

# CDAMP 200 POWER BOARD PARTLIST

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**Project:** CDAMP 200

**Document:** This document contains all parts of the CDAMP 200 Power Board.

**Parts for 1 Power Board CDAMP 200:**

PCB		Schematics		Part		Manufacturer		Part		Supplier	
QTY	Annotation	Name	Description	Name	Type	Footprint	Name	Ordering No	Page		

IC's (Integrated Circuits):											
1	U203	CD4011	Dual NAND	Fairchild	CD4011BCM	SO-14X220	Farnell EBV	1085279			
1	U204	CD4013	Dual Type D Flip-Flop CMOS	Fairchild	CD4013BCM	SO-14X220	Farnell EBV	1014057			
2	U302 U402	HIP4082IB	80V/1.25A Peak, Full Bridge Driver	Intersil	HIP4082IB	SO-16X220	Distrelec EBV	610195			
1	U100	LT1676CS8	Adjustable Step Down Switching Regulator max. 60V / 500mA	Linear	LT1676CS8	SO-8X220	Distrelec Eurodis	647581			
3	U103 U301 U401	LM319M	Dual High Speed Comparator, Single Supply, Open Collector	National	LM319M	SO-14X220	Distrelec Farnell	640016 9490469			
2	U201 U202	LM393M	Dual Comparator, Single Supply, Open Collector	National	LM393M	SO-8X220	Distrelec Farenell	645456 9487590			
1	U104	LM7121IM	Single High Speed low Power OP	National	LM7121IM	SO-8X220	Farnell EBV	9494120			
1	U200	MC33172D	Dual, Very low Noise Audio AMP with 2V/us	ON Semi	MC33172D	SO-8X220	Farnell EBV	9665307			
2	U300 U400	TS974ID	Quad, Very low Noise Audio AMP with 4V/us	ST	TS974ID	SO-14X220	Farnell	1094411			

Discrete Semiconductors:											
2	D202 D204	BAT54C	Schottky Diode 30V / 200mA / 5ns	Philips	BAT54C	SOT-23	Farnell	1081192			
1	D104	BAV99	Fast Diode 0.25A / 100V / 12ns	Philips	BAV99	SOT-23	Farnell Distrelec	1081211 603663			
2	D300 D400	BAW56	Fast Diode 0.25A / 100V / 12ns	Philips	BAW56	SOT-23	Farnell Distrelec	1081213 603653			
1	D201	LED Green	LED 3mm for PCB-mounting	MARL	103-314-04	LED	Compona	665 052			
1	D200	LED Red	LED 3mm for PCB-mounting	MARL	103-305-04	LED	Compona	665 050			
1	D100	MBR20100CT	2 x 10A / 100 V Schottky Diode	ON Semi	MBR20100CT	TO-220	Farnell EBV	878066			
8	T300 T301 T302 T303 T400 T401 T402 T403	SI7852DP	80V/10A N-Channel Power Trench MOSFET	Vishay	SI7852DP	SO-8X220 POWERPAK	Farnell EBV	9550747			
1	D101	SS16	Ultra Fast Schottky SMD-Diode 1.0A / 60V / 15ns	General Semiconductor	SS16	SMA	Distrelec Farnell	600694 9551298			
1	Z200	LM4040AIM3-25	2.5V Micropower Precision Ref.	National	LM4040AIM3-25	SOT-23	Farnell	3358513			

Inductors:											
4	L302 L303 L402 L403	4.7uH / 5.5A	SMD-Coil	Coiltronics	UP2B-4R7	UNI-PAC 2B	Distrelec Hy-Line	351086			
4	L300 L301 L400 L401	15uH / 5.5A	SMD-Coil	Coiltronics	UP4B-150	UNI-PAC 4B	Distrelec Hy-Line	351197			
2	L101 L102	22uH / 0.32A	Chip-Inductor	muRata	LQH43MN220K03L	INDUCTOR 22UH 0.32A	Distrelec	351428			
1	L100	220uH / 0.25A	Inductor SRR0604	Bourns	SRR0604-221K	SRR0604	Distrelec	350597			

Capacitors:											
Ceramic 0805:											
2	C314 C414	33pF	Ceramic Multi Layer +/-5% COG / 50V	-	-	0805	-	-	-	-	-
18	C119 C120 C121 C219 C302 C303 C304 C305 C306 C331 C332 C402 C403 C404 C405 C406 C431 C432	100pF									
4	C200 C201 C202 C203	220pF									
2	C217 C218	330pF									
4	C317 C318 C417 C418	1nF									
1	C100	2.2nF		Ceramic Multi Layer +/-10% X7R / 50V							
1	C207	10nF									

37	C101 C102 C106 C107 C108 C109 C110 C111 C112 C204 C205 C206 C208 C209 C210 C211 C212 C213 C220 C307 C308 C309 C310 C311 C312 C313 C319 C320 C407 C408 C409 C410 C411 C412 C413 C419 C420	100nF							
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1	C103	10nF / 500V	Ceramic Multi Layer +/-10% X7R / 500V	AVX	12067C103KAT1A	1206	Farnell	1216456	
4	C300 C301 C400 C401	470nF / 50V	Ceramic Multi Layer +/-20% Z5U / 50V	Epcos	B37873-K5474-M62	1206	Farnell	757688	
5	C118 C329 C330 C429 C430	1uF / 50V	Ceramic Multi Layer +/-10% X7R 50V	MuRata Kemet	GRM32RR71H105K A01L C1210C105K5RAC	1210	Farnell Farnell	9527826 9227962	
2	C214 C221	2.2uF / 16V	Ceramic Multi Layer +/-10% X7R / 16V	KEMET	C1206C225K4RAC	1206	Farnell	9227911	

<b>MKT:</b>									
2	C325 C425	68nF / 63V	MKT Capacitor +/-10%	Epcos	B32529C683K	CAP_50_25	Distrelec Farnell	820612 9750860	
4	C323 C324 C423 C424	0.47uF / 63V		Epcos	B32529C474K	CAP_50_45	Distrelec Farnell	820412 9750916	
4	C321 C322 C421 C422	2.2uF / 100V		Epcos	B32522C1225K	CAP_150_70	Distrelec Farnell	820475 1200743	

<b>Electrolyt:</b>									
10	C113 C114 C116 C117 C215 C216 C326 C327 C426 C427	220uF / 16V	Radial Electrolyt Capacitor ultra low ESR 105°C	Rubycon	Type YXA 16YXA220M63X11	CAPPOL_25_63	Distrelec	801796	
2	C328 C428	1000uF / 63V	Radial Electrolyt Capacitor low ESR 105°C	Rubycon	Type YXA 63YXA1000M16X25	CAPPOL_75_160	Distrelec	801823	

<b>Resistors:</b>									
<b>0805 +/- 1% / 0.1W:</b>									
6	R101 R103 R325 R335 R425 R435	0	Chip-Resistor +/- 1% / 0.1W		E12 / 1%	0805			
4	R341 R342 R441 R442	4.7	Chip-Resistor +/- 5% / 0.1W		E12 / 5% PHYCOMP 232273464708	0805	Farnell	9237208	
8	R329 R330 R331 R332 R429 R430 R431 R432	6.8	Chip-Resistor +/- 5% / 0.1W		E12 / 5% PHYCOMP 232273466808	0805	Farnell	9237224	
2	R217 R218	10	Chip-Resistor +/- 1% / 0.1W		E12 / 1%	0805			
4	R320 R336 R420 R436	560							
1	R116	820							
5	R208 R209 R210 R211 R224	1k							
6	R319 R323 R324 R419 R423 R424	1.2k							
2	R222 R223	2.7k							
7	R214 R215 R216 R327 R328 R427 R428	4.7k							
3	R111 R321 R421	6.8k							
1	R212	8.2k							
19	R118 R119 R120 R124 R213 R225 R226 R313 R314 R315 R316 R317 R318 R413 R414 R415 R416 R417 R418	10k							
4	R200 R202 R204 R205	12k							
1	R228	15k							
4	R110 R230 R322 R422	22k							
1	R220	33k							
1	R104	39k							

20	R106 R107 R300 R301 R302 R303 R304 R305 R306 R307 R308 R400 R401 R402 R403 R404 R405 R406 R407 R408	47k							
2	R122 R227	56k							
1	R113	68k							
4	R201 R203 R206 R207	82k							
11	R114 R115 R221 R309 R310 R311 R312 R409 R410 R411 R412	100k							
3	R100 R102 R219	220k							
1	R123	390k							
3	R229 R337 R437	470k							
3	R219 R326 R426	1Meg							

others:									
2	R334 R434	SHUNT 22m / 1W	Low ohm chip resistor 1W	Megitt	CRL-TI3A 0R022	2512	Farnell	1173980	
2	R333 R433	4.7 / 1W	Chip resistor 1W	Phicomp	Type PRC221 232276260478	2512	Farnell	9235876	
2	P300 P400	Poti axial 1Meg	Poti 11mm axial several turns	Vishay	Type 3229W-T93YB	POTI-AXIAL	Farnell (RHOS)	3065935 1141425	

Mechanical Components:									
1	S200	Power Enable	Switch horizontal Type 2	C&K	7101MD9AV2BE	SWITCH_PWM	Farnell	9575502	
1	J100	Power Input	Header 2x1 5.08mm vertical 12A / 300VAC	Lumberg sauro		POWER-1X2M	Farnell Compona	3337455 261 970-1	
2	JP300 JP400	Audio Input	Header 2x1 2.54mm vertical 6A / 63VAC	Phoenix Contact sauro	MPT 0,5-2-2,24	AUDIO-1X2	Distrelec Compona	142072 261 000	
2	JP301 JP401	Speaker Output	Header 2x1 5.0mm 45° 15A / 250VAC	Lumberg	Serie 6322 2 Pol	Speaker-1x2	Farnell	3336426	
1	JP100 JP302 JP402	Connectors to Volume Control Board	Stiftleisten Header 4x2.54mm l=10.4mm	Fischer Elektronik	SL1/104/36 G	Header 4x2.54	Distrelec	122202	
2	für JP302 / JP402	Jumper	Jumper closed 2.54mm	Fischer Elektronik	CAB4-G-BLAU	Jumper 2.54mm	Distrelec	450300	
1	F100	RUE900	Fuse 9A	Typco	RUE900	RUE900	Farnell	1175856	
10	TP107 TP210 TP211 TP318 TP418 TP108 TP109 TP110 TP322 TP422 (All AGND and all PGND)	Testpin	Testpins with a diameter of 1mm red, 100 / PK	W Hughes	300-307	TESTPIN	Farnell	3851588	