

TIDA-00779 REV D Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC1	1		TIDA-00779	Any	Printed Circuit Board	
2	BR1	1		GBJ3510_HOR	SMC Diode Solutions	Bridge Rectifier Single Phase Standard 1 kV Through Hole GBJ	GBJ3510_HOR
3	C1, C2, C22	3			Würth Elektronik	WCAP-FTXX Film Capacitor, THT, L26 x W11 x H20mm, 1µF, 310V	
4	C3	1	1.2µF	890334027012CS	Würth Electronics	1.2µF Film Capacitor 310V Polypropylene (PP), Metallized Radial	RADIAL
5	C4, C5, C18	3	680µF	8.61141E+11	Würth Electronics	680 µF 450 V Aluminum Electrolytic Capacitors Radial, Can - Snap-In 3000 Hrs @ 105°C	RADIAL
6	C6, C7, C8, C9, C23, C26	6	2200pF	DE2E3KY222MA2BM01F	MuRata	CAP, CERM, 2200 pF, X1 250 VAC/Y2 250 VAC, +/- 20%, E, 8x5mm	8x5mm
7	C10	1	3300pF	GRM188R72A332KA01D	MuRata	CAP, CERM, 3300 pF, 100 V, +/- 10%, X7R, 0603	0603
8	C11	1	820pF	GRM188R71H821KA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0603	0603
9	C12, C17, C28	3	1µF	GRT188R61H105ME13D	MuRata	CAP, CERM, 1 µF, 50 V, +/- 20%, X5R, AEC-Q200 Grade 3, 0603	0603
10	C13	1	0.39µF	GRM188R71C394KA88D	MuRata	CAP, CERM, 0.39 µF, 16 V, +/- 10%, X7R, 0603	0603
11	C14	1	8.2µF	C1206CA25MRAC7800	KEMET	Cap Ceramic 8.2µF 10V X7R 20% SMD 1206 125°C Plastic T/R	1206
12	C15	1	2700pF	GRM1885C1H272JA01D	MuRata	CAP, CERM, 2700 pF, 50 V, +/- 5%, COG/NPO, 0603	0603
13	C16, C24, C30	3	0.1µF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
14	C19, C20	2	10µF	GRM319R6YA106KA12D	MuRata	CAP, CERM, 10 µF, 35 V, +/- 10%, X5R, 1206	1206
15	C25	1	22µF	C3216XR1V1226M160AC	TDK	CAP, CERM, 22 µF, 35 V, +/- 20%, X5R, 1206	1206
16	C27	1	220pF	GRM1885C1H221JA01D	MuRata	CAP, CERM, 220 pF, 50 V, +/- 5%, COG/NPO, 0603	0603
17	C29	1	20pF	GRM1885C1H200JA01D	MuRata	CAP, CERM, 20 pF, 50 V, +/- 5%, COG/NPO, 0603	0603
18	C31	1	0.33µF	GRM219R71H334KA88D	MuRata	CAP, CERM, 0.33 µF, 50 V, +/- 10%, X7R, 0805	0805
19	C32	1	100µF	35ZLJ100M6.3X11	Rubycon	CAP, AL, 100 µF, 35 V, +/- 20%, TH	D6.3xL11mm
20	C33	1	100nF	8.85342E+11	Würth Electronics	0.1µF ±10% 630V Ceramic Capacitor X7R 1812 (4532 Metric)	1812
21	D1, D3	2		BYC30W-600PQ_HOR	WeEn Semiconductors	Diode 600 V 30A Through Hole TO-247-2	TO-247-2
22	D2	1	600V	1N5406	Vishay-Semiconductor	Diode, Switching-Bridge, 600 V, 3 A, TH	DO-201AD
23	D4, D8, D10	3	30V	BAT54T1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-123	SOD-123
24	D5	1	Green	LTST-C193KGKT-5A	Lite-On	LED, Green, SMD	1.6x0.8mm
25	D6, D7	2	1000V	CGRM4007-G	Comchip Technology	Diode, P-N, 1000 V, 1 A, 3.9x1.7x1.8mm	3.9x1.7x1.8mm
26	D9, D14	2	18V	MMS25248BS-7-F	Diodes Inc.	Diode, Zener, 18 V, 200 mW, SOD-323	SOD-323
27	D11, D12	2	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
28	D13, D15	2	1000V	U5TM-13-F	Diodes Inc.	Diode, Ultrafast, 1000 V, 1 A, SMA	SMA
29	D16	1	Red	LTST-C193KRKT-5A	Lite-On	LED, Red, SMD	1.6x0.8mm
30	F1	1		052925.MXEP	Littelfuse		A3AL
31	HS1	1		TIDA-00779 Heatsink	Texas Instruments	TIDA-00779 Heatsink	146MM0_200MM0
32	K1	1		T9AS1D12-12	TE	Electromechanical Relay 12VDC 144Ohm 30A SPST-NO (32.51x27.43x20.4)mm THT Industrial Relay	PTH_RELAY_27MM4 3_32MM51
33	L1	1	170µH	30A_170µH	Qingdao Yunlu	PFC Inductor	PTH_IND_60MM0_51 MM0
34	L2, L3	2		30A_2.5mH	Qingdao Yunlu	Common mode inductor	PTH_CMC_56MM0_4 2MM0
35	L5	1	1.8mH	768772182	Würth Elektronik	Inductor, Shielded Drum Core, Metal Composite, 1.8 mH, 0.35 A, 2.7 ohm, TH	Dia 8x10mm
36	MP1, MP2, MP3, MP4, MP5, MP6	6		970130365	Würth Electronics		SPCAER_M3
37	P1, P2, P3, P4, P5	5		63824-1	TE Connectivity		CONN_7MM92_3MM 11
38	Q1, Q6	2		IPW60R099CPFKSA1_HOR	Infineon Technologies	Trans MOSFET N-CH 600V 31A 3-Pin(3+Tab) TO-247 Tube	TO247
39	Q2	1	40 V	MMBT3906-7-F	Diodes Inc.	Transistor, PNP, 40 V, 0.2 A, SOT-23	SOT-23
40	Q3	1	60V	2V7002KT1G	ON Semiconductor	MOSFET, N-CH, 60 V, 0.32 A, AEC-Q101, SOT-23	SOT-23
41	Q4	1	40 V	MMBT3904-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
42	R1, R10, R13, R15, R19, R23, R31, R42, R47	9	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603
43	R2	1	0	RC2512FK-070RL	YAGEO	0 Ohms Jumper 1W Chip Resistor 2512 (6432 Metric) Moisture Resistant Thick Film	2512
44	R3, R33, R40	3	22	RC1206FR-0722RL	Yageo America	RES, 22.0, 1%, 0.25 W, 1206	1206
45	R4, R5, R45	3	0.01	ERJ1M1WSF10MU	Panasonic	RES, 0.01, 1%, 1 W, 2512	2512
46	R6, R7, R8, R20, R21, R22, R25, R26, R27	9	332k	RC1206FR-07332KL	Yageo America	RES, 332 k, 1%, 0.25 W, 1206	1206
47	R9	1	18.0k	RC0603FR-0718KL	Yageo	RES, 18.0 k, 1%, 0.1 W, 0603	0603
48	R11	1	220	RC0603FR-07220RL	Yageo	RES, 220, 1%, 0.1 W, 0603	0603
49	R12, R17, R38	3	47.0k	RC0603FR-0747KL	Yageo	RES, 47.0 k, 1%, 0.1 W, 0603	0603
50	R14	1	16.2k	RC0603FR-0716K2L	Yageo	RES, 16.2 k, 1%, 0.1 W, 0603	0603
51	R16	1	1.00k	RC0603FR-071KL	Yageo	RES, 1.00 k, 1%, 0.1 W, 0603	0603
52	R18	1	1	RC1206FR-071RL	Yageo America	RES, 1.00, 1%, 0.25 W, 1206	1206
53	R24, R41	2	4.7	RC1206FR-0747L	Yageo America	RES, 4.70, 1%, 0.25 W, 1206	1206
54	R29, R30, R32, R34, R35, R36	6	100k	RC1206FR-07100KL	Yageo America	RES, 100 k, 1%, 0.25 W, 1206	1206
55	R43	1	100	RT0603DRE07100RL	Yageo America	RES, 100, 0.5%, 0.1 W, 0603	0603
56	R46	1	133k	RC0603FR-07133KL	Yageo	RES, 133 k, 1%, 0.1 W, 0603	0603
57	R48	1	21.0k	RC0603FR-0721KL	Yageo	RES, 21.0 k, 1%, 0.1 W, 0603	0603
58	R50	1	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
59	RT1	1	50Ω	PPL16500NA2B7Y	Thinking Electronic	Ceramic PTC Thermistor	RADIAL
60	RV1	1		820543011	WURTH	VARISTOR 558V 4.5KA, TH	D16.5xT6.4mm
61	S1	1		4.72123E+11	Würth Electronics	Toggle Sw, SPDT, 1A, 30VDC, Panel/Th Rohs Compliant: Yes	PTH3
62	TP1, TP2, TP3, TP4, TP5, TP7, TP8, TP9	8	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
63	TP6	1	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
64	TP10, TP11, TP12	3		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
65	U1	1		UCC28180D	Texas Instruments	8-PIN CONTINUOUS CONDUCTION MODE (CCM) PFC CONTROLLER, D0008A	D0008A
66	U2	1		UCC27524DR	Texas Instruments	Dual, 5A, High-Speed Low-Side Power MOSFET Driver, D0008A (SOIC-8)	D0008A
67	U3	1		UCC28881DR	Texas Instruments	700-V Lowest Quiescent Current Off-Line Switcher, D0007A (SOIC-7)	D0007A
68	C21	0	220pF	GRM31A7U3A221JW31D	MuRata	CAP, CERM, 220 pF, 1000 V, +/- 5%, U2J, 1206	1206
69	FID1, FID2, FID3	0	N/A	N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
70	R28	0	22	RC1206FR-0722RL	Yageo America	RES, 22.0, 1%, 0.25 W, 1206	1206
71	R44	0	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603

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