

TIDA-020072 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-020072	Any	Printed Circuit Board	
2	3V3, 3V3IO, 5V0, 12V0, GND, INH, INT	8		TSW-101-07-G-S	Samtec	Header, 100mil, 1pos, Gold, TH	Testpoint
3	C1, C10, C11, C12, C13, C14, C21, C26, C27, C36, C37, C49, C52	13	0.1uF	C1005X5R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X5R, 0402	0402
4	C3, C4, C51	3	10uF	GRM155R61A106ME11	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
5	C7, C8, C9	3	2.2uF	C1005X5R1V225K050BC	TDK	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X5R, 0402	0402
6	C17, C18, C19, C28, C29, C54	6	0.01uF	GRM155R61C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X5R, 0402	0402
7	C20	1	0.047uF	GRM155R71C473KA01D	MuRata	CAP, CERM, 0.047 uF, 16 V, +/- 10%, X7R, 0402	0402
8	C22, C50	2	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
9	C30, C31	2	270pF	C0402C270J5GACTU	Kemet	CAP, CERM, 27 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
10	C38, C39	2	4700pF	GRM31BR73A472KW01L	MuRata	CAP, CERM, 4700 pF, 1000 V, +/- 10%, X7R, 1206	1206
11	C44	1	47uF	C2012X5R1A476M125AC	TDK	CAP, CERM, 47 uF, 10 V, +/- 20%, X5R, 0805	0805
12	C47, C48	2	1uF	GRM155R61E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0402	0402
13	D1, D2, D3, D4, D8, D9, D11	7	Green	APT2012LZGCK	Kingbright	LED, Green, SMD	LED_0605
14	D10	1	Red	15006RS75000	Würth Elektronik	LED, Red, SMD	LED_0603
15	FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
16	J1	1		1714505106	Molex	Conn Shrouded RCP 60 POS 0.8mm Solder ST SMD Emboss T/R	CONN_RCPT60
17	J2	1		9-2304372-1	TE Connectivity	Header(shrouded), 2x1, R/A, TH	Header(shrouded), 2x1, R/A, TH
18	J3	1		901-144-8RFX	Amphenol RF	SMA Straight Jack, Gold, 50 Ohm, TH	SMA Straight Jack, TH
19	J4, J5, J6, J19, J21	5		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
20	J16, J17, J18	3		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
21	L1	1		DLW32MH201XK2	Murata	200uH @ 100kHz 2 Line Common Mode Choke Surface Mount 70mA DCR 4.8 Ohm	1210
22	L2	1			Würth Elektronik	WE-MAPI SMT Power Inductor, size 4020, 2.2uH, 4.7A, 35mOhm	
23	L4, L5	2	600 ohm	BLM18KG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 1.3 A, 0603	0603
24	L6	1		BLM18KG102SH1D	Murata	1 kOhms @ 100MHz 1 Power Line Ferrite Bead 0603 (1608 Metric) 1A 200mOhm	0603
25	L7	1		ADL32VHR-180M	TDK	Differential Mode Choke 18uH 370mA 0.84Ohm 3.2x2.5x2.5mm SMT	SMT_3MM2_2MM5
26	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.65" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
27	Q2	1	45 V	BC847CLT1G	ON Semiconductor	Transistor, NPN, 45 V, 0.1 A, SOT-23	SOT-23
28	R1, R2, R3, R6	4	10.0k	RT0402BRD0710KL	Yageo America	RES, 10.0 k, .1%, .0625 W, 0402	0402
29	R5, R7, R8, R9, R10, R11, R12, R13, R14, R15, R17, R19, R29, R43, R44, R45, R46, R48, R65, R68, R72	21	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	R18	1	100k	CRCW0402100KFKE	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R20	1	52.3k	CRCW0402523KFKE	Vishay-Dale	RES, 52.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
32	R22, R24	2	4.53k	CRCW04024K53KFKE	Vishay-Dale	RES, 4.53 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
33	R26, R30, R33, R41, R42, R62, R63, R64, R66, R67	10	2.49k	CRCW04022K49KFKE	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
34	R27, R28, R31, R32, R36	5	470	CRCW0402470R1JNE	Vishay-Dale	RES, 470, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R37	1	0	CRCW06030000Z0EAC	Vishay	CRCW Series 0603 0.1 W 0 Ohm Jumper Surface Mount Thick Film Chip Resistor	0603
36	R38	1	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
37	R53, R54	2	1.00k	ERJ-P06F1001V	Panasonic	RES, 1.00 k, 1%, 0.25 W, 0805	0805
38	R55	1	100k	RT0805BRD07100KL	Yageo America	RES, 100 k, 0.1%, 0.125 W, 0805	0805
39	R56	1	1.0Meg	CRCW12061M00JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
40	R70	1	1.30k	CRCW04021K30KFKE	Vishay-Dale	RES, 1.30 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
41	R71	1	4.42k	CRCW04024K42KFKE	Vishay-Dale	RES, 4.42 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
42	R78	1	100	CRCW0402100RFKE	Vishay-Dale	RES, 100, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
43	S1	1		KSR221GLFS	C&K Components	Switch, Normally open, 2.3N force, 200k operations, SMD	KSR
44	SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6, SH-J7, SH-J8	8	1x2	SPC02SYAN	Sullins Connector Solutions	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt
45	U2	1		TPS74701QDRCRQ1	Texas Instruments	Single Output Automotive LDO, 500 mA, Adjustable 0.8 to 3.6 V Output, 0.8 to 5.5 V Input, with Programmable Soft Start, 10-pin SON (DRC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRC0010A
46	U3	1		DP83TC817SRHARQ1	Texas Instruments	Precise and Secure 100BASE-T1 Automotive Ethernet with TC10, IEEE802.1AS, IEEE802.1AE MACsec and AVB Clock Generation	VQFN36
47	U4	1		TPS3838K33QDBVRQ1	Texas Instruments	Nanopower Supervisory Circuits for Automotive, DBV0005A (SOT-23-5)	DBV0005A
48	U5	1		TPS62921QDDRRLRQ1	Texas Instruments	3-V to 17-V, Synchronous Buck Converters in 1.6 mm x 2.1 mm SOT583 Package	FCSOT8
49	U6	1		TPD2E2U06QDCKRQ1	Texas Instruments	Automotive Dual-Channel High-Speed ESD Protection Device, DCK0003A (SOT-SC70-3)	DCK0003A
50	U12	1		TPS7B8233DRV-Q1	Texas Instruments	300-mA High-Voltage Ultralow-IQ Low-Dropout Regulator	WS0N6
51	Y1	1		ABM8AIG-25.000MHZ-12-2Z-T3	Abracon Corporation	Crystal, 25 MHz, 12pF, AEC-Q200 Grade 1, SMD	3.2x2.5mm
52	C2	0	10uF	GRM155R61A106ME11	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
53	C5, C6	0	2.2uF	C1005X5R1V225K050BC	TDK	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X5R, 0402	0402
54	C15, C16	0	0.01uF	GRM155R61C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X5R, 0402	0402
55	C56	0	0.1uF	C1005X5R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X5R, 0402	0402
56	D5, D6	0		EZAG3W11AV	Panasonic	Diode, TVS, BL, AEC-Q101, 0603	0603
57	H2, H3, H4	0		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
58	L3	0	600 ohm	BLM18KG601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 1.3 A, 0603	0603
59	R4	0	10.0k	RT0402BRD0710KL	Yageo America	RES, 10.0 k, .1%, .0625 W, 0402	0402
60	R16, R21, R23, R47	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
61	R25	0	249k	CRCW0402249KFKE	Vishay-Dale	RES, 249 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
62	R34, R35, R39	0	2.49k	CRCW04022K49KFKE	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
63	U1	0		CAT24C256WI-GT3	ON Semiconductor	256 kb I2C CMOS Serial EEPROM, SOIC-8	SOIC-8
64	Y2	0		CDC6CCE025000ADLETO	Texas Instruments	Low Power LVCMOS output BAW Oscillator	VSON4

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