

Bill of Materials

TI DESIGNS

TIDA-00530

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number
1	9	C1, C11, C12, C25, C31, C34, C37, C47, C48	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	MuRata	GCM155R71C104KA55D
2	1	C2	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0603	MuRata	GRM188R71A225KE15D
3	1	C3	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0805	TDK	CEU4J2X7R1H104K125AE
4	1	C4	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X7R, 0603	MuRata	GRM188R71E474KA12D
5	2	C5, C6	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 1210	TDK	C3225X7R1H225K250AB
6	10	C7, C8, C14, C17, C18, C26, C36, C38, C39, C40	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X7R, 0805	TDK	C2012X7R0J106M125AB
7	8	C9, C19, C20, C21, C24, C28, C29, C30	CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0805	TDK	C2012X7R1A105K
8	2	C10, C22	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0603	MuRata	GRM188R71A225KE15D
9	1	C13	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	Yageo America	CC0402KRX7R9BB101
10	4	C15, C27, C32, C33	CAP, CERM, 22 µF, 6.3 V, +/- 10%, X7R, 1206	MuRata	GRM31CR70J226KE19L
11	1	C16	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	TDK	C1005X7R1H104K
12	1	C23	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X7R, 0805	MuRata	GRM21BR71C475KA73L
13	1	C35	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0603	Kemet	C0603C104K8RACTU
14	1	C41	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402	MuRata	GRM155R71H221KA01D
15	1	C42	CAP, CERM, 2700 pF, 50 V, +/- 10%, X7R, 0402	MuRata	GRM155R71H272KA01D
16	1	C43	CAP, CERM, 0.33 µF, 16 V, +/- 10%, X7R, 0603	Kemet	C0603C334K4RACTU
17	1	C45	CAP, CERM, 0.22 µF, 16 V, +/- 10%, X7R, 0402	MuRata	GRM155R71C224KA12D
18	1	C46	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	Johanson Technology	500R07S100JV4T
19	1	D1	Diode, TVS, Uni, 26 V, 600 W, SMB	Diodes Inc.	SMBJ26A-13-F
20	1	D2	Diode, TVS, Uni, 14 V, 600 W, SMB	Diodes Inc.	SMBJ14A-13-F
21	1	D3	Diode, Zener, 5.1 V, 300 mW, SOD-523	Diodes Inc.	BZT52C5V1T-7
22	1	D5	LED, Green, SMD	Lite-On	LTST-C190KGKT
23	3	FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	Fiducial
24	3	H1, H2, H3	Screw Pan Head M3	Keystone	29311
25	3	H4, H5, H6	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C
26	1	J1	Conn Term Block, 2POS, 3.81mm, TH	Phoenix Contact	1727010
27	1	J2	Header, 2.54 mm, 3x1, Gold, TH	Würth Elektronik	61300311121
28	2	J3, J4	Terminal Block, 8x1, 2.54 mm, TH	Phoenix Contact	1725711
29	2	J5, J6	Header, 100mil, 12x2, Gold, TH	Samtec	TSW-112-07-G-D
30	1	L1	Inductor, Shielded Drum Core, Powdered Iron, 1.5 µH, 3.8 A, 0.032 ohm, SMD	Vishay-Dale	IHLP1212BZER1R5M11
31	2	L2, L4	Inductor, Drum Core, Ferrite, 2.2 µH, 2.05 A, 0.028 ohm, SMD	Bourns	SRR4028-2R2Y
32	1	L3	Inductor, Multilayer, Ferrite, 1 µH, 0.8 A, 0.19 ohm, SMD	MuRata	LQM21PN1R0MCOCD
33	1	L5	Inductor, Shielded, Ferrite, 1 µH, 1.7 A, 0.07 ohm, SMD	Coilcraft	EPL3010-102MLB
34	1	Q1	MOSFET, N-CH, 60 V, 12 A, SO-8	Vishay-Siliconix	12A
35	1	R1	RES, 4.99, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04024R99FKED
36	6	R2, R6, R10, R11, R14, R15	RES, 10 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0JNED
37	5	R3, R4, R5, R7, R8	RES, 100 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402100KJNED
38	1	R9	RES, 88.7 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040288K7FKED
39	2	R12, R16	RES, 0, 5%, 0.125 W, 0805	Vishay-Dale	CRCW08050000Z0EA

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40	11	R13, R22, R23, R24, R27, R30, R31, R32, R33, R34, R35	RES, 0, 5%, 0.125 W, 0805	Vishay-Dale	CRCW08050000Z0EA
41	1	R17	RES, 200 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402200KJNED
42	1	R18	RES, 220, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402220RJNED
43	1	R19	RES, 15.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040215K0FKED
44	1	R20	RES, 10.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0FKED
45	1	R21	RES, 26.7 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040226K7FKED
46	1	R26	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04020000Z0ED
47	1	R28	RES, 8.87 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04028K87FKED
48	2	TP13, TP14	Test Point, Miniature, Black, TH	Keystone	5001
49	1	TP_V3P3	Test Point, Miniature, Red, TH	Keystone	5000
50	1	U1	Smart Diode Controller, DGK0008A	Texas Instruments	LM74610QDGKRQ1
51	1	U2	3.3V, 3A, Buck Regulator For Automotive Applications, PWP0016H	Texas Instruments	LM536033QPWPQ1
52	1	U3	LOW-QUIESCENT-CURRENT PROGRAMMABLE-DELAY SUPERVISORY CIRCUIT, DBV0006A	Texas Instruments	TPS3808G01QDBVRQ1
53	1	U4	Single 2-Input Positive-OR Gate, DCK0005A	Texas Instruments	SN74AHC1G32TDCKRQ1
54	2	U5, U6	Power Sequencer, 6-pin SOT-23, Pb-Free	Texas Instruments	LM3880QMF-1AA/NOPB
55	1	U7	SINGLE 2-INPUT POSITIVE-AND GATE, DCK0005A	Texas Instruments	SN74AHC1G08QDCKRQ1
56	1	U8	Dual High-Current Step-Down DC-DC And Dual Linear Regulators with I2C Interface, YZR0025ACAC	Texas Instruments	LP8731QYZRRQ1
57	1	U9	Automotive Catalog 5V, 400mA, 4MHz Step-Up DC/DC Converter, DRV0006A	Texas Instruments	TPS61240IDRVRQ1
58	1	U10	TPS22968QDMGRQ1, DMG0010A	Texas Instruments	TPS22968QDMGRQ1

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