

MODEL CODE : GH92-00939A

Level	Location	SEC-Code	Component name	Quantity	RC
1	ANT400	4201-000157	ANTENNA-WHIP;885-931MHz,-,1.9,45.2mm,	0	*
0	-	GH92-00939A	PBA MAIN-SCH4000;SCH-4000,SAMSUNG,CHLE,-,-,-,-,-	0	-
1	AN401	CG42-00001A	ANTENNA-SPR5200;SP-R5200,1880-1900MHZ,-,500HM	0	MA
1	D200	0402-000306	DIODE-RECTIFIER;PRLL5817,20V,1A,SOD-87	0	SM
1	D402	0404-000161	DIODE-SCHOTTKY;1SS315,5V,30mA,USC,TP	0	SM
1	D303,D305,D400,D401	0405-001035	DIODE-VARACTOR;1SV279,15V,3nA,USC,TP	0	SM
1	D205	0406-001084	DIODE-TVS;SMF05,6/-V,200W,-	0	SM
1	D210	0407-000115	DIODE-ARRAY;DAN202U,80V,100mA,CA2-3,SC-70,	0	SM
1	D399	0409-001001	DIODE-PIN;BAR63-03W,50V,100mA,SOT-23,TP	0	SM
1	D304	0409-001016	DIODE-PIN;BAR63-02W,50V,100mA,SCD-80,TP	0	SM
1	Q402	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SOT-323,TP,180-3	0	SM
1	Q399	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200mW,UMT,TP,180-3	0	SM
1	Q202	0501-000457	TR-SMALL SIGNAL;MMBT2222A,NPN,350mW,SOT-23,TP,100-	0	SM
1	Q300	0501-002277	TR-SMALL SIGNAL;BFP540,NPN,-,SOT-343,TP,70-200	0	SM
1	U308	0501-002283	TR-SMALL SIGNAL;IBM43RF0100,NPN,-,SOT353,TP,-	0	SM
1	Q201,Q210	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K/47K,SC-70,TP	0	SM
1	Q105,Q211,Q304,Q401	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,TP	0	SM
1	Q404	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,TP	0	SM
1	Q200	0505-001165	FET-SILICON;SI3443DV,P,-20V,+/-3.5mA,65mohm	0	SM
1	U219	0505-001408	FET-SILICON;FDC6306,P,-20V,-1.9A,0.16ohm,1W,SSOT-6	0	SM
1	Q403	0505-001484	FET-SILICON;2SK2035,N,20V,100mA,8ohm,0.1W,SC-90	0	SM
1	U408,U411	0506-001004	TR-ARRAY;UMC5N,NPN/PNP,2,50V,-,-100mA,3	0	SM
1	D101,D102,D103,D104	0601-000273	LED;CHIP,Y/GRN,0.8x1.2mm,570nm	0	SM
1	D105,D106	0601-000273	LED;CHIP,Y/GRN,0.8x1.2mm,570nm	0	SM
1	LED205	0601-001402	LED;CHIP,RED/Y-GRN,1.2x1.5mm,660/570nm	0	SM
1	U305	0801-000794	IC-CMOS LOGIC;7S08,AND GATE,SOT-25,5P,63MIL,	0	SM
1	U406	0801-000796	IC-CMOS LOGIC;7S32,OR GATE,SOT-25,5P,63MIL,S	0	SM
1	U101,U206	0801-002345	IC-CMOS LOGIC;7S04FU,INVERTER,SOP,5P,-,-,TP,	0	SM
1	U304	1001-001048	IC-ANALOG SWITCH;SW395TR,SPDP,SOT-26,6P,-,DUAL,	0	SM
1	U100	1103-001184	IC-EEPROM;24C256,32Kx8Bit,dBGA,8P,92MIL,-,2.7V,-,P	0	SM
1	U414	1107-001111	IC-FLASH MEMORY;29LV800,512Kx16BIT,BGA,48P,354	0	SM
1	U104	1107-001181	IC-FLASH MEMORY;29DL163,2MX8BIT,FBGA,48P,-,70NS,3V	0	SM
1	U407	1201-001006	IC-OP AMP;7101,SOT-23,5P,-,SINGLE,-,PLAS	0	SM
1	U401	1201-001449	IC-OP AMP;358,MSOP,8P,118MIL,DUAL,-,PLASTIC,5.5V,-	0	SM
1	U409	1201-001491	IC-POWER AMP;912,LCC,7P,226MIL,SINGLE,28dB,PLASTIC	0	SM

1	U404	1201-001690	IC-POWER AMP;913,LCC,6P,-,SINGLE,24.5dB,-,4.2V,-,0	SM
1	U107	1202-001022	IC-VOLTAGE COMP.;75W56,SSOP,8P,110MIL,DUAL,7V,C 0	SM
1	U403	1204-001682	IC-IF/FM/AM;RFT3100,BCC,32P,196MIL,PLASTIC,3V,-,-3 0	SM
1	U103	1205-001860	IC-DATA COMM./GEN.;MSM3100,BGA,208P,595MIL,PLASTIC 0	SM
1	U302	1205-001943	IC-DATA COMM./GEN.;RF2366TR7,SOT23-6,6P,-,PLASTIC, 0	SM
1	TH100	1404-001152	THERMISTOR-NTC;10KOHM,5%,3380K,1MW/C,TP 0	SM
1	R219,R224,R225,R231	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005 0	SM
1	R232,R235,R236,R238	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005 0	SM
1	R242,R307,R312,R317	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005 0	SM
1	R318,R324,R326,R336	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005 0	SM
1	R105,R116,R117,R139	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R140,R159,R160,R162	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R226,R309,R332,R416	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R417,R418	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R156,R164,R165,R202	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R433	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R110,R200	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R106	2007-000147	R-CHIP;8.2Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R112,R126,R127,R144	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R147,R150,R152,R161	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R319,R328,R329,R410	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R415,R424,R427	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R308,R401,R414	2007-000149	R-CHIP;12Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R101	2007-000151	R-CHIP;15Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R431	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R204,R207,R208,R211	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R212,R306	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R435	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R108,R120,R122,R142	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R149,R154,R157,R171	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R203,R213,R221,R228	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R434	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R437	2007-000165	R-CHIP;200Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R151	2007-000169	R-CHIP;510Kohm,5%,1/16W,DA,TP,1005 0	SM
1	R239	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005 0	SM
1	R300,R304,R331,R333	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005 0	SM
1	R403	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005 0	SM
1	R325	2007-000174	R-CHIP;47ohm,5%,1/16W,DA,TP,1005 0	SM

1	R340	2007-000242	R-CHIP ; 1. 5Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R119	2007-000775	R-CHIP ; 33Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R408	2007-000831	R-CHIP ; 39Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R240	2007-000932	R-CHIP ; 470ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R118 , R429	2007-000982	R-CHIP ; 5. 6Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R337	2007-001119	R-CHIP ; 680ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R428	2007-001156	R-CHIP ; 750ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R330 , R335 , R338	2007-001288	R-CHIP ; 18ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R334 , R339 , R422	2007-001298	R-CHIP ; 51ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R134 , R135	2007-001301	R-CHIP ; 68ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R206 , R210 , R214	2007-001305	R-CHIP ; 120ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R420	2007-001323	R-CHIP ; 3Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R158	2007-001325	R-CHIP ; 3. 3Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R103 , R302	2007-001333	R-CHIP ; 18Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R148 , R153	2007-001339	R-CHIP ; 180Kohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R107	2007-002796	R-CHIP ; 510ohm , 5% , 1/16W , DA , TP , 1005	0	SM
1	R128 , R129 , R130 , R131	2007-003004	R-CHIP ; 1300HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R132 , R133	2007-003004	R-CHIP ; 1300HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R320 , R321	2007-003112	R-CHIP ; 270HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R316	2007-007009	R-CHIP ; 750HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R222	2007-007013	R-CHIP ; 9. 1K0HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R436	2007-007014	R-CHIP ; 51 K0HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R314	2007-007092	R-CHIP ; 1. 1K0HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R111 , R230 , R432	2007-007107	R-CHIP ; 100Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R405	2007-007132	R-CHIP ; 15Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R223	2007-007134	R-CHIP ; 39Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R400	2007-007135	R-CHIP ; 18Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R229	2007-007137	R-CHIP ; 1. 2Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R402 , R404 , R407	2007-007139	R-CHIP ; 47Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R201 , R244	2007-007142	R-CHIP ; 10Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R327	2007-007200	R-CHIP ; 2. 40HM , 5% , 1/16W , DA , TP , 1005	0	SM
1	R104	2007-007306	R-CHIP ; 100ohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R227	2007-007309	R-CHIP ; 12Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R243	2007-007313	R-CHIP ; 6. 8Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R109	2007-007529	R-CHIP ; 91Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R406	2007-007538	R-CHIP ; 56Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R209	2007-007573	R-CHIP ; 330Kohm , 1% , 1/16W , DA , TP , 1005	0	SM
1	R205	2007-007586	R-CHIP ; 470ohm , 1% , 1/16W , DA , TP , 1005	0	SM

1	R322	2007-007588	R-CHIP; 1.8Kohm, 1%, 1/16W, DA, TP, 1005	0	SM
1	R100, R102, R113, R114	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R115, R124, R125, R137	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R141, R143, R146, R163	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R167, R168, R169, R170	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R233, R234, R301, R303	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R311, R313, R323, R409	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R411, R412, R413, R419	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R421, R423, R425, R426	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	R430	2007-007771	R-CHIP; 00HM, 5%, 1/16W, DA, TP, 1005	0	SM
1	C126, C216, C221, C222	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C232, C236, C243, C245	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C3004, C3005, C3006	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C3007, C308, C366, C374	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C389, C400, C406, C409	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C410, C415, C418, C419	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C422, C431, C444, C446	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C462, C472, C477, C480	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C482	2203-000233	C-CERAMIC, CHIP; 0.1nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C100, C102, C104, C106	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C108, C110, C112, C114	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C116, C118, C121, C122	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C124, C127, C130, C131	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C133, C152, C154, C226	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C238, C251, C302, C304	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C318, C330, C331, C373	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C397, C402, C403, C405	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C420, C471, C473	2203-000254	C-CERAMIC, CHIP; 10nF, 10%, 16V, X7R, TP, 1005, -	0	SM
1	C143	2203-000257	C-CERAMIC, CHIP; 10nF, 10%, 50V, X7R, TP, 1608	0	SM
1	C371, C398	2203-000278	C-CERAMIC, CHIP; 0.01nF, 0.5pF, 50V, NP0, TP, 1005	0	SM
1	C404	2203-000311	C-CERAMIC, CHIP; 0.12nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C334	2203-000330	C-CERAMIC, CHIP; 0.012nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C430, C458, C459	2203-000359	C-CERAMIC, CHIP; 0.15nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C311, C357, C376, C386	2203-000386	C-CERAMIC, CHIP; 0.015nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C391, C445, C451	2203-000386	C-CERAMIC, CHIP; 0.015nF, 5%, 50V, NP0, TP, 1005	0	SM
1	C146, C202, C205, C210	2203-000438	C-CERAMIC, CHIP; 1nF, 10%, 50V, X7R, TP, 1005, -	0	SM
1	C212, C213, C214, C215	2203-000438	C-CERAMIC, CHIP; 1nF, 10%, 50V, X7R, TP, 1005, -	0	SM
1	C218, C219, C220, C3001	2203-000438	C-CERAMIC, CHIP; 1nF, 10%, 50V, X7R, TP, 1005, -	0	SM

1	C303,C306,C314,C315	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C319,C329,C333,C335	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C337,C338,C339,C344	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C349,C350,C354,C355	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C356,C358,C359,C364	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C365,C367,C369,C377	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C384,C393,C394,C412	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C414,C434,C438,C447	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C448,C457,C466,C467	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C476	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	0	SM
1	C3002,C310,C348,C360	2203-000466	C-CERAMIC,CHIP;0.001nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C372,C388	2203-000466	C-CERAMIC,CHIP;0.001nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C165,C237,C392	2203-000489	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1005,-	0	SM
1	C387	2203-000585	C-CERAMIC,CHIP;220pF,10%,50V,X7R,TP,1005,-	0	SM
1	C320,C443	2203-000628	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,1005	0	SM
1	C125,C128	2203-000679	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005	0	SM
1	C322,C323,C353,C399	2203-000696	C-CERAMIC,CHIP;0.002nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C417	2203-000714	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,1005,-	0	SM
1	C407,C408,C427,C428	2203-000836	C-CERAMIC,CHIP;390pF,10%,50V,X7R,TP,1005,-	0	SM
1	C436,C437,C441	2203-000854	C-CERAMIC,CHIP;0.039nF,5%,50V,NP0,TP,1005	0	SM
1	C312,C313,C324,C375	2203-000870	C-CERAMIC,CHIP;0.003nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C134	2203-000885	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005,-	0	SM
1	C217,C224,C244,C464	2203-000940	C-CERAMIC,CHIP;470pF,10%,50V,X7R,TP,1005,-	0	SM
1	C413,C432,C433,C435	2203-000995	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,1005	0	SM
1	C439,C474,C483	2203-000995	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,1005	0	SM
1	C325,C352	2203-001017	C-CERAMIC,CHIP;0.004nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C151	2203-001033	C-CERAMIC,CHIP;5.6nF,10%,25V,X7R,TP,1005,-	0	SM
1	C452	2203-001072	C-CERAMIC,CHIP;0.056nF,5%,50V,NP0,TP,1005	0	SM
1	C135,C136,C137,C140	2203-001103	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1608,-	0	SM
1	C463,C470	2203-001239	C-CERAMIC,CHIP;0.082nF,5%,50V,NP0,TP,1005	0	SM
1	C468	2203-001259	C-CERAMIC,CHIP;0.008nF,0.5pF,50V,NP0,TP,1005	0	SM
1	C159,C160	2203-001389	C-CERAMIC,CHIP;12nF,10%,50V,X7R,TP,1608,1.6mm	0	SM
1	C155,C166,C168,C169	2203-001405	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1005	0	SM
1	C340	2203-001405	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1005	0	SM
1	C411,C426	2203-001412	C-CERAMIC,CHIP;0.03nF,5%,50V,NP0,TP,1005	0	SM
1	C396,C475	2203-001432	C-CERAMIC,CHIP;47nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C317,C395	2203-001437	C-CERAMIC,CHIP;5pF,0.25pF,50V,X7R,TP,1005,1.0	0	SM
1	C423,C450	2203-001598	C-CERAMIC,CHIP;2200nF,+80-20%,16V,Y5V,TP,2012	0	SM

1	C429,C456	2203-002494	C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012	0	SM
1	C316,C345,C347,C361	2203-003054	C-CERAMIC,CHIP;0.009nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C370,C465	2203-003054	C-CERAMIC,CHIP;0.009nF,0.25pF,50V,NP0,TP,1005	0	SM
1	C101,C103,C105,C107	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C109,C111,C113,C115	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C117,C119,C120,C132	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C138,C141,C145,C147	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C149,C150,C153,C156	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C157,C158,C161,C162	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C164,C171,C172,C173	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C174,C207,C208,C239	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C240,C241,C242,C247	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C248,C250,C296,C297	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C300,C3008,C307,C321	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C336,C342,C343,C363	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C368,C379,C381,C382	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C383,C385,C390,C401	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C416,C421,C425,C478	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C479,C481	2203-005061	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005	0	SM
1	C163,C305,C461	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608	0	SM
1	C230,C231,C298,C299	2203-005144	C-CERAMIC,CHIP;1000nF,10%,10V,X7R,TP,2012	0	SM
1	C233	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608,-	0	SM
1	C225	2203-005171	C-CERAMIC,CHIP;1uF,10%,16V,X7R,TP,2012,-	0	SM
1	C351,C454	2203-005480	C-CERAMIC,CHIP;33nF,10%,10V,X7R,TP,1005,-	0	SM
1	C3000,C309,C332	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,-	0	SM
1	C123	2203-005483	C-CERAMIC,CHIP;68nF,10%,10V,X5R,TP,1005,-	0	SM
1	C227	2203-005714	C-CERAMIC,CHIP;4700nF,10%,10V,X5R,TP,3216	0	SM
1	C228,C229,C249	2203-005796	C-CERAMIC,CHIP;2200nF,10%,10V,X7R,TP,2012	0	SM
1	C3009	2404-001017	C-TA,CHIP;1uF,20%,10V,GP,TP,2012,2,0	0	SM
1	C3003	2404-001088	C-TA,CHIP;2.2uF,20%,6.3V,GP,TP,2012,-	0	SM
1	C129,C139,C142,C144	2404-001101	C-TA,CHIP;1uF,20%,16V,GP,TP,2012,-	0	SM
1	C167,C378,C380,C424	2404-001105	C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012	0	SM
1	C449	2404-001105	C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012	0	SM
1	C170	2404-001151	C-TA,CHIP;33UF,20%,6.3V,LZ,TP,3216	0	SM
1	L324	2703-000175	INDUCTOR-SMD;270nH,10%,0.8x1.6x0.8mm	0	SM
1	L323	2703-000300	INDUCTOR-SMD;1uH,10%,0.8x1.6x0.8mm	0	SM
1	L328,L332	2703-001043	INDUCTOR-SMD;180nH,5%,2.29x1.73x1.52mm	0	SM
1	L417	2703-001172	INDUCTOR-SMD;100nH,5%,1.6x0.8x0.8mm	0	SM

1	L302,L407	2703-001178	INDUCTOR-SMD;3.3nH,0.3nH,1x0.5x0.5mm	0	SM
1	L320,L334,L414	2703-001179	INDUCTOR-SMD;10nH,5%,1x0.5x0.5mm	0	SM
1	L318	2703-001207	INDUCTOR-SMD;6.8nH,5%,1.6x0.8x0.8mm	0	SM
1	L325	2703-001221	INDUCTOR-SMD;560nH,10%,1.6x0.8x0.8mm	0	SM
1	L322	2703-001409	INDUCTOR-SMD;12nH,10%,1x0.5x0.5mm	0	SM
1	L301,L305	2703-001425	INDUCTOR-SMD;68nH,5%,1.6x0.8x0.8mm	0	SM
1	L410,L411,L413	2703-001512	INDUCTOR-SMD;27nH,5%,1.8x1.12x1.02mm	0	SM
1	L307,L309	2703-001543	INDUCTOR-SMD;33nH,5%,1.8x1.12x1.02mm	0	SM
1	L315	2703-001722	INDUCTOR-SMD;18nH,5%,1.0x0.5x0.5mm	0	SM
1	L319	2703-001726	INDUCTOR-SMD;27nH,5%,1x0.5x0.5mm	0	SM
1	L335	2703-001727	INDUCTOR-SMD;22nH,5%,1x0.5x0.5mm	0	SM
1	L314	2703-001728	INDUCTOR-SMD;1.5nH,0.3nH,1x0.5x0.5mm	0	SM
1	L310	2703-001729	INDUCTOR-SMD;1.8nH,0.3nH,1x0.5x0.5mm	0	SM
1	L321	2703-001730	INDUCTOR-SMD;15nH,5%,1x0.5x0.5mm	0	SM
1	L333	2703-001731	INDUCTOR-SMD;22nH,5%,1.8x1.12x1.02mm	0	SM
1	L308,L406	2703-001747	INDUCTOR-SMD;4.7nH,0.3nH,1.0x0.5x0.5mm	0	SM
1	L303	2703-001748	INDUCTOR-SMD;5.6nH,0.3nH,1.0x0.5x0.5mm	0	SM
1	L306	2703-001751	INDUCTOR-SMD;3.9nH,0.3nH,1.0x0.5x0.5mm	0	SM
1	L312	2703-001851	INDUCTOR-SMD;270nH,5%,1.8x1.12x1.02mm	0	SM
1	L317	2703-001881	INDUCTOR-SMD;220nH,5%,1.6x0.8x0.8mm	0	SM
1	L311	2703-001913	INDUCTOR-SMD;220nH,5%,1.8x1.12x1.02mm	0	SM
1	L316	2703-001914	INDUCTOR-SMD;180nH,2%,1.6x0.8x0.8mm	0	SM
1	L313	2703-001918	INDUCTOR-SMD;150nH,2%,1.6x0.8x0.8mm	0	SM
1	L405,L409	2703-001920	INDUCTOR-SMD;2.2uH,20%,3.2x2.5x2.0mm	0	SM
1	L304	2703-001956	INDUCTOR-SMD;100nH,5%,1.6x0.8x0.8mm	0	SM
1	U306	2809-001230	OSCILLATOR-VCTCXO;19.68MHZ,2PPM,10KOHM//10PF,TP,3V	0	SM
1	F497	2904-001172	FILTER-SAW;836.5MHz,25MHz,+-12.5MHz/1.5,TP,+-12.5M	0	SM
1	F305	2904-001268	FILTER-SAW;210.38MHz,1.26MHz,+-0.3MHz/1.2dB,TP,+-0	0	SM
1	F300	2904-001269	FILTER-SAW;1.96GHz,60MHz,+-30MHz/3.5dB,TP,+-30MHz/	0	SM
1	F496	2909-001119	FILTER-DUPLEXER;881.5MHz,836.5MHz,4/3dB,TP,56dB,40	0	SM
1	L300,L331,L403	3301-001105	CORE-FERRITE;AB,1.6x0.8x0.8mm,-,-	0	SM
1	L100,L101,L102,L103	3301-001120	CORE-FERRITE BEAD;AB,30ohm,2x1.25x0.85mm,3000mA,TP	0	SM
1	L200,L201,L326,L327	3301-001342	CORE-FERRITE BEAD;AB,1.5KOHM,1X0.5X0.5MM,100MA,TP,	0	SM
1	L329,L330,L400,L401	3301-001342	CORE-FERRITE BEAD;AB,1.5KOHM,1X0.5X0.5MM,100MA,TP,	0	SM
1	L402,L404,L418	3301-001342	CORE-FERRITE BEAD;AB,1.5KOHM,1X0.5X0.5MM,100MA,TP,	0	SM
1	CN200	3710-001634	CONNECTOR-SOCKET;24P,1R,0.5mm,SMD-A,AUF	0	SM
1	EARJ1	3722-001456	JACK-PHONE;2P,2.6PI,AUF,BLK,-	0	SM
1	F498	4709-001216	FREQ-ISOLATOR;824-894/1850-1990MHz,12dB,0.5dB,-	0	SM

1	U405	NEW-IC001	SW-437	0	SM
1	U301	NEW-IC002	IFR3000	0	SM
1	U300,U303	NEW-IC003	CMY212	0	SM
1	F302	NEW-IC004	D881MH	0	SM
1	F301	NEW-IC005	855845	0	SM
1	F402	NEW-IC006	DFX1880J1960H	0	SM
1	F495	NEW-IC007	FREQ-ISOLATOR(CE053R836DCB-TA2)	0	SM
1	F499	NEW-IC008	855833	0	SM
1	F303	NEW-IC009	B4858	0	SM
1	U105	NEW-IC010	EM565161(8M SRAM)	0	SM
1	CN400	NEW-CON01	KMS-157	0	SM
1	U211	NEW-IC011	LMV331	0	SM
1	U307	NEW-IC012	LMX2331	0	SM
1	U201	NEW-IC013	MAX1869	0	SM
1	OSC100	NEW-IC014	SSP-T6	0	SM
1	U309	NEW-IC015	STK08A1747A	0	SM
1	U310	NEW-IC016	STK08A0966A	0	SM
1	OSC300	NEW-IC017	VOI1750P28KRA	0	SM

Programming of all NAM parameters, e.g. Service Security Code, MCC, MNC, MIN#, CDMA Channel#, vocoder rate, MOB_TERM, SID, SID/NID pairs, Slot Cycle Index, etc.

1. Press "Menu+6+*" → Enter SPC Code "000000" → Use Right navigation key to move next items
2. You can select MORE (Menu) when "Basic NAM 1 programming is complete." displays. Select if you want to program more detailed items than shown in basic NAM programming. Press "OK" to save or Right navigation key to proceed to next item.
→Not Recommended.
3. To toggle between settings, e.g. Home SID/NID pairs or selecting between Yes/No, use the Up/Down navigation key:
 - A. For changing Home SID/NID pairs, select from SID/NID pair numbers 01 to 20 by pressing Up navigation key Press [edit] by pressing Menu key to change setting Press OK key to save setting.
 - B. For changing Forn SID or NID Registration, Home Sys. Registration, etc. press Up/Down navigation key to select between Yes or No. Press OK key to save setting.
4. Press End Key to save & exit NAM programming.

1. Definition of Test Commands

- Press following key to enter the test mode ; "Menu, 6, #"

Command No.	Command SW Name	Description
01(1F,0,0)	T_SUSPEND_I	Enter to test menu
02(3F,0,0)	T_RESTART_I	Escape from test menu
03(FD,0,0)	T_SAVE_VAL_I	Save value in e2prom only in auto test
04(1D,0,1)	T_GET_MODE_I	Get mode CDMA/FM
07(81,0,0)	T_CARRIERON_I	Turn on the carrier
08(82,0,0)	T_CARRIEROFF_I	Turn off the carrier
09(83,4,0)	T_LOADSYN_I	Load the synthesizer for locking
10(84,1,0)	T_PWRLEVEL_I	Change RF power level
11(85,0,0)	T_RXMUTE_I	Mute Rx audio
12(86,0,0)	T_RXUNMUTE_I	Unmute Rx audio
13(87,0,0)	T_TXMUTE_I	Mute Tx audio
14(88,0,0)	T_TXUNMUTE_I	Unmute Tx audio
15	T_VOC_ESEC_I	Echo canceller
16(8F,0,0)	T_STON_I	Transmit a continuous Signaling Tone(ST)
17(90,0,0)	T_STOFF_I	Stop transmit a continuous Signaling Tone(ST)
18	T_LCD_CONTRAST_I	LCD contrast adjust
21	T_TEST_SYS_I	Roam Test System
22(91,96,96)	T_SNDNAM_I	Display & send NAM Information
23(95,3,4)	T_SNDVERSION_I	Display & send Software Version
24(9F,7,8)	T_SNDESN_I	Display & return ESN
25(92,0,0)	T_BACKLIGHT_ON_I	Backlight on
26(93,0,0)	T_BACKLIGHT_OFF_I	Backlight off
27(96,0,0)	T_LAMP_ON_I	LAMP on
28(97,0,0)	T_LAMP_OFF_I	LAMP off
29	T_REBUILD_I	Rebuilding EEPROM
30(9D,15,0)	T_PLINE_I	Display and return product information
31	T_MRU2_TABLE_I	MRU reset
32(A0,1,0)	T_SATON_I	Enable the transmission of SAT
33(A1,0,0)	T_SATOFF_I	Disable the transmission of SAT
34(A2,0,0)	T_CDATA_I	Continuously send Tx Control data
35	T_VOLUME_UP_I	Electric Volume up
36	T_VOLUME_DOWN_I	Electric Volume down
38	T_VOC_ENC_OFFSET_I	Vocoder ENC offset
39	T_VOC_DEC_OFFSET_I	Vocoder DEC offset
40(A7,3,0)	T_VOC_CDMA_UNITY_GAIN_I	Vocoder CDMA unity gain
41	T_VOC_FM_HFRX_UPGAIN_I	Vocoder FM HFRX upgain
42(AA,1,0)	T_DTMFON_I	Turn on DTMF
43(AB,0,0)	T_DTMFOFF_I	Turn off DTMF
44(B0,0,0)	T_COMPANDORON_I	Turn on compandor
45(B1,0,0)	T_COMPANDOROF_I	Turn off compandor
46(B2,0,0)	T_FM_VCLINE_I	Enter FM voice state
47(B3,3,0)	T_FM_AUD_GAIN_I	FM audio gain
48(B4,0,0)	T_VIBRATOR_ON_I	Activate a vibrator
49(B5,0,0)	T_VIBRATOR_OFF_I	Inactivate a vibrator
50(B6,0,4)	T_BATT_TYPE_I	Battery type

Command No.	Command SW Name	Description
51	T_BBA_I	BBASIC supplier
52(B9,0,8)	T_HW_VERSION_I	View HW version
55(AC,1,0)	T_EXT_AUDIO_I	External Audio Path On/Off
57(BC,0,0)	T_MIC_ON_I	Mute MIC Path
58(BD,0,0)	T_MIC_OFF_I	Unmute MIC Path
59(BE,0,0)	T_ALLPATH_I	Tune on all audio path
60(BF,3,0)	T_FM_TX_GAIN_I	AMPS Tx Audio Gain Control
61(C0,3,0)	T_FM_RX_GAIN_I	AMPS Rx Audio Gain Control
62(C1,3,0)	T_DTMF_VOL_TX_I	AMPS Tx DTMF Gain Control
63(C2,3,0)	T_TX_LIMITER_I	AMPS Tx Limiter Gain Control
64(C3,3,0)	T_FM_SAT_LEVEL_I	AMPS Tx SAT level Control
65(C4,3,0)	T_FM_FREQ_SGAIN_I	AMPS Tx Master Gain Control
66(C5,3,0)	T_FM_ST_GAIN_I	AMPS Tx ST Gain Control
67(C6,0,6)	T_READ_BATT_I	Saved Low battery value read
68(C8,0,3)	T_BATT_LVL_I	Set the low battery position in the standby
69(C9,0,3)	T_BATT_IDV_I	Set the low battery position in the talking
70(CA,3,0)	T_WRITE_BATT_I	write a BATT
71(D1,3,0)	T_CDMA_TXADJ_I	Sets Tx_agc_adj for PCS/CDMA mode
72(D2,3,0)	T_FM_TXADJ_I	Sets Tx_agc_adj for AMPS mode
73(D3,1,0)	T_SET_PA_R0	Set Tx power AMP ctrl R0
74	T_OFF_PA_R0	Off Tx power AMP ctrl R0
75(D5,0,3)	T_READ_RSSI_I	Read a RSSI
76(D6,3,0)	T_PCS_RSSI_I	Adjust RxRAS in PCS
77(D7,0,3)	T_THERM_READ_I	Read a thermister
78	T_RXRAS_AUTO_I	Adjust RxRAS in CDMA
79(D9,1,0)	T_BUZZER_ON_I	Buzzer on
80(DA,0,0)	T_BUZZER_OFF_I	Buzzer off
81(E3,0,0)	T_VOC_PCMLPON_I	Turn on to play a PCM LOOP BACK
82(E4,0,0)	T_VOC_PCMLPOFF_I	Turn off to play a PCM LOOP BACK
85(E7,0,0)	T_SPEAKER_ON_I	Turn on the speaker path
86(E8,0,0)	T_SPEAKER_OFF_I	Turn off the speaker path
87(E9,0,0)	T_FM_LOOP_TEST_I	FM loop back
88(EA,3,0)	T_TRK_ADJ_I	TRK LOCAL ADJUST
89(EB,3,0)	T_CDTRK_ADJ_I	CDMA TRK LOCAL ADJUST
90	T_PCS_TXRAS_ADJ_I	PCS Tx RAS adjust
91	T_PCS_RXRAS_ADJ_I	PCS Rx RAS adjust
92(D4,5,0)	T_TXRAS_ADJ_I	CDMA Tx RAS adjust
93(F3,4,0)	T_RXRAS_ADJ_I	CDMA Rx RAS adjust
94(F4,4,0)	T_LNARAS_ADJ_I	LNA RAS adjust
97(F2,4,0)	T_FM_TX_PWR_I	Setting the volume for power level 2~7

2. Commands in Test Mode

1) System Mode Selection

- A. Press "01" : "01" is suspend command
- B. Press "20" : "20" is mode selection command
 - PCS : 3XXXX(XXXX : Channel number)
 - CDMA : 2XXXX(XXXX : Channel number)
 - AMPS : 10000 or 10001
(10000 : AMPS A-Band, 10001 : AMPS B-Band)
- C. Press "OK" button to save changed mode
- D. Press "02" to escape from test mode

2) Channel Change and Tx Power Control

- A. PCS
 - a. Press "01" : Suspend
 - b. Press "09" : Chan____XXXX
Enter the channel number(4-digit), ex) "0600" : set to 600 Ch.
Press "#" : Move to next window
 - c. Press "07" : Carrier On
 - d. Press "34" : CDATA(spread spectrum to 1.23MHz bandwidth)
 - e. Press "71" : CD TXagc_XXX
Enter the AGC code number(3-digit)
(XXX means AGC code, AGC code range is from 000 to 511)
AGC code control Tx output power

B. CDMA

a. Press "01" : Suspend

b. Press "09" : Chan____XXXX

Enter the channel number(4-digit), ex) "0363" : set to 363 Ch.

Press "#" : Move to next window

c. Press "07" : Carrier On

d. Press "34" : CDATA(spread spectrum to 1.23MHz bandwidth)

e. Press "71" : CD TXagc_XXX

Enter the AGC code number(3-digit)

(XXX means AGC code, AGC code range is from 000 to 511)

AGC code controls Tx output power

C. AMPS

a. Press "01" : Suspend

b. Press "09" : Chan____XXXX

Enter the channel number(4-digit), ex) "0363" : set to 363 Ch.

Press "#" : Move to next window

c. Press "46" : Voice state

Vocoder initial to analog mode

d. Press "07" : Carrier On

e. Press "72" : FM TXagc_XXX

Enter the AGC code number(3-digit)

(XXX means AGC code, AGC code range is from 000 to 511)

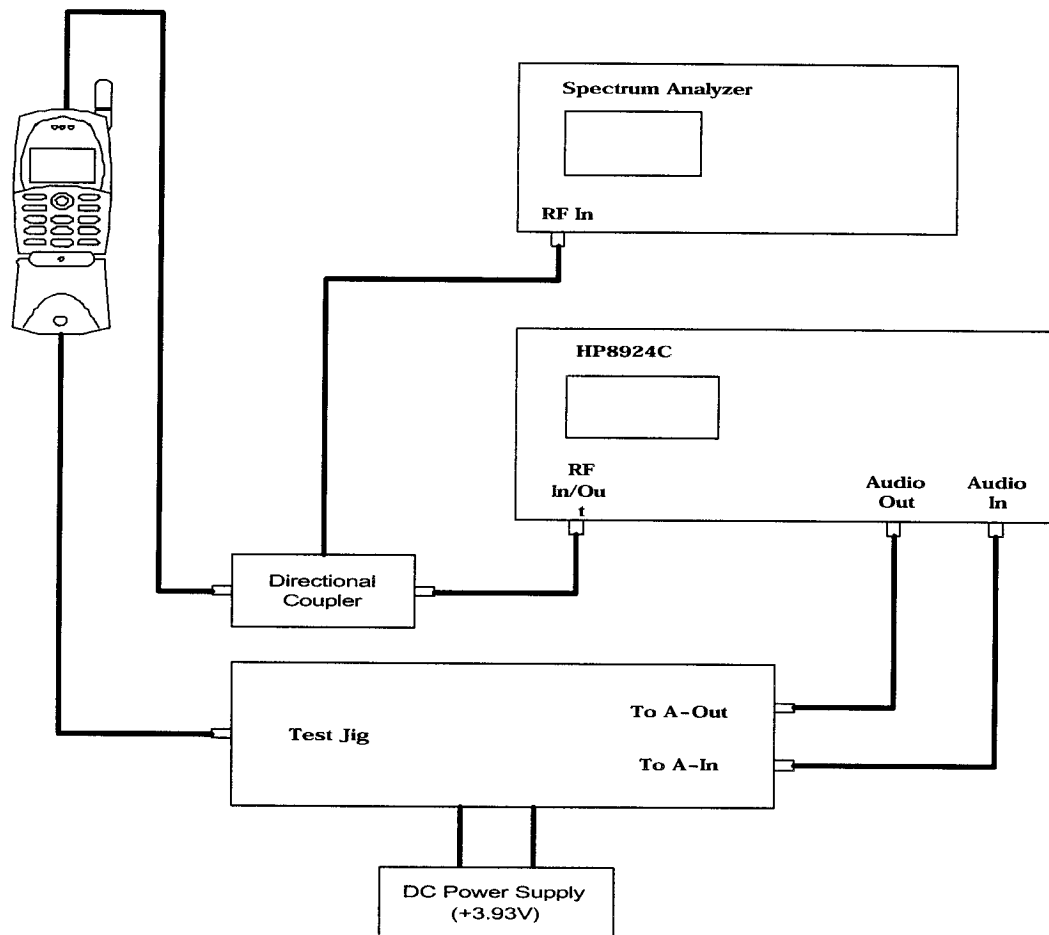
AGC code controls Tx output power

2. Test Procedure

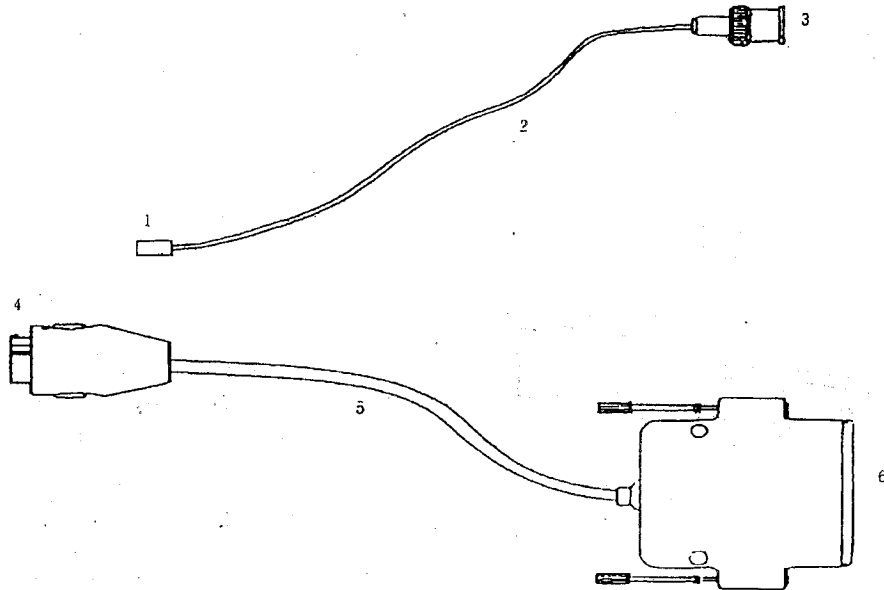
1) Test Equipment

- DC Power Supply
- Test Jig
- Test Cable
- CDMA Mobile Station Test Set : HP8924C, HP83236A, CMD-80, etc
- Spectrum Analyzer(including CDMA Test Mode) HP8596E

2) Test Configuration



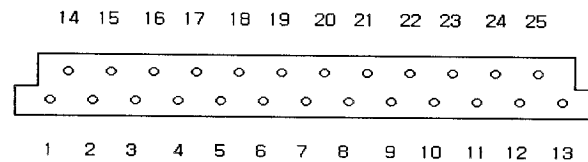
※ CAUTION : The test jig and data cable has a voltage drop of 0.33V at FM Max power output, you'd better set the DC power supply to 3.93V for normal test condition.
(Nominal voltage of battery is 3.6V at cellular phone)

3) Test Cable Description**A. Test Cable****B. Test Cable Name**

No.	Name
1	MHC 172
2	RF CABLE (1.5dB Loss for AMPS, 2.1dB for PCS)
3	BNC CONNECTOR (RF)
4	PLUG CONNECT TO SPH-N150
5	DATA CABLE
6	Dsub 25PIN CONNECTOR (DATA)

C. Dsub 25 PIN CONNECTOR PIN DESCRIPTION (TEST CABLE 1, BACK SIDE)

DATA DESCRIPTION	Dsub CONN. PIN NO.	DATA DESCRIPTION	Dsub CONN. PIN NO.
V_F	12,21	DP_RX_DATA	8
DGND	2,4,6,13,19	HP_PWR	9
BATT	15,16,22	RI	10
C_F	3,20	CD	11
TX_AUDIO	5	RTS	14
DP_TX_DATA	7	CTS	17
RX_AUDIO	1	DTR	18

**D. Conversion Table of Frequency vs Channel**

Type	Channel	Conversion Equation	Remark
Tx Freq.	$1 \leq N \leq 799$ $990 \leq N \leq 1023$	$F = 0.03 \times N + 825.00$ $F = 0.03 \times (N - 1023) + 825.00$	N : Ch Number F : Freq. (CDMA/AMPS)
Rx Freq.	$1 \leq N \leq 799$ $990 \leq N \leq 1023$	$F = 0.03 \times N + 870.00$ $F = 0.03 \times (N - 1023) + 870.00$	
Tx Freq.	$0 \leq N \leq 1199$	$F = 0.05 \times N + 1850.00$	N : Ch. Number F ; Freq. (PCS)
Rx Freq.	$0 \leq N \leq 1199$	$F = 0.05 \times N + 1930.00$	