

Bill of Materials

TI DESIGNS
TIDA-00315

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	Note
1	1	!PCB1	Printed Circuit Board	Any	TIDA-00315	Fitted
2	1	C1	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Cap, 7x12x9 mm	MuRata	DE1E3KX222MA4BL01	Fitted
3	1	C2	CAP, CERM, 4700 pF, 250 V, +/- 10%, X7R, 0805	MuRata	GRM21AR72E472KW01D	Fitted
4	2	C3, C4	CAP ALUM 330UF 35V 20% RADIAL	Panasonic Electronic Components	EEU-EB1V331	Fitted
5	1	C5	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0805	Kemet	C0805C104K5RACTU	Fitted
6	1	C6	CAP, CERM, 0.1 µF, 250 V, +/- 10%, X7R, 1206	TDK	C3216X7R2E104K	Fitted
7	1	C7	CAP, ALUM, 22UF, 500V, 20%, RADIAL	NICHICON	UCY2H220MHD	Fitted
8	3	C8, C13, C14	CAP ALUM 100UF 35V 20% RADIAL	Nichicon	UPV1V101MGD1TD	Fitted
9	1	C9	CAP, Film, 0.1 µF, 305 V, +/- 20%, TH	EPCOS Inc	B32921C3104M	Fitted
10	3	C10, C11, C12	CAP, CERM, 2200 pF, 250 V, +/- 20%, E, Radial D8x5mm	MuRata	DE2E3KY222MA2BM01	Fitted
11	1	C15	CAP, AL, 220 µF, 35 V, +/- 20%, 0.09 ohm, TH	Panasonic	EEU-FC1V221	Fitted
12	1	C16	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 0805	TDK	C2012X5R1E106K125AB	Fitted
13	1	C18	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NPO, 0805	AVX	08055A101JAT2A	Fitted
14	1	C20	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0805	Kemet	C0805C104K4RACTU	Fitted
15	2	C21, C26	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	MuRata	GRM31CR71H475KA12L	Fitted
16	2	C22, C27	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 1206	Taiyo Yuden	TMK316BJ106KL-T	Fitted
17	1	C23	CAP, CERM, 8200 pF, 25 V, +/- 5%, COG/NPO, 0805	TDK	C2012COG1E822J	Fitted
18	1	C24	CAP, CERM, 47 pF, 50 V, +/- 5%, COG/NPO, 0805	AVX	08055A470JAT2A	Fitted
19	1	C25	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0805	Yageo America	CC0805KRX7R9BB152	Fitted
20	7	D1, D4, D5, D6, D14, D15, D16	Diode, P-N, 1000V, 1A, TH	Fairchild Semiconductor	1N4007	Fitted
21	1	D2	DIODE, Transient Voltage Suppressor, xV, yA, 600W	ST	P6KExxx	Fitted
22	1	D3	Diode, Zener, 27 V, 500 mW, SOD-123	Diodes Inc.	MMSZ5254B-7-F	Fitted
23	1	D7	DIODE, GEN PURP, 400V, 4A, DO201AD, TH	ON SEMICONDUCTOR	MUR440	Fitted
24	2	D8, D9	Diode, Switching, 600V, 1A, TH	Vishay-Semiconductor	1N4937-E3	Fitted
25	4	D10, D17, D20, D26	Diode, Zener, 18 V, 500 mW, SOD-123	Diodes Inc.	MMSZ5248B-7-F	Fitted
26	5	D11, D13, D19, D25, D27	LED, Green, TH	Everlight	HLMP1523	Fitted
27	4	D12, D18, D21, D22	DIODE SUPERFAST 200V 3A SMC	Diodes Incorporated	MURS320-13-F	Fitted
28	1	D23	DIODE SMALL SIGNAL 80V 0.1A 2UMD	Rohm	1SS355TE-17	Fitted
29	1	D28	Diode, Zener, 7.5 V, 500 mW, SOD-123	Vishay-Semiconductor	MMSZ4693-V	Fitted
30	1	D29	Diode, Schottky, 40 V, 3 A, SMA	Diodes Inc.	B340A-13-F	Fitted
31	6	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	Fitted

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	Note
32	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	Fitted
33	1	HS1	HEATSINK TO-218/TO-247 W/PINS 2"	Aavid	513201B02500G	Fitted
34	1	J1	Terminal Block, 3x1, 6.35 mm, TH	Phoenix Contact	1714968	Fitted
35	1	J2	Terminal Block, 3x1, 2.54 mm, TH	Phoenix Contact	1725669	Fitted
36	5	J3, J5, J6, J7, J8	Terminal Block, 100mil, 2x1, 6A, 63V, TH	Phoenix Contact	1725656	Fitted
37	1	J4	Terminal Block, 3x1, 9.52MM, TH	Phoenix Contact	1714984	Fitted
38	1	L1	Inductor, Unshielded Drum Core, Ferrite, 4.7 μ H, 3.7 A, 0.019 ohm, TH	Würth Elektronik	7447462047	Fitted
39	2	L2, L3	Inductor, Shielded Drum Core, Metal Composite, 1 mH, 0.5 A, 1.7 ohm, TH	Würth Elektronik	768772102	Fitted
40	1	L4	Inductor, Shielded Drum Core, Metal Composite, 10 μ H, 4.2 A, 0.0175 ohm, TH	Würth Elektronik	7447471100	Fitted
41	1	LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	Fitted
42	1	Q1	MOSFET, N-CH, 650 V, 15 A, TO-220 FullPAK	Infineon Technologies	AOT7S65	Fitted
43	2	Q2, Q4	MOSFET, N-CH, 60V, 0.36A, SOT-23	NXP Semiconductor	2N7002P,215	Fitted
44	1	R1	RES, 20 k, 5%, 2 W, TH	Vishay-Bccomponents	PR02000202002JR500	Fitted
45	1	R2	RES, 28.7 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080528K7FKEA	Fitted
46	1	R3	RES, 1.78 M, 1%, 0.125 W, 0805	Vishay-Dale	CRCW08051M78FKEA	Fitted
47	3	R4, R5, R6	RES, 10.0 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080510K0FKEA	Fitted
48	2	R7, R10	RES, 2.00Meg ohm, 1%, 0.25W, 1206	Panasonic	ERJ-8ENF2004V	Fitted
49	1	R8	RES, 10 k, 5%, 0.125 W, 0805	Vishay-Dale	CRCW080510K0JNEA	Fitted
50	1	R9	RES, 205, 1%, 0.125 W, 0805	Vishay-Dale	CRCW0805205RFKEA	Fitted
51	1	R11	RES, 86.6 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080586K6FKEA	Fitted
52	1	R12	RES, 18 k, 5%, 0.125 W, 0805	Vishay-Dale	CRCW080518K0JNEA	Fitted
53	1	R13	RES, 750 k, 1%, 0.25 W, 1206	Vishay-Dale	CRCW1206750KFKEA	Fitted
54	1	R14	RES, 910 k, 0.5%, 0.1 W, 0805	Susumu Co Ltd	RR1220P-914-D	Fitted
55	1	R15	RES, 44.2 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080544K2FKEA	Fitted
56	1	R16	RES, 91, 5%, 0.125 W, 0805	Vishay-Dale	CRCW080591R0JNEA	Fitted
57	1	R17	RES, 36.5 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080536K5FKEA	Fitted
58	1	R18	RES, 28.0 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080528K0FKEA	Fitted
59	1	R19	RES, 0.3, 1%, 2 W, 2512	Stackpole Electronics Inc	CSRN2512FKR300	Fitted
60	1	R20	RES, 10.2 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080510K2FKEA	Fitted
61	1	R21	RES, 22.1 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW080522K1FKEA	Fitted
62	1	R22	RES, 1.58 k, 1%, 0.125 W, 0805	Vishay-Dale	CRCW08051K58FKEA	Fitted
63	3	RF1, RF2, RF3	RES, 1.0, 5%, 1 W, TH	TT Electronics/IRC	SPP1UL1R00JLF	Fitted
64	3	RV1, RV2, RV3	Varistor 250V RMS 10MM Radial, TH	Littelfuse	V250LA10P	Fitted
65	1	T1	TRANSFORMER, EXT, THT, HORIZONTAL, TH-14P	WURTH ELEKTRONIK	750342851,Rev00	Fitted
66	1	U1	IC REG CTRLR FLYBK ISO 7SOIC	Texas Instruments	UCC28711D	Fitted
67	1	U2	3V Under Voltage Detector, 5-pin SC-70, Pb-Free	Texas Instruments	LMS33460MG/NOPB	Fitted
68	1	U3	3.5-A, 28-V, 1-MHz, Step-Down DC-DC Converter With Eco-Mode, DDA0008H	Texas Instruments	TPS54332DDAR	Fitted
69	0	C17	CAP, CERM, 3300pF, 100V, +/-5%, X7R, 0805	AVX	08051C332JAT2A	Not Fitted
70	0	C19	CAP, CERM, 2200 pF, 100 V, +/-5%, X7R, 0805	AVX	08051C222JAT2A	Not Fitted
71	0	D24	Diode, Switching, 600V, 1A, TH	Vishay-Semiconductor	1N4937-E3	Not Fitted

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