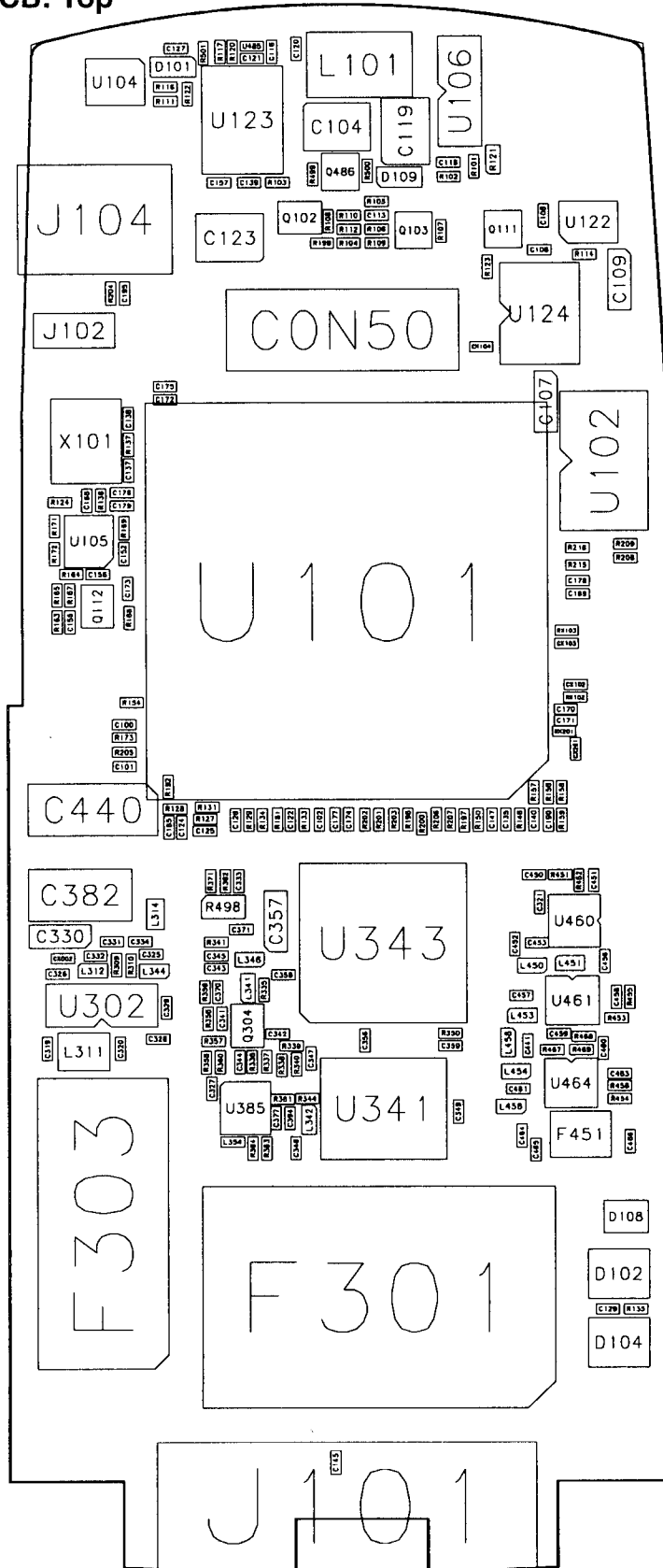


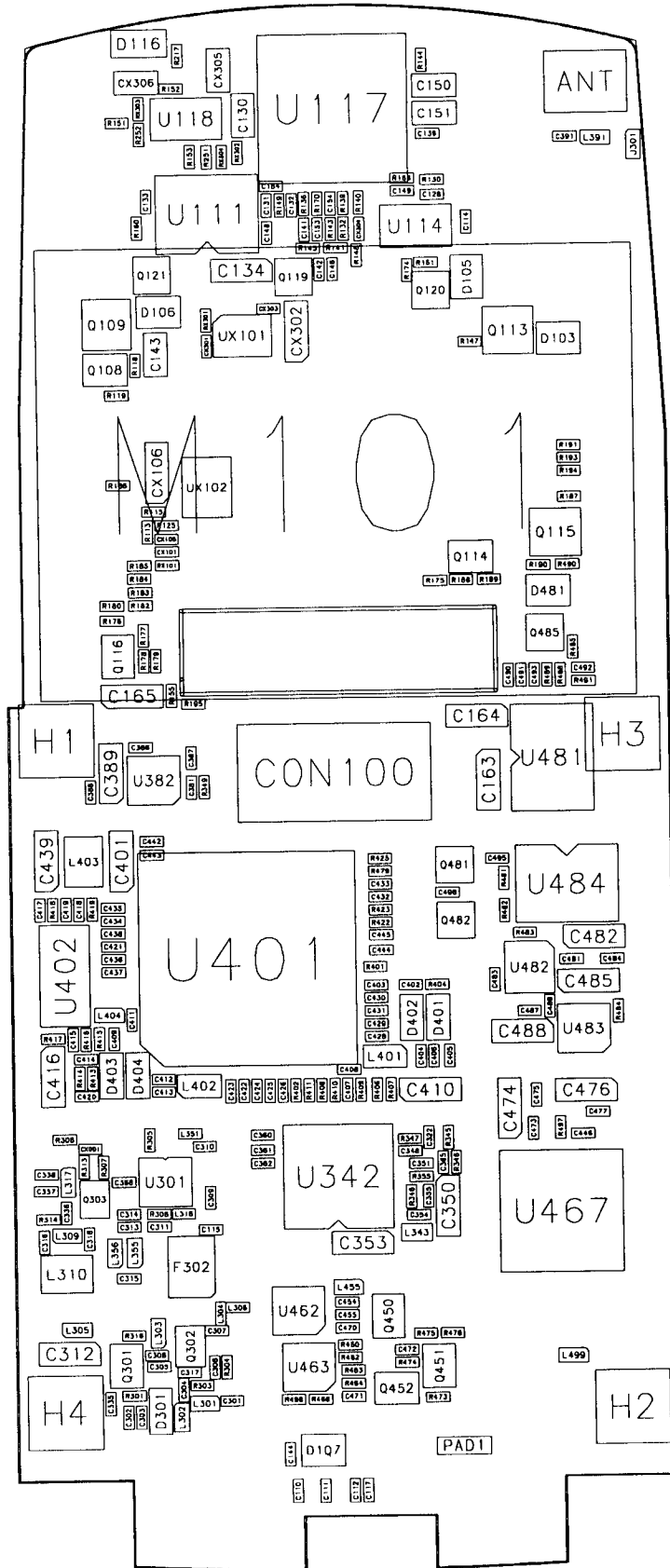
7. PCB Diagrams

7-1 Cellular Phone

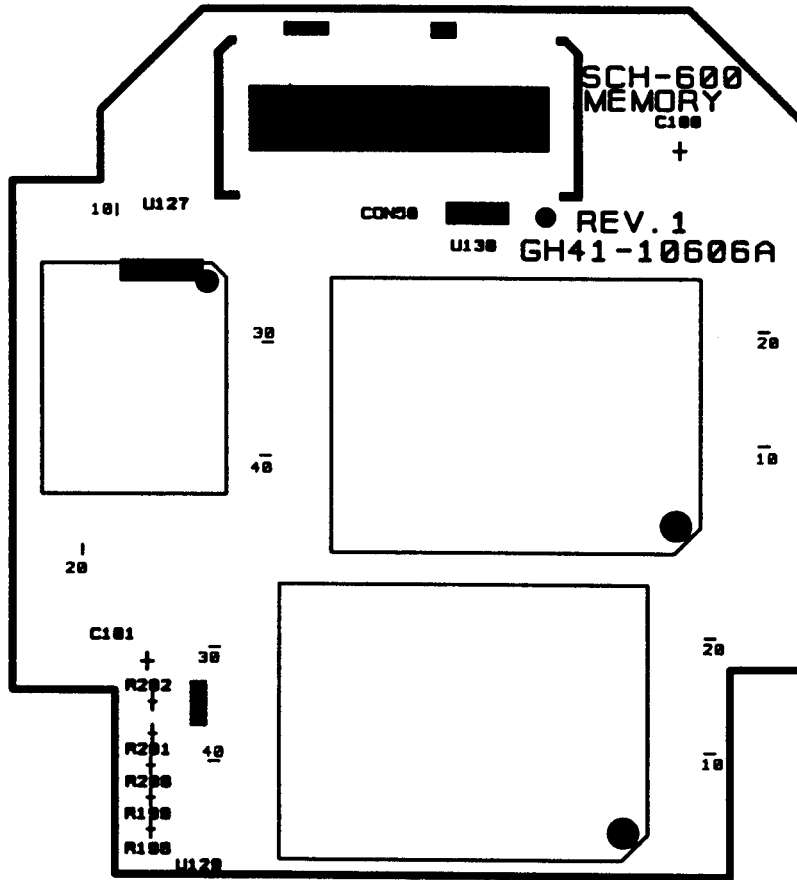
7-1-1 Main Board PCB: Top



7-1-2 Main Board PCB: Bottom



7-1-3 Memory Board PCB



7-2 Electrical Parts List

SEC. CODE	DESCRIPTION	PART NO.	POSITION
0405-000107	DIODEVARACTOR	D401,D402,D403,D404	TX
0401-001052	DIODE-SWITCHING	D101,D109	POWER
0407-000115	DIODE-ARRAY	D103,D105	AUDIO
0407-000115	DIODE-ARRAY	D106	POWER
0407-000122	DIODE-ARRAY	D102,D104	AUDIO
0407-000127	DIODE-ARRAY	D108,D107	LOGIC
0407-000127	DIODE-ARRAY	D481	TX
0409-000108	DIODE-PIN	D301	RX
0501-000162	TR-SMALL SIGNAL	Q116	POWER
0501-000162	TR-SMALL SIGNAL	Q452,Q450	TX
0501-000218	TR-SMALL SIGNAL	Q112	LOGIC
0501-000218	TR-SMALL SIGNAL	Q108,Q114,Q102	POWER
0501-000218	TR-SMALL SIGNAL	Q301	RX
0501-000218	TR-SMALL SIGNAL	Q451	TX
0501-000457	TR-SMALL SIGNAL	Q113	AUDIO
0501-000457	TR-SMALL SIGNAL	Q109,Q115	POWER
0501-000689	TR-SMALL SIGNAL	Q304	RX
0501-002063	TR-SMALL SIGNAL	Q303	RX
0504-000167	TR-DIGITAL	Q119	AUDIO
0504-000167	TR-DIGITAL	Q481,Q482	TX
0504-000168	TR-DIGITAL	Q103,Q121	POWER
0504-000172	TR-DIGITAL	Q120	AUDIO
0504-000172	TR-DIGITAL	Q111	POWER
0504-001016	TR-DIGITAL	Q485	TX
0505-001062	FET-GAAS	U301	RX
0505-001095	FET-SILICON	U106	POWER
0505-001119	FET-SILICON	Q302	RX
0505-001165	FET-SILICON	U104	POWER
0505-001170	FET-SILICON	U484	TX
0601-000355	LED,CHIP,RED	D116	POWER
0801-000885	IC-CMOS LOGIC	U105	LOGIC

SEC. CODE	DESCRIPTION	PART NO.	POSITION
0803-003010	IC-TTL	U114	AUDIO
1001-001019	IC-ANALOG MULTIPLEX	U481	TX
1103-001062	IC-EEPROM	U102	POWER
1201-000103	IC-AUDIO AMP	U111	AUDIO
1201-001006	IC-OP AMP	U463,U462	TX
1201-001090	IC-PREAMP	U385	RX
1201-001175	IC-PREAMP	U464	TX
1201-001176	IC-PREAMP	U461	TX
1201-001257	IC-AGC AMP	U302	RX
1201-001259	IC-POWER AMP	U467	TX
1202-000192	IC-CMOS,COMPARATOR	U118	AUDIO
1203-000384	IC-VOLTAGE REGULATOR	U122,UX101	POWER
1203-001107	IC-VOLTAGE REGULATOR	U482	TX
1203-001256	IC-VOLTAGE REGULATOR	U382	RX
1203-001285	IC-VOLTAGE REGULATOR	U483	TX
1203-001335	IC-VOLTAGE REGULATOR	U124	POWER
1203-001396	IC-PWM CONTROLLER	U123	POWER
1204-001106	IC-ASP	U117	AUDIO
1204-001113	IC-IF CIRCUIT	U401	TX
1205-001196	IC-LIN, MODEM	U101	LOGIC
1205-001253	IC-MIXER	U460	TX
1209-000142	IC-SYNTHESIZER	U342	RX
1209-001078	IC-PLL/SYNTHESIZER	U402	TX
1404-001040	THERMISTOR-NTC	R498	RX
2007-000070	R-CHIP 0 1/16W	L450	TX
2007-000137	R-CHIP 2K 1/16W	R417	TX
2007-000138	R-CHIP 100 1/16W	R154	LOGIC
2007-000140	R-CHIP 1K 1/16W	R147,R132,R204	AUDIO
2007-000140	R-CHIP 1K 1/16W	R192,R205,R156,R158	LOGIC
2007-000140	R-CHIP 1K 1/16W	R188,R209,R109	POWER
2007-000140	R-CHIP 1K 1/16W	R345,R346	RX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2007-000140	R-CHIP 1K 1/16W	R416,R451	TX
2007-000141	R-CHIP 2.2K 1/16W	R128,R164	LOGIC
2007-000141	R-CHIP 2.2K 1/16W	R314	RX
2007-000142	R-CHIP 2.7K 1/16W	R475,R456,R491	TX
2007-000143	R-CHIP 4.7K 1/16W	R145,R152,R140,R141	AUDIO
2007-000143	R-CHIP 4.7K 1/16W	R173,R129	LOGIC
2007-000143	R-CHIP 4.7K 1/16W	R176	POWER
2007-000143	R-CHIP 4.7K 1/16W	R466,R402	TX
2007-000146	R-CHIP 6.8K 1/16W	R455	TX
2007-000148	R-CHIP 10K 1/16W	R144,R143,R174,RX304, RX302,RX303	AUDIO
2007-000148	R-CHIP 10K 1/16W	R196,R197,R200-R203,R206, R207,R157,R159°	LOGIC
2007-000148	R-CHIP 10K 1/16W	R180,R182,R183,R185	POWER
2007-000148	R-CHIP 10K 1/16W	R178,U485	POWER
2007-000148	R-CHIP 10K 1/16W	R337,R305	RX
2007-000148	R-CHIP 10K 1/16W	R406,R407,R413,R415,R462, R464,R460,R414, R485,R473, R496	TX
2007-000149	R-CHIP 12K 1/16W	R103	POWER
2007-000151	R-CHIP 15K 1/16W	R208	POWER
2007-000151	R-CHIP 15K 1/16W	R307	RX
2007-000152	R-CHIP 20K 1/16W	R133,R134	LOGIC
2007-000153	R-CHIP 22K 1/16W	R181,R131	LOGIC
2007-000153	R-CHIP 22K 1/16W	R106,R189,R119,R199	POWER
2007-000153	R-CHIP 22K 1/16W	R474	TX
2007-000155	R-CHIP 27K 1/16W	R251,R252,R170,R136	AUDIO
2007-000155	R-CHIP 27K 1/16W	R463	TX
2007-000157	R-CHIP 47K 1/16W	R139,R166,R147	AUDIO
2007-000157	R-CHIP 47K 1/16W	R118	POWER
2007-000157	R-CHIP 47K 1/16W	R349	RX
2007-000157	R-CHIP 47K 1/16W	R481,R482,R483,R484	TX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2007-000159	R-CHIP 56K 1/16W	R148	AUDIO
2007-000159	R-CHIP 56K 1/16W	R167	LOGIC
2007-000161	R-CHIP 82K 1/16W	R146,R150	LOGIC
2007-000162	R-CHIP 100K 1/16W	R151,R153	AUDIO
2007-000162	R-CHIP 100K 1/16W	R169,R172	LOGIC
2007-000162	R-CHIP 100K 1/16W	R120,R116,R111,R108,R110	POWER
2007-000162	R-CHIP 100K 1/16W	R105,R123,R107,R113,R122	POWER
2007-000164	R-CHIP 150K 1/16W	R114,RX301	POWER
2007-000170	R-CHIP 1M 1/16W	R137	LOGIC
2007-000171	R-CHIP 0 1/16W	R138,R216,R215	LOGIC
2007-000171	R-CHIP 0 1/16W	R125,R501,R184	POWER
2007-000171	R-CHIP 0 1/16W	R364,C318,R316,R344	RX
2007-000171	R-CHIP 0 1/16W	R425,R408,R409,R418	TX
2007-000172	R-CHIP 10 1/16W	R306,R356,R350,R347,R348, R339,R341	RX
2007-000172	R-CHIP 10 1/16W	R401,R419	TX
2007-000772	R-CHIP 33K 1% 1/16W	R121	POWER
2007-000775	R-CHIP 33K 1/16W	R163	LOGIC
2007-000775	R-CHIP 33K 1/16W	R104	POWER
2007-000831	R-CHIP 39K 1/16W	R135	AUDIO
2007-000831	R-CHIP 39K 1/16W	R177	POWER
2007-000932	R-CHIP 470 1/16W	R127,R155	LOGIC
2007-000932	R-CHIP 470 1/16W	R301	RX
2007-000982	R-CHIP 5.6K 1/16W	R362	RX
2007-000982	R-CHIP 5.6K 1/16W	R453,R454,R476	TX
2007-001119	R-CHIP 680 1/16W	R355	RX
2007-001217	R-CHIP 82 1/16W	R186,R187	POWER
2007-001244	R-CHIP 91K 1/16W	R175	POWER
2007-001288	R-CHIP 18 1/16W	R360	RX
2007-001294	R-CHIP 36 1/16W	R191,R193,R194	POWER
2007-001294	R-CHIP 36 1/16W	R336	RX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2007-001298	R-CHIP 51 1/16W	R468	TX
2007-001305	R-CHIP 120 1/16W	R467,R469	TX
2007-001306	R-CHIP 150 1/16W	R361,R358	RX
2007-001307	R-CHIP 180 1/16W	R217	POWER
2007-001311	R-CHIP 270 1/16W	R308,R357	RX
2007-001313	R-CHIP 330 1/16W	RX102,RX201	LOGIC
2007-001319	R-CHIP 1.2K 1/16W	RX101,RX103	LOGIC
2007-001319	R-CHIP 1.2K 1/16W	R490	TX
2007-001320	R-CHIP 1.8K 1/16W	R303	RX
2007-001320	R-CHIP 1.8K 1/16W	R410	TX
2007-001325	R-CHIP 3.3K 1/16W	R190,R115	POWER
2007-001333	R-CHIP 18K 1/16W	R335	RX
2007-002797	R-CHIP 560 1/16W	R452	TX
2007-002965	R-CHIP 15 1/16W	R313	RX
2007-003030	R-CHIP 91 1/16W	R304	RX
2007-007001	R-CHIP 3.9K 1/16W	R160,R161	AUDIO
2007-007001	R-CHIP 3.9K 1/16W	R168	LOGIC
2007-007001	R-CHIP 3.9K 1/16W	R179	POWER
2007-007001	R-CHIP 3.9K 1/16W	R479	TX
2007-007021	R-CHIP 75K 1/16W	R112	POWER
2007-007131	R-CHIP 13K 1% 1/16W	R488	TX
2007-007132	R-CHIP 15K 1% 1/16W	R489	TX
2007-007133	R-CHIP 300 1% 1/16W	R404	TX
2007-007134	R-CHIP 39K 1% 1/16W	R411	TX
2007-007141	R-CHIP 240 1/16W	R309,R310	RX
2007-007480	R-CHIP 130K 1% 1/16W	R101	POWER
2007-007529	R-CHIP 91K 1% 1/16W	R102	POWER
2203-000234	C-CHIP 100P 1005	C145,C185,CX102,CX201	LOGIC
2203-000234	C-CHIP 100P 1005	C345,C370,C331,C334,C347, C359,C348	RX
2203-000234	C-CHIP 100P 1005	C360-C362	RX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2203-000234	C-CHIP 100P 1005	C411,C451,C417,C491,C493	TX
2203-000254	C-CHIP 10NF 1005	C110,C112,C111	AUDIO
2203-000254	C-CHIP 10NF 1005	C100,C179,C177,C169,C171, C175,C126,C152	LOGIC
2203-000254	C-CHIP 10NF 1005	C155,CX101	LOGIC
2203-000254	C-CHIP 10NF 1005	C121,CX104,CX105	POWER
2203-000254	C-CHIP 10NF 1005	C326,C308,C388,C346,C354, C355,C356,C358	RX
2203-000254	C-CHIP 10NF 1005	C381,C386,C333,C371,C394, C343,C349	RX
2203-000254	C-CHIP 10NF 1005	C461,C403,C444,C445,C429, C425,C475	TX
2203-000254	C-CHIP 10NF 1005	C423,C437,C435,C433,C431, C452,C495,C490	TX
2203-000254	C-CHIP 10NF 1005	C492,C481,C487,C486,C443, C483,C455,C470	TX
2203-000254	C-CHIP 10NF 1005	C471,C472,C473,C418,C457, C484,C441,C477	TX
2203-000278	C-CHIP 10PF 1005	C342,C313,C316	RX
2203-000359	C-CHIP 150PF 1005	C453	TX
2203-000386	C-CHIP 15PF 1005	C303	RX
2203-000438	C-CHIP 1N 1005	CX304	AUDIO
2203-000438	C-CHIP 1NF 1005	C125,C101,C140,C190	LOGIC
2203-000438	C-CHIP 1NF 1005	C113	POWER
2203-000438	C-CHIP 1NF 1005	C302,C301,C309,C311,C310, C377,C305,C306	RX
2203-000438	C-CHIP 1NF 1005	C336,C338,C307,C368,C327, C344,C315,CX001	RX
2203-000438	C-CHIP 1NF 1005	C450,C414,C428,C426,C424, C422,C436,C434	TX
2203-000438	C-CHIP 1NF 1005	C432,C430,C496,C442,C459, C460,C464,C419	TX
2203-000438	C-CHIP 1NF 1005	C454,C408	TX
2203-000466	C-CHIP 1PF 1005	C332,C325,C317	RX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2203-000466	C-CHIP 1PF 1005	C456	TX
2203-000489	C-CHIP 2.2NF 1005	C148,C131	AUDIO
2203-000489	C-CHIP 2.2NF 1005	C156	LOGIC
2203-000489	C-CHIP 2.2NF 1005	C402	TX
2203-000585	C-CHIP 220PF 1005	C124	LOGIC
2203-000585	C-CHIP 220PF 1005	C139	POWER
2203-000585	C-CHIP 220PF 1005	C387	RX
2203-000628	C-CHIP 22PF 1005	C314,C328	RX
2203-000679	C-CHIP 27PF 1005	C412,C413	TX
2203-000696	C-CHIP 2PF 1005	C420,C406,C465	TX
2203-000714	C-CHIP 3.3N 1005	C117	AUDIO
2203-000870	C-CHIP 3PF 1005	C319,C320,C341	RX
2203-000941	C-CHIP 470PF 1005	C144	LOGIC
2203-000941	C-CHIP 470PF 1005	CX103	LOGIC
2203-000941	C-CHIP 470PF 1005	C335,C329,CX002	RX
2203-000995	C-CHIP 47PF 1005	C463,C458,C404,C405	TX
2203-001033	C-CHIP 5.6NF 1005	C153	AUDIO
2203-001124	C-CHIP 680PF 1005	C133,C132	AUDIO
2203-001153	C-CHIP 68PF 1005	C135,C147	LOGIC
2203-001153	C-CHIP 68PF 1005	C337	RX
2203-001201	C-CHIP 7PF 1005	C304	RX
2203-001210	C-CHIP 8.2NF 1005	C102,C122	LOGIC
2203-001210	C-CHIP 8.2NF 1005	C438,C421	TX
2203-001259	C-CHIP 8PF 1005	C322	RX
2203-001405	C-CHIP 22NF 1005	C141,C142,C154	AUDIO
2203-001416	C-CHIP 33NF 1005	C415	TX
2203-001432	C-CHIP 47NF 1005	C365	RX
2203-001437	C-CHIP 5PF 1005	C137,C138	LOGIC
2203-001724	C-CHIP 47uF	CX302	POWER
2203-005054	C-CHIP 4.7P 1005	C466	TX
2203-005061	C-CHIP 100NF 1005	C129,C128,C146,C136	AUDIO

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2203-005061	C-CHIP 100NF 1005	C176,C174,C178,C170,C172, C173,C168	LOGIC
2203-005061	C-CHIP 100NF 1005	C106,C108,C120,C116,C118, C157,C127,CX303, CX301	POWER
2203-005144	C-CHIP 1UF 2012	C150,C151,C130	AUDIO
2203-005144	C-CHIP 1UF 2012	C143 POWER	
2404-000139	C-TA 10UF/6.3V	C107,C109	POWER
2404-000139	C-TA 10UF/6.3V	C312,C330,C389,C353,C357	RX
2404-000139	C-TA 10UF/6.3V	C439,C401,C488,C485,C476, C474	TX
2404-000151	C-TA 1UF/16V	C410	TX
2404-000167	C-TA 2.2UF/16V	C134	AUDIO
2404-000167	C-TA 2.2UF/16V	C482	TX
2404-000222	C-TA 33UF/16V	C382	RX
2404-000232	C-TA 4.7UF/10V	C163,C165,C164	POWER
2404-000274	C-TA 1.5UF/16V	C416	TX
2404-000278	C-TA 100UF/10V	C440	TX
2404-000312	C-TA 470NF/16V	C350	RX
2404-001032	C-TA 33UF/6.3V	C123	AUDIO
2404-001032	C-TA 33UF/6.3V	C104,C119	POWER
2703-000109	INDUCTOR 100NH	L309	RX
2703-000109	INDUCTOR 100NH	L404	TX
2703-000195	INDUCTOR 330NH	L310	RX
2703-000237	INDUCTOR 750NH	L403	TX
2703-000261	INDUCTOR 390NH	L311	RX
2703-000300	INDUCTOR 1UH	L305,L314,L343,L346,L342	RX
2703-000300	INDUCTOR 1UH	L455	TX
2703-000301	INDUCTOR 2.7UH	L312,L344	RX
2703-001031	INDUCTOR 33NH	L401	TX
2703-001049	INDUCTOR 100NH	L402	TX
2703-001166	INDUCTOR 5.6NH	L391	RX
2703-001167	INDUCTOR 8.2NH	L341	RX

SEC. CODE	DESCRIPTION	PART NO.	POSITION
2703-001172	INDUCTOR 100NH	L303,L317	RX
2703-001172	INDUCTOR 100NH	L458	TX
2703-001173	INDUCTOR 12NH	L451,L499	TX
2703-001175	INDUCTOR 56NH	L355,L356	RX
2703-001179	INDUCTOR 10NH	L351,L354	RX
2703-001181	INDUCTOR 27NH	L316	RX
2703-001190	INDUCTOR 15NH	L301	RX
2703-001263	INDUCTOR 4.7NH	C446	TX
2703-001285	INDUCTOR 39NH	L302	RX
2703-001408	INDUCTOR 8.2NH	L306	RX
2703-001409	INDUCTOR 12NH	L304	RX
2703-001413	INDUCTOR 27NH	L453,L454,L456	TX
2703-001563	INDUCTOR 10UH	L101	POWER
2802-001048	RESONATOR 27MHz	X101	LOGIC
2806-001146	OSCILLATOR-VCTCXO	U341	RX
2809-001205	OSCILLATOR-VCTCXO 19.68M	U343	RX
2904-000297	FILTER-SAW 85.38MHz	F303	RX
2904-001011	FILTER-SAW 881.5MHz	F302	RX
2904-001012	FILTER-SAW 836.5MHz	F451	TX
2909-001004	FILTER-DUPLEXER 881MHz	F301	RX
3710-001105	CONNECTOR-SOCKET 2P	J102	POWER
3710-001117	CONNECTOR-SOCKET 24P	CON100	LOGIC
3710-001302	CONNECTOR-SOCKET 18P	J101	AUDIO
3711-002048	CONNECTOR-HEADER	CON50	LOGIC
3722-001172	JACK POWER	J104	AUDIO
GH07-20521A	LCD	M101	POWER
GH39-20008A	CBF-SIGNAL	J301	RX