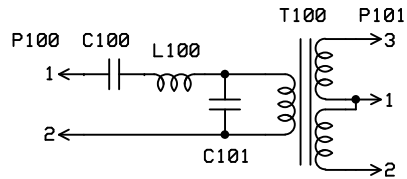


BPF module



Band specific values

Bands	C100	C101	L100	T100
160m	390pF	5600pF	18.7uH, T30-2(red) core 66T #30 AWG	1.4uH(primary), T30-2(red) core 18T #30 AWG on primary 9T #30 AWG on each bifilar secondary
80m/40m	560pF	680pF	1.6uH, T25-2(red) core 22T #30 AWG	1.2uH(primary), T25-2(red) core 18T #30 AWG on primary 9T #30 AWG on each bifilar secondary
30m/20m/17m	180pF	220pF	0.78uH, T25-6(yellow) core 17T #30 AWG	0.6uH(primary), T25-6(yellow) core 14T #30 AWG on primary 7T #30 AWG on each bifilar secondary
15m/12m/10m	82pF	330pF	0.53uH, T25-6(yellow) core 14T #30 AWG	0.13uH(primary), T25-6(yellow) core 7T #30 AWG on primary 4T #30 AWG on each bifilar secondary

Bill of Materials for Lite+USB Xtall v9.0

Resistors	Used where	Quantity
68 1/6W	R1, R3	2
1.0M 1/6W	R2	1
2.2k 1/6W	R4	1
4.7k 1/6W	R5	1
1.00k 1%	R6, R7, R15, R16	4
100 1/6W	R8, R12, R21, R22	4
10.0k 1%	R9, R10, R11	3
10.0 1%	R13, R14, R17, R18	4
4.99k 1%	R19, R20	2
Capacitors	Used where	Quantity
4.7uF ceramic	C1, C4, C5, C11, C14, C20, C24	7
0.1uF, SMT1206	C2, C3, C6, C7, C8, C9, C10, C25, C28, C31, C32	11 (black marked strip)
0.01uF, SMT1206	C12, C13, C15, C16, C17, C18, C21, C22, C23	9
0.01uF ceramic	C19	1
0.047uF ceramic	C26, C27	2
220pF ceramic	C29, C30	2
Ferrite filter, size 1206 SMT (gray)	FL1, FL2, FL3, FL4, FL5	5
Diodes and Transistors	Used where	Quantity
1N4003	D1	1
BZX55C3V6	D2, D3	2
ICs	Used where	Quantity
LM7805	U1 on top of board	1
ATTiny45-20PU & socket	U2 on top of board	1, (USB Synth code)
LP2992AIM5-3.3v	U3 on bottom of board	1
Si570, (LVDS or CMOS)	U4 on bottom of board	1
FIN1002 (Not used with CMOS Si570.)		
74AC74, SOIC14	U5 on bottom of board	1
FST3253, SOIC16	U6 on bottom of board	1
LT6231, SOIC8	U7 on bottom of board	1
Connectors and cables	Used where	Quantity
9-pin socket	J1	1
3-pin socket	J2	1
2-pin header	J3	1
USB cable, 3 foot long		1
Circuit board	Quantity	
Lite+USB Xtall v9.0	1	
Hardware	Quantity	
4-40 3/8 inch machine screw	5	
4-40 hex nut	5	
#4 star lock washer	1	
#4 1/8 inch nylon spacer	4	
#4 nylon washer	4	

Bill of Materials for each BPF module

Capacitors	Used where	Quantity
ceramic capacitor	C100	1(see band specific value)
ceramic capacitor	C101	1(see band specific value)
Inductors/transformers		
Toroid inductor	L100	1(see band specific value)
Toroid transformer	T100	1(see band specific value)
Connectors	Used where	Quantity
2-pin header	P100	1
3-pin header	P101	1
Circuit board	Quantity	
Lite+Xtall BPF board	1	

SoftRock Projects

SoftRock Lite+USB Xtall v9.0

Tony KB9YIG

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Page 2 of 3