

Variant: 001  
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TIDA-010966 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-010966	Any	Printed Circuit Board	
2	C1	1	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C2, C7, C16, C17, C19	5	300pF	GRM1885C1H301JA01D	MuRata	CAP, CERM, 300 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
4	C3, C4	2	2200pF	GRM1885C1H222JA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
5	C5, C9	2	1mF	EGPD800ELL102ML35H	United Chemi-Con	1000 µF 80 V Aluminum Electrolytic Capacitors Radial, Can 27mOhm @ 100kHz 2000 Hrs @ 135°C	RADIAL
6	C6	1	100pF	0603ZC101KAT2A	AVX	CAP, CERM, 100 pF, 10 V, +/- 10%, X7R, 0603	0603
7	C8, C18, C69, C70	4	1uF	C0805C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
8	C10	1	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
9	C11, C12, C13, C14, C15, C59, C60, C61, C65, C68	10	2.2uF	CGA5L3X7S2A225K160AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1206	1206
10	C20, C71	2	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
11	C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C33, C34, C35, C36, C39, C40, C41, C42, C43, C44, C45, C46, C49, C50, C51, C52, C53, C54, C55, C56	30	0.1uF	C3216C0G2A104J160AC	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 5%, C0G/NP0, 1206_190	1206_190
12	C31, C37, C48	3	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
13	C32, C38, C47	3	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0603	0603
14	C57, C58	2	1mF	EY3A102MNN1850M	Chinsan	1000 µF 120 V Aluminum Electrolytic Capacitors Radial, Can 10000 Hrs @ 105°C	RADIAL
15	C62, C64, C66, C67	4	47uF	GRM32ER61C476KE15L	MuRata	CAP, CERM, 47 uF, 16 V, +/- 10%, X5R, 1210	1210
16	C63	1	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
17	C72	1	1uF	GRM188R71A105KA61D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7R, 0603	0603
18	C73, C74	2	22uF	CL21A226KQ0NNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 16 V, +/- 10%, X5R, 0805	0805
19	GND_pri, GND_pri2, GND_sec, GND_sec2, SW_pri, SW_pri2, SW_sec, SW_sec2, Vbattery_p, Vbattery_p2, Vbus_p, Vbus_p2	12		0312-0-15-15-34-27-10-0	Mill-Max		Pin Receptacle
20	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
21	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
22	H9, H10, H11, H12	4		SJ-5303 (CLEAR)	3M	Bump-on, Hemisphere, 0.44 X 0.20, Clear	Transparent Bump-on
23	J1	1		HSEC8-160-01-L-DV-A-BL	Samtec	C2000 controlCARD-120HSEC connector, SMT	C2000 pin numbering
24	J2, J3, J4, J5, J6	5		HTSW-102-09-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 2x1, 2.54mm, TH
25	J7	1		M50-3000445	Harwin	Conn Socket Strip SKT 8 POS 1.27mm Solder ST Thru-Hole	CONN_SCKT_STRP8
26	J8, J9	2		M50-3030242	Harwin	2 Position Receptacle Connector 0.050" (1.27mm) Through Hole Gold	HDR2
27	L1, L2	2		74438336022	Würth Electronics	2.2µH Shielded Molded Inductor 2.4A 67mOhm Max 2-SMD	SMD2
28	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
29	R1, R2, R5, R6	4	50.5k	RT0805BRD0750K5L	Yageo America	RES, 50.5 k, 0.1%, 0.125 W, 0805	0805
30	R3, R4	2	10	RNCF0603AKT10R0	Stackpole Electronics Inc	RES, 10.0, 0.05%, 0.1 W, 0603	0603
31	R7, R8	2	10.0k	PLTT0805Z1002QGT5	Vishay-Dale	RES, 10.0 k, 0.02%, 0.25 W, 0805	0805
32	R9	1	51	RC0603FR-0751RL	Yageo	RES, 51.0, 1%, 0.1 W, 0603	0603
33	R10	1	0.01	LRMAP2512-R01FT4	TT Electronics/IRC	RES, 0.01, 1%, 3 W, AEC-Q200 Grade 0, 2512	2512
34	R11	1	5.30k	RT0805BRD075K3L	Yageo America	RES, 5.30 k, 0.1%, 0.125 W, 0805	0805
35	R12	1	3.60k	RG2012P-362-B-T5	Susumu Co Ltd	RES, 3.60 k, 0.1%, 0.125 W, 0805	0805
36	T1	1		PMP41134_transformer	3L	TRANSFORMER	PTH
37	TP1	1		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
38	U1	1		TLV9062IDR	Texas Instruments	10-MHz, Low-Noise, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, D0008A (SOIC-8)	D0008A
39	U2	1		INA181A1IDBVR	Texas Instruments	Bidirectional, Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0006A (SOT-6)	DBV0006A
40	U3	1		AMC0311RDWV	Texas Instruments	Precision, 2.25V Input, Basic and Reinforced Isolated Amplifiers With Single-Ended, Ratiometric Output	SOIC-WB8
41	U4	1		ISO7721DR	Texas Instruments	High Speed, Robust EMC Dual-Channel Digital Isolator, D0008B (SOIC-8)	D0008B
42	U5	1		TCAN1042HDRQ1	Texas Instruments	Automotive Fault Protected CAN Transceiver With Flexible Data-Rate, D0008A (SOIC-8)	D0008A
43	U6	1		ESD2CAN24DBZR	Texas Instruments	24-V, 2-Channel ESD Protection Diode for In-Vehicle Networks	SOT-23-3
44	U7	1		TLV71333PQDBVRQ1	Texas Instruments	Capacitor-Free, 150-mA, LDO Regulator w/ Foldback Current Limit, DBV0005A (SOT-23-5)	DBV0005A
45	U8, U9	2		TPS62163DSGR	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 5 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/Br)	DSG0008A