

9 . PARTS LIST			
SEC Code	Design LOC	Description	Specification
SCH-411B/PCL		SCH-411,BLACK,PELE-P	
GH92-01141A	MEMORY PBA	PBA MAIN-MEMORY(411)	SCH-410,SAMSUNG,USA,-,-,-,-
0501-000457	QM100	TR-SMALL SIGNAL	MMBT2222A,NPN,225mW,SOT-23,TP,
1107-001033	UM200	IC-FLASH MEMORY	29LV800,1Mx8BIT,SOP,48P,724MIL
1109-001081	UM100	IC-ETC. MEMORY	1306,524Kx16BIT,SOP,48P,400MIL
2007-000070	R190	R-CHIP	0ohm,5%,1/16W,DA,TP,1608
	RM100 RM101 RM102		
2007-000090		R-CHIP	10Kohm,5%,1/16W,DA,TP,1608
2203-000178	CM100	C-CERAMIC,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,
3710-000306	J200	CONNECTOR-SOCKET	50P,2R,0.5mm,STRAIGHT,NI
GH92-01142A	MAIN PBA	PBA MAIN-MAIN(411)	SCH-410,SAMSUNG,USA,-,-,-,-
	D70 D72		
0401-001052		DIODE-SWITCHING	MCL4148,100V,200mA,LL-34,TP
0404-000115	D100	DIODE-SCHOTTKY	RB160L-40,40V,1A,PSM,TP
	D470 D471		
0404-000161		DIODE-SCHOTTKY	1SS315,5V,30mA,USC,TP
	D303 D304 D401 D402		
0405-000107		DIODE-VARACTOR	1SV229,15V,3nA,USC,TP
	D140 D60		
0407-000115		DIODE-ARRAY	DAN202U,80V,100mA,CA2-3,SC-70,
	D20 D201 D202 D40		
0407-000122		DIODE-ARRAY	KDS226,80V,300mA,C2-3,SOT-23,T
0407-000127	D440	DIODE-ARRAY	DA204U,20V,100mA,C2-3,SC-70,TP
	D301 D302		
0409-001001		DIODE-PIN	BAR63-03W,50V,100mA,SOT-23,TP
	Q473 Q475		
0501-000162		TR-SMALL SIGNAL	2SA1576,PNP,200mW,SC-70,TP,180
	Q102 Q150 Q301 Q474		
0501-000218		TR-SMALL SIGNAL	2SC4081,NPN,200mW,UMT,TP,180-3
	Q140 Q151 Q60		
0501-000457		TR-SMALL SIGNAL	MMBT2222A,NPN,225mW,SOT-23,TP,
	Q302 Q486		
0501-000689		TR-SMALL SIGNAL	2SC4226,NPN,200mW,SC-70,TP,70-

0504-000167	Q470 Q472	TR-DIGITAL	RN1102,NPN,100mW,10K-10Kohm,SS
0504-000168	Q103 Q141 Q220 Q221	TR-DIGITAL	RN1104,NPN,100mW,47K-47Kohm,SS
0504-000172	Q104 Q61	TR-DIGITAL	RN2104,PNP,100mW,47K-47Kohm,SS
0504-001016	Q440	TR-DIGITAL	DTA114EE,PNP,150mW,10k/10k,SSM
0505-001095	U102	FET-SILICON	SI6801DQ,N/P,20V,+1.9A,0.16/0
0505-001165	Q100 Q471	FET-SILICON	SI3443DV,P,-20V,+3.5mA,65mohm
0601-000355	D220	LED	CHIP,RED,2.0x1.6mm,660nm
0801-000301	U152	IC-CMOS LOGIC	7W04,INVERTER,SSOP,8P,110MIL,T
0801-000885	U240	IC-CMOS LOGIC	7S04,INVERTER,SOT-25,5P,63MIL,
0803-003010	U151	IC-TTL	4W53,MUX/DEMUX,SOP,8P,110MIL,S
0904-001183	U150	IC-DSP	16272,-,QFP,64P,-,27MHz,TR,CMO
1001-000133	U473	IC-ANALOG SWITCH	TC4S66FTE85R,CMOS,SOP,5P,-,SIN
1001-001019	U440	IC-ANALOG MULTIPLEX	BU4051BCFV,CMOS,SOP,16P,173MIL
1103-001090	U160	IC-EEPROM	24C128,16Kx8BIT,SOP,8P,150MIL,
1201-001006	U474	IC-OP AMP	7101,SOT-23,5P,-,SINGLE,-,PLAS
1201-001075	U303	IC-AGC AMP	5500,SOP,16P,193MIL,DUAL,45dB,
1201-001259	U453	IC-POWER AMP	23124,LCC,8P,-,SINGLE,-,PLASTI
1202-000192	U11	IC-VOLFAGECOMP.	75W393,-,8P,-,DUAL,36V,CMOS,PL
1203-001256	U307 U470 U471	IC-VOLTAGE REGULATO	5205,SOT-23,5P,59MIL,PLASTIC,3
1203-001335	U110	IC-VOLTAGE REGULATO	7333,SOP,8P,-,PLASTIC,3.23/3.3
1203-001396	U100	IC-PWM CONTROLLER	9160,SOP,16P,-,PLASTIC,1.455/1
1204-001375	U10	IC-ENCODER/DECODER	ST5092TQFPTR,QFP,44P,-,PLASTIC
1205-001253	U450	IC-MIXER	uPC8109T,SOP,6P,59MIL,PLASTIC,
1205-001383	U200	IC-DATA COMM./GEN.	Q5272I-1S2,QFP,176P,-,PLASTIC,
1205-001451	U401	IC-DATA COMM./GEN.	Q5312I-3S2,QSOP,80P,138mm,PLAS
1209-001114	U305	IC-SYNTHESIZER	LMX2332LTMX,SOP,20P,173MIL,PLA
1404-001040	TH1	THERMISTOR-NTC	10Kohm,5%,3650K,-,TP
2007-000134	R76	R-CHIP	33Kohm,5%,1/16W,DA,TP,1608
2007-000137	R327 R482	R-CHIP	2Kohm,5%,1/16W,DA,TP,1005
2007-000138	R226 R237 R238 R315	R-CHIP	100ohm,5%,1/16W,DA,TP,1005

	R162 R186 R306 R307 R450 R485 R489		
2007-000140	R61	R-CHIP	1Kohm,5%,1/16W,DA,TP,1005
2007-000141	R104 R141	R-CHIP	2.2Kohm,5%,1/16W,DA,TP,1005
2007-000142	R328 R441	R-CHIP	2.7Kohm,5%,1/16W,DA,TP,1005
2007-000143	R106 R201 R223	R-CHIP	4.7Kohm,5%,1/16W,DA,TP,1005
2007-000146	R487	R-CHIP	6.8Kohm,5%,1/16W,DA,TP,1005
2007-000148	R121 R161 R220 R221 R222 R235 R319 R323 R329 R330	R-CHIP	10Kohm,5%,1/16W,DA,TP,1005
	R331 R402 R404 R409 R410 R442 R460 R477 R481 R488		
	R52 R53 R70 R82		
2007-000149	R74	R-CHIP	12Kohm,5%,1/16W,DA,TP,1005
2007-000151	R160	R-CHIP	15Kohm,5%,1/16W,DA,TP,1005

2007-000152	R203 R205 R230 R232 R234 R236 R316 R476	R-CHIP	20Kohm,5%,1/16W,DA,TP,1005
2007-000153	R109 R185 R213 R215 R478 R80	R-CHIP	22Kohm,5%,1/16W,DA,TP,1005
2007-000154	R475	R-CHIP	24Kohm,5%,1/16W,DA,TP,1005
2007-000157	R154 R207 R209 R334 R470 R471 R472 R473	R-CHIP	47Kohm,5%,1/16W,DA,TP,1005
2007-000159	R62	R-CHIP	56Kohm,5%,1/16W,DA,TP,1005
2007-000162	R102 R103 R105 R108 R112 R240 R72 R84	R-CHIP	100Kohm,5%,1/16W,DA,TP,1005
2007-000164	R480 R50	R-CHIP	150Kohm,5%,1/16W,DA,TP,1005
2007-000170	R152 R217	R-CHIP	1Mohm,5%,1/16W,DA,TP,1005
2007-000171	R151 R155 R225 R23 R24 R27 R271 R272 R273 R274	R-CHIP	0ohm,5%,1/16W,DA,TP,1005

	R275 R276 R277 R278 R279 R280 R30 R310 R311 R40		
	R41 R411 R42 R454 R64 R67		
2007-000172	R325 R326 R408	R-CHIP	10ohm,5%,1/16W,DA,TP,1005
2007-000173	R317 R463	R-CHIP	22ohm,5%,1/16W,DA,TP,1005
2007-000226	R171	R-CHIP	1.2Mohm,5%,1/16W,DA,TP,1608
2007-000242	R20	R-CHIP	1.5Kohm,5%,1/16W,DA,TP,1005
2007-000280	R79	R-CHIP	100Kohm,2%,1/16W,DA,TP,1608
2007-000368	R78	R-CHIP	130Kohm,5%,1/16W,DA,TP,1608
2007-000636	R123	R-CHIP	270Kohm,5%,1/16W,DA,TP,1005
2007-000691	R170	R-CHIP	3.3Mohm,5%,1/16W,DA,TP,1608
2007-000831	R51	R-CHIP	39Kohm,5%,1/16W,DA,TP,1005
2007-000932	R211 R224 R433	R-CHIP	470ohm,5%,1/16W,DA,TP,1005
2007-000982	R324 R444 R453 R459	R-CHIP	5.6Kohm,5%,1/16W,DA,TP,1005
2007-001291	R302	R-CHIP	30ohm,5%,1/16W,DA,TP,1005
2007-001292	R318 R322	R-CHIP	33ohm,5%,1/16W,DA,TP,1005
2007-001294	R181 R182 R183	R-CHIP	36ohm,5%,1/16W,DA,TP,1005
2007-001295	R452	R-CHIP	39ohm,5%,1/16W,DA,TP,1005
2007-001298	R304 R457	R-CHIP	51ohm,5%,1/16W,DA,TP,1005
2007-001301	R430 R432	R-CHIP	68ohm,5%,1/16W,DA,TP,1005

2007-001305	R456 R458	R-CHIP	120ohm,5%,1/16W,DA,TP,1005
2007-001306	R228 R241 R431	R-CHIP	150ohm,5%,1/16W,DA,TP,1005
2007-001307	R179 R180 R301	R-CHIP	180ohm,5%,1/16W,DA,TP,1005
2007-001308	R303	R-CHIP	200ohm,5%,1/16W,DA,TP,1005
2007-001319	R443	R-CHIP	1.2Kohm,5%,1/16W,DA,TP,1005
2007-001320	R403	R-CHIP	1.8Kohm,5%,1/16W,DA,TP,1005
2007-001325	R184 R21	R-CHIP	3.3Kohm,5%,1/16W,DA,TP,1005
2007-001333	R455	R-CHIP	18Kohm,5%,1/16W,DA,TP,1005
2007-002797	R451 R486	R-CHIP	560ohm,5%,1/16W,DA,TP,1005
2007-002965	R321	R-CHIP	15ohm,5%,1/16W,DA,TP,1005
2007-007101	R434	R-CHIP	43Kohm,5%,1/16W,DA,TP,1005
2007-007131	R440	R-CHIP	13Kohm,1%,1/16W,DA,TP,1005
2007-007132	R445 R479	R-CHIP	15Kohm,1%,1/16W,DA,TP,1005
2007-007133	R406	R-CHIP	300ohm,1%,1/16W,DA,TP,1005
2007-007134	R407	R-CHIP	39Kohm,1%,1/16W,DA,TP,1005
2007-007137	R401	R-CHIP	1.2Kohm,1%,1/16W,DA,TP,1005
2007-007142	R405	R-CHIP	10Kohm,1%,1/16W,DA,TP,1005
2007-007200	R320	R-CHIP	2.4ohm,5%,1/16W,DA,TP,1005
2203-000189	C10 C11 C111 C152 C153 C160 C170 C171 C172 C173	C-CERAMIC,CHIP	100nF,+80-20%,25V,Y5V,TP,1608,
	C174 C175 C176 C177 C178 C22 C23 C24 C242 C252		

	C254 C256 C260 C28 C43 C50 C62 C70 C72 C80		
	C86		
	C222 C237 C238 C305 C335 C357 C362 C368 C369 C370		
2203-000234	C370	C-CERAMIC,CHIP	100pF,5%,50V,NPO,TP,1005,-
	C374 C381 C382 C383 C384 C441 C443 C451 C459 C487		
	C201 C207 C221 C240 C251 C253 C255 C259 C334 C348		
2203-000254	C348	C-CERAMIC,CHIP	10nF,10%,16V,X7R,TP,1005,-

	C350 C351 C356 C361 C363 C364 C366 C367 C386 C387		
	C389 C402 C407 C409 C412 C414 C416 C418 C420 C422		
	C425 C440 C442 C444 C445 C455 C458 C461 C470 C471		
	C473 C474 C477 C479 C481 C484 C485 C493 C82		
2203-000278	C322 C323 C325	C-CERAMIC,CHIP	10pF,0.5pF,50V,NPO,TP,1005,-
2203-000330	C303 C307	C-CERAMIC,CHIP	12pF,5%,50V,NPO,TP,1005,-
2203-000359	C489 C491	C-CERAMIC,CHIP	150pF,5%,50V,NPO,TP,1005,-
2203-000425	C464	C-CERAMIC,CHIP	18pF,5%,50V,NPO,TP,1005,-

	C103 C209 C302 C308 C332 C333 C336 C337 C339		
2203-000438	C343	C-CERAMIC,CHIP	1nF,10%,50V,X7R,TP,1005,-
	C344 C345 C346 C353 C373 C401 C408 C410 C411 C413		
	C415 C417 C419 C421 C429 C450 C454 C462 C476 C492		
	C494 C497		
2203-000466	C375	C-CERAMIC,CHIP	1pF,0.25pF,50V,NPO,TP,1005,-
2203-000489	C388	C-CERAMIC,CHIP	2.2nF,10%,50V,X7R,TP,1005,-
	C205 C349		
2203-000585	C74	C-CERAMIC,CHIP	220pF,10%,50V,X7R,TP,1005,-
	C311 C314		
2203-000628	C466	C-CERAMIC,CHIP	22pF,5%,50V,NPO,TP,1005,-
	C309 C342		
2203-000812	C448	C-CERAMIC,CHIP	33pF,5%,50V,NPO,TP,1005,-
	C315 C319		
2203-000870	C329	C-CERAMIC,CHIP	3pF,0.25pF,50V,NPO,TP,1005,-
2203-000940	C424	C-CERAMIC,CHIP	470pF,10%,50V,X7R,TP,1005,-

2203-000941	C220 C301	C-CERAMIC,CHIP	470pF,10%,50V,X7R,TP,1005,-
2203-000995	C376 C377 C460	C-CERAMIC,CHIP	47pF,5%,50V,NPO,TP,1005,-
2203-001017	C304 C306 C341 C457	C-CERAMIC,CHIP	4pF,0.25pF,50V,NPO,TP,1005,-
2203-001153	C426 C427	C-CERAMIC,CHIP	68pF,5%,50V,NPO,TP,1005,-
2203-001210	C203 C204 C230 C232 C423 C430	C-CERAMIC,CHIP	8.2nF,10%,16V,X7R,TP,1005,-
2203-001259	C330 C331	C-CERAMIC,CHIP	8pF,0.5pF,50V,NPO,TP,1005,-
2203-001283	C496	C-CERAMIC,CHIP	9pF,0.5pF,50V,NPO,TP,1005,-
2203-001416	C317 C318 C320 C326 C327	C-CERAMIC,CHIP	33nF,10%,16V,Y5V,TP,1005,1.0mm
2203-001432	C338 C371 C404 C483	C-CERAMIC,CHIP	47nF,10%,16V,Y5V,TP,1005,1.0mm
2203-001437	C150 C151 C211 C213 C498	C-CERAMIC,CHIP	5pF,0.25pF,50V,X7R,TP,1005,1.0
2203-002707	C358	C-CERAMIC,CHIP	1.8nF,10%,50V,X7R,TP,1005,-
2203-005065	C328	C-CERAMIC,CHIP	1uF,+80-20%,10V,Y5V,TP,1608,-
2203-005144	C12 C13	C-CERAMIC,CHIP	1uF,10%,10V,X7R,TP,2012,-
2203-005383	C428	C-CERAMIC,CHIP	7pF,0.1pF,50V,NPO,TP,1005,-
2203-005393	C499	C-CERAMIC,CHIP	5pF,0.1pF,50V,NPO,TP,1005,-
2401-001284	C490	C-AL	4.7uF,20%,6.3V,GP,TP,5x11mm,2m

	C21 C340 C347 C355 C365 C403 C475		
2404-000139	C482	C-TA,CHIP	10uF,20%,6.3V,-,TP,3216,-
	C114 C140		
2404-000151	C488	C-TA,CHIP	1uF,20%,16V,-,TP,3216,-
	C405		
2404-000167	C472	C-TA,CHIP	2.2uF,20%,16V,-,TP,3216,-
2404-000180	C378	C-TA,CHIP	220nF,20%,35V,-,TP,3216,-
2404-000289	C359	C-TA,CHIP	150nF,20%,35V,GP,TP,3216,-
	C352 C40 C406 C431		
2404-001032	C84	C-TA,CHIP	33uF,20%,6.3V,GP,TP,3528,-
2404-001063	C100	C-TA,CHIP	100uF,10%,6.3V,GP,TP,7343L,-
	C110 C123		
2404-001064	C486	C-TA,CHIP	10uF,20%,6.3V,GP,TP,2012,-
	L301 L303 L319 L330		
2703-000109	L471	INDUCTOR-SMD	100nH,10%,0.8x1.6x0.8mm
	L311		
2703-000144	L317	INDUCTOR-SMD	180nH,10%,1.25x2x0.85mm
2703-000213	L322	INDUCTOR-SMD	470nH,10%,0.8x1.6x0.8mm
2703-000246	L310	INDUCTOR-SMD	820nH,10%,2.92x2.79x2.29mm
2703-000297	L316	INDUCTOR-SMD	390nH,10%,0.8x1.6x0.8mm
	L110 L326 L327		
2703-000300	L470	INDUCTOR-SMD	1uH,10%,0.8x1.6x0.8mm
2703-000301	L318	INDUCTOR-SMD	2.7uH,10%,0.8x1.6x0.8mm
2703-000304	L401	INDUCTOR-SMD	27nH,10%,2.29x1.73x1.52mm
	L452		
2703-001040	L453	INDUCTOR-SMD	10nH,5%,1.6x0.8x0.8mm
2703-001041	L463	INDUCTOR-SMD	15nH,5%,1.6x0.8x0.8mm
2703-001049	L331	INDUCTOR-SMD	100nH,10%,2.29x1.73x1.52mm
2703-001134	L315	INDUCTOR-SMD	150nH,10%,2.29x1.73x1.52mm
2703-001144	L450	INDUCTOR-SMD	12nH,5%,1.6x0.8x0.8mm

2703-001166	L312 L333	INDUCTOR-SMD	5.6nH,10%,1.6x0.8X0.8mm
2703-001172	L451	INDUCTOR-SMD	100nH,5%,1.6x0.8x0.8mm
2703-001179	L306	INDUCTOR-SMD	10nH,5%,1x0.5x0.5mm
2703-001206	L459	INDUCTOR-SMD	4.7nH,0.3nH,1.6x0.8X0.8mm
2703-001295	L458	INDUCTOR-SMD	3.9nH,0.3nH,1.6x0.8x0.8mm
2703-001408	L302 L304	INDUCTOR-SMD	8.2nH,10%,1x0.5x0.5mm
2703-001409	L305 L307 L308 L309 L323	INDUCTOR-SMD	12nH,10%,1x0.5x0.5mm
2703-001413	L454 L456	INDUCTOR-SMD	27nH,10%,1.6x0.8x0.8mm
2703-001563	L100	INDUCTOR-SMD	10uH,20%,4.45x6.6x2.92mm
2802-001048	X150 X200	RESONATOR-CERAMIC	27MHz,0.5%,TP,3.7x3.1x1.6
2806-001146	U304	OSCILLATOR-VCO	954MHz,-,-,TP,3.3V,6.4mA
2904-001011	F302	FILTER-SAW	881.5MHz,25MHz,-,REEL,869-894M
2904-001012	F451	FILTER-SAW	836.5MHz,25MHz,-,REEL,824-849M
2909-001004	F301	FILTER-DUPLEXER	881.5MHz,836.5MHz,3.7/2.8dB,TR
3301-001120	L105 L402 L405	CORE-FERRITE BEAD	AB,2.0x1.25x0.9mm,-,-
3710-001105	J150	CONNECTOR-SOCKET	2P,1R,1.27mm,SMD-S,AU
3710-001117	J106	CONNECTOR-SOCKET	24P,2R,0.5mm,SMD,SN
3710-001302	J302	CONNECTOR-SOCKET	18P,1R,0.5mm,SMD-A,AUF
3711-002048	J200	CONNECTOR-HEADER	NOWALL,50P,2R,1.25mm,STRAIGHT,
3712-000155	J1 J2	CONNECTOR-TERMINAL	PIN,MALE,#18-24,1.58mm
3722-001172	J10	JACK-AC POWER	2P,2.6PI,AU,BLK,NO

10. FUNCTIONS OF DEVICE

NO	NAME	VENDOR CODE	DESCRIPTION
1	U301	RF2442	Low Noise Amplifier
2	F301	DFY2R836CR881BHA	Duplexer
3	Q302	AT-32032-TR1	Bipolar Transistor
4	U302	RF2456	Downconverter
5	U303	Q5500	Rx AGC Amplifier
6	U304	VC-3R3A30-0967S	Voltage Controlled Oscillator
7	U305	LMX2332L	Phase Locked Loop
8	U306	TCO-555	Temperature Compensated Crystal Oscillator
9	D401, D402	1SV229	Variable Capacitance Diode
10	U453	RI23124U	Power Amplifier
11	U450	uPC8106T-E3	Upconverter
12	U451	GN01064B	Tx AGC Amplifier 1
13	U452	GN01066B	Tx AGC Amplifier 2