

**Bill of materials for SoftRock v6 RXTX board, 40m**

Tony, KB9YIG, 10/26/06

	<b>used where</b>	<b>quantity</b>	
<b>Resistors</b>			
49.9k, 1/4W, 1%	R1, R7	2	
10k, 1/4 W, 1%	R2, R4, R5, R8, R10, R11, R29, R30, R34, R35, R45, R46	12	
49.9, 1/4 W, 1%	R3, R6, R9, R12	4	
2.21k, 1/4 W, 1%	R13, R14, R18, R26	4	
3.32k, 1/4 W, 1%	R15	1	
1.5k, 1/4 W, 1%	R16	1	
22.1, 1/4 W, 1%	R17	1	
475, 1/4 W, 1%	R19, R23	2	
68.1, 1/4 W, 1%	R20	1	
15.0, 1/4 W, 1%	R21	1	
1k pot	R22	1	
1.0, 1/2 W, 5%	R24	1	
4.99k, 1/4 W, 1%	R25, R27, R28, R42, R43	5	
221, 1/4 W, 1%	R31	1	
22.1k, 1/4 W, 1%	R32, R33, R50 (if needed)	3	
omit	R34	1	
10.0, 1/4 W, 1%	R36, R37, R40, R41, R44	5	
1.00k, 1/4 W, 1%	R38, R39, R48	3	
499, 1/4 W, 1%	R47, R49	2	
<b>Capacitors</b>	<b>used where</b>	<b>quantity</b>	
0.001uF, ceramic, 10%	C1, C8	2	
10uF/16 VDC Electrolytic	C4, C6, C11, C13, C15, C16, C23, C31, C32, C33, C34		
	C35, C36, C37, C38, C39, C40, C45, C46	19	
100pF, ceramic, 5%	C3, C10, C51	3	
0.022uF, ceramic, 5%	C5, C7, C12, C14	4	
1500pF, ceramic, 5%	C17, C19, C26, C28, C30, C42, C44	7	
120pF, ceramic, 5%	C18, C43	2	
0.01uF, ceramic, 10%	C20, C21, C25	3	
0.1uF, ceramic, 10%	C2, C9, C22, C24	4	
56pF, ceramic, 5%	C27	1	
180pF, ceramic, 5%	C29	1	
0.033uF, ceramic, 10%	C41	1	
0.047uF, ceramic, 5%	C47, C48	2	
220pF, ceramic, 5%	C49, C50	2	
omit	C52	1	
22pF, ceramic, 5%	C53	1	
0.1uF, smt 1206	C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65	21	one spare provided in kit
	C66, C67, C68, C69, C70, C71, C72, C73, C74		
<b>Inductor / transformer cores and wire</b>	<b>used where</b>	<b>quantity</b>	
T25-2	L1, L2, L6, L7	4	
T30-2	L4, L5, T1, T3	4	
BN-43-2402	RFC1, RFC2, T2	3	
FT3743	L3	1	
#26 magnet wire	L3, L4, L5, RFC1, RFC2	8 feet	
#30 magnet wire	L1, L2, L6, L7, T1, T2, T3	8 feet	
<b>Crystals</b>	<b>used where</b>	<b>quantity</b>	
28.06 MHz, 28.224 MHz, 28.636 MHz	X1	1	one of each in beta kit
<b>Integrated circuits</b>	<b>used where</b>	<b>quantity</b>	
TLC2262CD op-amp, SOIC 8	U1, U2	2	
FST3253, SOIC 16	U3, U7	2	
78L05 voltage reg., TO92	U4	1	
74HC74, SOIC 14	U5, U6	2	
OPA2228UA or LTC6241IS8 dual op-amp, SOIC 8	U8	1	
<b>Transistors</b>	<b>used where</b>	<b>quantity</b>	
2N2222, TO18	Q1	1	
2N3866, TO39	Q2	1	
2N3904 NPN, TO92	Q3, Q5, Q7, Q8	4	
2N3906 PNP, TO92	Q4, Q9	2	
2N7000 FET, TO92	Q6	1	
<b>Diodes</b>	<b>used where</b>	<b>quantity</b>	
1N4148	D1, D3	2	
1N4003	D2	1	
<b>Connectors</b>	<b>used where</b>	<b>quantity</b>	
three-pin header, 0.1 inch centers	JP2	1	
jumper plug	JP2	1	
<b>Circuit boards</b>	<b>used where</b>	<b>quantity</b>	
v6 RXTX	v6 RXTX circuit board	1	
<b>Hardware</b>	<b>used where</b>	<b>quantity</b>	
3/8 inch 4-40 pan head phillips machine screw	mounting hardware for board	4	
4-40 hex nut	board stack	4	
1/8 inch #4 nylon spacer	board stack	4	
#4 nylon washer	board stack	4	
TO18 heat sink	Q1 heat sink	1	
TO39 heat sink	Q2 heat sink	1	