

BOM- TX-9560 Main Board, PCB Level Assembly				Document	Revision	Description	Date - Eng.		Long Range Systems, LLC 4550 Excel Parkway Suite 200 Addison, TX 75001	
Part Number- 97-0088				BOM	C5	SEE 99-LEVELS	3/19/13 KB			
				PCB AW	C	Add R34	04-09-2012 T.R.B.			
Item	Quantity	Reference	Value	LRS #	Size	Tol	Rating	Mfg	Manf_pn	Notes
1	2	C12,C15	8PF	01-0013	SMCC0603	5%	50V NPO	-	-	CAPACITOR
2	2	C13,C20	3.9PF	01-0100	SMCC0603	5%	50V NPO	-	-	CAPACITOR
3	1	C14	10N 16V	01-0085	SMCC0603	10%	16V	-	-	CAPACITOR
4	1	C16	82PF	01-0092	SMCC0603	5%	50V NPO	-	-	CAPACITOR
5	1	C17	10UF 16V	02-0003	SMCE-CASE-B	20%	16V	-	-	CAPACITOR
6	2	C18,C19	1UF 16V 0805	01-0116	SMCC0805	(+80 -20%)	16V	-	-	CAPACITOR
7	1	C31	470UF 25V	05-0022	AER 10.5DX5LS_TH	(+50 -20%)	16V	-	-	CAPACITOR
8	2	C36,C37	1200PF	01-0003	SMCC0603	10%	50V	-	-	CAPACITOR
9	1	C38	14pF	01-0250	SMCC0603	5%	50V NPO	-	-	CAPACITOR
10	1	C39	2PF	01-0132	SMCC0603	5%	50V NPO	-	-	CAPACITOR
11	1	C40	2-6PF	07-0004	TRIMCAP 2-6PF	-	50V	-	-	CAPACITOR, VARIABLE
12	3	C41,C42,C43	47UF 35V	03-0028	SMCT7343	20%	20V	-	-	CAPACITOR
13	2	C44,C45	22UF 16V	03-0023	SMCT3528	10%	16V	-	-	CAPACITOR
14	2	C46,C47	1UF 16V 0805	01-0116	SMCC0805	(+80 -20%)	16V	-	-	CAPACITOR
15	4	C48,C49,C50,C51	0.1UF 0603	01-0125	SMCC0603	10%	6V	-	-	CAPACITOR
16	7	D1,D2,D3,D5,D6,D7,D8	STPS1L30A	21-0009	SMA DO-214AC	-	1AMP	ST MICROELECTRONICS	STPS1L30A	DIODE, SCHOTTKY, 1 AMP
17	1	D9	MMBD4148	21-0019	SOT-23	-	-	FAIRCHILD - EQUIV.	MMBD4148	DIODE
18	1	J1	BNC PLASTIC_RA	A1-0003	BNC	-	-	-	-	BLACK PLASTIC BODY
19	1	J2	HDR-5X2-100-V-M	A0-0026	HDR-5X2-100-V-M	-	-	-	-	HEADER
20	1	J3	HDR-8X2-100-V-M	A0-0002	HDR-7X2-100-V-F	-	-	SAMTEC	SSQ-108-01-G-D	HEADER, 7 X 2 FEMALE, VERTICAL .100 CEN. STACKING
21	1	J5	HDR-10X1-100-V-M	A0-0009	CON10S-V	-	-	-	-	HEADER, 10 X 1 100 CEN. VERTICAL, MALE
22	2	J6,J7	JACK POWER 2.1MM	A8-0020	JACK POWER 2.1MM	-	-	WEALTH	DS-012-B	DC POWER JACK, 2.1MM, WITH GROOVE/SNAP
23	1	J8	HDR-2X1-100-RA-M	A0-0117	HDR-2X1-100-RA-M	-	-	-	-	HEADER, 2 X 1, MALE, RIGHT ANGLE, .100 CEN.
24	2	L2,L4	22NH_CS	61-0058	SMIN0805	-	-	COILCRAFT	0805CS-220XJLC or equiv	INDUCTOR, TYPE CS
25	1	L3	33NH_CS	61-0030	SMIN0805	5%	-	COILCRAFT	0805CS-330XJLC or equiv	INDUCTOR
26	1	L5	1UH_CS	61-0023	SMIN1008	10%	370MA	COILCRAFT	1008CS-102XJLC or equiv	INDUCTOR
27	1	Q2	MMBT4403	31-0002	SOT-23	-	20V	-	-	TRANSISTOR, PNP
28	3	Q3,Q4,Q5	61N02F	31-0022	SOT-23	-	20V MIN	ZETEX	ZXM61N02F	TRANSISTOR, N-CHANNEL, 20V MOSFET
29	1	Q8	2N7002	31-0004	SOT-23	-	20V MIN	ANY	MMBT7002	TRANSISTOR
30	2	Q9,Q11	MMBT2222	31-0001	SOT-23	-	20V	FAIRCHILD - EQUIV.	MMBT2222	TRANSISTOR, NPN
31	1	Q10	PZT2222A	31-0030	SOT-223	-	-	FAIRCHILD	PZT2222A	TRANSISTOR, NPN, SILICON PLANAR
32	2	Q12,Q13	61P02F	31-0023	SOT-23	-	20V MIN	ZETEX	ZXM61P02F	TRANSISTOR, P-CHANNEL, 20V MOSFET
33	2	R3,R4	1M	11-0257	SMR0603	1%	1/10W	-	-	RESISTOR
34	2	R8,R27	4.7K	11-0007	SMR0603	5%	1/16W	-	-	RESISTOR
35	6	R11,R13,R14,R25,R28,R34	10K	11-0003	SMR0603	5%	1/16W	-	-	RESISTOR
36	1	R26	4.3K	11-0006	SMR0603	5%	1/16W	-	-	RESISTOR
37	1	R29	22	11-0123	SMR0603	5%	1/16W	-	-	RESISTOR
38	3	R30,R32,R33	2.2K	11-0115	SMR0603	5%	1/16W	-	-	RESISTOR
39	1	SW1	TACSW	81-0004	SWITCH-TAC	-	-	-	-	SWITCH, MOMENTARY, TAC
40	1	U1	UPC2771TB	41-0020	SOT363	-	3V P1 +13dBm	RENESAS	UPC2771TB-E3-A	IC, 3V MMIC AMPLIFIER
41	1	U3	ATMEGA32A-AU	41-0154	TQFP44	-	2.7 - 5.5V	ATMEL	ATMEGA32A-AU	IC, 8 BIT MICRO, W/32K PROG FLASH
42	1	U7	PCA9555DB	41-0111	SSOP24	-	-	PHILIPS	PCA9555DB	IC, 16-BIT I2C & SMBus I/O PORT
43	1	U12	TH72011	41-0209	S08-244	-	-	MELEXIS	TH72011KDC-BAA-000-RE	IC, 433MHZ FSK TRANSMITTER
44	2	U13,U14	SPX2954M3-L-3-3	B3-0034	SOT-223	-	0.25 AMP	SIPEX/EXAR	SPX2954M3-L-3-3	REGULATOR, 3.3V OUT
45	1	Y1	14.617188MHz	51-0002S	HC49_SM	10PPM	Tc 10PPM 20PF LOAD	SHOULDER	49S-SMD-14.617188-10-10/10/C	CRYSTAL, 14.61788 MHZ, SHORT STYLE
46	1	Y2	3.6864MHZ_SM	51-0042	HC49_SM	50PPM	20 TO 50PF LOAD	-	-	CRYSTAL
47	1	Y3	32.768KHZ	51-0034	X801 CYCL.-TH	20PPM	-20C +80C 18PF LOAD	-	-	CRYSTAL
48	2	R9,R10	2.2K	11-0115	SMR0603	5%	1/16W	-	-	RESISTOR
49	1	-	-	G1-0110	-	-	-	-	-	PC BOARD, BLANK
THE COMPONENTS BELOW ARE NOT POPULATED ON THIS BOARD VERSION										
-	1	FID1	DNP_FIDUCIAL_ORIGIN	-	FIDUCIAL_ORIGIN_SMALL	-	-	-	-	FIDUCIAL, ORIGIN
-	3	MTG1,MTG2,MTG3	DNP_MTG_4_NPT	-	MTG_4_NPT	-	-	-	-	MOUNTING HOLE #4, NPT
-	1	J4	DNP_HDR-4X1-100-V-M	DNP	HDR-4X1-100-V-M	-	-	-	-	HEADER, 4 X 1, MALE, VERTICAL .100 CEN.
-	2	C34,C35	DNP-12PF	01-0004	SMCC0603	5%	50V NPO	-	-	CAPACITOR
-	1	C52	DNP-0.1UF 0603	01-0125	SMCC0603	10%	6V	-	-	CAPACITOR

[illegible]