

# LEVITRON 50 POWER BOARD PARTLIST

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**Filename:** MP-0002-04 Rev04 Levitron 50 Power Board Partlist.doc

**Project:** Levitron 50

**Document:** This document contains all parts of the Levitron 50 Power Board.

**Parts for 1 Power Board Levitron 50:**

PCB	Schematics		Part	Manufacturer		Part	Supplier		
QTY	Annotation	Name	Description	Name	Type	Footprint	Name	Ordering No	Price/Pc@50

**IC's (Integrated Circuits):**

1	U100	MC78L05AC DG	100mA / 5V Voltage Regulator	ON	MC78L05ACD	SO-8X220	Farnell Distrelec	9666265 647300	0.38 0.43
1	U200	LM324D	Temperature and Frequency compensated quad OPAMP	National	LM324M	SO-14X220	Distrelec Farnell	642403 2293547	0.54 0.49
1	U201	A1321LUA-T A1321EUA-T	Radiometric, linear Hall-Effect Sensor	Allegro	A1321	TO-92	KUK Farnell	A1321LUA-T 1521678	2.00 2.05
1	U202	LM393M	Dual Comparator, Single Supply, Open Collector	National	LM393M	SO-8X220	Distrelec Farnell	642405 4586128	0.54 0.30
1	U101	TS972ID	Dual, Very low Noise Audio AMP with 4V/us	ST	TS972ID	SO-8X220	Farnell	1094409	1.05
1	U203	TS974ID	Quad, Very low Noise Audio AMP with 4V/us	ST	TS974ID	SO-14X220	Farnell	1094411	1.35

**Discrete Semiconductors:**

2	D100 D202	SS14	Ultra Fast Schottky SMD-Diode 1.0A / 40V / 15ns	General	SS14	SMA	Distrelec Farnell	600693 9551280	0.48 0.38
2	D101 D204	LED green	LED green 1206	Fairchild	QTL650C-4	1206P	Distrelec Farnell	250153 8530076	0.32 0.14
1	D200	LED red	LED red 1206	Fairchild	QTL650C-7	1206P	Distrelec Farnell	250149 8530114	0.32 0.30
4	D201 D203 D205 D206	LED blue	LED blue 3mm	Kingbright	L-7104PBC-H	LED_3MM	Distrelec Farnell	250269 1142494	2.04 1.40
1	T200	BSS138	BSS138	Infinition	BSS138N	SOT-23	Farnell Distrelec	1156434 611646	0.13 0.27
1	T202	SI4896	80V/8A N-Channal PowerTrench MOSFET	Vishay		SO-8X220	EBV	SI4896	2.00
		FDS6630A	30V/6.5A N-Channal PowerTrench MOSFET	Fairchild	FDS6630A	SO-8X220	Farnell	9845240	1.05

**Capacitors:**

**Ceramic 0805:**

1	C112	1nF	Ceramic Multi Layer +/-10% X7R / 50V						
1	C215	22nF							
18	C102 C103 C106 C107 C108 C200 C201 C202 C203 C204 C205 C211 C207 C208 C209 C210 C212 C213	100nF							
	C214	1uF							
	C206	nc	not connected						

**Tantal:**

2	C113 C115	15uF/10V	Tantal SMD Capacitors polarizezed	Epcos	B45196-E2156-K309	6032P	Farnell Distrelec	9753826 810974	0.72 1.18
2	C111 C114	68uF/20V	Tantal SMD Capacitors polarizezed, low ESR	Epcos / Kemet	B45197-A4686-K509	7243P	Distrelec Farnell	8110311 9751106	2.04 5.50

**Resistors:**

**0805 +/- 1% / 0.1W:**

1	R236	0	Chip-Resistor +/- 1% / 0.1W		E12 / 1%	0805			0.02	
1	R234	10								
1	R231	22								
3	R223 R229	220								
	R235									
1	R107	330								
1	R201	470								
3	R200 R221	1k								
	R222									
5	R220 R224 R225 R226	1.8k								
	R227									
	R219									
1	R219	2.2k								
1	R233	4.7k								
1	R208	8.2k								
15	R103 R202 R203 R204 R205 R206 R207 R209 R210 R211 R212 R214 R215 R228	10k								
	R232									
	R114 R216									15k
	R217									27k
	R218									39k

1	R113	100k							
1	R102	150k							
1	R213	220k							
4	R237 R238 R239 R240	nc							

others:									
1	R230	0.47/1W	chip resistor 1W	Megitt	RL733A R47	2512	Farnell	3104679	1.70
1	P200	500	Poti 11mm radial 25 turns	BOURNS	3296P-001-501	POTI_RADIAL	Distrelec	743378	2.37
2	P201 P202	500k			3296P-001-504		Farnell	9353119	2.80
							Distrelec	743321	2.21
						Farnell	9353143	2.80	

Mechanical Components:									
1	JP100	Power Jack 2.1mm	Power Jack 2.1mm THT	Lumberg	NEB/J 21 R	POWER_JACK_THT	Farnell	1217039	0.84
1	TP102	Testpin GND	Testpins with a diameter of 1mm green/white, 100 / PK	VERO	20-313138	TESTPIN	Farnell Distrelec	8731160 450582	0.29 0.65