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TIDA-010040 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		TIDA-010040	Any	Printed Circuit Board	
2	C1	1	47uF	EEE-FK1C470P	Panasonic	CAP, AL, 47 µF, 16 V, +/- 20%, 0.36 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
3	C2, C5, C6, C7, C8, C12, C18, C19	8	0.22uF	C0603C224Z4VACTU	Kemet	CAP, CERM, 0.22 uF, 16 V, +80/-20%, Y5V, 0603	0603
4	C3, C4, C21, C31	4	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
5	C9, C10, C15, C17, C26, C27	6	0.47uF	C0603C474Z8VACTU	Kemet	CAP, CERM, 0.47 uF, 10 V, +80/-20%, Y5V, 0603	0603
6	C11	1	10uF	293D106X96R3A2TE3	Vishay-Sprague	CAP, TA, 10 uF, 6.3 V, +/- 10%, 3.4 ohm, SMD	3216-18
7	C13	1	10uF	ZRB18AD71A106KE01L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7T, 0603	0603
8	C14, C25, C35	3	0.01uF	0603ZC103KAT2A	AVX	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X7R, 0603	0603
9	C16, C20	2	1000pF	GRM188R61H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X5R, 0603	0603
10	C22, C23, C24, C29, C30	5	10uF	GRM32DR61E106KA12L	MuRata	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 1210	1210
11	C28	1	4.7uF	CL10A475KP8NNNC	Samsung Electro-Mechanics	CAP, CERM, 4.7 µF, 10 V,+/- 10%, X7S, 0603	0603
12	C32	1	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V, +/- 10%, X7R, 0603	0603
13	C33	1	10pF	0603ZC100KAT2A	AVX	CAP, CERM, 10 pF, 10 V, +/- 10%, X7R, 0603	0603
14	C34	1	0.1uF	885012206046	Wurth Elektronik	CAP, CERM, 0.1 µF, 16 V,+/- 10%, X7R, 0603	0603
15	D2	1	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
16	D3, D4	2	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
17	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
18	J1, J2	2		61301011121	Wurth Elektronik	Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm, 10x1, TH
19	J3, J4, J5	3		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
20	L1, L2	2	1000 ohm	742792096	Wurth Elektronik	Ferrite Bead, 1000 ohm @ 100 MHz, 1 A, 0805	0805
21	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"H x 0.200"W
22	Q1, Q2	2	45 V	BC857C-7-F	Diodes Inc.	Transistor, PNP, 45 V, 0.1 A, SOT-23	SOT-23
23	Q3	1	45 V	BC847CLT1G	ON Semiconductor	Transistor, NPN, 45 V, 0.1 A, SOT-23	SOT-23
24	R1	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
25	R2, R4, R18, R32	4	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
26	R3, R8, R9, R10, R12, R16, R17, R19, R20, R21, R22, R23, R27, R31, R42, R56	16	110k	CRCW0402110KFKED	Vishay-Dale	RES, 110 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R5, R6, R11, R28, R39, R48, R58	7	22.0k	ERJ-3EKF2202V	Panasonic	RES, 22.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
28	R7, R14, R34, R40, R41	5	11.0k	CRCW060311K0FKEA	Vishay-Dale	RES, 11.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R13, R15, R24	3	1.10k	CRCW06031K10FKEA	Vishay-Dale	RES, 1.10 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
30	R25, R51	2	5.6k	CRCW06035K60JNEA	Vishay-Dale	RES, 5.6 k, 5%, 0.1 W, 0603	0603
31	R26	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
32	R29	1	2.55k	CRCW06032K55FKEA	Vishay-Dale	RES, 2.55 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R30	1	10kohm	3310Y-001-103L	Bourns	Potentiometer, 10k ohm, 0.25W, TH	9.53x9.53mm
34	R33	1	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
35	R35	1	150k	CRCW0603150KFKEA	Vishay-Dale	RES, 150 k, 1%, 0.1 W, 0603	0603
36	R36, R38	2	68.0k	RC0603FR-0768KL	Yageo America	RES, 68.0 k, 1%, 0.1 W, 0603	0603
37	R37, R47	2	2.00k	RC0603FR-072KL	Yageo America	RES, 2.00 k, 1%, 0.1 W, 0603	0603
38	R43, R46, R50, R53, R54, R57, R59	7	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
39	R44	1	2.2k	CRCW06032K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.1 W, 0603	0603
40	R45, R55, R65	3	221k	CRCW0603221KFKEA	Vishay-Dale	RES, 221 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	R49	1	330	RC0603FR-07330RL	Yageo America	RES, 330, 1%, 0.1 W, 0603	0603
42	R52	1	39.2k	CRCW060339K2FKEA	Vishay-Dale	RES, 39.2 k, 1%, 0.1 W, 0603	0603
43	S1, S2, S3	3		CL-SB-12B-01T	Copal Electronics	Switch, Slide, SPDT, 0.2A, GULL, 12V, SMD	SMD, 3-Leads, Body 8.5x3.5mm, Pitch 2.5mm
44	S4	1		EVQ-21505R	Panasonic	Switch, Tactile, SPST-NO, 0.02A, 15V, TH	6.0x5.0x6mm
45	U1, U3, U5, U6	4		TLV9062IDR	Texas Instruments	10-MHz, Low-Noise, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, D0008A (SOIC-8)	D0008A
46	U2	1		TPA2005D1DGNR	Texas Instruments	1.4-W Mono Class-D Audio Amplifier, -40 to 85 degC, 8-pin SOP (DGN8), Green (RoHS & no Sb/Br)	DGN0008D
47	U4	1		TLV70433DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
48	U7	1		TS5A23157RSER	Texas Instruments	Dual 10-ohm SPDT Analog Switch, RSE0010A (UQFN-10)	RSE0010A
49	U8	1		LM393MX	Texas Instruments	Low Power Low Offset Voltage Dual Comparator, 8-pin Narrow SOIC	M08A
50	U9	1		SN74AHCT1G86DBVR	Texas Instruments	Single 2-Input Exclusive-OR Gate, DBV0005A (SOT-23-5)	DBV0005A
51	D1	0	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
52	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
53	R60	0	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603

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