

Variant: 001  
 Generated: 9/9/2020 4:11:44 PM  
 TID #: TIDA-020040



TIDA-020040 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-020040	Any	Printed Circuit Board	
2	C1, C13	2	1000pF	CGA2B2X7R1H102K050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
3	C2, C3, C4, C5, C6, C7	6	1000uF	EMVE500GTR102MMNOS	Chemi-Con	CAP, AL, 1000 uF, 50 V, +/- 20%, SMD	MN0
4	C8, C11, C16	3	1uF	CGA4J3X7R1H105K125AB	TDK	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
5	C9, C10, C12, C23	4	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
6	C17, C21	2	0.1uF	C0402C104K4RACAUTO	Kemet	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
7	C18	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C22	1	4.7uF	GCM21BC71E475KE36L	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0805	0805
9	C24	1	1uF	GCM155C71A105KE38D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
10	D1	1		SMBJ36CA	Littelfuse	Diode TVS Single Bi-Dir 36V 600W 2-Pin SMB	DO-214AA
11	D2, D3	2	40V	ACDDB540-HF	Comchip Technology	Diode, Schottky, 40 V, 5 A, AEC-Q101, SMB	SMB
12	J1, J3	2		HW-02-15-T-S-340-SM	Samtec	Header, 100mil, 2x1, Gold, SMD	SMD, 2-Leads, Body 100x200mil, Pitch 100mil
13	J2	1		TSW-103-07-G-D	Samtec	Header, 100mil, 3x2, Gold, TH	3x2 Header
14	J4	1		HTSW-101-07-G-S	Samtec	Header, 2.54mm, 1x1, Gold, TH	Header, 2.54mm, 1x1, TH
15	L1	1	3.3uH	SRP2313AA-3R3M	Bourns	Inductor, Shielded, Metal Composite, 3.3 uH, 37 A, 0.00175 ohm, AEC-Q200 Grade 0, SMD	Nonstandard
16	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
17	Q1, Q2, Q3, Q4	4	60V	NVMFS5C604NLT1G	ON Semiconductor	MOSFET, N-CH, 60 V, 287 A, AEC-Q101, DFN5 5x6mm	DFN5 5x6mm
18	R1	1	0.001	KRL11050-C-R001-J-T1	Susumu Co Ltd	RES, 0.001, 5%, 6 W, 4320_WIDE	4320_WIDE
19	R4, R5, R7	3	5.6	CRCW06035R60JNEA	Vishay-Dale	RES, 5.6, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
20	R6, R11, R13, R19, R20	5	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
21	R8, R10	2	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
22	R9, R15	2	499	CRCW0402499RFKED	Vishay-Dale	RES, 499, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
23	R12	1	20	CRCW040220R0JNED	Vishay-Dale	RES, 20, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
24	R14, R16	2	3.65k	CRCW04023K65FKED	Vishay-Dale	RES, 3.65 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
25	R17, R18	2	10.0k	CRCW040210K0DHEDP	Vishay-Dale	RES, 10.0 k, 0.5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
26	R21, R22	2	37.4k	CRCW040237K4FKED	Vishay-Dale	RES, 37.4 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	T1, T2, T3, T4	4		CXS70-14-C	Panduit	Terminal 70A Lug	LUG, 32.3x14.5x11.7
28	TP1, TP2	2		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
29	TP3	1		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
30	TP4	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
31	TP5	1		5008	Keystone	Test Point, Compact, Orange, TH	Orange Compact Testpoint
32	TP6	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
33	TP7	1		5009	Keystone	Test Point, Compact, Yellow, TH	Yellow Compact Testpoint
34	U1	1		LM74810DRRQ1	Texas Instruments	Ideal Diode Controller with Load Dump Protection, DRR0012E (WS0N-12)	DRR0012E
35	U2	1		TPS7B6950QDBVRQ1	Texas Instruments	Automotive High-Voltage Ultra-Low IQ Low-Dropout Regulator/Fixed 5-V Output Voltage, DBV0005A (SOT-23-5)	DBV0005A
36	U3	1		INA302A2IPWR	Texas Instruments	36-V, High-Speed, Bi-Directional, Zero-Drift, Voltage-Output, Current-Shunt Monitor with Multi-Alert High-Speed, Overcurrent Comparator, PW0014A (TSSOP-14)	PW0014A
37	U4	1		SN74LVC1G32QDCKRQ1	Texas Instruments	Automotive Catalog Single 2-Input Positive-OR Gate, DCK0005A, LARGE T&R	DCK0005A
38	C14	0	1uF	GCM31CR2A105KA03	MuRata	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
39	C15	0	10uF	UMJ325KB7106KMHT	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
40	C19	0	0.022uF	CGA2B3X7R1H223K050BB	TDK	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
41	C20	0	1uF	GRT155C71A105KE13D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
42	C25	0	470pF	GRT155R71H471KE01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
43	R2	0	5.36	CRCW12065R36FKEA	Vishay-Dale	RES, 5.36, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
44	R3	0	0.04	CSRN2512FK40L0	Stackpole Electronics Inc	RES, 0.04, 1%, 2 W, 2512	2512

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