

SoftRock RXTX Ensemble Transceiver Kit

Bill of Material

Circuit Board

	1	SoftRock RXTX Ensemble Circuit Board
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ICs

	1	Si570
	1	LP2992AIM5-3.3 (LFEA)
	1	74AC74
	2	TLV2462
	1	LT6231
	2	FST3253
	1	78L05
	8	BS170

Capacitors

	17	10 μ F
	7	4.7 μ F 10%
	4	0.022 μ F 10%
	2	82pF 5%
	1	47pF 5%
	6	220pF 5%
	1	4700pF 5%
	2	0.047 μ F 10%
	1	560pF 5%
	1	22pF 5%
	3	1000pF 5%
	2	2200pF 5%
	1	270pF 5%
	4	100pF 5%
	1	680pF 5%
	3	470pF 5%
	1	180pF 5%
	2	150pF 5%
	1	820pF 5%
	11	0.01 μ F (1206 SMT)
	2	390pF 5%
	22	0.1 μ F (1206 SMT -- ink mark on back of strips)

	1	10,000pF 10%
	2	330pF 5%
	1	5600pF 10%

Resistors/Diodes/Transistors/Firmware

	1	ATTiny85 programmed with v15.12 code
	1	8-pin DIP socket
	1	LTV817
	2	1N4003
	2	BZX55C3V3
	1	2N222A
	2	2N3904
	2	2N3906
	11	10.0k Ω 1/4W 1%
	8	49.9 Ω 1/4W 1%
	1	1.0M Ω 1/6W 5%
	1	3.32k Ω 1/4W 1%
	5	2.21k Ω 1/4W 1%
	3	221 Ω 1/4W 1%
	2	100 Ω 1/6W 5%
	4	10.0 Ω 1/4W 1%
	1	68.1 Ω 1/4W 1%
	4	2.2k Ω 1/6W 5%
	1	33.2 Ω 1/4W 1%
	1	22.1 Ω 1/4W 1%
	3	4.7k Ω 1/6W 5%
	4	68 Ω 1/6W 5%
	5	4.99k Ω 1/4W 1%
	3	22.1k Ω 1/4W 1%
	1	56.2 Ω 1/4W 1%
	2	2.2 Ω 1/4W 5%
	2	475 Ω 1/4W 1%
	3	1.00k Ω 1/4W 1%

Connectors

	1	BNC jack
	1	2.5mm power jack
	1	2.5mm power plug
	1	USB jack
	3	3.5mm audio jack

Hardware

	5	#4 nylon washer
	4	4-40x1/2in. screw
	4	4-40 hex nut
	4	#4x1/4in. nylon spacer
	1	6-32 hex nut
	1	6-22x1/2in. screw
	1	#6 lock washer
	1	TO-18 heat sink
	1	TO-220 heat sink

Cores/Wire

	4	T30-2 core (0.3inch OD, red)
	2	T30-6 core (0.3inch OD, yellow)
	2	T25-2 core (0.25inch OD, red)
	2	T25-6 core (0.25inch OD, yellow)
	2	T37-2 core (0.37inch OD, red)
	2	T37-6 core (0.37inch OD, yellow)
	5	BN-43-2402 binocular core
	3	BN-61-2402 binocular core
	1	TO-220 Sil-pad
	≈22ft.	#30 magnet wire
	≈10ft.	#26 magnet wire