

TIDA-01570 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-01570	Any	Printed Circuit Board	
2	A1	1		N/A		Used in BOM report	eg: 0603, used in PnP report
3	C1	1	0.47uF	JMK105B7474KVHF	Taiyo Yuden	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X7R, 0402	0402
4	C2	1	10uF	EEE-FK1H100UR	Panasonic	CAP, AL, 10 uF, 50 V, +/- 20%, 1.52 ohm, AEC-Q200 Grade 2, SMD	SMT Radial C
5	C3, C6	2	10uF	GRM32ER71H106MA12	MuRata	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
6	C4, C7	2	0.1uF	C1210C104KSRCTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 1210	1210
7	C5, C8	2	0.01uF	C0805C103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0805	0805
8	C9, C15, C18, C24, C31, C59, C60, C63, C64, C69	10	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
9	C10, C11, C12	3	22uF	C3225X7R1C226K250AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 10%, X7R, 1210	1210
10	C13	1	4.7uF	CGA4J1X7R1E475K125AC	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
11	C14, C17, C23, C33, C45, C47	6	1.0uF	CL05B105K05NQNC	Samsung Electro-Mechanics America, Inc	CAP CER 1UF 6.3V 10% X7R 0402	0402 (1005 Metric)
12	C16, C22, C30, C34, C36, C38, C39, C41, C49, C76	10	10uF	CL21B106K0GQNNNE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 0805	0805
13	C19, C20, C21, C26, C27	5	22uF	GCM21BD70J226ME36L	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X7T, AEC-Q200 Grade 1, 0805	0805
14	C25	1	10uF	GCM21BR71A106KE22L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
15	C28, C29	2	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
16	C32	1	22uF	GRM21BZ71A226ME15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X7R, 0805	0805
17	C35, C37, C40, C42, C43, C44, C50, C51, C54, C55, C57, C58, C61	13	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
18	C46, C48, C72, C74	4	4.7pF	GJM1555C1H4R7BB01D	MuRata	CAP, CERM, 4.7 pF, 50 V, +/- 2%, COG/NP0, 0402	0402
19	C52	1	0.22uF	GCM155R71C224KE02	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
20	C53, C56	2	2.2uF	GCM188R70J226KE22D	MuRata	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
21	C62	1	2200pF	JMK105B7222K4V-F	Taiyo Yuden	Cap, Cer-X7R, 2200pF, 50V, 10%, 0402	0402 (1005 Metric)
22	C65	1	0.1uF	C1005X5R1A104K0508A	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
23	C66, C68	2	1uF	GRM155R6Y1A05ME11D	MuRata	CAP, CERM, 1 uF, 35 V, +/- 20%, X5R, 0402	0402
24	C67, C71	2	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
25	C70	1	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1210	1210
26	C73	1	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
27	C75	1	0.33uF	C0805C334K4RACTU	Kemet	CAP, CERM, 0.33 uF, 16 V, +/- 10%, X7R, 0603	0603
28	D1	1	40V	BA1T68E8327HTSA1	Infineon Technologies	Diode, Schottky, 40 V, 0.75 A, AEC-Q101, SOD-323	SOD-323
29	D2	1	26V	SMBJ26A-13-F	Diodes Inc.	Diode, TVS, Uni, 26 V, 600 W, SMB	SMB
30	D3	1	Red	SML-P12UTT86	Rohm	LED, Red, SMD	LED, 1x2x6mm
31	D4	1	Green	SML-P12PTT86	Rohm	LED, Green, SMD	LED, 1x2x6mm
32	D5	1	14V	SMBJ14A-13-F	Diodes Inc.	Diode, TVS, Uni, 14 V, 600 W, SMB	SMB
33	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
34	H5, H6, H7, H8	4		19822	Keystone	Standoff, Hex, 0.5" L, #4-40 Nylon	Standoff
35	J1, J5, J7	3		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
36	J2, J3	2		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
37	J4	1		TSW-105-09-G-D	Samtec	Header, 2.54mm, 5x2, Gold, TH	Header, 2.54mm, 5x2, TH
38	J6	1		QSH-030-01-L-D-A	Samtec	Receptacle, 0.5 mm, 30x2, Gold, TH	Receptacle, 0.5 mm, 30x2, TH
39	L2, L3	2	470nH	DFE252012PD-R47M	MuRata Toko	Inductor, Shielded, 470 nH, 4.7 A, 0.021 ohm, SMD	1008
40	L4	1	1uH	DFE252012PD-1R0M	MuRata Toko	Inductor, Shielded, 1 uH, 3.8 A, 0.035 ohm, AEC-Q200 Grade 1, SMD	1008
41	L5, L6, L7, L8, L9, L10	6	120 ohm	BLM18KG121TH1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 1.9 A, 0603	0603
42	L100	1	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 9.2 A, 0.01 ohm, SMD	5.3x31 x5.5mm
43	R1, R3	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
44	R2	1	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, 0402	0402
45	R4	1	220	CRCW0402220R0JNED	Vishay-Dale	RES, 220, 5%, 0.063 W, 0402	0402
46	R6, R7, R8, R9, R15, R16, R18, R20, R21, R24, R25, R33, R35, R36, R38, R39, R40, R59, R60, R61, R62, R63, R64, R65, R66, R67, R73, R76, R77, R78, R79, R82, R83, R85	34	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
47	R10	1	12.1k	CRCW040212K1FKED	Vishay-Dale	RES, 12.1 k, 1%, 0.063 W, 0402	0402
48	R11, R12	2	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
49	R13, R14, R23, R26, R31, R37, R41, R48, R49, R50, R57, R58, R74, R75, R80, R81, R84	17	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
50	R17	1	48.7k	CRCW040248K7FKED	Vishay-Dale	RES, 48.7 k, 1%, 0.063 W, 0402	0402
51	R19	1	1.0k	RC0603JR-071KL	Vyso America	RES, 1.0 k, 5%, 0.1 W, 0603	0603
52	R22	1	2.43k	CRCW04022K43FKED	Vishay-Dale	RES, 2.43 k, 1%, 0.063 W, 0402	0402
53	R29	1	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, 0402	0402
54	R42, R44, R45, R47	4	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
55	R51	1	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
56	R52, R55, R69, R71	4	61.9	CRCW040261R9FKED	Vishay-Dale	RES, 61.9, 1%, 0.063 W, 0402	0402
57	R53, R54, R56	3	33.2	CRCW040233R2FKED	Vishay-Dale	RES, 33.2, 1%, 0.063 W, 0402	0402
58	R68	1	3.0k	CRCW04023K00JNED	Vishay-Dale	RES, 3.0 k, 5%, 0.063 W, 0402	0402
59	R70	1	33k	CRCW040233K0JNED	Vishay-Dale	RES, 33 k, 5%, 0.063 W, 0402	0402
60	S3, S4	2		SKRKAEE010	Alps	Switch, Tactile, 12v, 50mA, Vertical, SMD	2.9x2x3.9mm SMD
61	TP1	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
62	U1	1		LM536253QRNLRQ1	Texas Instruments	2.5/3.5A, 36 V Synchronous, 2.1MHz, Automotive Step Down DC-DC Converter, RNL0022A (VOFN-HR-22)	RNL0022A
63	U2	1		LP87702DRHBRQ1	Texas Instruments	Boost and Dual Buck Regulators With Diagnostic Functions, RHB0032N (VOFN-32)	RHB0032N
64	U3	1		TPST7A5201QRGRQ1	Texas Instruments	TPST7A5201R1TKT, RTK0020C (VOFNP-20)	RTK0020C
65	U4	1		X1642BIGABL	Texas Instruments	Single-Chip 77- and 79-GHz FMCW Radar Sensor, ABL0161B (FCBGA-161)	ABL0161B
66	U5	1		TCAN1042GVDRQ1	Texas Instruments	Automotive Fault Protected CAN Transceiver With Flexible Data-Rate, D0008A (SOIC-8)	D0008A
67	U6	1		MX25R1635FZUIH0	Macronix International Co., Ltd	ULTRA LOW POWER, 16M-BIT 1x 2x 4J CMOS MXSMIO (SERIAL MULTI I/O) FLASH MEMORY, SON-8	SON-8
68	U7	1		TCAN4550RGYRQ1	Texas Instruments	CAN-FD Controller with Integrated Transceiver, RGY0020A (VOFN-20)	RGY0020A
69	Y3, Y4	2		CX3225SA40000DPTWCC	Kyocera	Crystal, 40 MHz, 8pF, SMD	3.2x2.5mm
70	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
71	R5, R30, R72	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
72	R43, R46	0	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
73	R86	0	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402

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