1%, 0.0625 W, 0402	0402
51	R41	1	54.9k	CRCV040254K9PKED	Vishay-Dale	RES, 54.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
52	R42, R43, R44	3	100k	RC1206FR-07100KL	Yageo America	RES, 100 k, 1%, 0.25 W, 1206	1206
53	R46, R46, R47, R54, R55, R56, R58, R59, R60, R62, R63, R64	12	332k	RC1206FR-07332KL	Yageo America	RES, 332 k, 1%, 0.25 W, 1206	1206
54	R53, R66, R67, R68	4	8.20k	RC0402FR-0782KL	Yageo	RES, 8.20 k, 1%, 0.1 W, 0603	0603
55	R63, R67, R104	3	0.1	ERJ-6BRFR100V	Panasonic	RES, 0.1, 1%, 0.5 W, 1206	1206
56	RT1	1	550	PRF0500R0500ZJZ	THORNBURG ELECTRONIC	Current Sense Resistor 500m Ohm 10% 3A 300V Radial TH	RF0500L
57	RT2	1		TMP6131DECR	Texas Instruments	Thermistor, DECC002A (N50N-2)	DECC002A
58	RV1	1	430V	872214302T7K101	TDK	Varistor, 430V, 4.5KA, TH	Disc, 14x5mm
59	T1	1		750345502	Würth	TRANSFORMER	PTH5
60	U1	1		T290013PPT	Texas Instruments	Real-Time Microcontrollers	LOFP48
61	U2	1		UCC28911DR	Texas Instruments	700V Flyback Switcher with Constant-Voltage Constant-Current and Primary-Side Regulation, 00007A (SIC0-7)	00007A
62	U3	1		MSPM001506SPT	Texas Instruments	USPM0 uc 64k Flash 32k RAM 48pin LOFP	LOFP
63	U4	1		TLV74033PDBVVR	Texas Instruments	300-mA low-dropout (LDO) regulator with foldback current limit 5-SOT23-5 40 to 125	SOT23-5
64	U5	1		DRV7308RENR	Texas Instruments	Three-Phase, 650-V Integrated GaN FET Motor Driver, VQFN65	VQFN65
65	U6	1		CAP2000G	Power Integrations	Capacitor Discharge IC 8-Pin SOIC T/R	SO8
66	U8	1		SOE6718QDRQ1	Texas Instruments	Low Speed, General Purpose, Robust EMC, Dual-Channel Digital Isolators	SOIC8
67	U9	1		TLV90E2DGKR	Texas Instruments	10-MHz, Low-Noise, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, DCD0009A (VSSOP-8)	DGK0009A
68	Y1	1		8.30108E+11	Würth Electronics	20 MHz ±10ppm Crystal Sgf 50 Ohms 4-SMD, No Lead	SMT_CRYSTAL_3M M2_2MM6
69	C38, C44	0	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/-5%, COG/NP0, 0402	0402
70	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
71	LBL1	0		THT-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
72	MP1, MP2, MP3, MP4	0		970130365	Würth Electronics		SPCAER_M3
73	RT1, RT2	0	100k	RG1005P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.063 W, 0402	0402
74	R99	0	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
75	R106	0	0	RC0402JR-070RL	Yageo America	RES, 0.0%, 0.063 W, 0402	0402

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