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TIDA-010056 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-010056	Any	Printed Circuit Board	
2	C1, C2	2	390uF	EEU-FS2A391	Panasonic Electronic Compon	CAP ALUM 390UF 20% 100V THRUHOLE	D16xL27mm
3	C3	1	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 1206	1206
4	C4, C10, C11, C12	4	2.2uF	CL31B225KCHSNNE	Samsung Electro-Mechanics	CAP CER 2.2UF 100V X7R 1206	1206
5	C5	1	10uF	22201C106MAT2A	AVX	CAP, CERM, 10 uF, 100 V, +/- 20%, X7R, 2220	2220
6	C6, C28, C30	3	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
7	C7, C31	2	1uF	CL05A105MO5NNNC	Samsung Electro-Mechanics	CAP, CERM, 1 uF, 16 V, +/- 20%, X5R, 0402	0402
8	C8	1	0.047uF	GRM21BR72A473KA01L	MuRata	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, 0805	0805
9	C9	1	1uF	GRM152R60J105ME15D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 20%, X5R, 0402	0402
10	C16, C17, C18	3	3900pF	12061C392KAZ2A	AVX Corporation	CAP CER 3900PF 100V X7R 1206	1206
11	C19, C33, C35, C39, C40, C44, C45	7	0.1uF	GCM155R71A104KA55D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
12	C21	1	3300pF	GRM155R71H332KA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
13	C23, C36, C41, C42, C43	5	1000pF	GRM155R71C102KA01D	MuRata	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0402	0402
14	C24	1	0.01uF	885012206114	Würth Elektronik	CAP, CERM, 0.01 uF, 100 V, +/- 10%, X7R, 0603	0603
15	C25	1	3000pF	GRM1885C1H302JA01D	MuRata	CAP, CERM, 3000 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
16	C26	1	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
17	C27, C29	2	3.3uF	C3216X7S2A335M160AB	TDK	CAP, CERM, 3.3 uF, 100 V, +/- 20%, X7S, 1206 190	1206 190
18	C32	1	0.47uF	CGB2A1X5R1C474K033BC	TDK Corporation	CAP CER 0.47UF 16V X5R 0402	0402
19	C34	1	10uF	GRM188R61A106KE69D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X5R, 0603	0603
20	C37	1	2.2uF	885012105013	Würth Elektronik	CAP, CERM, 2.2 uF, 10 V, +/- 20%, X5R, 0402	0402
21	C38	1	10uF	C3216X7R1V106M160AC	TDK	CAP, CERM, 10 uF, 35 V, +/- 20%, X7R, 1206 190	1206 190
22	D1	1	70V	SMBJ70CA-13-F	Diodes Inc.	Diode, TVS, Bi, 70 V, SMB	SMB
23	D2, D3	2	200V	DFLS1200-7	Diodes Inc.	Diode, Schottky, 200 V, 1 A, PowerDI123	PowerDI123
24	D4, D7	2	Green	150060GS75000	Würth Electronics Inc	LED, Green, SMD	LED 0603
25	D5	1	RED	150060RS75000	Würth Electronics Inc	LED RED CLEAR 0603 SMD	LED 0603
26	D6	1	YELLOW	150060YS75000	Würth Electronics Inc	LED YELLOW CLEAR 0603 SMD	LED 0603
27	H1, H2	2		NY PMS 256 0025 PH	B&F Fastener Supply	MACHINE SCREW PAN PHILLIPS 2-56	Machine Screw Pan Phillips 2-56
28	J2, J3, J5, J6	4		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
29	J4, J8, J10	3		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
30	J7	1		61300511121	Würth Elektronik	Header, 2.54mm, 5x1, Gold, TH	Header, 2.54mm, 5x1, TH
31	J9	1		61300821121	Würth Electronics	CONN HEADER VERT 8POS 2.54MM	HDR8
32	L1	1	330uH	SDR0604-331KL	Bourns	Inductor, Drum Core, Ferrite, 330 uH, 0.27 A, 2.25 ohm, SMD	5.8x4.8x5.8mm
33	L2	1	33uH	NLFV25T-330K-PF	TDK	Inductor, Shielded, Ferrite, 33 uH, 0.085 A, 1.4 ohm, SMD	2.5x1.8x2mm
34	Q1, Q2, Q3, Q4, Q5, Q6	6	100V	CSD19536KTT	Texas Instruments	MOSFET, N-CH, 100 V, 200 A, KTT0002A (TO-263-2)	KTT0002A
35	Q7	1	100 V	FMMT593TA	Fairchild Semiconductor	TRANS PNP 100V 1A SOT23-3	SOT-23
36	Q8	1	100 V	FMMT493TA	Diodes Incorporated	TRANS NPN 100V 1A SOT23-3	SOT-23
37	R4, R28	2	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
38	R6	1	18.0k	ERJ-2RKF1802X	Panasonic	RES, 18.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
39	R10	1	75k	CRCW040275K0JNED	Vishay-Dale	RES, 75 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
40	R14, R15, R16	3	1.50	CRCW12061R50FKEA	Vishay-Dale	RES, 1.50, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
41	R22, R27	2	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
42	R23, R52, R57, R58, R61	5	100	ERJ-2GEJ101X	Panasonic	RES, 100, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
43	R24, R25	2	0.001	CRE2512-FZ-R001E-3	Bourns	RES, 0.001, 1%, 3 W, AEC-Q200 Grade 0, 2512	2512
44	R29, R30	2	20.0k	CRCW040220K0FKED	Vishay-Dale	RES, 20.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
45	R31	1	0.91	ERJ-2BQFR91X	Panasonic	RES, 0.91, 1%, 0.125 W, 0402	0402
46	R32	1	249k	RC0402FR-07249KL	Yageo	RES SMD 249K OHM 1% 1/16W 0402	0402
47	R33	1	133k	AC0402FR-07133KL	Yageo America	RES, 133 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
48	R34	1	4.02k	RC0402FR-074K02L	Yageo	RES SMD 4.02K OHM 1% 1/16W 0402	0402
49	R35, R39, R48, R53	4	2.00Meg	CRCW04022M00FKED	Vishay-Dale	RES, 2.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
50	R43	1	97.6k	ERJ-2RKF9762X	Panasonic	RES, 97.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
51	R47	1	191k	ERJ-2RKF1913X	Panasonic	RES, 191 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
52	R49, R54, R55, R56	4	3.30k	ERJ-2RKF3301X	Panasonic	RES, 3.30 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
53	R50	1	3.32	CRCW04023R32FKED	Vishay-Dale	RES, 3.32, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
54	R51	1	47.0k	RC0402FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.0625 W, 0402	0402
55	R59, R64, R65	3	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
56	R60, R62, R66	3	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
57	R63	1	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
58	S1	1		434121025816	Würth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
59	U1	1		DRV8350RHRGZT	Texas Instruments	100-V Three-Phase Smart Gate Driver With Buck Regulator, RGZ0048L (VQFN-48)	RGZ0048L
60	U2	1		MSP430FR2355TPTR	Texas Instruments	Mixed-Signal Microcontroller, PT0048A (LQFP-48)	PT0048A
61	U3	1		TPS70933DRVR	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DRV0006A (WSON-6)	DRV0006A
62	U4	1		TMP235A4DBZR	Texas Instruments	TMP235A4DBZR, DBZ0003A (SOP-3)	DBZ0003A
63	U5	1		INA180A3IDBVT	Texas Instruments	Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0005A (SOT-5)	DBV0005A
64	C13, C14, C15	0	3900pF	12061C392KAZ2A	AVX Corporation	CAP CER 3900PF 100V X7R 1206	1206
65	C20, C22, C46, C47, C48, C49	0	1000pF	885012206083	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
66	J1	0		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
67	R1, R2, R3	0	1.50	CRCW12061R50FKEA	Vishay-Dale	RES, 1.50, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
68	R5	0	75k	CRCW040275K0JNED	Vishay-Dale	RES, 75 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
69	R7	0	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
70	R8	0	18.0k	ERJ-2RKF1802X	Panasonic	RES, 18.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
71	R9, R13, R17	0	100	ERJ-2GEJ101X	Panasonic	RES, 100, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
72	R36, R37, R38, R40, R41, R42	0	249k	RC0402FR-07249KL	Yageo	RES SMD 249K OHM 1% 1/16W 0402	0402
73	R44, R45, R46	0	23.2k	RC0402FR-0723K2L	Yageo	RES SMD 23.2K OHM 1% 1/16W 0402	0402

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