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2:101 C201 C301 C401 21:3 C5 1010 D107/207 D201 D301 D307/407 D401 1010 D107/207 D201 D301 D307/407 D401 1010 D202 D302 D402 10103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 104 D408 11 D105 D205 D305 D405 11 C2 L3 12 L3 12 L1 Q103 Q203 Q303 Q403 101 Q201 Q301 Q401	8 26 4 4 6 4 5 4 3 5	47n 100n 220n 22u BAT54C SZMM3Z10VST1G BAT54WS Red_3mm Yel 3mm	C0805 C0805 C2416 CE5x5.8 SOT-23-3 SOD-323	On Semiconductor	CC0805KRX7R9BB473 CC0805KRX7R9BB104 ECH-U1H224GX9 EEE-FK1V220AR BAT54CLT1G SZMM3Z10VST1G	Mouser Mouser Mouser Mouser Mouser	667-ECH-U1H224GX9	X7R, 50V, 10% X7R, 50V, 10% PPS, 50V, 2%	Alt. Fit 5.08mm THT box caps C 101, C 201, C 301, C 401
24 C6-8 C111-118 C211-213 C311-318 C411-413 :1:01 C201 C301 C401 :1:3 C5 :0101 D107/207 D201 D301 D307/407 D401 :0102 D202 D302 D402 :0103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- :040 D408 :01 D105 D205 D305 D405 :0106 D206 D306 D406 :1.2 L3 :01 Q103 Q203 Q303 Q403 :0101 Q201 Q301 Q401	4 4 6 4 14 5 4 3	100n 220n 22u BAT54C SZMM3Z10VST1G BAT54WS Red_3mm	C0805 C2416 CE5x5.8 SOT-23-3 SOD-323	Yageo Panasonic Panasonic On Semiconductor On Semiconductor	CC0805KRX7R9BB104 ECH-U1H224GX9 EEE-FK1V220AR BAT54CLT1G	Mouser Mouser Mouser	603-CC0805KRX7R9BB104 667-ECH-U1H224GX9	X7R, 50V, 10%	Alt Fit 5 08mm THT hox cans C 101 C 201 C 301 C 401
2:101 C201 C301 C401 2:1-3 C5 10101 D107/207 D201 D301 D307/407 D401 10102 D202 D302 D402 10103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 04 D408 11 D105 D205 D305 D405 106 D206 D306 D406 1.12 L3 21 Q103 Q203 Q303 Q403 2101 Q201 Q301 Q401	4 4 6 4 14 5 4 3	220n 22u BAT54C SZMM3Z10VST1G BAT54WS Red_3mm	C2416 CE5x5.8 SOT-23-3 SOD-323	Panasonic Panasonic On Semiconductor On Semiconductor	ECH-U1H224GX9 EEE-FK1V220AR BAT54CLT1G	Mouser Mouser	667-ECH-U1H224GX9	1 - 1 - 1 - 1	Alt Fit 5 08mm THT box cans C 101 C 201 C 301 C 401
2:1-3 C5 1010 D107/207 D201 D301 D307/407 D401 10102 D202 D302 D402 20103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 104 D408 10 D105 D205 D305 D405 20106 D206 D306 D406 1.12 L3 12 Q103 Q203 Q303 Q403 1101 Q201 Q301 Q401	14 5 4	22u BAT54C SZMM3Z10VST1G BAT54WS Red_3mm	CE5x5.8 SOT-23-3 SOD-323	Panasonic On Semiconductor On Semiconductor	EEE-FK1V220AR BAT54CLT1G	Mouser		PPS 50V 2%	Alt. Fit 5 08mm THT hox cans C. 101 C. 201 C. 301 C. 401
2010 D107/207 D201 D301 D307/407 D401 D102 D202 D302 D402 D103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- D104 D408 D10105 D205 D305 D405 D106 D206 D306 D406 L12 L3 D1 Q103 Q203 Q303 Q403 D10 Q201 Q301 Q401	14 5 4	BAT54C SZMM3Z10VST1G BAT54WS Red_3mm	SOT-23-3 SOD-323	On Semiconductor On Semiconductor	BAT54CLT1G				
0102 D202 D302 D402 0103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 04 D408 01 D105 D205 D306 D405 106 D206 D306 D406 1.12 L3 01 Q103 Q203 Q303 Q403 0101 Q201 Q301 Q401	14 5 4 3	SZMM3Z10VST1G BAT54WS Red_3mm	SOD-323	On Semiconductor		Mouser	667-EEE-FK1V220AR	35V, 20%, 105deg	
0102 D202 D302 D402 0103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 04 D408 01 D105 D205 D306 D405 106 D206 D306 D406 1.12 L3 01 Q103 Q203 Q303 Q403 0101 Q201 Q301 Q401	5 4 3	BAT54WS Red_3mm			SZMM3Z10VST1G		863-BAT54CLT1G	Dual schottky diode common cathode	
1103-104 D108-109 D203-204 D208 D303-304 D308-309 D403- 04 D408 11 D105 D205 D305 D405 1106 D206 D306 D406 1 L2 L3 11 Q103 Q203 Q303 Q403 1101 Q201 Q301 Q401	5 4 3	BAT54WS Red_3mm				Mouser	863-SZMM3Z10VST1G	Zener diode 10.2V 300mW	
0.40 D408 10 D105 D205 D305 D405 1066 D206 D306 D406 1.12 L3 21 Q103 Q203 Q303 Q403 101 Q201 Q301 Q401	5 4 3	Red_3mm	SOD-323						
01 D105 D205 D305 D405 1016 D206 D306 D406 1.1 L2 L3 01 Q103 Q203 Q303 Q403 Q101 Q201 Q301 Q401	5 4 3	Red_3mm		Diodes Inc	BAT54WS-7-F	Mouser	621-BAT54WS-F	Schottky diode 100mA	
0106 D206 D306 D406 1 L2 L3 11 Q103 Q203 Q303 Q403 1101 Q201 Q301 Q401	4		3mm LED THT	Wurth Elektronik	151031SS04000	Mouser	710-151031SS04000	LED red 3mm 635nm 160mcd	
1 L2 L3 91 Q103 Q203 Q303 Q403 9101 Q201 Q301 Q401	0		3mm LED THT	Wurth Elektronik	151031YS06000	Mouser	710-151031YS06000	LED vellow 3mm 590nm 110mcd	
01 Q103 Q203 Q303 Q403 0101 Q201 Q301 Q401	5	10u	L0805	Taiyo Yuden	LBC2012T100K	Mouser	963-LBC2012T100K	1.2R, 200mA, 10%	
101 Q201 Q301 Q401		MMBT3904	SOT-23-3		MMBT3904LT1G	Mouser	863-MMBT3904LT1G	NPN	
	4	DMMT3906W	SOT-363	Diodes Inc	DMMT3906W-7-F	Mouser	621-DMMT3906W-F	Dual Matched PNP	
	4	MMBFJ201	SOT-23-3	On Semiconductor	MMBFJ201	Mouser	512-MMBFJ201	N-Channel JFET	
102 Q202 Q302 Q402	4	WINDFJZUI	301-23-3	On Semiconductor	WIWIBFJ201	Wiousei	512-WWBFJ2U1	N-Channer JFE I	
123-124 R127 R223-224 R227 R323-324 R327 R423-424 R427	12	680R	R0805	Vagoo	RC0805FR-07680RL	Mouser	603-RC0805FR-07680RL	150V. 125mW. 1%. 100PPM	
	12	NOUR	CUOUD	Yageo	RC0003FR-07080RL	wouser	003-RC0003FR-07080RL	130V, 12311W, 170, 100PPM	
R110 R116 R144 R147 R153 R210 R216 R244 R247 R310 R316 R344 R347 R353 R410 R416 R444 R447	10	1k	R0805	Vagoo	DC000EED 071KI	Mouser	603-RC0805FR-071KL	150V 135mW 104 100DDM	
	18	1K	RUOUS	Yageo	RC0805FR-071KL	Mouser	003-KC0803FK-0/1KL	150V, 125mW, 1%, 100PPM	
102 R119 R129-132 R202 R219 R229-232 R302 R319 R329-									
	24	4k7	R0805	Yageo	RC0805FR-074K7L	Mouser	603-RC0805FR-074K7L	150V, 125mW, 1%, 100PPM	
200 112 10 11200 11000 110 10 11 100	6	5k6	R0805	Yageo	RC0805FR-075K6L	Mouser	603-RC0805FR-075K6L	150V, 125mW, 1%, 100PPM	
1 R134 R234 R334 R434	5	6k8	R0805	Yageo	RC0805FR-076K8L	Mouser	603-RC0805FR-076K8L	150V, 125mW, 1%, 100PPM	
126 R136 R143 R146 R152 R226 R236 R243 R246 R326 R336									
	18	10k	R0805	Yageo	RC0805FR-0710KL	Mouser	603-RC0805FR-0710KL	150V, 125mW, 1%, 100PPM	
	10	11k	R0805	Yageo	RC0805FR-0711KL	Mouser	603-RC0805FR-0711KL	150V, 125mW, 1%, 100PPM	
103 R203 R303 R403	4	15k	R0805	Yageo	RC0805FR-0715KL	Mouser	603-RC0805FR-0715KL	150V, 125mW, 1%, 100PPM	
R2 R128 R133 R140 R228 R233 R240 R328 R333 R340 R428									
433 R440	13	22k	R0805	Yageo	RC0805FR-0722KL	Mouser	603-RC0805FR-0722KL	150V, 125mW, 1%, 100PPM	
R104 R108-109 R113-114 R121 R125 R149 R204 R208-209									
R213-214 R221 R225 R304 R308-309 R313-314 R321 R325									
	30	47k	R0805	Yageo	RC0805FR-0747KL	Mouser	603-RC0805FR-0747KL	150V, 125mW, 1%, 100PPM	
R105 R107 R115 R117 R135 R205 R207 R215 R217 R235 R305									
	20	49k9	R0805	Yageo	RC0805FR-0749K9L	Mouser	603-RC0805FR-0749K9L	150V, 125mW, 1%, 100PPM	
101 R111-112 R138 R141 R150 R201 R211-212 R238 R241									
	22	100k	R0805	Yageo	RC0805FR-07100KL	Mouser	603-RC0805FR-07100KL	150V, 125mW, 1%, 100PPM	
TEE NEEL NOEL NIEL	4	150k	R0805	Yageo	RC0805FR-07150KL	Mouser	603-RC0805FR-07150KL	150V, 125mW, 1%, 100PPM	
137 R237 R337 R437	4	470k	R0805	Yageo	RC0805FR-07470KL	Mouser	603-RC0805FR-07470KL	150V, 125mW, 1%, 100PPM	
139 R239 R339 R439	4	1M	R0805	Yageo	RC0805FR-071ML	Mouser	603-RC0805FR-071ML	150V, 125mW, 1%, 100PPM	
118 R120 R218 R220 R318 R320 R418 R420	8	4M7	R0805	Yageo	RC0805FR-074M7L	Mouser	603-RC0805FR-074M7L	150V, 125mW, 1%, 100PPM	
W1 SW101 SW201 SW301 SW401	5	SPDT_ON-OFF-ON	M201X	NKK	M2013SS1W01	Mouser	633-M201301	Toggle switch SPDT On-Off-On	
W102, SW302,	2	SPDT_ON-ON	M201X	NKK	M2012SS1W01	Mouser	633-M201201	Toggle switch SPDT On-On	
R101, TR201, TR301, TR401,	4	50k	3314J	Bourns	3314J-1-503E	Mouser	652-3314J-1-503E	500V,250mW, 20%, 100PPM	
1,	1	L78L10	SOT-89	ST Microelectronics	L78L10ACUTR	Mouser	511-L78L10ACU	Linear voltage reg 10V 100mA	
J2.	1	TL072	SOIC08	Texas Instruments	TL072IDR	Mouser	595-TL072IDR	Dual op-amp FET input	
	6	TL074	SOIC14	Texas Instruments	TL074IDR	Mouser	595-TL074IDR	Quad op-amp FET input	
	4	CD4001	SOIC14	Texas Instruments	CD4001BM96	Mouser	595-CD4001BM96	Quad NOR gate 2 input	
	2	CD4066	SOIC14	Texas Instruments	CD4066BM96	Mouser	595-CD4066BM96	Quad analogue switch SPST	
	2	LM13700	SOIC16	Texas Instruments	LM13700MX/NOPB	Mouser	926-LM13700MX/NOPB	Dual transconductance amplifier	
	8	10k Linear	RV16AF-41-(L)R1-XXX		RV16AF-41-15R1-103B	Small Bear	1011 B10K	16mm RA PCB mount potentiometer	
	2	100k Linear	RD901F-40-00D	Alpha	RD901F-40-15R1-104B	Small Bear	1012A B100K	9mm RA PCB mount potentiometer	
	8	200K EIIICUI		Alpha	M7x0.75	Small Bear	1012A B100K	Toothed washer for 16mm potentiometer	Fit between potentiometer body and panel
	0			Alpha	1417 AU. 13	Small Bear	1011AM	Dust cover for 16mm potentiometer	Fit on all 16mm potentiometers

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Reference	Quantity	Value	Footprint	Manufacturer	MPN	Supplier	Order Code	Description	Notes
Panel Mount									
J101 J201 J301 J401	4	Pulse inputs		Johnson	108-0906-001	Mouser	530-108-0906-1	Orange banana jack	
J102-103 J202-203 J302-J303 J402-J403	8	CV inputs		Johnson	108-0903-001	Mouser	530-108-0903-1	Black banana jack	
J104 J204 J304 J404	4	Pulse outputs		Johnson	108-0902-001	Mouser	530-108-0902-1	Red banana jack	
J105-106 J205 J305-306 J405	6	CV outputs		Johnson	108-0910-001	Mouser	530-108-0910-1	Blue banana jack	
24awg wire black 25mm length	8			Alpha Wire	892419 BK005	Mouser	602-892419-100-02	Wiring to CV inputs	Strip 4mm each end. Order code is for 30.5m reel
24awg wire orange 25mm length	4			Alpha Wire	892419 OR005	Mouser	602-892419-100-08	Wiring to pulse inputs	Strip 4mm each end. Order code is for 30.5m reel
24awg wire red 25mm length	4			Alpha Wire	892419 RD005	Mouser	602-892419-100-03	Wiring to pulse outputs	Strip 4mm each end. Order code is for 30.5m reel
24awg wire blue 25mm length	6			Alpha Wire	892419 BL005	Mouser	602-892419-100-06	Wiring to CV outputs	Strip 4mm each end. Order code is for 30.5m reel
Hardware & Misc									
PCB	1			Dunnington Audio		thebeast.co.uk		Printed circuit board	
Front panel	1			The Beast		thebeast.co.uk	http://thebeast.co.uk/?product	Front panel	
M3x14mm F-F Standoff	3			Harwin	R30-1001402	Mouser	855-R30-1001402		
M3x6mm Pozi CSK	3			RS Pro		RS	528-946		Panel to standoff fixing
M3x6mm Pozi Pan SEMS	3			RS Pro		RS	279-149		PCB to standoff fixing
M3 Toothed Washer	3			RS Pro		RS	526-574		Fit between standoffs and panel
Small Skirted Knob Blue	8			Rogan	RB-67-0-SK-7-M	Thonk	https://www.thonk.co.uk/shop/		Fit on all 16mm potentiometers
Small Unskirted Knob Blue	2			Rogan	RB-67-0-ML	Thonk	https://www.thonk.co.uk/shop/		Fit on all 9mm potentiometers
Switch Cap Red	4			Mountain Switch	10TB001	Mouser	10TB001		Fit on SW101, SW201, SW301, SW401
Switch Cap Yellow	2			Mountain Switch	10TB005	Mouser	10TB005		Fit on SW102, SW302
Switch Cap White	1			Mountain Switch	10TB003	Mouser	10TB003		Fit on SW1
J1	1	Power		EDAC	306-010-500-102	Mouser	587-306-50-010	10P edge connector, 3.96mm	
	1			EDAC	338-240-328	Mouser	587-338-240-328	Polarizing key	Fit in position 7 of power EDAC
20awg wire black 350mm length	1	Q		Alpha Wire	892019 BK005	Mouser	602-892019-100-02		EDAC position 1. Order code is for 30.5m reel.
20awg wire white 350mm length	1	-15V		Alpha Wire	892019 WH005	Mouser	602-892019-100-01		EDAC position 2. Order code is for 30.5m reel.
20awg wire red 350mm length	1	+15V		Alpha Wire	892019 RD005	Mouser	602-892019-100-03		EDAC position 3. Order code is for 30.5m reel.
20awg wire green 350mm length	1	+12V		Alpha Wire	892019 GR005	Mouser	602-892019-100-04		EDAC position 4. Order code is for 30.5m reel.
Expandable Sleeving 3mm 300mm	1			Alpha Wire	GRP1301/8 BK007	Mouser	602-130018-50BK		Fit over power cabling
Heatshrink 6.35mm 40mm length	2			Alpha Wire	FIT221V1/4 BK103	Mouser	602-221V014-4		Fit at each end of expandable sleeving
Heatshrink 3.18mm 12mm length	4			Alpha Wire	FIT221V1/8 BK103	Mouser	602-221V018-4		Fit over terminated EDAC contacts
Cable ties	2			Panduit	PLT.7M-M	Mouser	644-PLT.7M-M		Secure power cabling to PCB and EDAC