

TIDA-010951 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	0.47uF	450MPK474J	Rubycon	CAP. Film, 0.47 uF, 450 V, +/- 5%, TH	18x6.5mm
2	C2	1	2200pF	GRM31BR73A222KW01L	MuRata	CAP. CERM, 2200 pF, 1000 V, +/- 10%, X7R, 1206	1206
3	C3	1	0.1uF	GRM55DR73A104KW01L	MuRata	CAP. CERM, 0.1 uF, 1000 V, +/- 10%, X7R, 2220	2220
4	C4	1	DNP	DNP	DNP	DNP	0805
5	C5	1				890180575031 WCAP-ATLL Aluminum Electrolytic Capacitors 35VDC	
6	C6, C7	2				890180575031 WCAP-ATLL Aluminum Electrolytic Capacitors	
7	C8	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP. CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C9	1	22uF	UVR2A220MED1TD	Nichicon	CAP. AL, 22 uF, 100 V, +/- 20%, TH	Dia 6.3mm
9	C11	1	0.01uF	C1608X7R1H103K080AA	TDK	CAP. CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
10	C12, C16	2	10pF	GRM1885R1H100JA01D	MuRata	CAP. CERM, 10 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
11	C13	1	1000pF	C0603X102K5RACTU	Kemet	CAP. CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
12	C14	1	0.1uF	GRM1887R1H104KA93D	MuRata	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
13	C15	1	100pF	C1608COG1H101J080AE	TDK	CAP. CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
14	C17	1	2.2uF	C1608XSR1V225K080AC	TDK	CAP. CERM, 2.2 uF, 35 V, +/- 10%, XSR, 0603	0603
15	C18	1	4.7uF	C2012X7R1V475K125AC	TDK	CAP. CERM, 4.7 uF, 35 V, +/- 10%, X7R, 0805	0805
16	C19	1	2.2uF	C2012X6S1H225K125AB	TDK	CAP. CERM, 2.2 uF, 50 V, +/- 10%, X6S, 0805	0805
17	C20	1	10uF	UMK316BBJ106KL-T	Taiyo Yuden	CAP. CERM, 10 uF, 50 V, +/- 10%, X6R, 1206	1206
18	C21	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
19	C22, C31	2	22uF	GRM31CR71A226KE15L	MuRata	CAP. CERM, 22 uF, 10 V, +/- 10%, X7R, 1206	1206
20	C23	1	10uF	GRM156RE0J106ME11	MuRata	CAP. CERM, 10 uF, 6.3 V, +/- 20%, XSR, 0402	0402
21	C24	1				Murata	
22	C25	1	0.47uF	GRM033R60J474KE90D	MuRata	CAP. CERM, 0.47 uF, 6.3 V, +/- 10%, XSR, 0201	0201
23	C26	1	1uF	GRM1887R1C105KE15D	MuRata	CAP. CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
24	C27	1	1uF	GRM156RE0J105KE19D	MuRata	CAP. CERM, 1 uF, 6.3 V, +/- 10%, XSR, 0402	0402
25	C28	1	2.2uF	UMK107B1225KA-T	Taiyo Yuden	CAP. CERM, 2.2 uF, 10 V, +/- 10%, XSR, 0603	0603
26	C29	1	0.047uF	C1005X7R1H473K050BB	TDK	CAP. CERM, 0.047 uF, 50 V, +/- 10%, X7R, 0402	0402
27	C30	1	1000pF	GCM155R71H102KA37D	MuRata	CAP. CERM, 1000 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
28	C32	1	470pF	8.85012E+11	Würth Elektronik	CAP. CERM, 470 pF, 10 V, +/- 5%, COG/NP0, 0603	0603
29	D1	1	600V	DF1506S-T	Diodes Inc.	Diode, Switching-Bridge, 600 V, 1.5 A, DF-S	DF-S
30	D2	1	150V	SMCJ150A-TP	Micro Commercial Component	Diode, TVS, Uni, 150 V, 243 Vc, SMC	SMC
31	D3, D4	2	600V	CGRM4005-G	Comchip Technology	Diode, P-N, 600 V, 1 A, MINI-SMA	MINI-SMA
32	D5	1	600V	MURA160T3G	ON Semiconductor	Diode, Ultrafast, 600 V, 1 A, AEC-Q101, SMA	SMA
33	D6	1	200V	STTH802B-TR	STMicroelectronics	Diode, Ultrafast, 200 V, 8 A, DPAK	DPAK
34	D7, D9, D11	3	BAS20HT1G	BAS20HT1G	ON Semiconductor	Diode, Switching, 200 V, 0.2 A, AEC-Q101, SOD-323	SOD-323
35	D8	1	18V	MMS24705-E3-08	Vishay-Semiconductor	Diode, Zener, 18 V, 500 mW, SOD-123	SOD-123
36	D14	1	Red	150060RS75000	Würth Elektronik	LED, Red, SMD	LED_0603
37	F1	1	3.15A	39213150000	Littelfuse	Fuse, 3.15 A, 250VAC/VDC, TH	8x8.5x4mm
38	J2	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
39	J4	1		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
40	L1	1	1.8mH	744861018	Würth Elektronik	Coupled inductor, 1.8 mH, 1 A, 0.31 ohm, TH	17x12.32x15.32 mm
41	L2	1	1mH	7447231102	Würth Elektronik	Inductor, Wirewound, 1 mH, 0.8 A, 0.75 ohm, TH	D11xL19mm
42	L3	1	47uH	78436335470	Würth Elektronik	Inductor, Shielded, Powdered Iron, 47 uH, 0.39 A, 2.3 ohm, AEC-Q200 Grade 1, SMD	SMD, 2-Leads, Body 3x3mm
43	MOV1	1		MOV-20D471K	Bourns Inc.	470 V 6.5 kA Varistor 1 Circuit Through Hole Disc 20mm	RADIAL
44	Q1	1	700V	IPD70R360P7SAUMA1	Infineon Technologies	MOSFET, N-CH, 700 V, 12.5 A, DPAK	DPAK
45	Q2	1	40 V	MMBT3904-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
46	Q3	1	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
47	R1, R4	2	200k	RC1210JR-07200KL	Yageo	RES, 200 k, 5%, 0.5 W, 1210	1210
48	R2	1	22	CRCW251222R0JNEGHP	Vishay-Dale	RES, 22, 5%, 1.5 W, AEC-Q200 Grade 0, 2512	2512
49	R3	1	47	CRCW120647R0JNEA	Vishay-Dale	RES, 47, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
50	R5, R10	2	510k	RC1206FR-07510KL	Yageo America	RES, 510 k, 1%, 0.25 W, 1206	1206
51	R6	1	3.3	RC0805JR-073R3L	Yageo America	RES, 3.3, 5%, 0.125 W, 0805	0805
52	R7	1	301k	RC0603FR-07301KL	Yageo	RES, 301 k, 1%, 0.1 W, 0603	0603
53	R8	1	30.1k	RC0603FR-0730K1L	Yageo	RES, 30.1 k, 1%, 0.1 W, 0603	0603
54	R9	1	47.0k	RC0603FR-0747KL	Yageo	RES, 47.0 k, 1%, 0.1 W, 0603	0603
55	R11	1	2.2	RC0805JR-072R2L	Yageo America	RES, 2.2, 5%, 0.125 W, 0805	0805
56	R12	1	4.7	RPC0805JT4R70	Stackpole Electronics Inc	RES, 4.7, 5%, 0.25 W, 0805	0805
57	R13	1	6.80k	RC0603FR-076K8L	Yageo	RES, 6.80 k, 1%, 0.1 W, 0603	0603
58	R14	1	4.7k	CR0603-JW-47Z2GLF	Bourns	RES, 4.7 k, 5%, 0.1 W, 0603	0603
59	R15, R19	2	1.0k	RC0603JR-071KL	Yageo	RES, 1.0 k, 5%, 0.1 W, 0603	0603
60	R16	1	412k	RC0603FR-07412KL	Yageo	RES, 412 k, 1%, 0.1 W, 0603	0603
61	R17	1	0.68	ERJ-1TRQJR68U	Panasonic	RES, 0.68, 5%, 1 W, 2512	2512
62	R18	1	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
63	R20	1	20k	ERJ-2GEJ203X	Panasonic	RES, 20 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
64	R21	1	18.0k	RC0603FR-0718KL	Yageo	RES, 18.0 k, 1%, 0.1 W, 0603	0603
65	R22	1	4.99k	RC0402FR-074K99L	Yageo America	RES, 4.99 k, 1%, 0.063 W, 0402	0402
66	R23	1	47.5k	RC0603FR-0747K5L	Yageo	RES, 47.5 k, 1%, 0.1 W, 0603	0603
67	R24	1	47.0k	RC0402FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.0625 W, 0402	0402
68	R25, R35	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
69	R26, R27, R34	3	5.10k	RC0603FR-075K1L	Yageo	RES, 5.10 k, 1%, 0.1 W, 0603	0603
70	R28, R30, R31, R32	4	180	CRCW0402180JNED	Vishay-Dale	RES, 180, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
71	R29	1	5.1k	CRCW06035K10JNEA	Vishay-Dale	RES, 5.1 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
72	R33	1	0	CRCW25120000Z0EGHP	Vishay-Dale	RES, 0, 5%, 1.5 W, AEC-Q200 Grade 0, 2512	2512
73	R36	1	1.00k	ERA2AED102X	Panasonic	RES, 1.00 k, 0.5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
74	R11	1	5	SCK205R0MSBY502	TKS	Thermistor NTC, 5 ohm, 20%, D20x16mm	D20x16mm
75	T1	1		G084231	GCI Technologies	FLYBACK TRANSFORMER	PTH_TRANSFORMER_31MM50_24MM50
76	U1	1	UCC28810DR	UCC28810DR	Texas Instruments	LED Lighting Power Controller, -40 to +105 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A
77	U2	1	VOS817A-7X001T	VOS817A-7X001T	Vishay-Semiconductor	Optocoupler, 3.75 kV, 80-160% CTR, SMT	7x2.12x2.6mm
78	U3	1	ATL431AIDBZR	ATL431AIDBZR	Texas Instruments	2.5V Low Iq Adjustable Precision Shunt Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
79	U4	1	MCF8315A1VRGFR	MCF8315A1VRGFR	Texas Instruments	Sensorless Field Oriented Control (FOC) Integrated FET BLDC Driver VQFN40	VQFN40
80	U5	1	MSPM0L1306SDGS20	MSPM0L1306SDGS20	Texas Instruments	Mixed-Signal Microcontrollers	VSSOP20
81	U6	1	TSOP32238	TSOP32238	Vishay Semiconductor Opto	IR RECEIVER, 35M, 950NM, SIP	SIP3

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