

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D38,D39, D41	3	1N4148		512-1N4148	IR1SS	Diode
D40	1	BZX85C6V8-TR		625-BZX85C6V8	RD6.8EB3	Zener diode
D42	1	BZX85B15-TR		78-BZX85B15	RD15EB3	Zener diode
D43	1	BZX85C6V2-TR		625-BZX85C6V2	1SZ46A	Zener diode 6.4v (6.2v in RE-303)
IC16	1	LM358P		595-LM358P	AN6562	OpAmp
Q42	1	2SC536F or 2SC945P	rare	-	2SC536	NPN General Purpose Transistor
Q43	1	KSD1616A	included with space cadet	-	2SD667(C)	NPN Bipolar Transistor
Q44	1	KSA916Y	included with space cadet	-	2SB647(C)	PNP Transistor
Q45	1	TIP30C	included with space cadet	-	2SB596(O)	PNP Transistor
R166	1	100K		291-100K-RC	100K	5% Resistor Carbon Film
R167,R169	2	1.5K		291-1.5K-RC	1.5K	5% Resistor Carbon Film
R168	1	use wire jumper	use wire jumper	-	2.7R	fusible resistor, jumpered in re-303
R170	1	22R		291-22-RC	22R	5% Resistor Carbon Film
R171	1	3.3K		291-3.3K-RC	3.3K	5% Resistor Carbon Film
R172	1	100R		291-100-RC	100R	5% Resistor Carbon Film
R173	1	1K		291-1K-RC	1K	5% Resistor Carbon Film
R174	1	5.6K		291-5.6K-RC	5.6K	5% Resistor Carbon Film
R176,R177	2	6.8K		291-6.8K-RC	6.8K	5% Resistor Carbon Film
R178	1	2.2K		291-2.2K-RC	2.2K	5% Resistor Carbon Film
R179	1	1.8K		291-1.8K-RC	1.8K	5% Resistor Carbon Film
R180	1	39K		291-39K-RC	39K	5% Resistor Carbon Film
TM6	1	5K		652-3306F-1-502	4.7K	Trimpot
C1	1	100uF / 6.3v		667-ECE-A0JKA1011	100uF	Electrolytic Capacitor
C60,C61,C64,C65,C67, C70	6	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C63	1	100uF / 50v		667-ECA-1HM101	100uF	Electrolytic Capacitor
C66	1	0.0022uF		QYX1H222KTP	0.0022uF	Film Capacitor
C68,C69	2	47uF / 16v		647-UVR1C470MDD	47uF	Electrolytic Capacitor
VR8	1		included with space cadet	-		potentiometer with switch
DC Socket	1		included with space cadet	-		DC power input socket
Sumida Coil + Adaptor	1		included with space cadet	-		IFT coil & Adapter
Power Supply 9v dc	1	guitar pedal psu, 9v dc center pole negative				https://www.thomann.de/se/thomann_ntac109.htm

Additional, optional
220K or 330K resistor for
dice roll build.

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
R35, R59, R92, R93, R102, R118	6	100K		291-100K-RC	100K	5% Resistor Carbon Film
R34, R36, R101, R105	4	10K		291-10K-RC	10K	5% Resistor Carbon Film
R104, R107	2	2.2K		291-2.2K-RC	2.2K	5% Resistor Carbon Film
R45, R60	2	22K		291-22K-RC	22K	5% Resistor Carbon Film
R103	1	220K		291-220K-RC	220K	5% Resistor Carbon Film
R91	1	1M		291-1M-RC	1M	5% Resistor Carbon Film
R106	1	24K		291-24K-RC	27K	1% Resistor Metal Film
R74 - R90	17	200K		271-200K-RC	200K	.1% selected, 1% used in re-303
R100	2	1K PTC		660-LT1/4LT52R102J39	560 (x1)	PTC Thermistor
TM5	1	5K		652-3306F-1-502	4.7K	Trimpot
TM4	1	50K		652-3306F-1-503	47K	Trimpot
VR2	1	50KB	included with space cadet	-	50KB	potentiometer
D25, D30, D31	3	1N4148		512-1N4148	IR1SS	Diode
C34	1	0.001uF (102)		647-QYX2A102KTP1FD	0.001uF (102)	Film Capacitor
C10, C33	2	0.01uF (103)		647-QYX1H103JTP3TA	0.01uF (2A103K)	Film Capacitor
C35	1	0.22uF (224)		647-QYX1H224KTP	0.22uF (224)	Film Capacitor
C11	1	1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
C31, C32	2	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
Q8, Q27	2	2SA733P	rare	-	2SA733P	BJT PNP Transistor
Q24, Q25, Q29, Q30	4	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
Q28	1	2SK30(O)	rare	-	2SK30(O)	JFET
Q26	1	2SC1583	rare	-	2SC1583	5-SIP matched pair with common emitter
IC12	1	CD4066B		595-CD4066BE	4066	Dual type D flip-flop
IC9	1	CD74AC174		595-CD74AC174E	4174	Hex d-type flip-flop with clear
IC11	1	LM358		595-LM358P	AN6562	8-DIP dual opamp
IC10	1	CD4050B		595-CD4050BE	MC14050B	Hex buffers
waveform switch	1		included with space cadet		unknown	waveform switch

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D24	1	1N4148		512-1N4148	IR1SS	Diode
R95	1	100R		291-100-RC	100R	5% Resistor Carbon Film
R67, R68, R69, R70, R71, R98, R108	7	2.2K		291-2.2K-RC	2.2K	5% Resistor Carbon Film
R47, R61, R64, R65, R94, R96, R97, R109, R112, R115, R116	11	10K		291-10K-RC	10K	5% Resistor Carbon Film
R110, R111	2	22K		291-22K-RC	22K	5% Resistor Carbon Film
R46	1	47K		291-47K-RC	47K	5% Resistor Carbon Film
R66, R72, R73, R99, R113, R114	6	100K		291-100K-RC	100K	5% Resistor Carbon Film
R62, R63	2	220K		291-220K-RC	220K	5% Resistor Carbon Film
TM3	1	500K		652-3306F-1-504	470K	Trimpot
VR3, VR5	2		included with space cadet		50K A LOG	potentiometer
VR4	1		included with space cadet		50K B LIN DUAL	potentiometer
C18	1	0.018uF (183)	*	QYX2A183KTP	0.018uF (2A183K)	Film Capacitor *if missing at mouser dig-key usually has stock
C19, C24, C26	3	0.033uF (333)		647-QYX2A333KTP	0.033uF (2A333K)	Film Capacitor
C25, C27	2	0.1uF (104)		647-QYX1H104JTP	0.1uF (2A104K)	Film Capacitor
C16, C30	2	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C28	1	47uF / 16v		647-UVR1C470MDD	47uF	Electrolytic Capacitor
C13, C14, C15, C17, C22, C23, C29	7	1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
Q9, Q10	2	2SA733P	rare	-	2SA733P	BJT PNP Transistor
Q11, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q23	10	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
Q22	1	2SC2291	rare	-	2SC2291	5-SIP matched pair with common base
Q12, Q21	2	2SC1583	rare	-	2SC1583	5-SIP matched pair with common emitter

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D26, D28, D29, D34, D37	5	1N4148		512-1N4148	IR1SS	Diode
R150	1	22R		291-22-RC	22R	5% Resistor Carbon Film
R152	1	100R		291-100-RC	100R	5% Resistor Carbon Film
R137	1	1K		291-1K-RC	1K	5% Resistor Carbon Film
R142, R143, R144, R145, R148, R149	6	10K		291-10K-RC	10K	5% Resistor Carbon Film
R117, R146, R151	3	22K		291-22K-RC	22K	5% Resistor Carbon Film
R138	1	68K		291-68K-RC	68K	5% Resistor Carbon Film
R139, R140, R141	3	100K		291-100K-RC	100K	5% Resistor Carbon Film
VR6	1		included with space cadet	-	1M	potentiometer
C54	1	0.047uF (473)		647-QYX1H473KTP	0.047uF (2A473K)	Film Capacitor
C62	1	1uF 35v tantalum		80-T350A105K035AT	1uF 35v tantalum	Tantalum capacitor (Note the polarity!)
C72	1	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C55	1	47uF / 16v		647-UVR1C470MDD	47uF	Electrolytic Capacitor
Q36, Q38	2	2SA733P	rare	-	2SA733P	BJT PNP Transistor
Q35, Q37, Q40, Q41	4	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
Q39	1	2SK30AY	rare	-	2SK30	JFET - must be AY
IC13	1	CD4013B		595-CD4013BE	MC14013B	Flip-Flops Dual CMOS

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D27, D35, D36	3	1N4148		512-1N4148	IR1SS	Diode
R130, R132	2	100R		291-100-RC	100R	5% Resistor Carbon Film
R124, R125, R126, R133, R162	5	2.2K		291-2.2K-RC	2.2K	5% Resistor Carbon Film
R120, R129, R134	3	22K		291-22K-RC	22K	5% Resistor Carbon Film
R119, R127	2	47K		291-47K-RC	47K	5% Resistor Carbon Film
R122	1	100K		291-100K-RC	100K	5% Resistor Carbon Film
R121, R128, R131	3	220K		291-220K-RC	220K	5% Resistor Carbon Film
R123	1	1.5M		291-1.5M-RC	1.5M	5% Resistor Carbon Film
VR7	1	50KB	included with space cadet	-	50KB	potentiometer
C20, C21	2	0.01uF (103)		647-QYX1H103JTP3TA	0.01uF (2A103K)	Film Capacitor
C36	1	0.033uF (333)		647-QYX2A333KTP	0.033uF (2A333K)	Film Capacitor
C41	1	0.1uF (104)		647-QYX1H104JTP	0.1uF (2A104K)	Film Capacitor
C38	1	1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
C37, C40	2	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C42	1	1uF 35v tantalum		80-T350A105K035AT	1uF 35v tantalum	Tantalum capacitor (Note the polarity!)
Q31	1	2SA733P	rare	-	2SA733P	BJT PNP Transistor
Q32	1	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
IC15	1	BA662 CLOWN	shop.re-303.com or www.openmusiclabs.com	-	BA662A	OTA IC
OPTIONAL FOR BA662 CLOWN						
trimmer	R3	install before fitting VCA to mainboard		3223J-1-503ECT-ND		
resistor	R4	Trimmer, Top Adjust		311-10MGRCT-ND		
		Chip Resistor (on back of PCB)				

PART	AMOUNTRE-303	SUPPLIER	MOUSER	TB-303	NOTES
D32, D33	2 1N4148		512-1N4148	IR1SS	Diode
R163, R164	2 10R		291-10-RC	10R	5% Resistor Carbon Film
R136	1 100R		291-100-RC	100R	5% Resistor Carbon Film
R161	1 1K		291-1K-RC	1K	5% Resistor Carbon Film
R135	1 4.7K		291-4.7K-RC	4.7K	5% Resistor Carbon Film
R157, R158, R160	3 10K		291-10K-RC	10K	5% Resistor Carbon Film
R159	1 33K		291-33K-RC	33K	5% Resistor Carbon Film
R155	1 47K		291-47K-RC	47K	5% Resistor Carbon Film
R153, R154, R156, R165	4 100K		291-100K-RC	100K	5% Resistor Carbon Film
C47	1 0.0068uF (682)		647-QYX1H682KTP	0.0068uF (2A682K)	Film Capacitor
C46	1 0.01uF (103)		647-QYX1H103JTP3TA	0.01uF (2A103K)	Film Capacitor
C45	1 0.068uF (683)		647-QYX1H683KTP3TA	0.068uF (2A683K)	Film Capacitor
C56, C58, C59	3 1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
C51	1 2.2uF / 100v		647-UVR2A2R2MDD	2.2uF	Electrolytic Capacitor
C50, C52	2 10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C44, C53	2 47uF / 16v		647-UVR1C470MDD	47uF	Electrolytic Capacitor
C48, C49	2 100uF / 25v		667-EEU-EB1E101S	100uF	Electrolytic Capacitor
C43	1 1000uF / 10v		667-EEU-FC1A102LJ	1000uF	Electrolytic Capacitor
Q33	1 2SA733P	rare	-	2SA733P	BJT PNP Transistor
Q34	1 2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
IC14	1 LA4140	rare	-	LA4140	AF Power amp

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D1, D2, D3, D4, D6, D7, D8, D9, D10, D11, D12,		1N4148				
D13, D14, D15, D16, D17, D18, D19, D20, D21, D22	21	1N4148		512-1N4148	IR1SS	Diode
D23	1	1N4001		583-1N4001-B	S-5500G	400V/1A rectifier diode
R28	1	22R		291-22-RC	22R	5% Resistor Carbon Film
R2, R3	2	1K		291-1K-RC	1K	5% Resistor Carbon Film
R39, R40, R41, R44, R181	5	3.3K		291-3.3K-RC	3.3K	5% Resistor Carbon Film
R7, R12, R22	3	10K		291-10K-RC	10K	5% Resistor Carbon Film
R8, R14, R48, R51, R52, R53, R54, R55, R56, R57, R58	11	15K		291-15K-RC	15K	5% Resistor Carbon Film
R13, R23, R33, R182	4	22K		291-22K-RC	22K	5% Resistor Carbon Film
R6, R9, R11, R15, R20, R32, R38	7	33K		291-33K-RC	33K	5% Resistor Carbon Film
R18, R19, R24, R25, R26, R27, R31, R42, R43, R49, R50	11	47K		291-47K-RC	47K	5% Resistor Carbon Film
R10, R16, R17, R30	4	100K		291-100K-RC	100K	5% Resistor Carbon Film
R37	1	120K		291-120K-RC	120K	5% Resistor Carbon Film
R4, R5	2	470K		291-470K-RC	470K	5% Resistor Carbon Film
R1, R21	2	1M		291-1M-RC	1M	5% Resistor Carbon Film
R29	1	1.5M		291-1.5M-RC	1.5M	5% Resistor Carbon Film
C57	1	100uF / 25v		667-EEU-EB1E101S	100uF	Electrolytic Capacitor
C5, C6	2	1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
C71	1	10uF / 16v		647-UVR1C100MDD	10uF	Electrolytic Capacitor
C2, C4	2	220pF		140-50P2-221K-RC	220pF	Ceramic Capacitor
C9	1	0.001uF (102)		647-QYX2A102KTP1FD	0.001uF (102)	Film Capacitor
C7	1	0.039uF (393)	*	QYX1H393JTP	0.039uF (393)	Film Capacitor *if missing at mouser dig-key usually has stock
C3, C12	2	0.01uF (103)		647-QYX1H103JTP3TA	0.01uF (103)	Film Capacitor
C8	1	0.033uF (333)		647-QYX2A333KTP	0.033uF (2A333K)	Film Capacitor
Q1, Q2, Q3, Q4, Q7	5	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
Q5, Q6	2	2SA733P	rare	-	2SA733P	BJT PNP Transistor
IC1	1	CD4013B		595-CD4013BE	MC4013B	Dual Type D Flip-flop
IC2	1	CD4556B		595-CD4556BE	MC14556B	Dual binary to 1-of-4 decoder/demultiplexer
IC3, IC4, IC5	3	uPD444C	rare		uPD444C	CMOS RAM (only needed with original CPU)
IC6	1	CD40106B		595-CD40106BE	HD14584B	Hex schmitt trigger
IC7	1	CD4001B		595-CD4001BE	MC14001BCP	Quad 2-input NOR gate
IC8	1	CPU, original or aftermarket 3rd party.		-	uPCD650C-133	CPU, original or aftermarket 3rd party.
TM1	1	250K		652-3306F-1-254	220K	Trimpot (tempo)
TM2	1	500K		652-3306F-1-504	470K	Trimpot (internal clock)
VR1	1		included with space cadet	-	1M	potentiometer
IFT(Y)	1	S74230(yellow)	rare	-	S74230(yellow)	IFT coil CPU clock

PART	AMOUNT	RE-303	SUPPLIER	MOUSER	TB-303	NOTES
D201, D202, D203, D204, D205, D206, D207,	-			-		-
D208, D209, D210, D211, D212, D213, D214,	-			-		-
D215, D216, D217, D218, D219, D220, D221	21	LED 3mm, diffused		859-LTL-1CHE	unknown	LED 3mm
D222, D223, D224, D225, D227, D228, D229, D230, D231, D234, D235	11	1N4148		512-1N4148	IR1SS	Diode
D226, D232, D233, D236	4	1N4001		583-1N4001-B	S-5500G	400V/1A rectifier diode
R210, R211, R216, R217	4	100R		291-100-RC	100R	5% Resistor Carbon Film
R204, R206, R208, R220, R225	5	680R		291-680-RC	680R	5% Resistor Carbon Film
R207	1	1.8K		291-1.8K-RC	1.8K	5% Resistor Carbon Film
R209, R222, R224, R226	4	2.2K		291-2.2K-RC	2.2K	5% Resistor Carbon Film
R212, R213, R214, R215	4	3.3K		291-3.3K-RC	3.3K	5% Resistor Carbon Film
R203	1	10K		291-10K-RC	10K	5% Resistor Carbon Film
R218, R219, R223	3	15K		291-15K-RC	15K	5% Resistor Carbon Film
R201, R202, R205, R221, R227	5	47K		291-47K-RC	47K	5% Resistor Carbon Film
C201, C202, C203, C205, C206	4	1uF / 50v		647-UVR1H010MDD	1uF	Electrolytic Capacitor
C204	1	100uf / 6.3v		667-ECA-0JM101	100uF	Electrolytic Capacitor
Q201, Q202, Q205, Q206, Q207, Q208, Q210, Q214	8	2SC2603 or alt. small form ecb NPN	rare	-	2SC2021R	NPN transistor
Q204	1	2SC536F or 2SC945P	rare	-	2SC536F	NPN transistor
Q203, Q209, Q211, Q212, Q213	5	2SA1115 or alt. small form ecb PNP	rare	-	2SA937Q	PNP Transistor
S4, S5, S6, S7, S8, S9, S10, S11,	-			-		-
S12, S13, S14, S15, S16, S17, S18, S19,	-			-		-
S20, S21, S22, S23, S24, S25, S26, S27	24	SKHCBEA010 (original) or 688-SKQEAA (sealed)		688-SKQEAA	SKHCBEA010	Tact Switch
LED STANDOFF	23	6mm LED standoff. do not place on D202		749-ELM-4-6MM	unknown	generic
STANDOFF	3	nylon locking standoff		534-8812	unknown	generic
din socket w/switch	1	obsolete		-	unknown	this part must be fabricated with a standard 5 pin DIN and a DPDT switch. SDS-50J might be a good candidate