

## 230D\_1.2\_Master

Reference	Quantity	Value	Footprint	Manufacturer	MPN	Supplier	Order Code	Description	Notes
<b>PCB Mount</b>									
C105 C107 C205 C207 C305 C307	6	100p	C0805	Yageo	CC0805JRNPO9BN101	Mouser	603-CC805JRNPO9BN101	C0G, 50V, 5%	
C106 C109 C206 C209 C306 C309	6	47n	C0805	Yageo	CC0805JRNPO9BN221	Mouser	603-CC805KRX7R9BB473	X7R, 50V, 10%	
C102-103 C110-111 C202-203 C210-211 C302-303 C310-311	12	100n	C0805	Yageo	CC0805KRX7R9BB104	Mouser	603-CC805KRX7R9BB104	X7R, 50V, 10%	
C101 C104 C201 C204 C301 C304	6	1u	CE4x5.8	Panasonic	EEE-FC1V1R0AR	Mouser	667-EEE-FC1V1R0AR	35V, 20%, 105deg	
C108 C208 C308	3	4u7	C1210 (B)	AVX	TAJB475K035RNJ	Mouser	581-TAJB475K035R	35V, 10%, 125deg	
C1 C2 C3	3	22u	CE5x5.8	Panasonic	EEE-FK1V220AR	Mouser	667-EEE-FK1V220AR	35V, 20%, 105deg	
D101 D201 D301	3	SZMM3Z3V9ST1G	SOD-323	On Semiconductor	SZMM3Z3V9ST1G	Mouser	863-SZMM3Z3V9ST1G	Zener diode, 3.9V, 300mW	
D102, D202, D302	3	BAV99	SOT-23-3	On Semiconductor	BAV99L1T1G	Mouser	863-BAV99L1T1G	Dual diode, series, 215mA	
D103, D105, D203, D205, D303, D305	6	BAS16	SOT-23-3	On Semiconductor	BAS16L1T1G	Mouser	863-BAS16L1T1G	Diode, 200mA	
D104, D204, D304	3	Red_3mm	3mm LED THT	Würth Elektronik	151031SS04000	Mouser	710-151031SS04000	LED red 3mm 635nm 160mcd	
L1 L2 L3	3	10u	L0805	Taiyo Yuden	LBC2012T100K	Mouser	963-LBC2012T100K	1.2R, 200mA, 10%	
Q101 Q201 Q301	3	MMBT3904	SOT-23-3	On Semiconductor	MMBT3904L1T1G	Mouser	863-MMBT3904L1T1G	NPN	
R123 R129 R223 R229 R323 R329	6	1k	R0805	Yageo	RC0805FR-071KL	Mouser	603-RC0805FR-071KL	150V, 125mW, 1%, 100PPM	
R102 R124 R202 R224 R302 R324	6	4k7	R0805	Yageo	RC0805FR-074K7L	Mouser	603-RC0805FR-074K7L	150V, 125mW, 1%, 100PPM	
R122 R125 R222 R225 R322 R325	6	6k8	R0805	Yageo	RC0805FR-076K8L	Mouser	603-RC0805FR-076K8L	150V, 125mW, 1%, 100PPM	
R126 R128 R226 R228 R326 R328	6	10k	R0805	Yageo	RC0805FR-0710KL	Mouser	603-RC0805FR-0710KL	150V, 125mW, 1%, 100PPM	
R118 R127 R218 R227 R318 R327	6	11k	R0805	Yageo	RC0805FR-0711KL	Mouser	603-RC0805FR-0711KL	150V, 125mW, 1%, 100PPM	
R111 R119 R211 R219 R311 R319	6	15k	R0805	Yageo	RC0805FR-0715KL	Mouser	603-RC0805FR-0715KL	150V, 125mW, 1%, 100PPM	
R106-109 R112-113 R121 R206-209 R212-213 R221 R306-309									
R312-313 R321	21	33k	R0805	Yageo	RC0805FR-0733KL	Mouser	603-RC0805FR-0733KL	150V, 125mW, 1%, 100PPM	
R114 R117 R214 R217 R314 R317	6	68k	R0805	Yageo	RC0805FR-0768KL	Mouser	603-RC0805FR-0768KL	150V, 125mW, 1%, 100PPM	
R120 R220 R320	3	100k	R0805	Yageo	RC0805FR-07100KL	Mouser	603-RC0805FR-07100KL	150V, 125mW, 1%, 100PPM	
R101 R201 R301	3	150k	R0805	Yageo	RC0805FR-07150KL	Mouser	603-RC0805FR-07150KL	150V, 125mW, 1%, 100PPM	
R105 R116 R205 R216 R305 R316	6	330k	R0805	Yageo	RC0805FR-07330KL	Mouser	603-RC0805FR-07330KL	150V, 125mW, 1%, 100PPM	
R115 R215 R315	3	4M7	R0805	Yageo	RC0805FR-074M7L	Mouser	603-RC0805FR-074M7L	150V, 125mW, 1%, 100PPM	
R103 R110 R203 R210 R303 R310	6	10M	R0805	Yageo	RC0805FR-0710ML	Mouser	603-RC0805FR-0710ML	150V, 125mW, 1%, 100PPM	
R104, R204, R304	3	22M	R0805	Yageo	RC0805JR-0722ML	Mouser	603-RC0805JR-0722ML	150V, 125mW, 5%, 200PPM	
SW101 SW201 SW301	3	SPDT_ON-ON	M201X	NKK	M2012SS1W01	Mouser	633-M201201	Toggle switch SPDT On-On	
TR101 TR201 TR301	3	5k	3314J	Bourns	3314J-1-502E	Mouser	652-3314J-1-502E	500V, 250mW, 20%, 100PPM	
U101, U201, U301	3	LM348	SOIC14	Texas Instruments	LM348DR	Mouser	595-LM348DR	Quad operational amplifier, BJT input	
U102, U202, U302	3	LM321	SOT-23-5	Texas Instruments	LM321MF/NOPB	Mouser	926-LM321MF/NOPB	Operational amplifier, BJT input	
VR101 VR201 VR301	3	50kA	RV16AF-41-(L)R1-XXX	Alpha	RV16AF-41-15R1-503A	Small Bear	1011 A50K	16mm RA PCB mount potentiometer	Snap off locating lug
VR102 VR202 VR302	3	1MA	RV16AF-41-(L)R1-XXX	Alpha	RV16AF-41-15R1-105A	Small Bear	1011 A1M	16mm RA PCB mount potentiometer	Snap off locating lug
	6			McMaster-Carr	93925A422	McMaster	93925A422	M7 Shakeproof Washer	Fit between 16mm potentiometers and panel. Order code is for 100.
<b>Panel Mount</b>									
J103-104 J203-204 J303-304	6	CV Outputs		Johnson	108-0910-001	Mouser	530-108-0910-1	Blue banana jack	
J102 J202 J302	3	Pulse Outputs		Johnson	108-0902-001	Mouser	530-108-0902-1	Red banana jack	
J101 J201 J301	3	Audio Inputs		Switchcraft	41	Mouser	502-41	Tinijax	
24awg wire black 25mm length	3			Alpha Wire	892419 BK005	Mouser	602-892419-100-02	Wiring to audio shields	Strip 4mm each end. Order code is for 30.5m reel.
24awg wire white 25mm length	3			Alpha Wire	892419 WH005	Mouser	602-892419-100-01	Wiring to audio inputs	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.
24awg wire red 25mm length	3			Alpha Wire	892419 RD005	Mouser	602-892419-100-03	Wiring to pulse outputs	Strip 4mm each end. Order code is for 30.5m reel.
<b>Hardware &amp; Misc</b>									
PCB	1			Dunnington Audio		thebeast.co.uk	http://thebeast.co.uk/?product=230d-triple-envelope-follower-pcb		
Front panel	1			The Beast		thebeast.co.uk	http://thebeast.co.uk/?product=buchla-style-230-panel-reprint		
M3x14mm F-F Standoff	6			Harwin	R30-1001402	Mouser	855-R30-1001402		
M3x6mm Philips CSK	6			McMaster-Carr	91801A151	McMaster	91801A151		Panel to standoff fixing. Order code is for 100.
M3x6mm Philips Pan SEMS	6			McMaster-Carr	90460A101	McMaster	90460A101		PCB to standoff fixing. Order code is for 25.
M3 Shakeproof Washer	6			McMaster-Carr	93925A417	McMaster	93925A417		Fit between standoffs and panel. Order code is for 100.
Small Skirted Knob	6			Rogan	RB67-0-SK	Thonk	https://www.thonk.co.uk/shop/rogan-buchla/		Fit on all 16mm potentiometers
Switch Cap Red	3			Thonk		Thonk	https://www.thonk.co.uk/shop/switchcaps-mini/		Fit on SW101, SW201, SW301
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.
20awg wire brown 350mm length	1	N		Alpha Wire	892019 BR005	Mouser	602-892019-100-07		EDAC position 6. Order code is for 30.5m reel.
Expandable Sleeving 6mm 300mm	1			Alpha Wire	GRP1301/4 BK007	Mouser	602-130014-S0BK		Fit over power cabling. Order code is for 15.25m reel.
Heatshrink 6.35mm 40mm length	5			Alpha Wire	FIT221V1/4 BK103	Mouser	602-221V014-4		Fit at each end of expandable sleeving
Heatshrink 3.18mm 12mm length	2			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