

**TIDA-020010 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-020010	Any	Printed Circuit Board	
2	C100	1	0.1uF	CGA3E2X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C101, C113	2	0.047uF	CGA4J2X7R2A473K125AA	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
4	C102	1	10pF	CGA3E2C0G1H100D080AA	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
5	C103, C104, C105, C106	4	2.2uF	CGA4J3X7R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
6	C107, C108, C700, C702	4	4.7uF	GRT21BR61H475KE13L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0805	0805
7	C109, C110	2	0.22uF	GCM188R71H224KA64D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C111, C300	2	0.01uF	C0603C103J3GCECAUTO	Kemet	CAP, CERM, 0.01 uF, 25 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
9	C112, C115, C301, C303, C304, C701	6	4.7uF	CGA4J1X7R1E475K125AC	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
10	C114	1	1uF	CGA3E1X7R1C105K080AC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
11	C302, C500, C501, C502, C503, C602, C800	7	0.1uF	CGJ3E2X7R1C104K080AA	TDK	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	C600, C601	2	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
13	C900, C901, C902, C903	4	220pF	CGA3E2C0G1H221J080AA	TDK	CAP, CERM, 220 pF, 20 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
14	D100	1	60V	B360AM-13-F	Diodes Inc.	Diode, Schottky, 60 V, 3 A, AEC-Q101, SMA	SMA
15	D101	1	26V	TPSMD26A	Littelfuse	Diode, TVS, Uni, 26 V, 42.1 Vc, AEC-Q101, SMC	SMC
16	D200	1	100V	PDS5100HQ-13	Diodes Inc.	Diode, Schottky, 100 V, 5 A, AEC-Q101, PowerDI5	PowerDI5
17	D301, D700	2	Yellow	APT1608SYCK	Kingbright	LED, Yellow, SMD	0603(1608)
18	D302, D304, D306, D308, D310, D315, D316, D317, D318, D319	10	Red	VLMR334BACB-GS08	Vishay-Semiconductor	LED, Red, SMD	3x2.8mm
19	D303, D305, D307, D309, D311, D313	6	White	LW T67C-S2V1-5K8L-Z	OSRAM	LED, White, SMD	3.2x2.8mm
20	D312	1	Yellow	LY T67K-J2M1-26-Z	OSRAM	LED, Yellow, SMD	3.2x2.8mm
21	D314	1	Blue	LB T673-L2P1-25-Z	OSRAM	LED, Blue, SMD	3.2x2.8mm
22	D900, D901	2	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
23	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
24	J100	1		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
25	J200	1		15-91-2040	Molex	Header, 100mil, 2x2, Tin, SMT	2x2 100mil Tin Header
26	J700, J800	2		15912120	Molex	Header, 100mil, 6x2, SMT	Header, 6x2, SMT
27	J900, J901	2		66953-010LF	FCI	Receptacle, 100mil, 10X2, Tin, TH	Receptacle, 100mil, 10x2, TH
28	L100	1	680nH	DFE252012PD-R68M	MuRata Toko	Inductor, Shielded, Metal Composite, 680 nH, 3.5 A, 0.03 ohm, AEC-Q200 Grade 1, SMD	1008
29	L101	1	4.7uH	DFE252012PD-4R7M	MuRata Toko	Inductor, Shielded, Metal Composite, 4.7 uH, 1.4 A, 0.165 ohm, AEC-Q200 Grade 1, SMD	1008
30	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 x 0.200 inch
31	R100	1	100k	ERJ-3GEYJ104V	Panasonic	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
32	R101, R300	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R102	1	43.2k	CRCW060343K2FKEA	Vishay-Dale	RES, 43.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
34	R200, R201, R203, R204, R302, R701, R900, R901	8	4.7k	ERJ-3GEYJ472V	Panasonic	RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
35	R202	1	620	RR1220P-621-D	Susumu Co Ltd	RES, 620, 0.5%, 0.1 W, 0805	0805
36	R301, R700, R906, R907, R908, R909	6	1.0k	RCA06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R303	1	2.43	CRCW06032R43FKEA	Vishay-Dale	RES, 2.43, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
38	R902	1	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
39	R903	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
40	U100	1		LMR36006AQRNXXRQ1	Texas Instruments	Automotive 65-V 0.6-A Synchronous Step-Down Converter, RNX0012B (VQFN-HR-12)	RNX0012B
41	U200	1		TPS1H100AQPWPRQ1	Texas Instruments	40V/100mOhm Single Channel Smart High Side Switch, PWP0014C (TSSOP-14)	PWP0014C
42	U300	1		TLC6C5716QDAPRQ1	Texas Instruments	Automotive Grade 16-Channel, Full Diagnostics, Constant-Current LED Driver with 7-Bit Dot Correction and 12-Bit PWM Dimming, DAP0038E (TSSOP-38)	DAP0038E
43	U400	1		OPT3001IDNPRQ1	Texas Instruments	Ambient Light Sensor (ALS), DNP0006A (USON-6)	DNP0006A
44	U500, U501, U502, U503	4		DRV5055A1QDBZT	Texas Instruments	High Accuracy 3.3 V or 5 V Ratiometric Bipolar Hall Effect Sensor Family, DBZ0003A (SOT-23-3)	DBZ0003A
45	U600	1		TPS7B4250QDBVRQ1	Texas Instruments	50-mA 40-V Voltage-Tracking LDO With 5-mV Tracking Tolerance, DBV0005A (SOT-23-5)	DBV0005A
46	U700	1		DRV8912PWPWRQ1	Texas Instruments	Automotive Multi-Channel Half-Bridge Driver, PWP0024J (HTSSOP-24)	PWP0024J
47	U800	1		SN74LV4051AQPWRQ1	Texas Instruments	Automotive Catalog 8-Channel Analog Multiplexer/Demultiplexer, PW0016A (TSSOP-16)	PW0016A
48	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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