

Bill of Materials

TI DESIGNS

TIDA-00503

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	Notes
1	8	C1, C2, C4, C5, C6, C7, C8, C16	CAP, CERM, 10uF, 50V, +/-10%, X5R, 1206_190,	TDK Murata	CGA5L3X5R1H106K160AB GRM31CR61H106K	
2	1	C3	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0603	Kemet	C0603C105K8PACTU	
3	2	C9, C15	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C470J5GACTU	
4	4	C10, C11, C12, C13	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	Kemet	C0603C222K5RACTU	
5	1	C14	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H104KA93D	
6	1	D1	Diode, Schottky, 60V, 4A, 6.15x1.00x5.15mm	ON Semiconductor	NRVB460MFST3G	
7	1	D2	LED, Red, SMD	Rohm	SML-311UTT86	
8	12	J1, J4, J5, J7, J8, J11, J12, J13, J14, J26, J28, J29	Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	Samtec	TSW-102-07-G-S	
9	4	J2, J3, J6, J10	Header, TH, 100mil, 3x1, Gold plated, 230 mil above insulator	Samtec	TSW-103-07-G-S	
10	9	J9, J19, J20, J21, J22, J23, J24, J27, J30	CONN HEADER 1POS .100" SNGL TIN, TH	Samtec	TSW-101-17-T-S	
11	2	J15, J17	Header, TH, 100mil, 8x2, Gold plated, 230 mil above insulator	Samtec	TSW-108-07-G-D	
12	1	J16	Header, TH, 100mil, 10x2, Gold plated, 230 mil above insulator	Samtec	TSW-110-07-G-D	
13	1	J18	Header, TH, 100mil, 10x1, Gold plated, 230 mil above insulator	Samtec	TSW-110-07-G-S	
14	1	J25	Conn Term Block, 2POS, 3.81mm, TH	Phoenix Contact	1727010	
15	2	L1, L2	Inductor, Shielded Drum Core, Ferrite, 10 uH, 1 A, 0.095 ohm, SMD	Würth Elektronik eiSos	744043100	Coil current rating to be checked per application
16	1	Q1	MOSFET, P-CH, -60V, 30A, PowerPAK_SO-8L	Vishay-Siliconix	SQJ461EP	
17	1	R1	RES, 0.05 ohm, 1%, 3W, 2512	Bourns	CRA2512-FZ-R050ELF	
18	1	R2	RES, 20k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060320K0JNEA	
19	1	R3	RES, 237 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603237KFKFA	
20	1	R4	RES, 24.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0724KL	
21	1	R5	RES, 1.80 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-071K8L	
22	1	R6	RES, 10.0 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060310K0FKFA	
23	1	R7	RES, 82.0 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0782KL	
24	1	R8	RES, 16.0 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0716KL	
25	1	R9	RES, 12.0 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0712KL	
26	1	R10	RES, 1.00k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-071KL	
27	5	R11, R14, R15, R16, R17	RES, 0 ohm, 5%, 0.1W, 0603	Rohm	MCR03EZPJ000	
28	1	R12	RES, 249 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-07249KL	
29	1	R13	RES, 130 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603130KFKFA	
30	2	R18, R20	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKFA	
31	1	R19	RES, 167k ohm, 0.5%, 0.1W, 0603	Yageo America	RT0603DRE07167KL	
32	1	R21	RES, 10.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0710KL	
33	1	R22	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	
34	1	RT1	Thermistor NTC, 10.0k ohm, 1%, 0603	MuRata	NCP18XH103F03RB	
35	1	U1	Low-EMI, High-Performance 4-Channel LED Driver for Automotive Lighting, PWP0020B	Texas Instruments	LP8861PWPQ1	
36	1	U2	LOW-VOLTAGE ADJUSTABLE PRECISION SHUNT REGULATOR, DBV0005A	Texas Instruments	TLVH431AQDBVRQ1	

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