

Inverter Board BOM

Item	Reference	Qty	Manufacturer	Part Number	Description	Distributor	Stock Number	Value	Modifier	Cost	Extended Cost
1	C16		Kemet	C322C473K1R5TA	Capacitor, Ceramic, 0.047uF, 100V, 10%, X7R, Radial	Digi-Key	399-4370-ND	0.047uF	100V	\$0.36	\$0.36
2	C5 C17-19 C21-24 C26 C32-45	23	Kemet	C322C104K5R5TA	Capacitor, Ceramic, 0.1uF, 50V, 10%, Radial	Digi-Key	399-4329-ND	0.1uF	50V	\$0.22	\$5.06
3	C6-9 C12 C20 C25	7	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	\$0.23	\$1.61
4	C3-4	2	Nichicon	UHE2A101MPD	Capacitor, Electrolytic, 100uF, 100V, 20%, Radial	Digi-Key	493-1668-ND	100uF	100V	\$0.40	\$0.80
5	C10-11 C13-15 C30-31	7	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	\$0.40	\$2.80
6	C28-29	2	Epcos	B43504A5337M	Capacitor, Electrolytic, 330uF, 450V, 20%, Radial	Newark	34M5327	330uF	450V	\$12.95	\$25.90
7	C1-2	2	Nichicon	UPW1H331MPD	Capacitor, Electrolytic, 330uF, 50V, 20%, Radial	Digi-Key	493-1908-ND	330uF	50V	\$0.62	\$1.24
8	C27	1	Vishay	BFC233840685	Capacitor, Polypropylene film, 6.8uF, 305VAC, 630VDC, 20%, Radial	Newark	53M6780	6.8uF	630VDC	\$5.91	\$5.91
9	T2	1	JW Miller	8113-RC	Choke, Common Mode, 5mH, 8.9A, Through-Hole	Digi-Key	M8908-ND	5mH	8.9A	\$13.26	\$13.26
10	P3-5	3	Samtec Inc	TSW-150-07-G-S	Connector, Breakaway, Single Row Pin Header, Through Hole	Digi-Key	SAM1029-50-ND	3 of 50 Pins	0.1"	\$0.17	\$0.50
11	J1	1	Tyco Electronics/Amp	5745781-4	Connector, D-Sub, RS232 Female, 9-Pin, Right-Angle	Digi-Key	A32075-ND	9-Pin Female	Right-Angle	\$3.40	\$3.40
12	P1	1	Tyco Electronics/Amp	5747250-4	Connector, D-Sub, RS232 Male, 9-Pin, Right-Angle	Digi-Key	A32072-ND	9-Pin Male	Right Angle	\$3.92	\$3.92
13	J2-3	2	AMP/Tyco Electronics	2-534998-0	Connector, Receptical, 40 Position, Dual, Vertical, Through-Hole	Digi-Key	A26498-ND	2x20 Pins	0.1"	\$4.68	\$9.36
14	D3 D16-17	3	Diodes Inc.	1N4148-T	Diode, , Switching, 75V, 300mA, DO35	Digi-Key	1N4148DICT-ND	75V	300mA	\$0.24	\$0.72
15	D1-2	2	Diodes Inc.	1N5819-T	Diode, Schottky, 40V, 1A, DO41	Digi-Key	1N5819DICT-ND	40V	1A	\$0.41	\$0.82
16	D4-5 D10-11	4	Fairchild Semiconductor	UF4007	Diode, Ultra Fast, 1000V, 1A, DO41	Digi-Key	UF4007CT-ND	1000V	1A	\$0.32	\$1.28
17	D6 D8	2	ON Semiconductor	1N5352BRLG	Diode, Zener, 15V, 5W, DO41	Digi-Key	1N5352BRLGOSCT-ND	15V	5W	\$0.47	\$0.93
18	D7 D9	2	Diodes Inc.	1N4733A-T	Diode, Zener, 5.1V, 1W, DO41	Digi-Key	1N4733ADICT-ND	5.1V	1W	\$0.38	\$0.76
19	HS1	1	Cts Electronic Components	7-340-2PP-BA	Heatsink, Black, Dual TO220	Digi-Key	294-1080-ND	9W@60 °C		\$3.51	\$3.51
20	MH3-10	8	Part of PCB	Not Applicable	Hole, Mounting, 0.125"	None	Not Applicable	125		\$0.00	\$0.00
21	U4-5	2	Avago Technologies US Inc.	HCPL-316J-000E	IC, Optocoupler, Gate Driver, 2A, SOIC16	Digi-Key	516-1478-5-ND	Bi-Directional	2A	\$5.50	\$11.00
22	U3	1	Texas Instruments	UC3843AN	IC, PWM Controller, Current-Mode, DIP8	Digi-Key	296-11285-5-ND			\$2.01	\$2.01
23	U9-10	2	Linear Technology	LTC1384CN#PBF	IC, RS232 Transceiver, Low-Power, DIP20	Digi-Key	LTC1384CN#PBF-ND			\$6.87	\$13.74
24	U8	1	National Semiconductor	LM311N/NOPB	IC, Voltage Comparator, 8DIP	Digi-Key	LM311NNS-ND			\$1.02	\$1.02
25	Q2-3	2	Fairchild Semiconductor	FGL40N120ANDTU	IGBT, NPT, 1200V, 64A, TO264	Digi-Key	FGL40N120ANDTU-ND	1200V		\$10.41	\$20.82
26	L3	1	API Delevan Inc.	4590R-334K	Inductor, 330uH, 1.61A, 10%, Axial	Digi-Key	DN7767-ND	330uH	1.61A	\$2.78	\$2.78
27	L1-2	2	AlfaMag Electronics, LLC	SWF-0.90-330	Inductor, 330uH, 900mA, 20%, TH	Digi-Key	TE2015-ND	330uH	900mA	\$1.86	\$3.72
28	Q1	1	ON Semiconductor	NTF3055-100T1G	MOSFET, Power, N-Channel, 60V, 3A, 110mOhms, SOT223	Digi-Key	NTF3055-100T1GOSCT-ND	60V	3A	\$0.58	\$0.58
29	D12-15	4	Diodes Inc.	1N4007-T	Rectifier, 1000V, 1A, DO41	Digi-Key	1N4007DICT-ND	1000V	1A	\$0.27	\$1.08
30	U7	1	ST Microelectronics	L79L05ACZ-TR	Regulator, Linear, Negative, 5V, 100mA, TO92	Digi-Key	497-1220-1-ND	-5V	100mA	\$0.51	\$0.51
31	U6	1	ST Microelectronics	L78L05ACZTR	Regulator, Linear, Positive, 5V, 100mA, TO92	Digi-Key	497-1184-1-ND	5V	100mA	\$0.53	\$0.