

TIDA-00794 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	2	0.47uF	TIDA-00794	Any	Printed Circuit Board	
2	C1, C2	2	0.47uF	B32923C3474K	TDK	CAP. Film, 0.47 uF, 50V, +/- 10%, TH	B32923, 16.5mm
3	C3, C4, C5, C6	4	220uF	L1S2W2A12ELA	Nichicon	CAP. AL, 220 uF, 450 V, +/- 20%, TH	TH, 2-Leads, Body 25x40mm, Pin Spacing 10mm
4	C7, C27	2	100uF	GRM216C2A101JA01D	MuRata	CAP. CERM, 100 uF, 100 V, +/- 5%, COGNP0, 0605	0605
5	C8, C28	2	4.7uF	TPS479K92R0300	AVX	CAP. TA, 4.7 uF, 50 V, +/- 10%, 0.3 ohm SMD	7343-31
6	C9, C13, C20, C22, C25, C29, C33, C40, C42, C45, C72, C74, C78, C90	14	0.1uF	GCN218R71H106KA37K	MuRata	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0605	0605
7	C10, C16, C23, C26, C30, C36, C43, C46, C76, C82	10	100uF	C1608COG2A101J	TDK	CAP. CERM, 100 uF, 100 V, +/- 5%, COGNP0, 0603	0603
8	C11, C31	2	0.01uF	0895SC103JA72A	AVX	CAP. CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0605	0605
9	C12, C17, C18, C32, C37, C38	6	1uF	GCN2CER71H106KA37L	MuRata	CAP. CERM, 1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
10	C14, C19, C34, C39	4	10uF	EEE-2AA100LP	Panasonic	CAP. AL, 10 uF, 100 V, +/- 20%, AEC-Q200 Grade 3, SMD	SMT Radial E
11	C15, C35	2	470uF	GRM216R71E471KA01D	MuRata	CAP. CERM, 470 uF, 25 V, +/- 10%, X7R, 0605	0605
12	C21, C24, C41, C44	4	10uF	GRM32ER71H106KA12L	MuRata	CAP. CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
13	C47, C48, C56, C57, C59, C60, C68, C69	8	22uF	GRM32ER71E22KE15L	MuRata	CAP. CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
14	C49, C55, C61, C67	4	0.01uF	C1608XR7H103K	TDK	CAP. CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
15	C50, C51, C62, C63	4	10uF	C3216XR1E106M160AE	TDK	CAP. CERM, 10 uF, 25 V, +/- 20%, X7R, 1206, 190	1206, 190
16	C52, C64	2	4.7uF	GRM31CR71H475KA12L	MuRata	CAP. CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
17	C53, C65	2	0.1uF	C1608XR7H104K	TDK	CAP. CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
18	C54, C66	2	1uF	C1608XR7H1E109K080AB	TDK	CAP. CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
19	C58, C70	2	100uF	GRM424L10010JW31L	MuRata	CAP. CERM, 100 uF, 310 V, +/- 5%, LQJ, 1838	1838
20	C71, C73, C77, C79	4	10uF	EEE-FK1H100P	Panasonic	CAP. AL, 10 uF, 50 V, +/- 20%, 0.88 ohm, SMD	SMT Radial D
21	C72, C81	2	47uF	C3216XR1E147M160AC	TDK	CAP. CERM, 47 uF, 25 V, +/- 20%, X7R, 1206, 190	1206, 190
22	C80, C82	2	1000uF	C1608XR7H103K	TDK	CAP. CERM, 1000 uF, 50 V, +/- 10%, X7R, 0603	0603
23	C1, C12	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP. CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
24	D2, D3, D11, D12	4	1600V	GL41YHE396	Vishay-Semiconductor	Diode, P-N, 1600 V, 1 A, AEC-Q101, DO-213AB	DO-213AB
25	D4, D13	2	12V	SZBZX64B12L1TG	ON Semiconductor	Diode, Zener, 12 V, 250 mW, AEC-Q101, SOT-23	SOT-23
26	D5, D14	2	60V	NRVBA160T3G	ON Semiconductor	Diode, Schottky, 60 V, 1 A, AEC-Q101, SMA	SMA
27	D6, D15, D24, D25	4	45V	RBS20SM-40FH	Rohm	Diode, Schottky, 45 V, 0.2 A, AEC-Q101, SOD-523	SOD-523
28	D7, D16	2	16V	BZT52B16-HE3-08	Vishay-Semiconductor	Diode, Zener, 16 V, 410 mW, AEC-Q101, SOD-123	SOD-123
29	D8, D17	2	10V	MMS2469T-1	Vishay-Semiconductor	Diode, Zener, 10 V, 500 mW, SOD-123	SOD-123
30	D9, D18	2	Green	LTS1170K0RT	Lite-On	LED, Green, SMD	LED, 0605
31	D10, D19	2	Red	LTS1-C170K0RT	Lite-On	LED, Red, SMD	LED, 0605
32	D20, D21, D22, D23	4	60V	RB160M-60TR	Rohm	Diode, Schottky, 60 V, 1 A, SOD-123	SOD-123
33	H9, H10, H11	3	1913578		Phoenix Contact	TERM BLOCK PLUG 2POS STR 10 16MM	
34	J1, J2, J3	3	1913714		Phoenix Contact	Header(shrouded), 10 16mm, 2x1, R/A, TH	Header(shrouded), 10 16mm, 2x1, R/A, TH
35	J4, J5, J6, J7, J8, J9, J10, J11, J13, J14, J15, J16, J17, J18, J19, J20, J22, J23, J24, J25, J28, J29, J31, J34, J37, J40	26	HTSW-102-07-G-S		Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
36	J12, J21	2	891 101 710 003		Würth Elektronik	Terminal Block, 5 mm, 3x1, Tin, TH	Terminal Block, 5 mm, 3x1, TH
37	J26, J27, J42, J43	4	SSO-102-03-F-S		Samtec	Receptacle, 2.54mm, 2x1, Gold, TH	Receptacle, 2.54mm, 2x1, TH
38	J30, J33, J35, J36, J39, J41	6	891213710002		Würth Elektronik	Terminal Block, 2x1, Brass, TH	Terminal Block, 2-Leads, Body 10x8.3mm, Pitch 5mm
39	J32, J38	2	SSW-104-01-G-D		Samtec	Receptacle, 2.54mm, 4X2, Gold, TH	Receptacle, 2.54mm, 4X2, TH
40	L1, L2, L3, L4	4	220 ohm	BLM21P2221SN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2 A, 0605	0605
41	Q1, Q2	2	60 V	NJW4UD3055T4G	ON Semiconductor	Transistor, NPN, 60 V, 10 A, AEC-Q101, DPAK	DPAK
42	Q2, Q6	2	60 V	NJW4UD2955T4G	ON Semiconductor	Transistor, PNP, 60 V, 10 A, AEC-Q101, DPAK	DPAK
43	Q3, Q7	2	45 V	BC857C-7-F	Diodes Inc.	Transistor, PNP, 45 V, 0.1 A, SOT-23	SOT-23
44	Q4, Q8	2	45 V	BCX70K	Infineon Technologies	Transistor, NPN, 45 V, 0.1 A, SOT-23	SOT-23
45	R1, R2, R3, R4, R57	5	200k	CRCW2012200KPEKG	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 2512	2512
46	R5, R26	2	1.00k	CRCW12061000FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.25 W, 1206	1206
47	R8, R27	2	10.0	RNCP0805F10DR0	Stackpole Electronics Inc	RES, 10.0 k, 1%, 0.25 W, 0605	0605
48	R7, R18, R28, R39	4	5.6	CRCW120656R80JNEA	Vishay-Dale	RES, 5.6, 5%, 0.25 W, 1206	1206
49	R9, R29	2	2.7	3522R27JT	TE Connectivity	RES, 2.7, 5%, 0.25 W, 2512	2512
50	R9, R17, R30, R38	4	0	CRCW120600002DEA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
51	R11, R20, R23, R32, R41, R44	6	10.0k	ERJ-3KF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
52	R12, R33	2	0.33	CSRN2512FKR330	Stackpole Electronics Inc	RES, 0.33, 1%, 2 W, 2512	2512
53	R14, R35	2	2.2	3522R22JT	TE Connectivity	RES, 2.2, 5%, 0.25 W, 2512	2512
54	R16, R37	2	10.0k	CRCW12061000FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.25 W, 1206	1206
55	R21, R25, R42, R46	4	20.0k	ERJ-3KF2002V	Panasonic	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
56	R22, R24, R43, R45	4	150	CRCW0603150R0FKEA	Vishay-Dale	RES, 150, 1%, 0.1 W, 0603	0603
57	R47, R52	2	4.02k	CRCW0603402F0FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, 0603	0603
58	R48, R53	2	2.00k	CRCW0603200F0FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
59	R49, R54	2	880k	RC0603R-0880K	Yageo/America	RES, 880 k, 1%, 0.1 W, 0603	0603
60	R50, R55	2	100k	CRCW0603100K0FKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
61	R51, R56	2	18.7k	CRCW0603187K0FKEA	Vishay-Dale	RES, 18.7 k, 1%, 0.1 W, 0603	0603
62	R60, R62, R61, R62	4	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
63	R61, R62	2	133k	CRCW0603133K0FKEA	Vishay-Dale	RES, 133 k, 1%, 0.1 W, 0603	0603
64	S1, S2	2	2	SKRKAEE10	Alps	Switch, Push Button, SMD	2.5x2x3.9mm SMD
65	T1, T2	2	25uH	750315445	Würth Elektronik	Transformer, 25 uH, TH	14, 7x14.6mm
66	TP1, TP2, TP5, TP7, TP8, TP9, TP10, TP13, TP15, TP16, TP17, TP19, TP20, TP21, TP22, TP24, TP25, TP26, TP27, TP28, TP29, TP31	22	Red	5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
67	TP4, TP12, TP23, TP32	4	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
68	TP6, TP14, TP18, TP24	4	Blue	5122	Keystone	Test Point, Compact, Blue, TH	Blue Compact Testpoint
69	UZ, U3	2		IS06852SDVR	Texas Instruments	2.5 / 5 A Isolated IGBT Gate Driver with Split Outputs and Active Safety Features, DW0016A	DW0016A
70	UX, U5	2		LM160AQPWPR01	Texas Instruments	Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, PWP0014A	PWP0014A
71	U1	0	600V	IDW100E60	Infineon Technologies	Diode, Switching, 600 V, 150 A, TH	TO-247
72	FID1, FID2, FID3	0	N/A	N/A	N/A	fiducial marks. There is nothing to buy or mount.	N/A
73	H1, H2, H5, H6	0		MPM5 005 0006 PH	B&F Fastener Supply	MACHINE SCREW PAN HEAD 1/8" MS	N/A
74	H3, H4, H7, H8	0		MFVZ 005	B&F Fastener Supply	WASHER FLAT 1/8" STEEL	N/A
75	R10, R13, R15, R19, R31, R34, R36, R40	0	0	RC6432J000CS	Samsung	RES, 0, 5%, 1 W, 2512	2512
76	U1	0	650 V	FF300R07ME4_B11	Infineon Technologies	EconoDUAL73 module with trench/fieldstop IGBT4 and Emitter Controlled Diode and NTC, TH	152x62.5mm

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