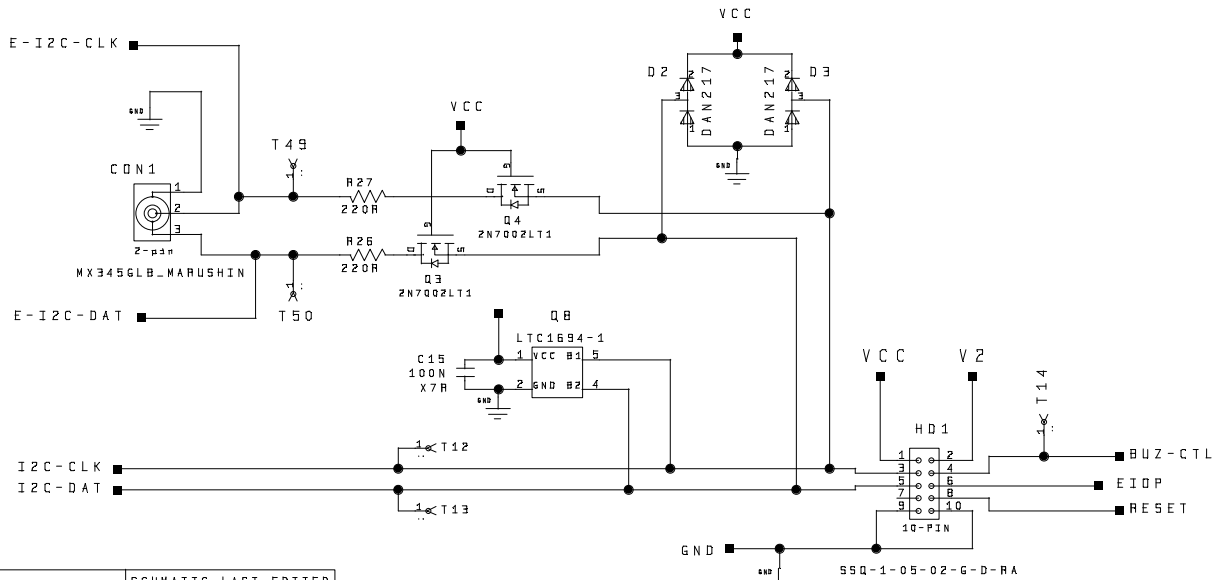
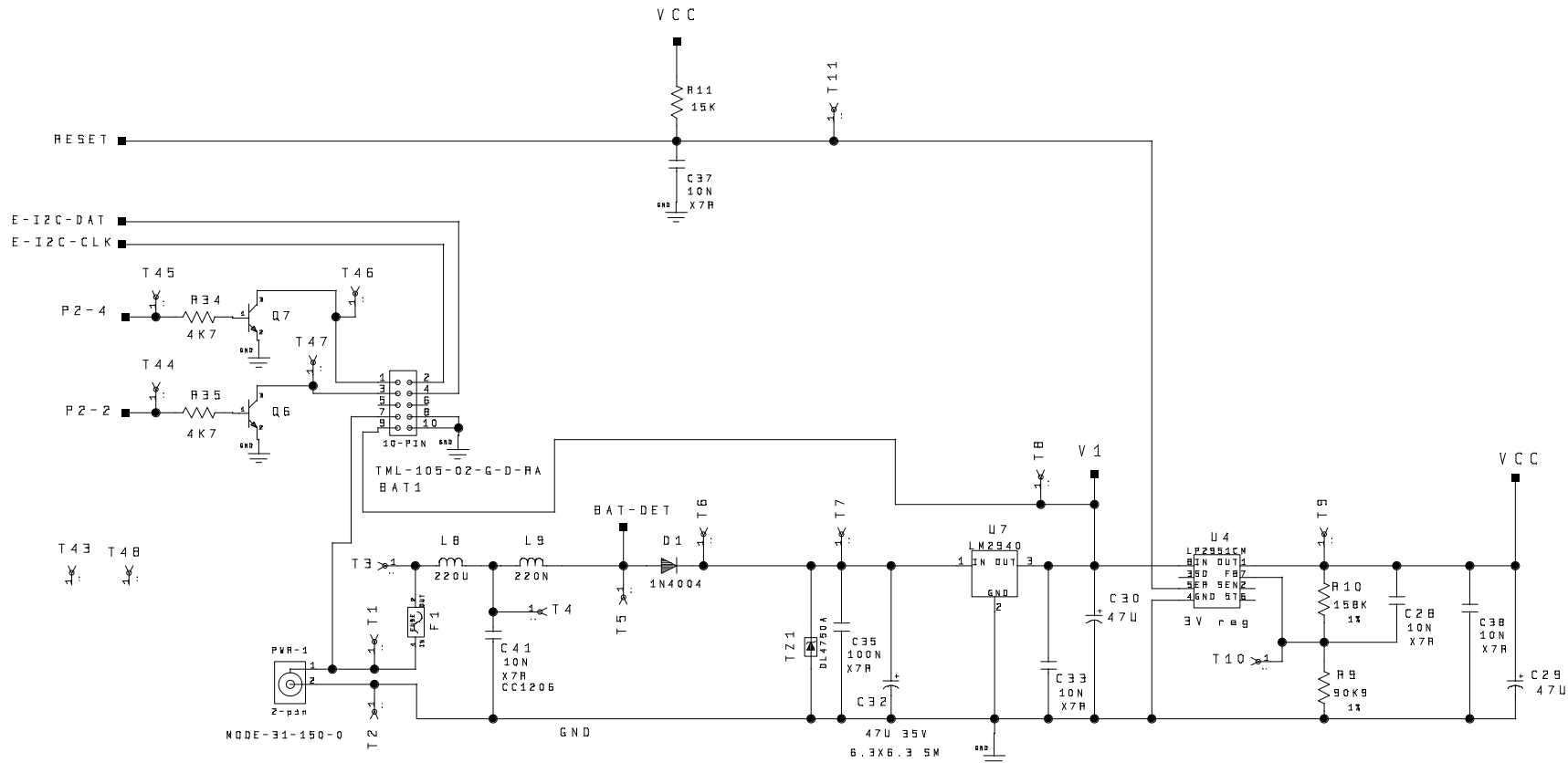


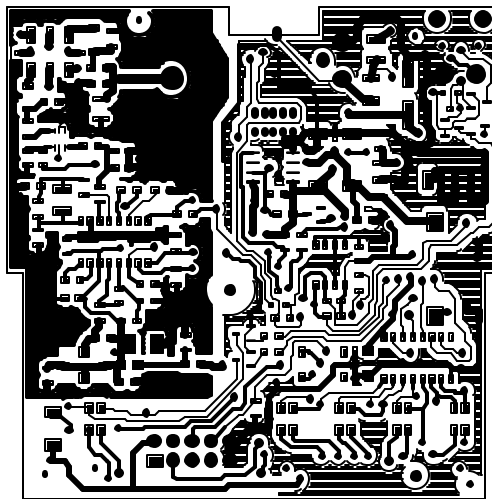
02	D=1 Q5,R36, R19-10K	01/20/00	JB
04	MISC. CORRECTIONS		
00	ORIGINAL	01/01/99	JB
REV	DESCRIPTION	DATE	INIT
SmartTire Systems Inc. © 1997-2000 THIS INFORMATION IS PROPRIETARY AND MUST NOT BE COPIED AND/OR REVEALED TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF SMARTTIRE SYSTEMS INC.			
DRAWN	CHECKED	DESIGNER	MANAGER
JB			
TITLE PASSENGER CAR			
GEN II RECVR. 433MHZ (BI-PHASE)			
DWG NO. 210.01295C02.1		REV 02	
PROTO	PILOT	PRODD	SHEET 1 OF 2

PRELIM SCHMATIC PRINT DATE: 11/23/99

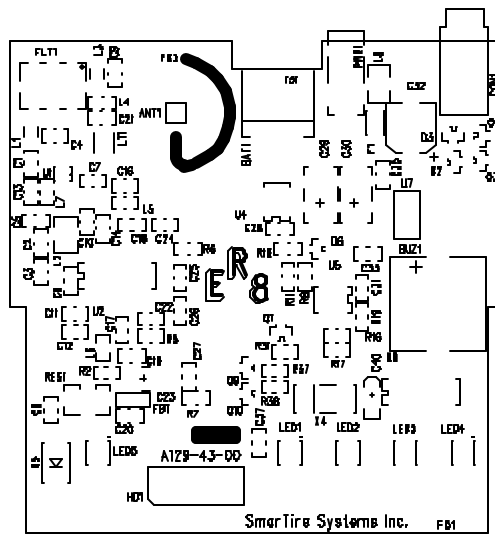


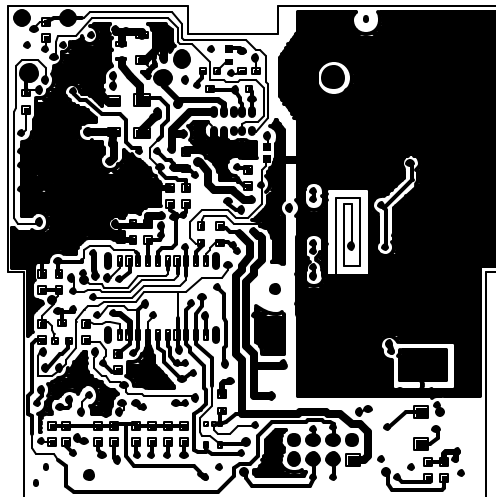
02	D01 Q5,R36, R19-10K	01/20/00	JB
04	MISC. CORRECTIONS	04/09/99	JB
00	ORIGINAL	01/01/99	JB
REV	DESCRIPTION	DATE	INIT
Smartire Systems Inc. © 1997-2000 THIS INFORMATION IS PROPRIETARY AND MUST NOT BE COPIED AND/OR REVEALED TO THIRD PARTIES WITHOUT THE WRITTEN CONSENT OF SMARTIRE SYSTEMS INC.			
DRAWN	CHECKED	DESIGNER	MANAGER
TITLE PASSENGER CAR GEN II RECVR, 433MHZ (BI-PHASE)			
DWG NO. 210.01295C02.2			REV 02
PROTO	PILOT	PRODD	SHEET 2 OF 2

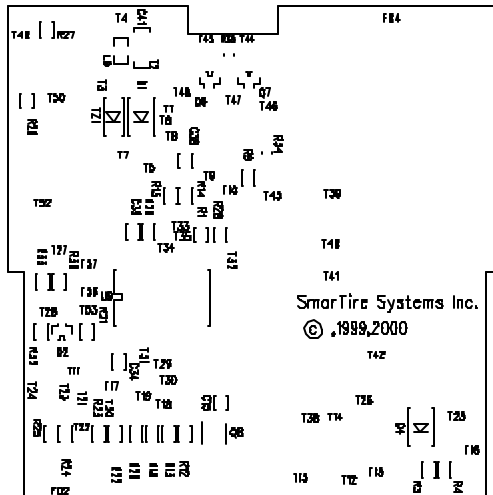
PRELIM SCHMATIC LAST EDITED 11/23/99



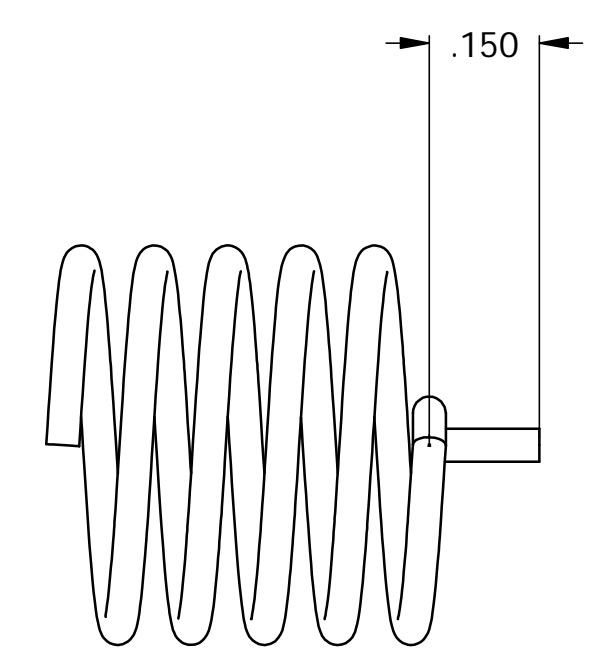
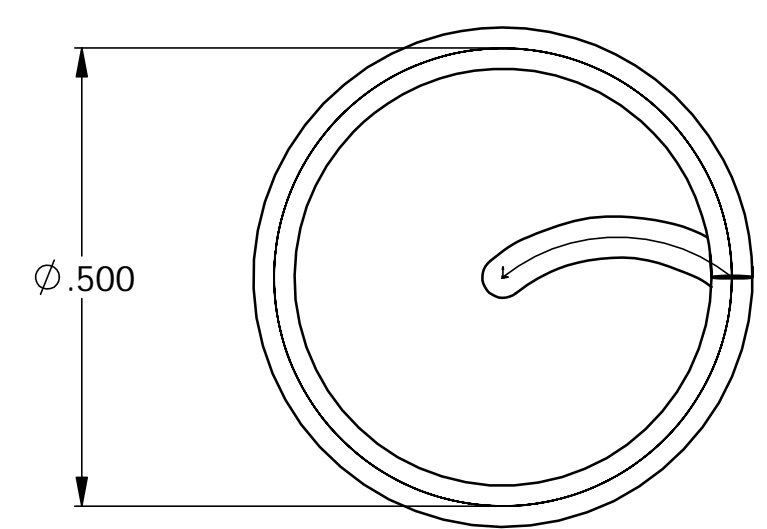
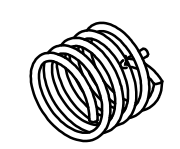
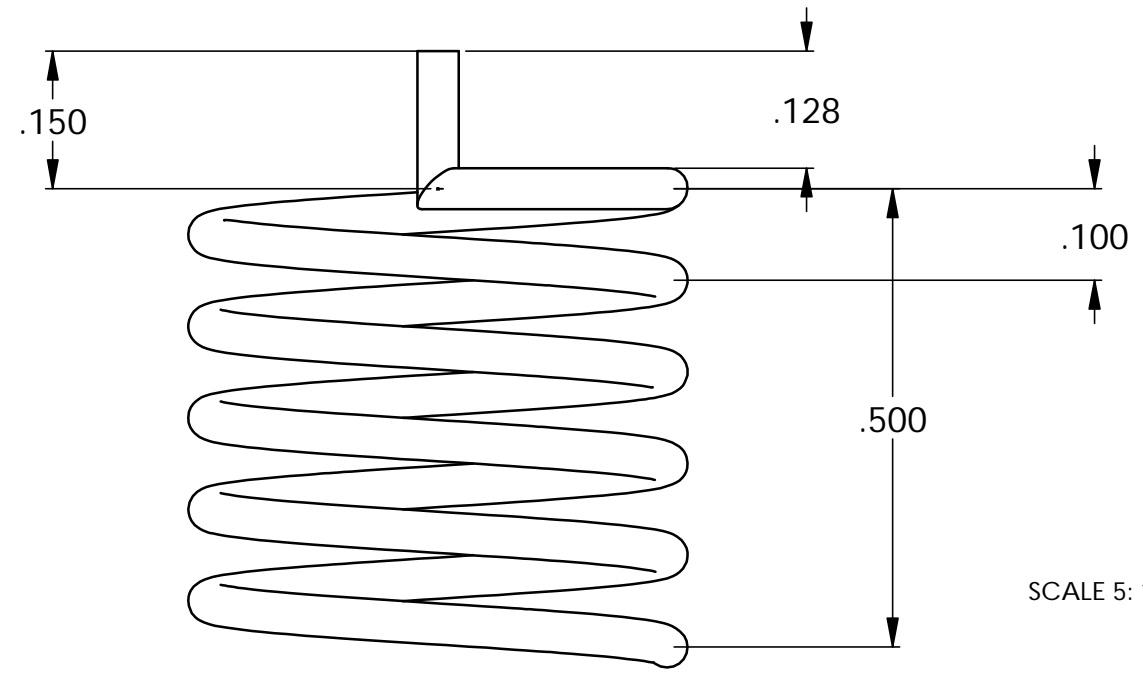
Smartire System Inc.
FR4 Material
0.062" Thick Material
SNOBC / LPISM
1oz Copper
Ident both sides
Solder Mask both sides
Panelize according to Drawing







REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



- Notes:
- 1. HEIGHT : 1/2 "
 - 2. ID : 1/2 "
 - 3. # OF TURNS : 4.5 TURNS +- 1/64 OF A TURN
 - 4. BEND ANGLE : 90 DEGREES

Notes:
 Phosphor-Bronze Wire
 ASTM B 159
 Alloy 510
 (Grade A)
 14 AWG (.0641 inch)

ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	QTY REQD
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN mm		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		SMARTIRE SYSTEMS INC. Base Receiver Antenna
X/X	.X .XX	ANGLE	APPROVALS	
±5	±.25 ±.025	±1/2"	DATE	
MATERIAL Phosphor Bronze		FINISH None	DRAWN JPW	
NEXT ASSY		USED ON	CHECKED	DATE Feb 8 / 00
APPLICATION		DO NOT SCALE DRAWING	RESP ENG	MFG ENG
			QUAL ENG	DATE
			SCALE	DWG. NO.
			CAD FILE:	REV.
			SHEET 1 OF 1	

SmarTire Systems Inc.

Acceptance Checklist - Bill of Materials

Item	Signature - Engineering Manager	Signature - Production Manager
BOM contains all required components		
All components are acceptable as per Specification Sheets or engineering drawings		
All suppliers are acceptable		
Kits; Marketing manager signature		

210.0129	BOM
----------	-----

210.0129 --RECEIVER PCB - BASE --NEXT ASSY 200.0059
Release 0 Revision 17

Stock code	Qty Part Description	Rel/ Rev	Part designations	Supplier
<u>210.0131</u>	1 PROGRAMMED MPU-REC-GENII FOR ASSY 210.0129	/	U9	
			** MPU P/N 249.0016, TI:MSP430P112IDW	
			** SOFTWARE P/N 248.0035	

<u>215.0043</u>	1	PCB BARE -REC-GENII-MAIN / FOR ASSY 210.0129	PCB-BARE	OMNI GR
<u>223.0004</u>	10	RESISTOR 100R 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 101	R3 R4 R12 R13 R18 R20 R22 R23 R24 R25	UTECH E
<u>223.0010</u>	5	RESISTOR 10K 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 103	R19 R21 R28 R30 R32	UTECH E
<u>223.0012</u>	6	RESISTOR 100K 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 104	R1 R14 R15 R29 R31 R33	UTECH E
<u>223.0013</u>	1	RESISTOR 680R 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 681	R5	UTECH E
<u>223.0026</u>	1	RESISTOR 27K 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 273	R6	UTECH E
<u>223.0034</u>	1	RESISTOR 15K 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 153	R11	UTECH E
<u>223.0044</u>	4	RESISTOR 220R 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 221	R2 R8 R26 R27	UTECH E
<u>223.0055</u>	4	RESISTOR 4K7 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 472	R16 R17 R37 R38	UTECH E
<u>223.0056</u>	1	RESISTOR 51R 1/10W 5% SM / 0805 ROHM:MCR 10 EZHM JW 510	R7	UTECH E
<u>224.0037</u>	1	RESISTOR 158K 1% 1/10W 805 / CALCHIP:RM10F1583CT	R10	
<u>224.0038</u>	1	RESISTOR 90.9K 1% 1/10W 805 / CHIPTECH:CR0805F9092TI	R9	

<u>225.00312</u>	RESISTOR 4k7 1/16W 5% SM 0603 ROHM:MCR03 EZHU J 472	/		R34 R35	
<u>230.00175</u>	CAP 100N 10% 50V X7R CER 805 CALCHIP:GMC21 X7R 104 K5ONT	/		C12 C18 C31 C34 C35	UTECH E
<u>230.00185</u>	CAP 10N 10% 50V X7R CER 805 ROHM:MCH21 5 C 103 K P	/		C8 C28 C33 C37 C38	UTECH E
<u>230.00322</u>	CAP 47U 16V TAN SM D NEMCO:PCT47/16DK	/	1	C29 C30	UTECH E
<u>230.00361</u>	CAP 1U 10% 16V TAN 1206 NEMCO:PCT1/16AK	/		C40	UTECH E
<u>230.00371</u>	CAP 10U 10V TAN SM B SPRAGUE:293D106X9010B2T	/		C23	UTECH E
<u>230.00491</u>	CAP 47U 35V 6.3x6.3 SM NIC:NACE 470M35V 6.3x6.3	/		C32	UTECH E
<u>230.00561</u>	CAP 10N 10% 50V X7R 1206 AVX:12065C103KATMA	/		C41	UTECH E
<u>231.00031</u>	CAP 47P 5% 50V NPO CER 0805 ROHM:MCH 21 5 A 470 K K	/		C25	UTECH E
<u>231.00081</u>	CAP 27P 5% 50V NPO CER 0805 ROHM:MCH 21 5 A 270 K K	/		C11	UTECH E
<u>231.00093</u>	CAP 100P 5% 50V NPO CER 0805 ROHM:MCH 21 5 A 101 J K	/		C1 C3 C5	UTECH E
<u>231.00102</u>	CAP 10P +-.5P 50V NPO CER 0805 ROHM:MCH 21 5 A 100 DK	/		C4 C9	UTECH E
<u>231.00131</u>	CAP 330P 5% 50V NPO CER	1 /	1	C24	UTECH E

	0805 ROHM:MCH 21 5 A 331 K K			
<u>231.00142</u>	CAP 68P 5% 50V NPO CER / 0805 ROHM:GMC21 CG 680 J 50NT	C10 C14	UTECH E	
<u>231.00172</u>	CAP 33P 5% 50V NPO CER / 0805 ROHM:MCH 21 5 A 330 J K	C2 C22	UTECH E	
<u>231.00181</u>	CAP 6P8 +-.25 50V NPO CER / 0805 ROHM:MCH 21 5 A 6R8 C K	C16	UTECH E	
<u>231.00231</u>	CAP 4P7 +-.25P 50V NPO CER / 805 KEMET:C0805 C 479 C 5 G A C	C21	UTECH E	
<u>231.00252</u>	CAP 3P3 +-.25 50V NPO CR / 0805 ROHM:MCH21 5 A 3R3 C K	C7 C17	UTECH E	
<u>231.00391</u>	CAP 1N 5% 50V NPO CER 0805 / ROHM:MCH21 5A 102 J K	C13	UTECH E	
<u>231.00462</u>	CAP 180P 5% 50V NPO CER / 0805 CALCHIP:GMC21CG181J50NT	C20 C27	UTECH E	
<u>231.00471</u>	CAP 3P9 +-.25P 50V NPO CER / 805 CALCHIP:GMC21CG3R9C50NT	C19	UTECH E	
<u>231.00501</u>	CAP 100N 5% X7R 50v CER 805 / CALCHIP:GMC21X7R104J50NT	C15	UTECH E	
<u>231.00521</u>	CAP 150P 5% 50V NPO CER / 0805 ROHM:MCH 21 5 A 151 J K	C6	UTECH E	
<u>231.00581</u>	CAP 6N8 10% 50V X7R CER / 0805	C26		

<u>240.0018</u>	1	IND FERBEAD IMP 750 200ma.7DC MURATA:BLM21A401S	/	0	FB1	FAI-U
<u>240.0043</u>	2	IND 47nH 10% WD SM 1206 COILCRAFT:1206CS-470XKBC	/		L1 L3	COILCRA
<u>240.0072</u>	1	IND 220N 10% WD 0805 CENTRAL-TECH:CT0805CS- 220NK	/		L9	INDUCTO
<u>240.0073</u>	1	ANTENNA, REC-GENII-433 HELICAL 1/2"x1/2"	0 /	0	ANT1	
					NO. OF TURNS=4- 1/2, .120 SPACING, 14 AWG COPPER CLAD STEEL, WITH NICKEL PLATE	
<u>240.0074</u>	1	IND 8N2 5% WD 0805 CENTRAL-TECH:CT0805CS- 8N2J	/		L5	INDUCTO
<u>240.0075</u>	1	IND 39N 5% WD 0805 CENTRAL-TECH:CT0805CS- 39NJ	/		L6	INDUCTO
<u>240.0076</u>	1	IND 470N 5% ML 0805 CENTRAL TECH	/		L7	INDUCTO
<u>240.0085</u>	1	IND 18N 5% CHIP 0805 CTLL2012-18NJ	/		L4	INDUCTO
<u>240.0086</u>	1	IND 560N 10% WD 1008 CT1008CS-R56K	/		L11	INDUCTO
<u>241.0004</u>	1	IND 560UH 10% 1210 MURATA:LQH3N561K04M00	/		L2	FAI-U
<u>241.0007</u>	1	IND 220U WD 10% 1210 MURATA:LQH3C221K34	/		L8	INDUCTO
<u>242.0005</u>	6	TRANSISTOR 3904 NPN SOT- 23 MOTOROLA:MMBT3904LT1	/		Q1 Q2 Q6 Q7 Q9 Q10	FAI-U

(R1A)					
<u>242.0021</u>	2	TRANSISTOR 7002 SOT23 MOT:2N7002LT1-SOT23	/	Q3 Q4	FAI-U
<u>243.0008</u>	1	IC 2951 REGULATOR PREC.VOLT SM NAT SEMI:LP2951CM	/	1 U4	FAI-U
<u>243.0031</u>	1	IC 3201 UHF/VHF RECEIVER PHILIPS:UAA3201T	/	U2	FAI-U
<u>243.0039</u>	1	IC 2940 REGULATOR LM2940 IMP-5.0	/	U7	FAI-U
<u>243.0041</u>	1	IC 900 MHZ LO NOISE AMP HP:INA51063	/	U1	FAI-U
<u>243.0042</u>	1	IC-1694-Active Pullup-SOT23 LINEAR TECH:LTC1694-1CS5	/	Q8	ARROW
<u>245.0015</u>	1	IC 74HC595AD CMOS8BITSERLAT SM MOTOROLA:MC74HC595AD	/	U6	ARROW
<u>253.0006</u>	1	IC 24C16 EPROM ATMEL:AT24C16N-10SI-2.5	/	U5	ALLAMER
<u>254.0006</u>	1	DIODE 202K DUAL COM CATH SOT23 ROHM:DAN202KT146	/	D6	UTECH E
<u>254.0009</u>	2	DIODE 217 DUAL SERIES SOT23 ROHM:DAN217K	/	D2 D3	UTECH E
<u>254.0015</u>	3	DIODE 1-04 GP SURF MT 400V 1A CENTRAL SEMI:CMR1-04	/	D1 D4 D5	UTECH E
<u>254.0024</u>	1	DIODE SML4750A GEN-SEMI:SML4750A	/	TZ1	ALLAMER
<u>255.0052</u>	1	RESONATOR SAW 433.42 SM- 2	/	RES1	IN SIGH

	RFM:RO2112A			
<u>255.0053</u>	1 FILTER SAW 433.92MH SM8558-8 RFM:RF1172B	/	FLT1	IN SIGH
<u>255.0054</u>	1 CRYSTAL 32.76800 KHZ sm CITIZEN:CM200S-32.768000- KDZF	/	X4	ANDERSO
<u>255.0055</u>	1 BUZZER SMI-158 PROJECTS UNLIMITED:SMI- 158	/	BUZZ1	PROJECT
<u>256.0028</u>	5 LED HER/GRN BI-COL SMT HALTRONICS:BL-HE1GO33B- TR	/	LED1 LED2 LED3 LED4 LED5	
<u>260.0080</u>	1 CONNECTOR MARUSHIN:MX345GLB	/	CON1	TARBUC
<u>260.0081</u>	1 HEADER SSQ-1-05-02-G-D-RA	/	HD1	UTECH E
<u>260.0082</u>	1 CONNECTOR-PWR JACK MODE:31-150D-0 -PET MATERIAL	/	PWR-1	INTEK E
<u>260.0083</u>	1 CONNECTOR SAMTEC:TML-105-02-G-D-RA	/	CONNECTOR BAT1	UTECH E
<u>261.0014</u>	1 FUSE 1/2 AMP ALFII SMF SM1206 LITTLEFUSE:429.500	/	F1	FAI-U
<u>999.9990</u>	0 REVISION CONTROL NOTES	/	CREATED 5-APR-99 CL REL 0 REV 0	
			-PROTOTYPE REVISION- -----	
			SEE REV. HISTORY TO REL 0-REV 16 IN /USIDOCs	

REL 0 REV 17 20-
JAN-00 ECO 185

-DELETE R36,Q5

-CHANGE R19 TO
10K 223.0010
