

Bill of Material: Neuralynx Small Animal XMTR PCB								
File Name: S+SNEURALYNX\DESIGN\BOM_SMALL_ANIMAL_XMTR_REVX2_FCC.XLS								
DATE: 12/09/05								
ITEM	DESCRIPTION	PACKAGE	QUANTITY	REFERENCE DESIGNATOR	VENDOR	PART NUMBER	ORDER QUANTITY	COMMENTS
1	Circuit Board		1		S+S	Small_Animal_Xmtr_RevX1.PC		
2	Resistor, 100, 5%, 1/16W	0402	1	R19	Digikey	P100JTR	10000	
3	Resistor, 240, 5%, 1/16W	0402	4	R5,R7,R11,R15	Digikey	P240JTR	10000	
4	Resistor, 360, 5%, 1/16W	0402	4	R3,R6,R10,R14	Digikey	P360JTR		
5	Resistor, 4.7k, 5%, 1/16W	0402	10	R1,R2,R4,R8,R9,R12,R13,R16,R17,R18	Digikey	P4.7KJTR	10000	
6	Resistor, 10k, Variable	0402	4	R22,R27,R40,R41	Digikey	3302W-103ECT	3000	Alt 3302E-103ECT
7	Resistor, 100k, 5%, 1/16W	0402	4	R28,R29,R30,R31	Digikey	P100KJTR	10000	
8	Resistor, 249k, 1%, 1/16W	0402	4	R32,R33,R34,R35	Digikey	P249KLTR	10000	
9	Resistor, 1MEG, 1%, 1/16W	0402	8	R23,R24,R25,R26,R36,R37,R38,R39	Digikey	P1.00MLTR	10000	
10	Capacitor, NP0, 2pf, +/- .25pf, 50V	0402	4	C4,C11,C18,C25	Digikey	PCC020CQTR	10000	
11	Capacitor, NP0, 3pf, +/- .25pf, 50V	0402	5	C2,C13,C20,C27,C34	Digikey	PCC030CQTR	10000	
12	Capacitor, NP0, 5.6pf, +/- .25pf, 50V	0402	4	C3,C12,C19,C26	Digikey	478-1067-1		Cut tape part number, 478-1067-2 is the T/R part number
13	Capacitor, NP0, 7pf, +/- .5pf, 50V	0402	2	C32,C33	Digikey	PCC070CQTR	10000	
14	Capacitor, NP0, 100pf, 5%, 50V	0402	4	C7,C9,C16,C23	Digikey	PCC101CQTR	10000	Alt 478-1082-2 (AVX)
15	Capacitor, NP0, 220pf, 5%, 50V	0402	15	C5,C6,C8,C14,C15,C21,C22,C28,C29,C30,C31,C36,C42	Digikey	PCC221CQTR	10000	Alt 478-1086-2 (AVX)
16	Capacitor, Film, .01uf, 5%, 16V	0805	4	C38,C39,C40,C41	Digikey	PCF1076TR-ND	3000	
17	Capacitor, X5R, 1uf, 10%, 10V	0603	2	C35,C37	Digikey	PCC2174TR	4000	Alt PCC2224TR
18	Inductor, 3.3nh, 2%, 700ma	0402	4	L3,L4,L5,L6	Coilcraft	0402CS-3N3XGL	2000	1-800-322-2654 Headquarters, 1-972-248-3575 Dallas
19	Inductor, 5.6nh, 5%, 700ma	0402	1	L2	Coilcraft	0402CS-5N6XJL	2000	1-800-322-2654 Headquarters, 1-972-248-3575 Dallas
20	Inductor, 22nh, 5%, 700ma	0402	1	L1	Coilcraft	0402CS-22NXJL	2000	
21	Transistor, NPN, RF	SOT323	5	Q1,Q2,Q3,Q4,Q5	Digikey	NE85619TR	3000	Alt NE85830TR or Philips BFS520
22	Saw Resonator, 917 MHz	SMDODD	1	X1	Epson	NS-32R917.0000M		
23	Saw Resonator, 918 MHz	SMDODD	1	X2	Epson	NS-32R918.0000M		
24	Saw Resonator, 919 MHz	SMDODD	1	X3	Epson	NS-32R919.0000M		
25	Saw Resonator, 920 MHz	SMDODD	1	X4	Epson	NS-32R920.0000M		
26								
27	Regulator Linear LDO, 3.3V, 2.5%, 200ma	SOT23-5	1	U1	Digikey	TC10553.3VCT713TR	3000	LP2985AIM5-3.3TR
28	Diode, Variable Capacitance, .6pf	SMD	4	D1,D2,D3,D4	Microsemi	KV1993A-350A	100	Suntech Marketing, Joe Corvino 1-480-221-9230
29								Alt Sprague GVD90009-015, Saguaro Technical Sales, 1-480-326-8476
30	IC, Op-amp, Single	SC70-5	4	U3,U4,U5,U6	Digikey	LMV821M7TR	1000	
31	Header, 11 pin male, .050"		1	P1 and P2	Digikey	ED8450	10 50 pin sticks	Use 11 pins from the stick of 50
32	Antenna Pin		1		Millmax	EIB-27M		Install Millmax pin in antenna hole so pin is on same side of PCB as the connector
			104					