



DUAL BAND Mobile SGH-Q100

by Toko (www.gsm-free.com)

SERVICE *Manual*

Dual Band Mobile Cellular Phone



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1. SGH-Q100 MAIN Electrical Parts List

Level	SEC Code	Design LOC	DESCRIPTIONS
0	GH92-00827A	-	PBA MAIN-SGHQ100 MP ASS'Y;SGH-Q100, SEUK, UNKD, MP PB
1	3002-001103	AU501	BUZZER-MAGNETIC;93 dB, 3.6 V, 90mA, 2, 550Hz, BK
1	2404-001134	C1001, C1002, C1003	C-TA, CHIP;100 uF, 20 %, 6.3 V, LZ, TP, 4028
1	2203-001239	C1005, C1015, C1023	C-CERAMIC, CHIP;0.082 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000696	C1006, C1016, C1020	C-CERAMIC, CHIP;0.002 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-000254	C1008, C1009, C1019	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-005571	C101, C103, C105, C112	C-CERAMIC, CHIP;10000 nF, +80-20 %, 6.3 V, Y5 V, TP, 2012
1	2203-005446	C1010, C902, R901	C-CERAMIC, CHIP;0.0027 nF, 0.1 pF, 50 V, NP0, TP, 1005
1	2203-000995	C1011, C942, R1019	C-CERAMIC, CHIP;0.047 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000233	C1012, C1036, C1037	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000812	C1013, C1045, C804	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001072	C1014	C-CERAMIC, CHIP;0.056 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001124	C1017, C1018, C1024	C-CERAMIC, CHIP;680 pF, 10 %, 50 V, X7R, TP, 1005, -
1	2203-005065	C102, C104, C106, C110	C-CERAMIC, CHIP;1000 nF, +80-20 %, 10 V, Y5 V, TP, 1608
1	2203-000628	C1021, C611, C612	C-CERAMIC, CHIP;0.022 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000696	C1022, C958	C-CERAMIC, CHIP;0.002 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-000254	C1028, C1030, C111	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-005383	C1029	C-CERAMIC, CHIP;7 pF, 0.1 pF, 50 V, NPO, TP, 1005, -
1	2203-000425	C1031, C905	C-CERAMIC, CHIP;0.018 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-005061	C1033, C115, C201, C203	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2203-001259	C1035, C1044, C944	C-CERAMIC, CHIP;0.008 nF, 0.5 pF, 50 V, NP0, TP, 1005
1	2203-000233	C1038, C1039, C1041	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001383	C1040	C-CERAMIC, CHIP;0.0005 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-000466	C1050	C-CERAMIC, CHIP;0.001 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2404-001105	C107, C108, C117, C205	C-TA, CHIP;10 uF, 20 %, 6.3 V, GP, TP, 2012
1	2203-005065	C113, C120, C204, C303	C-CERAMIC, CHIP;1000 nF, +80-20 %, 10 V, Y5 V, TP, 1608
1	2203-002494	C116	C-CERAMIC, CHIP;470 nF, 10 %, 16 V, X7R, TP, 2012
1	2203-000233	C118, C210	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000254	C119, C510, C602, C603	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-005571	C126	C-CERAMIC, CHIP;10000 nF, +80-20 %, 6.3 V, Y5 V, TP, 2012
1	2203-005562	C202	C-CERAMIC, CHIP;10000 nF, +80-20 %, 10 V, Y5 V, TP, 3216
1	2404-001105	C206, C812, C926, C966	C-TA, CHIP;10 uF, 20 %, 6.3 V, GP, TP, 2012
1	2203-005061	C207, C208, C315, C316	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005

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1	2203-000812	C211, C212, C213, C214	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000812	C215, C216, C217, C218	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2703-001180	C305	INDUCTOR-SMD;15 nH, 5 %, 1 x 0.5 x 0.5 mm
1	2203-000870	C308	C-CERAMIC, CHIP;0.003 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-000233	C309, C617	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001103	C313	C-CERAMIC, CHIP;6.8 nF, 10 %, 50 V, X7R, TP, 1608, -
1	2203-000189	C314	C-CERAMIC, CHIP;100 nF, +80-20 %, 25 V, Y5 V, TP, 1608,
1	2203-005496	C320	C-CERAMIC, CHIP;220 nF, +80-20 %, 10 V, Y5 V, TP, 1005
1	2203-005065	C404, C407, C520, C717	C-CERAMIC, CHIP;1000 nF, +80-20 %, 10 V, Y5 V, TP, 1608
1	2404-001100	C410, C811, C915	C-TA, CHIP;33 uF, 20 %, 6.3 V, GP, TP, 3719, -
1	2203-005061	C411, C506, C508, C601	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2203-001239	C421, C422	C-CERAMIC, CHIP;0.082 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000311	C425	C-CERAMIC, CHIP;0.12 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-005509	C501, C502, C503	C-CERAMIC, CHIP;330 nF, +80-20 %, 10 V, Y5 V, TP, 1005
1	2404-001101	C522	C-TA, CHIP;1 uF, 20 %, 16 V, GP, TP, 2012, -
1	2203-000254	C604, C605, C606, C607	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-000254	C608, C609, C613, C614	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-005061	C610, C713, C715, C720	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2203-000254	C615, C703, C704, C708	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-000233	C618, C619, C620, C621	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001405	C622, C121	C-CERAMIC, CHIP;22 nF, +80-20 %, 25 V, Y5 V, TP, 1005
1	2203-000233	C701, C702, C705, C706	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000254	C709, C710, C711, C712	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-000254	C718, C729, C732, C801	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-005061	C721, C722, C814, C815	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2203-005065	C723, C724, C725	C-CERAMIC, CHIP;1000 nF, +80-20 %, 10 V, Y5 V, TP, 1608
1	2203-000330	C780, C781, C782, C783	C-CERAMIC, CHIP;0.012 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-001437	C784	C-CERAMIC, CHIP;5 pF, 0.25 pF, 50 V, X7R, TP, 1005, 1.0
1	2203-000254	C802, C806, C807, C917	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-000233	C805, C809, C813	C-CERAMIC, CHIP;0.1 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-005552	C808	C-CERAMIC, CHIP;0.0022 nF, 0.1 pF, 50 V, NP0, TP, 1005
1	2404-001086	C810	C-TA, CHIP;4.7 uF, 20 %, 6.3 V, GP, TP, 2012, -
1	2203-000812	C816, C817, C922, C962	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000438	C818, C913, C914, C919	C-CERAMIC, CHIP;1 nF, 10 %, 50 V, X7R, TP, 1005, -

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1	2203-000654	C823, C824, C825, C977	C-CERAMIC, CHIP;270 pF, 10 %, 50 V, X7R, TP, 1005, -
1	2203-005234	C901, C907	C-CERAMIC, CHIP;0.0012 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-005050	C908	C-CERAMIC, CHIP;0.0018 nF, 0.25 pF, 50 V, NP0, TP, 1005
1	2203-000679	C918, C928, C976, C982	C-CERAMIC, CHIP;0.027 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000438	C923, C924, C929, C930	C-CERAMIC, CHIP;1 nF, 10 %, 50 V, X7R, TP, 1005, -
1	2203-000359	C925	C-CERAMIC, CHIP;0.15 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000438	C931, C939, C951, C979	C-CERAMIC, CHIP;1 nF, 10 %, 50 V, X7R, TP, 1005, -
1	2203-005061	C932, C934, C954, C957	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2703-001737	C935, C937	INDUCTOR-SMD;2.7 nH, 0.3 nH, 1 x 0.5 x 0.5 mm
1	2703-001734	C936, L912	INDUCTOR-SMD;6.8 nH, 5 %, 1 x 0.5 x 0.5 mm
1	2203-000278	C938	C-CERAMIC, CHIP;0.01 nF, 0.5 pF, 50 V, NP0, TP, 1005
1	2301-001214	C940	C-FILM, CHIP;4.7 nF, 5 %, 16 V, TP, 2012, -
1	2301-001387	C941	C-FILM, CHIP;0.82 nF, 5 %, 50 V, TP, 2012, -
1	2203-001153	C943	C-CERAMIC, CHIP;0.068 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-005061	C959	C-CERAMIC, CHIP;100 nF, +80-20 %, 16 V, Y5 V, TP, 1005
1	2404-001088	C963	C-TA, CHIP;2.2 uF, 20 %, 6.3 V, GP, TP, 2012, -
1	2203-000812	C964, C967, C968, C969	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2203-000254	C965, C980	C-CERAMIC, CHIP;10 nF, 10 %, 16 V, X7R, TP, 1005, -
1	2203-000812	C970, C978	C-CERAMIC, CHIP;0.033 nF, 5 %, 50 V, NP0, TP, 1005
1	2301-001475	C972	C-FILM, CHIP;3.9 nF, 5 %, 16 V, TP, 2.0 x 1.25 x 0.9 mm
1	2301-001230	C973	C-FILM, CHIP;10 nF, 5 %, 16 V, TP, 2012, -
1	2301-001231	C974	C-FILM, CHIP;680 pF, 5 %, 50 V, TP, 2012, -
1	2301-001197	C975	C-FILM, CHIP;0.39 nF, 5 %, 50 V, TP, 2 x 1.25 x 0.8 mm, -
1	2203-000438	C981	C-CERAMIC, CHIP;1 nF, 10 %, 50 V, X7R, TP, 1005, -
1	3710-001492	CN201	CONNECTOR-SOCKET;40P, 2R, 0.5MM, SMD-S, A uF
1	3710-001600	CN301	CONNECTOR-SOCKET;18P, 1R, 0.5 mm, SMD-A, A uF
1	3722-001380	CN401	JACK-PHONE;6P, 2.6PI, AG, BLK, -
1	3710-001105	CN501	CONNECTOR-SOCKET;2P, 1R, 1.27 mm, SMD-S, AU
1	3711-004621	CN601	CONNECTOR-HEADER;BOX, 14P, 2R, 0.5 mm, SMD-S, A uF
1	3709-001121	CN801	CONNECTOR-CARD EDGE;6P, 2.54 mm, SMD-S, AU
1	0401-001033	D101	DIODE-SWITCHING;MCL4154, 25 V, 200 mA, M-MELF, TP
1	0407-001002	D201, D502	DIODE-ARRAY;DAN222, 80 V, 300 mA, CA2-3, EM3, TP
1	1405-001082	D202, D203, D204	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP
1	1405-001082	D205, D206	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP

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1	1405-001018	D301, D303	VARISTOR;14 V, -, 1.6 x 0.8 mm, TP
1	0407-000115	D501	DIODE-ARRAY;DAN202U, 80 V, 100 mA, CA2-3, SC-70,
1	4709-001214	F1001	COUPLER-DIRECTION;880-915 MHz, 19.5+-1 dB, 13 dB, 2.0X1.
1	4709-001213	F1002	COUPLER-DIRECTION;1710-1785 MHz, 14+-1 dB, 12 dB, 2.0X1.
1	2904-001096	F1003	FILTER-SAW;1.8425GHz, 75 MHz, +37.5 MHz/2.5 dB, TP, +-15
1	2904-001271	F1004	FILTER-SAW;947.5 MHz, 25 MHz, +-12.5 MHz/1.4 dB, TP, +-12.
1	2904-001226	F901	FILTER-SAW;942.5 MHz, 35 MHz, 925-960 MHz/2 dB, TP, 925-96
1	2904-001227	F902	FILTER-SAW;225 MHz, 0.26 MHz, +-67.5 kHz/2 dB, TP, 5.5 dB, -
1	2904-001228	F903	FILTER-SAW;1.8425GHz, -, 1805-1880 MHz/1 dB, TP, 1805-18
1	4709-001217	F904	FREQ-DISTRIBUTER;880-960 MHz, 1710-1880 MHz, 0.7 dB, 4 W,
1	2703-001190	L1001	INDUCTOR-SMD;15 nH, 5 %, 1.6 x 0.8 x 0.8 mm
1	2703-001132	L1002, L1008, L914	INDUCTOR-SMD;4.7 nH, 5 %, 1.6 x 0.8 x 0.8 mm
1	2703-001288	L1004	INDUCTOR-SMD;2.7 nH, 0.5 nH, 1.6 x 0.8X0.8 mm
1	2703-001167	L1005	INDUCTOR-SMD;8.2 nH, 10 %, 1.6 x 0.8 x 0.8 mm
1	2703-001207	L1006, L1007	INDUCTOR-SMD;6.8 nH, 5 %, 1.6 x 0.8X0.8 mm
1	2703-001258	L1009	INDUCTOR-SMD;3.3 nH, 0.3 nH, 1.6 x 0.8 x 0.8 mm
1	3301-001105	L101	CORE-FERRITE;AB, 1.6 x 0.8 x 0.8 mm, -, -
1	3301-001208	L201, L202	CORE-FERRITE BEAD;AB, 1.6 x 0.8 x 0.8 mm, -, -
1	2703-001204	L302	INDUCTOR-SMD;1.2 nH, 0.3 nH, 1.6 x 0.8X0.8 mm
1	2703-002052	L303	INDUCTOR-SMD;1.5 mH, 20 %, 3.8 x 3.8 x 2.0 mm
1	2703-001853	L514	INDUCTOR-SMD;10 uH, 20 %, 6 x 6 x 1.8 mm
1	2703-001673	L529, L903, L906	INDUCTOR-SMD;120 nH, 5 %, 1.8 x 1.12 x 1.02 mm
1	2703-001918	L901, L905	INDUCTOR-SMD;150 nH, 2 %, 1.6 x 0.8 x 0.8 mm
1	2703-001545	L902, L907	INDUCTOR-SMD;47 nH, 5 %, 1.8 x 1.12 x 1.02 mm
1	2703-001175	L904	INDUCTOR-SMD;56 nH, 5 %, 1.6 x 0.8 x 0.8 mm
1	2703-001748	L909	INDUCTOR-SMD;5.6 nH, 0.3 nH, 1.0 x 0.5 x 0.5 mm
1	2703-001685	L910	INDUCTOR-SMD;82 nH, 5 %, 1.7 x 1.14 x 1.02 mm
1	2703-001726	L911	INDUCTOR-SMD;27 nH, 5 %, 1 x 0.5 x 0.5 mm
1	2007-007771	L915, R113	R-CHIP;0 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2703-001422	L916, L918	INDUCTOR-SMD;22 nH, 5 %, 1.6 x 0.8 x 0.8 mm
1	2203-002668	L919	C-CERAMIC, CHIP;0.0005 nF, 0.1 pF, 50 V, NP0, TP, 1005
1	0601-001094	LED601	LED;CHIP, Y-GRN, 0.8 x 1.1 mm, 570nm
1	4302-001081	M101	BATTERY-LI(2ND);-, .25MAH, COIN, 0.03 mA, -, -
1	2801-004052	OSC601	CRYSTAL-SMD;0.032768 MHz, -, 28-ACM, 12.5PF, 50 ohm, TP

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1	2809-001237	OSC801	OSCILLATOR-VCTCXO;13 MHz, 5ppm, 10K ohm//10 pF, TP, 3 V, 2m
1	2806-001233	OSC901	OSCILLATOR-VCO;1167 MHz/1615 MHz, -, 0+-3 dBm, TP, 2.85 V,
1	2806-001232	OSC902	OSCILLATOR-VCO;1080 MHz, -, -6to0 dBm, TP, 2.85 V, 6.5mA
1	2806-001231	OSC903	OSCILLATOR-VCO;897.5 MHz/1747.5 MHz, -, -, TP, 2.85 V, 20m
1	GH41-00123A	PCB	PCB-SGHQ100 MAIN;SGH-Q100, FR-4, 6L, -, 0.86T, 118X155M
1	0504-001012	Q1001, Q1002, Q1003	TR-DIGITAL;DTC114YE, NPN, 150 mW, 10K/47K, EMT3, TP
1	0504-000168	Q101, Q102, Q114, Q201	TR-DIGITAL;RN1104, NPN, 100 mW, 47K/47K, SSM, TP
1	0504-000168	Q202, Q203, Q204, Q205	TR-DIGITAL;RN1104, NPN, 100 mW, 47K/47K, SSM, TP
1	0501-002011	Q301, Q502	TR-SMALL SIGNAL;2SD2114K, NPN, 200 mW, SOT-23, TP, 8
1	0501-000162	Q302, Q501	TR-SMALL SIGNAL;2SA1576, PNP, 200 mW, SOT-323, TP, 180-3
1	0504-000167	Q503, Q601	TR-DIGITAL;RN1102, NPN, 100 mW, 10K/10K, SSM, TP
1	2007-001288	R1001, R1016, R907	R-CHIP;18 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007008	R1002, R1003, R1011	R-CHIP;300 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000139	R1004	R-CHIP;220 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007132	R1005, R1015	R-CHIP;15 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007142	R1006, R607	R-CHIP;10 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-001301	R1008, R1009, R1013	R-CHIP;68 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007139	R101, R1012	R-CHIP;47 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007311	R1010	R-CHIP;22 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-001301	R1014, R928	R-CHIP;68 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007008	R1017, R1018, R204	R-CHIP;300 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000162	R102, R116, R210	R-CHIP;100 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000148	R1020, R1021, R1022	R-CHIP;10 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000140	R1023, R302, R303, R304	R-CHIP;1 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000148	R1024, R115, R211, R222	R-CHIP;10 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001319	R103, R939	R-CHIP;1.2 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000172	R107, R507, R613, R734	R-CHIP;10 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000157	R108, R109, R212, R213	R-CHIP;47 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007771	R114, R117, R218, R402	R-CHIP;0 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007107	R201, R203, R720, R721	R-CHIP;100 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007791	R202	R-CHIP;9.1 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007308	R205, R209	R-CHIP;33 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007309	R206	R-CHIP;12 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007592	R207	R-CHIP;270 kohm, 1 %, 1/16 W, DA, TP, 1005

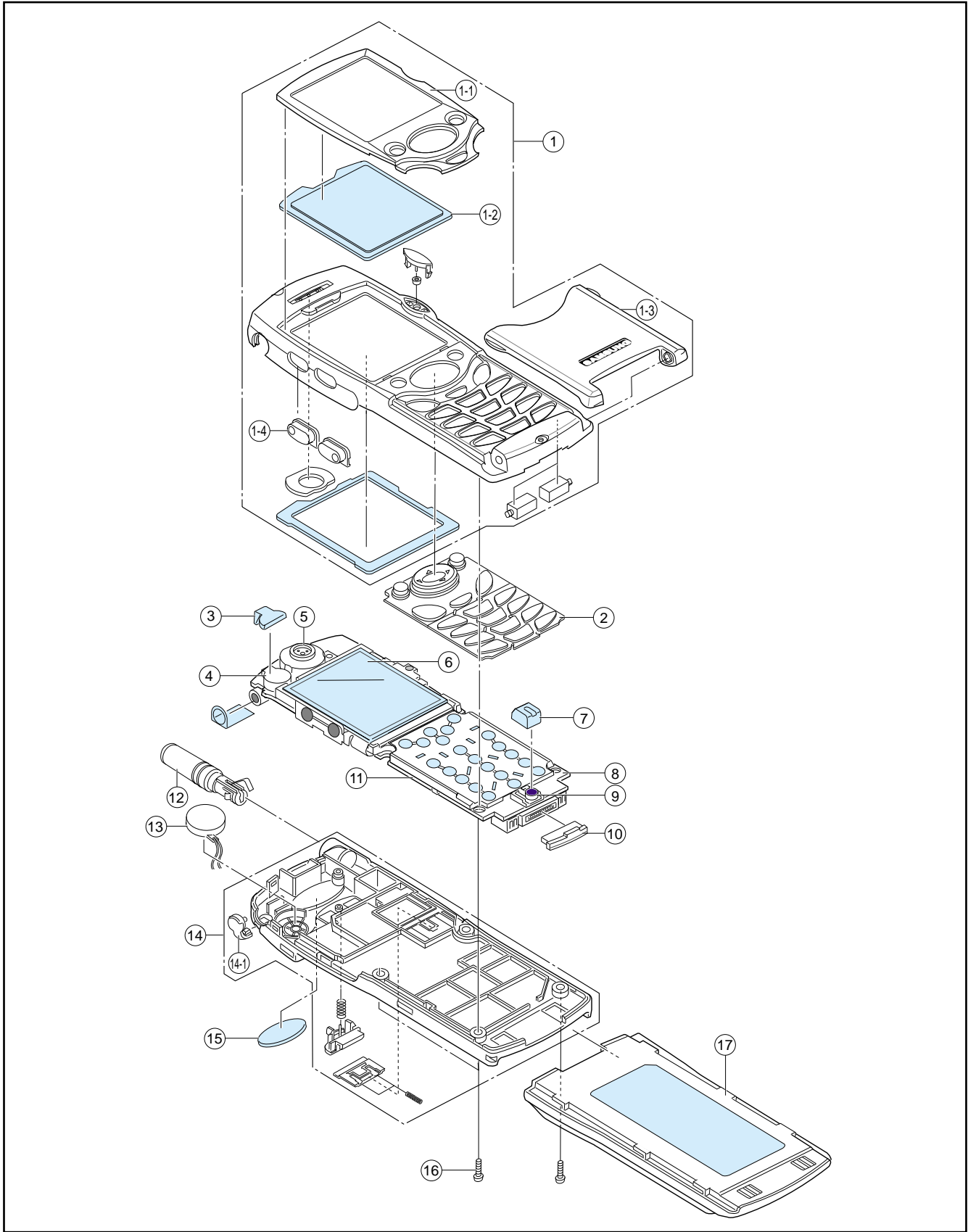
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1	2007-007135	R208	R-CHIP;18 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-000157	R214, R215, R216, R305	R-CHIP;47 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000140	R307, R308, R309, R321	R-CHIP;1 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000137	R310, R503	R-CHIP;2 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000157	R311, R511, R512, R520	R-CHIP;47 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000143	R312, R508, R509, R923	R-CHIP;4.7 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000839	R313	R-CHIP;39 ohm, 5 %, 1/16 W, DA, TP, 1608
1	2007-000164	R317	R-CHIP;150 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000140	R322, R323, R324	R-CHIP;1 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000162	R401, R408, R426, R812	R-CHIP;100 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000148	R403, R404, R406, R502	R-CHIP;10 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000161	R405, R803	R-CHIP;82 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000141	R407	R-CHIP;2.2 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001119	R427	R-CHIP;680 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000148	R504, R514, R601, R608	R-CHIP;10 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007771	R510, R513, R604, R616	R-CHIP;0 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000097	R603	R-CHIP;47 kohm, 5 %, 1/16 W, DA, TP, 1608
1	2007-000932	R605, R912	R-CHIP;470 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000170	R606, R808, R118	R-CHIP;1 Mohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000157	R609, R610	R-CHIP;47 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007771	R617, R806, R810, R811	R-CHIP;0 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007317	R701, R702, R711, R712	R-CHIP;2.2 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007134	R703, R704, R709, R710	R-CHIP;39 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007312	R705, R706, R707, R708	R-CHIP;20 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-000148	R714, R110, R223	R-CHIP;10 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000166	R716	R-CHIP;300 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007312	R718, R719, R722, R723	R-CHIP;20 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007107	R724, R725, R727	R-CHIP;100 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007334	R726	R-CHIP;200 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007698	R728, R729, R730, R731	R-CHIP;5.1 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-007698	R732, R733	R-CHIP;5.1 kohm, 1 %, 1/16 W, DA, TP, 1005
1	2007-000172	R801, R802, R809, R902	R-CHIP;10 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000151	R804	R-CHIP;15 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000174	R805, R911, R943	R-CHIP;47 ohm, 5 %, 1/16 W, DA, TP, 1005

Level	SEC Code	Design LOC	DESCRIPTIONS
1	2007-000159	R807	R-CHIP;56 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000162	R813, R814, R815	R-CHIP;100 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000172	R903, R906, R908, R915	R-CHIP;10 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001284	R905, R926	R-CHIP;4.7 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-007771	R909, R914, R929	R-CHIP;0 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000147	R917	R-CHIP;8.2 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001325	R921	R-CHIP;3.3 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000172	R922, R927, R930, R941	R-CHIP;10 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-000138	R931, R932	R-CHIP;100 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2703-001733	R933	INDUCTOR-SMD;8.2 nH, 5 %, 1 x 0.5 x 0.5 mm
1	2007-000153	R934	R-CHIP;22 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001217	R938	R-CHIP;82 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001298	R940	R-CHIP;51 ohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001325	R942	R-CHIP;3.3 kohm, 5 %, 1/16 W, DA, TP, 1005
1	2007-001311	R944	R-CHIP;270 ohm, 5 %, 1/16 W, DA, TP, 1005
1	1209-001292	U1001	IC-ETC, LINEAR;HD155171NP01EL, QFP, 24P, 165MIL, PLAST
1	1201-001583	U1002	IC-POWER AMP;08109, QFP, 16P, -, -, -, PLASTIC, 8 V, -, -30t
1	0801-000794	U1003, U503	IC-CMOS LOGIC;7S08, AND GATE, SOT-25, 5P, 63MIL,
1	0504-001042	U1004, U1005, U1008	TR-DIGITAL;BCR10PN, NPN/PNP, 250 mW, 10K/10K,
1	2909-001084	U1006	FILTER-DUPLEXER;942.5 MHz, 897.5 MHz, 1/1.2DB, TP, -, -
1	1203-001985	U101	IC-VOLTAGE REGULATOR;2005, QFP, 48P, 276MIL, PLASTIC, 1
1	1107-001225	U1010	IC-FLASH MEMORY;9BV1604, 1M x 16/2M x 8Bit, uBGA, 48P, -, 1
1	2203-001124	U1011	C-CERAMIC, CHIP;680 pF, 10 %, 50 V, X7R, TP, 1005, -
1	0504-001071	U1012	TR-DIGITAL;UMD9N, NPN/PNP, 150 mW, 4.7, UMT6, TP
1	1203-001917	U102	IC-VOLTAGE REGULATOR;5213, SOT-23, 5P, 50MIL, PLASTIC,
1	0801-002212	U103	IC-CMOS LOGIC;7S02, NOR GATE, SC-70, 5P, 63MIL, SINGLE,
1	0505-001423	U104, U703	FET-SILICON;FDG6323L, N/P, -, -, -, 0.3 W, SC70-6
1	1203-001515	U201	IC-BATTERY;1510, SSOP, 16P, 150MIL, PLASTIC, 3
1	1003-001226	U302	IC-POWER DRIVER;D361A, SOP, 8P, 120MIL, SINGLE, 90 mA, TP
1	1001-001088	U401	IC-ANALOG SWITCH;MAX4544EUT-T, -, SOT-23, 6P, -, SINGLE
1	1106-001301	U501	IC-SRAM;1337, 262K x 16Bit, CSP, 72P, -, 85nS, 3 V, -, PLASTI
1	0504-001042	U502	TR-DIGITAL;BCR10PN, NPN/PNP, 250 mW, 10K/10K,
1	GH09-00015A	U601	IC MICOM-SGHQ100;TR09BFSBD17IN-DB
1	1209-001219	U602	IC-SENSOR;LM60C, SOT-23, 3P, 115MIL, PLASTIC

Level	SEC Code	Design LOC	DESCRIPTIONS
1	1204-001693	U701	IC-SIGNAL PROCESSOR;CSP1089-FSBGA, BGA, 100P, 393MIL,
1	1201-001007	U702	IC-OP AMP;2274, SOP, 14P, -, DUAL, 15V/ mV, PLA
1	1001-001099	U704	IC-ANALOG MULTIPLEX;BU4551BF V, CMOS, SSOP, 16P, 173MIL
1	0801-002345	U801	IC-CMOS LOGIC;7S04, INVERTER, SOT-353, 5P, 49MIL, SINGL
1	1203-001289	U802	IC-DC/DC CONVERTER;1555, SOP, 16P, 150MIL, PLASTIC, -0
1	1209-001308	U901	IC-PLL/SYNTHESISER;HD155131TF, QFP, 56P, 290MIL, PLAST
1	0404-001044	ZD202, ZD203	DIODE-SCHOTTKY;UPS5817, 20 V, 1A, SMD, TP
1	1405-001082	ZD302	VARISTOR;5.6 V, 20A, 1 x 0.5 x 0.6 mm, TP
1	0406-001084	ZD303	DIODE-TVS;SMF05, 6/-/ V, 200 W, -
1	1405-001082	ZD305, ZD306, ZD307	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP
1	1405-001082	ZD308, ZD309, ZD310	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP
1	1405-001082	ZD311, ZD312, ZD401	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP
1	1405-001082	ZD402, ZD403, ZD404	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP
1	1405-001082	ZD405	VARISTOR;5.6 V, 20 A, 1 x 0.5 x 0.6 mm, TP

2. SGH-Q100 Exploded View and its Parts List

2-1. Cellular phone Exploded View



2-2. Cellular phone Parts List (D/GRAY)

NO	DESCRIPTION	SEC.CODE	REMARK
1	FRONT COVER ASS'Y	GH75-00638A	SA
1-1	FRONT PIECE	GH72-01195A	SNA
1-2	LCD WINDOW	GH72-01201A	SNA
1-3	FLIP COVER (BADGE)	GH72-01299A	SA
1-4	SIDE KEY ASS'Y	GH75-00640A	SNA
2	KEY PAD	GH72-01494A	SA
3	BUZZER HOLDER	GH73-00348A	SA
4	BUZZER	3002-001103	SA
5	SPEAKER	3001-001214	SA
6	LCD	GH07-00040A	SA
7	MIC HOLDER	GH73-00347A	SA
8	MAIN PBA	GH92-00827A	SA
9	MIC	3003-001034	SA
10	COVER-CONNECTOR	GH73-00350A	SA
11	SHIED COVER	GH72-01197A	SA
12	ANTENNA	GH42-00063A	SA
13	MOTOR	GH96-00855A	SA
14	REAR COVER ASS'Y	GH75-00639A	SA
14-1	EAR-JACK COVER	GH73-00349A	SNA
15	DECORATION	GH72-01206A	SA
16	SCREW(M2, L6) x 4EA	6001-001046	SA
17	BATTERY	GH43-00233A	SA
		GH43-00221A	SA
			540 mAh
			900 mAh

2-3. Cellular phone Parts List (BLUE)

NO	DESCRIPTION	SEC.CODE	REMARK
1	FRONT COVER ASS'Y	GH75-00638B	SA
1-1	FRONT PIECE	GH72-01195A	SNA
1-2	LCD WINDOW	GH72-01201A	SNA
1-3	FLIP COVER (BADGE)	GH72-01299B	SA
1-4	SIDE KEY ASS'Y	GH75-00640A	SNA
2	KEY PAD	GH72-01494A	SA
3	BUZZER HOLDER	GH73-00348A	SA
4	BUZZER	3002-001103	SA
5	SPEAKER	3001-001214	SA
6	LCD	GH07-00040A	SA
7	MIC HOLDER	GH73-00347A	SA
8	MAIN PBA	GH92-00827A	SA
9	MIC	3003-001034	SA
10	COVER-CONNECTOR	GH73-00350A	SA
11	SHIED COVER	GH72-01197A	SA
12	ANTENNA	GH42-00063A	SA
13	MOTOR	GH96-00855A	SA
14	REAR COVER ASS'Y	GH75-00639A	SA
14-1	EAR-JACK COVER	GH73-00349A	SNA
15	DECORATION	GH72-01206A	SA
16	SCREW(M2, L6) x 4EA	6001-001046	SA
17	BATTERY	GH43-00233A	SA
		GH43-00221A	SA
			540 mAh
			900 mAh

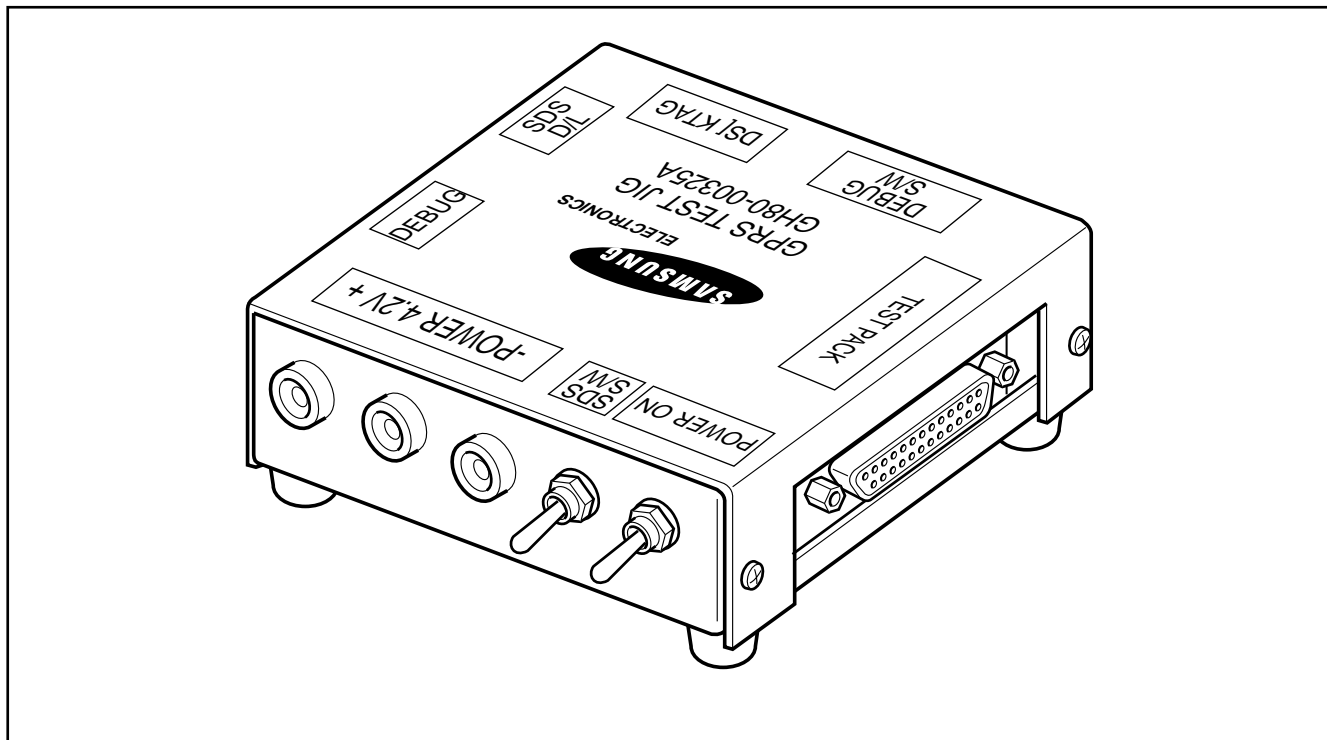
2-4. Cellular phone Parts List (WINE RED)

NO	DESCRIPTION	SEC.CODE	REMARK
1	FRONT COVER ASS'Y	GH75-00638C	SA
1-1	FRONT PIECE	GH72-01195A	SNA
1-2	LCD WINDOW	GH72-01201A	SNA
1-3	FLIP COVER (BADGE)	GH72-01299C	SA
1-4	SIDE KEY ASS'Y	GH75-00640A	SNA
2	KEY PAD	GH72-01494A	SA
3	BUZZER HOLDER	GH73-00348A	SA
4	BUZZER	3002-001103	SA
5	SPEAKER	3001-001214	SA
6	LCD	GH07-00040A	SA
7	MIC HOLDER	GH73-00347A	SA
8	MAIN PBA	GH92-00827A	SA
9	MIC	3003-001034	SA
10	COVER-CONNECTOR	GH73-00350A	SA
11	SHIED COVER	GH72-01197A	SA
12	ANTENNA	GH42-00063A	SA
13	MOTOR	GH96-00855A	SA
14	REAR COVER ASS'Y	GH75-00639A	SA
14-1	EAR-JACK COVER	GH73-00349A	SNA
15	DECORATION	GH72-01206A	SA
16	SCREW(M2, L6) x 4EA	6001-001046	SA
17	BATTERY	GH43-00233A	SA
		GH43-00221A	SA
			540 mAh
			900 mAh

2-5. Cellular phone Parts List (GREEN)

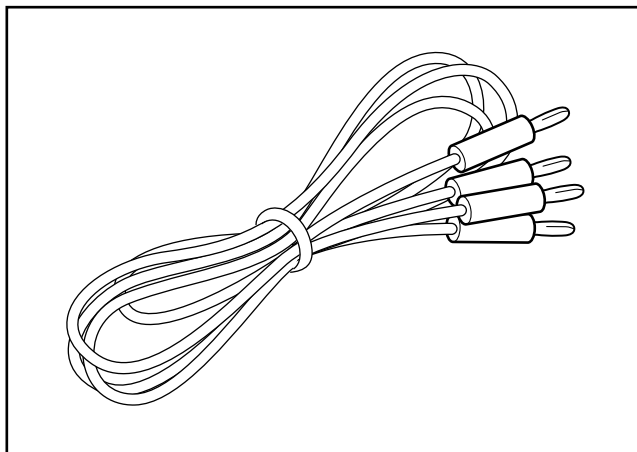
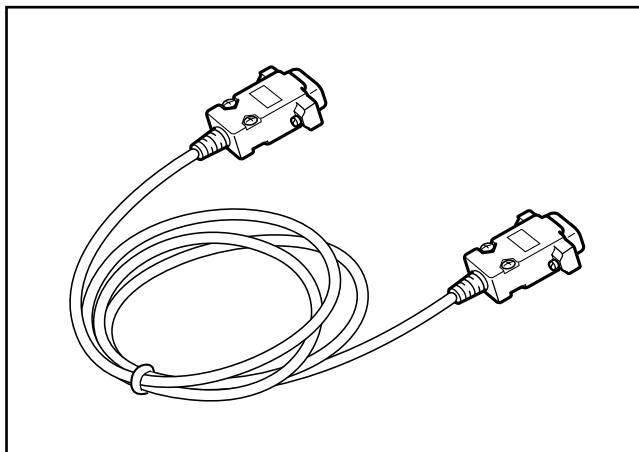
NO	DESCRIPTION	SEC.CODE	REMARK
1	FRONT COVER ASS'Y	GH75-00638D	SA
1-1	FRONT PIECE	GH72-01195A	SNA
1-2	LCD WINDOW	GH72-01201A	SNA
1-3	FLIP COVER (BADGE)	GH72-01299D	SA
1-4	SIDE KEY ASS'Y	GH75-00640A	SNA
2	KEY PAD	GH72-01494A	SA
3	BUZZER HOLDER	GH73-00348A	SA
4	BUZZER	3002-001103	SA
5	SPEAKER	3001-001214	SA
6	LCD	GH07-00040A	SA
7	MIC HOLDER	GH73-00347A	SA
8	MAIN PBA	GH92-00827A	SA
9	MIC	3003-001034	SA
10	COVER-CONNECTOR	GH73-00350A	SA
11	SHIED COVER	GH72-01197A	SA
12	ANTENNA	GH42-00063A	SA
13	MOTOR	GH96-00855A	SA
14	REAR COVER ASS'Y	GH75-00639A	SA
14-1	EAR-JACK COVER	GH73-00349A	SNA
15	DECORATION	GH72-01206A	SA
16	SCREW(M2, L6) x 4EA	6001-001046	SA
17	BATTERY	GH43-00233A	SA
		GH43-00221A	SA
			540 mAh
			900 mAh

2-6. Test Jig (GH80-00161A)



Data Cable

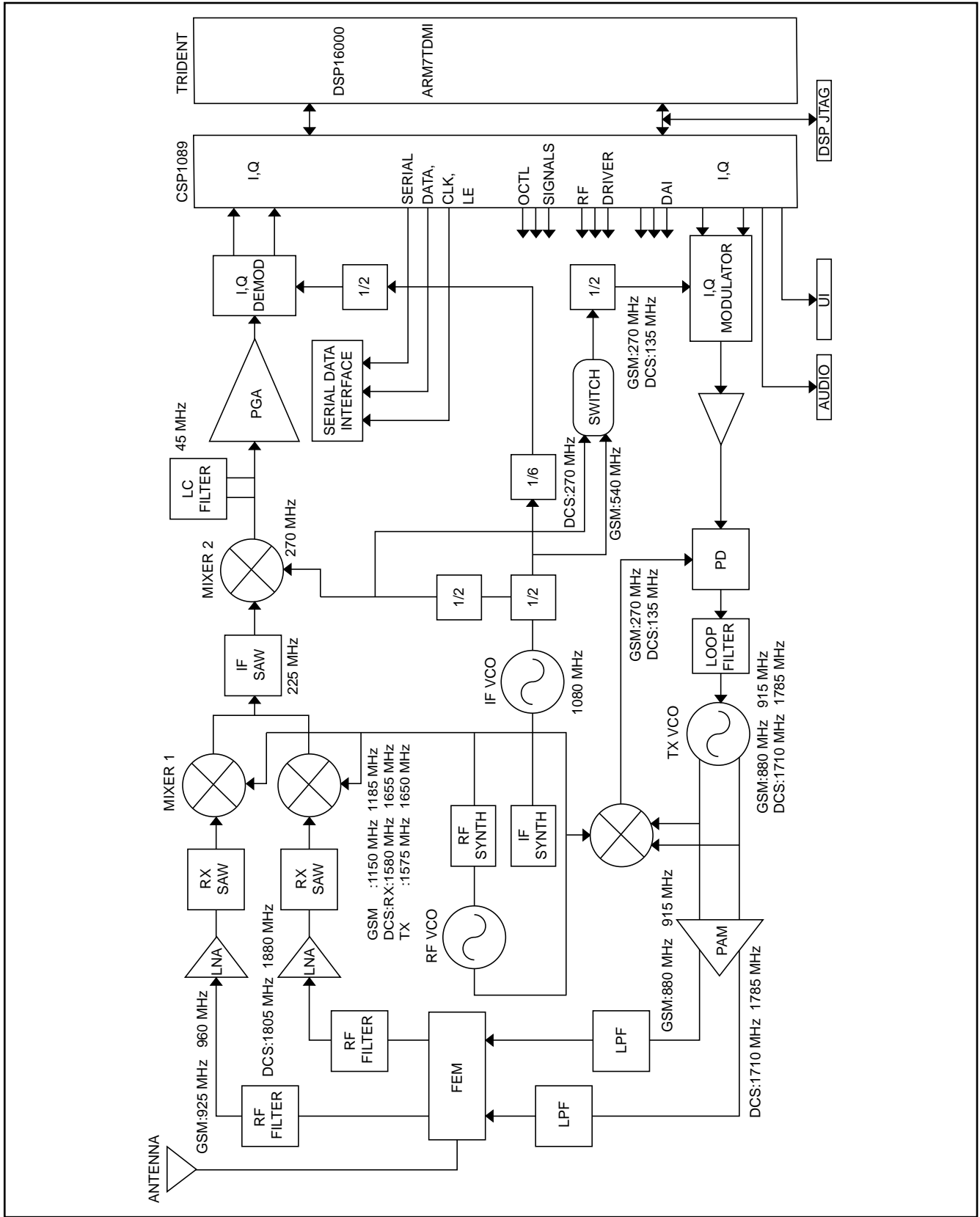
Test Cable



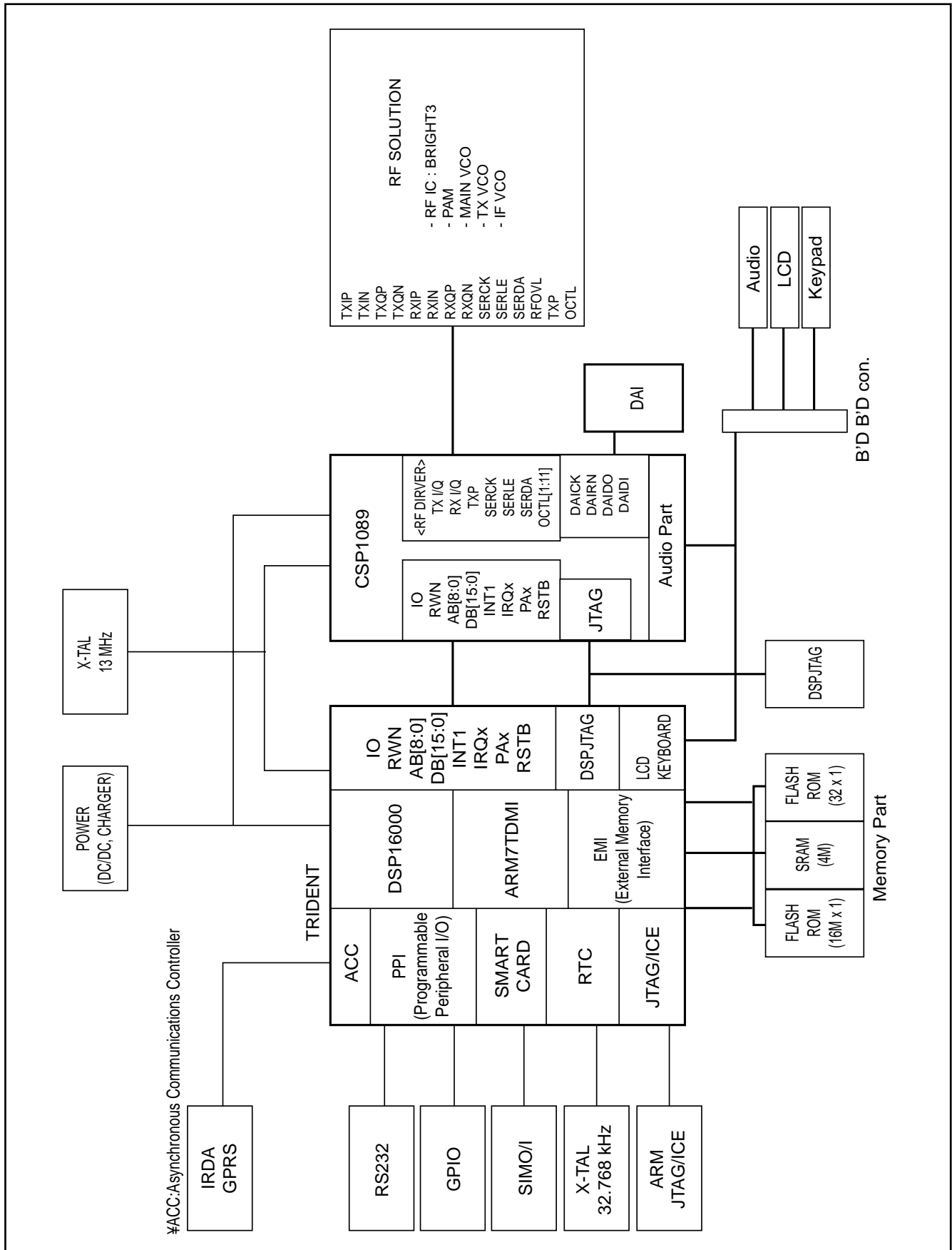
SWITCH						
MODE	AUTO	SDS S/W	DOWNLOAD S/W	DEBUG S/W	SDS D/L	DEBUG
D/L	HIGH	LOW	HIGH	LOW	CONNECT	N.C
CAL	HIGH	LOW	LOW	HIGH	CONNECT	N.C

3. SGH-Q100 Block Diagrams

3-1. RF Solution Block Diagram

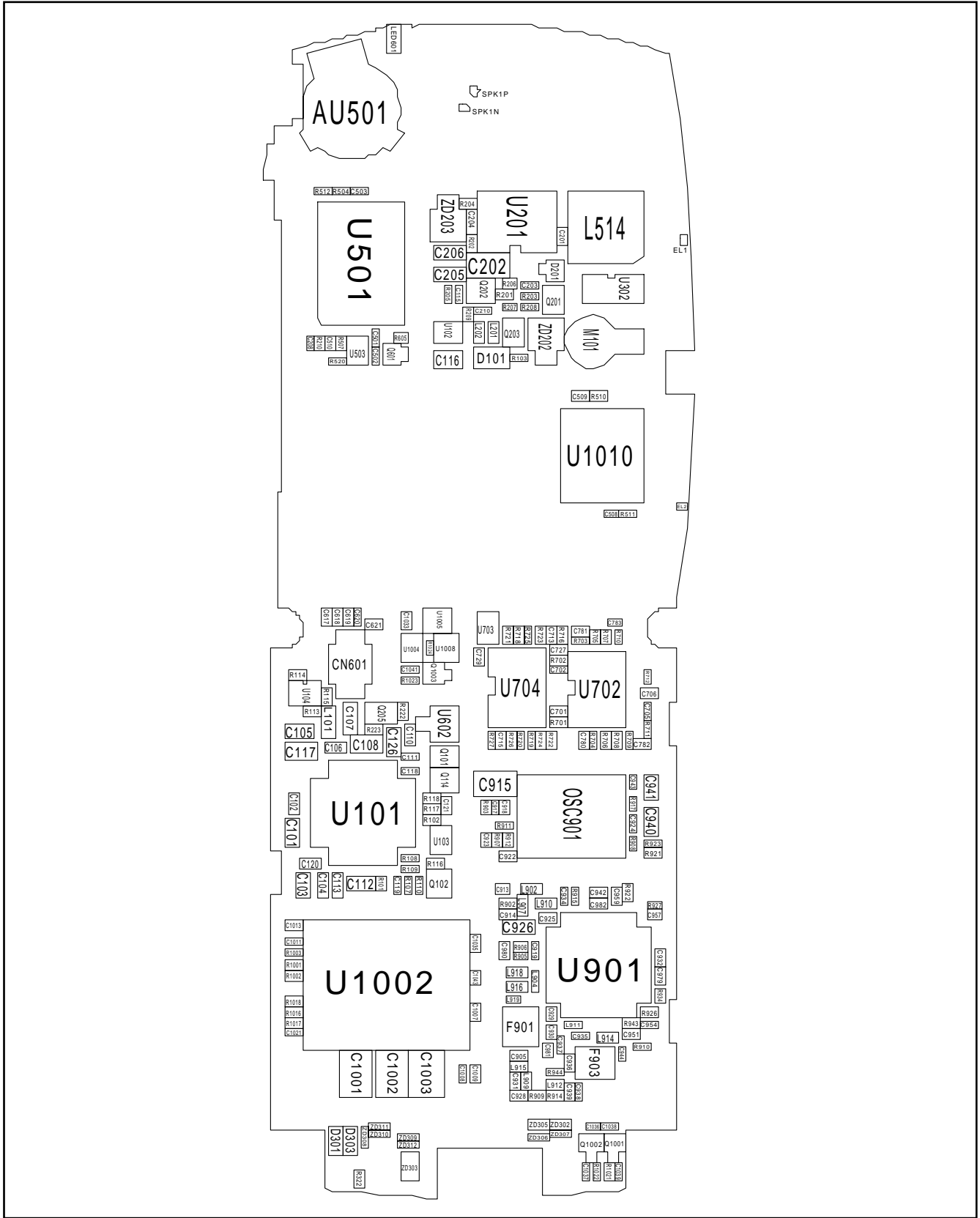


3-2. Base Band Solution Block Diagram

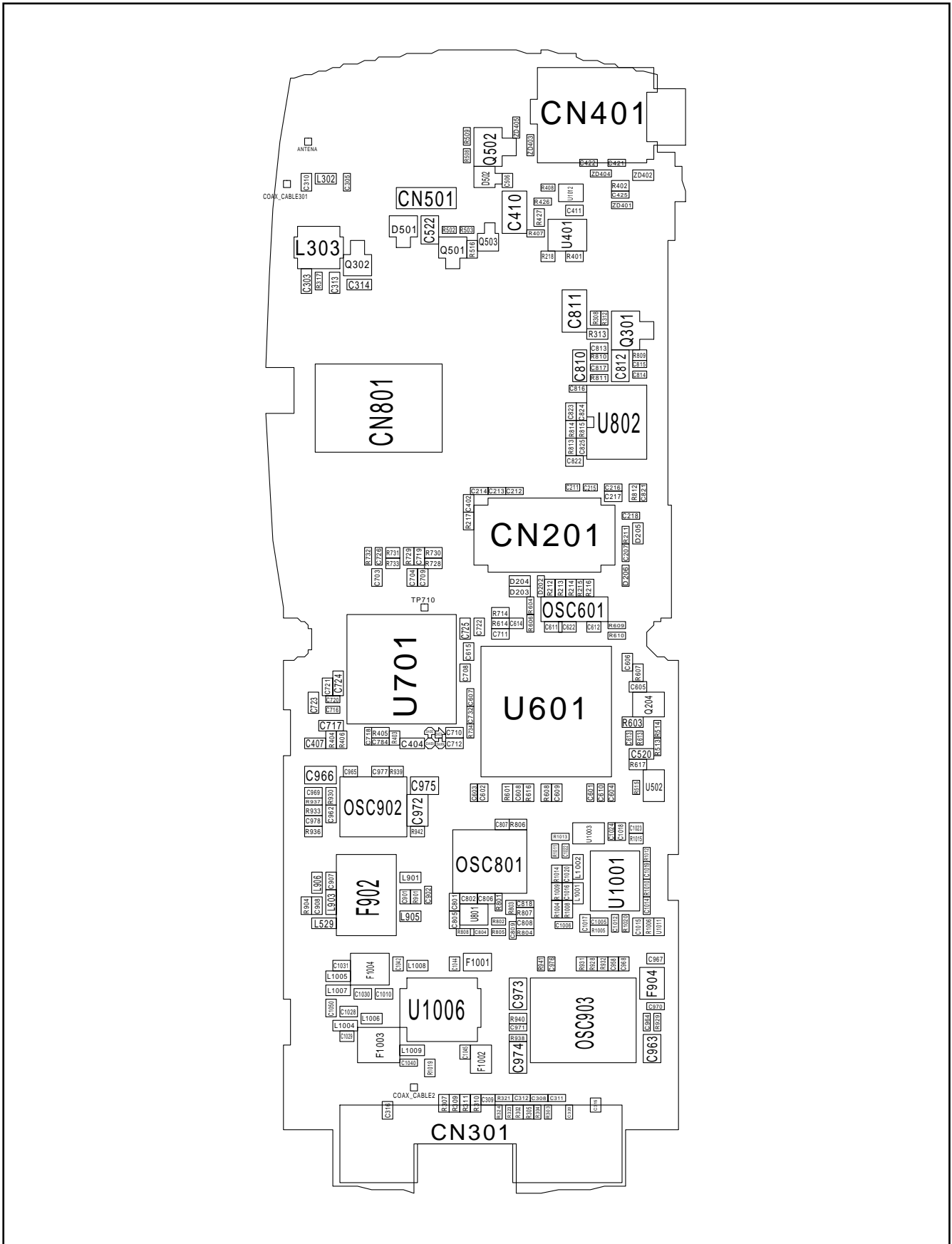


4. SGH-Q100 PCB Diagrams

4-1. Main PCB Top Diagram

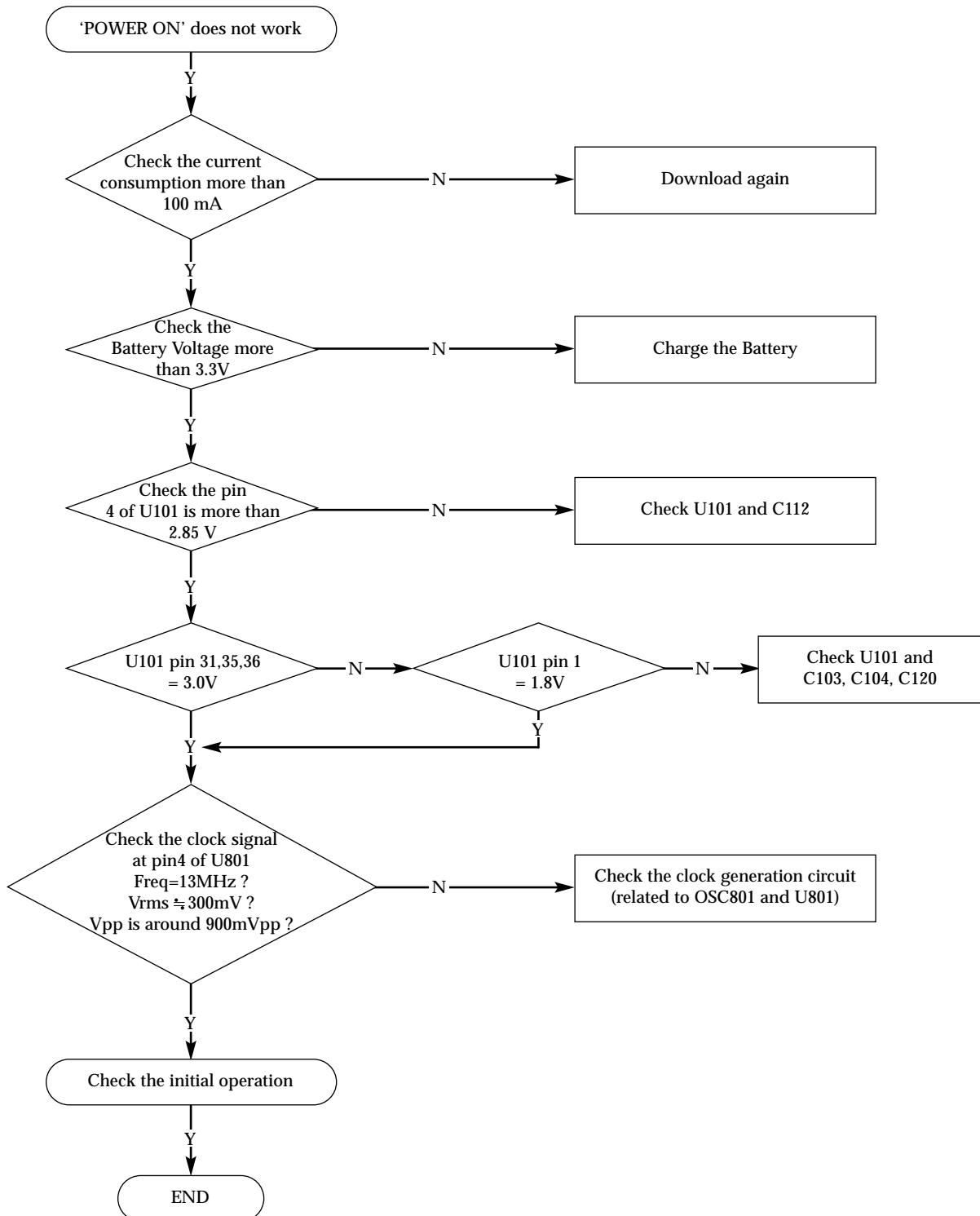


4-2. Main PCB Bottom Diagram

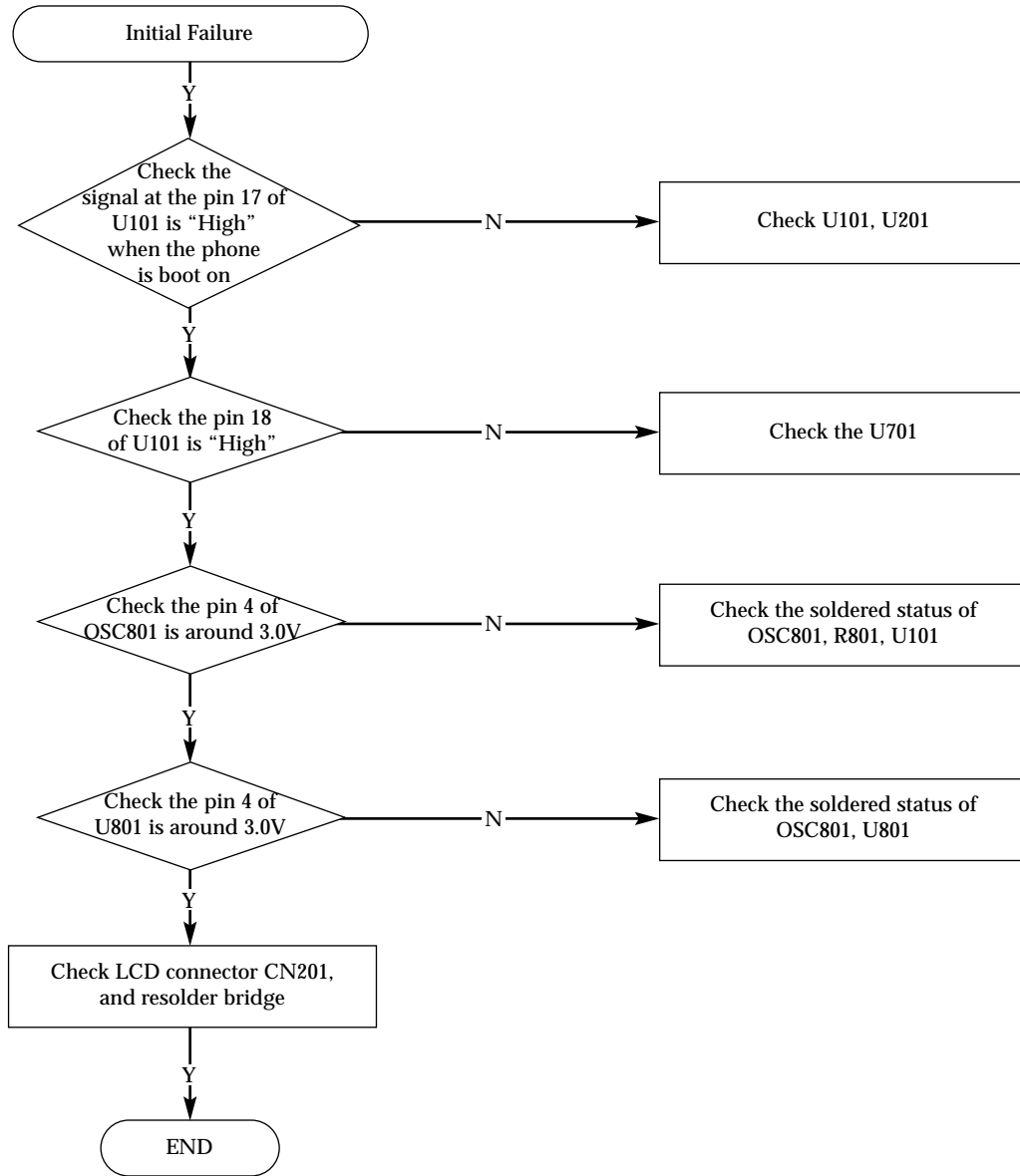


5.SGH-Q100 Flow Chart of Troubleshooting and Circuit Diagrams

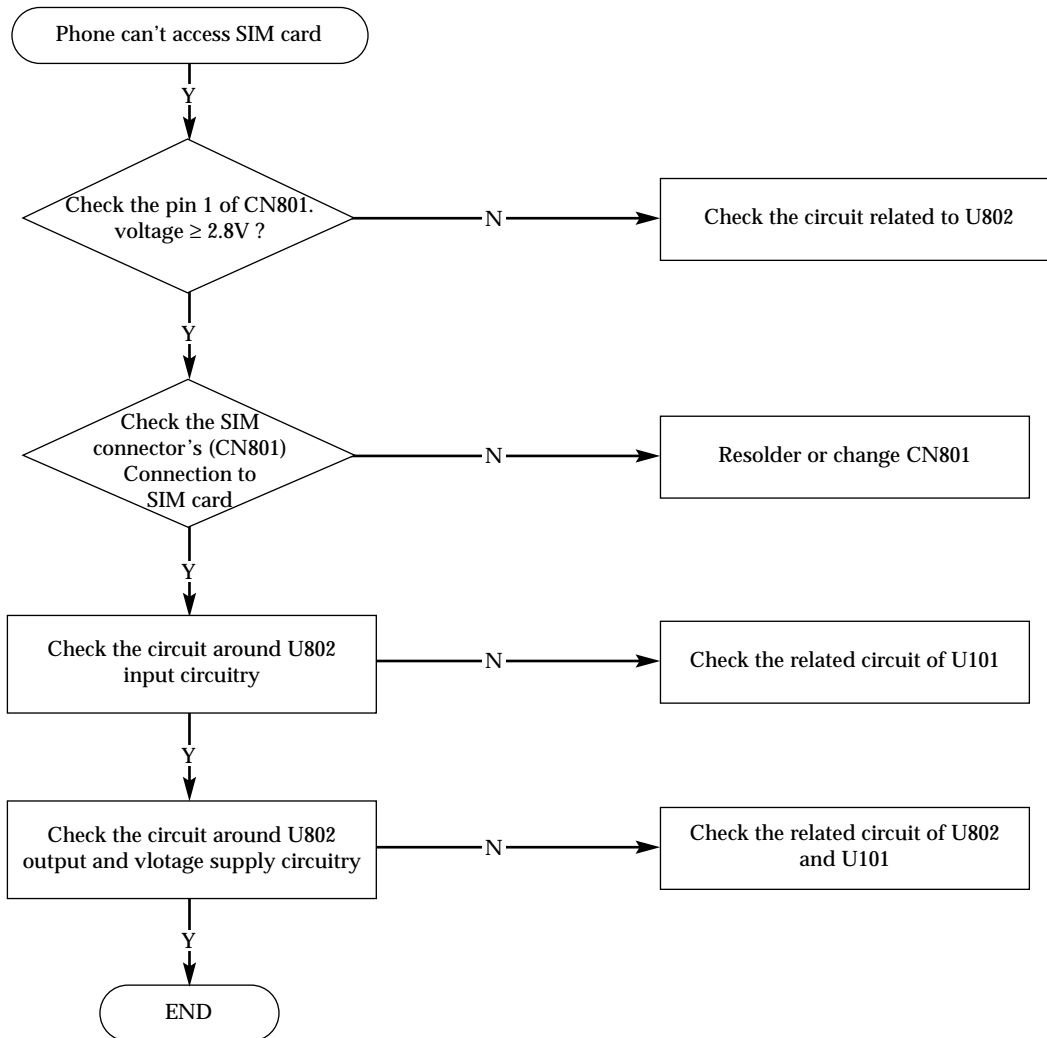
5-1. Power ON



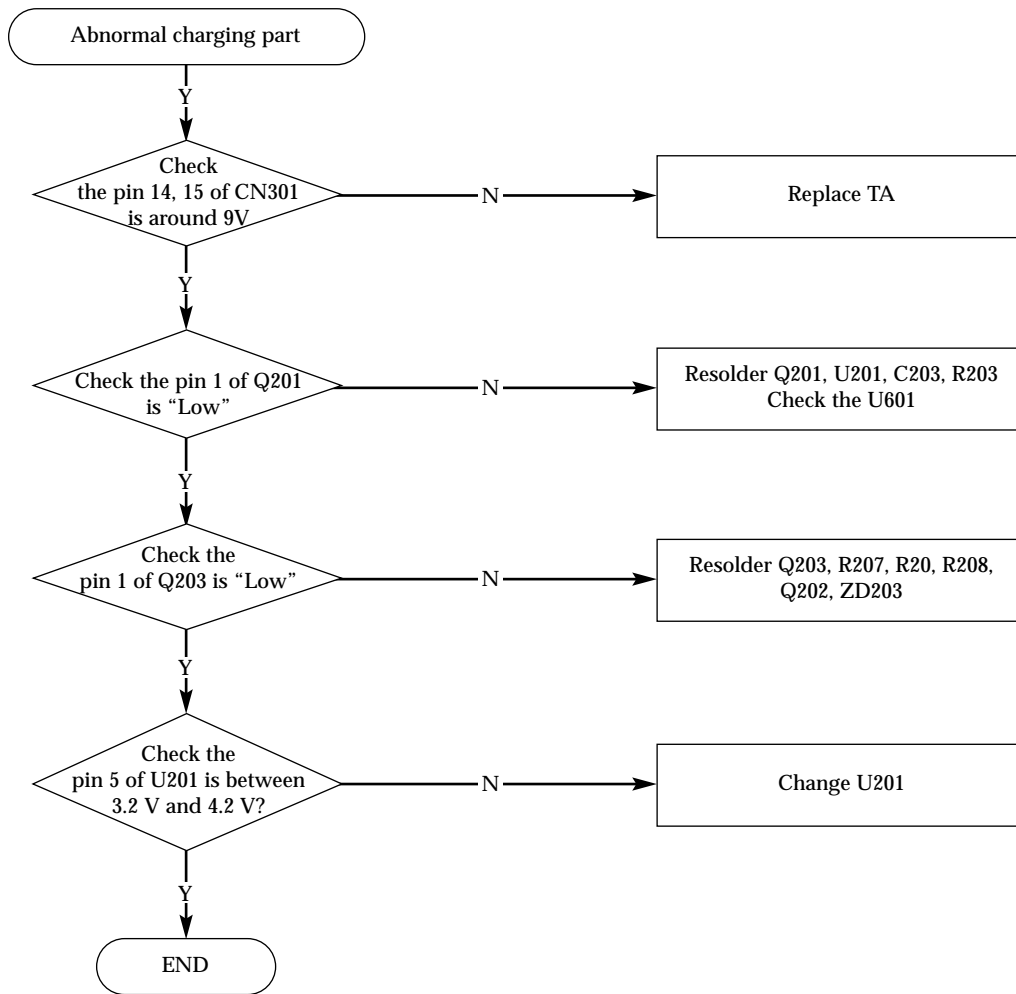
5-2. Initial



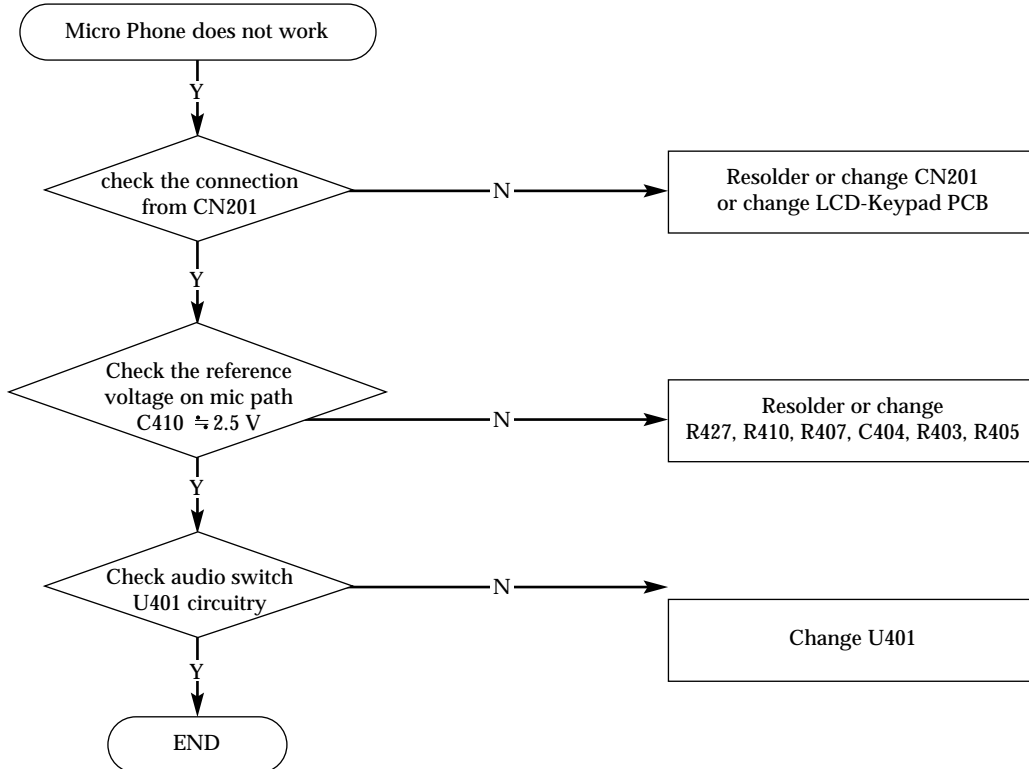
5-3. Sim Part



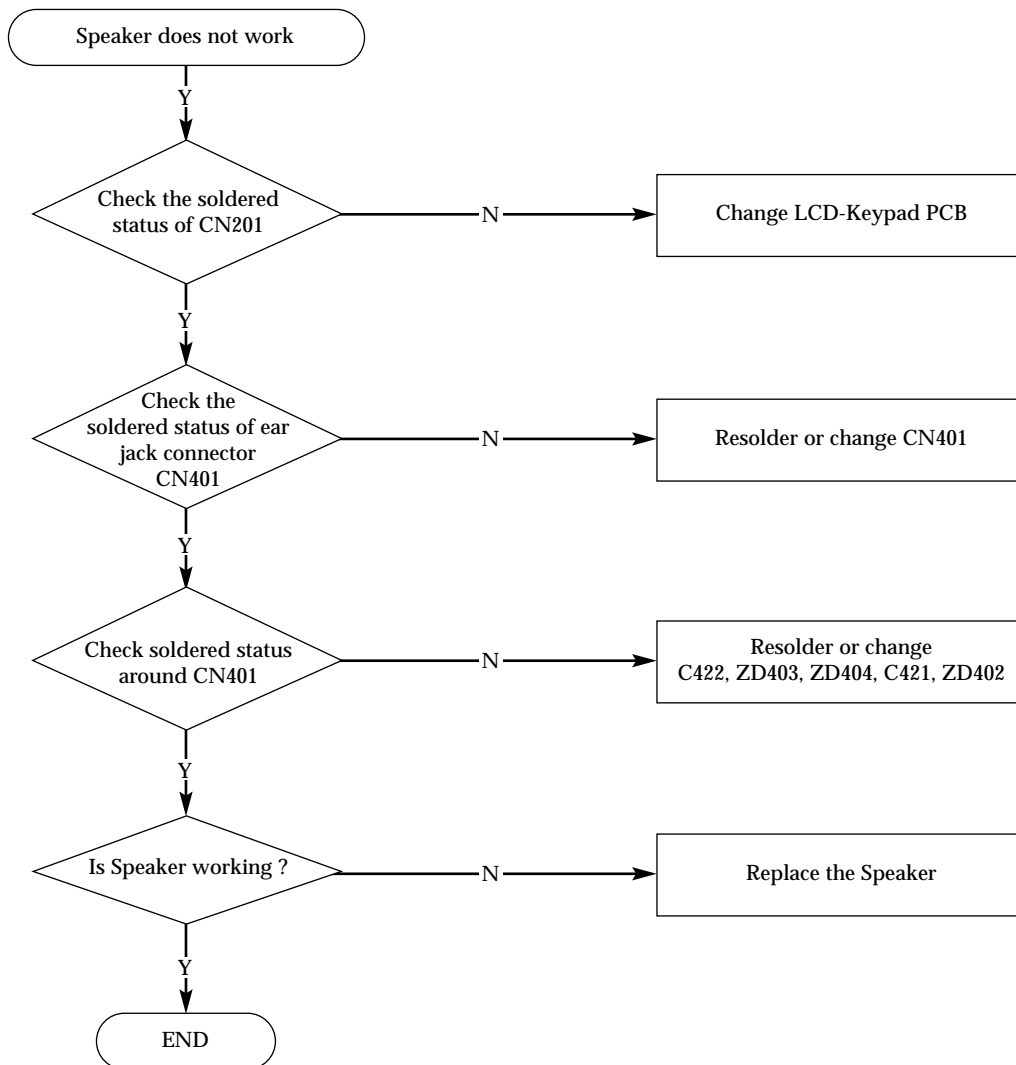
5-4. Charging Part



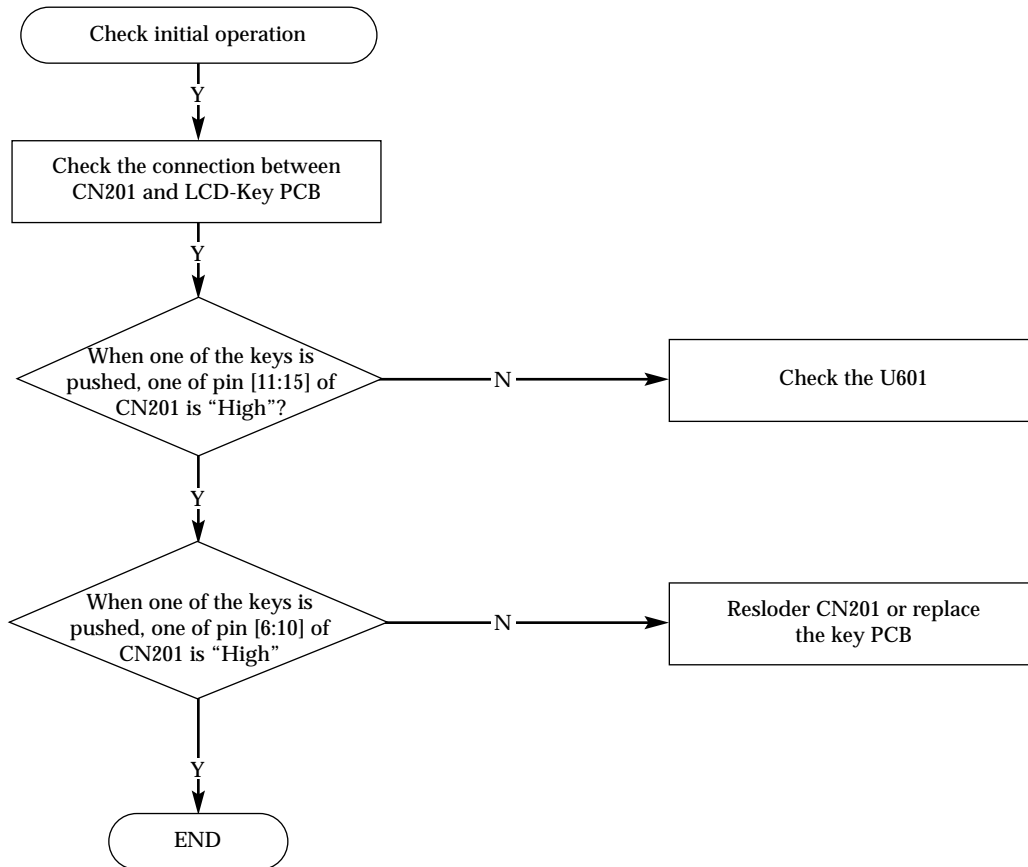
5-5. Microphone Part



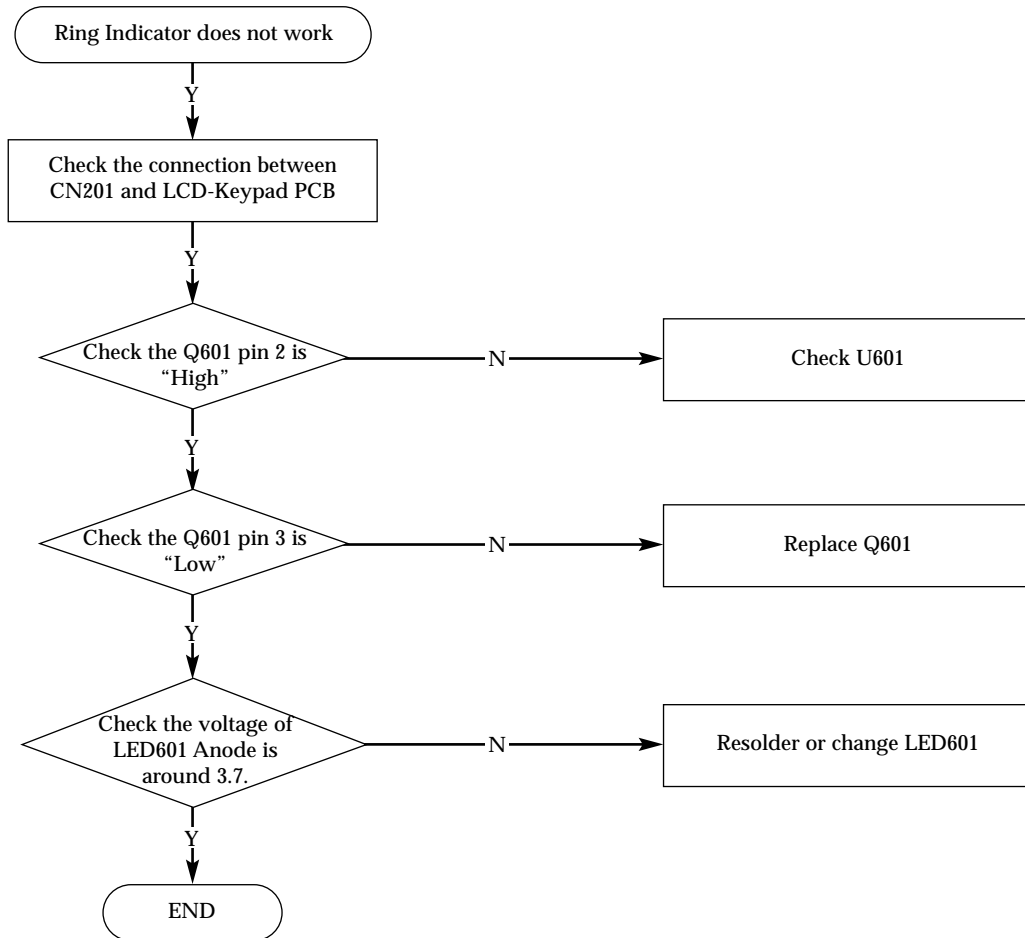
5-6. Speaker Part



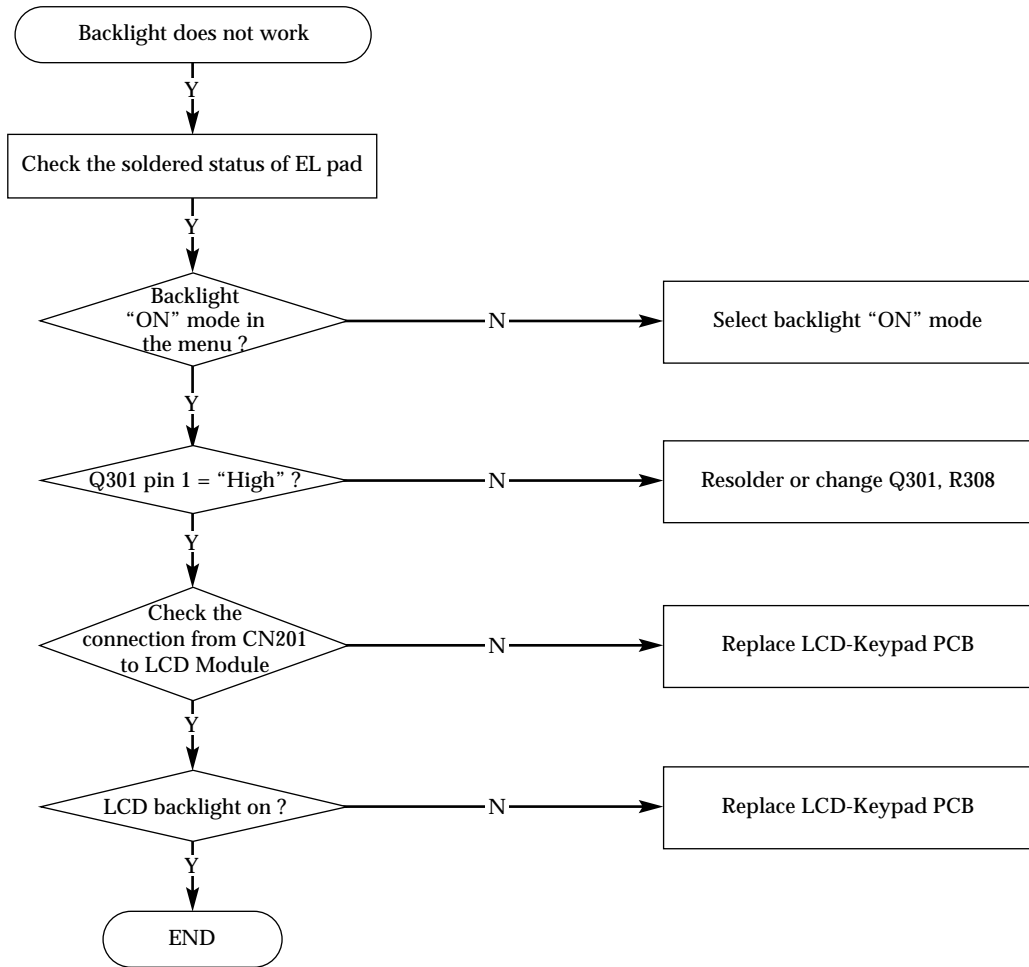
5-7. Key Data Input



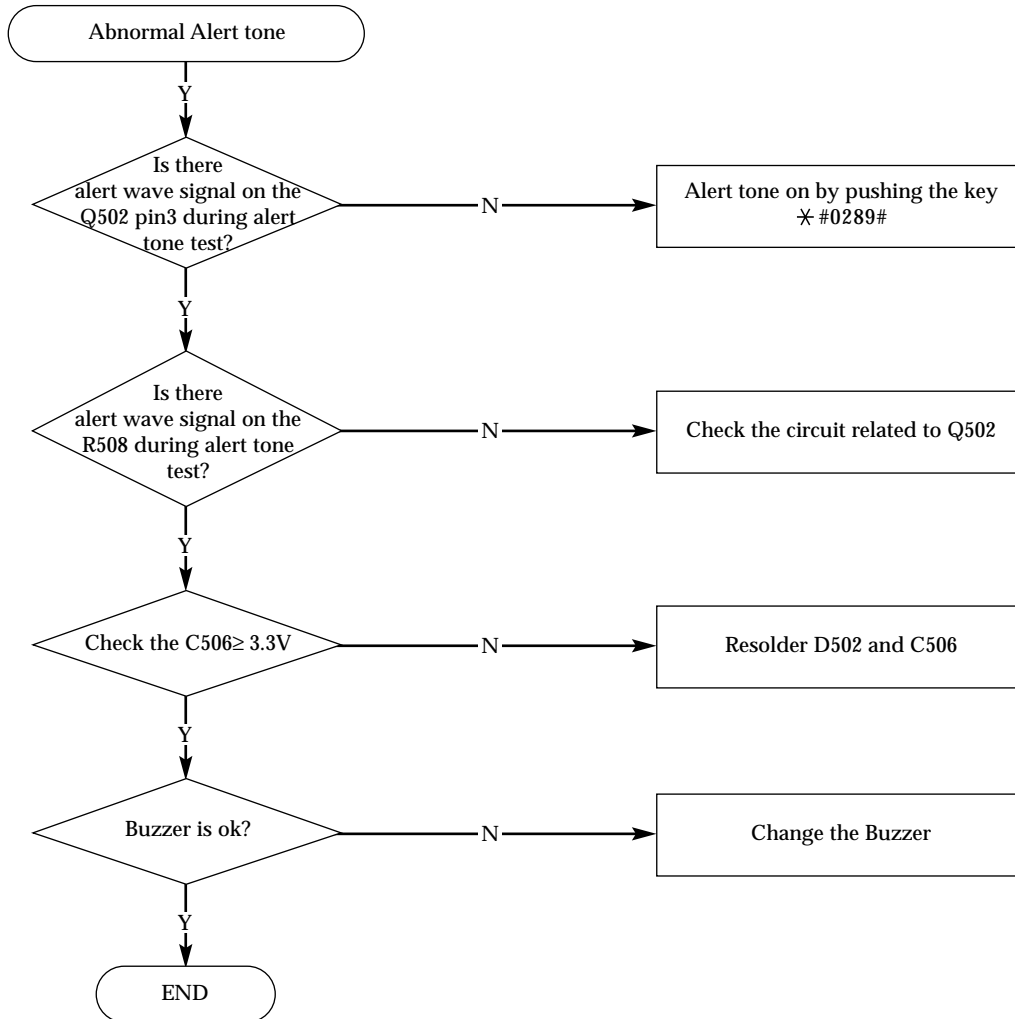
5-8. Ring Indicator



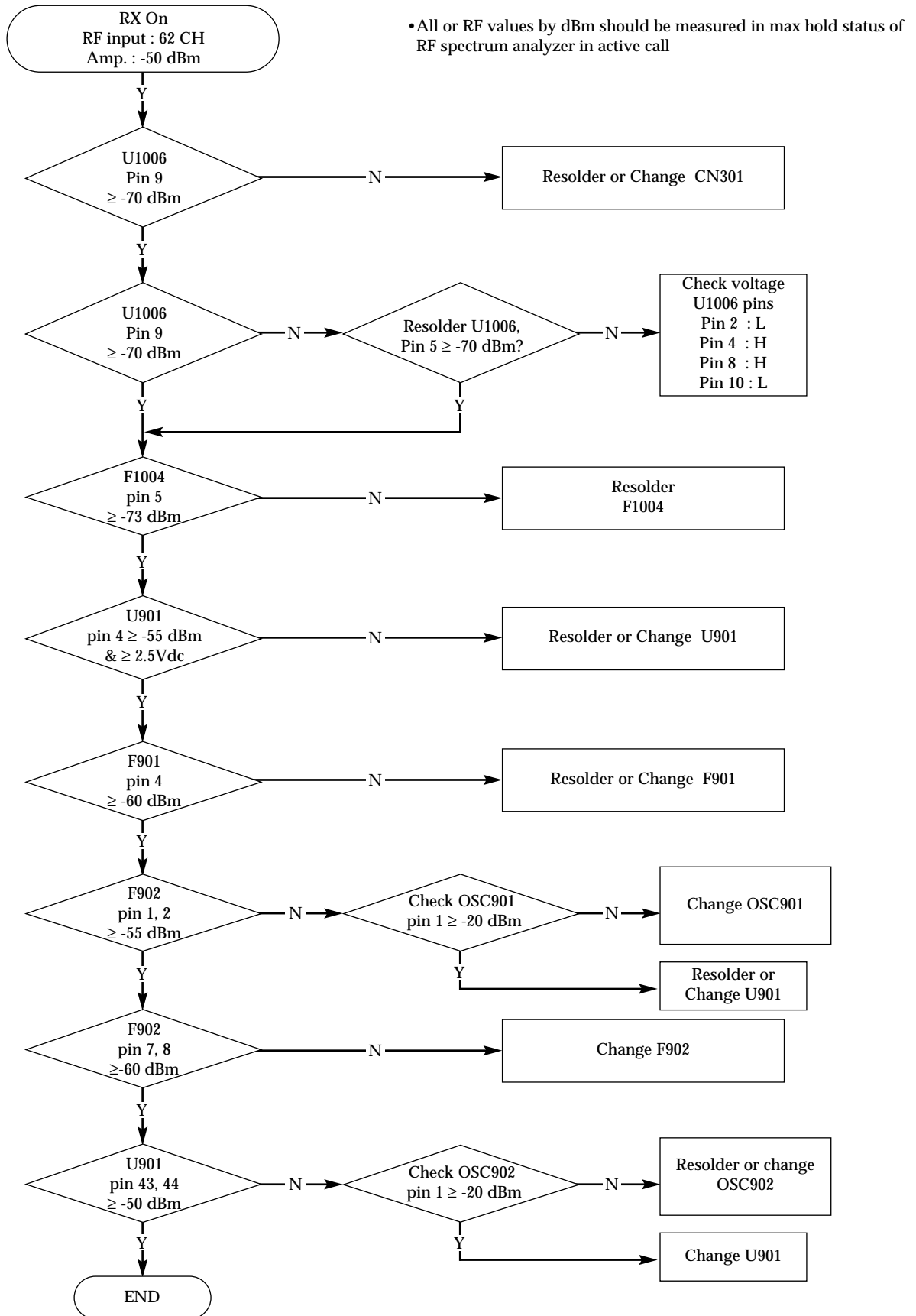
5-9. Back Light



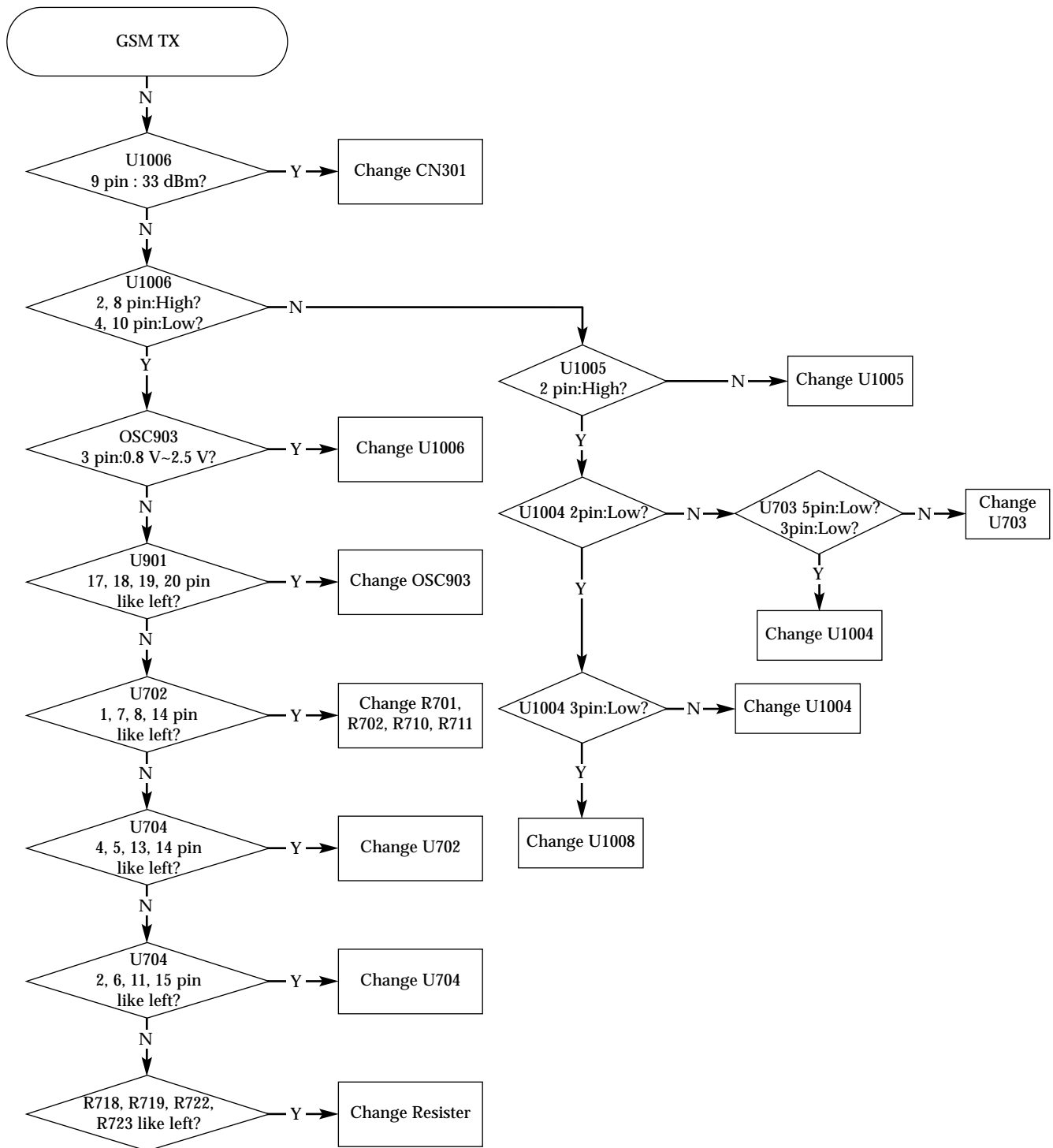
5-10. Alert Tone



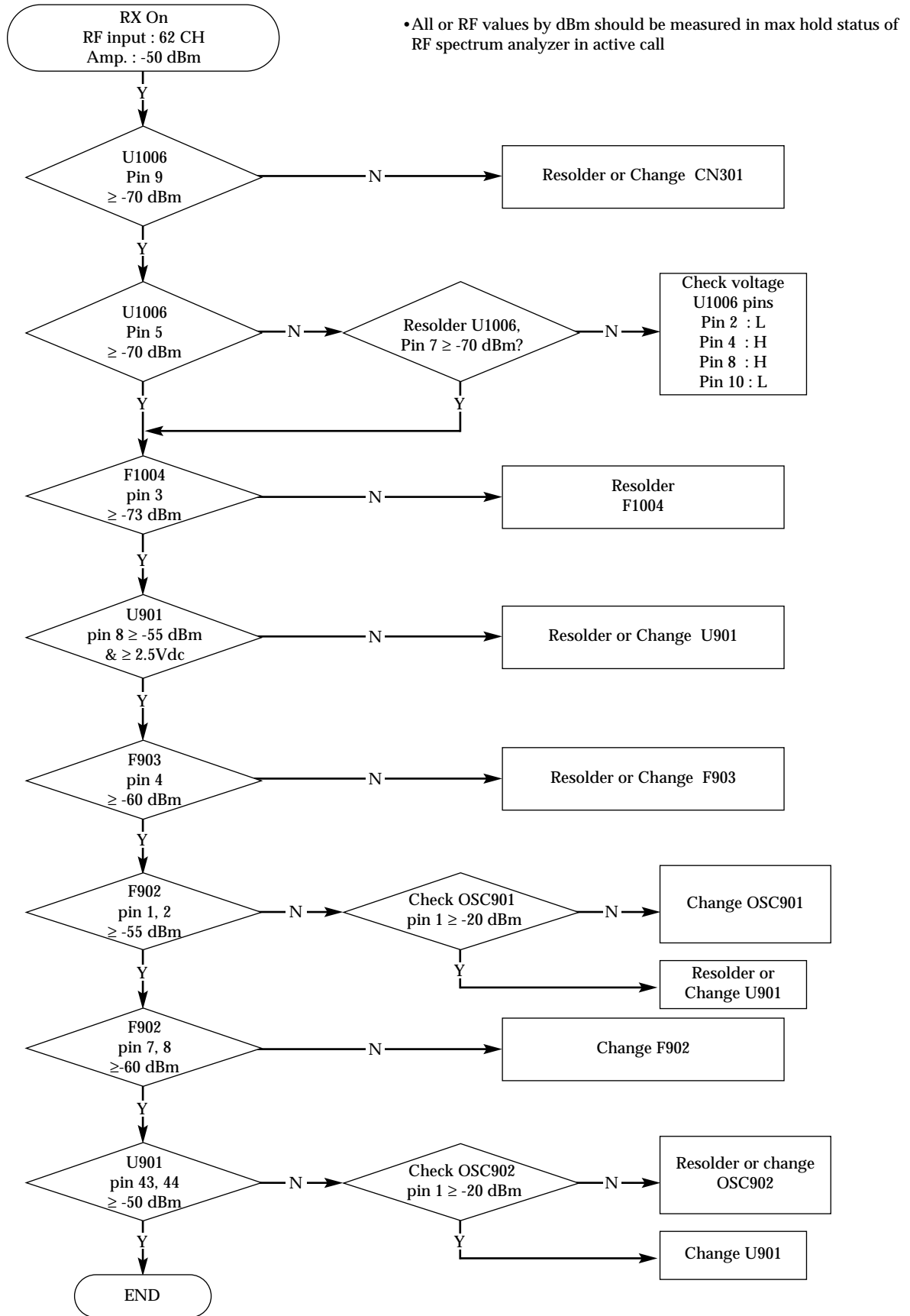
5-11. GSM Receiver



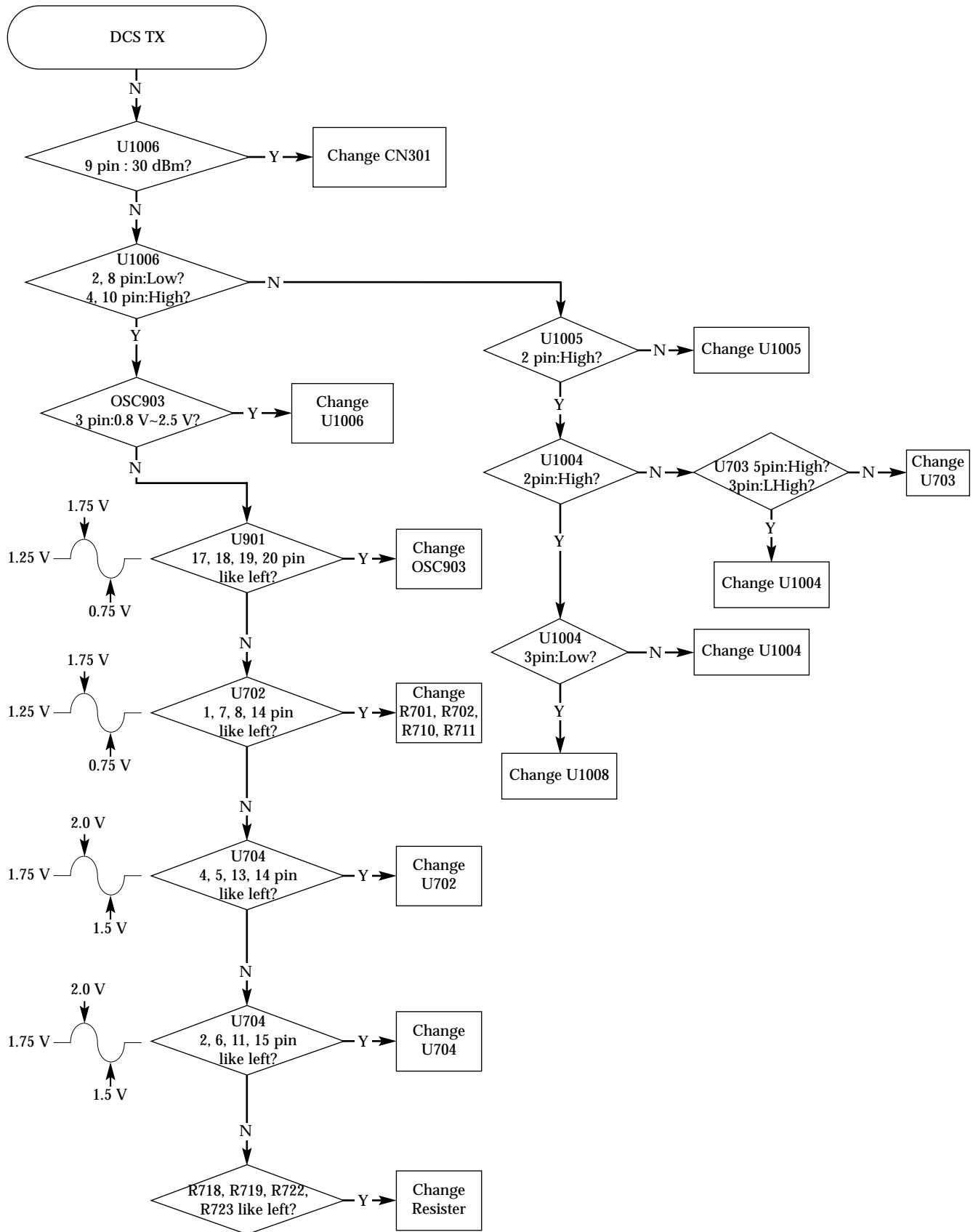
5-12. GSM Transmitter



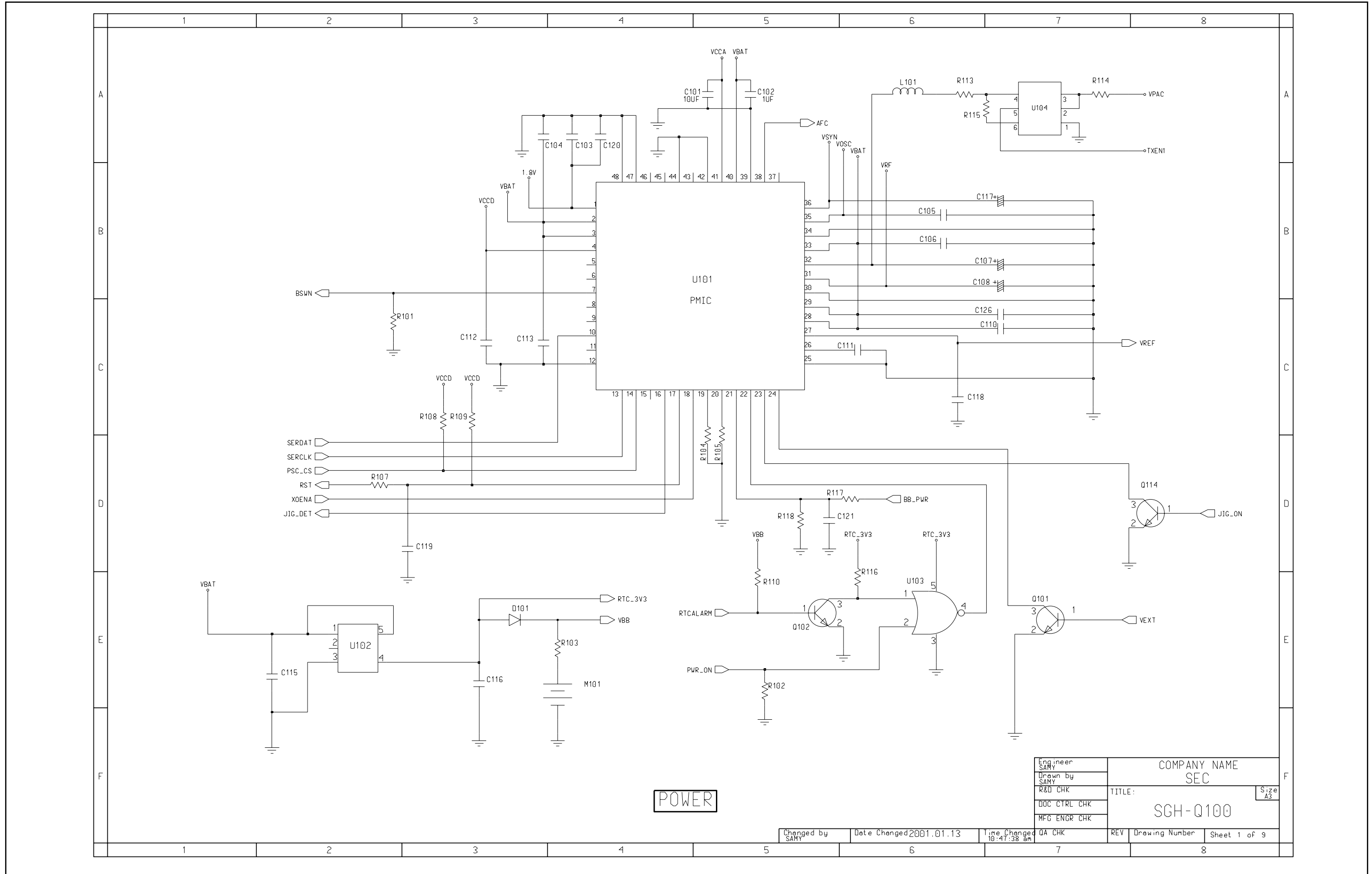
5-13. DCS Receiver



5-14. DCS Transmitter



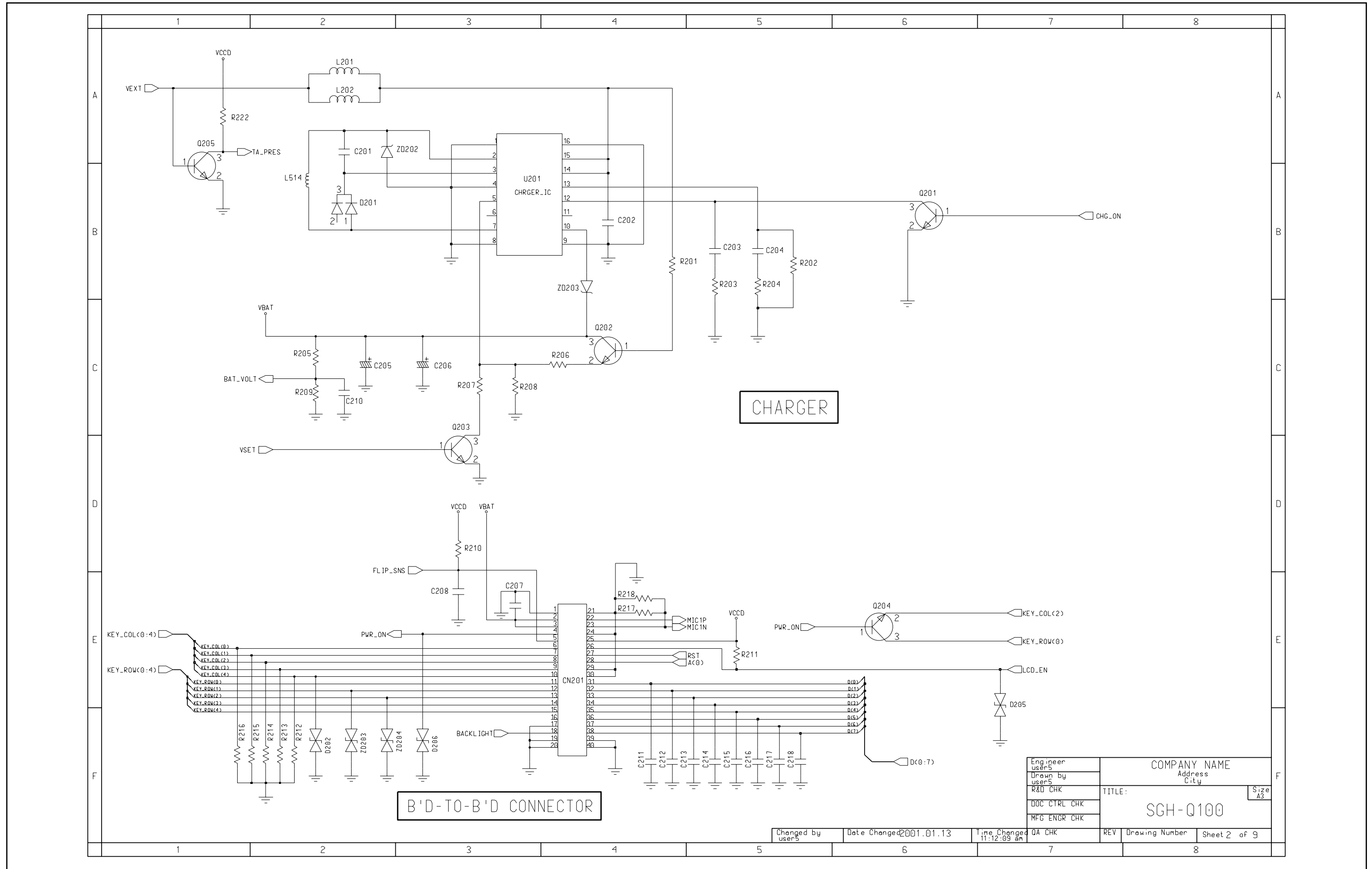
5-15. Power Circuit Diagram



Engineer SAMY	COMPANY NAME SEC		Size A3
Drawn by SAMY	TITLE: SGH-Q100		
R&D CHK	QA CHK	REV	Drawing Number
DOC CTRL CHK			Sheet 1 of 9
MFG ENGR CHK			

Changed by SAMY Date Changed 2001.01.13 Time Changed 10:47:38 am

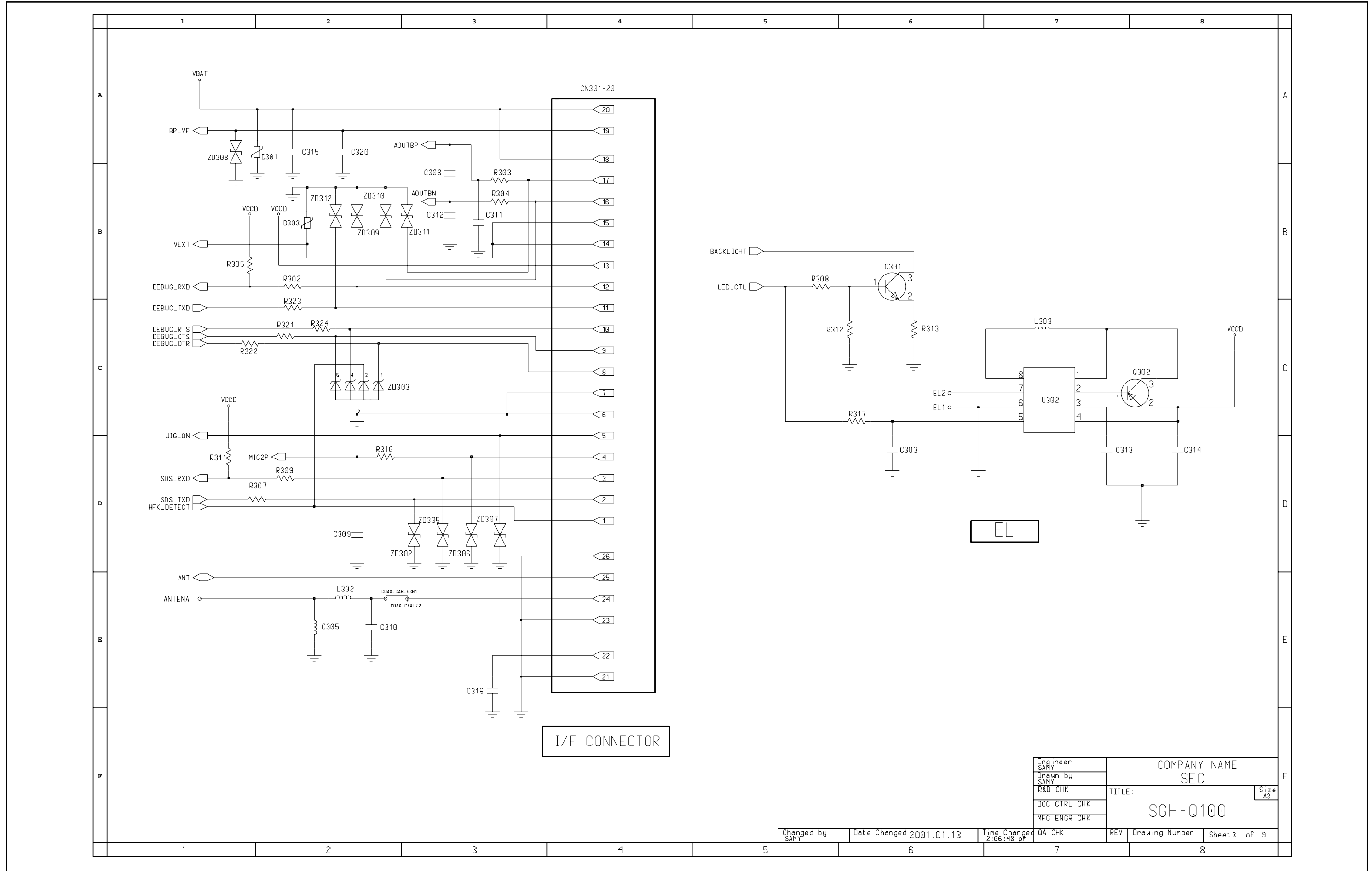
5-16. Charger & B'D-TO-B'D Connector Circuit Diagram



Engineer user5	COMPANY NAME
Drawn by user5	Address
R&D CHK	City
DOC CTRL CHK	TITLE:
MFG ENGR CHK	SGH-Q100

Changed by user5	Date Changed 2001.01.13	Time Changed 11:12:09 am	QA CHK	REV	Drawing Number	Sheet 2 of 9
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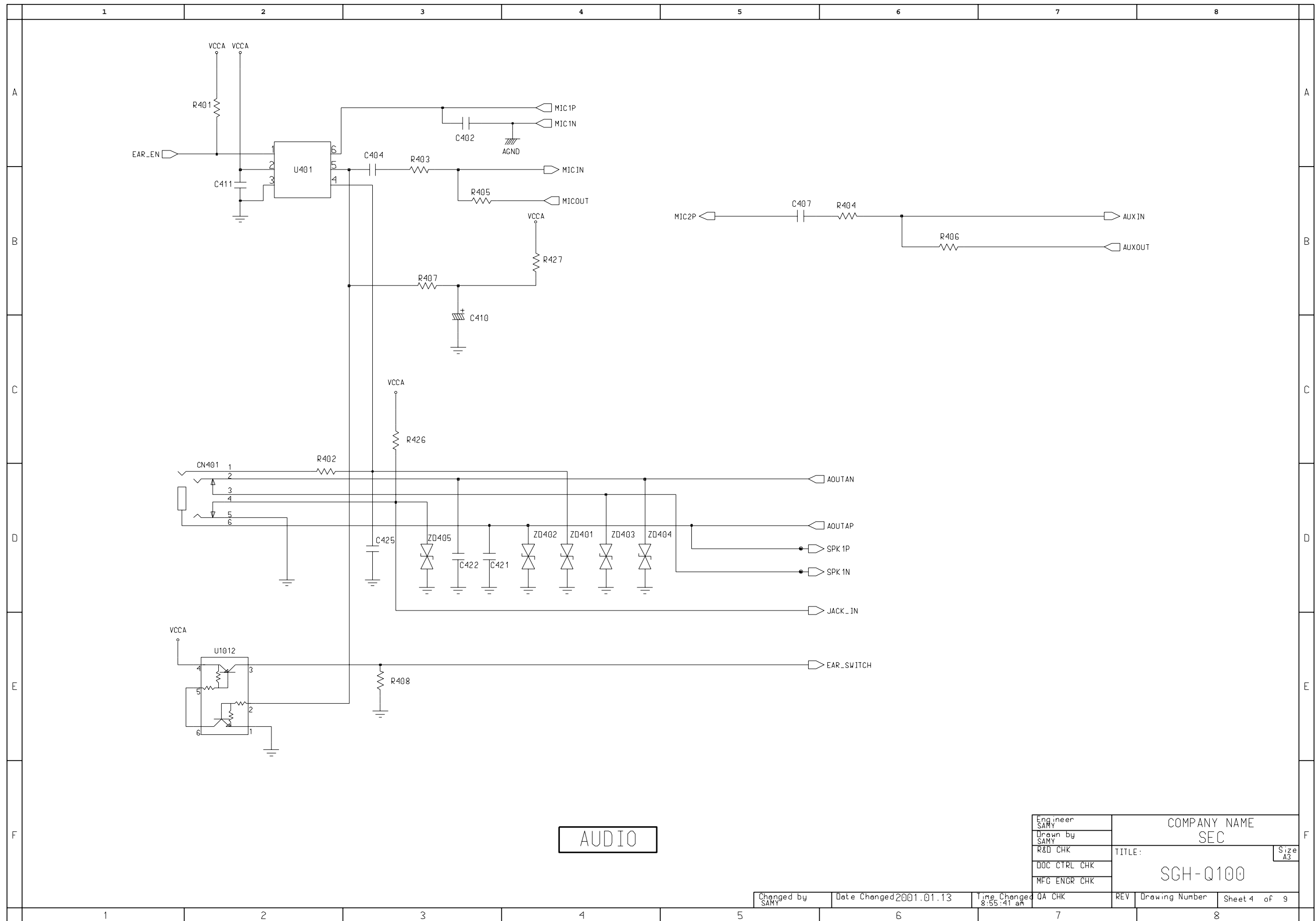
5-17. EL & I/F Connector Circuit Diagram



Engineer SAMY	COMPANY NAME SEC	
Drawn by SAMY	TITLE: SGH-Q100	
R&D CHK	DA CHK	Size A3
DOC CTRL CHK	REV	Drawing Number
MFG ENGR CHK		Sheet 3 of 9

Changed by SAMY Date Changed 2001.01.13 Time Changed 2:06:48 pm

5-18. Audio Circuit Diagram

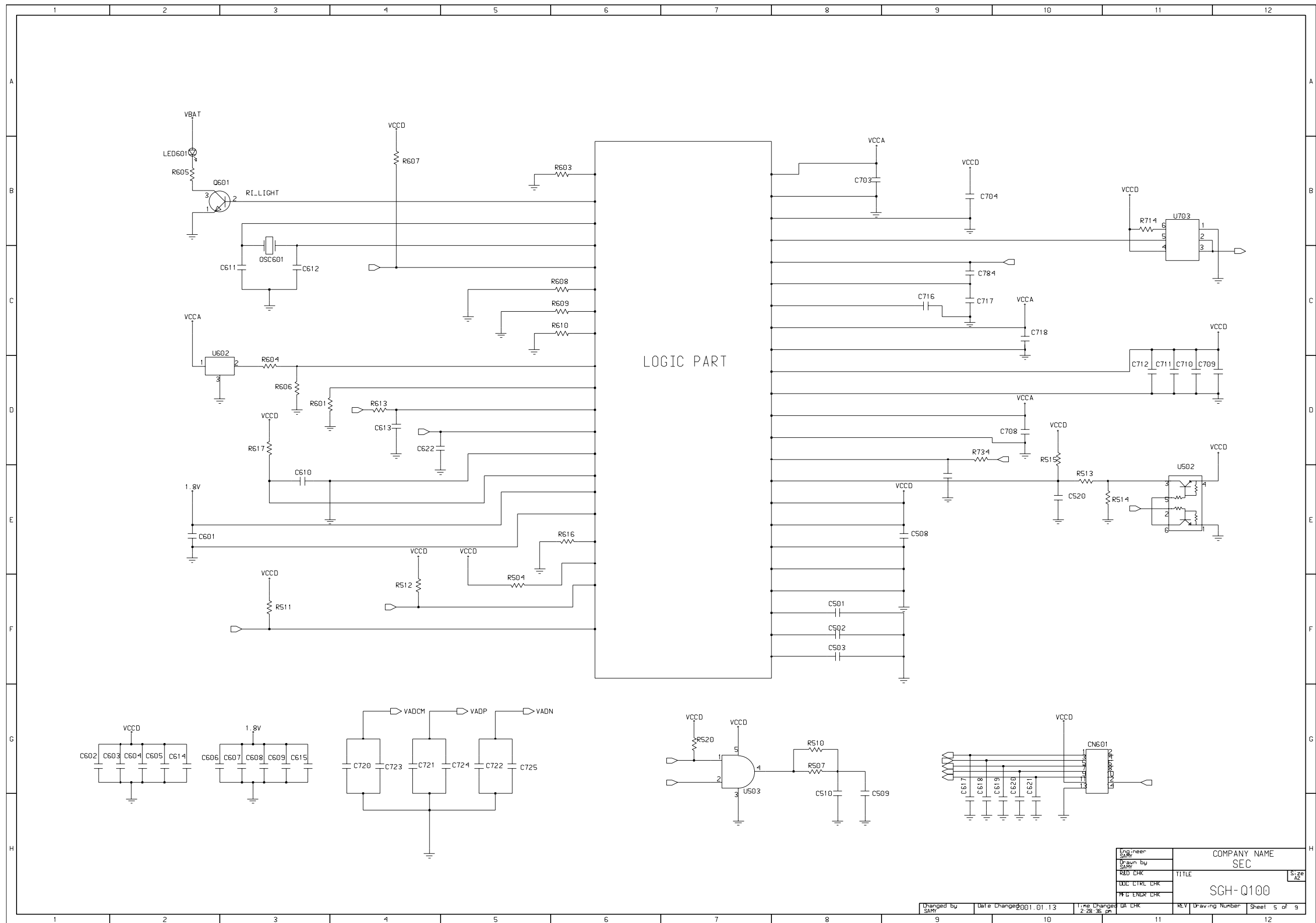


AUDIO

Engineer SAMY	COMPANY NAME SEC		
Drawn by SAMY	TITLE:		
R&D CHK	SGH-Q100		
DOC CTRL CHK	Size A3		
MFG ENGR CHK	REV	Drawing Number	Sheet 4 of 9

Changed by SAMY	Date Changed 2001.01.13	Time Changed 8:55:41 am	QA CHK
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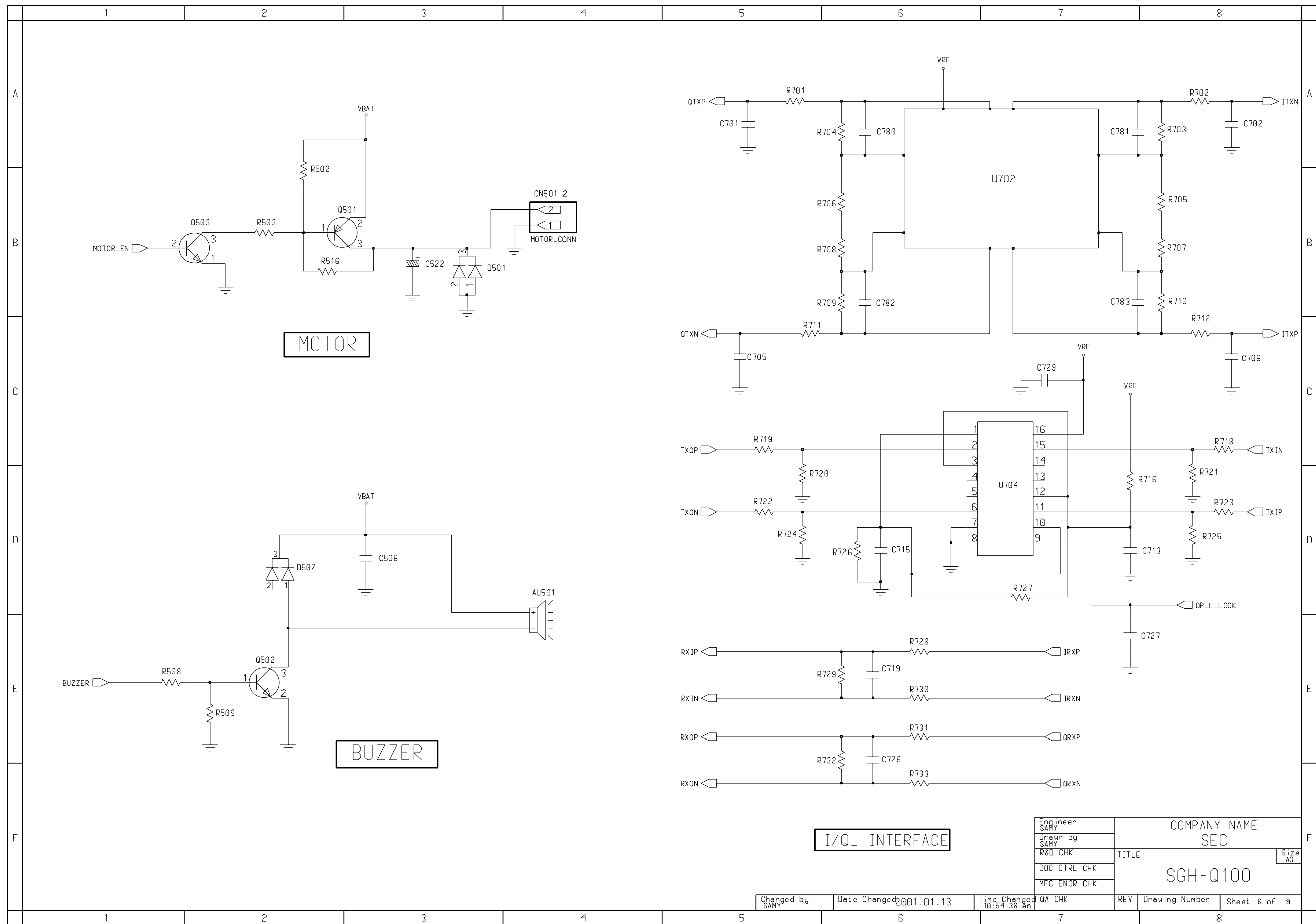
5-19. Logic Part Circuit Diagram



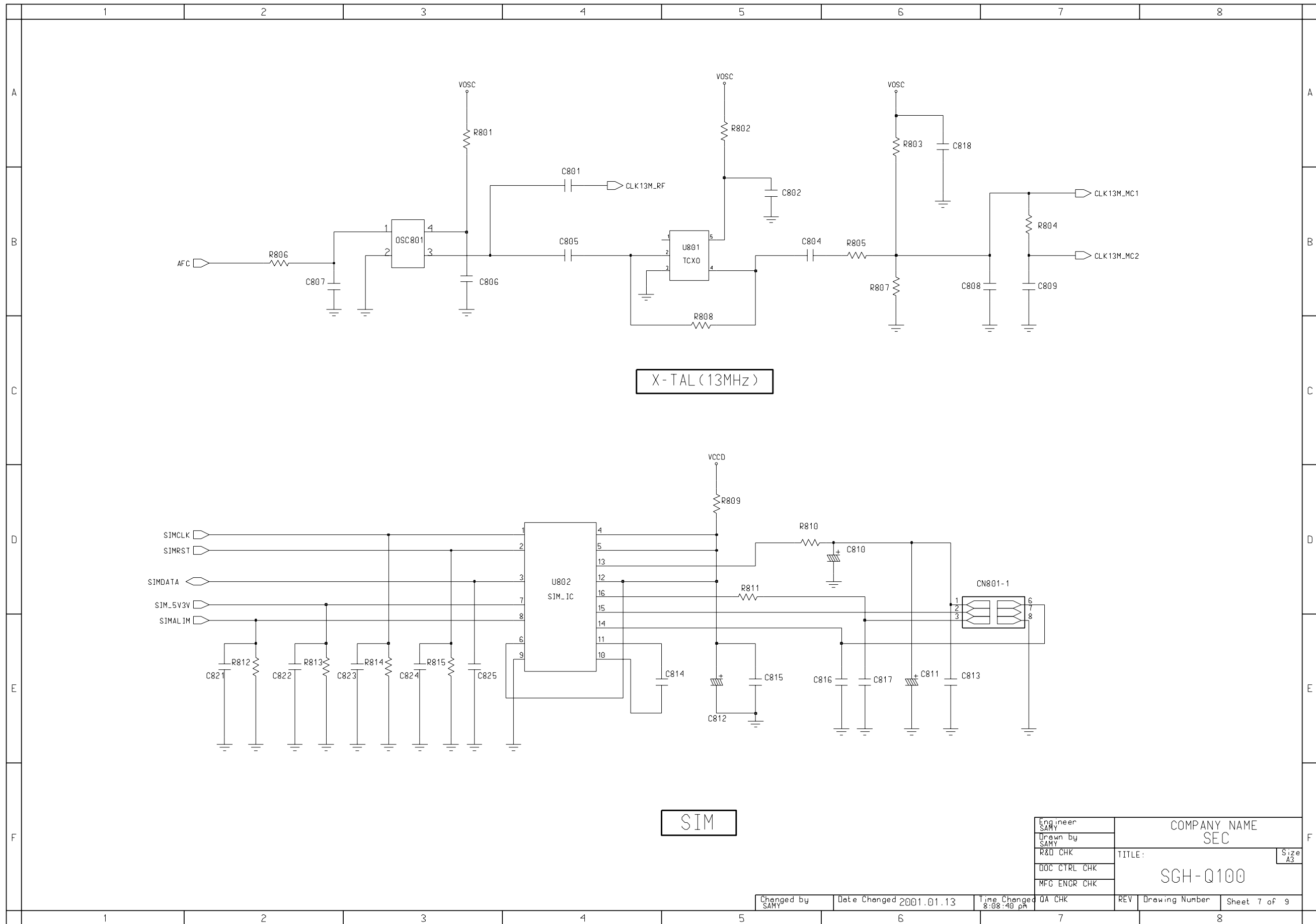
Drawn by SAMY	COMPANY NAME SEC
Checked by SAMY	TITLE SGH-Q100
Approved by SAMY	Size A2
Changed by SAMY	REV Drawing Number Sheet 5 of 9

Date Change 2001.01.13	Time Change 2:28:35 pm	DA CHK
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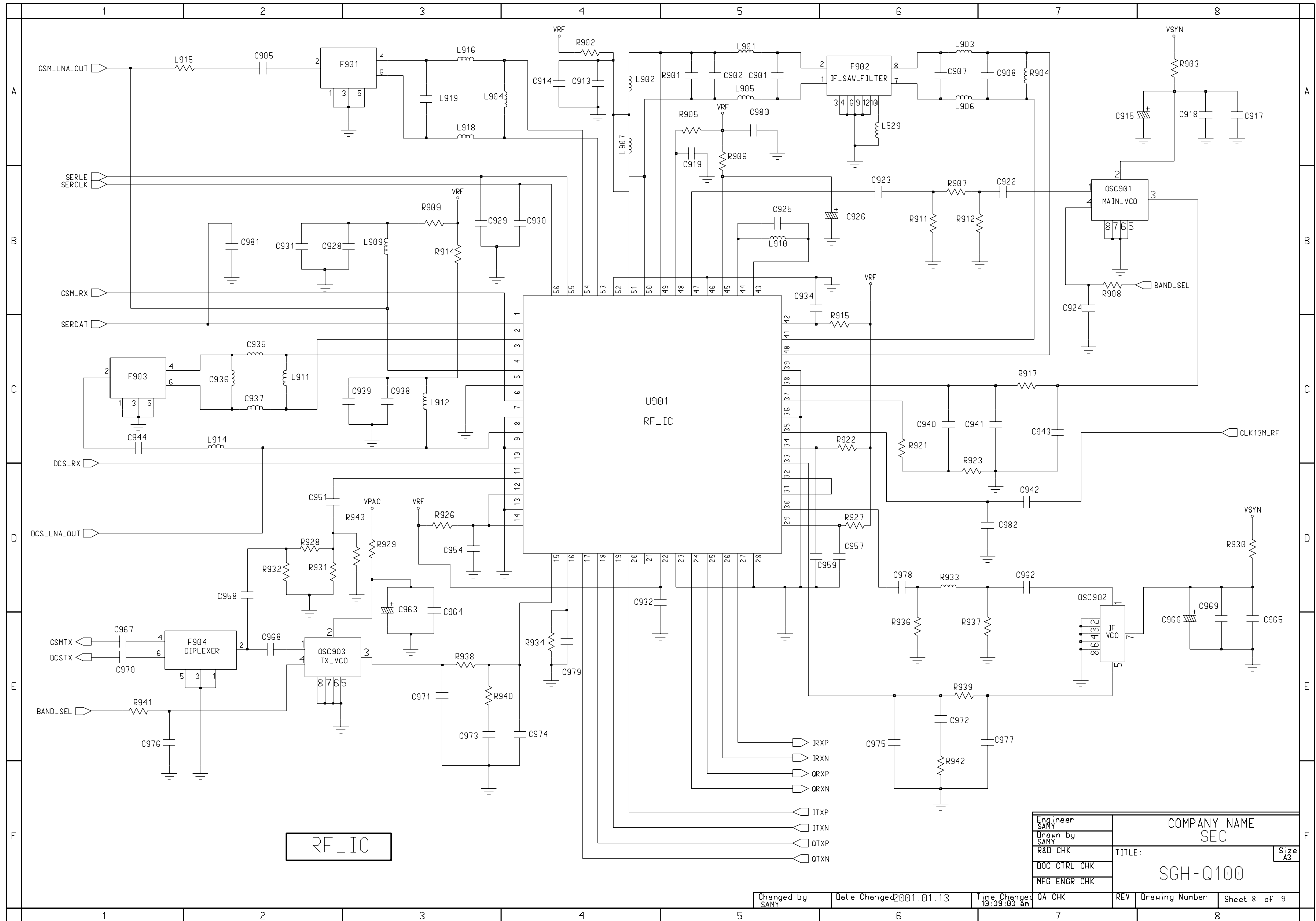
5-20. Motor & Buzzer & I/Q Interface Circuit Diagram



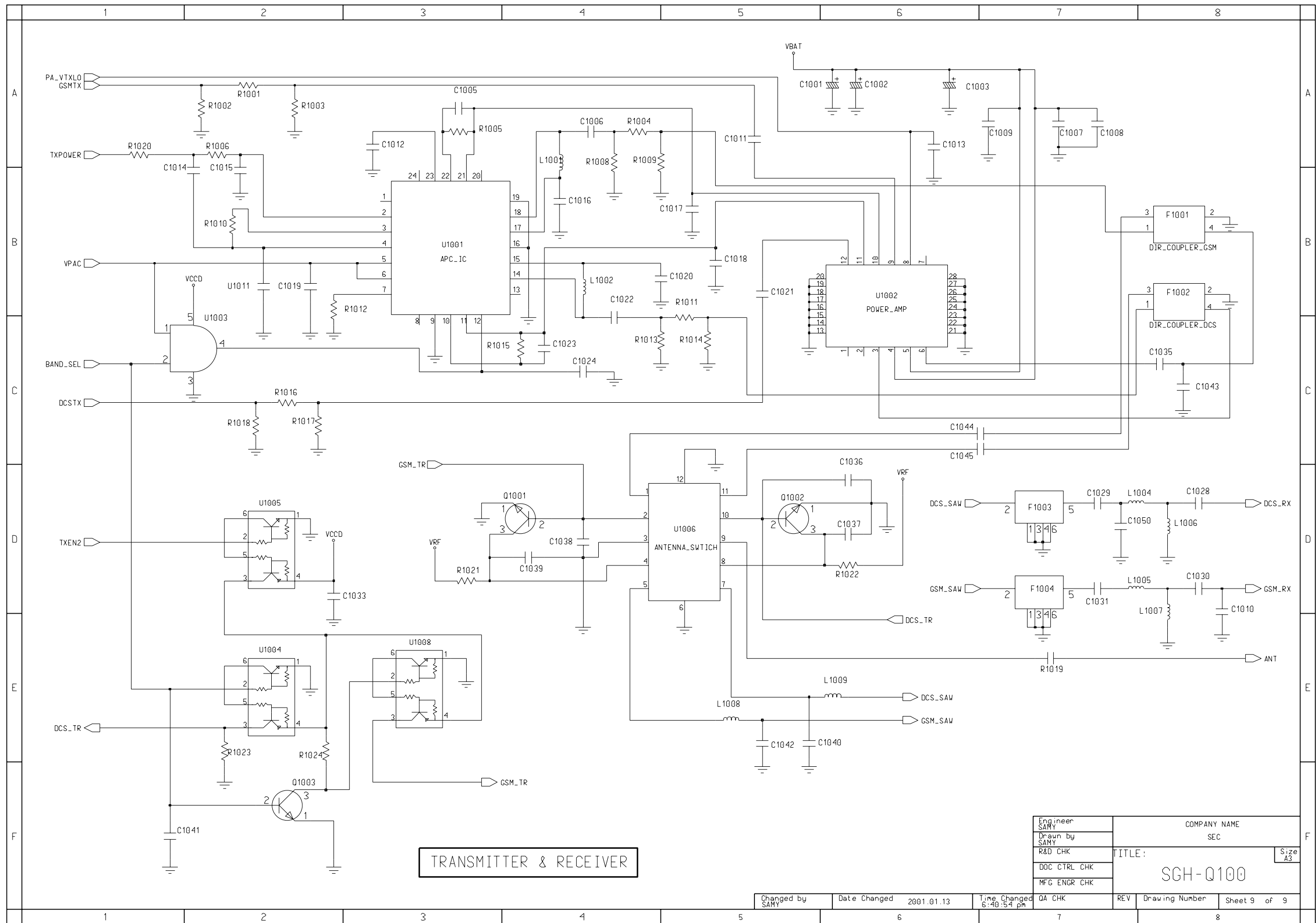
5-21. X-TAL(13 MHz) & SIM Circuit Diagram



5-22. RF_IC Circuit Diagram



5-23. Transmitter & Receiver Circuit Diagram



Engineer SAMY	COMPANY NAME SEC
Drawn by SAMY	TITLE: SGH-Q100
R&D CHK	Size A3
DOC CTRL CHK	
MFG ENGR CHK	
QA CHK	REV
Changed by SAMY	Date Changed 2001.01.13
	Time Changed 6:40:54 pm
	Drawing Number
	Sheet 9 of 9

