

TIDA-020011 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-020011	Any	Printed Circuit Board	
2	C1	1	0.47uF	JMK105B7474KVHF	Taiyo Yuden	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X7R, 0402	0402
3	C2	1	10uF	EEE-FK1H100UR	Panasonic	CAP, AL, 10 uF, 50 V, +/- 20%, 1.52 ohm, AEC-Q200 Grade 2, SMD	SMT Radial C
4	C3, C6	2	10uF	GRM32ER71H106MA12	MuRata	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
5	C4, C7	2	0.1uF	C1210C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 1210	1210
6	C5, C8	2	0.01uF	C0805C103K5RACTU	Kemet	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0805	0805
7	C9, C15, C18, C24, C31, C59, C60, C63, C64, C68	10	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
8	C10, C11, C12	3	22uF	C3225X7R1C226K250AC	TDK	CAP, CERM, 22 uF, 16 V, +/- 10%, X7R, 1210	1210
9	C13	1	4.7uF	CGA4J1X7R1E475K125AC	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
10	C14, C17, C23, C33, C45, C47	6	1.0uF	CL05B105KQ5NQNCC	Samsung Electro-Mechanics America, Inc	CAP CER 1UF 6.3V 10% X7R 0402	0402 (1005 Metric)
11	C16, C22, C30, C34, C36, C38, C39, C41, C49	9	10uF	CL21B106KOQNNNE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 0805	0805
12	C19, C20, C21, C26, C27	5	22uF	GCM21BD70J226ME36L	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X7T, AEC-Q200 Grade 1, 0805	0805
13	C25	1	10uF	GCM21BR71A106KE22L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
14	C28, C29	2	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	0402
15	C32	1	22uF	GRM21BZ71A226ME15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X7R, 0805	0805
16	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
17	C46, C48	2	4.7pF	GJM1555C1H4R7BB01D	MuRata	CAP, CERM, 4.7 pF, 50 V, +/- 2%, COG/NP0, 0402	0402
18	C52	1	0.22uF	GCM155R71C224KE02	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
19	C53, C56	2	2.2uF	GCM188R70J225KE22D	MuRata	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
20	C62	1	2200pF	UMK105B7222KV-F	Taiyo Yuden	Cap, Cer-X7R, 2200pF, 50V, 10%, 0402	0402 (1005 Metric)
21	C65	1	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
22	C66	1	1uF	GRM155R6YA105ME11D	MuRata	CAP, CERM, 1 uF, 35 V, +/- 20%, X5R, 0402	0402
23	C67	1	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
24	D1	1	40V	BAT165E6327HTSA1	Infineon Technologies	Diode, Schottky, 40 V, 0.75 A, AEC-Q101, SOD-323	SOD-323
25	D2	1	26V	SMBJ26A-13-F	Diodes Inc.	Diode, TVS, Uni, 26 V, 600 W, SMB	SMB
26	D5	1	14V	SMBJ14A-13-F	Diodes Inc.	Diode, TVS, Uni, 14 V, 600 W, SMB	SMB
27	FID4, FID5, FID6	3	N/A	N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
28	J1, J5	2		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
29	J2	1		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
30	J3	1		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
31	L2, L3	2	470nH	DFE252012PD-R47M	MuRata Toko	Inductor, Shielded, 470 nH, 4.7 A, 0.021 ohm, SMD	1008
32	L4	1	1uH	DFE252012PD-1R0M	MuRata Toko	Inductor, Shielded, 1 uH, 3.8 A, 0.035 ohm, AEC-Q200 Grade 1, SMD	1008
33	L5, L7, L8, L10	4	120 ohm	BLM18KG121TH1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 1.9 A, 0603	0603
34	L100	1	2.2uH	XAL5030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 9.2 A, 0.01 ohm, SMD	5.3x31.x5.5mm
35	R1, R3	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10k ohm, 5%, 0.063W, 0402	0402
36	R2, R14, R23, R31, R37, R41, R48, R49, R50, R57	10	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
37	R4	1	11.0k	CRCW040211K0FKED	Vishay-Dale	RES, 11.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	R7, R8, R9, R15, R16, R18, R20, R21, R33, R35, R36, R38, R39, R40, R95	15	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
39	R10	1	12.1k	CRCW040212K1FKED	Vishay-Dale	RES, 12.1 k, 1%, 0.063 W, 0402	0402
40	R11, R12	2	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
41	R17	1	48.7k	CRCW040248K7FKED	Vishay-Dale	RES, 48.7 k, 1%, 0.063 W, 0402	0402
42	R19	1	1.0k	RC0603JR-071KL	Yageo America	RES, 1.0 k, 5%, 0.1 W, 0603	0603
43	R29	1	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, 0402	0402
44	R42, R44, R45, R47	4	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
45	R51	1	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
46	R52, R55	2	61.9	CRCW040261R9FKED	Vishay-Dale	RES, 61.9, 1%, 0.063 W, 0402	0402
47	R53, R54, R56	3	33.2	CRCW040233R2FKED	Vishay-Dale	RES, 33.2, 1%, 0.063 W, 0402	0402
48	S3	1		SKRKAEE010	Alps	Switch, Tactile, 12v, 50mA, Vertical, SMD	2.9x2x3.9mm SMD
49	U1	1		LM536253QRNLRQ1	Texas Instruments	2.5/3.5A, 36 V Synchronous, 2.1MHz, Automotive Step Down DC-DC Converter, RNL0022A (VQFN-HR-22)	RNL0022A
50	U2	1		LP87702DRHBRQ1	Texas Instruments	Boost and Dual Buck Regulators With Diagnostic Functions, RHB0032N (VQFN-32)	RHB0032N
51	U3	1		TPS7A5201QRGRRQ1	Texas Instruments	TPS7A5201RTKT, RTK0020C (VQFN-20)	RTK0020C
52	U4	1		X1642BIGABL	Texas Instruments	Single-Chip 77- and 79-GHz FMCW Radar Sensor, ABL0161B (FCBGA-161)	ABL0161B
53	U5	1		TCAN1042GVDRQ1	Texas Instruments	Automotive Fault Protected CAN Transceiver With Flexible Data-Rate, D0008A (SOIC-8)	D0008A
54	U6	1		MX25R1635FZUIH0	Macronix International Co., LTD	ULTRA LOW POWER, 16M-BIT [x 1x 2/x 4] CMOS MXSMIO (SERIAL MULTI I/O) FLASH MEMORY, SON-8	SON-8
55	Y3	1		CX3225SA4000D0PTWCC	Kyocera	Crystal, 40 MHz, 8pF, SMD	3.2x2.5mm
56	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
57	R24	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0 ohm, 5%, 0.063W, 0402	0402
58	R43, R46	0	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603

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