

Bill of Materials

TI DESIGNS #

TIDA-00200

Item	Qty	Reference	Part Description	anufactur	Manufacturer Part Number	PCB Footprint	Note
1	2	C1, C12	Capacitor, Ceramic, 250V, [temp], [tol]	muRata	GRM42-6yyyxxxKvv	1206	Fitted
2	4	C10, C19, C25, C27	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU	0603	Fitted
3	1	C11	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0805	Kemet	C0805C105K4RACTU	0805	Fitted
4	2	C15, C16	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C101J5GACTU	0603	Fitted
5	2	C17, C18	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0603	Kemet	C0603C102K5RACTU	0603	Fitted
6	2	C2, C13	Capacitor, Ceramic Chip, 250V, ±10%	STD		1206	Fitted
7	1	C22	Capacitor, multi pattern, SM 1210 to E case + F THole	Rubycon	35ZL1200 12.5X20	0.492 inch	Fitted
8	1	C23	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	TDK	C2012X7R1E105K	0805	Fitted
9	1	C24	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	Kemet	C0805C104K3RACTU	0805	Fitted
10	1	C26	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C103K5RACTU	0603	Fitted
11	1	C28	Capacitor, Ceramic Disc, 250WV, 4700pF, Y5U ±20%	Panasonic	DE2EKY472MA2BM01	0.236 x 0.315	Fitted
12	2	C3, C14	Capacitor, Polyester, 400V, 10%	Panasonic	ECQ-E2104KB	0.311 x 0.213 inch	Fitted
13	2	C4, C5	Capacitor, multi pattern, TH 0.080 to 0.200	panasonic	EEUEB2D151	0.571 inch	Fitted
14	1	C6	Capacitor, Leaded, 0.10 uF, 275 VAC, X2		B81130-C1104-Mxxx	6x18mm	Fitted
15	4	C7, C8, C20, C21	CAP, CERM, 1uF, 25V, +/-10%, X7R, 1206	Kemet	C1206C105K3RACTU	1206	Fitted
16	1	C9	Capacitor, Aluminum Electrolytic, vV	Rubycon	16ZL56 5X11	0.197 inch	Fitted
17	2	D1, D12	Rectifier, SMD Ultrafast Power, 600V 1A	On Semi	MURA160T3G	403D	Fitted
18	2	D2, D7	Diode, Zener, 12V, yy-mA	Diodes	MMBZ5242BLT1	SOT-23	Fitted
19	2	D3, D10	Diode, UltraFast Rectifier, 1-A, 200-V	On Semi	MURA120T3	403A	Fitted
20	2	D4, D11	Diode, Schottky, 60V, 20A, TH	Vishay-Ser	NTST40120CTG	TO-262	Fitted
21	1	D5	Diode, Bridge Rectifier, 6 A, 400V	Fairchild	GBU604	0.880 x 0.140 inch	Fitted
22	8	D6, D9, D13, D14, D15, D16, D17, D18	Diode, Switching, 200mA, 100V, 300mW	Vishay-Lite	BAS16	SOT23	Fitted
23	1	D8	Diode, Zener, 15V, yy-mA	Diodes	MMBZ5245BLT1	SOT-23	Fitted
24	1	F1	Fuse, TR5 Series, 6 slow, 250V	Wickmann	370 1400 041	0.335	Fitted
25	1	J1	Connector, AC Board mount, 9mm	Qualtek El	703W-00/54	1.97 x 0.79 inch	Fitted
26	1	J2	Terminal Block, 2-pin, 6-A, 3.5mm	OST	ED555/2DS	0.27 x 0.25 inch	Fitted
27	1	L1	Inductor, Common Mode Choke,	GCI	GVTM1-472	1.400 x 0.820 inch	Fitted
28	1	Q1	Trans, NPN Midium Power, 300V 3A	Zetex	FZT657	SOT223	Fitted
29	2	Q2, Q4	Trans, NPN, xx-V, yy-mA, zz-V	On Semi	MMBT3904LT1G	SOT23	Fitted
30	2	Q3, Q5	MOSFET, N-ch, 500-V, yy-A, 85-milliOhms	STD	STD	TO-220V	Fitted
31	2	R1, R13	RES, 20k ohm, 5%, 0.25W, 1206	Vishay-Dal	CRCW120620K0JNEA	1206	Fitted
32	3	R10, R20, R22	RES, 10.0 ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW060310R0FKEA	0603	Fitted
33	2	R11, R24	RES, 0.15 ohm, 5%, 0.25W, 1206	Panasonic	ERJ-8RSJR15V	1206	Fitted
34	1	R12	RES, 12.4k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW060312K4FKEA	0603	Fitted
35	1	R14	RES, 86.6k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW060386K6FKEA	0603	Fitted
36	1	R17	RES, 200k ohm, 5%, 0.1W, 0603	Vishay-Dal	CRCW0603200KJNEA	0603	Fitted
37	6	R18, R19, R25, R28, R31, R32	RES, 2.49k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW06032K49FKEA	0603	Fitted
38	6	R2, R3, R5, R7, R15, R16	RES, 200k ohm, 5%, 0.25W, 1206	Vishay-Dal	CRCW1206200KJNEA	1206	Fitted
39	1	R21	RES, 4.99k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW06034K99FKEA	0603	Fitted
40	2	R23, R27	RES, 7.5k ohm, 5%, 0.1W, 0603	Vishay-Dal	CRCW06037K50JNEA	0603	Fitted
41	1	R26	RES, 18.7k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW060318K7FKEA	0603	Fitted
42	3	R30, R34, R35	RES, 1.0k ohm, 5%, 0.1W, 0603	Vishay-Dal	CRCW06031K00JNEA	0603	Fitted
43	1	R33	RES, 21.0k ohm, 1%, 0.1W, 0603	Vishay-Dal	CRCW060321K0FKEA	0603	Fitted
44	2	R36, R37	RES, 0.01 ohm, 1%, 1W, 2512	Vishay-Dal	WSL2512R0100FEA	2512	Fitted
45	1	R38	RES, 100 ohm, 5%, 0.1W, 0603	Vishay-Dal	CRCW0603100RJNEA	0603	Fitted
46	2	R4, R6	RES, 100k ohm, 5%, 0.25W, 1206	Vishay-Dal	CRCW1206100KJNEA	1206	Fitted
47	2	R8, R29	RES, 20k ohm, 5%, 0.1W, 0603	Vishay-Dal	CRCW060320K0JNEA	0603	Fitted
48	1	R9	RES, 1.00Meg ohm, 1%, 0.25W, 1206	Vishay-Dal	CRCW12061M00FKEA	1206	Fitted
49	2	T1, T2	Transformer, Flyback, 500uH, TH	GCI Techn	G135067LF	31.5x26.5x38.5mm	Fitted
50	11	TP1, TP2, TP3, TP4, TP6, TP7, TP10, TP11, TP12, TP13, TP14	Test Point, Miniature, Red, TH	Keystone	5000	Red Miniature Testpoint	Fitted
51	3	TP5, TP8, TP9	Test Point, Miniature, Black, TH	Keystone	5001	Black Miniature Testpoint	Fitted
52	1	U1	High Voltage Dual Interleaved Current Mode Controller, 16-pin TSSOP, Pb-Free	National S	LM5032MTC/NOPB	MTC16	Fitted
53	1	U2	IC, Precision Adjustable Shunt Regulator	TI	TL431DBVZ	SOT23-3	Fitted
54	1	U3	IC, Precision Dual Operational Amplifiers	TI	TLC272CD	SO8	Fitted
55	1	U4		QT Optoe	H11A817B	0.380 x 0.180	Fitted

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