



**Column 1 - VCO Core [ASM325 - VCO II Component Kit]**

Item	Description	Qty	Designator	Package
	<b>CAPACITOR</b>			
1	Do Not Fit	1	C405	-
2	18pF 5% Ceramic	1	C203	RAD-0.2N
3	100pF 5% Ceramic	1	C201	RAD-0.2N
4	2200pF 2.5% Polystyrene	1	C202	AXIAL-0.6
5	100nF 63V Polyester	1	C204	RAD-0.2
6	100nF Ceramic	4	C401, C402, C403, C404	RAD-0.2N
	<b>CONNECTOR</b>			
7	1x4 Pin 9mm Header	1	J202	2.54MM
8	1x2 Pin 9mm Header	2	JP100, JP101	2.54MM
9	8-pin IC Socket 0.3inch	5	Q201, U101, U201, U202, U203	DIP-8
10	Jumper Shunt	2	JP100, JP101	2.54MM
11	1x4 Pin 16mm Header	1	J101	-
12	IDC16 RA Box Header	1	J402	2.54MM
	<b>DIODE</b>			
13	1N4148	2	D201, D202	DIODE-0.3
	<b>LINEAR</b>			
14	LM311 - Comparator	1	U202	DIP-8
15	CA3140 Opamp	1	U201	DIP-8
16	OP07 - Opamp	1	U101	DIP-8
17	LT1013CP - Dual Precision Opamp	1	U203	DIP-8
	<b>POTENTIOMETER</b>			
18	100KB LIN - 18T Spline	3	P103, P104, P105	ALPHA 16MM
	<b>RESISTOR</b>			
19	TEMPCO - PT146 1K 3500ppm	1	Q201	AXIAL-0.5
20	0R Resistor	1	R401	AXIAL-0.4
21	47R 1% 0.5W Metal Film	1	R108	AXIAL-0.4

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Item	Description	Qty	Designator	Package
	<b>RESISTOR - continued</b>			
22	680R 1% 0.5W Metal Film	1	R206	AXIAL-0.4
23	3K3 1% 0.5W Metal Film	1	R208	AXIAL-0.4
24	10K 1% 0.5W Metal Film	2	R202, R209	AXIAL-0.4
25	13K 1% 0.5W Metal Film	1	R210	AXIAL-0.4
26	15K 1% 0.5W Metal Film	2	R105, R207	AXIAL-0.4
27	47K 1% 0.5W Metal Film	1	R215	AXIAL-0.4
28	56K 1% 0.5W Metal Film	1	R107	AXIAL-0.4
29	91K 1% 0.5W Metal Film	1	R106	AXIAL-0.4
30	100K 1% 0.5W Metal Film	6	R101, R103, R204, R212, R213, R216	AXIAL-0.4
31	100K 0.1% Metal Film	1	R104	AXIAL-0.4
32	150K 1% 0.5W Metal Film	1	R102	AXIAL-0.4
33	887K 1% 0.5W Metal Film	1	R201	AXIAL-0.4
34	1M0 1% 0.5W Metal Film	1	R211	AXIAL-0.4
35	1M5 1% 0.5W Metal Film	1	R109	AXIAL-0.4
	<b>TRANSISTOR</b>			
36	LS312 - Dual Matched NPN Transistors	1	Q201 NB: Marked as LS31F	DIP-8
37	2N3904 NPN Transistor	1	Q203	TO-92
38	J108 JFET	1	Q202	TO-92
	<b>TRIMPOT</b>			
39	10K MTH Cermet	1	P102	T93XA
40	50K MTV Cermet	1	P201	T93YA
41	100K MTH Cermet	1	P101	T93XA

**Column 2 - WaveShaper [ASM325 - VCO II Component Kit]**

Item	Description	Qty	Designator	Package
	<b>CAPACITOR</b>			
1	Do Not Fit	1	C401	-
2	10pF 5% Ceramic	2	C201, C202 NB: See modification	RAD-0.2N
3	180pF 5% Ceramic	1	C301	RAD-0.2N
4	100nF Ceramic	4	C403, C404, C405, C406	RAD-0.2N
	<b>CONNECTOR</b>			
5	1x4 Pin 9mm Header	1	J203	2.54MM
6	14-pin IC Socket 0.3inch	1	U201	DIP-14
7	8-pin IC Socket 0.3inch	1	U302	DIP-8
8	1x4 Pin 16mm Header	2	J101, J202	-
9	16-pin IC Socket 0.3inch	1	U301	DIP-16
10	IDC10 RA Box Header	1	J2	-
	<b>DIODE</b>			
11	BAT48 Schottky Diode	2	D301, D302	DIODE-0.3
	<b>LINEAR</b>			
12	TL072 Dual JFET Opamp	1	U302	DIP-8
13	LM13700 - Dual OTA	1	U301	DIP-16
14	TL074 Quad JFET Opamp	1	U201	DIP-14
	<b>POTENTIOMETER</b>			
15	100KB LIN - 18T Spline	2	P202, P203	ALPHA 16MM
	<b>RESISTOR</b>			
16	0R Resistor	2	R199, R401	AXIAL-0.4
17	330R 1% 0.5W Metal Film	1	R318	AXIAL-0.4
18	680R 1% 0.5W Metal Film	5	R209, R210, R211, R309, R321	AXIAL-0.4
19	1K0 1% 0.5W Metal Film	1	R312	AXIAL-0.4
20	2K0 1% 0.5W Metal Film	1	R208	AXIAL-0.4
21	2K2 1% 0.5W Metal Film	1	R205	AXIAL-0.4



**Backboard - Power [ASM325 - VCO II Component Kit]**

Item	Description	Qty	Designator	Package
<b>CAPACITOR</b>				
1	1uF 35V Tantalum	2	C3, C6	RB-D5.0-P5.0
2	10uF 35V Electrolytic	4	C1, C2, C4, C5	RB-D5.0-P2.0
<b>CONNECTOR</b>				
3	IDC10 Receptacle	1	J2	2.54MM
4	IDC10 Box Header	1	J3	2.54MM
5	IDC16 Receptacle	1	J1	2.54MM
<b>DIODE</b>				
6	1N4004 200V 1A	4	D1, D2, D3, D4	DIODE-0.4
<b>LINEAR</b>				
7	LM317LZ - Adjustable Positive Voltage Regulator	1	U1	TO-92
8	LM337LZ - Adjustable Negative Voltage Regulator	1	U2	TO-92
<b>INDUCTOR</b>				
9	Ferrite Bead - 5A	2	L1, L2	AXIAL-0.3
<b>RESISTOR</b>				
10	240R 1% 0.5W Metal Film	2	R2, R4	AXIAL-0.4
11	1K4 1% 0.5W Metal Film	2	R1, R3	AXIAL-0.4
<b>TRIMPOT</b>				
12	200R MTV Cermet	2	P1, P2	T93YA
<b>UNITS</b>				
13	Panther - IDC16-10 - 24cm	1	J3	-





