

L-1 SYNTH

Vocoder filterbank capacitors (film 5mm spacing)

Really no matter how to distribute channels between boards but to save good functionality with any quantities of filterbank boards I've distributed so:

board	channels
1	1, 5, 9, 13, 17, 21
2	2, 6, 10, 14, 18, 22
3	3, 7, 11, 15, 19, 23
4	4, 8, 12, 16, 20, 24

Quantity per channel: **C1 – 8, C2 – 1.**

These capacitors don't listed into next page of the partslist, only here.

Channels differ only with these capacitors values, other parts are identical.

Lead spacing – 5mm.

Channel	C1	C2
1.	47n	0.33uF
2.	39n	0.33uF
3.	33n	0.22uF
4.	27n	0.22uF
5.	22n	0.15uF
6.	18n	0.15uF
7.	15n	0.1uF
8.	12n	0.1uF
9.	10n	68n
10.	8n2	68n
11.	6n8	47n
12.	5n6	47n
13.	4n7	33n
14.	3n9	33n
15.	3n3	22n
16.	2n7	22n
17.	2n2	15n
18.	1n8	15n
19.	1n5	10n
20.	1n2	10n
21.	1n	6n8
22.	820p	6n8
23.	680p	4n7
24.	560p	4n7

	Buy in Tayda. Accutronics (grey ones) http://www.taydaelectronics.com/capacitors/polyester-film-box-type-capacitors.html
	Included in Mouser cart

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Vocoder filterbank board– Parts list. (4 BOARDS TOTAL, so multiply everything on 4)

All parts not higher than 10mm to fit into 12mm between boards.

Qty	Value	Package	Comments	Parts	Farnell code
IC's					
6	TL074	DIL14		IC1, IC2, IC3, IC4, IC5, IC6	1256325
6	THAT4301	DIL20		U1, U2, U3, U4, U5, U6	1354170
3	THAT300	DIL14		Q1, Q2, Q3	1354175
Capacitors					
12	47p	5mm	ceramic	C114, C115, C214, C215, C314, C315, C414, C415, C514, C515, C614, C615	1216413
6	100p	5mm	ceramic	C113, C213, C313, C413, C513, C613	1216414
24	0.1uF	1206	ceramic, power decoupling caps	C116, C117, C118, C119, C216, C217, C218, C219, C316, C317, C318, C319, C416, C417, C418, C419, C516, C517, C518, C519, C616, C617, C618, C619	1759361
6	2.2uF	2.5mm	electrolyth (tantal preferred)	C112, C212, C312, C412, C512, C612	1457578
2	22uF	2.5mm	electrolyth	C1, C2	1165527
12	47uF	2.5mm	electrolyth	C105, C111, C205, C211, C305, C311, C405, C411, C505, C511, C605, C611	1165523
Resistors					
2	ferrite bead			R1, R2	
6	51	0.25W through-hole		R125, R225, R325, R425, R525, R625	9342044
6	200	0.25W through-hole		R124, R224, R324, R424, R524, R624	9341471
12	1K	0.25W through-hole		R107, R115, R207, R215, R307, R315, R407, R415, R507, R515, R607, R615	9341102
12	1K3	0.25W through-hole		R105, R113, R205, R213, R305, R313, R405, R413, R505, R513, R605, R613	9341277
12	1K5	0.25W through-hole		R102, R110, R202, R210, R302, R310, R402, R410, R502, R510, R602, R610	9341323
6	2K	0.25W through-hole		R121, R221, R321, R421, R521, R621	9341480
6	2K (tempco)	0805 SMD	do not install	R121-1, R221-1, R321-1, R421-1, R521-1, R621-1	1174317
6	3K	0.25W through-hole		R123, R223, R323, R423, R523, R623	9341692

6	4K99	0.25W through-hole		R117, R217, R317, R417, R517, R617	9468722
12	10K	0.25W through-hole		R108, R120, R208, R220, R308, R320, R408, R420, R508, R520, R608, R620	9341110
6	20K	0.25W through-hole		R126, R226, R326, R426, R526, R626	9341498
6	56K	0.25W through-hole		R112, R212, R312, R412, R512, R612	9342079
6	68K	0.25W through-hole		R109, R209, R309, R409, R509, R609	9342176
6	100K	0.25W through-hole		R104, R204, R304, R404, R504, R604	9341129
6	150K	0.25W through-hole		R101, R201, R301, R401, R501, R601	9341340
6	160K	0.25W through-hole		R122, R222, R322, R422, R522, R622	9341404
6	220K	0.25W through-hole		R118, R218, R318, R418, R518, R618	9341552
6	560K	0.25W through-hole		R114, R214, R314, R414, R514, R614	9342087
6	620K	0.25W through-hole		R106, R206, R306, R406, R506, R606	9342133
6	680K	0.25W through-hole		R111, R211, R311, R411, R511, R611	9342184
6	750K	0.25W through-hole		R103, R203, R303, R403, R503, R603	9342249
6	1M	0.25W through-hole		R119, R219, R319, R419, R519, R619	9341137
6	2M	0.25W through-hole		R116, R216, R316, R416, R516, R616	9466878
Trimpots					
6	100K		optional gain trimpots	T101, T201, T301, T401, T501, T601	9355294
Other					
1	Samtec connector	6-pin	ESQ-106-13-G-S		1769276
4	Spacer 12mm				1466845

	Buy in Tayda. http://www.taydaelectronics.com/stackable-header-6-pins-2-54mm.html
	Included in Mouser cart
	Included in kit
	THAT chips