

TIDA-01344 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01344	Any	Printed Circuit Board	
2	C1	1	47uF	EEV-FK2A470Q	Panasonic	CAP, AL, 47 µF, 100 V, +/- 20%, 0.32 ohm, AEC-Q200 Grade 2, SMD	SMT Radial H13
3	C2, C3, C8, C17, C18	5	4.7uF	GRM32DC72A475KE01L	MuRata	CAP, CERM, 4.7 µF, 100 V, +/- 10%, X7S, 1210	1210
4	C4	1	0.1uF	CGA4J2X7R2A104K125AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
5	C5	1	4.7uF	EEE-FK1K4R7P	Panasonic	CAP, AL, 4.7 µF, 80 V, +/- 20%, 3 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
6	C6, C7	2	100uF	EEE-FK1E101XP	Panasonic	CAP, AL, 100 µF, 25 V, +/- 20%, 0.34 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D8
7	C9	1	0.1uF	GRM319R72A104KA01D	MuRata	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 1206	1206
8	C10	1	22uF	GRM32ER71E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210
9	C11, C13	2	1uF	GRM216R61E105KA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0805	0805
10	C12	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
11	C14	1	1000pF	GCM2165C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0805	0805
12	C15	1	2200pF	DE1E3KX222MA4BL01	MuRata	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Cap, 7x12x9 mm	Cap, 7x12x9 mm
13	C16, C19	2	4700pF	VY2472M49Y5US63V7	Vishay-Bccomponents	CAP, CERM, 4700 pF, 440 V, +/- 20%, Y5U, TH, 12.5x5mm	TH, 12.5x5mm
14	C20	1	0.033uF	GRM219R71H333KA01D	MuRata	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0805	0805
15	C21	1	820pF	GRM2165C1H821JA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
16	C22, C23	2	0.01uF	VJ1812Y103KXEAT5Z	Vishay-Vitramon	CAP, CERM, 0.01 µF, 500 V, +/- 10%, X7R, 1812	1812
17	D1	1	100V	STPS8H100G-TR	STMicroelectronics	Diode, Schottky, 100 V, 8 A, DDPAK	DDPAK
18	D2	1	150V	STPS1150A	STMicroelectronics	Diode, Schottky, 150 V, 1 A, SMA	SMA
19	D3	1	51V	1SMB5942BT3G	ON Semiconductor	Diode, Zener, 51 V, 550 mW, SMB	SMB
20	D4	1	100V	PMEG10010ELRX	NXP Semiconductor	Diode, Schottky, 100 V, 1 A, AEC-Q101, SOD-123W	SOD-123W
21	D5	1	14V	MMBZ5244BLT1G	ON Semiconductor	Diode, Zener, 14 V, 225 mW, SOT-23	SOT-23
22	D6	1	54V	SMCJ54A	Fairchild Semiconductor	Diode, TVS, Uni, 54 V, SMC	SMC
23	D7	1	100V	B3100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 3 A, SMC	SMC
24	D8	1	16V	MMSZ5246B-7-F	Diodes Inc.	Diode, Zener, 16 V, 500 mW, SOD-123	SOD-123
25	D9	1	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
26	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
27	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
28	J1, J2, J3, J4	4		7693	Keystone	Terminal screw, vertical, snap-in	7693
29	L1, L3	2	150uH	MSS1583-154KEB	Coilcraft	Inductor, Drum Core, Ferrite, 150 µH, 2.2 A, 0.138 ohm, SMD	14.8x8.6x14.8mm
30	L2	1		ACM1211-102-2PL-TL01	TDK	Coupled inductor, 6 A, 0.014 ohm, SMD	SMD, 12x11mm
31	LBL1	1		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
32	Q1	1	150 V	ZXTN4004ZTA	Diodes Inc.	Transistor, NPN, 150 V, 1 A, SOT-89	SOT-89
33	Q2	1	200V	IRFS4227PBF	International Rectifier	MOSFET, N-CH, 200 V, 62 A, DDPAK	DDPAK
34	R1	1	20.0k	CRCW251220K0FKKEG	Vishay-Dale	RES, 20.0 k, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512
35	R2	1	20.0	CRCW251220R0FKKEG	Vishay-Dale	RES, 20.0, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512
36	R3, R4	2	5.1k	CRCW20105K10JNEF	Vishay-Dale	RES, 5.1 k, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
37	R5	1	10.0	CRCW060310R0FKKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
38	R6	1	100k	CRCW0805100KFKKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
39	R7	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603
40	R8	1	14.3k	CRCW080514K3FKKEA	Vishay-Dale	RES, 14.3 k, 1%, 0.125 W, 0805	0805
41	R9	1	47.5k	CRCW060347K5FKKEA	Vishay-Dale	RES, 47.5 k, 1%, 0.1 W, 0603	0603
42	R10	1	49.9	CRCW060349R9FKKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
43	R11	1	100	CRCW0805100RFKKEA	Vishay-Dale	RES, 100, 1%, 0.125 W, 0805	0805
44	R12	1	2.49k	CRCW08052K49FKKEA	Vishay-Dale	RES, 2.49 k, 1%, 0.125 W, 0805	0805
45	R13	1	51.1k	CRCW060351K1FKKEA	Vishay-Dale	RES, 51.1 k, 1%, 0.1 W, 0603	0603
46	R14	1	0.1	CRM2512-FX-R100ELF	Bourns	RES, 0.1, 1%, 2 W, 2512	2512
47	R15	1	5.36k	CRCW06035K36FKKEA	Vishay-Dale	RES, 5.36 k, 1%, 0.1 W, 0603	0603
48	R16	1	91k	CRCW080591K0JNEA	Vishay-Dale	RES, 91 k, 5%, 0.125 W, 0805	0805
49	T1	1	35uH	UA8263-AL	Coilcraft	Transformer, Flyback, EFD25, 35 uH, SMT	34.29x26.75mm
50	TP1, TP3, TP5, TP6, TP9	5		5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
51	TP2, TP4, TP8, TP12	4		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
52	TP7	1	Blue	5122	Keystone	Test Point, Compact, Blue, TH	Blue Compact Testpoint
53	U1	1		LM5022QDGSRQ1	Texas Instruments	2.2MHz 60-V Low Side Controller for Boost, SEPIC and Flyback, DGS0010A (VSSOP-10)	DGS0010A
54	C24	0	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
55	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
56	R17	0	10.0k	CRCW060310K0FKKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603

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