

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
1	IC1	1		UCC27200AD	Texas Instruments	Gate Driver		4.90 x 3.91	
2	IC2	1		LM5025CMTC	Texas Instruments	PWM Controller		5.0 x 6.4	
3	IC3	1		LT8311EFE#TRPBF	Analog Devices	Synchronous Rectifier Controller		6.5 x 6.4	
4	IC4, IC9	2		TLP785(GR	TOSHIBA	Photocoupler	DIP4 (TLP785)	4.6 x 7.62	
5	IC10, IC123	2		TLV7211AIDBV	Texas Instruments	Voltage Comparator		2.8 x 2.9	
6	IC11	1		LTC3630AIMSE#PBF	Analog Devices	Buck Converter		4.039 x 3.0	
7	IC121	1		TPS3779DDBV	Texas Instruments	Voltage Detector		2.8 x 2.9	
8	IC122	1		SN74LVC1G97DCK	Texas Instruments	CMOS Multiplexer		2.0 x 2.1	
9	IC124	1		TAR5S50	TOSHIBA	Bipolar LDO, 5 V, 200 mA	SOT-25 (SMV)	2.9 x 2.8	
10	Q1	1		2SA1201-Y	TOSHIBA	PNP Transistor, -120 V, -0.8 A	PW-Mini	4.6 x 4.2	
11	Q2	1		TPN5900CNH	TOSHIBA	N-ch MOSFET, 150 V, 18 A	TSON Advance	3.3 x 3.3	
12	Q3	1		TPH3300CNH	TOSHIBA	N-ch MOSFET, 150 V, 29 A	SOP Advance	5.0 x 6.0	
13	Q7	1		2SC5810	TOSHIBA	NPN Transistor, 50 V, 1 A	PW-Mini	4.6 x 4.2	
14	Q8, Q9, Q10, Q11	4		TPH9R00CQH	TOSHIBA	N-ch MOSFET, 150 V, 64 A	SOP Advance	5.0 x 6.0	
15	D3	1		TBAT54S	TOSHIBA	Dual SBD, 30 V, 200 mA	SOT23	2.9 x 2.4	
16	D6	1		BAS316	TOSHIBA	Switching Diode, 100 V, 250 mA	USC	2.5 x 1.25	
17	D8	1		MM3Z11VST1G	onsemi	Zener Diode, 11 V		2.5 x 1.25	
18	D10, D11	2		MBR2H200SF	onsemi	SBD, 200 V, 2 A		3.6 x 1.65	
19	D12	1		MM3Z5V6ST1G	onsemi	Zener Diode, 5.6 V		2.5 x 1.25	
20	D13	1		FSV10150V	onsemi	SBD, 150 V, 10 A		6.5 x 4.44	
21	D122, D123	2		RB520SM-30	Rohm	SBD, 30 V, 200 mA		1.6 x 0.8	

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22	L1	1	0.68 μ H	ETQP5MR68YLC	Panasonic	42 A		10 x 10	
23	L2	1	47 μ H	SRP1770TA-470M	Bourns	16 A		18 x 18	
24	L101	1	47 μ H	VLS6045EX-470M	TDK	1.8 A		7 x 7	
25	FB1, FB2, FB3	3		BLM18PG221SN1	Murata	Ferrite Bead 1.4 A		1.6 x 0.8 (0603)	
26	C1, C8, C11, C31, C52, C111	6	1 μ F			Ceramic, 100 V, \pm 10 % X7S		2.0 x 1.2 (0805)	
27	C2, C3	2	18 μ F	PCV2A180MCL1GS	Nichicon	Aluminum Polymer, 100 V, \pm 20 %		10 x 12.7	
28	C5	1	0.22 μ F			Ceramic, 50 V, \pm 10 % X7R		1.6 x 0.8 (0603)	
29	C6, C44, C53, C81, C83, C122, C124	7	1.0 μ F			Ceramic, 50 V, \pm 10 % X7R		1.6 x 0.8 (0603)	
30	C7	1	47 nF	ECQE2473KF	Panasonic	PET Film, 250 V, \pm 10 %			
31	C9	1	470 pF			Ceramic, 250 V, \pm 5 % C0G		2.0 x 1.2 (0805)	
32	C10	1	0.1 μ F			Ceramic, 100 V, \pm 10 % X7R		2.0 x 1.2 (0805)	
33	C13, C15	2	0.1 μ F			Ceramic, 50 V, \pm 10 % X7R		1.0 x 0.5 (0402)	
34	C14, C41, C129	3	10 μ F			Ceramic, 25 V, \pm 10 % X7R		3.2 x 2.5 (1210)	
35	C16	1	0.1 μ F			Ceramic, 100 V, \pm 10 % X7R		2.0 x 1.2 (0805)	
36	C17, C123	2	1 nF			Ceramic, 50 V, \pm 5 % CH0		1.6 x 0.8 (0603)	
37	C18	1	1.2 nF			Ceramic, 50 V, \pm 5 % CH0		1.6 x 0.8 (0603)	
38	C32, C33, C34, C35	4	10 μ F			Ceramic, 50 V, \pm 10 % X7R		5.7 x 5.0 (2220)	
39	C36	1	330 μ F	PCR1V331MCL1GS	Nichicon	Aluminum Polymer, 35 V, \pm 10 %		10 x 12.7	
40	C42	1	22 nF			Ceramic, 50 V, \pm 10 % X7R		1.0 x 0.5 (0402)	
41	C43, C121, C125, C126	4	100 pF			Ceramic, 50 V, \pm 5 % CH0		1.6 x 0.8 (0603)	
42	C49	1	22 nF	ECQE2223KB	Panasonic	PET Film, 250 V, \pm 10 %			

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43	C61	1	2.2 nF			Ceramic, 3 kV, ±10 % X7R		4.5 x 3.2 (1812)	
44	C64	1	15 nF			Ceramic, 50 V, ±5 % CH0		2.0 x 1.2 (0805)	
45	C65, C66, C67	3	1.5 nF	ECQE6152KF	Panasonic	PET Film, 630 V, ±10 %			
46	C82, C128	2	10 nF			Ceramic, 50 V, ±10 % X7R		1.0 x 0.5 (0402)	
47	C113	1	22 µF			Ceramic, 25 V, ±10 % X7S		3.2 x 2.5 (1210)	
48	R1, R9	2	10			±1 %, 0.4 W		2.0 x 1.2 (0805)	
49	R2, R113, R124, R126, R128, R129	6	47 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
50	R3	1	33 k			±1 %, 0.4 W		2.0 x 1.2 (0805)	
51	R5, R41, R42, R43, R44, R114, R115	7	0			1 A		1.6 x 0.8 (0603)	
52	R6, R13, R72, R101, R102, R103, R104, R131	8	10 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
53	R10	1	15			±1 %, 0.1 W		1.6 x 0.8 (0603)	
54	R15, R34	2	100			±1 %, 0.4 W		2.0x1.2 (0805)	
55	R16	1	1 M			±1 %, 0.4 W		2.0 x 1.2 (0805)	
56	R21, R27	2	56 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
57	R22, R93	2	4.7 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
58	R23, R134	2	30 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
59	R24, R25	2	100			±1 %, 0.4 W		2.0 x 1.2 (0805)	
60	R26	1	47			±1 %, 0.4 W		2.0 x 1.2 (0805)	
61	R28	1	1 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
62	R29	1	15 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	

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63	R63, R31	2	470			±1 %, 0.1 W		1.6 x 0.8 (0603)	
64	R32	1	7.5 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
65	R37	1	8.2 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
66	R46, R47	2	27			±1 %, 2 W		3.2 x 6.4 (1225)	
67	R48	1	47			±1 %, 2 W		3.2 x 6.4 (1225)	
68	R51, R53	2	2.2 k			±1 %, 0.4 W		2.0 x 1.2 (0805)	
69	R52, R54	2	6.8 k			±1 %, 0.4 W		2.0 x 1.2 (0805)	
70	R56	1	1 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
71	R57	1	5.1 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
72	R58, R91, R111	3	130 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
73	R61, R62	2	1.8 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
74	R64, R125, R127, R130	4	100 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
75	R65	1	51 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
76	R66	1	2.4 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
77	R67	1	330			±1 %, 0.1 W		1.6 x 0.8 (0603)	
78	R68	1	3.3 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
79	R71	1	0			2 A		2.0 x 1.2 (0805)	
80	R92	1	33 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
81	R94	1	2.2 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
82	R105	1	10 k			±1 %, 2 W		3.2 x 6.4 (1225)	
83	R112	1	11 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Package name	Standard dimensions mm (inch)	Not Mounted
84	R116, R117	2	10			±1 %, 0.1 W		1.6 x 0.8 (0603)	
85	R121	1	110 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
86	R122	1	3.6 k			±1 %, 0.1 W		1.6 x 0.8 (0603)	
87	CN1, CN2, CN3	3		6834-0-00-15-00-00-03-0	Mill-Max	Terminal Pin			
88	CN4, CN5	2		8237-0-05-15-00-00-03-0	Mill-Max	Terminal Pin			
89	J1	1		FFC-2AMEP1	HONDA	Pin Header (2 pin)			
90	TP2, TP3, TP5, TP6, TP8, TP9, TP11, TP12, TP41, TP42, TP71, TP72, TP101, TP131, TP132	15		PM-1	MAC8	Test Pin			
91	TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP31, TP32	9		LC-22-G	MAC8	Test Pin			
92	T2	1		53050C	Murata	Current Transformer (1:50)		7.2 x 8.3	
93	T5	1		PC47EER35	TDK	Transformer (core)			
94	D2	1		TBAT54S	TOSHIBA	Dual SBD, 30 V, 200 mA	SOT23	2.9 x 2.4	Not Mounted
95	D5	1		BAS316	TOSHIBA	Switching Diode, 100 V, 250 mA	USC	2.5 x 1.25	Not Mounted
96	C12, C112	2						1.6 x 0.8 (0603)	Not Mounted
97	C45	1						1.6 x 0.8 (0603)	Not Mounted
98	C46	1						1.6 x 0.8 (0603)	Not Mounted
99	R11, R12	2						1.6 x 0.8 (0603)	Not Mounted
100	R30	1						1.6 x 0.8 (0603)	Not Mounted
101	R33	1						2.0 x 1.2 (0805)	Not Mounted

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102	R55	1						1.6 x 0.8 (0603)	Not Mounted
103	R133	1						1.6 x 0.8 (0603)	Not Mounted

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