

Bill of Materials

TI DESIGNS

TIDA-00699

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number
1	1	C1	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H471K
2	2	C2, C4	CAP, AL, 47uF, 50V, +/-20%, 0.68 ohm, SMD	Panasonic	EEE-FK1H470XP
3	5	C3, C5, C19, C20, C25	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 2220	TDK	CGA9N3X7R1H106K230KB
4	3	C6, C26, C28	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	MuRata	GCM188R71C104KA37J
5	1	C7	CAP, CERM, 1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	MuRata	GCM31CR72A105KA03
6	3	C8, C11, C21	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0402	TDK	CGA2B3X7R1H104M050BB
7	1	C9	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X7R, 0603	MuRata	GRM188R71A225KE15D
8	1	C10	CAP, CERM, 100 pF, 25 V, +/- 5%, COG/NP0, 0402	Kemet	C0402C101J3GACTU
9	1	C12	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X7R, 0805	MuRata	GRM21BR71A475KA73L
10	1	C13	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, 0805	Taiyo Yuden	UMK212B7474KG-T
11	1	C14	CAP, CERM, 2200 pF, 16 V, +/- 10%, X7R, 0402	Würth Elektronik	885012205027
12	1	C15	CAP, CERM, 330 pF, 50 V, +/- 5%, COG/NP0, 0402	TDK	C1005C0G1H331J
13	1	C16	CAP, CERM, 0.047 uF, 25 V, +/- 5%, X7R, 0603	AVX	06033C473JAT2A
14	1	C17	CAP, CERM, 0.68 uF, 10 V, +/- 10%, X7R, 0805	AVX	0805ZC684KAT2A
15	1	C18	CAP, CERM, 0.47 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	TDK	CGA3E3X7R1E474K080AB
16	3	C22, C23, C24	CAP, CERM, 22 uF, 16 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	TDK	CGA6P1X7R1C226M250AC
17	1	C27	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	MuRata	GCM188R70J225KE22D
18	2	D1, DSHT	Diode, Schottky, 40 V, 0.2 A, SOT-23	Diodes Inc.	BAS40-05-7-F
19	1	D2	Diode, TVS, Uni, 26 V, 600 W, SMB	Diodes Inc.	SMBJ26A-13-F
20	1	D3	Diode, TVS, Uni, 14 V, 600 W, SMB	Diodes Inc.	SMBJ14A-13-F
21	1	D4	Diode, Schottky, 60 V, 1 A, SOD-123F	NXP Semiconductor	PMEG6010CEH,115
22	1	D5	Diode, Zener, 5.6 V, 500 mW, SOD-123	Diodes Inc.	MMSZ5232B-7-F
23	6	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	Fiducial
24	4	H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH
25	4	H5, H6, H7, H8	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C
26	4	J1, J2, J3, J4	Standard Banana Jack, Uninsulated, 8.9mm	Keystone	575-8
27	1	J5	Header, 50mil, 6x1, Gold, R/A, TH	Sullins Connector Solutions	GRPB061VWCN-RC
28	2	L1, L3	Inductor, Shielded, Composite, 2.2 uH, 9.2 A, 0.01 ohm, SMD	Coilcraft	XAL5030-222MEB
29	1	L2	Inductor, Shielded, Composite, 2.2 uH, 5.5 A, 0.04 ohm, SMD	Coilcraft	XAL4020-222MEB
30	2	Q1, Q2	MOSFET, N-CH, 60V, 19A, SON 5x6mm	Texas Instruments	CSD18531Q5A
31	1	Q3	MOSFET, N-CH, 60 V, 12 A, SO-8	Vishay-Siliconix	12A
32	1	R1	RES, 8.2, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04028R20JNED
33	1	R2	RES, 0.008, 1%, 1 W, 2010	Vishay-Dale	WSL20108L000FEA18
34	2	R3, R4	RES, 100, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402100RJNED
35	2	R5, R6	RES, 49.9 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249K9FKED
36	1	R7	RES, 64.9 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040264K9FKED
37	1	R8	RES, 24.3 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040224K3FKED
38	1	R9	RES, 28.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040228K0FKED
39	1	R10	RES, 19.1 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040219K1FKED

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40	2	R11, R17	RES, 10.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0FKED
41	2	R12, R16	RES, 10 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0JNED
42	1	R13	RES, 5.1, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04025R10JNED
43	1	R14	RES, 0, 5%, 1 W, 2512	Vishay-Dale	CRCW25120000Z0EG
44	1	R15	RES, 0, 5%, 0.25 W, 1206	Vishay-Dale	CRCW12060000Z0EA
45	1	R18	RES, 102 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402102KFKED
46	3	R19, R20, R21	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04020000Z0ED
47	4	TP1, TP3, TP4, TP5	Test Point, Multipurpose, Red, TH	Keystone	5010
48	3	TP2, TP6, TP7	Test Point, Multipurpose, Black, TH	Keystone	5011
49	1	U1	Smart Diode Controller, DGK0008A	Texas Instruments	LM74610QDGKRQ1
50	1	U2	Wide-Input Synchronous Boost Controller With Multiple Phase Capability, PWP0020A	Texas Instruments	LM25122QPWPTQ1
51	1	U3	5V, 3A, Buck Regulator For Automotive Applications, PWP0016H	Texas Instruments	LM536035QPWPRQ1
52	1	U4	LOW-QUIESCENT-CURRENT PROGRAMMABLE-DELAY SUPERVISORY CIRCUIT, DBV0006A	Texas Instruments	TPS3808G01QDBVRQ1

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